

DRAFT
FIVE YEAR PLAN
1978—83 * ORISSA

Vol. I



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PLANNING & CO-ORDINATION DEPARTMENT
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PART I
GENERAL

CHAPTER 1

THE SOCIO ECONOMIC BACK DROP

1.1. The State of Orissa came into existence in the year 1936. Before she fully realised her separate identity, she was faced with great strain on her economy due to Second World War and its aftermath. With the merger of twenty four feudatory States Orissa assumed her present shape. When India embarked on economic planning in the year 1951 the economy of Orissa was in a miserable condition which presented the problems of cumulative economic backlog of serious proportions. The State had a feudal system of land laws characterised by absentee landlordism, hardly any irrigation, practically no power, no industries worth the name, an extremely inadequate system of railways and roads, unsatisfactory public health conditions, absolutely meagre facilities for the general education and total absence of technical education of any nature. The level of urbanisation was very low with the accompanying characteristics of absence of banks and business houses and lack of facility for modern financial and commercial practices. No wonder capital was shy and entrepreneurial talent absent.

1.2. Developing economies are characterised by the existence of severe constraints of resources particularly capital, low *per capita* income, prevalence of mass poverty, lopsided occupational patterns, chronic un-employment and under-employment, prevalence of low level of technology and poor economic organisation. The level of economic activity in these economies is low with the result that a vicious circle of poverty, want and low productivity has a firm grip on their economy. Orissa is no exception to this. Uncontrolled market economy has been found to be too weak to make a dent in the economic stagnation, low level of employment and particularly on the problem of mobilisation of limited resources in a way that can bring about necessary structural changes and balanced growth of the entire economy. Planning has, therefore, been accepted as an essential and pivotal means of guiding and accelerating economic growth in these economies.

1.3 After all these years of planning and development Orissa continues to remain as one of the economically backward States even though in certain fields of development rapid strides have been made. The State income at constant prices has been more than doubled during this period. The State has achieved in foodgrains, output of the order of 55.70 lakh tons in the year 1975-76 as against the level of about 23.93 lakh tons in the year 1951. Sugarcane production in terms of Gur has increased to 2.77 lakh tons in 1976-77 from 0.92 lakh tons in the year 1955-56. As regards oil-seeds, production in 1976-77 was of the order of 2.43 lakh tons against the level of 0.68 lakh tons in 1955-56. When the first plan started, Orissa had only one small Paper-mill, a sugar-mill, a Re-rolling mill, a Glass factory, a Textile mill and a Refractory unit. In the public sector important industries that have come up during these years are Steel Plant at Rourkela, Fertiliser Plants at Rourkela and Talcher, an Aero-nautic factory at Sunabeda (Koraput), a Thermal Power Station at Talcher, an Aluminium Factory at Hirakud and a Detonator Plant at Rourkela. The Industrial Development Corporation of Orissa has established Hira Cement Works at Baragarh, Hira Cable works at Hirakud, a Re-rolling mill at Hirakud, a Ferro-Chrome plant at Jajpur Road, a Tile factory at Chaudwar and a Pig Iron Plant at Barbil. In the Private Sector, Paper-mills at Chaudwar and Rayagada, a Cement factory at Raj-gangapur, Ferro-Manganese plants in Joda in Keonjhar district and Rayagada in Koraput district, Ferro silicon and silicon-carbide plants at Theruvalli, Chemical factory at Ganjam and a Heavy machinery factory at Kanshabahal in Sundergarh district have been established. Due to the progress in this field, employment opportunities have been widened and there has been a phenomenal increase in the number of skilled and technical personnel.

1.4. In the field of education progressively larger budgetary resources are being provided from year to year. The expenditure on education in the year 1950-51 was Rs. 1.38 crores which formed 11.4 per cent of the total revenue expenditure of the State. This increased both in size and proportion in the subsequent years and in the year 1977-78 the non-plan expenditure on education was of the order of Rs. 64.35 crores which formed 22.7 per cent of the total revenue expenditure in the State. The expenditure on education in the plan side for that year was of the order of Rs. 9.17 crores which formed 6.15 per cent of the total plan expenditure for that year.

1.5. As regards power, at the beginning of 1951 the installed capacity was 4.6 M. W. in public utility power stations and about 5 M. W. in Industry owned power Stations. The installed capacity has gone up to 914 M. W. by the end of March 1978. This has enabled the State to provide *per capita* power consumption at about 110 K. Wh. as against 7.7 K. Wh. in 1957-58.

1.6. For laying down the proper strategy for development and the targets under various economic activities, it is necessary to take stock of our achievements and failures in various fields so that it would be possible to draw up a realistic plan for implementation during the next five years.

State Income

1.7. The estimates of National and State Income data suffer from many inadequacies, yet they are important indices of measurement of economic growth. The State income at constant prices is a measure of the net domestic product in real terms. The following table would show the growth of State income and *per capita* income in Orissa over the last decade and a half, at 1960-61 prices and at current prices.

TABLE 1
State Income and *per capita* Income of Orissa at Current and Constant (1960) prices

Year	At current prices		At constant (60-61 prices)		
	State Income (Rs. in lakhs)	<i>Per capita</i> Income (in Rs.)	State Income (Rs. in lakhs)	<i>Per capita</i> Income (in Rs.)	
(1)	(2)	(3)	(4)	(5)	
1960-61	..	274,08	217	374.08	217
1965-66	..	640,08	329	465.22	239
1968-69	..	964,48	464	544.13	262
1970-71	..	1070,60*	493*	567.42*	262*
1971-72	..	1079,84*	487*	522.68*	236*
1972-73	..	1319,06*	584*	555.25*	246*
1973-74	..	1614,88*	701*	597.61*	259*
1974-75	..	1659,91*	707*	545.00*	231*
1975-76	..	1877,36**	785**	661.70**	276**
1976-77	..	1613,36**	662**	450.47**	226**

*Provisional

** Quick

State income of Orissa by Industrial origin at current prices with the sectoral break up is given at Annexure-I.

1.8. Growth rate--During the last fifteen years (1961--75) the State Income of Orissa increased at the annual rate of 3.8 per cent (Compound) whereas the *per capita* income increased at the rate of 1.5 per cent (compound) annually. The rate of growth of the State Income of Orissa has been 4.6 per cent in the Third Plan, 5.3 per cent during the three Annual plans, 2.6 per cent in the Fourth Plan and 2.5 per cent in the Fifth Plan. Compared to earlier plans, the growth-rate during the Fourth and Fifth Plans was very low, partly due to the low levels of investments and partly due to the severe inflation prevailing all over the country, which might have brought down the real value of investments much lower.

1.9 Sectoral Growth Rates --Over the period 1961-62 to 1975-76, the income originating from Sectors other than Agriculture and Manufacturing have grown slightly faster. In spite of this, the proportional contributions of different sectors to the net out-put in the State remained almost the same during this period. Of the different sectors, the rate of growth (compound) in the Agriculture Sector was 3.8 per cent, Manufacturing 2.9 per cent, Transport 4.4 per cent and Services 4.2 per cent, as against 2.1 per cent, 4.2 per cent, 5.2 per cent and 4.4 per cent for all-India during the period 1961-62 to 1975-76.

TABLE 2
SECTIONAL GROWTH-RATE (COMPOUND) (1961-62 TO 1975-76)

Sector	Orissa	India
1. Agriculture and allied	3.81	2.07
2. Manufacturing	2.87	4.21
3. Power (Generation plus purchases)	10.73	9.90*
4. Transport	4.37	5.16
5. Other services	4.20	4.35
All sectors	3.76	3.40

* Relates to electricity gas and water-supply

Disparity between National and State *per capita* Income of Orissa and India -

1.10. Although the rate of growth of *per capita* income of Orissa is comparatively higher than that of all-India, the gap in the *per capita* income which was 89.1 rupees in 1960-61 has marginally increased to 90.2 rupees in 1975-76. During the year 1976-77, due to adverse climatic conditions, the gap in the *per capita* income has widened further.

TABLE 3
DISPARITY ON *per capita* INCOME OF ORISSA AND ALL-INDIA (1960-61 to 1976-77)

Year	<i>Per capita</i> Income at 1960-61 prices (Rupees)		
	India	Orissa	Gap
1960-61	305.6	216.5	89.1
1965-66	311.0	238.8	72.2
1968-69	327.0	261.6	65.4
1973-74	349.1	258.5	90.6
1974-75	342.2	231.4	111.8
1975-76	365.9	275.7	90.2
1976-77	371.9	226.0	145.9

1.11. Inter State Position - A comparison of the *per capita* income of Orissa at current prices over the period 1960-75 shows that Orissa's position with the exception of Bihar is the lowest among States (Annexure- 11).

Consumer expenditure

1.12. A low level of consumer expenditure is not only an indicator of under-development, but a disproportionately high percentage of expenditure on food items as against non food items is equally an unhealthy symptom.

1.13. The monthly *per capita* Consumer expenditure in the Rural areas has increased from Rs. 18.76 in 1960-61 to Rs. 39.18 in 1973-74. This would apparently mean that the living standard of the people both in Rural and Urban areas have increased substantially. But during this period, the consumer price Index has gone up rapidly due to the exorbitant increase in prices. Adjusting the expenditure with consumer price indices, the *per capita* consumer expenditure at 1960-61 prices has declined in real terms. There has been a fall in the quantity of consumption by about 8.2 per cent in Rural areas and 17.6 per cent in the Urban areas of the State during the period 1960-74.

TABLE 4
DISTRIBUTION OF CONSUMER EXPENDITURE IN RURAL AND URBAN AREAS OF ORISSA

Year	N. S. S. Round	Monthly <i>per capita</i> consumption Expenditure (Rs.)		<i>Per capita</i> expenditure 1960-61 prices (Rs.)	
		Rural	Urban	Rural	Urban
1960-61	.. 16th	18.76	31.95	18.76	31.95
1965-66	.. 20th	24.00	36.09	16.30	25.19
1968-69	.. 23rd	28.55	43.02	14.68	22.12
1973-74	.. 28th	39.18	59.94	17.22	26.34

Source—National Sample Survey

1.14. Consumer Expenditure on Food —An analysis of the consumption expenditure over the period 1960-61 to 1973-74 reveals that the percentage of expenditure on food items as against non-food items has increased further. In the rural areas of the State, expenditure on food alone constitutes 80.96 per cent of the total consumer expenditure in 1973-74 as against 69.19 per cent in 1960-61. In the urban area the corresponding proportion of expenditure on food was 71.30 per cent in 1973-74 as against 62.75 per cent in 1960-61. This disproportionately heavy expenditure on food alone is largely attributed to the steep rise in prices of food articles and the absence of an adequate surplus with the majority of the people to go for other items of necessities and comforts.

TABLE 5
DISTRIBUTION OF CONSUMER EXPENDITURE ON FOOD AND NON-FOOD ITEMS IN ORISSA FROM 1960-61 TO 1973-74

Year	N. S. S. Round	Percentage distribution of food items			
		Food		Non-food	
(1)	(2)	Rural	Urban	Rural	Urban
		(3)	(4)	(5)	(6)
1960-61	.. 16th	69.19	62.75	30.81	37.25
1965-66	.. 20th	76.71	67.54	23.29	32.46
1968-69	.. 23rd	78.54	67.08	21.46	32.92
1973-74	.. 28th	80.96	71.30	19.04	28.70

1.15. The above table shows the overall pattern of consumption in rural and urban Orissa. More than ninety per cent of the people of Orissa live in the rural areas and more than 80 per cent of their expenditure is on food only. In the urban areas also the ratio of expenditure on food items to total consumer expenditure is quite high. A higher expenditure on food which is more or less in-elastic leads, to a lower order of savings in the State and consequently results in a low rate of economic growth in the State. Comparative figures relating to expenditure on food items as a percentage of total expenditure is given at Annexure III.

Demographic Characteristics

1.16. Orissa had a population of 175.48 lakhs in 1961 which rose to 219.45 lakhs in 1971, thereby registering an increase of 25.05 per cent during that period. This appreciable increase in the growth-rate is due to the improvement in the survival-rate which is mostly due to improvement in the provision of medical facilities and education in the incidence of communicable diseases and consequent reduction in the death-rate from 22.9 in 1961 to 19.0 in 1976. The birth-rate during the period 1961-76 has increased appreciably from 39 per thousand in 1961 to 35 per thousand in 1976 on account of increased

adoption of family welfare measures. The infant mortality rate which was 133 per 1000 live births in 1951 has gone down to 127.2 in 1971. Thus the net growth-rate of population which was 2.5 per cent annually during 1961-71 is estimated to have decreased some what during the current decade.

Agriculture

1-17. Agriculture provides employment to 79 per cent of the working population of Orissa and accounts for about 69 per cent of the State's Income. The contribution of this sector to State Income during the period 1960-75 varied from 68 per cent to 71 per cent. In the years of bad rainfall the contribution of this sector declines considerably. The Income from Agriculture and Allied activities which was Rs. 229 crores in 1960-71 has been estimated to have increased to Rs. 432 crores in 1975-76 at 1960-61 prices i. e., an increase of 88.6 per cent over a period of 15 years. The rate of growth of the Agriculture sector was about 4.0 per cent during this period. Recurring droughts and irregular monsoons often affect the agricultural production of the State. Although the growth of food grain production was nearly at the rate of 2.3 per cent per annum, the growth of production of non-food-grains was at the rate of 7.8 per cent per annum. This impressive growth-rate in the production of nonfood-grains is largely due to the success of our planned efforts in the development of commercial crops.

1-18. The production of rice which is the principal crop of the State has increased marginally from 37.4 lakh tonnes in 1960-61 to 43.3 lakh tonnes in 1975-76 and has again come down to 32.2 lakh tonnes in 1976-77 due to the severe drought conditions (vide Annexure IV). The production in 1977-78 is estimated to be approximately of the order of 45.0 lakh tonnes. The production of other cereals and pulses increased significantly i. e., from 2.9 lakh tonnes in 1960-61 to 10.4 lakh tonnes in 1976-77 i. e., an increase of 15 per cent annually (vide Annexure IV). The yield rates of principal crops in the State from 1961-62 to 1976-77 are given in Annexure V.

1-19. Multiple cropping in Orissa has not made substantial impact on the agricultural production of the State, partly because, varieties suitable for ill drained lands are not available from the research and partly because of the lack of irrigation facilities for second crop in summer. Uncertain rainfall and difficulties in water-management in high rainfall and drainage conditions are some of the inhibiting factors low cropping intensity in the State. The cropping intensity varied from 109.57 in 1961-62 to 122.66 in 1976-77. During the decade 1967-77 the cropping intensity in the State remained more-or-less stagnant, inspite of our emphasis on the development of irrigation potential and intensive agriculture in the State as can be seen from the following Tables.

TABLE 6
Cropping Intensity

Year	Net area sown	(Area in 000' hectares)	
		Gross cropped area	Cropping intensity
(1)	(2)	(3)	(4)
1961-62	5,811	6,367	109.57
1962-63	5,955	6,947	116.66
1963-64	5,980	7,221	120.75
1964-65	5,888	7,446	124.35
1965-66	5,993	5,576	126.41
1966-67	6,019	7,954	132.15
1967-68	6,043	7,635	126.34
1968-69	6,048	7,666	126.33
1969-70	5,560	6,813	122.54
1970-71	5,602	6,761	120.68
1971-72	5,765	6,874	119.24
1972-73	5,622	6,936	123.37
1973-74	5,973	7,294	121.96
1974-75	5,789	7,130	124.67
1975-76	6,137	7,733	126.01
1976-77	5,877	7,209	126.66

Irrigation

1.20. Major and Medium Irrigation projects up to 1977-78 have created a potential of 6.89 lakh hectares in Khariff and 3.03 lakh hectares in Rabi. Minor irrigation (Flow) Projects have created a gross potential of 3.10 lakh hectares by the end of the Fifth Plan period.

1.21. The ground-water potential of the State has been estimated to bring about 28 lakh hectares (gross) under irrigation. As against this, the Lift Irrigation potential (gross) under irrigation created is about 0.99 lakh hectares. One new development during the Fifth Plan deserves to be mentioned. Dug-wells have become popular for irrigation for the first time in Orissa. About 1.57 lakh dug-wells were completed during the Fifth Plan period, as against the achievement of 54,918 dug-wells in the Fourth Plan period. This has created an additional potential of 1.70 lakh hectares.

1.22. Small flow irrigation schemes up to an ayacut of 60 acres and below, which are executed and maintained by Panchayat Samitis have a potential of 3.82 lakh hectares. Thus the total gross potential created by end of 1977-78 is 19.57 lakh hectares. The coverage works out to about 25 per cent of the gross cropped area of the State. Extent of irrigation by sources is given at Annexure-VI. Of this Rabi potential is only 4.39 lakh hectares which is 22 per cent of the gross potential.

Power

1.23. There has been nearly three-fold increase in the installed capacity and nearly five-fold increase in the generation of electricity during the period from 1960-61 to 1977-78 which is revealed from the following Table:

TABLE 7

By end of the year	Installed capacity in M. W.*	Energy in M. U.
1960-61	253	638
1968-69	491	1429
1973-74	674	2132
1977-78	914	3436

* Excludes small diesel and thermal generation.

The State Plan expenditure on power starting from the First Plan up to the end of 1977-78 has been of the order of Rs. 373.26 crores.

1.24. The *per capita* consumption of electricity which was 31.7 K. Wh. in 1961-62 has increased to 79.4 k. wh. by the end of Third Plan and to 92.8 K. Wh. by the end of Fourth Plan.

In spite of the considerable installed capacity, the level of utilisation is rather low. The *per capita* power consumption was about 109 K. Wh. in Orissa (1975-76) as against 232 K. Wh. in Punjab, 180 K. Wh. in Gujarat, 179 K. Wh. in Maharashtra and 141 K. Wh. in Karnataka.

1.25. *Rural Electrification*— With the increased stress on the use of electrical energy for agricultural purposes, great emphasis has been laid on the programme of rural electrification. By the end of 1976-77 about 13,061 villages (25.5 per cent) were electrified and 5,400 pump-sets energised. By the end of 1977-78, 14,161 villages or about 30 per cent of the villages have been electrified and the total number of pump-sets energised is 6,427.

Industries

1.26. During the First and Second Plan period efforts were made for creating necessary infrastructure for industrial development in the State. Emphasis was laid on development of roads, generation of electricity, provision of water-supply and other extension facilities which would help in the industrial development programmes of the State. Besides, Hirakud and Machkund Hydro-Electric Projects were ready for adequate power-supply and necessary infrastructure was built up by expansion and repair of major arteries of the road system in the State. Construction of Industrial Estates was taken up during this period. The Orissa State Financial Corporation was set up with a view to providing institutional finance and for giving incentives to small and medium sized industries.

1.27. For development of Village and Small-Scale Industries, the State Government helped the Small entrepreneurs in setting-up small industries, ensuring a regular supply of raw materials and marketing of finished goods. In case of Pilot Projects in Small-Scale Industries Sector, the State Government participated in the fixed-capital to the tune of 90 per cent and the Private entrepreneur was given the option to take over the unit in due course. Realising that such efforts were not adequate to attract large number of industries in the State, the State Government at the time of formulation of the Third Plan decided not only to intensify these projects but also felt necessary to take up directly the responsibility of industrialisation both in the field of large, medium and small-scale industries sector. As a result of this decision, the Orissa Industrial Development Corporation was set up in March, 1962. The Corporation set up a number of large and medium industries in the State in the Public Sector. These are, a Cement Factory at Bargarh, a Re-rolling Mill and a Cable Factory at Hirakud, a Low Shaft Pig Iron Plant at Barbil, an Industrial Salt Factory at Ganjam, a Structural Workshop at Hirakud and a medium sized Tile Factory at Choudwar. The Corporation also invested a huge capital in the Ferro-Silicon Plant at Rayagada and Caustic soda Plant at Ganjam and in the development of Talcher Industrial Complex. The Private sector has been very slow in its response to the industrial development programmes of the State, yet quite a number of industries like Heavy Structural Machine Building Plant at Kansabahal, Spinning Mill at Jharsuguda, Graphite Crucible Unit at Titlagarh and a Paper Mill at Rayagada were set up in the private sector during the Third Plan period. Besides, a large number of small units were also set up in this sector during the Annual Plan period preceding the Fourth Five-Year Plan. During the Fourth Five-Year Plan, under the Central Sector, a Division of the Hindustan Aeronautics Ltd. was established in Koraput district. The Fourth Plan emphasized more on the labour intensive industries in order to create maximum employment in Industries Sector.

1.28. As a result of these efforts, the number of registered factories which was 679 by the end of Second Plan increased to 907 in the Third Plan and to 1,334 in the Fourth Plan. In the year 1976 there were as many as 1,478 registered factories in the State. In the year 1960 fixed-capital employed was Rs. 35.90 crores which increased to Rs. 343.79 crores by the end of Third Plan and to Rs. 412.68 crores by the end of Fourth Plan and factory employment in the corresponding years was 0.30 lakh in 1960, 0.81 lakh in 1966, and 0.98 lakh in 1973. It is, therefore evident that steps taken in the direction of industrialisation of Orissa have yielded tangible results in the past but have been able to touch only the fringe of the problem. A predominantly agricultural economy has been transferred to some extent in the direction of industrialisation but a substantial ground has to be covered to ensure the optimum utilisation of the resources and potential available in the State.

1.29. Orissa's share in the industrial production is about 3 per cent of the Country's total production. The level of industrial growth measured in terms of gross *per capita* output as well as *per capita* value added by manufacture is comparatively low. The gross *per capita* output in the industry was as low as Rs. 213 in 1975-76 as compared to Rs. 494 All-India, Rs. 1,001 Gujarat, Rs. 692 West Bengal and Rs. 1,285 Maharashtra. The *per capita* value added by manufacture in 1975-76 was also as low as Rs. 42 in case of Orissa compared to Rs. 106 All-India and Rs. 172 West Bengal, Rs. 281 Maharashtra, Rs. 190 Gujarat, etc. In terms of factory employment the factory workers per thousand of population was only 4.5 in Orissa as against 10.5 All-India.

Transport and Communication

1.30. *Railway*—The State has only 13 Kms. of railway-line per 1000 Sq. Kms. as compared to 18 Kms. All-India, 43 Kms. in West Bengal and Punjab, 32 Kms. in Haryana and 31 Kms. in Bihar. Jakhapura-Bansapani line has been a long felt need of the State. The first phase of the line from Jakhapura to Daitari has been approved by the Government of India works have started. Early approval for construction of the second phase is an urgent necessity.

1.31. *Roads*—The deficiency in the rail transport could have been compensated by an adequate network of roads. But the existing system of roads in Orissa is inadequate. Orissa has only 49 Kms. of surfaced roads per lakh of population as against 86 Kms. All-India, 204 Kms. Kerala, 187 Kms. Mysore and 128 Kms. Tamilnadu. Orissa has now only 37 Kms. of road per 100 Sq. Kms. compared with the other States. Orissa is a State with a heavy average annual rainfall and recurring high flood which cause considerable damage to the roads every year. Since only 18.9 per cent of the total road length is surfaced, most of the places of the State become inaccessible during the rainy season. There is also considerable sub-regional imbalance in this field of development within the State as is revealed from the following Table :

TABLE 8
DISTRICTWISE ROAD DENSITY IN THE STATE AS ON MARCH, 1976
(In Kms.)

Sl. No.	District	Density of roads per 100 Kms. area		Density per lakh of population
		All roads	All roads	All roads
(1)	(2)	(3)	(3)	(4)
1	Balasore	..	42.86	134.61
2	Balangir	..	29.82	191.64
3	Cuttack	..	44.92	119.92
4	Dhenkanal	..	31.45	239.42
5	Ganjam	..	44.16	219.67
6	Kalahandi	..	30.98	286.73
7	Keonjhar	..	31.10	243.81
8	Koraput	..	22.39	269.00
9	Mayurbhanj	..	37.95	251.72
10	Phulbani	..	26.92	438.78
11	Puri	..	41.41	164.61
12	Sambalpur	..	37.81	328.90
13	Sundergarh	..	41.75	358.42
	Orissa	..	34.29	222.12

1.32. There are at present six National Highways passing through the State with a total length of 1,634 Kms. ; of this only 194 Kms. have double-lane width. The quality of the existing National Highways should be improved so as to carry more tonnage of traffic as in other States. Besides, the coverage of roads of this category should be increased.

1.33. The total length of the State Highways in 1976 was about 2,190 Kms. About 98.9 per cent of the State Highways have been surfaced by 1976 as against 77 per cent in 1950-51.

1.34. The length of Major and other District Roads in the State was 5,072 Kms. in 1976. ; of this 87 per cent were surfaced and about 13 per cent unsurfaced (vide Annexure VII).

1.35. The length of the unclassified village roads, Panchayat Samiti roads and R E O. roads in all was 38,423 Kms. as on March, 1976.

1-36. Most of the villages in Orissa do not yet have all-weather link roads. Under the 'Minimum Needs Programme' an attempt was made in the Fifth Plan to provide villages with a population of 1,500 or a group of villages within 1.5 Kms. radius having a total of 1,500 population with all-weather link roads. About 7,567 Kms. of new roads and 23,537 Kms. of roads for improvement were proposed at a cost of Rs. 183 crores under this programme.

Education

1-37. The period following independence witnessed rapid expansion of general education at all levels. In the year 1950-51, there were in all 9,801 Primary Schools with an enrolment of 3.15 lakh children including 64,000 girls. There were also in that year 501 Middle Schools, 172 High Schools, 14 Arts and Science Colleges and one affiliating University. The total enrolment in these Middle and High Schools was 40,000 and 16,000 respectively. The number of teachers was 2,569 and 2,247 in Middle and High Schools respectively. The number of girls in the Middle Schools was 1,548 and High Schools 642. The number of students in Colleges in 1950-51 was 6,282 out of which only 289 were girls.

1-38. Against this background, Orissa launched her First Five-Year Plan. The first two Plans made significant impact in raising the general education level in the State. By the end of the Second Plan, there were 20,286 Primary Schools with an enrolment of 12.63 lakh children including 4.03 lakh girls. In the year 1960-61 there were 1,242 Middle Schools and 447 High Schools with an enrolment of 1.08 lakh in the Middle Schools and 44,582 in the High Schools. With the introduction of universal free and compulsory education, there have been remarkable progress in the Primary Education of the State. The number of children in the Primary Schools increased to 16.92 lakhs. The corresponding rise in the enrolment in the Middle and Secondary Schools was 2.15 lakhs and 1.87 lakhs respectively by the end of Third Plan. Thus under the Primary Education enrolment of students which was 57.6 per cent by the end of Second Plan increased to 68.4 per cent by the end of Third Plan.

1-39. According to the Third Education Survey about 75 per cent of the children were enrolled by the end of Third Plan. In case of Middle Schools only 7 per cent of boys and 0.5 per cent of the girls in their respective age-group (11-14) were in schools in 1950-51. The percentage rose to 31 in case of boys and 11.2 for girls at the end of the Fourth Plan period. The achievement in the Fifth Plan is likely to be 25.6 per cent by the end of 1977-78. Enrolment of children in the age-group 6-11 and 11-14 during the period 1961-76 is given at Annexure VIII.

1-40. The programme during Fifth Plan was to enrol 84 per cent of children in the age-group 6-11 and 27.6 per cent in the age-group 11-14. As against these targets, achievements are likely to be 82 per cent and 25.6 per cent respectively by the end of 1977-78. During the Sixth Plan period, it is proposed to enrol hundred per cent of children in the age-group 6-11 and 68 per cent in the age-group 11-14. This would need provision of Primary Schools in about 13,222 habitations, which do not have a Primary School within their spatial reach. The implementation of this programme would require 17,970 additional teachers in Primary Schools and 10,266 in Middle Schools on the basis of 1:34 teacher-pupil ratio in the Primary Schools and 1:20 in the Middle Schools.

1-41. As regards, Higher Education, the linear expansion in terms of number of institutions and enrolment has been equally impressive. The number of University had risen from one in 1960-61 to four and the number of General Colleges from 29 to 92 in 1976-77. The total enrolment which was only 10,689 in 1960-61 has increased to about 85,871 including in 1976-77. As a result of opening of new colleges in large numbers, the percentage of enrolment to the total population in the age-group of 17-23 rose to 2.9 per cent in 1976-77 from a low figure of 0.4 per cent in 1950-51 and 0.8 per cent in 1960. Although there has been progressive increase in the number of Colleges as well as in the average annual rate of expansion of enrolment in Arts, Science and Commerce courses every year, the State continues to be relatively backward in higher education. The percentage of enrolment in 17-23 age-group to the population in higher education in Orissa is about 2.9 while that in all-India is nearly 4.5 per-cent.

Adult Education

1-42. Eradication of adult illiteracy has been one of the major national concern. About 7.3 millions are in the age group of 11 to 35, and the major bulk of them who are illiterate are in the working force. Therefore, for reducing the illiteracy among the workers as well as for dissemination of the knowledge in the fields of agriculture and industry, family welfare, public health, etc. an integrated functional literacy programme will be taken up on a priority basis.

1.43. Literacy in Orissa has increased from 22 per cent in 1961 to 26 per cent in 1971. The low level of literacy (26 per cent) in Orissa is largely due to very high drop-out rates, which is as high as 63.5 per cent at the primary level. This high rate of drop-outs, particularly, in rural areas is another manifestation of rural poverty because of low sustenance levels, children are forced to supplement the family income. Besides, about 13,202 villages still do not have a Primary School within the spatial reach of 1.5 kilometres. It has not been possible to attain higher level of literacy in the State as the *per capita* expenditure on education has been on the lower side compared to other States

Health

1.44. At the end of the Second Plan hospitals and dispensaries taken together were 382 and there were 111 Primary Health Centres. The bed strength in these hospitals and dispensaries was 4,690. By the end of the Fifth Plan (1974-78) there are 245 Allopathic Hospitals, 322 Dispensaries and 72 Medical-Aid Centres in the State. The number of beds in these hospitals is 11,876 including the beds provided in 314 Primary Health Centres. Specialist services have been provided at the District Headquarters Hospitals and 13 Subdivisional Hospitals. The doctor-population ratio which was 1:17,713 at the beginning of the Third Plan increased to 1:9,648 by the end of the Fourth Plan and has almost remained unaltered (1:9,433) during the Fifth Plan period. This, however takes into account Government doctors only. The *per capita* expenditure in health services in Orissa stands at Rs. 9.43 in the year 1976-77 compared to Rs. 12.37 All-India, Rs. 14.77 in Haryana, Rs. 13.59 in Andhra Pradesh, Rs. 15.63 in Rajasthan and Rs. 16.49 in Gujarat.

1.45. *Family Planning*—The increase of population at a tremendous rate of 2.5 per cent annually not only creates difficulties in the provision of adequate social facilities but also reduces the *per capita* flow of benefits of planned development. The State has made determined efforts to curb the birth-rate. The success of the programme can be assessed by the number of persons vasectomised and tubectomised and number of persons who adopted family planning measures. The following table shows the achievement in family planning measures since 1973-74.

TABLE 9
Achievement in Family Planning in Orissa, since 1973-74 up to the end of March, 1977

Sl. No.	Item	Achievements (In lakhs)				Rate per 1,000 population			
		1973-74	1974-75	1975-76	1976-77	1973-74	1974-75	1975-76	1976-77
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Sterilisation ..	7.42	8.11	9.35	12.58	33.80	36.94	38.33	50.62
2	U. U. C. D.	3.11	3.31	3.34	3.74	17.17	15.09	13.73	15.05
3	C. C. Users ..	3.54	3.87	3.96	4.72	16.12	17.68	16.25	19.02

SOURCE—Directorate of Health & Family Welfare, Orissa

Unemployment

1.46. Unemployment and under employment constitute the most pressing problems of the State. According to recent estimate prepared by the Bureau of Statistics & Economics, the man-year equivalent of under-employment and unemployment in the State is around 24.1 lakhs by the end of 1977-78. While this magnitude is itself colossal there is an addition to the labour force every year to the tune of 1.90 lakhs due to the increase in population during the Sixth Plan period. Thus by the end of the Sixth Plan, the job opportunities required to be created for full employment in terms of man-years is of the order of 33.6 lakhs.

1-47 The educated unemployed in the State constituted roughly one-third of the total registrants on the live registers of Employment Exchanges (persons with Matric and above educational standard are considered under this category). The number of educated unemployed was 6,245 in the year 1961. This has increased to 1.36 lakhs in 1977, of the total educated unemployed of 1.36 lakhs two-thirds are Matriculates (0.86 lakh). Roughly one-fifth of the educated unemployed are Graduates and above. During the period 1961 to 1977 the number of Matriculates has increased from 5,150 to 86,026. The corresponding increase of Graduates during the period has been more than 47 times i.e. from 632 in 1961 to 30,553 in 1977.

1-48 Considering the magnitude of educated unemployed, the rate at which employment in the Public Sector of Orissa increased during the period has been rather low. The number of persons employed in the Public Sector as on the 31st March 1961 was 1.96 lakhs. This increased to 3.99 lakhs by the 31st March 1977. The increase in the employment potential in the Public Sector vis-à-vis the increase the number of educated unemployed can be seen in Annexure IX.

Extent of poverty--

1-49 According to the Study Group set-up by the Government of India a *percapita* consumption expenditure of Rs. 70 per month at 1960-61 prices (excluding expenditure on health and education) has been considered to be the minimum subsistence level in India. Dandekar and Rath have determined that minimum diet of 2,250 calories would be needed for subsistence. This would require Rs. 15 *percapita* per month for the rural population and Rs. 22.50 *percapita* for the urban population at 1960-61 prices. Adjusting the above norms by the All-India Whole sale Price Index, poverty line in Orissa would be drawn at a *per capita* monthly consumer expenditure of Rs. 49.62 in rural areas and Rs. 74.43 in urban areas in 1977. On this basis the population at present below poverty-line has been estimated at 88 per cent. Considering the limitations involved in the above estimate an acceptable estimate of population below poverty-line should be 85 per cent in the minimum.

1-50 Summing up, Orissa has not done badly taking into account the legacy of the cumulative economic back log and the frequencies of natural calamities like drought, flood and cyclone. But considering the fact that Orissa has one of the richest potential in minerals, forest and marine wealth, she has not done well enough. The strategy has now changed in favour of direct attack on poverty and unemployment, emphasis on agriculture and allied sectors, village and small industries and providing the minimum needs to the poorest of the poor. Our growth rate has not been impressive enough so far, nevertheless basic institutional changes have taken place like (i) land reforms, (ii) expansion and strengthening of credit infrastructure and (iii) change of orientation in favour of beneficiary target groups. The lot of the poor cannot be improved by providing them with some minimum purchasing power irrespective of the way in which the production process is organised, it is only by making the poor more efficient producers that their living standards and their incomes can be increased. The Sixth Five-Year Plan aims at achieving this objective through the strategy of Integrated Rural Development. With the changed outlook and new strategy, Orissa will definitely do better in the years to come.

ANNEXURE-I

State Income of Orissa by Industrial Origin at Current Prices—Sectoral break-up

Industry	1960-61	1965-66	1968-69	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76	1976-77
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Agriculture, Animal Husbandry & Ancillary Activities.	229.36 (61.3)	362.44 (56.6)	609.73 (63.6)	726.96 (67.9)	725.02 (67.1)	931.94 (70.6)	1,153.83 (71.4)	1,154.47 (69.6)	1,285.51 (68.5)	1,039.22 (64.4)
Mining, Manufacturing and Small Enterprises.	53.59 (14.3)	112.14 (19.1)	136.04 (14.1)	151.12 (14.1)	146.79 (13.6)	148.89 (11.4)	194.29 (12.1)	207.03 (12.5)	283.38 (12.6)	242.28 (15.0)
Commerce, Transport and Communication.	29.04 (7.8)	46.51 (7.7)	77.07 (8.0)	85.51 (8.0)	90.71 (8.4)	104.13 (7.9)	124.90 (7.7)	126.75 (7.6)	138.28 (7.4)	99.05 (6.2)
Other services	62.09 (16.6)	105.99 (16.6)	141.64 (14.3)	107.01 (10.0)	177.32 (10.9)	113.10 (10.1)	141.46 (8.8)	171.66 (10.3)	216.19 (11.5)	233.08 (14.4)
Net domestic product of factor cost (Rs. in crores.)	371.08 (100.0)	640.08 (100.0)	964.48 (100.0)	1,070.60 (100.0)	1,079.84 (100.0)	1,319.05 (100.0)	1,614.88 (100.0)	1,659.91 (100.0)	1,877.36 (100.0)	1,613.63 (100.0)

* Provisional

** Quick Estimate

NOTE—Figures in the bracket indicate percentages

ANNEXURE II

Per capita income of States and All-India (1960-61 to 1975-76 at current prices)

(in Rupees)

Sl. No.	State	1960-61	1965-66	1968-69	1973-74 P	1974-75 P	1975-76 P, Q.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Andhra Pradesh	275	387	498	840	1,003	920
2	Assam	315	399	513	601	776	..
3	Bihar	211	326	402	604	718	.
4	Gujarat	362	498	606	1,080	1,038	..
5	Haryana	327	450	635	1,174	1,217	1,296
6	Jammu & Kashmir	269	317	446	720	836	..
7	Kerala	259	380	496	785	861	..
8	Madhya Pradesh	260	305	430	733	830	793
9	Maharashtra	409	534	700	1,091	1,270	1,329
10	Karnataka	285	386	483	704	784	785
11	Orissa	217	329	464	701	707	785
12	Punjab	374	559	881	1,386	1,482	..
13	Rajasthan	284	373	414	780	819	..
14	Tamil Nadu	334	403	499	810	814	851
15	Uttar Pradesh	252	373	453	707	817	781
16	West Bengal	390	532	660	944	1,041	1,046
17	All-India	306	426	555	856	989	1,005

P—Provisional

Q—Quick Estimate

(7-A-4)

ANNEXURE III

Expenditure food-items as a percentage to total expenditure

Sl. No.	State	Expenditure on food items as a percentage to total expenditure							
		1960-61		1965-66		1968-69		1973-74	
		Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Andhra Pradesh ..	69.24	67.98	68.91	63.87	73.47	65.55	70.37	67.65
2	Assam ..	74.22	60.10	75.77	74.27	77.19	67.50	79.43	69.53
3	Bihar ..	76.11	55.54	78.89	71.03	77.23	69.03	79.59	76.52
4	Gujarat ..	73.05	62.71	77.01	65.11	80.10	73.86	80.14	73.95
5	Haryana ..	63.56	60.51	66.01	67.35	77.37	66.75	70.61	63.73
6	Jammu & Kashmir	70.71	68.25	75.23	68.90	71.97	66.94	73.48	68.51
7	Karnatak ..	66.57	65.27	76.30	67.64	75.33	68.27	74.56	68.67
8	Kerala ..	64.57	64.46	71.15	66.39	63.85	67.88	71.54	67.80
9	Madhya Pradesh ..	67.49	58.71	71.68	66.77	75.81	66.34	75.66	68.48
10	Maharashtra ..	66.36	55.49	73.57	68.37	72.10	63.48	72.37	68.51
11	Orissa ..	71.03	57.13	77.40	68.76	79.67	70.39	75.73	67.57
12	Punjab ..	63.56	60.51	63.17	57.29	68.00	67.17	69.24	65.63
13	Rajasthan ..	75.58	64.85	73.21	65.32	68.54	66.92	72.22	67.84
14	Tamil Nadu ..	69.57	62.47	74.07	64.20	75.15	65.73	74.44	66.64
15	Uttar Pradesh ..	65.38	59.73	73.25	64.40	72.04	66.65	75.93	68.98
16	West Bengal ..	74.38	59.30	79.15	63.50	80.17	65.42	80.14	68.04
17	Union Territories ..	63.56	53.50	72.34	61.75	78.57	61.75	72.54	60.12
	All-India ..	68.86	60.03	74.01	63.75	74.20	66.42	74.89	67.72

SOURCE—National Sample Survey Report on Consumer Expenditure

ANNEXURE IV

Area and Production of different crops for 1961-64, 1965-66, 1968-69, 1973-74, 1975-76 and 1976-77

Areas in '000 hectares

Production in '000 tonnes

Year		Rice	Cereals	Pulses	Food-grains	Oil-seeds	Fibres	Sugar cane
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)
1961-62	A ..	3,872	4,040	500	4,540	209	65	25
	P ..	3,722	3,800	234	4,034	75	5	75
1965-66	A ..	4,232	4,488	884	5,372	314	64	36
	P ..	3,241	3,371	314	3,685	128	29	177
1968-69	A ..	4,266	4,681	894	5,575	340	78	37
	P ..	3,976	4,275	446	4,721	189	50	211
1973-74	A ..	4,734	5,255	963	6,218	388	100	41
	P ..	4,404	4,800	475	5,275	286	34	241
1975-76	A ..	4,686	5,350	1,133	6,484	496	84	45
	P ..	4,532	5,043	527	5,570	310	24	297
1976-77	A ..	4,380	5,071	967	6,038	425	95	45
	P ..	3,218	3,666	410	4,076	243	18	277

ANNEXURE V

Yield-rate of Principal Crops in the State

(Quintals per hectare)

Sl. No.	Crops	1961-62	1964-65	1968-69	1969-70	1973-74	1974-75	1975-76	1976-77
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Winter Rice ..	10.22	10.47	9.53	9.17	9.93	7.60	10.23	7.63
2	Summer Rice ..	7.25	8.80	11.03	11.69	13.05	12.75	14.31	15.10
3	Autumn Rice ..	5.50	7.54	4.69	4.94	5.82	3.56	5.8	4.38
4	Rice Total ..	9.61	10.20	9.55	9.02	9.30	7.14	9.67	7.35
5	Ragi ..	4.70	5.58	9.86	8.19	8.20	6.42	7.30	5.40
6	Gram ..	4.25	4.62	6.22	5.62	5.10	5.12	4.80	4.30
7	Mung ..	..	..	4.84	5.19	5.10	4.10	4.50	4.30
8	Biri ..	..	..	4.95	4.89	5.00	4.40	4.90	4.70
9	Sugarcane ..	25.69	49.63	57.73	52.07	58.72	62.50	62.00	61.50
10	Mustard ..	3.96	4.18	3.74	4.43	4.20	4.40	4.70	3.90
11	Jute (Bales) ..	6.58	12.55	6.92	6.94	7.00	7.10	7.70	8.60
12	Cotton (Bales) ..	0.40	2.22	1.53	1.31	1.00	1.00	1.14	1.10
13	Potato ..	29.21	66.87	117.60	108.75	77.19	80.70	86.16	70.47

ANNEXURE VI
Extent of Irrigation by sources (1977-78)

(Area in '000 hectares)

Source	Kharif	Rabi	Total
(1)	(2)	(3)	(4)
Major and Medium Irrigation ..	688.77	303.68	992.45
Minor Irrigation (Flow) ..	631.22	63.98	695.20
Lift ..	198.17	71.24	269.41
Total (All sources) ..	1,518.16	438.90	1,957.06

ANNEXURE VII**Length of Roads by the end of 1970-71, 1974-75 and 1975-76**

Sl No.	Type	1970-71		1974-75		1975-76	
		Total	Surfaced	Total	Surfaced	Total	Surfaced
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.1	National Highways ..	1,352	1,275 (93.30)	1,634	1,557 (95.29)	1,639	1,608 (98.10)
1.2	Express Ways ..	140	140 (100.00)	81	81 (100.00)	81	81 (100.00)
1.3	State Highways ..	2,197	2,093 (95.27)	2,210	2,179 (98.60)	2,190	2,166 (98.90)
1.4	Major District Roads ..	5,235	5,186 (99.06)	5,091	4,342 (85.29)	5,072	4,402 (86.79)
1.5	Other District Roads ..	2,315	1,159 (50.06)	2,304	1,418 (61.55)	2,304	1,468 (63.71)
1.6	Classified Village Roads	6,120	938 (15.33)	6,440	1,353 (21.01)	6,440	1,466 (22.76)
	Total ..	17,359	10,870 (62.37)	17,760	10,930 (61.54)	17,726	11,191 (63.13)
2	P. E. O. Roads ..	6,935	..	6,879(P)	..	6,559	..
3	Panchayat Samiti Roads	6,570	..	6,140(P)	..	8,558	..
4	Other Unclassified Roads	21,863	..	23,212(P)	..	23,306	2,140
	Grand Total ..	52,757	10,870 (20.52)	53,991	10,950 (20.24)	56,149	13,331 (23.74)

Figures in the bracket indicate percentage of length of surface roads to the total

ANNEXURE VIII

Enrolment of Children in the age group 6-11 and 11-14 during the period 1961-76

Year	Number of enrolment			
	Primary (6-11)	Middle (11-14)	Secondary (14-16)	Total
(1)	(2)	(3)	(4)	(5)
1961-62	1,407,620	123,960	114,169	1,645,749
1965-66	1,691,548	215,341	187,273	2,094,162
1972-73	2,034,973	308,882	208,410	2,552,265
1973-74	2,132,927	350,447	230,115	2,713,489
1974-75	2,237,055	297,036	372,398	3,145,614
1975-76	2,348,989	349,177	387,725	3,232,239
1976-77	2,522,635	429,657	228,712	3,337,678

SOURCE—Director of Public Instructions, Orissa

ANNEXURE IX

Employment in Public Sector

(In lakhs)

Sl. No.	Sector	Number of persons employed as on 31st March				
		1961	1966	1969	1974	1977
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Central Government (Including Railways).	0.30	0.38	0.41	0.43	0.49
2	State Government	1.30	1.79	2.01	2.14	2.48
3	Quasi Government	0.29	0.55	0.65	0.77	0.91
4	Local Bodies	0.07	0.23	0.08	0.10	0.11
	Total	1.96	2.95	3.15	3.44	3.99

(7-A-5)

CHAPTER 2

REVIEW OF THE FIFTH PLAN (1974--78)

2.1. The objectives of the Fifth Plan as stated in the Approach Paper for the Fifth Plan of Orissa were the following :

- (i) To double the State's income at current prices during the years 1974--79.
- (ii) To meet the immediate consumption needs of all the people in education, drinking water-supply, health and nutrition, housing and other facilities.
- (iii) To improve considerably the status of the relatively backward tribal population in the State whose conditions still remain at the lowest level.
- (iv) To remove the imbalances in the development of various regions within the State.

2.2. It was mentioned further that doubling the State's income will have the effect of raising the *per capita* income of Orissa to the level of the average *per capita* income for the whole country. However, at the stage of preparation of the Draft Five-Year Plan, it was realised that there were obvious constraints as regards the extent of the total investment in order to achieve the objective of doubling the State's income. Therefore, the following objectives were considered achievable :

- (1) If for any reason, it is not possible to double the State's income and make the *per capita* income of the State equal to the National figure, the aim should, at the least be to see that the gap does not widen.
- (2) Specially tailored programmes should be undertaken to promote distributive justice within the State and among different groups of its people with a view to increasing the consumption of the lowest 30 per cent of the population.

In order to achieve these objectives an outlay of Rs. 836.09 crores was envisaged and presented to the Planning Commission.

2.3. Investment of this order was considered essential keeping in view the socio-economic problems facing the State. The Planning Commission at first tentatively fixed an outlay of Rs. 567.01 crores and had indicated that the size and content of the Fifth Plan would be finally determined later after a firm view had been taken on the availability of total resources for financing the plan. The outlay finally approved in 1976-77 by the Planning Commission for the Fifth Plan was Rs. 588.50 crores.

2.4. During the early part of 1977-78, the need for a comprehensive reassessment of the present state of development of the Indian economy and for determining the priorities, the programmes and policies for the next phase of plan developments was felt. It was felt that the plan objectives should be reformulated in terms of time-bound targets for the removal of unemployment, elimination of destitution, alleviation of poverty and reduction in disparities of income and wealth. Since this required a substantial shift in the investment priorities in the Central and State Plans over the next few years and the economic policies were to be co-ordinated with the new priorities; it was decided to terminate the Fifth Plan in March 1978 and to launch a Medium-term plan for the 5 years--1978-79 to 1982-83 with effect from the 1st April 1978. Therefore, the annual plan for 1978-79 comprises of the investments for the first year of the new plan.

2.5. The sectorwise break-up of the approved outlay for the Fifth Plan (1974-79), plan expenditure for four years (1974-78) and the approved outlay for 1978-79 are given in the table below :

(Rs. in lakhs)			
Name of the Sector	Approved outlay for Fifth Plan 1974-79	Expenditure for four years, 1974-78	Approved outlay for 1978-79
(1)	(2)	(3)	(4)
1. Agriculture and Allied Services ..	9925.00 (16.9)	7747.35 (17.1)	4352.00 (22.8)
2. Irrigation and Power ..	33494.00 (56.9)	25984.89 (57.3)	10300.00 (53.9)
3. Industries and Mining ..	2215.00 (3.7)	1323.79 (2.9)	530.00 (2.8)
4. Transport and Communication ..	3664.00 (6.2)	2858.64 (6.3)	1013.00 (5.3)
5. Social Services ..	9110.00 (15.5)	7107.77 (15.7)	7252.50 (14.4)
6. Miscellaneous ..	442.00 (0.8)	339.82 (0.7)	152.50 (0.8)
	58850.00 (100)	45362.26 (100)	19100.00 (100)

(The figures in brackets indicate the percentages of the sectoral outlays/expenditure to the total outlay/expenditure)

Minimum Needs Programme

2.6. One of the important objectives of the Fifth Plan was to increase the consumption standard of the lowest 30 per cent. Since such consumption may be partly private and partly social, the National programme of Minimum Needs assumed considerable importance. The limitations to the extent to which private consumption of the lowest 30 per cent of the population could be raised through the ordinary process of economic development were recognised and resources were set apart for ensuring a higher level of social consumption for these people. From the total outlay of Rs. 836.09 crores proposed for the State in the Draft Fifth Plan, an amount of Rs. 216.11 crores was to be set apart for the Minimum Needs Programme. With an investment of this order it was envisaged that the social consumption needs of the lowest 30 per cent of the State's population could be met to a considerable extent. However, when the ceiling of the State's Fifth Five-Year Plan was fixed tentatively at Rs. 567.01 crores, the outlay under the Minimum Needs Programme was reduced to Rs. 149.38 crores. When the ceiling of the State's Five-Year Plan was finally revised to Rs. 588.50 crores the Minimum Needs Programme component was pegged down to Rs. 84.49 crores. The approved outlay on Minimum Needs Programme for 1974-79, the actual expenditure in 1974-78 and the approved outlay for 1978-79 is given in the table below.

MINIMUM NEEDS PROGRAMME

(Rs. in lakhs)

Sl. No.	Programme	Fifth Plan outlay 1974-79	Fifth Plan Expenditure in 1974-78	Approved outlay for 1978-79
(1)	(2)	(3)	(4)	(5)
1	Rural Electrification	1900.00	1186.86	780.00
2	Rural Roads	2063.00	1531.90	520.00
3	Elementary Education	2023.80	1323.64	651.07
4	Rural Health	490.00	367.66	170.00
5	Rural Water-Supply	840.00	990.99	361.00
6	House sites for rural landless labourers	300.00	209.45	45.00
7	Environmental improvement of slums	36.00	30.00	10.00
8	Nutrition	796.00	592.48	155.00
	Total	8448.00	6232.98	2692.07

(i) Rural Electrification

2.7. There are 46,992 inhabited villages in the State having a population of 2.19 crores as per the 1971 Census. By the end of the Fourth Five Year Plan, 8,077 villages were electrified covering a population of 31.81 per cent. During the Fifth Plan (1974-78) an additional number of 6084 villages have been electrified, thus bringing the total number of villages electrified to 14,161 and the percentage of the population covered to 50.89. The number of lift irrigation points energised by the end of March, 1978 is 5,665 covering 6,427 number of pump sets. The achievement during the four years 1974-78 in this regard is the energisation of 3,431 L. I. points, as against the energisation of 1961 L. I. points during the Fourth Plan 1969-74.

(ii) Rural Water-Supply

2.8. The objective under rural water-supply was to provide safe drinking water to all identified problem villages. Out of 19,284 problem villages identified so far 7,010 villages have been covered by either tube-wells or open drinking water wells by March, 1978. The constraint in this regard is the availability of funds and with the proposed outlay under M. N. P. supplemented by the Centrally Sponsored Accelerated Rural Water-Supply Scheme all the problem villages are likely to be covered by tube-wells or sanitary wells by March, 1980.

(iii) Distribution of House-sites

2.9. Under the programme of distribution of house sites and other help for housing to the landless rural labour households, the State had launched a massive programme of distribution of Government wasteland, free of cost both for agriculture and for homestead purpose. The upper limit for allotment of house site has been fixed at 0.04 acres per family. By the end of March, 1978, 7863.159 acres of land suitable for house sites were distributed to 162,171 families. Among the beneficiary families 59,135 belong to Scheduled Tribe who have received 3,601.555 acres of land and 45,255 families belong to Scheduled Caste who have received 2,357.979 acres of land.

(iv) Integrated Housing Scheme

2.10. Besides providing house sites to the homesteadless persons an integrated housing scheme was taken up for providing built up houses at low cost to these people. The houses were intended to be constructed in colonies of 20 houses or more on compact patches of homestead land allotted to the houseless persons preferably near the existing basti sites of the villages so as to facilitate provision of other basic amenities like approach roads, water-supply, schools and community centres by pulling resources of other ongoing schemes of the M. N. P. A total number of 7793 houses have been completed and distributed to the beneficiaries under this scheme. 4,121 Scheduled Tribe families and 2,836 Scheduled Caste families have so far been benefited.

(v) Elementary Education

2.11. At the end of the Fourth Plan, the number of Primary Schools in Orissa was 31,822 and Middle Schools was 4,647. The percentage of enrolment in the age-group of 6-11 in 1973-74 was 77. In case of Middle Schools 31 per cent of the boys and 11.7 per cent of girls in the age group of 11-14 were in schools. The main thrust of the Fifth Plan was on universalisation of the schooling facility for Elementary education and expansion of enrolment from Pre-Plan achievement of 25 per cent in 1973-74 to 39 per cent at the end of 1978-79 in case of age group of 6-11 and from 22 per cent to 33 per cent in case of age-group of 11-14. The outlay under Elementary education in the Fifth Plan was of the order of Rs. 283.63 lakhs. In order to encourage enrolment at the elementary stage package of incentives like free supply of text books, writing materials, supply of free uniform and award of attendance scholarship to girls and opening of Book Banks in M.I. Schools was introduced. In order to expand Teachers' training facility the Plan had also envisaged opening of 30 new Secondary Training Schools.

2.12. The actual Plan expenditure on Elementary education during 1974-78 came to Rs. 13.24 crores. As a result of the expansion activities enrolment at the Primary stage has risen from 22.69 lakhs in 1973-74 to 26 lakhs in 1977-78 and at the Middle School stage from 3.60 lakhs to 4.68 lakhs. The percentage of coverage increased during this period from 75 to 82.4 at the Primary stage and 22 to 25.8 at the Middle School stage. Concentration of resources and efforts has so far been made on hener expansion of facility. Therefore, the position about buildings and teaching aids have become extremely unsatisfactory. At the elementary stage both enrolment and attendance continued to suffer due to want of permanent shelter for a large number of schools. Lack of residential facilities for the teachers has also led to the serious problem of teacher absenteeism leading to heavy drop-out of pupils. Deficiencies in the administrative and supervisory set up have also become a problem at the elementary level and requires to be remedied immediately.

(vi) Rural Roads

2.13. According to the Fifth Plan norms of the M. N. P. all villages within a population of 1,500 or more were to have to road-link for this purpose. 456 number of roads with a total length of 4,601 Kms. with an estimated cost of Rs. 26 crores were identified, but due to constraint on resources it would be possible to construct/improve only 2,110.5 Kms. of roads with an expenditure of Rs. 15.32 crores during the Fifth Plan period (1974-78). It has also not been possible to make many of these roads all-weather and it was not possible to provide cross-drainage works of more than 20 ft. length. Besides the norm of expenditure fixed under the M. N. P. as Rs. 50,000 per Km. was found to be inadequate due to rise in cost of materials and labour charges. These constraints are proposed to be removed during the Sixth Plan period for which adequate provision has been suggested under the Revised Minimum Needs Programme.

(vii) Rural Health

2.14. The Fifth Plan norm under the Minimum Needs of rural health was establishment of one Primary Health Centre for each C. D. Block and establishment of one Sub-Centre for every 10,000 population and provision of drugs at the rate of 12,000 per annum for each Primary Health Centre and 2,000 for each Sub-Centre. There were 314 C. D. Blocks in the State each with one Primary Health Centre at the beginning of the Fifth Plan. An outlay of Rs. 14 crores was suggested in the Draft Plan for strengthening the provision of medical facilities at the level of P.H.Cs. and Sub-Centres. Besides completing the incomplete buildings for Primary Health Centres and Sub-Centres, 187 Sub-Centres were to be established in the hilly areas at the rate of one Sub-Centre for a population of 7,000. As part of the Minimum Needs Programme, 77 Primary Health Centres were to be upgraded to 30-bedded Rural Hospitals.

2.15. However, with the constraint of lack of resources, the outlay on Rural Health under the Minimum Needs Programme could not be of the anticipated order. During the four years (1974-78) of the Fifth Plan a sum of Rs. 3.68 crores was spent and with this, medicine grant at the rate of Rs. 12,000 per P. H. C. and Rs. 2,000 per Sub-Centre for 314 P.H.Cs. and 942 Sub-Centres were provided. Besides, medicines were also provided to 1,096 Family Welfare Sub-Centres. 396 posts of A. N. Ms. were created for these Sub-Centres. 17 P. H. Cs. were upgraded and building construction were taken up in all these cases partially. During this period, construction of staff quarters were taken up for different P. H. Cs. and building construction programme is complete in respect of 309 number of P. H. Cs. out of 314 P. H. Cs. It was also possible to provide electrification to 131 Primary Health Centre buildings during this period.

(viii) Improvement of Urban Slums

2.16. Environmental improvement of slums was taken up at Cuttack. A sum of Rs. 30 lakhs was spent during the Fifth Plan period (1974—78). Civic amenities like water-supply, electricity, paved roads and street lights were provided to 38 identified slums in Cuttack city. This has benefited 51,262 inhabitants who belong to the weaker sections of the community.

(ix) Nutrition

2.17. A sum of Rs. 5.92 crores has been spent in Nutrition during the Fifth Plan (1974—78) under M. N. P. Importance has been given to the supplementary nutritional feeding of the pre-school children and expectant nursing mothers. The coverage in the Fifth Plan is of the order of 9.85 lakh beneficiaries of which 2.44 lakh beneficiaries are provided with local food under the Minimum Needs Programme and 7.41 lakhs are maintained with the food assistance received from the International Agencies.

Agriculture

2.18. The level of production of foodgrains in 1973-74 was 52.75 lakh tonnes and the target for the year 1977-78 was to achieve 64 lakh tonnes. The achievement has been of the order of 55.67 lakh tonnes. 1974-75 and 1976-77 were years of drought and in the year 1977-78 we had floods in as many as 135 blocks of the State. There was full crop damage in 0.95 lakh acres and partial crop damage in 3.64 lakh acres. Estimated value of crop loss was of the order of Rs. 10 crores. Immediately after the floods, vast areas were subject to pest attack. Apart from this, short duration of the monsoon rains coupled with the delayed planting due to lack of farm power partly accounts for low rice yield in kharif.

2.19. The target of production for the year 1977-78 in respect of foodgrains, oil seeds, sugarcane, jute and mesta and the respective achievements are given in the table below :—

Crop	Unit	Target for 1977-78	Achievement in 1977-78
(1)	(2)	(3)	(4)
Foodgrains	.. Lakh tonnes	64	55.67
Oil seeds	.. Lakh tonnes	3.30	2.84
Jute	.. Lakh bales	4.80	4.20
Mesta	.. Lakh bales	1.70	1.71
Sugarcane (Gur)	.. Lakh tonnes	3.00	2.60

2.20. The target of area under Plant Protection measures by the end of the Fifth Plan was 20 lakh hectares. The achievement by the end of the year 1977-78 is 16.90 lakh hectares. In the last two to three years the extent of area attacked by pest has been increasing. Funds at the disposal of the State Government for Plant Protection from the Plan and Non-Plan have been rather inadequate to handle the necessary Plant Protection measures in case of a major pest attack. Government sponsored activities have been found to be inadequate in handling large scale pest attack. Retail trade in pesticide is not well developed in the State. This has been mainly due to the scarcity of technical grade materials and inability of local formulators to compete with national organisations having larger units.

2.21. As regards consumption of chemical fertilisers the target for 1977-78 was 79,000 tonnes of nutrients and the achievement has been of the order of 65,000 tonnes. The achievement is expected to go up during the current year to 83,300 tonnes. There are various factors which stand on the way of large scale fertilizer use. Only 20.5 per cent of the farmers are in the habit of using

chemical fertilizers in the State. The main difficulty is non-availability of fertilizer in time and at easy reach of the farmer. Co-operatives have not been able to organise fertilizer business on a larger scale due to low margin of profit and heavy transportation cost. Private operators are not attracted since movement of fertilizer through road is costlier and most of the demanded brands of fertilizers are to be brought through ports outside the State. A transport subsidy is being proposed during the Sixth Plan to overcome these difficulties.

2.22. During the Fifth Plan, soil conservation measures were undertaken both under the State Plan and under Centrally Sponsored Schemes. An area of 54,124 hectares was covered under various programmes of soil conservation undertaken in the State. A separate directorate of soil conservation was formed during this period.

2.23. There was a target of covering 10,000 hectares under horticulture programmes. Up to the end of the 1977-78 it has been possible to achieve 8,500 hectares under different horticultural programmes. The Compact Area Programmes of in-situ plantation have become popular during the Fifth Plan. A separate Directorate of Horticulture has been established mainly to focus attention for developing Horticultural Programmes particularly in the Tribal areas to wean away tribals from the practice of shifting cultivation.

2.24. Consolidation of holdings has been recognised as a curative measure for the evils of sub-division and fragmentation of holding. Statutory consolidation operation in the State has been started in selected areas since January, 1974. Initially, a modest beginning was made with an area of 1,58,573 hectares to which 95,514 hectares were added in 1976-77 and 100,000 hectares were added in 1978. The total area under consolidation operation by the end of 1977-78 was 3.53 lakh hectares. Priority in this respect is being given to the command areas of major irrigation projects viz. Hirakud, Salandi and Mahanadi Delta. Consolidation of holding in the Command Areas has attracted World Bank assistance. The achievement up to the end of March, 1978 is indicated below :-

(1)	Villages (2)	Hectares (3)
1. Survey	1,562	230,166
2. Preparation of map and land Register	1,299	179,434
3. Publication of Map and records u/s. 9 of the Act.	858	104,708
4. Final publication of Map and records before Consolidation under section 13 of the Act.	602	61,277
5. Preparation of provisional consolidation scheme	416	30,733
6. Final publication of Maps and records u/s 22 of the Act	200	11,392

Co-operation

2.25. Development of co-operative activities has kept pace with the increased activities for agricultural development. By the end of the Fourth Plan, Co-operatives had a total membership of 16.26 lakhs and there was an increase of 6.74 lakhs in membership during 1974-78. Investment in short term credit went up from Rs. 11 crores in 1973-74 to Rs. 26 crores by 1977-78. As regards investment in medium-term loans, achievement during the 1974-78 was Rs. 8.88 crores whereas the corresponding figures by the end of the Fourth Plan, was Rs. 1.37 crores. Considerable improvement has also taken place as regards long-term investment. As against the 4th Plan achievement of Rs. 3.05 crores the investment in long-term loans has reached the level of Rs. 11.41 crores by the end of 1974-78. The total deposits in the Co-operative sector stood at Rs. 46.50 crores by the end of 1967-78. The

value of agricultural produce marketed by the co-operatives was Rs. 8 crores per annum by the end of the Fourth Plan. It has gone up to Rs. 16 crores per annum by the end of the Fifth Plan. The Storage capacity in Rural godowns has increased from 34,100 M.Ts. by the end of the Fourth Plan to 78,400 M.Ts. by the end of the Fifth Plan. The development in the field of consumer movement which was rather slow during the 4th Plan period has picked up considerably during the Fifth Plan. The value of the consumer articles distributed in rural areas has gone up from Rs. 0.50 crores by the end of the Fourth Plan to Rs. 15 crores per annum by the end of the Fifth Plan. The Urban Consumer Co-operatives have also registered a phenomenal increase in their retail sales. The value of retail sales of Urban Consumer Co-operatives has gone up from Rs. 1.5 crores by the end of the Fourth Plan to Rs. 9 crores by the end of the Fifth Plan.

2-26. One of the special features to be noticed in a review of the achievements of Co-operation in the Fifth Plan is the increase in the percentage of agricultural families covered during this period. Whereas the agricultural families covered by the co-operatives constituted only 38 per cent by the end of the Fourth Plan and the coverage went up to 62 per cent within a period of four years. Another feature is the popularity gained by the dug-wells as a source of Minor Irrigation. The Co-operatives have played a major role in financing 1.82 lakh dug-wells during the Fifth Plan.

Irrigation

2-27. During the Fourth Plan there were four continuing major projects, namely, Hirakud, Salandi, Derjang and Mahanadi Delta, and one new major project, namely, Anandpur barrage was taken up. There were eight continuing medium projects and ten new projects were taken up during the Fourth Plan. Hirakud dam project was completed in all respects during the Fourth Plan and Derjang was categorised as "medium" during the Fifth Plan. The three other Major Irrigation projects, namely, Salandi, Mahanadi Delta and Anandpur barrage spilled over to the Fifth Plan and the 18 medium projects also spilled over to the Fifth Plan. During the Fifth Plan two new major Irrigation projects, namely, Rengali and Upper Kolah were taken up. Modernisation of Rushikulya system and improvement and extension of the Hirakud system were also taken up during the Fifth Plan. 15 new Medium Irrigation projects were started during this period. Salandi Major project has been completed except improvement of the Dasmouja system. Ten other Medium Irrigation projects, namely, Budhabudiani, Dhanei, Salia, Salki, Darjang, Bahuda, Ghadahado, Baghua, Uttei and Pitamahar have also been completed. Four major projects, modernisation schemes for 2 major projects and 23 medium projects have spilled over to the Sixth Plan. Total order of investment in Major and Medium Irrigation projects was Rs. 70.63 crores. Additional irrigation potential created has been of the order of 186,240 hectares.

2-28. The Fourth Five-Year Plan started with 130 spill over Minor Irrigation (Flow) projects, 131 new projects were taken up for execution. Thus the total number of projects under execution during the Fourth Plan was 261. By the end of the Fourth Plan 92 projects were completed and the remaining 169 projects spilled over to the Fifth Plan. An additional ayacut of 60,000 hectares was achieved during the Fourth Plan. The emphasis during the Fifth Plan was on completion of the incomplete projects rather than starting of new projects. Only 8 new projects were taken up during this period and 5 old projects were dropped. 142 projects were completed during 1974-78 leaving a balance of 30 projects which spilled over to the year 1978-79, first year of the Sixth Plan. Investment in Minor Irrigation (Flow) during 1974-78 was Rs. 21.97 crores and additional irrigation potential created is of the order of 54,197 hectares.

2-29. In order to implement the lift irrigation programme in a massive scale during the Fifth Plan the Orissa Lift Irrigation Corporation was constituted in 1973 which took over the work of the Directorate of Lift Irrigation. 1,236 energised projects with total ayacut of 29,420 hectares (Khariff) were taken over by the Corporation for operation and maintenance. During the year 1973-74 the Corporation energised 162 numbers of projects creating a potential of about 3,000 hectares in Khariff. Thus, by the beginning of the Fifth Plan the total ayacut under M. I. (Lift) projects was 32,430 hectares in Khariff and about 19,000 in Rabi. Lift Irrigation continued to be popular during the Fifth Plan and a total number of 1,436 Lift Irrigation points were commissioned through the Lift Irrigation Corporation consisting of 707 Tube-wells and 729 river lifts. Additional gross potential created during this period is of the order of 47,270 hectares. Besides, private dug-wells during this period have added to the irrigation potential by 119,920 hectares. As against the Fifth Plan target of 4.00 lakh hectares additional irrigation potential during the Fifth Plan period has been of the order of 4.08 hectares.

Power

2.30. Orissa had an installed capacity of 681.5 M. W. at the beginning of the Fifth Five-Year Plan. By the end of the year 1977-78 the installed capacity has been of the order of 921.5 M. W. The increase by 240 M. W. is due to commission of 4 generating units of 60 M. W. each in the Balimela Project.

2.31. Talcher Balimela double circuit 220 K. V. line has been completed and charged. Out of the total length of 192 Km. Talcher Rourkela 220 K. V. second circuit transmission line which was started during the Fourth Plan work has been completed to the extent of 108 Km. Out of the total length of 923 K. Ms. of 132 K. V. lines taken up during the Fourth and the Fifth Plan a length of 324 Kms. has been completed by the end of 1977-78.

Industries

2.32. With the objective of taking various promotional measures such as financial, technical and managerial to stimulate the growth of large and medium industries in the State the Industrial Promotion and Investment Corporation of Orissa Ltd., was incorporated in 1973-74 with an authorised capital of Rs. 5 crores. The State Government invested Rs. 129.61 lakhs in the share capital of this Corporation in order to enable it to participate in the equity of the joint sector and private sector projects. The requirement of funds to operate the refinancing scheme of I. D. B. I. was also met from this. During the Fifth Plan Period the IPICOL has started implementation of 5 Joint Sector Projects viz. Tyre and Tube Project, Refractory Project, Tool Room Project, Watch Assembly Unit, Electronic Manganese Dioxide and Synthetic Detergent Project and 24 Private Sector Projects. Out of the 24 projects, 12 projects have gone into production with IPICOL's assistance and 12 others are under implementation. The total capital mobilised by the IPICOL during the Fifth plan Period for setting up large and medium industries, aggregated to Rs. 6,018.00 lakhs and 5,659 persons have been provided with employment. Another significant achievement of the Corporation is the identification of 92 new entrepreneurs with equal number of projects.

2.33. Village and Cottage Industries in Orissa encompass handloom, sericulture, handicraft, salt and coir industries and village industries as listed out by the Khadi and Village Industries Commission. The main thrust of the development programmes in handloom during the Fifth Plan was to enable weavers engaged on handlooms to obtain yarn at a reasonable price, expand the number of working days in a year, improve and upgrade their skill and providing marketing support for the products. In order to assist weavers outside the co-operative fold the Orissa Handloom Development Corporation was set up and it has invested Rs. 5,730 lakhs during 1977-78. The average income per day per weaver has gone up from Rs. 4 to 5 in 1975-76, Rs. 7 to 8 by the end of 1977-78. The value of sale for annum of handloom fabrics has gone up from Rs. 266.56 lakhs in 1975-76 to Rs. 350.82 lakhs by the end of 1977-78 and production during the same period has gone up from 51.32 lakh metres to 82.63 lakh metres. The membership of Handloom weavers in the co-operative fold has been doubled over the last 4 years and the present membership figure stands at 106,029.

2.34. Co-operative societies of Tassar rearers are the main agencies for tassar growing activities in the State. The number of such societies has gone up from 27 in 1974-75 to 133 by the end of 1977-78 and the number of rearers engaged in rearing has gone up from 17,000 to 21,000. The value of yarn converted into fabrics has gone up from Rs. 35 lakhs in 1975-76 to Rs. 66.60 lakhs by the end of 1977-78.

2.35. Orissa has about 35,000 artisan families dispersed in rural areas who are engaged in nearly 50 varieties of handicrafts as a source of employment. More than 15,000 families are engaged in production of Brass and Bell metals. Steps were taken during the Fifth Plan for providing a package of inputs for these artisans for improving their skill and capacity, for enhancing the market acceptance of handicraft products and providing aggressive marketing support through sales emporia and sales campaigns inside and outside the State. The value of sale of handicraft per annum has gone up from Rs. 71.19 lakhs in 1975-76 to Rs. 82.72 lakhs in 1977-78. The number of handicraft Co-operative Societies has gone up from 160 in 1975-76 to 182 by the end of 1977-78.

2.36. Inadequacy of complete and up to date statistics for the traditional and rural Industries is the main handicap for assessing the physical progress of the development programmes undertaken. The Orissa Khadi and Village Industries Board during the Fifth plan has taken a number of measures for dispersal of village industries in conformance with the guidelines of the K. & V. I. Commission. 143 new societies with 3,500 members were organised during 1977-78 and assistance was made available to 580 rural artisans of which 110 belong to the weaker sections. Fifth Plan

experience has been that out of the 20 village industries listed by the Commission the following 9 appear to be promising in the context of availability of raw materials and environmental situation in Orissa.

- (a) Collection of non-edible oil seeds
- (b) Carpentry and Blacksmith
- (c) Bee-Keeping
- (d) Village leather industry
- (e) Village pottery
- (f) Fibre
- (g) Cane and bamboo
- (h) Cottage match
- (i) Plam-gur

Health

2:37. Small-pox and Malaria have been successfully eradicated. By the end of March, 1978 the achievement under the Family Planning Programme has been the coverage of 26.5 per cent of the 4.5 million eligible couples protected under different methods. Surgical facilities in family welfare services have been extended to 50 selected Primary Health Centres and 25 subdivisional Hospitals. Cases of voluntary sterilisation during 1974—78 has been of the order of Rs. 3.07 lakh. The expenditure of Rs. 39.40 lakhs was incurred for provision of specialised services at the Districts Headquarters Hospitals during the period 1974 - 78, 88 posts of specialist have been created in different subjects in the District Headquarters Hospitals. Due to limited resources the deficiency in plan and other facilities could not be made good during the Fifth Plan period.

Education

2:38. The Fifth Plan had envisaged opening of 5,000 new Primary schools in the unserved areas upgradation of 9,900 three class primary schools to five class ones to serve the six to eleven age group upgradation of 2,965 viable primary schools to middle schools level, opening of 15 High schools including 5 Girl's High schools in the tribal pockets and establishment of 2 Women's Colleges in backward areas. Planning Commission had approved a total outlay of Rs. 45.97 crores (excluding outlay on cultural affairs). During the third year of the Plan, the total plan allocation was reduced to Rs. 34 crores. The actual plan expenditure during 1974-78 came to nearly Rs. 25 crores. During this period 2,100 new primary schools were opened, 5,800 three-class primary schools were upgraded to five class ones 1901 new middle schools have been opened and 17 High schools including 5 Girl's High Schools were established by the Government in the backward areas. Two new Government Women's Colleges were also opened during this period. The High School enrolment which was 13 per cent in 1973-74 rose to 14.5 per cent in 1977-78 and at the college state it rose from 2 per cent to nearly 2.9 per cent. The over all experience at the end of the Fifth Plan has been that emphasis on expansion has tended to somewhat relegate the qualitative aspects of education and educational reforms to the background.

Roads

2:39. Orissa has continued to lag behind as regards road communications. Even by the end of the Fifth Plan it has not been possible to connect six Subdivisional headquarters of the State with respective District Headquarters with all weather communication. This is also the case with 95 Block Headquarters, 85 Police Stations and 18 Tahasils of the State. There are quite a number of tribal and rural areas which are not approachable. The deficiencies in road communication system in the State have to be made up. For construction of new roads, adequate maintenance of existing roads, construction of missing links/bridges and replacement of narrow delapidated bridges on the existing road system, an amount of Rs. 176.02 crores will be required. 327 road works have been identified under different categories. It can be seen that road sector has all along been neglected in the State mainly due to paucity of resources. There was an investment of Rs. 1.87 crores for improvement of 1,249 K. Ms. of existing roads, construction of 48 K. Ms. of new roads and 16 bridges in the First plan. In the Second plan, 1,600 Kms. of roads were improved, 52 K. Ms. of new roads were constructed and 28 bridges were constructed with an investment of Rs. 5.4 crores. During the Third Plan the investment was Rs. 8.48 crores and with that amount 1,158 K.Ms. of existing roads were improved. 80 K. Ms new roads were constructed and 110 new bridges were completed. In the annual plans from 1966 to 1969, a sum of Rs. 3 crores was spent and the physical achievement thereof was 570 K. Ms. of surface improvement, 10.4 K. Ms. of new roads and 63 bridges. During the Fourth Plan the total expenditure for road development was Rs. 13.94 crores.

240. During the Fourth Plan period the outlay for development of P W D roads under the State Plan was Rs. 10.95 crores which was later increased to Rs. 11.17 crores. Out of 217 number of road and bridge Projects approved by the State Government for execution during the Fourth Plan period 146 Projects were carried over to the Fifth Plan period due to non-availability of funds and only 71 projects could be completed during the Fourth Plan. Whereas for the spill over projects only, the requirement of funds in the Fifth Plan was of the order of Rs. 13.55 crores, due to the constraint of resources the amount available for expenditure during the Fifth Plan was Rs. 11.42 crores.

241. From review of progress upto the end of the Fifth Plan it is apparent that the cumulative backlog in respect of road communication for Orissa has continued unabated. The existing crust of many roads has been badly damaged due to the impact of modern heavy traffic. Many of the old bridges and culverts are in precarious condition and many weak and narrow bridges need immediate replacement. Heavy investment would be needed to make up all these deficiencies.

242. An investment of the order of Rs. 459.96 crores will be needed for the improvement of road system in the State to attain the present all India level. This however, does not include the length of Panchayat roads. Though the State is endowed with natural resources and sufficient manpower, it is backward in industry. Commerce and Agriculture mainly due to lack of a good communication system. Experience of the earlier plans makes it clear that a much higher level of investment than hitherto made is required for developing a good communication system.

Area Development

243. During the Fifth Plan, ayacut development has been taken up in a big way in order to maximise utilisation of the potential already created. Steps were initiated to remove the deficiency in the development of Command Area and to consider measures for optimising agricultural production in such areas. Accordingly, the State Government constituted four Command Area Development Authorities in the State for the three major irrigation systems of Hirakud, Salandi and Mahanadi Delta (Puri and Cuttack Delta). The concerned Revenue Divisional Commissioner has been appointed as the Chairman of the Command Area Development Authority and in order to co-ordinate the activities in this regard at the State level, a Commissioner, Command Area Development Authority has been appointed. Programmes like Consolidation of Holdings, Topographical Survey, Construction of field channels and lining of canals have been taken up. The content of this programme will be expanded during the Sixth Plan period.

244. Some of the experience of the Fifth Plan in different Sectors of the economy have been explained in brief above. These, however, are not exhaustive and more details of the achievements and shortfalls in the Fifth Plan have been given in the next few chapters while presenting the sectoral programmes. Statements G. N. I. and G. N. II in part III give a broad over view of the financial and physical achievements under selected Heads of Developments. In certain cases like agricultural and industrial production there has been short fall from the target but in certain other cases like Power, Co-operation, Minor Irrigation and Family Welfare the targets have been exceeded. The shortfalls are mainly due to the limited size of the Public Sector investment, difficult resource position of the State, natural calamities like drought and flood and other organisational and socio economic constraints.

245. The *per capita* income of Orissa at the beginning of the Fifth Plan was Rs. 258.50 at 1960-61 prices as against the all India average of Rs. 349.10. In 1976-77 the average *per capita* income for India was Rs. 371.90 whereas that of Orissa was only Rs. 226. Thus the gap between the two which was Rs. 90.60 during 1973-74 was Rs. 145.90 during 1976-77 as has already been discussed in the first chapter. The gap between the *per capita* income between the Orissa and all India has widened during this period. During 1974-75 the gap was Rs. 111.80 and during 1975-76 it was Rs. 90.20. Adverse climatic conditions namely severe drought explains the width of the gap in 1976-77 to a considerable extent, but fact remains that the disparity is as conspicuous as it was at the beginning of the Fifth Plan period, if not more.

246. Un developed infrastructure continues to act as a disincentive despite the vast potential of natural resources. In order to do away with the cumulative backlog in unemployment and infra-structural development plan investment has to be of a sizable order in the Sixth Plan. Public sector investment continued to play a very significant part in the economic development in the State during the Fifth Plan period and there is clear indication that heavy reliance has to be placed on a sizable public sector investment in the Five Year Plan 1978-83.

CHAPTER 3

Objectives, strategy and The Plan in outline

3.1. The National Development Council in its meeting on the 18th and 19th March, 1978 considered the Draft Five Year Plan for 1978-83 prepared by the Planning Commission which outlined the national objectives, developmental strategy, economic and social policies, quantum of public sector investment etc., for the Five-Year Plan. Chief Minister, Orissa in his speech in the N. D. C. had observed, "on the eve of the last General Elections to the Parliament and the state Legislatures we had promised to our people to remove unemployment and destitution within 10 years. We also promised to serve the poorest section of the population with some basic life needs such as clean drinking water, health care, elementary education, etc. We assured that we would pursue appropriate policies to achieve these goals. We have these promises to keep and keep we must". He went on to observe that it gave him great satisfaction to find that the Draft Plan document prepared within the short span of less than a year has quite rightly incorporated these promises as primary objectives to be attained while stimulating the growth of economy at a rate higher than in the past, reducing the disparities in the distribution of incomes and wealth and at the same time moving towards a larger measure of National self-reliance.

3.2. He had stressed that in finalising the size of the State Plan and allocation of Central assistance, cases of under-developed States like Orissa should be considered on a special footing and availability of resources within the State should not be taken as the only criterion. It would be rather more appropriate to consider the other important factors prevailing in individual States such as low economic growth, low *per capita* income compared to the All India average as well as other advanced States and concentration of Scheduled Caste and Scheduled Tribe population in the State who are the poorest sections of the population. He further emphasised that if these factors are seriously taken into consideration and if we aim at not allowing the existing gap atleast to further widen we should provide basic amenities to the people and expand employment opportunities.

3.3. The principal objectives of planning at the national level have been defined as, achieving within a period of 10 years:—

- (i) The removal of unemployment and significant under-employment
- (ii) An appreciable rise in the standard of living of the poorest sections of the population
- (iii) Provision by the State of some of the basic needs of the poorer sections of the population like clean drinking water, adult literacy, elementary education, health care, rural roads, rural housing for the landless and minimum services for the urban slums.

These primary objectives should be attended to while—

- (iv) achieving a higher rate of growth for the economy than in the past,
- (v) moving towards a significant reduction in the present disparities of incomes and wealth, and
- (vi) ensuring the country's continued progress towards self-reliance.

The State Planning Board have fully endorsed these objectives and have accepted the relevant objectives for the State Plan.

3.4. The Planning Commission have indicated that the tentative size for the Five-Year Plan 1978-83 for Orissa should be Rs. 955 crores. Taking into account the plan expenditure for the four years 1974-78 and the current year's plan outlay of Rs. 191 crores the total outlay of the fifth Five-Year Plan would have been of the order of Rs. 645 crores. Considering this, the outlay of Rs. 955 crores is absolutely on the low side and it does not even provide for the minimum trend increase on the outlay fixed for the first year of the Sixth Plan. In order that regional economic imbalances should reduce to the minimum, the States which are today economically backward obviously need higher rate of economic growth than the All India average. Because of their backwardness they are unable to raise sufficient resources and have to look to the union Government for necessary assistance. Therefore, it is logical that Orissa deserves a larger plan size and also deserves a higher percentage of its plan outlay to be given in the shape of Central assistance. A standard formula of plan allocation and Central assistance for all States has so far been followed without consciously attempting to cut down the regional disparities and imbalances. However, the National Development Council are now seized of the problem of finding out a suitable alternative to the present system of allocation of resources between the Centre and the States.

3.5. Even though Orissa has always been emphasizing on the point that Five-Year Plan for the State should be need based rather than resource based, all efforts will be made for additional resource mobilisation. In spite of severe limitations on the capacity of the State to mobilise additional resources, Rs. 335 crores is estimated to be mobilised in 1978-79 from the measures undertaken this year which is the first year of the Sixth Plan. Further measures will be introduced during the plan period and it is estimated that the additional mobilisation would aggregate to about Rs. 85 crores in the years 1978-83. There is a limit beyond which further efforts in this direction would not yield any result and could only create further stress in different areas of the economy.

3.6. Orissa among all the States has the highest percentage of people below the poverty line. The prevalence of poverty and inequality can be seen most clearly in the conditions of life of the two most disadvantaged groups in our society, the Scheduled castes and the Scheduled Tribes. The living standards of these two groups and their economic and social status should rise significantly in order to impart some meaning to our concept of economic growth with social justice. It is not that nothing has been done so far for their development but their involvement in the process of development has to be more substantial than has been the case so far. Rural and urban poverty in the State are identifiable with low productivity, low wages and intermittent employment as well as chronic lack of work. The task before us is to create through development, additional employment opportunities to tackle the problem of unemployment and under-employment as far as possible. Therefore, we aim at ensuring within a specified time frame a measureable increase in the welfare of the people starting with the poorest of them.

3.7. In order to launch a direct attack on poverty planning process has to adopt a two pronged strategy specially to meet the needs of the weaker sections of the society (i) by raising the private consumption expenditure of the lower expenditure groups and (ii) by making provision for the basic minimum needs through public consumption expenditure on elementary education, health care, rural roads, housing, etc.

3.8. The existing gap between the *per capita* income of State and of India should be narrowed to the extent possible in the coming 5 years. An appreciable rise in the standard of living of the poorest section of the population has been accepted as one of the principal objectives of planning. There are obvious limitations to the extent to which private consumption of the poorest sections of the population can be raised through ordinary process of economic development. Therefore, resources have to be set apart for ensuring a higher level of social consumption for these people and this must be followed up by adequate allocations for the areas where these targets groups congregate.

3.9. The *per capita* income of Orissa in 1977-78 at 1970-71 prices is estimated at Rs. 522.60. In order that Orissa reaches the all India level by 1982-83, it has to increase its *per capita* income by Rs. 236.00. In order to achieve this level of *per capita* income the State has to make an outlay of Rs. 3,104 crores at 1970-71 prices. Assuming the all India wholesale price Index for 1977-78 to be 186 the outlay required at current prices works out to Rs. 5,773 crores. This order of plan investment would result in a compound growth rate of 9.7 per cent. In view of our past experience of having reached only a growth rate of 3.8 per cent, an ambitious growth rate of 9.7 per cent is unattainable. On the other hand, the calculations would show that a growth rate of less than 6 per cent will not enable us to achieve any of our development objectives. Thus taking a realistic view of the case, it is urged that the Medium Term Plan should aim at a growth rate of 6 per cent involving an outlay of Rs. 3,311 crores at 1977-78 prices.

3.10. Private sector investment in this State has been very shy mainly for the lack of infrastructure facilities. The present rate of saving of 5 per cent, can be expected to attain the level of 7 per cent with the development efforts contemplated. The present level of State income is around Rs. 1,317 crores. With the estimated saving rate of 7 per cent, the annual savings (which we assume to be equal to the investment) should be about Rs. 92 crores. In a period of 5 years, therefore, the private sector investment may be estimated at Rs. 460 crores. In the past, investment of the order of Rs. 45 to Rs. 50 crores per annum has been flowing from the Union Government to our State. On an optimistic assumption, this will be doubled during the next five year period, and the Central sector investment in the State may be taken at Rs. 500 crores during this period. Thus the balance amount of Rs. 2,351 crores may be provided in the State sector. Considering the imponderables inherent in the process, projection of the State Plan can be suggested around Rs. 2,500 crores. The sectoral outlays proposed in the State plan total to Rs. 2,551.85 crores. With this order of investment the State has set before itself the following objectives:—

- (a) A growth rate of about 6 per cent,
- (b) Providing employment to about 60 per cent of the unemployed by 1982-83,
- (c) Bridging the existing gap in the *per capita* income of the State and of India by about 20 per cent by 1982-83, and
- (d) creating opportunities for a substantial portion of the population below poverty line to secure a minimum consumption level earning.

3.11. The State Government project a plan outlay of Rs. 2,551.85 crores in the State sector. On present reckoning, resources of the State Government and the State enterprises would provide about Rs. 440 crores of this outlay and the balance has to come from the Centre. Resources raising capacity of the State is admittedly limited. A massive induction of Capital resources from outside has been recognised as the only method of lifting up under-developed areas that have rich potential. Since the Finance Commission is yet to submit its recommendations to the Government of India, for the present purpose of working out the resource built up it has been assumed that the awards of the 7th Finance Commission would fully cover the whole of non-Plan Revenue and Capital gaps for the year 1979—83. No clear idea is also available of the likely order of Central Plan assistance to the State during the next 5 years.

3.12. The plan outlays cannot be distributed among the States mechanically on the basis of population or even the percentage of people below the poverty line. But in view of the accepted national objectives, the claims of Orissa for a reasonable share in the National public sector outlay should carry due weight. The public sector outlay proposed for the country as a whole in the Draft Five-Year Plan is Rs. 69,380 crores. The plan outlay proposed by Orissa in the public sector is Rs. 3,052 crores which is only 4.4 per cent of the national outlay. In view of the fact that Orissa has 4 per cent of the the total population of India, the plan outlay suggested is not at all unjustified.

3.13. The sectoral strategies which are given in more detail in the respective chapters are described briefly below.

Agriculture

3.14. The strategy in Agriculture will be to increase the area under irrigation, gross cropped area and cropping intensity and productivity and ensure large application of inputs. This will be backed by improved agronomic practices for higher efficiency through development and propagation of better seeds, a strengthened extension system, assured availability of credit and improved facilities for marketing, storage and processing. To maximise employment in agriculture it is not only necessary to provide for infrastructure and inputs which will increase physical productivity but also to push forward the implementation of land re-distribution programmes and schemes for the consolidation of holdings. Consolidation of holdings, which is an important pre-requisite for good water use will be vigorously pursued along with land and tenancy reforms. Besides, a policy of optimum land use involving better water management, reclamation and reshaping of land, drainage and other on-farm developments will be adopted. Special attention will be paid to increase the area under oil-seeds and pulses in the State.

Animal Husbandry, Dairy Development and Fisheries

3.15. In this sector, the major policies will be to increase production of livestock products, such as milk, eggs, poultry, and mutton by improved methods of animal husbandry supported by a marketing structure based on a functional system of co-operatives on the lines prevalent in Gujarat State. For this purpose District Milk Co-operative Unions will be activated. Planned cross breeding for improving the productivity of cows and buffaloes and draught power of bullocks, and promotion of poultry in rural areas on co-operative basis supported by marketing services will be adopted. Frozen semen technology will be adopted and the coverage will be increased through centralised units. In order to meet the large gap between the requirement and availability of fodder and feeds, the production of fodder crops will be given priority as part of an integrated programme of crop husbandry in mixed farming. Plantation of fodder trees will also form a part of the forestry programmes. Fodder and feeding development will be implemented in the State as per recommendations of the National Commission on Agriculture. It is expected that milk production will increase to 280 thousand tonnes as against the current level of 212 thousand tonnes. A Dairy Development Corporation will be set up which would be the apex body for marketing of milk and milk products in the State.

3.16. Fisheries programme will be stepped up giving special emphasis on family based labour intensive inland and brackish water fisheries and improving the harvest from marine fisheries. Fish production is expected to go up substantially to 107 thousand tonnes, as against the present level of 56 thousand tonnes.

Forestry

3-17. The main thrust of the programme will be to accelerate production forestry and social forestry including farm forestry giving due attention to the need for maintaining the ecological balance and protecting the environment. Besides taking up afforestation programmes, out strategy in the forest sector will also be to double the output of forest products by the end of the ten-year period ending 1987-88. Coastal afforestation programme will be given foremost attention and shelter belt plantation along the sea coast will be taken up as one of the anticyclone measures.

Irrigation

3-18. The main support to the agricultural programme in the plan is a large step-up in the irrigation potential. As against the additional potential of 187.64 thousand hectares in major and medium irrigation achieved in the State during the first four years of the Fifth Plan, it is contemplated that additional potential of 493.01 thousand hectares can be achieved by the end of 1982-83. In implementing the irrigation programme, importance will be given to the following :—

- (a) getting full utilisation of the potential already created ;
- (b) expeditious completion of on-going projects ;
- (c) proper maintenance and operation of the existing irrigation systems ;
- (d) ensuring that the smaller farmers get their fair share of water.

3-19. Under minor irrigation, the main thrust of our strategy would be launching of new schemes in drought prone areas along with a careful assessment of the ground water potential. Renovation of derelict and semi-derelict projects will also receive due attention. Co-ordination of Ground Water programmes with rural electrification schemes with acceleration of both and utilisation of institutional finance for them will be increased sizeably. Dug well as a source of minor irrigation has become very popular during the Fifth Plan. It is proposed to take up a programme of three lakh dug wells during the Sixth Plan period fully availing the quantum of institutional finance and providing subsidy to Small and Marginal farmers. Of these, 77,000 wells are proposed to be energised.

Power

3-20. In the tentative outlay of Rs. 2,551.85 crores now being suggested for the State Plan, Rs. 700 crores relate to programmes under power sector. It is anticipated that by 1982-83 the installed capacity will increase from the present level of 914 M. W. to 1,264 M. W. adding an additional capacity of 350 M. W. The State Government will also take steps to impress on the Government of India for establishment of a Super Thermal Station at Talcher during this plan period. Further the State Government have also offered the proposed Bhimkund Project to the Central Government for its execution on Hirakud pattern. Additional efforts will be made in the coming five years to strengthen the transmission system and to achieve an effective regional grid operation.

3-21. Rural Electrification will receive the highest priority. At present only 14,161 villages in the State have been electrified out of the total 51,639 revenue villages. The coverage comes to 27.42 per cent. During the Plan period, 1978—83 it is proposed to electrify 11,050 villages and energise one lakh pump sets. In order to provide more funds for rural electrification, advantage will be taken of the new scheme of joint financing by Rural Electrification Corporation, A. R. D. C. and Commercial Banks.

Industries (Large and Medium)

3-22. While the emphasis is on village and cottage industries the Large and Medium Industries will not be neglected. I. P. I. C. O. L. will be assigned to play an important role in the promotion of large and medium industries in the State. In addition to their existing programme, this corporation would take up new projects such as Sponge Iron project and Ferro Vanadium project. 45 projects in the private sector will also be promoted during this period.

Village and Small Industries

3-23. As a contributing factor to the growth of employment, this sector will receive high priority. The Integrated Rural Development programme envisages creation of detailed block level programmes for full employment. This will identify the scope for setting up traditional and other small industries taking into account local resources like raw materials, manpower, marketing etc. In order to minimise the number of contact points that an entrepreneur has to deal with, a District Industries Centre has been established in each district where the services and inputs required by the entrepreneurs namely, raw materials, technical and marketing assistance, credit etc. will be provided. The major drawback of marketing the products of small scale industries is proposed to be removed by arranging marketing assistance through governmental and co-operative efforts. Training of entrepreneurs will be expanded substantially, besides increasing the training facilities to the rural artisans, weavers etc.

Roads and Road Transport

3-24. The National Policy is to provide all the villages having a population of 1,000 and above with link roads during the next 10 years ending 1983. As a sequel to this programme, it is proposed to cover all the villages in the State having a population of 1,500 and above and efforts will be made to cover some of the villages having population within 1,000 to 1,500 with link roads during the next five year Plan period. The working group set up by the State Government have assessed that the requirement of funds in this sector will be of the order of Rs. 458 crores. It is proposed to provide Rs. 286.90 crores during this Plan period, in addition to the assistance available under Food for Works Programme. The balance will be taken care of in the next Five Year period. The public sector transport services will be adequately strengthened to cope up to the additional demands on the seating capacity during the Sixth Plan.

Education

3-25. The priorities in the Education sector will be the removal of illiteracy and universalisation of elementary education and making education more relevant to society and employment oriented. A programme of adult education has been launched with emphasis on illiterates in the age group of 15—35. Considering the resources and availability of funds, this programme will cover 45 lakh adults of the above age-group by 1982—83 with an outlay of Rs. 28 crores. In this work, school teachers, university students and other voluntary organisations having experience in this field will be actively associated. Regarding universalisation of elementary education it is estimated that the population in the age-group of 6—11 will be 33.41 lakhs by 1982-83. It is proposed to enrol all these children in the primary schools. The present achievement in enrolment is only 26 lakhs. In the middle school stage in the age-group of 11—14, the population is estimated at 18.94 lakhs. During the next 5 years it is proposed to enrol 68 per cent of them numbering 12.88 lakhs. Expansion of general academic courses in secondary and university education will be slowed down and emphasis would be shifted to vocationalisation, quality improvement and removal of existing inadequacies.

Health and Family Welfare Programme

3-26. Recognising the crucial role of the Primary Health Centre as the focal point for delivery of the health care in rural areas, the State's Sixth Plan proposals seek to achieve the following objectives :—

- (a) Strengthening the P. H. C. complex by bringing within its fold all curative institutions like dispensaries and Medical Aid centres which hitherto were not under the command of the P. H. C., and
- (b) Establishment of additional Sub-Centres in a phased manner so as to achieve a norm of one Sub-Centre for approximately 8,000 population by 1983 and 5,000 by 1987-88. The Family Welfare Programme will continue to receive high priority in this plan also. As against the achievement of 3.07 lakhs of voluntary sterilisation during the four years 1974—78 a target of 9.55 lakhs of voluntary sterilisation has been kept for the five years 1978—83.

Revised Minimum Needs Programme

3-27. All the schemes under the Revised Minimum Needs programme would get the highest priority in the respective sectors. The most important among them is the Rural Water-Supply. All the identified problem villages will be covered with at least one tube-well/Sanitary well each by the end of 1979-80, both under M. N. P. and Accelerated Water-supply Programme. The Sixth Plan programme however, envisages coverage on the basis of population i. e. one tube-well/sanitary well for population of 200 or part thereof. An outlay of Rs. 14 crores for sanitary wells and Rs. 26 crores for the tube-wells have been provided under M. N. P. which would go a long way in meeting the need for safe drinking water in the rural areas.

Tribal Sub-Plan

3.28. During the Fifth Five-Year Plan, blocks having tribal population of 50 per cent and above only were included in the tribal sub-plan programmes. This programme will now be intensified during the next five years and will be extended to contiguous areas of 10,000 population which have more than 50 per cent tribal people. The emphasis in the Sixth Plan would shift to project level Plan formulation and implementation. For the first time micro plans at the I. T. D. P. level are under preparation and after the finalisation of these, State Tribal Sub-Plan will be presented.

Antyodaya

3.29. An increase in National income and *per capita* income is not a necessary and sufficient condition to eradicate poverty. Therefore, for a direct attack on poverty and unemployment, Antyodaya Programme has been taken up on a priority basis. The status and income of the poor can be raised more effectively by having family specific plans for their development and these plans would be integrated into the rural area plans. The Antyodaya Programme aims at the economic development of the poorest of the poor families in every village. It is an attempt to reverse the pattern of development that has benefited the rich and widened the gulf between the poor and the rich.

3.30. The programme has been patterned more or less on the Rajasthan Scheme. This programme will be introduced at first in 279 Blocks out of the total number of 314 Blocks in the State, which are at present covered by Special Development Agencies/Projects like S. F. D. A., C. A. D. A., D. P. A. P., I. T. D. P., T. D. A. and I. R. D. The other Blocks will be covered gradually. In these Blocks about 20 per cent of the villages will be selected in the first year. The same rate of coverage will be maintained in the subsequent years so that during the Sixth Plan period all the villages of the State will get the benefits of the scheme. In each of the selected villages, on an average five of the poorest families will get the benefit of any or more of the schemes under this programme.

3.31. The schemes which will be commonly adopted are:—

- (i) Old age pension scheme ;
- (ii) Allotment of land ;
- (iii) Agricultural development ;
- (iv) Dairy and animal husbandry ; and
- (v) other miscellaneous schemes such as fishery, farm forestry and schemes adopted by the Khadi and Village Industries Commission.

3.32. The pattern of assistance for various schemes as applicable in case of S. F. D. A., C. A. D. A., D. P. A. P., T. D. A., I. T. D. P. and I. R. D. will be applicable for the Antyodaya beneficiaries.

3.33. A comparative statement of expenditure during the Fifth Plan (1974—78), the outlay for 1978-79 and the tentative sectoral allocation suggested for 1978—83 is given at Annexure-1. The outlays and expenditure for the Fifth Plan (1974—78) and the proposed outlays for the Sixth Plan (1978—83) are given at Statement GN-1 and GN-2. The physical targets and achievements for the Fifth Plan and the targets proposed for the Sixth Plan are given at Statement GN-3.

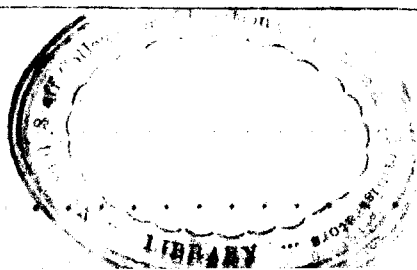
ANNEXURE I

TENTATIVE ALLOCATION FOR THE MEDIUM TERM SIXTH PLAN 1978—83

(Rs. in lakhs)

Head of Development	Expenditure, 1974—78	Outlay, 1978-79	Total (Col. 2+3)	Tentative allocation suggested for 1978—83
(1)	(2)	(3)	(4)	(5)
Agriculture ..	1,540.37	1,085.00	2,625.37	8,500.00
Land Reforms ..	473.29	302.00	775.29	6,450.00
Minor Irrigation ..	3,103.42	1,380.00	4,483.42	14,500.00
Soil Conservation ..	255.15	120.00	375.15	2,129.00
Area Development ..	181.35	380.00	561.35	2,456.00
Animal Husbandry & Dairy Development	294.04	160.00	454.04	2,200.00
Fisheries ..	172.26	139.00	311.26	2,000.00
Forests ..	283.61	120.00	403.61	2,500.00
Investment in Agricultural Financial Institutions.	246.44	96.00	342.44	1,580.00
Community Development and Panchayats	208.13	60.00	268.13	1,000.00
Agriculture & Allied Sector ..	6,758.06	3,842.00	10,600.06	43,285.00
Co-operation ..	989.29	510.00	1,499.29	5,900.00
Major & Medium Irrigation ..	7,063.11	3,200.00	10,263.11	45,000.00
Flood Control ..	585.49	300.00	885.49	4,500.00
Power ..	18,336.29	6,800.00	25,136.29	70,000.00
Irrigation & Power ..	25,984.89	10,300.00	36,284.89	1,19,500.00

(1)	(2)	(3)	(4)	(5)
Large & Medium Industries ..	550.62	130.00	680.62	3,249.00
Village & Small Industries ..	377.42	240.00	617.42	6,529.00
Mineral Development ..	395.75	160.00	555.75	2,650.00
Industries & Mineral ..	1,323.79	530.00	1,853.79	12,428.00
Roads & Bridges including N. M. P. ..	2,495.18	835.00	3,330.18	28,690.00
Road Transport ..	309.40	143.00	452.40	1,600.00
Inland Water Transport ..	7.72	8.00	15.72	500.00
Tourism ..	46.34	27.00	73.34	500.00
Transport and Communication ..	2,858.64	1,013.00	3,871.64	31,290.00
General Education ..	2,531.43	1,114.00	3,645.43	11,890.00
Art and Culture ..	60.62	26.00	86.62	317.00
Technical Education ..	64.95	28.00	92.95	600.00
Medical & Public Health ..	869.58	368.00	1,237.58	5,272.00
Urban Water Supply ..	329.78	165.00	494.78	3,123.00
Rural Water Supply ..	990.99	361.00	1,351.99	4,000.00
Housing ..	1,159.47	365.00	1,524.47	6,820.00
Urban Development ..	49.22	15.00	64.22	1,019.00
Information and Publicity ..	35.68	6.00	41.68	200.00
Labour & Labour Welfare ..	32.78	14.00	46.78	178.00
Craftsman Training ..	32.04	14.00	46.04	200.00
Welfare of S. C., S. T. & Other Backward Classes ..	346.45	115.00	461.45	2,000.00
Social Welfare ..	11.27	6.00	17.27	455.00
Nutrition ..	592.48	155.00	747.48	2,700.00



	(1)	(2)	(3)	(4)	(5)
Other Social and Community Services— Public Co-operation.		1·03	0·50	1·53	25·00
Social Services ..		7,107·77	2,752·50	9,860·27	38,852·00
Secretariat Economic Service ..		3·51	6·00	9·51	100·00
Other Economic Services (Statistics) ..		23·22	12·00	35·22	250·00
Economic Services ..		26·73	18·00	44·73	350·00
Government Press and Publications ..		92·78	24·50	117·28	350·00
Building of different Departments ..		163·33	100·00	263·33	3,100·00
Schemes of O. C. C. ..		56·98	10·00	66·98	130·00
Miscellaneous ..		313·09	134·50	447·59	3,930·00
Grand Total ..		45,362·26	19,100·00	64,462·26	2,55,185·00

CHAPTER 4

FINANCIAL RESOURCES

4.1. The Plan aims at achieving an annual growth of 6 per cent for the State's economy with a total outlay of Rs. 33,11 crores having a public sector component of Rs. 30,00 crores of which Rs. 25,52 crores is proposed to be in the State Plan. Optimum mobilisation of internal resources by the State Government and flow of assistance of a sizeable order from the Centre are essential for financing a plan of this size. From year to year the non-plan revenue and Capital accounts of the State have been characterized by chronic deficits. The State had an accumulated over draft of Rs. 21.42 crores at the commencement of the Fourth Plan. A sizeable overdraft by the end of 1978-79 is also foreseen. A weak resource base, characterised by subsistence agriculture, low level of industrialisation and urbanisation, is the main reason for the imbalance between needs and resources for rapid growth. About eighty-five per cent of the population of the State (nearly 40 per cent of which are Scheduled Castes and Scheduled Tribes) live below the poverty line. The *per capita* net domestic product of the State which was Rs. 707 in 1974-75 has registered a share fall even in terms of current prices to Rs. 6,662 in 1976-77 (Quick estimate). The extent of urbanisation in the State is 8.4 per cent only against the country's average of 19.90 per cent *per capita* value of manufactures is Rs. 41.92 against the national average of Rs. 105.56, the ratio between irrigated and unirrigated agricultural lands is 25:75 in the State while for the country as a whole it is 30:70. In the back drop of this economic scene the possibility of internal resource mobilisation, of an order fully commensurate with the investment requirement, is remote. The choice for the State Government in the field of internal resource mobilisation is perforce limited to (a) maximising efficiency of collection of revenue from existing sources, (b) selectively revising rates and taxes, commensurate with increase in the State's net domestic product and *per capita* taxable surplus, (c) economising non-plan and non-productive expenditure wherever possible, (d) improving returns from public sector enterprises and (e) mobilising private savings for productive purposes.

4.2. The table below indicates the resource profile of the State Government for the period 1978-83.

TABLE 1
ESTIMATE OF RESOURCES FOR THE STATE PLAN, 1978-83

	(Rs. in crores)		
	1978-79	1979-83	Total
1. Balance from Current Revenues ..	(—)18.40	..	(—)18.40
2. Miscellaneous Capital Receipts (Net) ..	(—)12.04	..	(—)12.04
3. Market Borrowing (Net)—			
(a) State Government ..	8.25	42.11	50.36
(b) State Enterprises ..	8.72	44.52	53.24
4. Negotiated Borrowings—			
(a) State Government ..	4.15	21.19	25.34
(b) State Enterprises ..	11.30	57.73	69.03
(c) Local Bodies ..	0.65	4.35	5.00
5. Contribution of Public Enterprises at 1977-78 freight and tariffs, etc.	0.17	34.77	34.94
6. Saving Mobilisation—			
(a) Small Savings ..	8.50	43.50	52.00
(b) Government Provident Fund ..	8.50	43.41	51.91
7. Additional Resource Mobilisation during 1978-83.			
(a) by the State Government ..	34.84	61.78	96.62
(b) by the State Enterprises ..	9.31	22.75	32.06
	63.95	3,76.11	440.06

Balance from current revenues

4.3. The forecast of Revenue Receipts and Expenditure presented to the Seventh Finance Commission envisages a revenue deficit of Rs. 14,08.56 crores for the period 1979-83 over and above deficit of Rs. 18.40 crores for the year 1978-79. Thus the total Revenue deficit for the period 1978-83 would be Rs. 14,26.96 crores, details of which are given in the Table 2 below :-

TABLE 2**ESTIMATE OF BALANCE FROM CURRENT REVENUES FOR THE PERIOD 1978-83**

	Amount (Rs. in crores)	
I. Non-Plan Revenue Receipt—		
(i) Tax Revenue ..	4,77.35	
(ii) Non-Tax Revenue ..	214.99	
(iii) Non-Plan grant from Centre (As per Budget Estimate 1978-79).	79.72	
(iv) Share in Central Taxes (As per Budget Estimate 1978-79)	73.87	8,45.93
II. Non-Plan Revenue Expenditure—		
(a) Expenditure at 1978-79 level (inclusive of expenditure on maintenance of 5th Plan Schemes)—		
(i) Non-Developmental ..	642.62	
(ii) Developmental ..	11,63.51	
(b) Fresh Expenditure—		
(i) For improvement of standards of administration	2,18.76	
(ii) Revision of Emoluments of Government servants etc.	2,48.00	22,72.89
(Revenue Deficit I—II)		14,26.96

4.4. In estimating the Revenue Receipts for 1979-83, State Government's share in Central Taxes and Grants-in-aid from the Centre have not been taken into account. For purposes of estimating aggregate resources (as in Table-1) it has been assumed that the Seventh Finance Commission by suitable schemes of devolution of grants-in-aid and shared taxes would cover the entire revenue deficit for the period 1979-83. There would however still be a deficit of Rs. 18.40 crores relating to 1978-79 which is outside the Seventh Finance Commission's award period.

Non-Plan Capital Account

4.5. *Miscellaneous Capital Receipts and Disbursements*—The Miscellaneous Capital Account of the State will also not balance as the repayment liabilities particularly to the Centre and Capital Outlay on essential non-plan programmes would exceed the estimates of receipts by way of recovery of loans, appropriations from revenue, and miscellaneous deposits and advances. Table 3 indicates the levels of receipts and disbursements in the Miscellaneous Capital Account.

TABLE 3**ESTIMATE OF DEFICIT IN THE MISCELLANEOUS CAPITAL ACCOUNT FOR THE PERIOD 1978-83**

	Amount (Rs. in crores)	
A. Receipts—		
(a) Recovery of loans and advances—		
(i) At 1978-79 level of outstanding ..		30.96
(ii) On account of fresh lending ..		36.24
(b) Appropriations from revenue for reduction and avoidance of debt, etc.		4.42
(c) Miscellaneous Deposits and Advances in the Public Account ..		6.38
(d) Non-Plan Loans from Centre to be received during the period 1978-83		56.13
		1,34.13

	Amount (Rs. in crores)
B. Disbursements—	
Repayment of loans	
(a) To Centre—	
(i) On account of the borrowings outstanding at the end of 1977-78	1,67.34
(ii) On account of the borrowing during the period 1978 - 83	72.41
(b) To others—	
(i) On account of the borrowing outstanding at the end of 1977-78	10.75
(ii) On account of the borrowing during the period 1978—83	35.90
(c) Non-Plan Loans and Advances (Fresh borrowings)	42.36
(d) Non-Plan Capital Outlay—	
(i) Payment of compensation to ex-intermediaries	0.54
(ii) Capital Outlay on buildings, etc.	42.86
	} 43.40
	3,72.16
Deficit in Miscellaneous Capital Account (A - B)	(-)2,38.03

4.6. The assessed Miscellaneous Capital deficit of Rs. 2,38.03 crores for the period 1978—83 includes an estimate of Rs. 12.04 crores for the year 1978-79, which would continue as such. The remaining deficit of Rs. 2,25.99 crores is expected to be met through suitable schemes of capital grant, debt relief and special loans from the Centre on the basis of the Seventh Finance Commission's award. For purposes of estimating aggregate resources (as in Table-1) it has been assumed that the award of the Seventh Finance Commission would fully cover the deficit of the period 1979—83.

Borrowing of the State Government, State Enterprises and Local Bodies

4.7. In the computation of levels of Market and Negotiated borrowing of the State Government and State Enterprises, as indicated in the table below, the levels estimated for 1978-79 have been progressed at the rate of 10 per cent per annum. The estimate of borrowing of the Urban Local Bodies for financing the Urban Water-Supply Schemes is tentative.

TABLE 4
ESTIMATE OF BORROWING BY STATE GOVERNMENT, STATE ENTERPRISES
AND LOCAL BODIES DURING THE PERIOD
1978-79

	Amount (Rs. in crores)
1. State Government—	
(a) From Open Market (Net)	50.36
(b) From R. B. I.	16.80
(c) From Life Insurance Corporation	8.54
	75.70
2. State Enterprises—	
(a) (Orissa State Electricity Board) from Open Market	53.24
(b) From Life Insurance Corporation.	29.63
(c) From R. E. C. (Normal)	39.40
	122.37
3. Local Bodies—	
From-Life Insurance Corporation	5.00
Total (1+2+3)	202.97

Contribution of Public Enterprises

4.8. The internal surpluses of the Orissa State Electricity Board and the Orissa State Road Transport Corporation are likely to be as indicated below:—

	Period 1978—83 (Rs. in crores)
1. A. Orissa State Electricity Board—	
(a) Depreciation and General Reserves	53.87
(b) Miscellaneous Debts and Deposits	7.75
(c) Consumers contribution etc.	6.10
	67.72
B. Less Disbursements.	
Repayment of loan to—	
(a) Life Insurance Corporation	12.79
(b) R. E. C.	5.08
(c) Others	19.00
	36.87
Net internal surplus	30.85
2. Orissa State Road Transport Corporation—	
Depreciation Reserve and retained profits	4.09
Total—Contribution of State Enterprises (1+2)	34.94

4.9. Internal surplus of (Rs. 5.64 crores) which appeared in the estimate of resources of the Orissa Mining Corporation during the Fifth Plan period mainly from profits on chromite ore exports is not likely to accrue owing to short falls in the International demand and export price of chromite ore.

Savings Mobilisation

4.10. Net accumulation in the Provident Fund during the period 1974—78 has been of the order of Rs. 38.76 crores. It is estimated that during the period 1978—83 the net accretion from this source would be Rs. 51.91 crores, assuming an average growth rate of 10% per annum.

4.11. The estimate of Rs.52.00 crores of loan under the Small Savings Scheme also assumes an annual growth rate of 10%.

Additional Resources Mobilisation

4.12. In a State like Orissa low levels of income and *per capita* taxable surplus inhibit growth of revenue. The largest State enterprise, namely, the State Electricity Board suffers from the drag that a major part of its production is pre-empted by power intensive industries paying low rated tariff. An appreciable increase in the non-tax revenue is therefore difficult. In the absence of any marked improvement in agricultural production even commercial irrigation in the State is not likely to yield any surplus in the immediate future. A careful balance has to be struck between revision of rates and taxes and the need to provide incentives for development. Even so, the State Government propose to mobilise additional resources of Rs. 1,28.68 crores during the period 1978—83 from a variety of measures including revision of Electricity tariff and duties, sales tax, royalty on forest produce, royalty on minerals motor vehicle tax, water rate, entertainment tax, floating of rural debentures etc.

4.13. It has been tentatively indicated by the Planning Commission that outlay for the State's Sixth Plan may be of the order of Rs. 9.55 crores. An outlay of this order would be utterly inadequate to tackle the problems of abject poverty and underdevelopment prevailing in the State. Owing to paucity of resources, it has not been possible for the State Government to undertake adequate programmes of development to break through the poverty barrier. An outlay of Rs. 25.52 crores for the State plan aiming at a growth rate higher than that envisaged for the country as a whole, is an imperative for Orissa State's resources for financing the Plan having been estimated at Rs. 440 crores, the balance needs to be provided by way of Central assistance.

CHAPTER 5

ROLE OF CREDIT INSTITUTIONS

5.1. Credit is undoubtedly a very important input in any modern system of production. In India, the small producer has so far limited access to sources of credit. Given access to credit small farmers and small producers in many sectors will be able to achieve better productivity than their richer counterparts. Expansion of institutional credit should therefore, continue to receive a high priority during the Sixth Plan period. A substantial step up in the volume of rural credit is contemplated during the Sixth Plan to take care of the growing requirement of multifarious programmes of agricultural development, minor irrigation and village and small industries. It is proposed to step up the order of availability of short term credit by 100 per cent during the Sixth Plan period from its current level. The main constraint in the flow of credit have been low recoveries high level of over-dues and consequent ineligibility of a large number of co-operative institutions for refinance. Therefore it will be imperative to improve upon the management of the rural credit so as to achieve a more equitable distribution of credit for the benefit of larger section of population. Steps will be taken to ensure that co-operative societies and the rural population it serves do not suffer on account of a few major defaulters.

5.2. The share of small and marginal farmers, tenants, agricultural labourers and share croppers in co-operatives as well as Commercial Banks lending, is only about one-third at present. A major objective of the agricultural credit policy would be progressive institutionalisation with a multi-agency approach and the earmarking of an increasingly larger share for the weaker section. Special efforts would be made to meet the credit requirement of Scheduled Castes and Scheduled Tribes on a priority basis. The main burden of providing credit would continue to be on the co-operative sector. The Commercial Banks would also assume greater responsibility for supplementing the efforts of the co-operative credit agencies. As far as possible, the deposits collected by Commercial Banks in rural areas would be made available for investment in the rural sector.

5.3. The strategy of the public credit system favouring small and marginal farmers is a powerful means of reducing the disparities in rural areas in many ways. They have very little by way of assets to offer as security. Loans to them for productive purposes have to be advanced either against security of assets to be financed by the loans or where the amounts involved are small, on personal credit. Similarly, facilities would be made available to landless labourers and rural artisans.

Co-operative Credits

5.4. In the year 1977-78 short term loans advanced by the Co-operatives in the State was of the order of Rs. 26 crores, medium term loan Rs. 8.88 crores and long term loan of Rs. 11.41 crores. About 45 per cent of the short term loan has been advanced to the small and marginal farmers. During the Sixth Plan period it is proposed to increase the co-operative credit to the level of Rs. 63 crores of short term, Rs. 20 crores of medium term and Rs. 30 crores of long term loans investment in the State.

Commercial Banks

5.5. By the end of June 1978, the number of branches of Commercial Banks all over the country was 28,016. As against 270 branches by the end of December, 1972, Orissa had 660 branches by June, 1978. More than 68 per cent of the branches were opened in the rural areas and this trend is in conformity with the rest of the country. During the period July, 1976 to June, 1978 as many as 198 unbanked centres were provided with banking facilities in the State. At present, out of 314 C. D. Blocks there are six which do not have any Commercial Banks. Four of them are in Mayurbhanj district and one each in Ganjam and Sambalpur districts.

5.6. For the whole country, the population branch ratio for a Commercial bank now stands at 20,000 where as in Orissa this ratio is 33,000. Therefore, as regards opening additional branches in the State there is much ground to be covered when compared with the coverage of population in other States, namely 10,000 in case of Punjab and 11,000 in case of Kerala.

5.7. The Reserve Bank of India have issued directions to the Commercial Banks for opening more branches in the country, so as to bring down the average population coverage per bank office to 20,000. There is likelihood of opening of more branches in the State in the near future. Following (7A-11).

figures would indicate the deposit, credit and investment by the banks in the State as compared to All-India figures.

(Figures up to June, 1978)

(Rs. in crores)

	Orissa	India
Deposit	169.95	22,931.95
Credit	102.95	15,558.87
Investment	84.62	7,543.19
Credit deposit ratio	60 per cent	67.5 per cent

Advances by the Commercial Banks to neglected sectors

5.8. About 44.6 per cent of total advances by the Commercial Banks in the State have gone to the neglected sectors by June, 1977. In this regard the average borrowing per account stands at Rs. 2,266 as against the all-India average of Rs. 4,795. The following table will indicate the trend of advances in different fields by the Commercial Banks.

Sector	June 1976		June 1977		September 1977*	
	No. of A/c Units	Amount outstanding	No. of A/c Units	Amount outstanding	No. of A/c Units	Amount outstanding
Agriculture Direct Finance	75,779	7.93 (27.1)	1,24,296	14.57 (33.6)	1,36,826	16.41 (35.8)
Indirect Finance	11,666	3.60 (12.3)	20,851	5.10 (11.7)	17,841	4.35 (9.5)
Sub-Total	87,445	11.53 (39.4)	1,45,147	19.67 (45.3)	1,54,667	20.76 (45.3)
Small Scale Industries	4,366	9.11 (27.7)	10,501	10.65 (24.5)	10,383	11.03 (24.1)
Road and Water Transport	3,070	5.38	4,266	6.54	4,427	6.88
Retail Trade and Small Business.	13,557	3.61	22,925	5.51	27,580	6.13
Professional and Self-employed Persons.	4,582	0.60	8,551	0.97	8,874	1.03
Education	66	0.02	243	0.07	183	0.02
Total	1,13,086	29.26 (100.0)	1,91,633	43.41 (100.0)	2,06,114	45.85 (100.0)

*Provisional

**Figures in brackets indicate percentages.

More than 62 per cent of the advance is going to small and marginal farmers though the all India figure in this respect is 29.5 per cent.

Industrial Development Bank of India

5.9. Industrial Development Bank of India is providing assistance to institutions like Orissa State Finance Corporation, Industrial Development Corporation, Industrial Promotion and Investment Corporation of Orissa. Besides, I. D. B. I. also lends assistance to different lead banks in different districts in refinancing specific schemes. By the end of June 1977, I. D. B. I. has sanctioned

a sum of Rs. 45.10 crores in Orissa as against the total sum of Rs. 2,345.33 crores for the entire country. The actual disbursement against the amount of Rs. 45.10 crores is Rs. 23.18 crores as against 1,523.95 crores disbursed for the country as a whole. The percentage of schemes sanctioned to Orissa compared to all India is only 1.88 and the percentage of disbursement is 1.52.

5.10. During the Sixth Plan period IPICOL and IDC would need credit facilities to the extent of Rs. 70.35 crores and Rs. 24.15 crores respectively from the financing institutions for their ongoing and new projects and the IDBI is expected to increase its financing substantially to them. The Orissa State Financial Corporation expects to attain investment level of Rs. 38 crores by the end of 1982-83. During Sixth Plan, State Government propose to contribute Rs. 4 crores towards share capital of this Corporation and it is expected that the IDBI will contribute Rs. 4 crores towards its share.

A. R. D. C.

5.11. The Agricultural Refinance Development Corporation came into being in 1963. But Orissa started to avail the refinance facilities from this Corporation only from 1970-71. The refinance from A.R.D.C. under different schemes is increasing steadily since then. By June 1978, the A.R. D. C. has sanctioned 246 schemes involving total loan assistance of Rs. 81.90 crores with A. R. D. C. commitment of Rs. 73.14 crores. The schemes covered for refinance facilities of this Corporation mainly relate to Land Development, Minor Irrigation, Lift Irrigation, Horticulture, Fisheries, etc. The following table will give the yearwise progressive picture of the schemes sanctioned for Commercial Banks by the A. R. D. C. during the Fifth Plan period.

(Amount in lakhs of rupees)

Year	Number of schemes	Financial assistance	ARDC's commitment	Refinance disbursement
1974-75	33	1,341	171	36
1975-76	81	2,258	1,362	273
1976-77	96	2,342	1,671	407
1977-78	109	2,446	2,195	502
Up to 31-1-1978				

The details of 109 schemes sanctioned during 1977-78 in favour of Commercial Banks are indicated below :—

(Amount in lakhs of rupees)

As on 31st January, 1978

Purpose	No. of Schemes	Financial assistance	ARDC's Commitment	Refinance disbursement
(i) Minor Irrigation (of which under OLIC).	82 (70)	2,169.72 (1122.38)	1,957.12 (1010.11)	442.79 (306.85)
(ii) Land Development	4	96.85	81.12	15.66
(iii) Farm Mechanisation	2	26.71	21.56	19.60
(iv) Plantation and Horticulture	6	47.12	42.41	0.65
(v) Dairy Development	1	8.68	7.81	..
(vi) Storage and Markets	5	38.20	31.96	17.95
(vii) Fisheries	9	58.98	53.08	5.72
Total	109	2,446.26	2,195.06	502.37

5-12. During the Sixth Plan period, about Rs. 12 crores of institutional finance would be required for development of marine, inland and brackish water fisheries in the State. This amount will be utilised for acquisition of 600 mechanised boats, four large sized trawlers, eight ice plants and 1,000 country boats in private sector. The institutional finance is expected to flow from the Commercial Banks and Orissa State Finance Corporation with refinancing facilities from A. R. D. C.

5-13. During the Sixth Plan period, Orissa Lift Irrigation Corporation has projected to avail bank loan to the extent of Rs. 45.21 crores. In this connection, it may be stated that the Lift Irrigation Corporation has already submitted schemes costing Rs. 19.26 crores to A. R. D. C. to be taken up in the coming years. After receipt of sanction from the A. R. D. C. new schemes will be prepared and submitted in course of the Plan period so as to achieve the target of installing 5,406 Lift Irrigation Projects which includes 2,363 river lift points.

5-14. Orissa State Electricity Board has to implement a larger programme of rural electrification during the Sixth Plan period in order to electrify 11,050 villages and energise one lakh pump sets with a total estimated cost of Rs. 170 crores, out of which 45.08 crores is expected to be drawn from the A. R. D. C.

Rural Electrification Corporation

5-15. By the year 1976-77 R. E. C. have financed in Orissa under Special Transmission and Distribution Scheme, Normal Scheme and Minimum Needs Programme, a total sum of Rs. 2,274.78 lakhs. For the year 1977-78 R. E. C. provided Rs. 651.10 lakhs under different programme.

5-16. During the Sixth Plan, out of Rs. 170 crores meant for rural electrification, it is expected that R. E. C. would provide Rs. 73.81 crores under R. E. C. normal schemes, and Rs. 37.89 crores under Minimum Needs Programme.

HUDCO

5-17. Till now there has been no appreciable investment from the Housing and Urban Development Corporation. During the Sixth Plan period, it is anticipated that a sum of Rs. 37.31 crores may be available for the following schemes :—

Sl. No.	Name of the agency	Name of the project	Loan component (Rs. in lakhs)	No. of houses
(1)	(2)	(3)	(4)	(5)
1	Orissa State Housing Board, Bhubaneswar	1. Composite Housing Scheme, Baramunda.	109.37	EWS—196 LIG—438 MIG—168
		2. New Schemes	837.00	6,008
		3. 6th Plan Scheme	1,200	9,691
			2,946.37	16,501
2	Industrial Development Corporation.	(i) Quarters for employees at Bhubaneswar.	6.24	20
		(ii) H. I. W., Hirakud	33.73	148
		(iii) Ferrochrome Plant, Jajpur Road.	8.79	24
			48.76	192

Sl. No.	Name of the agency	Name of the project	Loan component (Rs. in lakhs)	No. of houses
(1)	(2)	(3)	(3)	(4)
3	IPICOL	(1) Sunabeda ..	20.00	100
		(2) Dhenkanal ..	100.00	500
		(3) Rairangpur ..	60.00	300
		(4) Joda Barbil ..	20.00	100
		(5) Talcher ..	40.00	200
		(6) Paradeep ..	40.00	200
		(7) Jagatpur ..	20.00	100
		(8) Jajpur Road ..	20.00	100
4	Utkal Chamber of Commerce and Industry, Cuttack.		320.00	1,600
			500.00	Not indicated
5	Bhubaneswar Regional Improvement Trust.	(1) Composite Housing Scheme, Nuapalli.	50.00	LIG—289 MIG—74
		(2) Shop-cum-Office complex, Station Square.	20.00	134
		(3) Kapilprasad ..	120.00	1,460
		(4) Baramunda ..	320.00	3,000
		(5) Baragarh ..	135.00	1,510
6	Greater Cuttack Improvement Trust	(1) Tulsipur ..	20.35	EWS—90 LIG—32
		(2) Buxibazar Marketing Scheme.	16.75	35
7	Sambalpur Regional Improvement Trust.		10.39	EWS—63 LIG—54
8	Rourkela Regional Improvement Trust.		22.30	EWS—92 LIG—138
Total ..			3,730.74	

Life Insurance Corporation

5.18. Loan assistance from Life Insurance Corporation of India is being availed for Housing Schemes, Urban Water Supply and schemes of Orissa State Electricity Board. During the Fifth Plan period L. I. C. advanced loan assistance of Rs. 4.99 crores for construction of houses under different Social Housing Schemes and for State Capital Project. During the Sixth Plan, a sum of Rs. 15.26 crores would be required for different Social Housing Schemes, besides Rs. 15.78 crores as L. I. C. assistance for State Capital Project.

Water Supply

5.19. During the Fifth Plan period a sum of Rs. 233.25 lakhs was availed as L. I. C. assistance towards share of the Urban Local Bodies for thirteen Water Supply Projects. During the Sixth Plan period Urban Local Bodies would require Rs. 209.62 lakhs towards their share for the on going 11 Urban Water Supply Schemes. This amount is expected to be financed by the L. I. C. as loan assistance. Besides, 28 new viable Water Supply Schemes are proposed to be executed at an estimated cost of Rs. 17.50 crores. Of this Rs. 11.67 crores will be the share of the Urban Local Bodies which is expected to be obtained as loan from the L. I. C.

CHAPTER 6

EMPLOYMENT AND MANPOWER

6.1. Orissa alongwith other States of India experienced a population explosion in the sixties. The period 1961—71 has shown an increase of 25.0 per cent in the growth rate of population from 19.9 per cent in the previous decade ; the rate is estimated to have increased further in the current decade 1971—81. As a sequel to this, within a short span of 15 years, the State has entered a period of labour-force explosion. The babies of yesterday have grown to become job-seekers of to-day. Even if family planning has had any effect, its impact on additions to labour-force will be felt only after 15—20 years. In the mean-time the State has to withstand, the sudden impact of the tremendous increase to its labour-force and plan to transform this handicap into a powerful aid to progress. This is the crux of the employment problem.

6.2. The total population of Orissa which was 219.45 lakhs in 1971 is estimated to have increased to 255.67 lakhs in 1978. Of this about 91.6 per cent lives in rural areas. Further, most of the urban centres in the State are no more than overgrown villages which makes distinction between urban and rural unemployment insignificant. In fact the urban unemployment is considered as an out-flow of rural unemployment. In determining the magnitude of unemployment the following factors are relevant :—

- (i) The size of the labour-force
- (ii) The proportion of persons in the working age-group willing and available for work
- (iii) Number of persons employed in gainful occupation
- (iv) The additions to labour force per annum
- (v) Additional employment generated per annum

6.3. Taking into account the fact that about 30 per cent of the female population in the working age-group 15—59 do not offer themselves for work and that about 1.90 lakhs are entering in to labour-force every year, it is estimated that there were 18.6 lakhs unemployed persons in rural areas in the year 1973-74 which, together with the number of unemployed persons in the urban areas as per the Employment Exchange Live Register of 3.4 lakhs, comes to 22.0 lakhs. By the end of 1977-78 with an annual addition to labour force of 1.90 lakhs, the total size of job requirements in terms of man-years is estimated at 29.6 lakhs.

6.4. During the period 1974-75 to 1977-78, the Fifth Plan investments in Orissa generated direct employment opportunities to the tune of 2.99 lakh persons on the basis of investment employment ratio of 6.5 persons per lakh-rupees of plan investment. It is estimated that during this period the central sector investment and also investments available from institutional sources to the tune of approximately Rs. 100 crores have generated about 65 thousand man-years of direct employment. Thus, the total employment generated has been estimated to be of the following order :—

Year	State Plan expenditure Rs. in crores	Employment opportunities created in crores (man-years)		
		Direct	Indirect	Total
(1)	(2)	(3)	(4)	(5)
1974-75	75	0.49	0.27	0.76
1975-76	92	0.60	0.34	0.94
1976-77	137	0.89	0.50	1.39
1977-78	149	0.97	0.54	1.51
State-Total	453	2.95	1.65	4.60
Central and private	100	0.65	0.36	1.01
Total	553	3.60	2.01	5.61

6.5. Since employment opportunities required by 1977-78 was estimated at 29.6 lakhs man years out of which employment created during the Fifth-Plan Period was of the order of 3.6 lakhs, the size of unemployment by the end of 1977-78 was approximately 24 lakhs. The task for the planners, therefore, is to provide full-employment to these unemployed persons together with those who enter into the labour-force during the Sixth and Seventh Plan Periods. As per the Planning Commission estimates the general pattern of man-power deployment in the country is that only 10 to 11 per cent of increase in the labour-force finds employment in the organised sector while the rest drifts into part-time employment in the rural areas or in the informal sectors of urban industry and trade, or becomes chronically unemployed.

6.6. The principal objective of the Sixth plan at the national level is to remove unemployment during the decade ending 1987-88. With backlog of 24 lakhs unemployed persons awaiting job opportunities and an annual addition of 1.9 lakhs to the State's labour force, there would be need for creating additional job opportunities to the extent of 33.5 lakhs during the next five years ending sixth plan or of 43 lakhs during the next ten years for achieving a goal of full employment by the end of the Seventh Plan. In any plan for massive employment generation, the employment policy must aim at expanding both wage-employment and self employment. As yet substantial additional opportunities for wage employment exist in the non-agricultural sectors, i.e. construction, mining & manufacturing, generation and distribution of electricity, transport, communication and storage, banking and social services sector, but it is in the field of agriculture, cottage and small industries, road transport, trade and services sectors that opportunities for further and more productive self employment could be anticipated. The employment potential of a given growth pattern is determined by its capital-labour ratio. Thus by choosing a product pattern, which is labour intensive in character or adopting a technology leading to substitution of scarce capital by labour, the employment potential of a given growth rate would be enlarged. In the present situation, possibilities of creating substantial additional wage employment by changing the product pattern of manufactured goods in a labour intensive direction in the organised sector of the economy has so long appeared to be limited. However, the New Industrial Policy which envisages maximum emphasis for small scale sector and reservation of larger number of goods to be manufactured in the non-factory sector would help to reduce such limitations. Accordingly the allocation of larger plan resources in the agriculture and village and small industries sectors in the Sixth Plan would help generation of larger employment. However, when the sectoral allocations of the Sixth Plan are finalised a clear picture of the likely size of employment generation would be available.

6.7. The size of employment generation being dependent on the size of investment and the investment-employment co-efficient, available data as worked out by National Council of Applied Economic Research indicate the following norms for Orissa at 1973-74 prices.

TABLE

Sector	Investment required (in 000 Rs.) per unit of employment at 1973-74 prices
1. Agriculture and allied pursuits	5
2. Household and small scale industries	1.5
3. Mining and large industries	40
4. Power generation and distribution	60
5. Transport and communication	30
6. Other including services	8

6.8. The tentative sectoral break-ups for the Sixth Plan as per the Draft indicates that highest priority has been given to the sectors which generate maximum employment. Accordingly at the national level, Agriculture and Rural Development sector accounts for an outlay of 12.4 per cent compared to 11 per cent in the Fifth Plan. Similarly, Irrigation and Flood Control is given higher priority with 13.9 per cent in the Sixth Plan as against 10.7 per cent in the Fifth Plan. Of course at the stage of finalisation, the sectoral allocation may undergo some change but consistent with the sectoral strategy, it may be reasonably hoped that change, if any, would be for larger allocation in these sectors. On the basis of the Fifth Plan sectoral allocations in Orissa and utilising the above N.C.A.E.R. investment employment norm, the Working Group on Manpower Planning and Employment, has worked out that for generation of one unit of additional employment at 1973-74 prices investment required was Rs. 9,346, and at 1980-81 (mid Sixth Plan prices), it would be Rs. 14,686. In terms of Plan-outlay, (investment component of outlay is nearly 85 per cent) the norm works out to an outlay of Rs. 17,183 at 1980-81 prices. Thus the outlay-employment ratio comes to 5.8 persons per lakh of rupee of outlay. This norm is presumed to hold good throughout the Sixth Plan Period for Orissa.

6.9. It is envisaged that the size of the Sixth Plan outlay in the State sector would be of the order of Rs. 2,552 crores. On the basis of the above outlay-employment ratio of 5.8 persons per lakh of rupees of outlay, the additional employment generation would be of the order of 14.80 lakhs of person. The indirect employment at the rate of 56 per cent of direct employment may be of the order of 8.28 lakhs. Thus the total size of additional employment generation would be around of 23.08 lakhs. It has already been discussed earlier that there would be need for creation of additional job opportunities to the extent of 33.5 lakhs by the end of the Sixth Plan and 43 lakhs by the end of the Seventh Plan, in order to achieve the objective of full-employment. Thus with a generation of employment to the tune of 23.08 lakhs, there would be still a big gap of 10.42 lakhs of unemployed persons at the end of the Sixth Plan. The extent to which it would be further reduced depends on the size of Central investment together with the investment available from the private sector.

6.10. A tentative year wise projection of direct employment likely to be generated during the five years 1978-83 for different sectors under State Plan has been indicated in the Statement Employment—1. The total of yearwise break up is as follows :—

1978-79	..	1,76,454
1979-80	..	13,82,040
1980-81	..	13,24,232
1981-82	..	13,32,866
1982-83	..	12,48,910

(Figures in man years)

CHAPTER 7

REVISED MINIMUM NEEDS PROGRAMME

7.1. A national programme for minimum needs was included in the Fifth Plan under which certain social consumption facilities and investments were provided in the form of elementary education, health, drinking water, communication, electricity in rural areas, housing and nutrition in order that the rural poor were helped to reach a certain minimum standard of living. Given the difficulty of raising the incomes of the lowest income classes adequately to ensure minimum consumption standards, it is necessary to supplement the outlay of general economic development through sectoral programmes by specific programmes of direct transfers of basic services to the largest population group. Although a minimum needs approach to the alleviation of poverty was mooted in the Fifth Plan Period, the outlay originally earmarked for this programme had to be reduced on account of inflationary crisis of 1973-75.

7.2. In the Sixth Plan the earlier list of basic needs, viz., supply of drinking water, provision of house sites for the homeless, village access roads, elementary education for the rural poor, provision of Rural Health Services, extension of Rural Electrification, environmental improvement of slums and nutrition to the under-nourished will be extended to include Adult Education. Various norms under the programme have been changed to improve the coverage and therefore the programme has been designated as the "Revised Minimum Needs Programme". This programme is intended to fulfil the promise of providing essential infrastructure and social services which the public sector alone can supply to the weaker sections of the population particularly in the rural areas. Opportunities of employment will be created under various programmes and schemes included, and this will generate income for enabling persons in different strata of the society to satisfy their consumption needs.

7.3. In the following paragraphs a summary of the proposals under this programme has been indicated and the details of the programmes can be found in the respective Chapters. In formulating these proposals as part of the Sixth Plan, although the tentative allocations indicated by the Planning Commission have been kept in view, the outlay suggested in the plan by the State Government have exceeded the suggested allocation by the Planning Commission in all sectors except "House site for landless and Rural Housing", as it is felt that the proposal relating to these items indicated in the following paragraphs are the minimum required for assuring a reasonable standard of living to the persons living below the poverty line.

Elementary Education

7.4. The State Government is committed to make determined efforts towards the universalisation of elementary education for all children up to the age of 14 keeping in view the priority attached to universalisation of education and removal of illiteracy. Out target under Elementary Education is to provide enrolment facilities for all the children in the age-group of 6-11 and 68 per cent of the children in the age-group 11-14. An outlay of Rs. 58 crores is proposed so that an additional number of 12 lakh children in age-group of 6-14 will be accommodated in the schools and all the children will get adequate incentives to continue their studies.

7.5. Special attention will be given to education of girls and children from the poorer sections. The objective will be to reduce the rate of drop-out. The main stress would be on enrolling the non-attendant children in the educationally backward districts, reduction of wastage and stagnation and raising the attendance rates. In view of the adverse natural conditions and settlement pattern in the hilly areas it is proposed to provide Primary school facility within a distance of one K. M. from the home of the child.

Adult Education

7.6. Along with the universalisation of elementary education, it is essential to remedy the education deprivation of the Adult population to enable them to develop their full potentialities and play an active role in the economic, social and cultural progress. The basic policy for adult education has been spelt out by the Ministry of Education and Social Welfare, Government of India in the National Adult Education Programme. The long term objective of the programme is to create the situation in which the poor do not remain passive spectators but become active and intelligent participants of the development process. Removal of adult illiteracy should receive the highest priority in the programme but the functional upgradation of neoliterates would also be given due importance. The content of education will be relevant to learners' needs and environment

A programme of Adult education with emphasis on literacy of the age-group of 15-35 has been launched during the current year 1978-79, the first year of the Sixth Five-Year Plan. It is estimated that in the State there are 55 lakhs of illiterates in the above age group. In order to make them literate a sum of Rs. 38 crores will be needed. Considering the availability of funds and organisational capacity this programme will cover 45 lakh adults of the above age-group by 1982-83 with an outlay of Rs. 28 crores, 50 per cent of which is expected to be available from the Government of India as a matching share. In this work school teachers, University students and other voluntary organisations having experience in this field will be actively associated. In order to make the programme meaningful, efforts will be made to identify all such programmes run by various Departments and voluntary organisations at the district and block levels and these will be pooled together and channelised towards a massive literacy drive in the State. The main problem in the area of adult education is in regard to lack of motivation amongst the participants. Special efforts are proposed to be made on several fronts to create a proper atmosphere to ensure maximum participation of the beneficiaries before the programmes are launched. The important components of this programme would be strengthening of the existing Adult Literacy organisations, expansion of Farmers' Functional Literacy Scheme, increasing the number of non-formal Literacy Centres and paying grant to the voluntary organisations engaged in Adult Literacy activities. In this venture among other volunteers of National Service Scheme, National Cadet Corps, Nehru Yuvak Kendra and Planning forums will be engaged.

Rural Health

7.7. According to the earlier M. N. P. norm, a Primary Health Centre serves a population of 1 lakh and a Sub-Centre serves 10,000. The revised norms as suggested by the Government of India are one P. H. C. for 50,000 persons and one Sub-Centre for 5,000 persons. Widening the coverage of the system is expected to increase *per capita* availability of drugs. Recognising the crucial role of the Primary Health Centre as the focal point for delivery of the health care in rural areas, the State's Sixth Plan proposals seek to achieve the following objectives.

(a) Strengthening the P. H. C. complex by bringing within its fold all curative institutions like Dispensaries and Medical Aid Centres which hitherto were not under the command of the P. H. C. and (b) establishment of additional Sub-Centres in a phased manner so as to achieve a norm of one Sub-Centre for approximately 8,000 population by 1983 and 5,000 population by 1987-88.

7.8. The average territorial jurisdiction of a Sub-Centre (10,000 population) in the State varies between an area approximately from 35 square K. Ms. in coastal districts to 115 square K. Ms. in the sparsely populated areas of Bambalpur and Sundargarh districts. Keeping these factors in view it is proposed during the Sixth Plan to phase the establishment of additional Sub-Centres particularly in the sparsely populated areas and tribal areas of the State not merely on the basis of population but also on the basis of a more homogenous geographical unit of about 30 to 40 square K. Ms. Out of the 314 P. H. Cs. in Orissa, 118 are in the Tribal Sub-Plan area and 196 in other areas. It is proposed to establish 196 Subsidiary Health Centres by upgrading one Sub-Centre in each of these 196 P.H.Cs., where a Medical Officer will be posted in addition to the existing A.N.M. and stocks of medicine worth Rs. 3,000 per annum will be provided. In respect of 118 Tribal blocks of the State, it is proposed to upgrade one of the Sub-Centres in each P. H. C. to the status of a Mini-Health Centre where similar provision for posting of a Doctor will be made and the grants of medicine augmented. The norm of one Health Centre with a Doctor for 30,000 population is expected to be achieved by 1983.

7.9. With a view to providing better referral facilities in rural areas it was proposed during the Fifth Plan to upgrade 77 P. H. Cs. to 30 bedded hospitals. For completion of construction of 12 upgraded P.H.Cs. taken up during the Fifth Plan and for construction of 60 upgraded P. H. Cs. and provision of staff to 77 upgraded P. H. Cs. an amount of Rs. 11.71 crores is proposed as the outlay for the Sixth Plan. The existing grant of medicine to P. H. Cs. and Sub-Centres will be suitably increased.

7.10 The total outlay under the revised Minimum Needs Programme under Rural Health for the Sixth Plan is of the order of Rs. 2241.67 lakhs.

Rural Water-Supply

7.11. Of all the Revised Minimum Needs Programmes proposals in the Draft Plan, the most urgent is the one for provision of safe drinking water to all villages at the National level. The plan at the national level provides an outlay of Rs. 675 crores for providing within 5 years sources of safe of drinking water-supply within one mile of every village in the country and the provision of alternate sources where present supplies are contaminated or salinity condition exists. The main thrust in the Five-Year Plan 1978—83 would be towards providing sources of water-supply to all problem and difficult villages in the State identified during the 5th Plan period. When the survey on identification of water scarcity villages is completed there is a likelihood of more number of villages being added to the list of problem villages. As per the 5th Plan survey 19,284 revenue villages have been identified as problem villages, so far as drinking water-supply is concerned. The Community Development Department are implementing the programme of constructing sanitary wells and Public Health Department are constructing tube-wells in the health-hazard and geophysically difficult villages. All the problem villages so far identified can be covered with atleast one tube-well or sanitary well each by the end of 1979-80. The Sixth Plan Programme for rural water further envisages coverage on the basis of population as well, i. e. one tube-well or sanitary well for population of 200 or part thereof. For sanitary wells, an outlay of Rs. 14 crores and for tube-wells an outlay of Rs. 26 crores have been proposed. With this, a total number of 26,508 sanitary wells and 25,845 tube-wells will be constructed.

Rural Roads

7.12. During the Fifth Plan period the national norm under the Minimum Needs Programme was to provide all-weather link roads to all the villages with a population of 1,500 or more and also to the clusters of villages of hilly and tribal areas having the population of 1,500 and more. The prescribed expenditure limit was Rs. 50,000 per Kilo Metre including cross drainage work not exceeding 20 feet length. Rural roads for connecting villages with population of 1,500 and above in plain areas and clusters of villages having population of 1,500 or more in hilly and tribal areas have been identified. Under the revised norms it is now proposed at the national level to provide a road link for all villages with a population of 1,000 and above by 1988. In Orissa, during the Sixth Plan period it is proposed to take up and complete all the identified roads connecting villages with population of 1,500 and above and to provide culverts and bridges for the roads already completed to make them all-weather roads. Attempts will also be made to select roads for linking of the villages having population of 1,000 and more, but due to paucity of funds it may not be possible to provide link roads for many of the villages having a population of more than 1,000.

7.13. In Orissa, the rural roads programme under Minimum Needs is executed by different agencies. The National Highway Organisation, and the Public Works Department execute the rural roads under the P. W. D. as well as the Grama Panchayat and Panchayat Samiti roads, the Rural Engineering Organisation executes the rural roads under its charge, the Chief Engineer, Irrigation, executes the improvement of canal embankment roads, Forest Department executes the development of forest roads and the Community Development Department executes the improvement of some link roads belonging to Panchayat Samitis and Grama Panchayats. The existing norm for rural roads under Minimum Needs Programme is an expenditure of Rs. 50,000 per Kilo Metre excluding structures beyond 6 M span. In the Sixth Plan the State Government would propose to increase this to Rs. 80,000 per Kilo Metre in order to cater to the rise in the cost of materials and labour and providing culverts and causeways as per actual requirements instead of limiting to 2 M in plain areas and 4 M in hilly areas per Kilo Metre. This programme of linking the villages will remain unfulfilled if major and minor bridges are not constructed to provide all-weather communication. It is, therefore, proposed to construct the missing major and minor bridges under the revised

Minimum Needs Programme wherever necessary during the Sixth Five-Year Plan. The financial outlay for rural roads under Minimum Needs Programme executed by different Organisations and the physical targets for the Sixth Plan Period are given in the table below.

Name of the organisation	Rs. in lakhs	
	Financial outlay	Physical target
1	2	3
P. W. D	52,75.00	36,94.00
R. E. O	23,21.00	2,23.60
Irrigation	4,00.00	8,03.10
Forest	4,00.00	4,00.00
G. P. & P. S. Roads	26,50.00	1,30,50.00
	(to be supplemented by Food for Works)	
Total	1,10,46.00	1,81,70.12

Rural Electrification

7-14. Under the Revised Minimum Needs Programme, it has been proposed by the Government of India that by 1988 at least 50 per cent of villages should be electrified in every State and Union Territories. So that Inter Regional discrepancy in coverage are reduced. At the 5th Plan period, 8,077 villages are electrified which was about 20 per cent of the total villages of the State. During the 5th Plan period (1974—78) 6,084 more villages numbering the total coverage 14,161 villages which is 27.42 per cent of the total revenue villages and numbering 51.639 per cent of the rural population. The total number of 3,431 L. I Points have been energised during 1974—78 bringing the cumulative total to 5,665.

7-15. Keeping in view the target for Revised Minimum Needs Programme, it has been decided to electrify 11,050 villages to achieve 54 per cent of villages electrified by 1982-83. One lakh Lift Irrigation Pumps has been proposed to be energised during 1978—83. The funds required for the proposed target of rural electrification (M. N. P.) energised during 1978—83 is Rs. 170 crores out of which Rs. 114.79 crores relate to energising one lakh pump sets and Rs. 55.21 crores relate to electrification of 11,050 villages. Out of this, the target under (M. N. P.) is electrification of 4,080 villages and energisation of 12,565 pump sets with the total outlay of Rs. 3,789 lakhs

Housing for landless rural labour households

7-16. The housing needs of the poorest section of the rural population namely landless rural workers are proposed to be covered under this programme. During 1974-75, the State Government had launched the scheme under the Minimum Needs Programme for developing house sites allotted to the households under the scheme. Rs. 150-00 was to be provided for the improvement to each house sites. The scheme for development of house sites was converted to Integrated Housing Scheme since 1975-76 with the object of providing low cost built-up houses to all house less persons of the State on the house sites allotted to them. The Government grant for each house is at present Rs. 700-00 and free supply of forest materials is ensured to the beneficiaries. The beneficiaries contribute their unskilled labour for the construction of the house, which is executed by the Panchayat Samiti. Under the revised norms, the rate of assistance for site development and housing works has been assumed at Rs. 750 per house hold. The amount of Rs. 750 is considered to be utterly inadequate as Government grant for the construction of one house. The beneficiaries who are mostly members of the Scheduled Caste and Scheduled Tribe come from the poorest section of the society and are unable to contribute the required labour as envisaged under the scheme. Since they have to live on daily wages for their sustenance, it is proposed to raise the limit of the Government grant to Rs. 2,000 per unit of house. On the basis of the revised norms the programme for the 6th Five-Year Plan (1978—83) has been drawn up. The financial outlay under the scheme for the 6th Plan as indicated by the Planning Commission is Rs. 2,120-00 lakhs. The number of houses to be constructed with this outlay during the five-year period is Rs. 1,05,400-00.

Environmental Improvement of Urban Slums

7-17. At the National level nearly 1/5th of the urban population is estimated to constitute the slum-population. Environmental improvement in slum areas under M. N. P. was taken up during the 5th Plan only in the city of Cuttack. Under the scheme, improvement of the slum areas was to be taken up by providing link roads, drains, water taps, public sanitary latrines, community bath, street lights and other community facilities for the various slum areas of Cuttack city. The Fifth Plan outlay under this scheme was Rs. 36 lakhs out of which expenditure during 1974—78 was Rs. 30 lakhs and approved outlay for 1978-79 is Rs. 10 lakhs. It has not been possible with this meagre outlay to provide all these amenities satisfactorily. During the Sixth Plan it is envisaged that slum areas in Cuttack Municipality will be further developed by providing essential civic amenities and establishing sanitised colonies in close proximity to the existing hutments.

7-18. There are about 100 identified slum pockets in the towns of Rourkela, Sambalpur, Berhampur, Puri and Bhubaneswar. In order to provide basic amenities to these slum pockets along with the ongoing scheme for Cuttack slums, an amount of Rs. 450 lakhs has been provided as outlay under this scheme during the Five-Year Plan 1978—83.

Nutrition

7-19. Nutrition scheme under the programme of Minimum Needs consists of supplementary feeding programme for school children and pregnant women and nursing mothers and for midday food programme for school children. The revised norms achievable by 1988 under nutrition are (i) Mid-day meals for one fourth of children in the age-group 6—11 years and (ii) supplementary feeding programme for under-nourished children in the age-group 0—6, pregnant women and nursing mothers in blocks with high concentration of scheduled castes and scheduled tribes.

7-20. An outlay of Rs. 2,700 lakhs is proposed under this scheme and the number of beneficiaries proposed to be covered with this scheme during 1978—83, is Rs. 42.35 lakhs.

7-21. The outlays and expenditure, physical targets and achievements relating to the Minimum Needs Programme of the Fifth Plan and the proposed targets for the Revised Minimum Needs Programme can be seen at Statement G. N. 4.

CHAPTER 8
TRIBAL SUB-PLAN

8.1. Preparation of a separate Tribal Sub-Plan for five years was initiated in the State in the year 1974 and Orissa was the pioneer in this regard. Such quantification has had the effect of bringing into sharp focus the adequacy or inadequacy of the provisions made in different sectors for sub-plan areas against the background of the wide gap to be covered in development between the sub-plan and other areas and achievement of the objective of improving the standard of living of the tribals. It would be evident from the table below that flow of funds from the State Plan to the Sub-Plan areas has been on the increase since 1974-75.

(Rs. in crores)

Year	Total flow of funds	From State Plan	Centrally Sponsored and Central Schemes	Special Central Assistance	Per centage of Special Central Assistance to flow of fund from State Plan
1	2	3	4	5	6
1974-75	20.50	17.61	2.13	0.76	4.31
1975-76	26.39	19.71	4.58	2.10	10.65
1976-77	33.46	21.54	7.95	3.97	18.43
1977-78	47.93	28.58	12.18	7.17 (drawal)	25.09
1978-79 (Outlay)	74.47	51.37	13.50	9.60	18.68
	202.75	138.81	40.34	23.60	..

8.2. At the time of the finalization of the Sub-Plan outlay for the five year period of 1974 to 1979 Planning Commission had indicated a minimum outlay of Rs. 127.35 crores out of the State Plan Sectors. The allocation to Sub-Plan has exceeded this figure. But the anticipated flow of institutional finance could not materialise due to a variety of reasons which include inadequate infrastructure of financial institutions, respective credit policies, and extreme poverty of tribals. The physical achievement made in different sectors during the Fifth Plan period 1974-78 with the investment of Rs. 114.28 crores out of State Plan funds and under Central and Centrally Sponsored schemes have been indicated in the statement (T. Sub-Plan-2). The achievement during 1974-78 made with the investment of Rs. 14.00 crores out of special central assistance during these years are shown in Annexure I.

8.3. The Annual Plan for 1979-80 as well as the Sixth Plan is being built up from the plans prepared by ITDPs and TDAs. In accordance with the guide-lines issued by the Planning Commission, the ITDPs and TDAs are preparing these plans on the basis of the broad frame work suggested by the Heads of Department. The continuing schemes will be critically reviewed and schemes not considered useful for the local areas will be substituted by others which are more useful for solving the local problems.

8.4. The Sub-Plan provision projected by different Departments for the Plan 1978-83, are based on the basis objectives of narrowing the gap in the level of development of Sub-Plan area, with the focus on development of tribals and improving the quality of their life. The quantum of flow of funds into Sub-Plan areas has been fixed with the above objectives and the proportionate provision for the Sub-Plan area is much more than the Fifth Plan.

8.5. The State Plan has projected Rs. 764.72 crores for Sub-Plan out of the proposed outlay of Rs. 2551.85 crores which works out to about 30 per cent of the State Plan outlay. The sectorwise outlay is indicated in statement T-Sub-Plan-I.

8.6. It is proposed that in addition to the flow of funds from the State Plan to the Sub-Plan, Special Central Assistance should be of the order of Rs. 90.00 crores. This has been suggested in view of the very low level of development in many sectors compared to other States and the resources constraints faced by the State Government and Central assistance should appropriately flow into the Sub-Plan in a much bigger way than the past. The flow of funds to the Tribal Sub-Plan has been of the order of 20 per cent of the State Plan during the Fifth Plan 1974-78 and 26.89 per cent of the State Plan during 1978-79. The Sixth Plan projection in this regard is 30 per cent. Special Central Assistance as a percentage of flow of State Plan funds to Tribal areas was 22.51 per cent in the year 1977-78 which is the highest between 1974 to 1979. The State would normally expect that at least 20 per cent of the flow of State Plan funds into Sub-Plan should be available as Special Central Assistance. This comes to Rs. 152.94 crores.

8.7. However, considering the constraints of resources and capacity of expenditure an outlay of Rs. 89.19 crores has been projected towards Special Central Assistance during 1978-83. An indication of the proposed outlays under different sectors are given in the table below. Adequate funds have been provided for the major thrust programmes relating to Education, Health, Shifting Cultivation, Soil Conservation, Minor Irrigation, Horticulture, Sericulture; Bee-keeping etc. The administrative machinery for implementation of the Tribal Sub-Plan will also be strengthened.

TABLE

Break up of the outlay suggested for Special Central Assistance

(Rs. in lakhs)

Sl. No.	Head of Development	Department	Outlay for 1978-83
1	2	3	4
1	Agricultural Research and Education including Crop Husbandry.	A. & C.	1,065.03
2	Land Reforms	.. Revenue	100.00
3	Minor Irrigation (flow)	.. R. D.	700.00
4	Minor Irrigation (Lift)	.. I. & P. (LI)	650.00
5	Soil Conservation	.. A. & C.	300.00
6	Animal Husbandry and Dairy Development	.. F. F. & A. H.	300.00
7	Fisheries	.. Ditto	40.00
8	Forest	.. Ditto	100.00
9	Co-operation	.. A. & C.	600.00
10	Village and Small Industries	.. Industries	446.00
11	Roads and Bridges—		
	(a) Arterial Roads	Works	} 460.00
	(b) P. W. D. Roads		
	(c) R. E. O. Roads			R. D.

1	2	3	4
12	General Education	.. Education and Y. S. Department.	800·00
13	Medical Public Health	.. Health & F. W.	508·24
14	Sewerage and Water Supply—		
	(a) Rural Sanitary Wells	.. C. D. & S. W.	300·00
	(b) Rural Tube Wells	.. U. D.	50·00
15	Craftsman Training	.. Industries	100·00
16	Others—		
	(i) Establishment	..	100·00
	(ii) Prevention of shifting cultivation	..	400·00
	(iii) Neuoleus Budget	..	1,500·00
	(iv) Special Project for Industrial and Mining complex.		50·00
	(v) Others (Disbursed Tribal outside sub-Plan and Primitive Tribes)		350·00
	Total	..	8,919·27

8·8. As regards welfare and protective measures, the following regulations have been promulgated in the Tribal areas under the special provisions of the Constitution :—

- (i) Orissa Debt Bondage Abolition Regulation, 1948.
- (ii) Orissa Scheduled Area Transfer of Immovable Property (by Scheduled Tribes) Regulations; 1956.
- (iii) Orissa Scheduled Areas Debt Relief Regulation, 1967
- (iv) Orissa Scheduled Areas Money Lenders Regulation, 1967

8·9. Apart from these Regulations promulgated by the Governor of Orissa the following general laws have continued to be in force for furtherance and protection of the Tribal interests—

- (a) The Land Improvement Loans Act, 1883
- (b) The Agriculturist Loans Act, 1884
- (c) The Minimum Wages Act, 1948
- (d) The Orissa Land Reforms Act, 1960
- (e) The Orissa Co-operative Societies Act, 1962
- (f) The Bonded Labour System (Abolition) Act, 1976

8-10. The Orissa Land Reforms (Amendment) Act, 1973 has laid down that 70 per cent of the surplus land vested with Government shall be settled with persons belonging to the Scheduled Tribes or Scheduled Castes in proportion to their respective population in a village in which the lands are situated and the remaining lands shall be settled with persons not belonging to the aforesaid categories. The provisions relating to ceiling fixation came into force in October, 1973. The percentage of surplus areas distributed against the total areas of ceiling surplus lands declared in this State is the third highest in the entire country as revealed from the statistics compiled by the Planning Commission in the Chief Ministers' Conference held in September 1978. Out of the total number of beneficiaries which is 69,436, the Scheduled Tribes are 27,809, Scheduled Castes are 22,911 and others are 18,716. Out of 93,755 acres of area settled 40,844 acres have gone to persons belonging to S. T. and 20,788 acres have gone to persons belonging to Scheduled Castes.

8-11. There were some reports of eviction of allottees of ceiling surplus lands by the erstwhile land owners. Although their number is not enough to cause concern immediate steps have been taken to issue stern instructions to the Revenue Officers and the Law and order authorities to ensure restoration of the land to the allottees concerned whereas the total number of allottees of ceiling surplus land is 69,436 the number of cases of eviction is only 804 which works out to about 1.2 per cent. Out of the 804 cases of eviction so far reported, restoration has already been made in 558 cases benefit 240 Scheduled Castes and 201 Scheduled Tribes.

8-12. With a view to ameliorating the economic conditions of the weaker sections of the community the State Government have launched a massive programme of distribution of Government waste land, free of cost both for agriculture and for homestead purposes. A total number of 173,319 beneficiary families have received house sites up to the end of July, 1978, out of which 63,658 belong to the S.T. and 48,144 belong to S. C. Out of 10,347.265 acres of homestead land distributed by the end of July, 1978, 3,815.856 acres have been received by the S.Ts and 24,80.971 acres by the S. C. Under distribution of cultivable waste lands 296,675.442 acres of lands have been distributed to 160,866 S. T. families and 115,172.936 acres of land families.

Alienation of Land

8-13. In order to check and regulate alienation of land belonging to Scheduled Tribes in the scheduled areas of the State, the Orissa Scheduled Areas Transfer of Immovable Property (Scheduled Tribe) Regulation, 1956 has been promulgated and enforced with effect from the 4th October 1956 in the non-Scheduled Areas the regulatory control is effected under Sections 22,23 and 23-A of the Orissa Land Reforms Act to benefit persons belonging to the Scheduled Castes and Scheduled Tribes. The provisions of the O. L. R. Act apply to S. C. persons of the Scheduled Areas also. To deal with problem of land alienation in the State all the Subdivisional Officers of the Scheduled Areas and 9 Special Officers (6 in Koraput district, 2 in Phulbani and 1 in Ganjam districts) have been notified to function as "competent authority". Besides 3 Tahasildars of Phulbani district as well as the Subdivisional Revenue Officers of Mayurbhanj and Sundergarh districts have also been empowered to function as 'competent authority' and all the S. D. Os. and Subdivisional Revenue Officers of the State have been empowered to declare invalid the cases of illegal transfer by the Scheduled Tribes and Scheduled Castes. A statement showing the number of cases of land alienation, persons benefited and area restored is given in the table below :—

	Till the year ending 1976-77	During the year 1977-78	During the year 1978-79 (end of August)	Total
<i>(A) In Scheduled Areas</i>				
(i) Number of cases of violation instituted.	37,739	4,596	2,145	44,471
(ii) Area involved	Ac. 23,044.23	Ac. 3,673.65	Ac. 1,714.63	Ac. 28,432.51
(iii) No. of cases disposed of	32,250	5,377	2,168	39,795
(iv) No. of S. T. beneficiaries	15,593	2,083	897	18,573
(v) Area restored	Ac. 12,404.44	Ac. 1,567.95	Ac. 889.76	Ac. 14,862.15
(vi) Penalty collected from offenders.	Rs. 2,30,754.64	Rs. 50,848.09	Rs. 26,234.00	Rs. 3,07,836.73

(B) In non-Scheduled Areas

(i) No. of cases of violation instituted	18,670
(ii) No. of cases disposed of	12,406
(iii) Balance cases for disposal	6,264
(iv) No. of cases in which property has been restored	5,187
(v) No. of persons benefitted	5,428
(vi) Area restored	Ac. 6,796-993

Liquidation of Indebtedness

8-14. As a first step towards liquidation of rural indebtedness, the State Government have effected drastic amendments to the Orissa Money Lenders Act, 1939 with a view to regulating the Money-lending business and to provide adequate relief to the weaker sections. Heavy penalty including imprisonment has been prescribed for offences under the Act and the offences have been made triable by the Executive Magistrates summarily. No money-lender shall recover towards interest in respect of any loan advanced by him, an amount in excess of the amount of the principal and if the money-lender has realised from the debtor an amount equal to or more than twice the amount of the principal, the loan shall stand discharged and the amount realised in excess shall be refunded to the debtor. A moratorium for a period of 2 years with effect from the 22nd September 1975 was provided under the O. M. L. (Amendment) Act, 1975 to stay all proceedings in execution of a decree obtained by a money-lender in respect of a loan advanced by him to an indigent debtor and the period of moratorium has been extended by another year with effect from the 22nd September 1977.

Debt relief in Scheduled Areas

8-15. The Orissa (Scheduled Areas) Debt Relief Regulation is a protective legislation promulgated to provide relief from indebtedness to the Scheduled tribes in the Scheduled areas of the State. In pursuance of the provisions contained therein Debt Relief Courts have been established in each Sub-division within the Scheduled Areas for determination of debts incurred by the tribals and repayment in instalments.

Abolition of Bonded Labour System

8-16. The practice of bonded labour has so far been detected only in five districts viz. Ganjam Koraput, Phulbani, Kalahandi and Mayurbhanj. The Bonded Labour System (Abolition Act) was passed in 1976 and powers have been conferred on the District Magistrates to ensure proper implementation of the provisions of the Act. Subdivisional Officers have been conferred with the judicial powers in respect of the trial of these cases. Vigilance Committees for these five districts and for their Sub divisions in which bonded labour system prevails have been constituted under the provisions of the Act. By the end of July, 1978, 690 cases of suspected bonded labour were instituted out of which in 320 cases, 320 bonded labourers were released and out of them 39 persons belong to S. Cs. and 135 belong to S. Ts.

8-17. In order to rehabilitate the released bonded labourers the State Government have formulated a comprehensive scheme which provides the conferment of the following benefits :—

1. Monthly subsistence grant of Rs. 50 p. m. for six months
2. 15 Kgs. of rice and 2 Dhotis/Sarees at the time of release
3. Allotment of reclaimed land on priority basis and reclamation grant of Rs. 300 per acre where the land has to be reclaimed.
4. One pair of bullocks, agricultural implements worth Rs. 50, seeds and fertilizers worth Rs. 100, Rs. 20 towards share capital subscription for enrolment in the primary co-operative society and one goatery Unit.
5. In the case of female unmarried bonded labourers, marriage grant of Rs. 500 is given for her marriage. After her marriage, if the husband is landless, he will be entitled to receive other benefits.

8.18. By the end of July, 1978, 315 (S. C. 37, S. T. 185 and O. C. 93) freed Bonded Labourers have been rehabilitated. Rs. 1,36,405 has so far been spent for giving rehabilitation assistance to them. An area of Ac. 239.25 of agricultural land and Ac. 0.45 of house sites have been allotted to the freed bonded labourers free of cost. 4 (four) freed bonded labourers have also been provided with employment facilities. Further assistance according to the scheme is being given.

Integrated Housing Scheme

8.19. The Integrated Housing Scheme is a composite scheme for providing built up houses on low cost to the weaker sections of the community which constitute mostly the landless agricultural labourers having no house site of their own. The houses are intended to be constructed in colonies of 20 houses or more on compact patches of homestead lands allotted to the house-less persons preferably near the existing Basti sites of the villages so as to facilitate provision of other basic amenities to the inhabitants like approach road, water-supply, schools and Community centres etc. by pooling the resources of the on going schemes undertaken in such areas. Since the beneficiaries under the scheme are all landless persons they will also be eligible to avail of the opportunities extended under the various schemes like Goat Rearing, Bee-keeping, Dairy etc. to provide subsidiary sources of income besides agricultural land to take up cultivation. Out of 8,212 beneficiaries who have been provided with 4,121 belong to Scheduled Tribes and 2,836 belong to Scheduled Caste.

Reservation in Services

8.20. Orissa is the first State to have a legislation for this purpose which came into effect from the 1st July 1976. In the light of experiences gained comprehensive amendment proposals are under active consideration of Government relating to relaxation of standards in matters of initial recruitment and promotion and enhancement of promotion opportunities.

8.21. In order to combat the evils of atrocities on Harijans and Adivasis a State level Atrocity Committee has been formed to enquire into the cases of alleged atrocities and harassment. In suitable cases monetary help is being sanctioned to the victims.

Sectoral Programmes

Agriculture

8.22. Introduction of cropping pattern most suited for the different agro-climatic zones in the key to the agriculture development of tribal areas. With this end in view demonstration, input assistance, supply of improved and high yielding variety of seeds, plant protection and introduction of simple agricultural implements have been given special emphasis. Areas affected by shifting cultivation will receive priority in extension of financial support under different schemes. Total financial outlay under Agriculture will be as follows:—

	Rs. in lakhs
(a) State Plan	2,200.00
(b) Special Central assistance	665.03
(c) Central/Centrally Sponsored	200.00
Total	3,065.03

8.23. The financial outlays provided under different schemes and their physical contents under State Plan, Central and Centrally sponsored schemes and Special Central assistance are indicated in Annexure II.

Horticulture

8.24. As a major thrust programme Horticulture in the Sub-Plan areas will account for an outlay of Rs. 10.00 crores under State Plan and Rs. 4.00 crores under special Central Assistance. Seven horticultural zones have been identified. The technique of in-situ plantation has been well established. An area of 55,825 hectares in sub-plan area will be covered under different species. The details are in Annexure III.

8-25. In order to give research support Adaptive Research Station and Progeny Orchards will be set up in 10 centres. Research, demonstration & training will be taken up in these areas. The horticultural programme will be major instrument for weaning away the tribal from shifting cultivation.

8-26. Thus in all the total financial outlay under Horticulture Sector proposed for the Sixth Plan period is Rs. 19.00 crores as indicated below :-

	Rs. in crores
(a) State Plan	10.00
(b) Central/Centrally Sponsored Scheme	5.00
(c) Spl. Central Assistance	4.00
Total	19.00

Soil Conservation

8-27. The ecological and agro climatic setting of the tribal scene make soil conservation a key programme for the Sub-Plan area. During the previous plan period, land reclamation, land development including field bunding contourbunding, terracing, gully plugging, water harvesting structures; pasture development and plantation, etc. had received major attention. Water shed approach has been adopted. The achievements under these items are—

Item	Hectares
Land reclamation	5,210 hectares mostly in tribal areas
Contourbunding	1,35,698 (75 per cent in tribal areas)
Plantations	44,147 (66 per cent in tribal areas)
Water harvesting structure	1,030 (70 per cent in tribal areas)

8-28. State Plan has provided an outlay of Rs. 1,929.00 lakhs for soil conservation and out of that Rs. 1,295.00 lakhs has been quantified for the Sub-Plan area. With this amount it is proposed to carry forward the various soil conservation measures more intensively in the Sixth Plan period and take up comprehensive treatment over 2.25 lakh hectares besides raising of plantation over 55,000 hectares of land.

8-29. In addition to the State Plan funds, it is proposed to allocate Rs. 300 lakhs out of special Central Assistance for Soil Conservation programme. With this provision it is proposed to take up 56 water sheds covering an area of 2,080 square K. Ms. Different items of works like land reclamation, land development (contourbunding and terracing) growing of plantation crops like Cashew, Coffee and sisal etc., development of pasture land, Splantation of bamboo etc. will be taken up during the Sixth Plan period. It is estimated that about 2,240 hectares of agricultural lands will be treated under this programme, about 17,600 hectares will be covered under plantation and pasture development programmes

8-30. Under Central Sector schemes Government of India have sanctioned 3 units of Pilot projects for rehabilitation of 300 tribal families in the district of Koraput who are practising shifting cultivation. This scheme was sanctioned during the year 1977-78. Under this scheme reclamation of land over 300 hectares will be done out of which irrigation facility will be extended to 50 per cent of the reclaimed lands by construction of water harvesting structures and farm ponds. Further 300

hectares will be put under plantation crops like Cashew nut, Jack fruit, Mango, Tamarind, Guava etc. This scheme will be continued during Sixth Plan period and in addition to the 300 families already covered during the Fifth Plan period 1,000 podu practising families will be covered with an outlay of Rs. 150 lakhs.

8.31. Under the Central Sector schemes Soil Conservation programme will also be taken up in the catchment area of river valley projects with an outlay of Rs. 10 crores to cover 1,40,000 hectares to benefit about 50,000 tribal families.

8.32. Thus, in all the total financial outlay under Soil Conservation sector proposed for the Sixth Plan period is estimated at Rs. 31 crores as indicated below :—

	Rs. in crores
(a) State Plan	12.95
(b) Special Central Assistance	3.00
(c) Central Scheme (prevention of shifting cultivation)	1.50
(d) Central scheme (development of catchment areas of river valley projects and other schemes).	13.55
Total	31.00

Irrigation

8.33. According to an estimate made in the beginning of the Fifth Plan the irrigation potential from Major, Medium and Minor Irrigation Projects and Ground water projects in the State is estimated as 634.83 thousand hectares. Only a small per cent of the potential has been exploited so far and the net areas irrigated constitute about 16 per cent of the net cropped area. As irrigation is crucial for intensive agriculture, it has been included among the core sector projects of the Sub-Plan. The gap in the Development of irrigation in tribal areas is very wide and only 6.06 per cent of the net cropped area of 26.8 lakh hectares received irrigation by various sources by the end of 1977-78.

8.34. Up to the end of 1977-78 the total irrigated area from different sources in Sub-Plan area was 1,64,357.25 hectares. The Sixth Plan has set a target of 3.977 lakh hectares for additional irrigation facilities. Sourcewise irrigated area by the end of Sixth Plan will be as under—

	Hectares
(a) Major and Medium Irrigation	2,22,940
(b) Minor Irrigation (flow)	91,044
(c) Minor Irrigation (Block and Panchayat)	6,400
(d) Minor Irrigation (lift)	57,600
(e) Dug-wells	18,000
(f) Mini Minor Irrigation	1,800
Total	3,97,784

8.35. The percentage of irrigated area will be stepped up to 20.7 per cent. The Plan outlay for different sectors, Sub-Plan outlay and the outlay proposed under Special Central Assistance are as under—

[Rs. in lakhs]					
Sl. No.	Sectors	Plan outlay	Sub-Plan outlay out of State Plan	Special Central Assistance	Central and Centrally sponsored
1	M. I. (Flow)	9,000	5,612.00	700	700.00
2	Lift Irrigation	4,300	1,279.00	25	..
3	Major & Medium	45,000	12,797.90	..	3,233.50
4	Mini M. I. P.	..	..	75	..
5	Dug Wells	..	..	450	..
6	P. S. Irrigation project and G. P. Tanks.	1,200	400.00	..	..
Total		59,500	20,988.93	1,250	3,933.50

Animal Husbandry

8.36. Animal Husbandry Schemes aim at providing supplementary income to the landless tribals and small and marginal farmers and help them to become self sufficient. Schemes taken up for providing sheep, goat, pigs and poultry have had a good impact and it is proposed to expand the scope of these schemes and also provide the necessary health support. The outlay proposed for Sub-Plan is Rs. 659.63 lakhs. Besides a sum of Rs. 300 lakhs is proposed out of Special Central Assistance and Rs. 208.34 lakhs from out of the Central/Centrally Sponsored Schemes totalling Rs. 1,168.00 lakhs. The details are shown in Annexure IV.

Forest

8.37. In the tribal Sub-Plan for 1974—79 a financial outlay of Rs. 327.90 lakhs had been proposed out of which the State Plan outlay was Rs. 152 lakhs and the balance was expected to be met from the Central Assistance. During the 4 years ending 1977-78, Rs. 98.47 lakhs have been spent under various schemes under the State Plan and Rs. 114.28 lakhs in the Central sector. The budget provision for 1978-79 is Rs. 30.57 lakhs in the State Plan and Rs. 75.36 lakhs in the Central Sector. Against a target of 16,633 hectares of plantations under various schemes, 11,761 hectares have been raised in the first 4 years and 2,840 hectares of plantations have been taken up this year. In addition to this, under Centrally Sponsored Schemes 9,680 hectares of plantations have been raised and 4,635 hectares of plantations have been taken up this year. 98 Kms. of forest roads have been constructed during this period and 30 Kms. are under construction against a target of 430 Kms. in the Plan period ending 1974—79. Like-wise 5,780 Kms. of boundary lines have been cleared during the first 4 years for new demarcation and 3,000 Kms. are being cleared this year, against a target of 12,000 Kms. during the Sub-Plan period.

8.38. During the Sixth Plan the total financial outlay under forestry sector for Sub-Plan has been projected at Rs. 1,822.00 lakhs as follows :

	Rs. in lakhs	
(a) State Plan	1,222.00	(Out of the Plan outlay on forestry of Rs. 2,500 lakhs for the whole State.)
(b) Central and Centrally Sponsored Schemes	500.00	
(c) Special Central Assistance	100.00	

8.39. The important plantation schemes proposed to be implemented with the above outlay are as follows :

Name of the scheme	Financial Outlay State Plan (Rs. in lakhs)	Physical Target
(a) Plantation of quick growing species	150.00	15,000 hectares
(b) Economic plantation	113.00	11,400 hectares
(c) Development of Minor Forest Produce	40.00	Plantation of Asan, Kusum, Rauwolfia Serpentina and other medicinal herbs.

Centrally Sponsored Scheme

	(Rs. in lakhs)	
(d) Compensatory Afforestation in Potteru Command Area.	110.00	9,000 hectares

Special Central Assistance

(e) Horticultural Plantation over podu ravaged areas.	80.00	10,000 hectares
(f) Plantation of Trees yielding minor forest produce.	15.00	3,000 hectares
(g) Social Forestry	5.00	2,334 hectares

Co-operation

8.40. Organisation of 220 Large sized Multipurpose Co-operative Societies is a major development during Fifth Plan. Of these 46 are Block level LAMPS and 174 are small LAMPS. The salient achievements by the end of 1978 and target set for 1982-83 are given below :

	1977-78	1982-83
1. Number of LAMPS	220	220
2. Number of branches	574	574
3. Membership	4,52,728	6,00,000
4. Percentage of rural population covered	29%	80%

Rs. in lakhs

5. Share Capital	{ Government 95.87 Members .. 76.71 }	172.58	580.00
6. Working Capital	..	600.00	3,000.00
7. S. T. Loan disbursed	..	263.64	2,500.00
8. M. T. Loan disbursed	..	155.00	1,000.00
9. L. T. Loan disbursed	..	..	3,000.00

(Rs. in lakhs)

10. Agriculture Produce purchased	..	39.23	600.00
11. M. E. P. purchased	..	64.70	1,000.00
12. Consumer articles supplied	..	179.57	1,000.00
13. Godowns and storage capacity available	..	30,000	65,000
		M. T. Rs.	M. T. Rs.

8.41. In the Sixth Plan the total plan outlay on Co-operation is Rs. 5,900.00 lakhs of which the flow into Sub-Plan will be Rs. 2,000 lakhs in the following Programmes:

Programmes		Plan outlay	Flow of funds to
		(Rs. in lakhs)	Sub-Plan (Rs. in lakhs)
1. Direction and Administration	..	400.00	200.00
2. Credit Co-operatives	..	3,000.00	1,091.00
3. Housing Co-operatives	..	250.00	Nil
4. Labour Co-operatives	..	200.00	60.00
5. Warehousing & Marketing Co-operatives	..	700.00	197.00
6. Co-operative Storage	..	50.00	15.50
7. Processing Co-operatives	..	110.00	9.00
8. Sugar Mills	..	540.00	300.00
9. Consumer's Co-operatives	..	350.00	96.00
10. Co-operative Education	..	200.00	Nil
11. Other Co-operatives	..	100.00	31.50
Total—Co-operation		..	5,900.00
		..	2,000.00
12. Marketing including Storage and Warehousing	..	300.00	60.00
Grand Total		..	6,200.00
		..	2,060.00

8.42. It is proposed to utilise Special Central Assistance of Rs. 600.00 lakhs for the following schemes.

	(Rs. in lakhs)
1. Working Capital ..	9.50
2. Managerial Subsidy ..	30.72
3. Construction of Godown ..	9.50
4. Repairs of Godowns ..	5.00
5. Transport Subsidy ..	34.28
6. Training Programme ..	1.00
7. Improvement of Hats ..	50.00
8. Output Subsidy ..	20.00
9. Price Fluctuation Fund ..	20.00
10. Custom Services ..	20.00
11. Assistance to T. D. C. C. ..	400.00
	600.00

Tribal Development Co-operative Corporation

8.43. The Orissa State Tribal Development Co-operative Corporation was set up in the year 1972. In the last five years, the Co-operation has made considerable headway in supplying daily requirements of tribals and marketing of their produce. The value of agriculture produce handled has increased to Rs. 113.00 lakhs in the year 1977-78 from Rs. 44.96 lakhs in the year 1972-73 and value of minor forest produce procured Rs. 42.00 lakhs from Rs. 18.97 lakhs. Similarly the value of consumer goods supplied through the fair price shops has gone upto Rs. 210 lakhs in 1977-78 from Rs. 44.60 lakhs in the year 1972-73.

8.44. The Corporation proposes to handle 50 per cent of the surplus agriculture produce of the tribals by the end of Sixth Plan period. The value of business is anticipated to rise upto Rs. 14 crores by 1982-83 from the present level of about Rs. 5 crores. The value of minor forest produce and surplus agriculture produce would be Rs. 8 crores and out of this consumer articles Rs. 6 crores. Besides, the corporation proposes to set up a few processing units.

8.45. It is proposed to assist T. D. C. C. with contribution towards share capital, contribution towards price fluctuation fund, grants for meeting 25 per cent of the cost of additional godowns and subsidy to meet part of overheads, royalty, etc. By absorbing overheads and royalty as recommended in the recent meeting of State Ministers of Forests and Tribal & Rural Welfare the Corporation will be enabled to pay a higher price for tribal produce and supply consumer articles at the wholesale rate. A sum of Rs 4 crores is proposed to be utilised for assisting T. D. C. C. in the above manner.

Industries

8-46. The Sub-Plan area has many important major industries and mining complexes. The Rourkela Steel Plant, the Cement Factory at Rajgangpur in Sundargarh district, the MIG factory at Sunabeda, Ferro Manganese Factory and Sugar Mill at Rayagada and the J. K. Paper Mill at Chandili, Rayagada, Ferro Silicon Plant at Theruvalli in Koraput district and the Kalinga Iron Works, Barbil in Keonjhar district are some of the major industries in the Sub-Plan area. Mining activity has gathered considerable momentum in Keonjhar district, and with the discovery of large deposits of Bauxite in Koraput district it would also be an important mining area in near future.

8-47. In the Sixth Plan an outlay of Rs. 1308-47 lakhs has been proposed for major industries. These are expected to create employment opportunities for nearly 2,000 persons. It is proposed to initiate special measures to ensure that maximum benefit accrues to tribals out of these developments.

8-48. In the Small Scales and Village Industries Sector, Sericulture, Bee Keeping, Khadi and Village Industries and Handicrafts are the major components of the Sixth Plan programme of the Sub-Plan. The District Industrial Centres are expected to play an important role in encouraging tribal entrepreneurs, providing adequate training, arranging raw-materials, credit and other inputs and assuring adequate marketing facilities. Under craftsman training schemes, some of the I. T. Is. in Sub-Plan area will be strengthened and a Polytechnic will be opened at Rayagada in Koraput district. Important crafts as in the I. T. Is. will be introduced in selected Ashram Schools and High Schools located in the Sub-Plan area. With a view to organising flow of credit and services systematically maximum support will be extended to industrial co-operatives.

8-49. Tassar production in the Sub-Plan area which is at present 30,000 Kahans (1 Kahan--1,280 Nos.) is proposed to be stepped up to one lakh Kahan. The number of Tassar Rearers Co-operatives and their membership will be increased from 33 to 57 and 21,048 to 30,000 respectively. Special attention is being given to increase the area under Asan, Arjun and other host-plants under the plantation programmes taken up by Forest and Soil Conservation Departments. The number of training centres for reeling yarn will be increased by 20. Special demonstrations will be organised for propagation of improve technique to increase production. Research has been successful in evolving a better race of seed cocoons and the multiplication of these cocoons will be stepped up systematically and supply augmented.

8-50. Mulberry has been introduced in the Sub-Plan area on an experimental scale and holds much promise. It is proposed to make an effective beginning in the remaining years by increasing the area under mulberry, arranging supply of cocoons and organising training for rearing of mulberry warms and production of mulberry yarn.

8-51. The State Plan provides an amount of Rs. 2,031-98 lakhs for expenditure in the Sub-Plan on different Industrial activities. This is to be further supplemented by Rs. 400-00 lakhs from funds under Special Central Assistance.

The details are given in Annexure V.

Communication

8-52. As against the All-India average of 16-00 Kms. of road per 100 Sq. Kms. Orissa has only 8-60 Kms. The position in the Sub-Plan area is still worse. Most of the Sub-Plan area is isolated for want of communication. Due to the undulating terrain, the expenditure on construction and maintenance of road is very high.

8-53. As roads are not in the core sector, very limited allocations have been made available under the Five-Year Plans with the result that even the existing roads could not be maintained properly. The requirement for Minimum Needs Programme was estimated as Rs. 180 crores during the Fifth Plan whereas the outlay was only about 10 per cent of this cost.

8-54. With a view to making good the backlog and narrow the gap in development in tribal areas, the following outlays and physical targets are proposed.

[Rs. in lakhs]

Sl. No.	Programme	Plan outlay	Flow to the Sub-Plan area	Physical target fixed
(1)	(2)	(3)	(4)	(5)
I. P. W. D. Roads				
(i)	Minimum Need Programme	5,200.00	2,633.40	Conversion of 2,150 Kms. of roads into all weather roads.
(ii)	Arterial road	75.00	57.57	Construction of Bridges with approach road.
(iii)	Road Development	13,490.00	3,889.42	Construction of 264 Nos. of Bridges and 1309 Nos. of C. D. works (culverts and causeways). Besides, Mettaling will be made in 885 Kms., Black toping in 1005.60 Kms., Ghat cutting in 35 Kms., straightening of road cross in 152 Kms. and construction of new roads in 27.60 Kms.
II. Municipal Roads		275.00	110.00	Conversion of morrum to metal in 100 Kms. and conversion of earth road into Blacktop in 60 Kms.
III. Roads under Community Development and Grama Panchayat.		2,650.00	883.33	Improvement of 144 Kms. under rural link road programme.
IV. R. E. O. Roads				
(a) Missing Road Links				
(i)	New Schemes	..	65.77	
(ii)	Minimum Needs Programme	..	410.67	Spillover roads 491 Kms. New roads 1809 Kms.
(iii)	Other than Minimum Needs Programme.	..	1,530.35	
(b) Missing Minor Bridges				
(i)	New Schemes	..	106.71	
(ii)	Other than M. N. P.	..	6,200.00	
		..	Nil	
(c) Road Project Costing less than Rs. 5.00 lakhs				
(i)	Spill over	..	9.18	
(ii)	New Schemes (M. N. P.)	..	13.40	
(iii)	Other than M. N. P.	..	363.92	
Total		27,890.00	9,573.72	

'B' Special Central Assistance

Programmes	Outlay proposed (Rs. in lakhs)	Physical target fixed
1	2	3
(a) Spill over Projects		
(i) Completion of Th. Rampur Road	.. 50.00	20 Kms.
(ii) Raikia Manekeswari Road	.. 5.00	Completion of Bridges.
(iii) Khairput-Muduhpada Road	.. 30.00	13 Kms.
New Schemes		
(i) Raisuan-Kusumi Road	.. 16.00	16 Kms.
(ii) Kersamal-Raiberua Road	.. 6.00	3 Kms.
(iii) Construction of Small Road Projects through Block Agency in the sub-Plan area.	353.00	706 Kms. (approximately).
Total	.. 460.00	

Education

8.54. Orissa has the second largest concentration of tribal population in the country with 23.11 per cent of its people belonging to scheduled Tribes. Of the 50.00 lakh tribals in the State, hardly 9.5 per cent could be made literate till 1971. The percentage of literacy among the scheduled Castes is only 15.62 per cent against the State average of 126.12 per cent. Female education in the State needs special attention in as much as only 13 per cent among them are literate against the all-India level of 19 per cent. Literacy among the tribal women is rather nominal which is around 2 per cent. Hardly 9 per cent of children enrolled at Primary level are retained in the Higher Secondary level and 3 per cent at College level.

8.55. At the end of the Fourth Plan there were 9933 Primary Schools (including 770 Sevashrams, run by T. & R. W. Department) 975 Middle Schools and 390 High Schools in the sub-plan area. During the Fifth Plan period there has been some expansion in the field of education in the sub-Plan area. The number of Primary schools has increased to 10,794 number of middle schools to 1,519 and the number of High Schools to 443. As a result of this expansion, the rate of drop out which was almost forced upon the pupil at the end of Class V, due to lack of middle school facility has been reduced to some extent. The percentage of enrolment of children at the Primary stages (6-11 groups) increased from 56 in (1973-74) to 62 in 1977-78. At the middle schools stage the percentage of enrolment has increased from 6.5 per cent to nearly 9 per cent. Still there is considerable disparity in development as between the districts included in the sub-Plan and also between the State averages and averages for the sub-Plan area.

8.56. During the Sixth Plan period, it is proposed to increase the percentage of enrolment at the primary stage to 81.3 per cent in the case of Scheduled Castes and 65.1 per cent in respect of Scheduled Tribes children. Similarly, at the middle schools stage the percentage of enrolment for the tribal children is proposed to be increased to 20.1 per cent. Necessary infrastructural facilities are proposed to be provided to achieve this objective during the Sixth Plan period. Under Adult Literacy Programme 18.65 lakhs of people will be covered in the sub-Plan area.

8.57. During the Sixth Plan period, the State Plan outlay under education has been fixed at Rs. 11,300.00 lakhs out of which Rs. 4,106.80 lakhs has been quantified for the sub-Plan area. In addition to this Rs. 1,097.69 lakhs has been earmarked under the Plan for the welfare of Backward classes, Rs. 800 lakhs from Special Central assistance and Rs. 899 lakhs under Central and Centrally sponsored schemes for investment in the sub-Plan area for implementation of different programmes. Thus the total investment in education sector in the sub-Plan area will be of the order of Rs. 6,903.49 lakhs from the following sources :--

	Rs. in lakhs
(a) State Plan ..	4,106.80
(b) Central & Centrally Sponsored Schemes ..	899.00 (Including Rs. 131.00 lakhs for Backward Classes Sector).
(c) Backward Classes Sector ..	1,097.69
(d) Special Central assistance ..	800.00
Total ..	6,903.49

The scheme-wise financial outlays and physical targets are indicated in Annexure VI enclosed.

Health

8.58. Tribal areas are lagging far behind in respect of health services. In some of the areas special health hazards like tuberculosis, leprosy, venereal diseases, yaws, etc., continue to shake the vitality and reduce the longevity of tribal communities. An effective programme of preventive medical care is proposed to be taken up in the tribal areas during the sixth plan period. Curative medical services are also proposed to be intensified in these areas. A list of existing Health institutions in the sub-Plan area and the facilities available are shown in Annexure VII.

8.59. In the Sixth Plan period the following outlay has been proposed.

I. State Plan	Outlay Rupees in lakhs
(a) Minimum Needs Programme ..	594.59
(b) Control of communicable diseases ..	17.30
(c) Hospital and dispensaries ..	322.95
(d) Homoeopathic and Ayurvedic dispensaries ..	51.29
Total ..	986.13

8.60. Besides, an outlay of Rs. 1327.45 lakhs has been proposed under Centrally Sponsored Scheme, and Rs. 508.24 lakhs under Special Central Assistance.

The items of work in the Plan include the following

1. Establishment of Mini Health Centre
2. Increasing the number of beds both in general and isolated wards

3. Completion of incomplete Primary Health Centre buildings for sub-centres proposed to be upgraded and putting up staff quarters.
4. Augmentation of staff including dieticians, nutritionists, staff nurses, Specialists, etc.
5. Opening of Ayurvedic and Homoeopathic dispensaries
6. Mobile Survey units.
7. Establishment of Rural Family Planning Centres and District Family Welfare Centres
8. Health and Nutritional Survey
9. Provision of ambulance services

II. Centrally Sponsored Scheme	Outlay
(a) National Malaria Eradication Programme	} Rs. 13,27.45 lakhs
(b) National Smallpox Eradication Programme	
(c) National Leprosy Control Programme	
(d) Family Welfare Programme	

8.61. Under the Centrally Sponsored Schemes, the National Malaria Eradication Programme, National Smallpox Eradication Programme are proposed to be continued. It is also proposed to establish one Leprosy centre unit, 3 upgraded leprosy centre units and 30 S. E. T. units in tribal areas and continue 118 Rural Family Welfare Centres, 5 District Family Welfare Centres, 5 post partum centres and 4 Auxiliary Nurse-cum-midwife training centres.

III. Special Central Assistance

8.62 An outlay of Rs. 5,08.24 lakhs is required on the following programmes :

	Rs. in lakhs
(a) Nutrition survey of health condition of tribals	0.50
(b) Establishment of 118 Mini Health Centres	244.50
(c) Construction of dispensary building & staff quarters	24.20
(d) Strengthening of rural administration in the sub-Plan area.	51.00
(e) Construction of buildings & staff quarters for 10 bedded T. B. ward.	89.25
(f) Health coverage of beneficiaries under Feeding Programme—Demonstration of Mobile Units.	14.16
(g) Nutrition therapy centres at 5 S. D. hospitals	7.35
(h) Nutrition and health survey in 4 districts	1.05
(i) Provision of nutritionists P. H. D. nurses in 11 P. H. Cs. and dieticians in district headquarters hospitals.	30.45

	Rs. in lakhs
(j) Special health schemes for Lodhas in Mayurbhanj district—Establishment of 2 (two) mobile health units.	6.27
(k) Disability Survey and treatment.	24.20
(l) Provision for prevention of visual impairment and control of blindness establishment of 10 units in 10 S.D. hospital of I.T.D.P. areas.	7.85
(m) Provision of Ambulances van in 7 S.D. hospitals of I. T. D. P. areas.	7.46
	508.24

Primitive Groups of tribals

8.63. Tribal groups in the pre-agricultural level of technology and still fighting for their separate identity and survival have been accepted as a separate category needing special attention. In Orissa there are as many as 62 various ethnic groups, many of whom are unfortunately still in a state of extreme backwardness and a few of them are on the verge of extinction.

8.64. As per the decision in the meeting on Primitive Groups held at New Delhi on the 13th September 1977, the following Primitive Groups were selected for assistance in addition to the Bondas of Koraput district—

- (1) Souras of Ganjam Agency
- (2) Lanjia-Souras of Thumba Agency
- (3) Dongria-Kondhas of Koraput district
- (4) Kutia-Kondha of Phulbani district
- (5) Juangs of Keonjhar district
- (6) Paudi-Bhuyans of Dhenkanal district

8.65. Accordingly, 5 more MICRO Projects for the Primitive Groups have been started and the Soura Development Agency at Chandragiri has been converted to a MICRO Project. In all there are 7 MICRO Projects functioning in the State at present, the details of which are given in Annexure VIII. The outlay proposed for the 7 MICRO Projects will be of the order of Rs. 862.35 lakhs during the Sixth Plan period.

8.66. Since Orissa has a large number of Primitive Tribal groups the MICRO schemes so far started are by no means adequate. It is, therefore, proposed to start 5 more MICRO projects during the Sixth Plan period in Junagpirh area of Keonjhar district, Koinpur area of Ganjam Agency, Kotgarh area of Phulbani district, Bonai Subdivision of Sundargarh district and Rayagada Subdivision of Koraput district. The requirement of funds during the Sixth Plan period for these additional projects will be of the order of Rs. 500 lakhs.

8.67. Thus, the total financial outlay for the development of the Primitive Groups during the Sixth Plan period will be of over Rs. 13 crores.

ANNEXURE I

Statement showing sectorwise physical achievements made in the sub-plan during the last four years (1974—78)

Sl. No.	Sector	Physical achievement made
1	2	3
1	Agriculture	<p>(i) 11,638 Nos. of bullocks have been supplied.</p> <p>(ii) 6,928.16 Acs. of land were taken up under crop demonstration programme.</p> <p>(iii) 6,128 sets of agricultural implements have been distributed among the beneficiaries.</p> <p>(iv) 19,688 Nos. of families have been supplied with seeds, fertilisers and pesticides.</p>
2	Horticulture	<p>(i) Survey of 7 Horticultural belts have been completed.</p> <p>(ii) Over 10,608.27 Acs. of area were brought under Horticultural plantations and 2,318 grafts supplied to tribal beneficiaries.</p>
3	Soil Conservation	<p>(i) 9,153 Acs. of land have been reclaimed and distributed among the landless beneficiaries.</p> <p>(ii) Over 6,135.01 Acs. of private land were improved</p>
4	Minor Irrigation	<p>(i) 41 M. I. Ps with an ayacut of 14,523 Acs. were taken up in the sub-plan area of ten projects, 22 projects have since been completed providing irrigation facilities to 4,837 Acs.</p> <p>(ii) 197 Mini Irrigation projects with an ayacut of 4,013 Acs. at an estimated cost of Rs. 27.48 lakhs have been taken up in the I. T. D. Ps. through the Block Agency. Of the 197 Mini Irrigation projects, 49 projects have since been completed. In addition, 49 community irrigation wells and renovation of 38 tanks have been completed.</p> <p>(iii) Construction of over 10,000 dugwells have been completed.</p> <p>(iv) 41 River Lift Irrigation projects have been completed.</p>
5	Co-operation	<p>(i) 220 LAMPS with 574 branches have been organised, 4,52,728 members have been enrolled, over 30,000 M. T. capacity storage godowns have been constructed.</p>
6	Animal Husbandry	<p>(i) 12,844 goats have been distributed.</p> <p>(ii) 252 sheeps have been distributed.</p> <p>(iii) 336 breeding dose and 90 boards have been distributed.</p> <p>(iv) 518 bucks have been distributed.</p>

Sl. No.	Sector	Physical achievement made
1	2	3
7	Village and Small-Scale Industries	<p>(i) 60 Bee-keeping units have been organised in the sub-plan areas.</p> <p>(ii) Besides funds have been placed with the Apex T. R. Cs and 5 primary T. R. Cs for strengthening the share capital base, establishment of 5 pilot projects centres, 4 Receling and spinning centre, 12 units of supply of seed cocoons, 5 units for maintenance of tassar food plants, 2 units of lac cultivation. Further funds have also been placed for establishment of Training-cum-Production Centre of Mulberry at Phulbani. Under P. S. I. units funds have also been placed with the Director of Industries for establishment of 7 oil units and training of 20 tribal entrepreneurs, under Multitrade Co-operative Society funds have been placed to train up 950 S. T. and S. C. candidates.</p>
8	Forestry	Over Acs. 3,698.05 were brought under plantation programme.
9	Drinking water wells	944 Nos. of a sanitary wells have been sunk.
10	Education	15 Book Banks have so far been opened in the educational institutions of the T. & R. W. Department. Besides funds have been placed with D. W. O. for supply of utensils and furnitures in the educational institutions. Under pre-primary education programme funds have been placed with Education Department for construction of Primary school buildings in the sub-plan areas.
11	Communication	30 communication Projects have been taken up in the sub-Plan area.
12	Settlement operation	
	Name of the district ..	Year Physical achievement made
1	Sundargarh ..	<p>1974-75 Draft publication and objection bearing of 368 villages relating to Panposh and Sadar Subdivision and final publication of records in respect of 333 villages of Bonai Subdivision completed.</p> <p>1975-76 F. P. and P. D. in 243 villages relating to Bonai Subdivision, D. P. and O. H. of 101 villages of Panposh and Sadar Subdivision completed.</p> <p>1976-77 Attestation of 2 villages and F. P. and D. P. of 254 villages relating to Panposh and Sadar Subdivision completed.</p> <p>1977-78 D. P. and O. H. completed in 32 villages of Sadar Subdivision. Re-janch and Safai completed in 29 villages original taming and alamat printing completed in 202 villages.</p>

Sl. No.	Name of the district	Year	Physical achievement made
1	2	3	4
2	Koraput ..	1974-75	Kistwar of 44 villages and Khanapuri of 3 villages completed.
		1975-76	Kistwar and Khanapuri of 258 villages in Bonda hills areas completed.
		1976-77	Kistwar and Khanapuri of 61 villages and attestation of 73 villages in Bonda hills areas completed.
		1977-78	Kistwar and Khanapuri completed in 66 villages. Attestation completed in 56 villages.
3	Keonjhar ..	1974-75	Kistwar and Khanapuri of 110 villages completed
		1975-76	Kistwar and Khanapuri of 54 villages in Junagpirh and Bhuyanpirh areas completed.
		1976-77	Bhujharat of 56 villages and Attestation of 66 villages in Bhuyanpirh and Junagpirh areas completed.
		1977-78	Bhujharat and Attestation completed in 53 villages of Bhuyanpirh and Junagpirh areas.
4	Ganjam ..	1974-75	Kistwar of 10 villages, Kistwar and Khanapuri of 383 villages, Bhujharat of 510 villages and attestation of 414 villages completed.
		1975-76	Kistwar and Khanapuri of 361 villages, Bhujharat of 351 villages and attestation of 185 villages in Ganjam agency areas completed.
		1976-77	Bhujharat of 56 villages and attestation of 66 villages in Bhuyanpirh and Junagpirh areas completed.
		1977-78	D. P. and O. H. completed in 26 villages. Attestation completed in 39 villages. Kistwar and Khanapuri completed in 27 villages.
5	Mayurbhanj ..	1976-77	Attestation of 39 villages and Kistwar and Khanapuri of 94 villages completed. Spill over D. P. and O. H. of 3 villages completed.
		1977-78	D. P. and O. H. completed 3 villages. Attestation completed in 474 villages. Kistwar and Khanapuri completed in 620 villages.
6	Sambalpur .. (Kuchinda subdivision)	1977-78	Attestation completed in 17 villages. Calculation and incorporation of rent completed in 33 villages. Original tamilling of maps completed in 211 villages. Rejanch completed in 284 villages.
7	Phulbani ..	1977-78	D. P. and O. H. completed in 10 villages.
8	D. Ds. and M. P. ..	1977-78	Purchase of Machineris and equipments for printing of Maps for tribal areas and expansion of the map printing faction.

ANNEXURE II

STATE PLAN

Agriculture--Flow of funds to Tribal Sub-Plan

Sl. No.	Name of the Scheme	Total Sixth Plan	Tribal Sub-Plan
1	2	3	4
		(Rupees in lakhs)	
(a) Direction and Administration			
1	Strengthening of the Directorate ..	55.00	..
2	Ex. of Range office ..	89.00	30.00
3	District Organisation ..	220.00	101.00
4	Orissa Agricultural Development (World Bank Assistance Project).	1,320.00	592.00
5	Planning and Evaluation Cell in Secretariat ..	15.00	..
6	Planning and Evaluation Cell in Directorate ..	24.00	..
		1,725.00	723.00
(b) Multiplication and distribution of seeds			
7	Subsidy on improved seeds ..	415.42	160.00
8	Estt. of Seed Development Corp. ..	250.00	..
9	Seed processing and seed certification ..	50.00	20.00
10	Bacterial Culture ..	75.00	..
11	Subsidy on fertilisers for pulse crop ..	400.00	150.00
		1,190.42	330.00
Agricultural Farms			
12	Multiplication and distribution of seed experimental seed farm..	170.00	60.00
		170.00	60.00

Sl. No.	Name of the Scheme	Total Sixth Plan	Tribal Sub Plan
1	2	3	4
(Rupees in lakhs)			
(d) Manures and Fertilisers			
13	Production and distribution of compost	80·00	32·00
14	Quality control of chemical fertilisers	50·00	18·00
15	Strengthening of Soil testing laboratory	320·00	150·00
		450·00	200·00
(e) Plant Protection			
16	Intensification Plant protection measures	250·00	75·00
		250·00	75·00
(f) Commercial Crops			
17	Multiplication and Distribution of Oil Seeds	806·00	350·00
18	Sugarcane	35·00	10·00
19	Jute Development	11·00	5·00
20	Development of Cotton	42·00	10·00
		894·00	375·00
(g) Extension and Farmers Training			
21	Strengthening of the training programme in the Agricultural Department both in service and outsiders.	25·00	15·00
22	Agricultural Information Service	150·00	60·00
23	Higher Training of V. A. Ws.	25·00	85·00
		200·00	160·00
(h) Agricultural Engineering			
24	Reorganisation of Agricultural Engineering Section and Supply of Improved Agricultural implement.	180·00	80·00
25	Land reclamation and hiring of tractors	20·00	10·00
		200·00	90·00

(1)	(2)	(3)	
		(Rupees in lakhs)	
(I) Agricultural Research and Education			
26	Grant in aid to O. U. A. T. for Research adaptive research and field trials.	749.00	150.00
27	Modernisation of Agricultural Education in Secondary Schools	20.00	8.00
	Total	769.00	158.00
(J) Others			
28	Investment in Agro Industries Corporation as shared loans, etc. for composite extension programme.	231.58	100.00
29	Contribution to special schemes	10.00	4.00
	Total	241.58	104.00
	Grand Total	6,100.00	2,200.00

Physical targets (State plan schemes)

Schemes	Physical Targets
(1)	(2)
1. Production and distribution of compost	(i) 72 lakh tonnes will be produced and distributed in rural areas. (ii) 10 lakh tonnes will be produced and distributed in urban areas.
2. Seed processing of/Seed certification and enforcement seed law.	To be introduced in 5,000 hectares
3. Subsidy in fertilisers for pulse crops	Coverage in 4.00 lakhs hectares
4. Quality control of chemical fertilisers	16,000 Sample Nos.
5. Strengthening of soil testing laboratory	Soil testing units will be introduced in 42 Blocks.

(1)	(2)
6. Intensification of plant protection measures ..	Coverage in 10.00 lakh Hects.
7. Multiplication and distribution of oil seeds ..	4.40 lakh tonnes will be made
8. Sugar-cane development ..	13.00 lakh tonnes of cane will be produced
9. Jute development ..	1.00 lakh bale will be produced
10. Development of cotton ..	12,000 hectares will be covered
11. Strengthening of training programme in Agrl. Department both in services and outsider.	3,000 farmers will be trained
12. Higher training to V. A. Ws. ..	300 candidates will be trained
13. Reorganisation of Agricultural Engineering Sec.	2,500 demonstrators will be conducting and 2.50 lakh farmers will participate.
14. Modernisation of Agricultural Education in Secondary Education.	In 50 schools this scheme will be introduced

Special Central Assistance

Scheme	Financial outlay	Physical Target
(1)	(2)	(3)
	Rs.	
1. Salaries and Office Contingencies (State level, Range level and District level).	56,85,138	Staff Scheme
2. Crop Demonstration ..	5,71,60,000	10,400 acres
3. Training of Tribal Boys ..	13,48,000	936 Nos.
(a) Adivasi Couple training ..	3,60,000	200 nos.
4. Dormitories for adivasi couple ..	2,50,000	10 Nos.
5. Adaptive Trials farmers ..	3,00,000	15 Nos.
6. Subsidised sales of agricultural implements	4,00,000	5,000 sets
7. Input assistance ..	10,00,000	1. Agricultural Implement Rs. 1.00 lakh/ 2,285 Nos.
		2. Imp. Seeds Rs. 400 lakhs/ 14,120.
		3. Fertiliser Rs. 4 lakhs/ M.T. 8,000
		4. Pesticide Rs. 1 lakh/ Hect. 6,000
Total ..	6,65,03,138	

ANNEXURE III

Horticulture

(State-Plan)

Item (1)	Physical in Hect. (2)	Financial Rs. in lakhs (3)
1. Short Term Fruit		
(a) Banana ..	1,000	20.00
(b) Pine-apple ..	375	24.00
(c) Pappaya ..	4,000	20.00
2. Long term fruit (Mango, Guava, Jack fruit etc).	16,000	117.60
3. Progency Orchard ..	900	270.00
4. Plantation of other crops ..	3,500	19.25
5. Spices and Condiments ..	1,000	25.00
6. Potato and vegetable ..	20,000	40.00
7. Vegetable Seed Production ..	..	30.00
8. Community Canny Centre ..	..	2.50
9. Trial and Pilot preservation ..	..	30.00
10. Refreshers Training ..	1,240 Nos. of trainees	3.75
11. Training of Hort. Assistant ..	800 Nos.	24.00
12. Training of Private Nursemen ..	40 Nos.	1.40
13. Establishment of Private Nursery ..	50 Nos.	2.50
14. Growth Centre ..	40 Nos.	60.00
15. Staff & Facilities ..	..	250.00
16. Corporation ..	..	60.00
		1,000.00

Central/Centrally Sponsored Schemes

Item	Financial Rs. in lakhs
1. Package programme of sweet potato, topioca, yams for tribal areas. ..	200.00
2. Purchase programme on Turmudia singu peepur and arrowroot for tribal areas. ..	300.00
	500.00

Special Central Assistance

Item	Cost Rs. in lakhs	Physical Target in Hect.
(1)	(2)	(3)
1 Compact Area Plantation ..	262.20	8,100
2 Tuber crops ..	12.00	640
3 Spices and Condiments ..	21.00	640
4 Banana & Pine-apple ..	10.00 (Pineapple Banana).	40 80
5 Vegetable Seed Production ..	7.00	50
6 Production of quality planning Materials for Fruits progeny orchard.	40.00	80
7 Mini Truck Farming ..	17.00	400
8 Fruit and Vegetable preservation ..	5.00	5 centres.
9 Temperate Fruit Trial ..	2.50	10
10 Experimental Rehabilitation of Nomadi Mankdias.	1.30	1 Unit
11 Growth Centre ..	22.00	16 units
Total ..	400.00	

ANNEXURE IV

Animal Husbandry—Flow of funds to Sub-plan—A—State Plan

Sl. No.	Name of the Scheme	Provision (Rs. in lakhs)	Physical Target
(1)	(2)	(3)	(4)
1	Opening of new Veterinary Dispensaries	115.60	70
2	Opening of new L. A. C.	77.90	145
3	Mobile Investigation laboratory	11.80	10
4	Intensive Cattle Development	82.00	1 (Continuing)
5	Opening K. V. Block	4.00	2 Do.

(1)	(2)	(3)	(4)
6	Expansion of R. P. Farm ..	0.88	2 Continuing
7	Opening of A. I. Centre ..	2.28	21
8	Finance Assistantce to small/Marginal farmers	4.16	500 (Farmers)
9	Subsidies fodder cultivation ..	0.70	600 Acres.
10	Establishment of Fodder Seed Farm ..	10.83	2
11	Establishment of Milk Produces Co-operative Union.	3.50	5
12	Expansion of Live Stock Breeding Farm ..	4.20	5
13	Establishment Frozen Semen Bank ..	56.13	1
14	Intensive Natural breeding ..	32.65	5 centres
15	Establishment of Calf Rearing Centre ..	11.12	5 Do.
16	Establishment of Vaccine Depot ..	1.80	5 Do.
17	Expansion of Hospitals and dispensaries ..	26.00	200
18	Expansion of poly clinic ..	22.05	3
19	Opening of check post ..	58.83	30
20	Minikit programme for Fodder Development ..	8.40	300
21	Pasture development in gocher land ..	2.50	4,000
22	Establishment of Fodder Bank ..	4.00	1
23	Financial assistance to Poultry Co-operative ..	8.00	55
24	Dist. Administration ..	68.00	13
25	Wool Shearing and Manufacturing unit ..	2.24	1
26	Financial assistance to Primary Milk Producers Co-operative Society.	12.42	2.00
27	Grant-in-aid to Dist. Milk Producers Co-operative	27.00	5
		659.63	

B. Special Central Assistance

	Provision Rs. in lakhs	Physical Targets
1 Expansion of Farms—		
Goat ..	3.65	1,400 Goat units
Pigs ..	1.25	2,000 Pig units
2 Goat Unit ..	111.00	50,000 beneficiaries
3 Buck unit ..	14.39	5,000 Ditto

(1)	(2)	(3)	(4)
4	Sheep Unit	22.00	10,000 beneficiaries
5	Ram unit	1.50	1,000 Ditto
6	Pig Unit	4.15	5,000 beneficiaries
7	Boar Unit	1.62	1,000 boars
8	Training	22.60	7,818 farmers
9	Health cover	4.69	198 Dispensaries
10	Poultry scheme in School	5.00	50 schools
11	Goatery scheme in School	9.30	50 schools
12	Dairy	21.40	1,000 beneficiaries
13	Poultry Unit	1.00	1,000 units
14	Cock Unit	2.88	16,000 cocks for upgradation.
15	Duckery	2.05	500 Units
16	School Teaching	1.92	50 Schools
17	Scheme for podu families	12.77	2,000 families
18	Fodder Schemes	2.84	840 acres
19	Staff	25.07	189
		300.00	

C. Central/Centrally Sponsored Schemes

Schemes	Provision (Rs. in lakhs)	Target
Live stock production—		
1 (a) Pig Unit	15.65	1,600
(b) Poultry units	3.75	500
2 Establishment Check post	7.10	3 centres
3 Establishment of vigilance unit	9.85	2
4 Scalf rearing (New)	40.75	4,000
5 Poultry units (New)	44.44	4,000
6 Sheep Unit (New)	86.80	8,000
		208.34

ANNEXURE V

INDUSTRIES

Flow of Fund to sub-plan

I. State Plan

		Rs. in lakhs	
(a) Large and Medium Industries		1,308.47	Loan to Industrial Promotion and Investment Corporation of Orissa Ltd., expansion and improvement of Kalinga Iron Works, establishment of spinning mills and mini cement plants.
(b) Small Scale Industries	..	210.17	Share capital to Industrial Co-operatives, seed money for S. T. and S. C. entrepreneurs, organisation of District Industries Centre and Industrial estates etc.
(c) Handicrafts and Handlooms	..	106.89	Share capital loan to handicraft co-operatives, individual artisans, craftsman and weavers, share capital for non-ferrous metal co-operative societies, opening of new craft schools and strengthening the existing ones, share capital loans to weavers co-operative societies working capital to weavers co-operative societies, loan-cum-subsidy to such societies for construction of godowns, subsidy for managerial expenses etc.
(d) Sericulture	..	235.48	Establishment of seed farms on mulberry and organisation of pilot project centres and seed stations for silk worm and tassar reeling and spinning organisation of training in improved rearing and spinning of tassar cocoon.
(e) Technical Education	..	142.81	Improvement and provision of additional accommodation and supply of equipment to Orissa School of Mining and Engineering, Keonjhar, Regional Engineering College, Rourkela, Utkalmani Gopabandhu Institute Rourkela and establishment of polytechnic at Rayagada.
(f) Craftsman Training	..	28.16	Construction of workshop, staff quarters and supply of equipments to I. T. I. Ambaguda in Koraput district.

II. Special Central Assistance

Industries Department have furnished proposals for schemes under Special Central Assistance to the extent of Rs. 446.13 lakhs as per details given below—

(a) Small Scale Industries

	(Rs. in lakhs)	No. of units
(1) Entrepreneurs Development Programme for Tribal entrepreneurs to set-up small-scale industries.	5.00	1,000 candidates
(2) Margin money assistance to tribal entrepreneurs to set up small-scale industries.	25.00	100 small-scale Industries.

	(Rs. in lakhs)	No. of Units
(b) Khadi and Village Industries		
1. Bee keeping	66.40	30
2. Palm-gur Industries	2.37	10
3. Village Leather Industries	11.80	20
4. Village Pottery Industries	2.57	10
5. Cottage Match Industries	8.18	10
6. Fibre Industries	12.42	12
7. Cane and Bamboo Industry	1.62	10
8. Soap Industries	4.49	2
9. Shellac Industry	6.41	1
10. Bidi Making Units	8.93	20
11. Turmeric processing Unit	1.67	2
12. Leaf plate making	8.93	20
13. Khadi Industry	40.00	200
14. Margin money and managerial subsidy	47.00	118
15. Staff support to K. & V. I. Board	6.25	..
	<hr/>	
Total	229.23	
	<hr/>	
(c) Handicrafts		
1. Training of Tribal youth	16.50	1,000 tribals
2. Administration and supervision	13.90	Staff Scheme
3. Opening of New Crafts School	12.50	10 crafts school
4. Assistance to individual tribal artisan	10.00	2,000 artisans
5. Organisation of new Handicraft Co-operatives	14.50	20 societies
6. Share capital investment in Orissa Handicraft Corporation.	1.00	..
7. Share capital investment	0.50	..
8. Publicity	1.00	..
9. Survey of Handicrafts	0.50	..
	<hr/>	
Total	70.90	
	<hr/>	

(Rs. in lakhs)

(d) Sericulture

1. Pilot Project Centre	..	34.00	6 Pilot project centres
2. Tassar Reeling and Spinning Centres	..	17.00	6 centres
3. Organisation of Tassar Rearing Co-operative Societies	..	18.00	21 T. R. C. S.
4. Mulberry Silk cultivation and Training Programme	..	27.00	500 Tribals will be trained.
5. Financial assistance to sericulture co-operatives and individuals.	..	20.00	2,000 tribal artisans
Total	..	116.00	
Grand Total	..	446.13	

(e) Craftsman Training

1. Expansion of I. T. I., Phulbani	..	55.37	Provision for supply of building equipments and recurring expenditure.
2. Reorganisation and expansion of I. T. I., Takatpur	..	20.27	Ditto
3. Expansion of I. T. I., Rourkela	..	24.36	Ditto
Total	..	100.00	

ANNEXURE VI**EDUCATION****STATE PLAN**

Name of the Department	Name of the Scheme	Total State Plan outlays	Amount proposed for Sub-Plan area	Physical target for Sub-Plan area
1	2	3	4	5
(Rs. in lakhs)				
Education & Department.	Y. S. Elementary Education	5,800.00	2,298.00	(a) Opening of 1,500 new Primary Schools. (b) Upgradation of 2,000 Primary Schools to M. E. Schools. (c) Opening of 500 Chat-salis.

1	2	3	4	5
(Rs. in lakhs)				
				(d) Opening of 314 School Complexes.
				(e) Provision of incentives like Free supply of Text Books. Garments, at the Primary Stage attendances sholarships to girl students. Supply of text books and uniform in the Middle School stage etc.
				(f) Construction of quarters for female teachers.
(2) Secondary Education	2,100.00	615.50	(a) Opening of 15 new High Schools.	
			(b) Construction of 92 High School buildings.	
(3) Higher Education	2,000.00	550.00	(a) Opening of 3 new Colleges.	
			(b) Opening of additional Classes in 21 existing Colleges in Sub-Plan areas.	
			(c) Improvement of 21 College buildings.	
			(d) Construction of 10 new Hostels for Women students.	
(4) Adult Education	1,400.00	600.00	To make literate to 18.65 lakhs of people.	
(5) Other Educational facilities.	200.00	43.30	(a) 400 schools for National Physical Efficiency Drive	
			(b) Introduction of National Service Scheme in 21 Colleges.	
			(c) Youth Leadership Campus will be organised in the selected institutions.	
		11,500.00	4,106.80	

**Backward Classes Sector
State Plan**

Name of the Department	Name of the Scheme	Total State Plan outlays	Amount proposed for sub-Plan area	Physical targets for sub-Plan area
1	2	3	4	5
(Rs. in lakhs)				
T. & R. W. Deptt.	(1) Elementary Education.	740.34	588.15	(a) Upgradation of L. P. Sevashram to U. P. Standard. 300 (b) Upgradation of Residential Sevashram to Ashram School. 32 (c) Reconstruction of Sevashram School buildings. 200 (d) Construction of staff quarters in 500 schools.
	(2) Secondary Education.	513.51	295.49	(a) Upgradation of Kanyashram to High School. 2 (b) Construction of High School buildings and 1,500 staff quarters. 26 (c) Construction of Compound walls and Lavatories in Girls' institutions.
	(3) Other Educational facilities.	380.69	214.05	(a) Free Supply of Nationalised Text Books. (b) Supply of Cots, utensils etc. in all the Residential Schools.
		1,634.54	1,097.69	

Special Central Assistance

(Rs. in lakhs)

Education & Y. S. Department.	Elementary Education	456.00	(a) Construction of 300 quarters for female teachers.
	Secondary Education	144.00	(b) Provision of mid-day meals in 1,855 Pre-Primary Schools.

1	2	3	4	5
(Rs. in lakhs)				
				(e) Opening of 250 Primary Complexes.
				(d) Construction of 80 hostel buildings.
T. & R. W. Deptt.	Elementary Education	80.75	(a) Construction of 500 quarters for teachers.	
	Secondary Education	119.25	(b) Improvement of 450 Sevashram Buildings.	
	Total	800.00		(c) Upgradation of 23 Sevashrams.
				(d) Upgradation of 5 Kanyashrams.

Central/Centrally Sponsored Schemes

Name of the Department	Name of the Scheme	Total outlays under Central Sector grants	Amounts earmarked for sub-Plan areas	Physical targets proposed
1	2	3	4	5
(Rs. in lakhs)				
Education & Youth Services Department.	(a) Appointment of Hindi & Sanskrit teachers. Payment of National Scholarship to meritorious students. Opening of State resources Centre and production of literature in regional language.	2,111.00	768.00	(a) Appointment of 850 Hindi teachers to impart literacy to an additional target Group of 9 lakhs illiterate adults and to appoint 118 attendance reporters to report monthly attendance of elementary Schools.
T. & R. W. Department.	(b) Construction of hostel buildings for Scheduled Caste and Scheduled Tribe Girls' students. Disbursement of Post-Matric Scholarships and Pre-examination training Centres.	187.00	131.00	80 Numbers of 20 seated Hostels will be constructed.
		2,298.00	899.00	

ANNEXURE VII

HEALTH

Existing facilities in the Health Institutions in Sub-Plan Area

Name of the I. T. D. P. and T. D. A.	Referral hospital	P. H. C.	Allopathic Disp.	Ayurvedic Disp.	Sub-centres	Indoor facilities		Institution without building	
						Rural	Urban	P.H.C.	Dispensaries and sub-centres
1	2	3	4	5	6	7	8	9	10
Mayurbhanj District									
1. Baripada ..	5	10	3	7	57	92	187	..	13
2. Rairangpur ..	2	7	4	..	35	50	50	..	11
3. Kaptipada ..	2	4	1	2	21	38	35	..	7
4. Karanjia ..	3	5	1	1	19	42	40	..	3
Balasore District									
5. Nilgiri ..	1	1	1	..	9	6	40	..	2
Sundargarh District									
6. Sundargarh ..	3	9	4	..	41	68	155	..	10
7. Panposh ..	3	4	3	..	21	30	40	..	3
8. Bonai ..	1	4	2	..	16	24	50	..	2
Keonjhar District									
9. Keonjhar ..	2	4	1	..	25	30	134	..	10
10. Champua ..	3	3	1	..	19	30	22	1	9
Sambalpur District									
11. Kuchinda ..	2	3	1	..	12	38	24	..	3
Koraput District									
12. Koraput ..	3	9	3	..	33	60	103	1	24
13. Rayagada ..	1	4	..	..	20	24	33	..	7
14. Jeypore ..	1	5	4	..	28	24	55	..	12
15. Malkangiri ..	..	7	1	..	23	42	..	..	23
16. Nowrangpur ..	2	10	1	..	41	72	25	1	28

1	2	3	4	5	6	7	8	9	10
Phulbani District									
17. G. Udayagiri ..	..	4	3	..	13	24	..	..	2
18. Phulbani ..	1	3	4	..	12	18	103	..	4
Kalahandi District									
19. Th. Rampur ..	2	2	..	..	6	28	..	..	6
T. D. A.									
1. Parlakhemundi	1	5	3	..	33	36	..	..	9
2. Balliguda ..	4	5	3	..	13	42	30	..	9
3. Gunpur ..	2	7	3	..	24	6	10	..	18
4. Bhiyanpirh & Juangpirh	1	3	5	..	15	24	..	..	9

ANNEXURE VIII

Primitive Groups

Sl. No.	Name of the Agency and name of the block	District	No. of vill-ages	Population			Pro-posed outlay (Rs. in lakhs)	Funds allotted during 1978-79 (Rs. in lakhs)	Area in Sq. K.M.
				Tribe	Other	Total			
1	2	3	4	5	6	7	8	9	10
1	Bonda Development Agency, Khoirput.	Koraput	31	3,870	74	3,944	135.00	0.60	125
2	Thumba Development Agency, Patrapur.	Ganjam	59	2,621	545	3,166	100.35	1.60	28
3	Dongria-Kondh Development Agency, Bissam-Cuttack and Muni-guda Block.	Koraput	42	2,559	759	3,318	160.00	1.60	130
4	Kutia-Kondh Development Agency, Kotagarh & Tumudibandha Blocks.	Phulbani	279	16,701	8,668	25,469	150.00	1.60	700
5	Paudi-Bhuyan Development Agency, Pallahara.	Dhenkanal	14	2,218	82	2,300	65.00	1.60	50
			(Nagira G. P. only)						
6	Juang Development Agency, Hari-ohandanpur.	Keonjhar	47	11,808	..	11,808	152.00	1.60	130
7	Soura Development Agency, R. Udaya-giri and Mohana Blocks.	Ganjam	50	4,663	189	4,852	190.00	1.00	..
							862.35	9.60	

CHAPTER 9

Planning, Implementation, Monitoring and Evaluation

9.1. With a view to re-ordering Plan priorities and restructuring investments accordingly, the Fifth Five-Year Plan was terminated one year in advance and the new Five-Year Plan has commenced from the 1st April 1978. The Planning process as well as the machinery for implementing and monitoring the progress of the Plan would need to be improved considerably in view of the new priorities and the areas of investment proposed for the Five-Year Plan period. Not only that the Planning machinery at the State level would need better professional assistance but it has also to be integrated more closely with the administrative decision making process. Formulation of Plan at the district and block level would require full-time professional Planning machineries and would call for a great deal more of public participation through Panchayat Raj institutions and voluntary agencies.

9.2. There are some inadequacies in the existing machinery of the State for Project appraisal, Plan monitoring and Evaluation. In the context of the new strategy of Rolling Plan with Integrated Rural Development Programme and intensive block level Planning being the main planks of the Sixth Plan there will be a greater need for (i) Plan formulation on a more scientific basis starting from the blocks, (ii) Streamlining the information system and (iii) Re-structuring the monitoring and evaluation organisation. In view of the fact that the total Plan outlay proposed for the State under Public, Private and Institutional sectors is around Rs. 700 crores every year, it is necessary that the existing Planning machinery may be suitably re-organised and strengthened to Plan and monitor the proper use of funds for achieving the broad objectives of removal of poverty and unemployment, strengthening of Plan monitoring and evaluation has assumed importance in view of the fact that development programmes would be made area specific to a much greater extent than in the past and monitoring will not restrict itself to watching the progress against the time and resource schedule during the project implementation stage. It would also go into the progress regarding generation of employment and reduction in the present disparities of incomes and wealth by way of redistribution of income.

9.3. The Block level Planning or Micro-level Planning will bring in its fold a study of all the local resources, man-power, institutional finance, public participation, etc., for evolving a suitable programme of overall development besides opening of scope for a large-scale employment. In order to formulate various programmes, projects and schemes on the basis of detailed analysis of local potential and resources and proper re-investment appraisals, the data base and the Plan information system have to be suitably developed. As regards participation of voluntary agencies, professional institutions and also the public in the Plan formulation and monitoring at Block level, their co-operation should be utilised to the maximum extent possible. While formulating block Plans, there would be the broadest consultation at the Block and Panchayat levels with the people's representatives so as to ensure full participation of the people in Plan formulation.

9.4. Sectoral allocation of resources and the elaboration of sectorwise developmental programmes and projects will be inadequate for the attainment of the basic objectives of eradication of unemployment and reduction of poverty and inequality. Apart from some major investments as in basic industries, and large-scale irrigation, power, transport and other infrastructure net-works, the bulk of investment, on agriculture, minor irrigation, animal husbandry, fishery, forestry, marketing or processing cottage and small industries and local infrastructure and social services including water-supply, housing health, education, sanitation, local transport etc., would be made amenable to Planning at the local level, i. e., the block and the district levels. Since Planning of all these activities has a high work component and can absorb a high proportion of the unemployed, it should be undertaken at the local or area level where the employment needs and potential are more clearly known.

9.5. The district level Plan formulation requires the appraisal of the existing level of development the felt needs of the people and potentiality of different resources existing in the district. The formulation of Plans at the district level with adequate foresight and their integration with over-all State Plan is of most importance. By and large sectoral Plans have so far been thrust on district level Plan implementing authorities from above. Therefore, it is proposed to set up a well organised Planning machinery at the district level. There would be a District Planning Board for taking up Plan formulation at Block and District levels. The members of the District Planning Board will be drawn from the District Development Board, various departments of Government represented at district level, the special development agencies like SFDA/MFAL/DPAP, etc., working in the district from among the non-official experts available in the district. The District Collector would be the

Chairman of the District Planning Board. He will also head the district Planning Unit the composition of which will be on the following lines. The District Planning Unit would be under the overall control and guidance of the Collector. The unit cell would have two wings, (i) for collection and tabulation of relevant statistical information required for the Block Plan/district Plan framed and the other wing should develop and undertake alternative exercises in maximisation of Plan benefits through combination of different sectoral programmes. This wing should synthesise the demands of the block/district on the basis of potential, needs and resources. Since factual information and their scientific analysis are complementary functions, the District Statistical agency which would form the first wing of the District Planning Cell, would be headed by the District Statistical Officer and the other wing which would take up the analytical work will be headed by the District Planning Officer. The work of these two wings will be supervised and guided by the A. D. M. (Development) who would also be assisted by the District Development Officer, Complementary staff like Economic Investigators, Cartographer, Steno-Typist, U. D. C.-cum-Accountant would be provided to these sections. The Collector will also provide necessary additional ministerial assistance for speedy functioning of the District Planning Cell during the time of Plan formulation.

9-6. This District Planning Unit will formulate the Block Plans and the District Planning Board will approve them. At the formulation stage, the Block Plan will also be discussed at the Panchayat and the Panchayat Samiti level with the representatives of the people and their suggestions would be given due weightage in the formulation of the Plan. After the approval of the District Planning Board the Block Plan would be forwarded to the State Planning Department with the necessary modifications in the light of the district level priorities taking into account the resources available, their utilisation and generation of employment etc. The Block Plan and the District Plan will be treated as final after it is approved by the State Planning Board.

9-7. The district planning unit would also be preparing the ground work for district plans simultaneously. Since formulation and finalisation of plan for all the constituent blocks of a district would take considerable time the district planning unit would be engaged also in preparing perspective plans for the district and getting them approved by the District Planning Board.

9-8. The State Plan while scrutinising and filling up the gaps required in the block and district plans will take into consideration the overall requirement of the State and maintain the inter-sectoral balance and the regional investments, the State Plan should suggest different models for providing optimum employment opportunities not only to the existing unemployed but also to the additional labour force which is created every year. The State Planning Board will be the Apex body at the State level under the Chairmanship of the Chief Minister and will have a full time Deputy Chairman. Standing steering groups and working groups are proposed to be set up under the Chairmanship of technical experts from among the members of the State Planning Board, preferably from outside the Government. The members of the standing steering groups will be taken both from Government and outside the Government. Below such Steering Groups, there will be Working Groups, members of which should be drawn exclusively from the Government. Working Groups should be entrusted with the task of formulation of Sectoral Plans and the steering Groups should be entrusted with the task of approving the Sectoral Plan formulated. The Steering Groups would also take up periodical reviews for monitoring and evaluating the plan implementation. To this extent they will work as standing sub-committees of the State Planning Board.

9-9. Planning & Co-ordination Department has to be suitably strengthened to play a significant role in plan formulation, monitoring and evaluation. It is proposed to set up seven different cells in the Planning Department to attend to the functions of the Planning Board. These cells are:—

- (i) Perspective Planning
- (ii) Plan formulation and Co-ordination
- (iii) Project appraisal
- (iv) Plan information and monitoring
- (v) Regional and District Plan
- (vi) Plan Evaluation
- (vii) Manpower and Employment Cell

Each Cell except Manpower and Employment should be under charge of a Joint Director. The Manpower and Employment Cell will be headed by a Deputy Director. These seven cells will be kept under three adequately qualified and experienced Directors for higher supervision. These Directors will work in the Planning and Co-ordination Department. The team consisting of Directors, Joint Directors, Deputy Directors and Sub-ordinate Officers will be of multi-disciplinary character and will be drawn from all available sources so as to get the best brains. The sub-ordinate posts required have been assessed and the financial requirements calculated.

FUNCTIONS OF DIFFERENT CELLS

Perspective Planning

9-10. One of the functions of the proposed re-organised set up of Planning Machinery will be the work relating to preparation of long-term perspective plans. The preparation of a long-term perspective plan involves several exercises leading to formulation of norms, yardsticks and models. For such types of exercises, a number of alternative models have to be set with a view to choosing one which is expected to maximise the benefits within a set time-horizon.

- (a) To prepare and up-date resources inventories;
- (b) To prepare detailed long-term perspective plans for the State and also for specific sectors of the economy;
- (c) To work out the overall and sectoral strategy of development and rates of growth.

Plan Formulation and Co-ordination

9-11. This will be the Central Cell in the Planning Machinery which will work out the details after receiving the proposals from the District Planning Board on one hand and the Heads of Departments on the other. The Plan Formulation Division will not only fill up the gaps required for the District Plans in consultation with the respective Departmental Heads, but also consider the over all State requirements and organise the intersectoral balances and the regional investments.

Project Appraisal

9-12. Exercises required for taking decisions about the most effective investments compared to other alternatives should be undertaken in a Project Appraisal Cell. The Cell will work out various norms like investment out-put, employment out-put and other norms required for cost benefit analysis of important programmes. Such exercises are necessary in the context of selecting most beneficial projects from a shelf of projects. This cell will also conduct techno-economic evaluation and appraisal of the large investment projects in the core sector. It will also prepare guide lines for other Departments, public Sector undertakings, etc., which will help them to take decisions on the formulation of the investment projects.

Plan Information and Monitoring

9-13. In the context of the Rolling Plan, the role of monitoring or concurrent evaluation has been emphasised at all levels. It is essential to collect information from time to time on the progress, both physical and financial, made in the implementation of the Plan projects. In the existing administrative set up, there is arrangement for getting monthly, quarterly, half-yearly and annual progress reports. The agency entrusted with the execution of the projects/schemes is often found to be too busy in his programme to devote adequate attention to the progress reporting. Intelligent appraisal information on progress of schemes however could go a long way in removing factors impeding progress and expediting completion according to schedules. A specialised agency has to be created that will be responsible for collection of information which will help to monitor the project. It is now felt to devote greater attention to monitoring projects in the core sector and a few selected projects in non-core sector.

9-14. It is also proposed to set up small monitoring units in selected Departments implementing entrusted with high plan investments and executing core sector projects. To begin with, monitoring units have been proposed to be set up in the Departments of Agriculture and Co-operation, Irrigation, Power, Tribal and Rural Welfare and Rural Development.

Regional and District Plan

9-15. This will function as the Central Cell which will guide the District Planning units in appraisal of levels of developments.

Plan Evaluation

9-16. There is a small Evaluation Cell under the Planning & Co-ordination Department under the charge of an Evaluation Specialist. A number of Evaluation studies have also been taken up from time to time and the reports published. But the concepts of Rolling Plan and the Area Planning which have now been introduced, poses challenging tasks on this small unit. Since the scope of this unit has expanded, it has to be adequately strengthened. With the new priorities of Planning, the evaluation and monitoring have acquired critical importance especially after the adoption of Rolling Plan concept where urgent and authoritative knowledge of the performance of the projects should come in greater detail and with greater speed. In future the Evaluation studies should give information not only of what the projects had achieved in terms of growth but also how the projects had achieved their employment targets and improved the income distribution for reduction of poverty. In view of an increasing number of evaluation studies to be undertaken, the Evaluation Cell should be properly manned, and a small part of the State Evaluation capacity should be reserved for joint evaluation by the Central Programme evaluation and the State Evaluation Organisation.

Manpower and Employment

9-17. In order to enable the Planning Department to discharge their Secretarial functions for the apex Planning body (Planning Board) their strength should be suitably augmented with experts in various fields and disciplines. In this the Planning Commission have also recommended that a cell for study of manpower and employment may be created in the Planning Department. The object of this cell will be to make projections of population and of labour force and assessment of manpower available at any particular time having different qualities, training, education and skill. The cell will also collect information on addition to the manpower from time to time and study the employment opportunities available, employment potential created in public and private sectors, number of unemployed with class and category of persons and assist in employment Planning. This study on manpower and Employment will remain a continuous process since the primary objectives of the Plan have been to create full employment opportunities for all types of manpower within the ten years period. The present Manpower Cell needs considerable strengthening to perform the role envisaged for it.

9-18. The Planning Machinery at the State level and district level will be strengthened on the above lines. District and Block Plans will be formulated simultaneously in a phased manner. State Government have already taken steps in the direction of preparing model plans with the help of Expert Organisations like Operation Research Group, Boroda and Agricultural Finance Corporation, Bombay. These model plans will be utilised for preparing detailed resource based block plan for all the Blocks in the State. Starting with the Blocks selected under the Integrated Rural Development programme. For preparation of detailed Block plan, District Plans and taking into account the additional administrative expenses on staff, contingencies, etc. at the district level as well as in the State Headquarters, it is estimated that a sum of Rs.300 lakhs would be necessary for the period 1978--83. As per the existing financing/pattern it is expected that 2/3rd of the expenditure will be borne by the Government of India and hence an outlay of Rs.100 lakhs has been suggested, in the State Plan for the Five-Year Plan 1978--83.

STRENGTHENING OF EVALUATION ORGANISATION

STATEMENT—EO-1

(Rs. in lakhs)

Item	Fifth Plan		1977-78		Outlay & Expenditure Outlay for next Five-Year Plan. 1978—83	
	Outlay	Expr.	Approved Outlay	Expr.	Existing Posts/Items	Addl. Posts/Items
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Staff	14.00	3.51	3.00	1.74	100.00	
2. Contingency						
3. Equipment						

EVALUATION ORGANISATION PROPOSALS FOR TECHNICAL STAFF

STATEMENT—EO-2

Name of the agency/Board/Department, etc under which functioning	State Headquarters					Field Organisation.				
	Designation	Posts sanctioned	In position	Nos. trained	Addl. posts now proposed	Designation	Posts sanctioned	In position	Nos. trained	Addl. posts now proposed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Class I									
Planning & Co-ordination Department Bhubaneswar.	Evaluation Specialist 1,150—1,750	One	One	One	Addl. staff have been proposed under the scheme "Strengthening of State Planning Machinery.	District and Field Units have been proposed under the scheme "strengthening of State Planning machinery"				
	Class II Research Officer 525—1,150	Five	Five	Five						
	Class III									
	Field Controller (500—825)	Four	Four							
	Senior Economic Investigator (400—620)	Ten	Ten							
	Junior Economic Investigator (320—450)	Eleven	Eleven							
	Artist (370—570)	One	One							

EVALUATION STUDIES CONDUCTED PROPOSED

Name of the studies taken up during Fifth Five-Year Plan 1974-75 to 1978-79	No. of studies completed	No. of reports published	No. of studies proposed to be taken up to be completed during next Five-Year Plan 1978-83	Subjects proposed to be covered
(1)	(2)	(3)	(4)	(5)
1. Evaluation of Lift Irrigation Projects in Orissa	Completed	Published		1. Evaluation of Intensive Tribal Development Projects.
2. Evaluation of Industrial Estates of Orissa.	Completed	Do.	At present it has been tentatively decided to take up 11 studies as detailed in Col. No. 5. Besides some more studies are likely to be taken up during the period according to the requirement of the different Departments.	2. Evaluation of Tribal Development Agencies
3. Evaluation of the scheme for providing loans under State-Aid to Industries Act.	Do.	Do.		3. Evaluation of Minor Irrigation Projects.
4. Evaluation of Family Planning Programme in Orissa.	Do.	Do.		4. Evaluation of Rural Drinking Water-Supply Schemes.
5. Evaluation of Tribal and Harijan Research-cum-Training Institute, Bhubaneswar.	Do.	Do.		5. Evaluation of Informal Education. Schemes of Education and Youth Services Department.
6. Evaluation of Dug-well Programme in Orissa.	Do.	Not published.		6. Evaluation of Afforestation Scheme of A. & C. Department.
7. Evaluation of Rural Electrification Programme in Orissa.	Do.	Ditto		7. Evaluation of Soil Conservation programme in Orissa.
8. Evaluation of Village Housing Projects Scheme.	Do.	Ditto		8. Evaluation of Intensive Applied Nutrition Programme of Nimapara Block.
9. Evaluation of Applied Nutrition Programme.	Do.	Ditto		9. Evaluation of Demonstration Scheme of A. & C. Department.
10. Evaluation of Testing Laboratories.	Do.	Ditto		10. Evaluation of Co-operative rice Mill and Sugar Factories.
11. Evaluation of Orissa Construction Corporation.	Draft report under finalisation.	Ditto		11. Evaluation of Food for Works Programme.
12. Evaluation of problem of Rural Employment in draught affected areas.	Ditto	Ditto		..
13. Evaluation of Tourism system in Orissa.	Ditto	Ditto		..
14. Evaluation of Farmer's Training Institute.	Ditto	Ditto		..
15. Evaluation of Industrial Training Institute.	Field work completed.	Ditto		..
16. Evaluation of Salandi Irrigation Project.	Ditto	Ditto		..
17. Evaluation of the way in which the powers delegated to Collectors in development matters are being utilised.	Field work in progress.	Ditto		..

CHAPTER 10

INTEGRATED RURAL DEVELOPMENT

10.1. The integrated rural development envisaged in this plan will be specially focussed on the target group comprising small and marginal farmers, agricultural labourers and rural artisans, whose economic improvement is an important concern of rural development. The maximum emphasis under the programme is on individual beneficiary schemes. This approach will help a substantial part of the Scheduled Caste and Scheduled Tribe families who are amongst the most disadvantaged sections of the population. The approaches in the on going rural development programmes, viz., S.F.D.A., D.P.A.P. and C.A.D. which are broadly area development programmes having the uplift of small and marginal farmers and the landless labourers as their main thrust, are proposed to be utilised according to their relevance in particular areas to achieve the twin objectives of generating employment opportunities and increasing production. It is proposed to bring this about by developing the primary sector programmes for agriculture, animal husbandry, fisheries and forestry development. In the secondary sector, programmes for village and cottage industries as well as small-scale industries, skill formation and supporting services will be substantially enlarged and strengthened. Tertiary sector will be developed by creating facilities for organised marketing, processing and allied activities so as to absorb increasing number of local people. The programmes of animal husbandry will be specially oriented to include a good part of the rural labour population with special preference to Scheduled Caste families who are generally a major component of the landless. The social forestry programmes will be suitably oriented to give a fodder base to such labour families for animal husbandry development. In the fisheries programme, special steps will be taken to see that the backward sections of the population like fisherman class are given suitable rights of exploitation.

10.2. It has been decided by the Government of India to intensify rural development work in 2,000 Blocks from out of about 2,950 in the country now covered by one or more of the three special programmes, namely S. F. D. A., D. P. A. P., C. A. D., during the year 1978-79. From out of these 2,000 Blocks, 114 Blocks have been allocated in favour of this State. On the basis of concentration of Scheduled Caste population these 114 Blocks have been selected for intensive development under the programme during the year 1978-79. The outlay for each of these Blocks will be Rs. 5 lakhs in addition to the allocation from normal State Plan Sector which they will be getting under the ongoing programmes. In case of Blocks selected from the areas covered by S. F. D. A., C. A. D., the additional amount of Rs. 5 lakhs would be provided entirely by the Central Government. In case of Blocks selected from the D. P. A. P. areas, additional allocation by the Government of India would be Rs. 4 lakhs to be supplemented by Rs. 1 lakh per Block by the State Government.

10.3. Besides 2,000 Blocks referred to above, another 300 Blocks in the country would be taken up for Block level planning and development every year for a period of 5 years starting from the year 1978-79. In this process 1,500 Blocks would be covered by the end of the Sixth Plan period. For the year 1978-79 from out of 300 Blocks, 13 have been allocated in favour of this State. A sum of Rs. 2 lakhs per Block would be provided for these Blocks for the year 1978-79 which will be taken from out side areas covered by these three special programmes. Where suitable programmes are identified and can be implemented, additional funds would be available. 35 Blocks of this State are not covered by any of the special programmes. The 13 Blocks now allotted by the Government of India for Block level planning will be selected from out of those 35 Blocks. The remaining 22 Blocks may get themselves selected in next 2 years (1979-80 and 1980-81) @ 12 and 10 respectively for intensive Block level planning and development. The provision for the year 1978-79 is sought to be made for intensive development of 127 Blocks.

10.4. The Government of India have sent a set of guidelines regarding the scheme that can be taken up in the selected Blocks under the I. R. D. Programme. They have indicated that they are only illustrative and further schemes can be taken up with their prior concurrence. The following are some of the important rural development works proposed to be taken up in the selected Blocks under the I. R. D. Programme. Individual and community irrigation works including drainage, agricultural demonstration, land development, soil conservation, land reclamation and improvement, distribution of milch and other animals, cross breeding of local non-descript cows by use of frozen semen technology in collaboration with the B. A. I. F., horticulture, sericulture, farm forestry, distribution of inputs, agriculture implement, storage bins and development of other infrastructural facilities.

10.5. For each of the 114 Blocks selected for intensive development from the current year, the provision of Rs. 5 lakhs has been made. This allocation for the year 1979-80 to 1982-83 has been increased from Rs. 5.5 lakhs to Rs. 7 lakhs per Block, i. e., an annual increase of Rs. 0.5 lakh. Similarly for Block level planning and development in the first and second years allocation is Rs. 2 lakhs and Rs. 3 lakhs respectively per Block. For subsequent years the allocation may start from Rs. 5 lakhs with an annual increase of Rs. 0.5 lakh.

10.6. A lump provision of Rs. 30 lakhs has been suggested for project administration in all these projects for the first year. As per the guidelines of the Government of India in the districts which are covered by S. F. D. A., D. P. A. P. and C. A. D. the same Agency will be in charge of the new schemes for intensive development of Blocks. In case of the new Blocks falling out-side the area of operation of these special programmes, a suitable Agency may be set up at the district level for implementing the programme. As all these 35 Blocks not covered by any special programme are situated in the districts already covered by the special programmes like S. F. D. A., C. A. D. and D. P. A. P., the question of establishment of a separate Agency may not arise. As per the present indications the S.F. D. A., D. P. A. P. agencies will not continue after the 31st March, 1979. It is, therefore, necessary to continue some of the Agencies for implementation of the I. R. D. Programme in the selected Blocks from the respective project areas. Hence in S. F. D. As., Ganjam, Dhenkanal and Balangir and D. P. A. Ps., Kalahandi and Phulbani, the existing Agencies may be allowed to implement the I. R. D. Programme in the selected Blocks after March, 1979. It appears that in C. A. D. areas the ongoing programme may continue in addition to I. R. D. Programme. Therefore the C. A. D. As., Mahanadi Stage I, Mahanadi, Stage II, Hirakud and Salandi will also implement the I. R. D. Programme in the selected Blocks within their respective jurisdictions. It may not be possible on the part of the C. A. D. As. to take up the I. R. D. Programmes in Blocks selected from out of the S. F. D. A. areas in the districts of Cuttack, Puri and Sambalpur due to large number of Blocks situated in the interior areas. It is, therefore, suggested that the S. F. D. A., Puri, Cuttack and Sambalpur may be allowed to continue to implement the I. R. D. Programme in the selected Blocks within their jurisdictions.

- (i) So far as Keonjhar M. F. A. L. is concerned, the number of Blocks of I. R. D. Programme is only two. The two Blocks only will not justify continuance of the separate Agency. Hence, it is suggested that the C. A. D. A., Salandi may take up implementation of the programme in the selected Blocks of Keonjhar district the area of operation of which is close to the area under Salandi C. A. D.

- (ii) The Sixth Plan projection of the I. R. D. is indicated in Annexure 'A'

I. R. D. (Pilot Scheme), Puri district

10.7. Government of India had initiated Integrated Rural Development Programme in 20 selected districts all over the country in the year 1977-78. Puri was one of these selected districts. The objectives of this programme were generation of employment opportunities through optimum use of local resources, setting up of agrobased, forest-based and village and small scale industries in rural areas, intensification of agriculture, animal husbandry, dairy, poultry and piggery; and taking up meaningful programmes for small and marginal farmers, agricultural labourers, share croppers, tenants and rural artisans with a view to enhancing the purchasing power of the poorest of the poor families in the rural areas. Within the broad frame-work of these objectives 10 different schemes were finalised by the Government of India for implementation in Puri district in the sanctioning Committee Meeting held on the 23rd January, 1978.

10.8. (i) In March 1978, Government of India had sanctioned a sum of Rs. 71.06 lakhs for implementation of these special schemes for Puri district. The schemes are being implemented through S. F. D. A., Puri and actual execution is done through different field level Government agencies/public Corporations/Co-operative Societies. Government of India have allowed the State Government to utilise the entire sanctioned amount by the end of December 1978. It is expected that the entire amount would be spent within the stipulated period. Continuance and maintenance of the schemes would be switched over to the normal I. R. D. Programme in the Blocks selected for the purpose.

Cross Breeding Scheme of B. A. I. F.

10.9. For providing gainful employment to the small and marginal farmers and agricultural labourers through a programme of milk production, the B.A. I. F. and Mafatlal Group of Companies have formulated a scheme which has been commended by the Central Government for implementation by the State Government. The Government of India have also indicated that the scheme will form a part of Integrated Rural Development. The benefits and advantages envisaged under the scheme food for works programme, supplementary nutrition scheme of CARE, social forestry scheme of Ministry of Agriculture and Irrigation and cross bred heifer production programme of the B.A.I.F. are to be availed of for successful operation of the programme. Each identified family from among the category of small and marginal farmers and agricultural labourers will be provided for a period of 3 years one hectare of land in Government waste land, marginal, sub-marginal land or degraded forest areas out of which 0.60 hectare (1.50 Ac.) will be utilised for development of plantation of suitable fuel, small timber and fruit species and 0.40 hectare (1 Acre) for Kubabul or other suitable fodder tree plantation for fodder production. Besides plantation over one hectare of land, the family will raise seedlings of fodder and forest species, plant Kubabul plants in their backyards and near their homes under the technical guidance of the implementing authorities. The family will be entitled to usufructs of each 0.40 hectare (one acre) of Kubabul and other fodder tree plantation for his needs in the term of labour and protection afforded to area. The ownership of the land, however, will not be transferred. It will remain with the Forest Department for dedicating the area to the fodder tree production in perpetuity. The family will have no right also on the remaining 0.60 hectare of land under forest or its produce.

(ii) The family of small and marginal farmers and Agricultural labourers will be provided for 10 Kgs. of food grains (wheat) for food for works programmes and 2 Kgs. of nutrient food of CARE per week assured for a period of 3 years. The local cows of the family will be registered and cross bred so that by the time the food for works programme is completed, the farmers will have at least one cross bred cow in milk and nutrient fodder from one acre of land. This is expected to provide the family with suitable income. This scheme is going to be implemented in four centres coming under D. P. A. P. areas of the districts of Boudh-Khondamals and Kalahandi. Besides, the scheme would be implemented at one more centre at Panposh in the district of Sundargarh.

(iii) This scheme provides for grants of subsidy towards the cost of successful conception for each of the cows at Rs. 150 and health cover of cross bred heifers at Rs. 25 each. A statement showing the financial outlay during the sixth Plan period of this scheme is appended as Annexure 'B'. During the year 1978-79 the scheme is being funded by D. P. A. P. and hence provision for the rest four years has been proposed under I. R. D. Programme.

ANNEXURE A

SIXTH PLAN PROJECTION—I. R. D. PROGRAMME

(Rs. in lakhs)

Year	Details of Programme	No. of Blocks	No. of beneficiaries in 000' persons	Employment potential in 000' man days	Credit	Subsidy	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1978-79	Intensive Development	114	268	9,701	1,049	570	1,619
	Block Level Planning	13	..	..	..	26	26
	Total	127	268	9,701	1,049	596	1,645
1979-80	Intensive Development	127	295	10,671	1,154	666	1,820
	Block Level Planning	12	..	..	..	24	24
	Project Administration	..	..	..	..	25	25
	Total	139	295	10,671	1,154	715	1,869
1980-81	Intensive Development	139	325	11,738	1,304	785	2,089
	Block Level Planning	10	..	..	..	20	20
	Project Administration	..	..	..	..	28	28
	Total	149	325	11,738	1,304	833	2,137
1981-82	Intensive Development	149	357	12,911	1,460	903	2,363
	Project Administration	..	..	..	..	32	32
	Total	149	357	12,911	1,460	935	2,395
1982-83	Intensive Development	149	392	14,202	1,708	992	2,700
	Project Administration	..	..	..	..	35	35
	Total	149	392	14,202	1,708	1,027	2,735
	Grand Total	149	1,637	59,223	6,675	4,106	10,781

ANNEXURE B

**STATEMENT OF COST SHOWING THE SUBSIDY COMPONENT TO BE MET FOR
INTEGRATED RURAL DEVELOPMENT THROUGH CROSS BREEDING OF
COWS WITH FROZEN SEMEN LINKED WITH AFFORESTATION AND
SOCIAL FORESTRY**

(Rs in lakhs)

	1978-79 1st	1979-80 2nd	1980-81 3rd	1981-82 4th	1982-83 5th	Total
1. No. of centres to be operated	10	5	..	..	15
2. No. of Beneficiaries to be covered under subsidy.		5,600	7,600	6,000	2,000	21,200
3. Amount to be subsidised for payment to B. A. I. F. at the rate of Rs. 150 per successful conception as breeding cover to indigeneous and F. I. cross bred.	..	8.40	11.40	10.20	7.20	37.20
4. Amount to be subsidised towards insurance cover for indigeneous cow & F. I. cross bred heifers.	..	0.80	1.60	2.78	3.84	9.02
5. Amount to subsidised towards health cover of FI cross bred heifers payable to B. A. I. F. at the rate of Rs. 25 per cross bred heifer.	..	0.20	0.90	1.85	2.60	5.55
6. Amount to be subsidised to O. A. I. C. towards service charges at the rate of Rs. 20 per cow.	..	1.12	1.52	1.36	0.96	4.96
	..	10.52	15.42	16.19	14.60	56.73

ANNEXURE IX

RURAL DEVELOPMENT

Achievement and selected physical target and programme

1. Total No. of Blocks covered under special programme		1977-78		1978-83	
		No. of Blocks	No. of beneficiaries	No. of Blocks	No. of Beneficiaries
(1)	(2)	(3)	(4)	(5)	(6)
<i>(i) SFDA</i>					
(a) Central	}	105	50,479	105	45,500 (Proposed beneficiaries.)
(b) State					
<i>(ii) DPAP</i>					
(a) Central	}	25	16,020	25	64,543 (Proposed beneficiaries)
(b) State					
<i>(iii) Command Area Development.</i>					
(a) Central
(b) State
2 Proposed coverage of beneficiaries during 1978-83.		Total	Scheduled Castes	Scheduled Tribes	
		41,99,980	8,04,409	..	
(i) Small Farmers	..	10,49,995		..	
(ii) Marginal Farmers	..	12,59,994		..	
(iii) Agricultural Labourers		18,27,993		..	
(iv) Artisans	..	41,998		..	

ANNEXURE X

AGRICULTURE AND RURAL DEVELOPMENT HEADWISE/SUB-HEADWISE
BREAK UP OF THE FINAL OUTLAY

(Rs. in lakhs)

Sl. No.	Head of Development/Programme	Fifth Plan approved outlay	Approved outlay 1978-79	Proposed outlay 1978-83		
				Total	Capital	Foreign Exchange
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I.	Agricultural Research & Education.	170.00	175.31	769.00	200.00	..
II.	Agricultural Extension and Administration.					
	1. Direction & Administration	154.49	419.65	1,725.00	400.00	..
	2. Agril. Extension	71.24	23.02	210.00	..	..
	3. Extension Education and Farmers' Training.					
	4. Adaptive Research included in item 1 above.					
	5. Agricultural Economy & Statistics.	..	..	..	..	..
	Total—II	..	225.73	442.67	1,935.00	400.00
III.	Agricultural Inputs					
	1. Seeds	..	282.02	158.14	794.00	100.00
	2. Fertiliser and Manures	..	74.41	16.13	450.00	100.00
	3. Plant Protection	..	97.49	11.50	250.00	100.00
	4. Implements & Machinery	..	78.92	31.48	200.00	30.00
	Total—III	..	532.84	217.25	1,694.00	330.00
IV.	Crop Oriented Programme					
	1. H. Y. V. P.	..	58.67	1.67	..	..
	2. Pulses	}	Included in III(1) above			
	3. Com. Crops					
	4. Horticulture Crops and Plantation.	..	231.04	90.00	2,000.00	200.00
	Total—IV	..	289.71	91.67	2,000.00	200.00

(Rs. in lakhs)

Sl. No.	Head of Development/ Programmes	Fifth Plan approved outlay	Approved outlay 1978-79	Proposed outlay 1978-83		
				Total	Capital	Foreign Exchange
(1)	(2)	(3)	(4)	(5)	(6)	(7)
V. (A) Land Reforms—						
(a)	Consolidation of Holdings		120.00	42,71.50	..	..
(b)	Implementation of Ceiling law	619.00	45.00	303.50	..	..
(c)	Survey and Settlement		1,35.00	18,25.00	..	..
Total—V		619.00	300.00	64,00.00	..	..
(B) Area Development programme						
(a)	Consolidation of Holdings		210.00	271.91	..	..
		100.00	40.00*	..	..	..
(b)	Cardex System		20.00	128.09	..	..
Total—V (B)		100.00	230.00	400.00	..	..
			40.00*	..	..	..
* Central grants						
VI. Minor Irrigation						
1	Survey and Investigation of surface water schemes.	165.00	62.00	500.00	500.00	..
2	Surface flow schemes	2,145.00	688.00	8,500.00	8,500.00	..
Total—VI		2,310.00	750.00	9,000.00	9,000.00	..
3	Food for Works Programme	2.30	10.35	..	..	..
		(1977-78)	..	..	..	..
VII. Soil and Water Conservation						
1	Direction and Administration	52.72	34.00	339.00	139.00	..
2	Soil Survey and Testing	49.16	8.00	36.60	..	..
3	Research Education and Training	5.13	3.00	20.00	..	..
4	Soil Conservation Scheme	239.99	70.00	1,533.40	25.00	..
Total—VII		340.00	115.00	19,29.00	164.00	..

(Rs. In lakhs)

Sl. No.	Head of Development/ Programmes	Fifth Plan approved outlay	Approved outlay 1978-79	Proposed outlay, 1978-83		
				Total	Capital	Foreign Exchange
(1)	(2)	(3)	(4)	(5)	(6)	(7)
VIII. Animal Husbandry						
1	Direction, Administration and extension.	4.66	1.00	209.27	41.00	..
2	Vety. Services, & Animal Health ..	79.46	36.92	892.25	456.50	..
3	Research/Assistance to Agriculture University.	6.70	1.48	1.48	..	..
4	Investigation and Statistics ..	2.78	4.08	43.04	..	..
5	Cattle Development ..	202.82	59.97	258.80	11.00	..
6	Poultry Development ..	23.93	8.44	122.62	3.00	..
7	Sheep Wool Development ..	11.20	2.27	9.61	..	..
8	Piggery Development ..	..	0.56	3.00	..	..
9	Goat Development ..	..	..	7.88	..	..
10	Other Live-stock Development ..	48.69	18.98	125.98	..	..
11	Feed and Fodder Development ..	17.28	5.93	64.66	5.00	..
12	Education and Training ..	15.44	9.64	315.04	5.00	..
Total—VIII ..		412.96	149.27	2,053.63	521.50	..
IX. Dairy Development						
1	Direction and Administration ..	..	..	..	..	..
2	Dairy Development ..	16.04	10.73	146.37	2.50	..
Total—IX ..		16.04	10.73	146.37	2.50	..
Total—VIII & IX ..		429.00	160.00	2,200.00	524.00	..
X. Fisheries						
1	Direction and Administration ..	4.00	1.05	71.00	55.00	..
2	Inland Fisheries ..	7.50	5.05	257.55	244.00	..
3	Research/Education and Training	27.80	5.70	28.88	8.00	..
4	Marine Fisheries (Off-shore Fisheries)	11.20	2.00	6.00	6.00	..
5	Marketing and Storages ..	23.20	..	..	..	..
6	Others ..	14.33	33.35	422.45	365.20	..
Total—X ..		88.03	47.15	785.88	678.20	..

(Rs. In lakhs)

Sl. No.	Head of Development/ Programmes	Fifth Plan approved outlay	Approved outlay 1978-79	Proposed outlay 1978-83		
				Total	Capital	Foreign Exchange
(1)	(2)	(3)	(4)	(5)	(6)	(7)
XI. Forestry						
1	Direction and Administration ..	34.31	6.97	350.00	..	..
2	Research, Education and Training	23.38	6.54	140.00	..	5.00
3	Forest conservation and Development.	45.78	13.50	205.00	..	..
4	Forest Research Survey ..	..	..	50.00	..	..
5	Plantation Schemes—					
	(a) Departmental ..	265.68	72.19	985.00	400.00	..
	(b) Forest Corporation ..	..	..	..	..	..
6	Forest Development Corporation (Equity participation).	..	..	20.00	20.00	..
7	Forest Communication and Buildings.	41.17	10.80	600.00	600.00	..
8	Preservation of Wild Life ..	34.68	10.00	100.00	..	..
9	Others ..	..	..	50.00	..	..
	Total—XI ..	445.00	120.00	2,500.00	1,020.00	5.00
10	Grain for works programme ..	..	11.50	..	..	..
11	I. T. D. P. ..	..	23.00	..	..	..
Soil Conservation						
1	Aff. for Soil Conservation in coastal Sand dune	9.00	5.00	200.00	..	..

(Rs. In lakhs)

Sl. No.	Head of Development/ Programmes	Fifth Plan approved outlay	Approved outlay 1978-79	Proposed outlay 1978-83		
				Total	Capital	Foreign Exchange
(1)	(2)	(3)	(4)	(5)	(6)	(7)
XII. Community Development & Panchayats						
	(a) Community Development	247.00	55.00	600.00	..	..
	(b) Panchayats	..	45.00	5.00	400.00	..
	Total- XII	..	292.00	60.00	1,000.00	..
XIII. Co-operation						
1	Direction and Administration	..	87.55	35.00	400.00	250.00
2	Credit Co-operatives	..	812.52	335.51	3,000.00	2,450.00
3	Farming Co-operatives	..	5.02	..	..	..
4	Dairy Co-operatives	..	2.33	..	..	..
5	Warehousing and Marketing	..	71.40	45.22	700.00	609.00
6	Processing Co-operatives	..	57.24	8.00	110.00	110.00
7	Co-operative Sugar Mills	..	118.00	..	540.00	540.00
8	Education/Research and Training	..	113.12	33.27	200.00	79.35
9	Other Co-operatives	..	2.50	2.00	100.00	100.00
	Total -XIII	..	1,269.68	459.00	5,050.00	4,138.35
XIV. Rural Development						
	A. S. F. D. A.	..	800.00	350.00	..	..
	B. D. P. A. P.	..	500.00	81.00	100.00	..
	C. C. A. D.	..	385.00	150.00	2,056.75	..

ANNEXURE XI

Agriculture and Rural Development—Employment generation

Sl. No.	Head of Development/ Programme	Likely employment generation in man year					Total
		Scientists	Technical	Admini- strative	Skilled	Un- skilled	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. Agriculture							
1	Direction and Administra- tion.	..	2,083	562	686	428	3,759
2	Multiplication and distribution of seeds.	..	311	183	..	183	677
3	Agricultural farms ..	..	43	29	25	373	470
4	Mannures and fertilisers ..	..	184	25	..	1,065	1,274
5	Plant Protection ..	..	168	20	379	45	612
6	Commercial crops ..	..	515	98	196	661	1,470
7	Extension and Farmers training.	..	38	8	24	901	971
8	Agricultural Engineering ..	..	143	42	96	143	424
Total ..		..	3,485	967	1,406	3,799	9,657
II. Land Reforms							
	(a) Consolidation of holdings.	..	10,000	..	20,000	40,000	70,000
	(b) Implementation of Ceiling law.	..	..	182	246	644	1,072
	(c) Survey and Settle- ment.	..	13,410	8,582	2,896	1,870	26,758
III. Minor Irrigation							
5	Survey and Investigation of surface water schemes.	..	3,944	986	..	8,219	13,149
6	Surface flow schemes ..	..	2,042	1,021	30,630	68,430	1,02,123

Sl. No.	Head of Development/ Programme	Likely employment generation in man year					Total
		Scientists	Technical	Admini- strative	Skilled	Un- skilled	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IV. Soil and Water Conserva- tion.							
1	Direction and Admini- stration.	..	300	75	..	50	..
2	Soil Survey and Testing . .	..	70	50	..	150	..
3	Research, Education and Training.	..	15	5	..	15	..
4	Soil Conserva tion Schemes.	..	1,000	200	..	57,637	..
Total		..	1,385	330	..	57,852	..
V. Animal Husbandry							
1	Direction Administration and extension.	..	87	321	..	128	536
2	Veterinary Service and Animal Health.	..	1,489	74	..	1,030	2,593
3	Research / Assistance to Agriculture University.	..	..	..	..	..	..
4	Investigation and Statis- tics.	..	53	54	..	8	115
5	Cattle Development	..	26	10	..	49	85
6	Poultry Development	..	10	8	..	20	38
7	Sheep and Wool Develop- ment.	..	5	..	..	2	7
8	Piggery Development	..	..	..	..	2	2
9	Goat Development	..	..	..	..	..	..
10	Other Livestock Deve- lopment.	..	110	33	..	47	190
11	Fodder and Feed Development.	..	8	12	..	22	42
12	Training and Education	..	7	12	..	24	43
Total		..	1,795	524	..	1,332	3,651

Sl. No.	Head of Development/ Programme	Likely Employment generation in man year					
		Scientists	Technical	Admini- stration	Skilled	Un- skilled	Total
(1)	(2)	(3)	(3)	(5)	(6)	(7)	(8)
VI. Fisheries							
1	Direction and Admini- stration.						
	(a) Administration at Headquarter.	..	9	35	..	9	53
	(b) Administration at Zonal and district level.	..	13	8	..	..	21
2	Research, Education and Training.						
	(a) Applied Research Organisation.	..	2	17	..	..	19
	(b) All India Co-ordi- nated research project on Utilisa- tion of trash fish.	..	2	..	..	..	2
	(c) Train i n g in Fisheries.	..	4	25	..	3	32
3	Others—						
	(a) Expan s i o n of Fisheries Co- operatives.	..	8	4	..	..	12
	(b) Fisheries propa- ganda and fair.	..	1	..	..	..	1
	(c) Infrastruc t u r e facilities to coastal fishing villages (Bal i t u t h a and Kasafala).	..	18	2	..	14	34
	(d) Survey of Brackish water fish farming in Orissa coast.	..	44	1	..	13	58
	(e) Infrastructure faci- lities to coastal fishing villages Purunab a n d h a, K a n k a d i a, Chudamani.	..	27	3	..	21	51
	(f) Survey and census of Fisheries resour- ces.	..	4	1	..	2	7
	Total	..	132	96	..	62	290

Sl. No.	Head of Development/ Programme	Likely Employment generation in man year					Total
		Scientists	Technical	Admini- stration	Skilled	Un- skilled	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VII. Forestry							
1	Forest Research ..	..	..	..	..	2,475	2,475
2	Education and Training of Personnel.	..	..	..	..	2,475	2,475
3	Survey Demarcation and settlement of Forest areas.	..	12	12	..	4,240	4,264
4	Forest Resources Survey	..	..	..	..	2,430	2,430
5	Working Plan ..	..	45	45	..	265	345
6	Cultural operation ..	..	..	..	..	2,475	2,475
7	Intensification of F. M.	..	470	130	..	..	600
8	Forest Communication	..	..	..	3,368	10,107	13,475
9	Buildings ..	..	..	..	1,688	5,062	6,750
10	Plantation of quick growing species.	..	..	..	..	9,900	9,900
11	Economic Plantation ..	..	..	..	..	19,000	19,800
12	Farm Forestry ..	..	..	..	..	2,475	2,475
13	Extension Forestry ..	..	..	..	..	550	550
14	Reforestation of D. F. ..	..	..	..	..	550	550
15	Anti erosion measure ..	..	..	..	..	3,850	3,850
16	Recreation Forestry ..	..	..	..	..	825	825
17	Affn. of special sites, coastal belt etc.	..	246 82 (1st year)	84 28 (1st year)	..	3,968	5,398
18	Development of Pasture	..	..	..	..	990	990
19	Wild Life management & Conservation.	..	120 70 (1st year)	60 42 (1st year)	..	..	832
20	Protection of Forests ..	..	64 24 (1st year)	20 8 (1st year)	..	..	376
21	Mechanised logging ..	..	28	4	..	220	348
22	Development of M. F. P.	..	..	..	..	1,980	1,980
23	Forest Publicity ..	..	3	1	..	..	20
24	Planning, Statistical & Evaluation. Cell	..	6	26	..	..	146
Total			793	383	5,056	79,693	85,595

Likely Employment generation in man-year

Sl. No.	Head of Development/ Programme	Likely Employment generation in man-year					Total
		Scientists	Technical	Admini- stration	Skilled	Un- skilled	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VIII. Co-operation							
1	Direction and Admini- stration.	..	.	72	..	1,092	1,164
IX. Rural Development							
Area Development programme.							
(a)	Consolidation of Hold- ings.	..	1,000	..	..	..	1,000
(b)	Cardex Scheme	..	..	..	..	1,750	1,750
(c)	Command Area Develop- ment.	..	300	200	500	1,200	2,200

ANNEXURE XII

Agricultural Education and Training during five years

Sl. No.	Item	Animal Husbandry	Dairy	Fisheries	Forestry
(1)	(2)	(3)	(4)	(5)	(6)
I. University Education					
<i>i</i> —State Agricultural University					
	(a) Graduates	300	..	..	..
	(b) Post-Graduates	50	..	..	..
	M. Sc.	5	..	..	..
	Ph. D.	..	..	..	..
	II. Professional Training	1,500	..	1,200 (Candidates)	3
	III. Vocational Training	950	..	..	..
	IV. Skill formation				
	V. Training Institutes	..	..	..	..
	(a) University Colleges	1	..	..	..
	(b) Post-Graduate Institute	1	..	..	..
	(c) Professional/Vocational Training Centres	..	..	9 (Centres)	..
	(i) Extension Training Centres	1	..	..	..
	(ii) Krishi Vigyan Kendra	..	..	1	..
	(iii) Young Farmers Training Centres	6	..	..	..
	(iv) Gyan Kendras	..	..	..	..
	(v) Farmers/Artisans Training Centres	..	..	..	..

PART II

SECTORAL PROGRAMMES

CHAPTER 11

AGRICULTURE

11.1. Nearly 70 per cent of the working force in Orissa are engaged in agriculture, which contributes the major share towards State's income. Broadly speaking, productivity in agriculture has remained near stagnant or at a low level in the past Plan period, even though, in particular crops like wheat, groundnut, and jute productivity has been higher. About 16 per cent of the net sown area is under irrigation and the average rainfall in most parts of the State is adequate for sustaining paddy. In the Fifth Plan period the programme for utilisation of ground water potential has found wide acceptance amongst the farmers. Yet development in the field of agriculture has not been achieved to the desired extent and foodgrains production particularly in rice is nearly stagnant. A joint team consisting of representatives of Government of India and International Rice Research Institute (GOI-IRRI Team) surveyed the rice growing areas of the three States, Bihar, West Bengal and Orissa in September, 1977. The joint team has observed that these areas have extremely low yield of rice during the monsoons. What is more, there has been essentially no increase in the yield rate in the past two decades, the performance differing sharply from the other regions of India.

11.2. The lowest increase in the yield rate is in the upland areas which have experienced no impact from the high yielding varieties. In the bulk of this area only one rice crop is grown, often under conditions of severe moisture stress. In fact, even though millet and other crops are more suitable than rice in the drier portions of this area, rice has remained the dominant crop.

11.3. Short duration of the monsoon rains coupled with the delay in planting due to lack of farm power partly accounts for low rice yields in Kharif. The result is that most of the rice crop is flowering in October when rains are uncertain and in other than low lying areas with stagnant water, the land is beginning to dry out. One solution to the problem would seem to be in providing photo-insensitive varieties of short duration since constraint of farm power cannot easily be overcome.

11.4. High yielding varieties like Bala, Cauvery, Annapurna, CRM-13 have shown better results on uplands. Under better agronomic management, these varieties have yielded more than 2.5 tonnes per hectare. There is great scope for increasing yields in these areas by introducing high yielding varieties coupled with better agronomic management.

11.5. On medium lands, extensive areas are grown at present with traditional long duration varieties (Photo-sensitive) which should be replaced by mid-early duration types like Jaya and this will facilitate land preparation and raising of subsequent crops like potato, pulses, oil-seeds, etc.

11.6. On low lying waterlogged and ill-drained fields, late duration photo-sensitive varieties which are ready for harvest from mid-November to end December are grown. Jagannath, Patkaj, Mashuri, and CR 1014 are the improved types which are grown in limited pockets only. The general problems met with in such areas are—

- (i) Poor establishment of seedlings due to partially submerged conditions
- (ii) Premature lodging of the crop under even slight application of fertilisers
- (iii) Low photo-synthetic efficiency of the varieties due to reduced light intensity
- (iv) Accumulation of toxic substances due to ill-drained field conditions

11.7. The basic problem is inadequate stand establishment particularly in direct sown rice, either because of lower seed rate, poor germination and or due to wider spacing adopted. Proper land preparation, early sowing, transplanting, timely weeding, a moderate level of fertiliser use would be beneficial in improving the productivity of the existing varieties to a considerable extent.

11.8. While Research Programmes are being strengthened and modified to evolve better varieties to suit different situations and varieties resistant to common pests and diseases, it has been recognised by the experts that reasonable increase in productivity can be achieved by application of the technology which is now available. This was also recommended by the experts from World Bank and the Agricultural Intensification Programme has been taken up.

11.9. The following table would indicate the achievement in production and yield per ha. in foodgrains, oil-seeds, jute, mesta and sugarcane.

TABLE

T—Target of production in lakh tonnes
bales

A—Achievement of production in lakh tonnes
bales

Y—Yield rate in quintals per hectare
bales

Crops	1973-74			1974-75 (Drought)			1975-76			1976-77 (Drought)			1977-78		
	T	A	Y	T	A	Y	T	A	Y	T	A	Y	T	A	Y
Food grains	60	52.75	8.48	57	39.71	6.60	60	55.70	8.59	61	40.75	6.80	64	55.67	8.54
Oil-seeds (5 major)	3	2.46	8.10	2.5	2.45	7.00	2.85	2.60	6.90	3.10	2.06	6.30	3.30	2.84	6.73
Jute	5.60	4.01	7.00	4.07	3.33	7.10	4.28	2.90	7.70	4.00	4.04	8.70	4.80	4.20	8.60
Mesta	1.60	1.75	5.00	1.87	1.76	4.80	1.93	2.01	5.40	2.00	1.87	5.00	1.70	1.71	4.88
Sugarcane (Gur)	3	2.41	58.72	2.65	2.75	62.50	2.70	2.97	62.00	2.82	2.77	62.00	3.00	2.60	60.47

11.10. In the year 1975-76, which was a normal year, the foodgrain production rose to 55.77 lakh tonnes as against the previous normal year's production of 52.75 lakh tonnes in 1973-74. There was a shortfall in production in 1976-77 which was a drought year when loss in annual production in Kharif rice was of the order of 13 lakh tonnes. In 1977-78, foodgrain production has gone up to 55.67 lakh tonnes which is slightly less than the figure of 1975-76. The marginal loss in production was mainly due to large scale pest attack which followed major floods in 7 out of 13 Revenue districts of the State. In the last year of the Fifth Plan, State Government had taken up a sustained programme of increasing area and productivity in oil-seeds and pulses. As a result of this, production of all types of oil-seeds has gone up from 3.10 lakh tonnes in 1975-76 to 3.49 lakh tonnes in 1977-78. Inadequate marketing support has prevented extension of area under jute and mesta though the production has gone up marginally to 6.20 lakh bales in 1977-78 from 5.92 lakh bales in 1976-77. Area under HYV for paddy is increasing gradually. The cultivators are interested in recommended short duration varieties, in order to avoid moisture stress during dry spells at critical stages of plant growth. The area under HYV has gone up to 7.22 lakh hectares in 1977-78 from 5.57 lakh hectares in 1976-77. A programme of large coverage under HYV and propagation of other short duration varieties of paddy has led to more area of rain-fed land coming under double cropping and more intensive cropping in the irrigated lands.

11.11. The outlay on Agriculture in the four years of the Fifth Plan was of the order of Rs. 18.59 crores. The expenditure by the end of 1977-78 has been of the order of Rs. 13.61 crores.

11.12. With larger areas coming under new and more stable irrigation systems a faster pace of development in the field of agriculture is envisaged in the years of the Sixth Plan. The following table would indicate the projected additional irrigation facilities during the mid-term plan :—

Irrigation facilities	(000' hectares)	
	Kharif	Rabi
Major Irrigation	195.58	156.65
Medium Irrigation	104.19	36.59
Minor Irrigation (flow and lift)	200.00	100.00
Dug wells, filter points	332.12	154.91
Lift Irrigation (through O.I.C.)	139.80	83.88

11.13. Increase in agricultural production would require a strong and well co-ordinated extension system which would be supported by adequate field demonstrations and adaptive and applied research. The programme for shift to HYV paddy in irrigated and rain-fed condition and where possible a shift from paddy to other high yielding crops would continue. Adoption of good management practices, diversification of cropping, soil testing, green manuring, exploitation of groundwater potential are some of the main modes for increasing agricultural production. An organised programme of soil testing and correct application of the fertiliser needed for the soil and crop will also be taken up. Wider publicity would be given for adoption of improved agricultural implements. Arrangements will also be made for a proper tie-up of credit and marketing support particularly in respect of crops requiring higher investment.

11.14. The outlay of Rs. 8,100.00 lakh for agriculture including agricultural research and education has been indicated. The break-up of this under different heads of expenditure in agriculture is indicated below :

	(Rs. in lakhs)
1. Direction and Administration	1,702.00
2. Multiplication and distribution of seeds	1,190.00
3. Agricultural farms	170.00
4. Manures and Fertiliser	450.00
5. Plant Protection	250.00
6. Commercial Crops	794.00
7. D. P. A. P.	100.00
8. Extension and Farmer Training	210.00
9. Agricultural Engineering	200.00
10. Agricultural Education and Research	769.00
11. Others	2,65.00
12. Horticulture	2,000.00
Total	8,100.00

11.15. The physical programme under different heads of development indicated above are discussed below.

11.16. The revised target of gross cropped area by the end of the Fifth Plan was 77.34 lakh hectares ; and this was achieved in 1975-76. Because of adverse weather conditions the gross cropped area came down sharply to 72 lakh hectares in the year 1976-77. In 1977-78, this went up to 78 lakh hectares which is marginally more than the target fixed for last year of the Fifth Plan. In the current year, the gross cropped area is expected to go up to 91 lakh hectares, with the special programme of pulses and oilseeds which would be taken up with available moisture in rice-follows. It is expected that large areas would come under double-cropping in the current year and the coming years. By the end of the Sixth Plan, gross cropped area is expected to go up to 102 lakh hectares as against the cultivated area of 68 lakh hectares. The following table would indicate the cultivated area, the gross cropped area and the percentage of crop intensity in the years from the last year of the 4th Plan till the end of the 6th Plan.

TABLE

(Area in lakh hectares)

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	1982-83
Cultivated Area	67.99	67.59	66.92	65.95	68.00	68.00	68.50
Gross Cropped Area.	72.84	71.34	77.33	72.09	78.28	90.91	101.85
Percentage of crop intensity.	122	125	126	123	139	148	158

11-17. It would be seen that the crop intensity of 158 per cent has been projected by 1982-83. This is sought to be achieved by bringing a large portion of rice-follows covering an area of about 40 lakh hectares under a programme of rabi cropping with pulses and oilseeds.

11-18. *H. Y. V. Programme*—Increase in area under high yielding variety and increase in productivity in high yielding variety crops will be a major policy in the Sixth Plan period. As already indicated, only a small area of cultivated land enjoys stable irrigation facilities and in the irrigated areas improper water management practices results in stagnation of water in low and low-medium lands at the tillering stage and results in poor tillering. Because of this, larger extension of HYV areas in kharif season is not being achieved. Early planting through the scheme of community nursery is being advocated through the extension wing. To maintain adequate plant population in a given area and to control weeds, line-sowing is also advocated. The Central Sector scheme on community nursery is taken advantage of in raising seedlings in farmers' fields and in the ayacut areas of dugwells and L. 1. points. Early raising of seedlings has become widespread. In the directly sown areas, early sowing is also advocated and more and more cultivators are taking to early sowing. In rain-fed conditions, short duration varieties are advocated and has become popular in high and high medium lands and this strategy would be continued in the coming years.

11-19. The following table would indicate the target and achievement of coverage under high yielding variety of paddy, wheat, maize and jowar in the years from 1973-74 till 1978-79 and the target by the end of the Sixth Plan period.

H. Y. V. Programme

T—Target of area in thousand hectares

A—Achievement in thousand hectares

	1973-74		1974-75		1975-76		1976-77		1977-78		1978-79	1982-83
	T	A	T	A	T	A	T	A	T	A	Target	Target
Paddy	650	358	800	313	950	482	750	558	1,000	647	1,100	2,000
Wheat	80	46	100	49	120	60	100	53	120	66	200	375
Maize	8.5	13	26	18	30	30	33	33	36	48	48	75
Jowar	4.1	1.4	10.2	0.8	12.4	2.4	14.8	4.5	10.3	3.5	8	20

11-20. In the plan no separate programme for popularising high yielding variety in different crops is envisaged, as besides provision of seed adequately and in time, the package of practices will be put to the farmers through reorganised extension system.

Crop Husbandry

11-21. *Paddy*—Rice represents about 80 per cent of the total foodgrain production in the State. In the year 1975-76, which was a normal year, the total production of rice was 45.32 lakh tonnes and the break-up this in area, production and yield per hectare in autumn, winter and summer rice is indicated in the Statement below :—

Area, production and yield rate of rice in Orissa during 1975-76

	Area in thousand hec.	Production in thou- sand tonnes cleaned rice	Yield rate of cleaned rice in quintals per hec.
Autumn Rice	759	440	5.80
Winter Rice	3,746	3,834	10.23
Summer Rice	180	258	14.31
Total Rice	4,684	4,532	9.67

11.22. It is seen that while the productivity in summer rice is relatively high and is going up, in case of winter rice, productivity has remained more or less stagnant except in the year 1975-76 when a production of 10 quintals per hectare in winter rice was achieved. The following table would indicate the area, production and yield per hectare for autumn, winter and summer rice from the year 1973-74 to 1977-78 and expected achievement in the year 1978-79 and the proposed target by the end of the sixth plan.

A—Area in hectares

P—Production in thousand tonnes

Y—Yield rate in quintals per hectare

Year	Autumn Rice			Winter rice			Summer rice		
	A	P	Y	A	P	Y	A	P	Y
1973-74	845	492	5.82	3,725	3,690	9.93	164	213	13.00
1974-75	697	248	3.56	3,579	2,719	7.60	156	199	12.75
1975-76	758	440	5.80	3,746	3,834	10.23	180	258	14.31
1976-77	778	341	4.38	3,429	2,616	7.63	173	261	15.11
1977-78	839	596	7.10	3,377	3,454	10.23	189	269	13.83
1978-79 (Target)	1,000	800	8.00	3,500	3,666	10.47	350	534	15.26
1982-83 (Target)	1,200	1,140	9.50	3,300	4,012	12.16	390	614	1,574

11.23. Reasons for low average yield of paddy have already been discussed at the outset. In marginal lands not suitable for paddy cultivators are being gradually motivated to take millets and area under millet crops is also increasing year after year.

11.24. *Wheat*—Yield rate in wheat in our State is 1.7 tonnes per hectare which is higher than the All India average. This is because almost the entire wheat area is under high yielding varieties.

11.25. In the irrigated area, wheat is being propagated in place of paddy wherever possible in rabi as it is a medium duty crop and requires comparatively less investment for the farmers. As a result, the wheat area is increasing year after year.

Adoption of improved agricultural implements particularly seed fertiliser drill has also been propagated and this is becoming popular.

11.26. *Pulses*—The total area under all types of pulses in the year 1975-76 was 11.33 lakh hectares which come down to 9.67 lakh hectares in 1976-77 because of drought condition during the kharif season resulting in acute moisture stress in the rice-follows during the rabi season. Production accordingly fell from 5.27 lakh tonnes to 4.10 lakh tonnes. Taking the F. A. O. standard of consumption of 85 grams of pulses per adult per day and the requirement for cattle, the target before the State Government is to produce 18 lakh tonnes of pulses as against the level of 5.26 lakhs in the year 1975-76. This however would remain a long-term objective. It is expected that by the year 1982-83, the pulses area would increase to 21 lakh hectares and the production would go up to 9.97 lakh tonnes.

Commercial Crops

11.27. *Oilseeds*—In recent times the state has faced acute scarcity of edible oils. Shortage of oilseeds has also presented difficulties to processing units in the State in both co-operative and private sectors. The State Government have formulated an ambitious programme of increase in oilseed production. It is proposed to propagate groundnut in the irrigated areas and achieve larger coverage as it is a medium duty crop. In river bed areas and flood tracts unirrigated groundnut is widely grown with residual moisture. Improved management practices for these crops with increased use

of phosphatic fertiliser has been introduced to cultivators and the results are reflected in higher production of groundnut. In irrigated areas, mustard has also been introduced as a catch crop between two crops of paddy. In tribal areas in the State groundnut is traditionally grown on high lands in Khariff. M 27 which is a short-duration variety has been introduced in such areas for getting better yield. Arrangements have also been made to cover larger areas for pest control in groundnut and mustard. In northern districts, a large programme of oilseeds has also been taken up in order to achieve higher productivity in high land, the most important of which is groundnut. In tribal areas of the State, particularly in Koraput district, niger is widely grown by the tribals. Even though this crop is not one of the main major oilseeds, it is crucial to the economy of the tribals and not much work has yet been done on this crop. Recently a programme of adaptive research in niger has been taken in hand and the results of this would be tried out in the farmers' fields in the next season. The following table would indicate the target and production of the 5 major types of oilseeds in the years from 1973-74 to 1977-78 with the current year's target along with annual production of groundnut, mustard and niger in these years.

11.28. Major Oilseeds production— Targets and Achievements.

(Lakh tonnes)

Year	Target	Achievement	Production of important oilseeds		
			Groundnut	Mustard	Niger
1973-74	3.00	2.86	1.38	0.31	0.39
1974-75	2.87	2.90	1.42	0.34	0.40
1975-76	3.27	3.10	1.35	0.45	0.48
1976-77	3.63	2.43	1.19	0.26	0.35
1977-78	3.30	2.84	1.45	0.48	0.42
1978-79	4.55 (Anticipated)	4.55 (Anticipated)	..	..	..
1982-83	10.54	..	..	..	..

11.29. In 1977-78 the production of the 5 major types of oilseeds comes to 2.84 lakh tonnes representing an increase of 85 per cent in areas under mustard and 22 per cent in areas under all types of groundnut. The target for the year 1982-83 for the 5 major types of oilseeds has been projected at 10.54 lakh tonnes over an area of 14.19 lakh hectares.

Jute

11.30. The following table would indicate the target and achievement in production of jute and mesta from the years 1973-74 to 1977-78.

TARGET AND PRODUCTION OF JUTE AND MESTA

(Production in lakh bales, each bale 180 Kg.)

Year	Jute		Mesta	
	Target	Achievement	Target	Achievement
1973-74	5.60	4.01	1.60	1.75
1974-75	4.07	3.33	1.87	1.76
1975-76	4.28	2.90	1.93	2.01
1976-77	4.00	5.04	2.00	1.87
1977-78	4.80	4.20	1.70	2.00
1978-79	5.40	4.40	2.20	2.00
(Anticipated Achievement)				
1982-83	6.70		2.90	

11.31. As against the target of 7.60 lakh bales of jute and mesta, the expected achievement in 1978-79 is of the order of 6.40 lakh bales representing a marginal increase over previous years' production. The shortfall is due to dry spells in certain pockets in the State at the sprouting stage in jute crop. Notwithstanding this, productivity has gone up from 7 bales per hectare in 1973-74 to 8.8 bales in the current year. The targeted production in the year 1982-83 is of the order of 9.6 lakh bales. The absence of processing facilities in the heart of jute areas has resulted in the jute cultivators of the State being dependent on market situations obtaining in Calcutta. With the establishment of a Jute Mill in the Joint Sector within the Sixth Plan period, marketing arrangements for jute in the State is expected to improve considerably giving a boost to wider coverage under this crop.

Sugarcane

The following table would indicate the target and achievement in production of sugarcane:—

Year	Sugarcane production (Lakh tonnes in terms of Gur)	
	Target	Achievement
1973-74	3.00	2.41
1974-75	2.65	2.75
1975-76	2.70	2.97
1976-77	2.82	2.77
1977-78	3.00	2.60
1978-79	3.20	3.20 (Anticipated)
1982-83	4.00	..

11.32. Gur production has remained stagnant mainly because of inadequate marketing arrangements. There are three sugar factories in the State of which two are in the Co-operative Sector. In the area of operation of the sugar factories, adequate credit and input services are arranged and cultivators get a high price for their sugarcane. In other traditional sugarcane growing areas, the cultivators do not get a fair return on their crop and apprehension of this prevents cultivators for taking to improved management practices requiring higher level of investment. Under the Central Sector Scheme, disease free varieties of seed-cane is supplied to the cultivators. But this is generally confined to the area of operation of the sugar factories. With expansion of irrigated area, more and more cultivators will be taking to high-value crops like sugarcane and in that context it has been separately proposed to create more processing facilities for sugarcane in the State. With these arrangements the production is expected to go up to 55,000 hectares and 4 lakh tonnes in terms of Gur by 1982-83.

Cotton

11.33. Cotton is a new crop and has been introduced in the State in the Fifth Plan. In major part of the State, this is grown in rainfed area on marginal lands and for rainfed cotton short duration variety is propagated. This requires less expenditure on plant protection measures. For irrigated areas long staple varieties are recommended and seeds are supplied by the Directorate of Agriculture. There is one Spinning Mill in the Co-operative Sector which undertakes purchase from the cultivators at remunerative prices. All these arrangements have led to rapid increase in the areas under this crop even though the total area is still very small. From 3,000 hectares under this crop in the year 1974-75, the coverage has gone up to 6,000 hectares in 1977-78. The targeted production for the year 1978-79 is 800 hectares which is expected to go up to 20,000 hectares by 1982-83.

Direction and Administration

11.34. Under Orissa Agriculture Development Project I. D. A. assisted scheme effective from the 1st July 1977, the extension set up in the State has been reorganised and an intensive programme of field visit by the extension functionaries with a supporting programme of training of officers at different levels, has been laid down. A proper tie up has been established between extension and different kinds of research undertaken in different agro climatic conditions in the State. There is now one V. L. W. for every 400—800 families amongst whom there are a handful of contact farmers who are exposed to more intensive training in improved management practices. Required number of subject-matter specialists in different disciplines have also been provided under the scheme. Infrastructural facilities by way of staff at headquarters and may be at Range level, is also necessary for certain crucial crops in respect of which rapid development in production and productivity is envisaged. It is considered necessary to increase the number of extension organisation for the tribals and to this end, the normal pattern adopted in the more accessible parts of the State is not considered adequate for the tribal areas. Such additions in extension organisation and headquarters staff have to be suitably supported by provision of mobility and other infrastructural facilities. On the above items under this head, an outlay of Rs. 1,687 lakhs is proposed to be made.

Manure and Fertiliser

11.35. *Soil Testing*—There are 8 Soil Testing Laboratories in different districts of the State and capacity utilisation in these units is fairly satisfactory. It is proposed to set up one Soil Testing Laboratory in each of the 13 districts, besides having some more mobile units to make this facility available at the door steps of the farmers. In areas where larger demand for soil testing would be coming up more Soil Testing Laboratories, even below the district level, are proposed to be set up. The State Government also propose to provide soil testing kits to all field offices of the Agriculture Department so that farmers can avail of these facilities there. It is further proposed to introduce teachers in High Schools where Agriculture is taught as an optional subject to easier methods of soil testing and to provide them with soil testing equipments. It is expected that larger use of soil testing facilities which have been set up and which are proposed to be set up, would lead to greater consciousness amongst the farmers towards nutrient deficiency in soil, balanced use of different types of fertilisers and nutrient requirement of different crops. It is proposed to analyse 5 lakh samples per year when all the above facilities come into existence. If necessary the capacity of the existing Soil Testing Laboratories would be expanded.

Fertiliser

11.36. The pattern of consumption of fertiliser in this State reflects sharp ups and downs. The highest ever recorded use of fertiliser was in the year 1973-74 when 63,000 tonnes of nutrients were consumed. This was followed by a year of sharp decline in consumption and two years of rapid recovery. In the year 1977-78 consumption of fertiliser has out-stripped the figures of 1973-74 and has gone up to 65,000 nutrient tonnes. As against the target of one lakh nutrient tonnes in the year 1978-79, the achievement in Kharif has been of the order of 33,000 nutrient tonnes. It is expected that consumption in Rabi would be of the order of 50,300 tonnes and against the target of one lakh tonnes in 1978-79 the total achievement would come to 83,300 tonnes. It would be seen from the above that fertiliser consumption in the State has been going up in recent years though the rate of growth is not as fast as is being achieved in some other States in the Eastern Region. It is expected to increase to 1.72 lakh tonnes by 1982-83. Besides, more balanced use of different types of nutrients would be achieved than is obtaining at present. There are several factors which stand on the way of larger fertiliser use. A recent study has shown that only 20.5 per cent of the farmers use fertiliser in our State. The main difficulty is non-availability of fertiliser in time and at easy distance from farmer's field. Pricing policy of Government of India on fertiliser has resulted in retail points coming up in or around rail head points in the private sector. Co-operatives which have a virtual monopoly of fertiliser distribution in the interiors have yet to go a long way to handle this responsibility in a business like fashion. It has been found that transport cost on fertiliser far exceeds the margin provided in the costing. It has been proposed in the Chapter on Co-operation to give financial support to the Co-operatives for handling this work. It is proposed to give some financial support to private dealers who will deal with fertiliser in the tribal areas of the State on the same lines as the Co-operatives. Except the producing unit at Rourkela most of our fertiliser stocks come from manufacturing points outside the State and most of the imported fertilisers are also brought through ports outside the State. Because of difficulty in rail movement, even with adequate allocation of fertiliser from the Central pool as also from indigenous sources, periodical pockets of scarcity develop during times of heavy demand. To avoid this, it would be necessary to allow fertiliser dealers to make road movement of fertiliser and for this it is proposed to provide a sum of Rs. 60 lakhs from the plan to give them transport subsidy for transport of fertilisers into interior pockets.

Manures

11.37. Importance of manure for maintaining fertility status has already been well accepted by the farmers of this State. Scheme for production of urban and rural compost are continuing from the previous plans. The following table would indicate the production of urban and rural compost from the year 1974-75 to 1977-78.

Table of Target and Achievement of Compost

(In '000' tonnes)

Year	Rural compost in tonnes		Urban compost in tonnes	
	Target	Achievement	Target	Achievement
1974-75	7,500	6,550	45	21
1975-76	9,000	7,507	55	24
1976-77	10,798	7,868	73	23
1978-79	15,000	(Anticipated)	104	

11.38. It is noticed that distribution of urban compost is much less than production and this is because of heavy cost of transport of urban compost to rural areas. The earlier scheme of subsidising transport cost of urban compost which was done away within the 5th Plan, is proposed to be reintroduced in the 6th Plan. In the 3rd Plan a large scale programme of green manure was taken up and the cultivators were well acquainted with this programme. In subsequent years emphasis on green manuring has decreased resulting in a set back in the programme. It is proposed to introduce cultivators to use of Azolla and blue green algae which possess a high concentrate of nutrient. A programme of distributing Azolla and blue green algae culture free at the initial stage and subsequently at a subsidised rate to the cultivators will be taken up.

Plant protection

11.39. At the time of formulation of the Fifth Plan a target of coverage of 20 lakh hectares in the year 1978-79 from different items of plant protection measures was envisaged. The following table would indicate the target and achievement under different items of plant protection measures in the years from 1974-75 to 1977-78 and the target and expected achievement in the year 1978-79.

Coverage under Plant Protection Measures

(Area in lakh hectares)

Year	Seed treatment		Prophylactic control		Rodent control		Epidemic control		Seed control	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1974-75	3.00	2.80	1.50	1.30	4.00	3.80	3.40	3.05	0.10	0.05
1975-76	4.00	3.50	2.50	1.50	4.30	4.00	3.50	3.20	0.20	0.10
1976-77	5.00	3.82	2.25	2.23	4.80	2.80	3.70	1.83	0.25	0.10
1977-78 (Estimated)	8.08	7.00	2.81	2.50	4.90	3.47	2.76	1.93	0.20	0.10
1978-79 (Programme)	7.00 (Anticipated)	7.00	2.50 (Anticipated)	2.50	5.70 (Anticipated)	5.00	4.30 (Anticipated)	4.30	0.50 (Anticipated)	0.20

11.40. With farmers taking to more intensive agriculture, plant protection measures are assuming greater importance year after year. In the last 2 to 3 years, the extent of area attacked by pests has also been increasing. The funds at the disposal of the State Government from the Plan and non-Plan have been thoroughly inadequate to handle plant protection measures, in case of a major pest attack. According to the norms laid down by the State Government for any attack covering an area of less than 500 acres, the cultivator has to arrange for pest control measures at his own cost with technical guidance by the extension organisation. For an attack of more than 500 acres, the area is declared epidemic and plant protection measures taken up at Government cost. Besides, for areas which are endemic to certain types of pests, provision exist in the Central Plan for pest control measures. It has been found that Government sponsored activity is extremely inadequate in handling large scale pest attack. In the 5th Plan, therefore, a programme was undertaken to encourage the farmer to take to pest control measures at his own initiative and for this a subsidy of 25 per cent on plant protection equipment was being allowed from the Plan. It is proposed to increase the subsidy to 50 per cent. When a farmer is in possession of plant protection equipments, he would not wait for the extension organisation to go and adopt pest control measures in his field. Unfortunately retail trade in pesticides has not been well developed in the State and this is partly due to scarcity of technical grade materials and inability of the local formulators to compete with national level organisations having larger units. Besides subsidising cost of plant protection equipments to the farmers, it is proposed to fund the cost of plant protection chemicals valued at Rs. 40 lakhs every year from the plan provision. This will be utilised for epidemic and prophylactic control. On this, an outlay of Rs. 1.60 crores is envisaged during the Plan period. Under the reorganised extension system, plant protection subject-matter specialists have been provided at the subdivisional and range levels. Adequate arrangements by way of staff and infrastructural facilities are lacking with regard to pest surveillance. This assumes very great importance particularly in years of natural calamities like floods. It is proposed to set up 3 pest surveillance units from the State Plan in the Sixth Plan. With that the State would have 4 pest surveillance units in 4 agro-climatic zones in the State.

11.41. The details of the different items of work indicated in the target for the year 1982-83 are given below :—

(a) Seed Treatment

The target for this programme is 37.50 lakh hectares out of which 10 lakh hectares will be covered by the Department at the rate of Re. 1/ per hectare at an estimated cost of Rs. 10 lakhs. The balance area will be covered by the cultivators from their own resources.

(b) Prophylactic control

Prophylactic measures for control of epidemic pests such as Brown Plant Hoppers, Gallmidge, Grass Hoppers, Leaf Hoppers, Hairy caterpillars and white grubs will be taken up over an area of 11.30 lakh hectares during the plan period of which the Department will take up the programme in 25,400 hectares. The cost of pesticides for prophylactic spraying per hectare will be about Rs. 75 and a sum of Rs. 19.30 lakhs will be required during the plan period for this programme.

(c) Epidemic control

A sum of Rs. 160 lakhs has been provided under this programme in the plan proposals. Pesticides worth Rs. 50 per hectare will be required and the Department will organise epidemic control measures in an area of 32,000 hectares.

(d) Infestation control

A sum of Rs. 2,95,000 has been provided for control of rodents and stored grain pests.

11.42. Besides this programme of weed control, biological control will be taken up and facilities will be created at the zonal level for repair of plant protection equipments of the cultivators as also those belonging to the Department. Provision has also been made for expansion of training facilities in the Plant Protection Training Institute so that large number of field functionaries could be trained in plant protection technology.

Seeds

11.43. An attempt has been made to bring some system in this operation through participation in the National Seeds Programme, Phase II. Under this programme, a State Seeds Corporation has been set up for handling production, processing and marketing of seeds of high yielding paddy, potato, groundnut and pulses. The State Seeds Corporation will take up certified seed production in the farmers' field and would obtain foundation seeds from the Orissa University of Agriculture and Technology and the National Seeds Corporation for the above purpose. A scheme for taking up a modest programme of production of certified seeds in the coming Rabi has been taken in hand by the State Seeds Corporation. Certified seeds of the above four commodities would thus be available to the farmers from Khariff of 1979-80. Prior to formation of the State Seeds Corporation, it was the responsibility of the Directorate of Agriculture to multiply seeds of improved and high yielding varieties. In the coming years, Directorate of Agriculture would continue handling of all types of seeds which would not be taken up by the State Seeds Corporation. The most important in this is certified seeds of Tall Indica variety of paddy. A programme of developing foundation seeds of Tall Indica variety, would be taken up by the Orissa University of Agriculture and Technology and production of certified seeds of these varieties will be organised in the Departmental Agricultural Farms. Besides this, certified seeds of cash crops like jute and sugarcane would also be grown by the Directorate. For the tribal areas, crops with immediate relevance to tribal agriculture would be supported by provision of certified seeds. Under this programme, production will be organised for certified seeds of mustard, ragi, maize and castor. The State Government have set up a seed certification agency which is registered as a Society under the Societies Registration Act. The revenue deficit of the agency is proposed to be met from the plan.

Agriculture farms

11.44. There are 84 Departmental farms under the management and control of Director of Agriculture after transfer of certain farms to Orissa University of Agriculture and Technology, Orissa State Seeds Corporation and I. C. A. R. The total farm area available for seed production by the end of 1977-78 would be 2,549 hectares. Thirteen farms have been set apart for adaptive research under the Orissa Agricultural Development Projects and a Programme of research work has already been drawn up and undertaken from the current kharif. The objective in the next plan period would be to utilise larger area in the Departmental farms than has hitherto been done. In the strategy of agricultural development in the coming plan, departmental agricultural farms would play a very crucial role by providing scope for multiplication of seeds of different crops not handled by Orissa State Seeds Corporation. Though the Government farms have been started with the primary objective of producing seeds of improved varieties, emphasis will now be on commercial farming. The farms will also be utilised for producing foundation seeds, training of farmers, adaptive research and adaptive trials besides operating them as demonstrative farms to highlight the new technology of water management and optimum utilisation of land and water resources. In course of time, small uneconomic farms will be disposed of and the number of farms to be maintained will be reduced. Some of the farms will also be converted into service centres where farmers will be given facilities for learning new technology. It would be necessary to meet 50 per cent of the working cost of the farms from the plan as the provision in the non-Plan side fixed years ago has proved thoroughly inadequate. This has resulted in a situation where in spite of heavy demands for seed and availability of land and water, farms are not being put to optimum use. On the agricultural farms, an outlay of Rs. 300 lakhs is proposed.

Agriculture Engineering

11.45. Agricultural implements play an important role in increasing productivity of different crops. Even though different types of improved agricultural implements have been developed and their use propagated amongst the farmers, adequate infrastructural facilities are not available for larger coverage of farmers both in respect of knowledge and use of improved implements as also their availability for purchase by the farmers at interior points. Besides there is an overall shortage of improved implements because private trade in improved implements have not been developed in the State and the Government controlled Implement Factory and Orissa Agro Industries Corporation have not yet taken up this work on a fairly large scale. A set of improved agricultural implements have been selected for popularisation amongst the farmers and it is proposed to supply one such set to each V. L. W. for demonstrating their use amongst the farmers. In the context of wide acceptance of dug wells programme and consequent excavation of 1.82 lakh dug wells in the State, the need for introducing manually operated and animal drawn water lifting devices has also assumed considerable importance. This is more important because our well energisation programme has lagged behind

very much notwithstanding the increased emphasis put on this programme by the State Government in recent times, there would continue to be big gap between excavation of dug wells and their energisation. Water lifting devices are not manufactured in the State now and it is proposed to have these items of agricultural machineries manufactured through the Agro Industries Corporation. For this purpose the Corporation will have to be given adequate financial support from this sector of the Plan. The Implements Programme is also being strengthened under the Orissa Agricultural Development Programme which is in operation from July, 1977. In addition to carrying out research on implements by the University of Agriculture, a development unit in the Department has also been established to carry out development of commercial proto-types, conducting field trials and financing the manufacturing processes of implements to be manufactured by different units including Government Implements Factory and Agro Industries Corporation. Implement demonstration has been organised under the Orissa Agricultural Development Project. Mobile demonstration vans will be utilised for the purpose to cover a large number of farmers. Under the Tribal sub-Plan a set of implements identified as suitable for tribal areas will be popularised. Agro Industries Corporation will open a large number of sale centres. Besides, distribution programme will also be carried out through selected co-operatives, sale centres of Agriculture Department and private dealers. Annual sale of implements at the end of the Plan period would come up to the levels indicated in the following table.

	4th Year
M. B. Plough ..	50,000
Weeders ..	100,000
Disc. Harrow ..	2,500
3 Tyne Cultivators ..	2,500
Seed drills ..	3,000
Water lifts ..	50,000

An outlay in this sector of Rs. 200 lakhs is proposed.

Agriculture Research and Education

11.46. The Orissa University of Agriculture and Technology is responsible for applied research in agriculture and they have taken up a programme of applied research in four Central Farms in the four Agro Climatic Zones in the State. The Directorate of Agriculture is in charge of adaptive research in 13 Agricultural Farms located one in each district. Under the Orissa Agriculture Development Project the missing link in the flow of technical knowledge from the laboratory to the farmers is proposed to be provided for. It is also proposed to have several wings in the University for research in water management and on crucial crops like groundnut, pulses and jute. Farm Management Research through multi-disciplinary operation project have also been suggested. It is also envisaged to start Krushi Vigyan Kendras to train agricultural graduates to enable them to return to a career in farming. It is also proposed to start a Faculty on fisheries and provide facilities for research in forestry in the University in the coming plan period. Arrangements will be made in the University for introducing a course on Project Preparation, Training and Evaluation so that at the outset Government employees required to take up this type of work would be trained in these. Besides providing for the outlay envisaged under Orissa Agriculture Development Project on research, it is also proposed to provide for grants to the University. On this sector, an outlay of Rs. 769 lakhs is proposed.

Extension and Farmers Training

11.47. There are two components under this programme, agriculture information service and training of V.L.Ws and Extension Officers. The need for adequate communication support to T. & V. system cannot be over emphasised. It is proposed to strengthen dissemination of information through different media of communication like radio, audio visual aids, printed materials, etc. at the State, Range and District levels. At the Range level it is proposed to create one information communication unit so that results of local fields verification, trials and achievements could be widely published. The financial outlay of the scheme for the 6th Plan is Rs. 80 lakhs out of which provision in the tribal areas would be of the order of Rs. 40 lakhs. The total outlay under this sector is Rs. 210 lakhs.

Dug wells

11-48. For financing the dugwells, active participation of various financing institutions like C. C. Bs., L. D. Bs., Commercial Banks and the Regional Rural Banks is necessary. A target of 75,000 dug wells was fixed for the year 1977-78 but the progress could only be about 50,000. In view of this it is proposed on a realistic basis, to fix a target of 3 lakh dug wells during the Sixth Plan period at the rate of Rs. 60,000 per year. Of these 3 lakh wells proposed to be done about 87,000 dug wells would be fitted with pump sets and the balance would be fitted with traditional water lifting arrangements.

11-49. Filter-point tube-wells are only feasible in coastal and river alluvial areas. All the filter-points are required to be fitted with pump sets. When fitted with pump-sets, a filter points tube well can provide irrigation for an area of 8-10 acres of land. There is great potentiality for this kind of irrigation, yet it has not so far been very successful.

11-50. The question of taking up these filter-point tube-wells through the Orissa Lift Irrigation Corporation was also under consideration. If the Corporation takes up these works, the cost will be more as the Corporation will also have to maintain them. If, however, this is taken up by an individual cultivator, he will try to reduce the cost without impairing the efficiency and at the same time the maintenance will be his. There will be no strain on the State Exchequer. In view of this it has been decided to encourage cultivators either individually or co-operatively to take up these filter-point tube-wells by obtaining finance from different financing institutions with necessary support from the State Government.

11-51. It is proposed to take up 15,000 filter-point tube-wells during the 6th Plan period in the private and co-operative sectors. The average investment required per filter-point is roughly Rs. 10,000-00.

11-52. In respect of filter-point tube-wells to be owned by a group of farmers, it has been decided that 50 per cent of the cost will come as subsidy from different Special Development Agencies. To make this scheme a success, it is proposed to provide an additive support of 25 per cent from the State Budget. The small farmers will also be entitled to 25 per cent subsidy from the Government of India in respect of areas not covered by any Special Development Agencies. According to the schemes now in vogue and the recent schemes introduced by the Government of India, subsidy available to tribals, small farmers and marginal farmers for this purpose in project and non-project areas as detailed below :—

Small Farmers	.. 25 per cent subsidy
Marginal Farmers	.. 33 $\frac{1}{3}$ per cent subsidy
Tribal Farmers	.. 50 per cent subsidy
Community Wells	.. 25 per cent subsidy from State Government & 50 per cent subsidy from agencies.

11-53. Under the programme, it is assumed that 50 per cent of the wells will be owned by big farmers for which no subsidy will be paid.

Agro Processing

11-54. Production and sale of improved implements through Agro Industries Corporation will be substantially stepped up with financial support from the Plan to offset the high cost in transport and stocking in remote rural areas particularly in tribal tracts. Manufacturing of processing equipments for oil mills, Dal mills will be taken up. The Agro Industries Corporation will take up a big programme for manufacture and sale of manual operated and animal drawn water devices. Because of operations at a low uneconomic level in the past, the Agro Industries Corporation has suffered losses in recent years. In the year 1977-78 their turnover has increased by 49 per cent and it has come to a break-even point. It would be necessary to strengthen the share capital base of the Agro Industries Corporation to make up for gradual erosion of their owned funds. On this a total outlay of Rs. 230 lakhs is proposed.

Horticulture

11-55. As against the 5th Plan objective of 10,000 hectares to be brought under horticulture development, in the years from 1974-75 to 1977-78, 8,500 hectares had been achieved under compact area programme of insitu plantation. Besides, supply of planting material of mango, guava, citrus fruits for backyard plantation has also been continuing. Cultivation of exportable varieties of banana has not been satisfactory because of the reluctance of the cultivators to shift from a short duration agricultural crop to a plantation crop. Besides the Kew and Queen varieties of pine-apple, production of improved local varieties has also been started. Canal embankment plantation of cocoanut has quick promising results. Under a special central sector scheme for Puri district, a programme of such plantation has already been taken up. It has been estimated that there is scope for planting 35 lakh coconut seedlings on canal embankments. The main difficulty is absence of adequate infrastructural facilities and shortage of seed material. A Dxt Cocoanut nursery has been set up and a quarantine nursery for growing exotic varieties has also been established.

11-56. In the Horticulture sector, the major thrust would be to ensure adequate availability of good quality planting materials and to extend infrastructural facilities for propagating the same amongst the farmers. The weak point in the programme of horticulture development is the total absence of any worthwhile marketing support. This is proposed to be provided through establishment of a Horticulture Corporation. A scheme of subsidy on planting materials and grants for small/marginal/tribal farmers and agricultural labourers for meeting maintenance costs during pre-fruiting years has been proposed. The Corporation would be able to avail institutional finance to take up the above activities. While compact area plantation would be of very great relevance to the tribals both from the point of view of taking them away from destructive agricultural practices like podu cultivation and also for increasing productivity of their lands, such compact area schemes would be confined mostly to the tribal area in the State. In the coastal areas where diversion of land from agriculture to horticulture would be difficult, the emphasis would be on the backyard plantation. For this, arrangements for supplying quality planting material at a much larger scale is envisaged. Along with expansion under fruit and plantation crops, development of potato as a Kharif and Rabi crop and vegetables, spices and condiments and fruit and vegetable preservation will be attempted. Supporting supply and services including plant protection cover will be done through mobile units provided in the proposed growth centres. Upgradation of present level of technical knowledge would be done by expanding training facilities in the School of Horticulture. The proposed Horticulture Development Corporation would try to remove the main constraints on credit and marketing. A programme of extension of potato, vegetables and mushroom is envisaged. Vegetable programme other than potato will be supported by a strong seed multiplication project. A new programme for training of nursery men and orchardists will be undertaken and all nurseries and seed gardens will be encouraged with suitable subsidies. Service facilities will be provided in suitable growth centres for identifying diseases, pests, nutrition deficiencies, etc. As already indicated, the programme is of crucial importance for the tribals. Out of a total outlay of Rs. 20 crores under this sector, an outlay of Rs. 10 crore is envisaged under the Tribal Sub-Plan. Besides the above, an outlay of Rs. 8 crore out of special Central assistance for the tribal sub-plan area is envisaged. The strategy of development as indicated above would be adopted for schemes undertaken out of the above special Central assistance of the above order.

Market Intelligence

11-57. During the Sixth Plan it is proposed to reorganise the scheme with a view to covering both urban and rural areas with an outlay of Rs. 100 lakhs with the following objectives. —

1. To increase the coverage from the existing 79 centres to 314 centres in order to cover all the blocks in the State.
2. To strengthen the collection, compilation and supervision machinery and give mobility to the field staff for quick collection, compilation and dissemination of information.
3. To release price bulletins regularly from all the districts for the benefit of the producers and consumers.
4. To collect, compile and disseminate necessary data on Market Intelligence forces, supply and distribution and prices of various commodities for Government with a view to having effective control over production, distribution and prices and help formulation of short-term and long term policy.

11-58. In organising the system for getting adequate, accurate and timely date special attention will be paid to the tribal areas and also areas having concentration of weaker section of the society.

Agricultural Marketing—

11-59. Consequent upon various developmental measures undertaken during the previous plan period to increase agricultural production, the need has arisen for a link-up between marketing and production. This calls for an organised marketing system. In order to organise marketing of agricultural produces, Regulated Markets are established under the Orissa Agricultural Produce Market Act, 1956 to regulate buying and selling of agricultural produces. Grading of agricultural produces is undertaken to ensure a better price to the producers and a quality product to the consumers. In order to streamline the marketing system in the State, it is of utmost importance to study various marketing complexes for improvement of existing marketing structure. For the purpose, market research and survey is essential. Marketing Extension programme is necessary to educate the farmers about the Marketing development programme. In recognition of the need to develop of Market centres, Government of India have implemented a scheme for development of market yard under which central assistance in the shape of subsidy is available at different rates for different categories of markets. Various conditions laid down *inter alia* include possession of minimum 15 acres of land by each Market Committee for development of market yard and formation of a State Agricultural Marketing Board to co-ordinate the activities and development of the Regulated Markets in the State as a whole. Accordingly, a State Agricultural Marketing Board has been formed by the State Government. In order to make the Board more efficient and to equip it with necessary powers to exercise control and supervision over various Markets, necessary steps have been taken to amend the Orissa Agricultural Produce Market Act, 1956.

11-60. As regards select on of markets under the Central assistance programme, 14 markets of the States were selected, out of which only 6 markets have been able to receive the first instalments of central assistance. Cases of other Market Committees have not been considered because of non-possession of minimum land holding by the Market Committees prescribed by the Government of India. Recently, Government of India have extended the scheme to markets dealing with Commercial Crops and sub-markets. Similarly, Government of India, have taken up a scheme for establishment of Pilot grading units for grading of cash crops.

11-61. Out of 76 Wholesale Markets and 147 sub-markets of the State by the end of 1977-78, 38 markets have been regulated, 22 sub-markets under different markets have been declared as such but regulatory measures have not been enforced. This has virtually created bottlenecks, in smooth enforcement of the provisions of the Act and Rules, in the markets so declared. It is, therefore, proposed to bring all the markets and sub-markets under the purview of regulation. Besides, the market already established should be able to possess 15 acres of land to attract central assistance without any difficulty. The markets to be regulated have also to be equipped accordingly. Grading units are to be organised in the Regulated markets where primary producers sell their produce. For this purpose suitable technical persons will be necessary for management and the administrative machinery has to be strengthened.

11-62. In view of the marketing development programme undertaken by Government of India as well as State Government reorganisation of marketing set up was felt necessary and the posts of Regional Marketing Officers with staff have already been created at field level only. By the end of the Third Year of the sixth plan, all market and sub-markets will have been regulated. This will call for regular supervision and control besides the executives required for its management. It is, therefore, proposed to have 3 Divisional Officers, 12 field officers and other technical and non-technical staff at headquarters.

11-63. In this connection, it may be indicated as envisaged in the Bill to amend the existing Orissa Agricultural Produce Marketing Act, 1956, the State Agricultural Marketing Board will have its own employees, as well as will appoint employees for Market Committees. Fund of the Board will be raised through contribution by Regulated Markets and other miscellaneous sources. On an average, for 76 markets the Board will incur an expenditure of Rs. 40.00 lakhs per annum against the present expenditure of Rs. 20.00 lakhs. In course of time all the staff will be taken over to the State Agricultural Marketing Board in line with the State Agricultural Marketing Board functioning in Punjab and Hariyana States.

11-64. The programme during the period have been chalked out accordingly with a total outlay Rs. 230 lakhs for the Five-Year Plan 1978—83.

Storage & Warehousing

11.65. State Warehousing Corporation has been set up to acquire and build godowns and warehouses at different places of the State, run warehouses in the State for the storage of agricultural produce, seeds, manures, fertilisers, agricultural implements and notified commodities; arrange facilities for their transport and to act as an Agent of the Central Warehousing Corporation or of the State Government for the purpose of purchase, sale, storage and distribution of these commodities. The Orissa State Warehousing Corporation has at present 52 warehouses with a capacity of 60,000 MT. The distribution of the storage facilities of 60,000 MT. is as follows :—

7100 MT. in the own building of State Warehousing Corporation.

12330 MT. in the godowns of Food and Civil Supplies Department taken on rent

40570 MT. in private godowns taken on rent

11.66. From the above it will be seen that the bulk of the storage space is in rented buildings, where scientific storage becomes difficult at times. Even though the State Warehousing Corporation has completed about 20 years of its existence by the end of March, 1978 it has been able to construct only 9 godowns of 7100 tons capacity. Therefore, it is proposed to launch a drive for increasing the owned godown capacity of the Corporation. The Corporation proposes to construct and acquire warehouses of 53,500 tons at 26 places at a cost of Rs. 2 crores, during the sixth Plan. Outlay indicated for this Corporation during the sixth Plan is Rs. 70 lakhs which will attract another Rs. 70 lakh as share capital from the Central Warehousing Corporation. As such, against the requirement of Rs. 2 crores, the Corporation will be getting Rs. 1.40 crores. The balance amount of Rs. 60 lakh will be raised by the Corporation from financial institutions, by utilising the State Government share capital as margin money.

Agriculture credit

11.67. The yearwise loaning programme for the Orissa State Land Development Bank as has been proposed for the purposes of development of Minor Irrigation, Horticulture, Farm Mechanisation, etc. is given below.

Year	(Rs. in crores)		
	Normal	A. R. D. C.	Total
1978-79	3.50	10.00	13.50
1979-80	6.00	10.50	16.50
1980-81	8.00	14.00	22.00
1981-82	12.00	15.00	27.00
1982-83	15.00	20.00	35.00

11.68. As against the above loaning programme the debenture programme of Orissa State Co-operative Land Development Bank both under ordinary and special debentures for the above periods is given below :—

Debenture Programme :

	Ordinary	Special
	(Rs. in crores)	
1978-79	3.50	10.00
1979-80	5.50	10.50
1980-81	7.50	14.00
1981-82	11.00	15.00
1982-83	14.00	20.00

11.69. In the ordinary debentures there is no upper limit fixed by the Reserve Bank of India for contribution by the State and Central Governments. During 1975-76, 1976-77 and 1977-78 at the rate of 16 per cent, 12 per cent and 15 per cent respectively have been contributed by State and Central Government each. This is because of reluctance for investment in debentures at lower rate of interest for a larger period by other agencies and inadequacy of resources within the State which the S. L. D. Bank is required to raise by its own efforts.

11.70. In view of the above mentioned programme for debentures by the Orissa State Co-operative Land Development Bank the Government (both State and Centre) propose to contribute in ordinary debentures on an average of 16 per cent and 13 per cent on special development debentures because of minor irrigation and other purposes :

Year	Ordinary	Special (Rs. in crores)	Total
(1)	(2)	(3)	(4)
1978-79	State 0.20	State 0.95	State 1.15
1979-80	1.50	1.30	2.80
1980-81	1.80	1.70	3.50
1981-82	1.80	1.80	3.60
1982-83	1.85	2.60	4.45
			15.50

Tribal Sub-Plan

11.71. The tribal Sub-Plan area covers 118 Blocks of 314 Blocks in the State. In these areas, high and high medium lands account for major portion of the cultivated area. The strategy for raising the economy of tribals, therefore, lies in raising a short duration kharif crop which ensures assured return to the farmers to be followed by a light Rabi crop with available moisture. In marginal lands, millets are being propagated instead of paddy. Introduction of new crops like cotton, mesta, tapioca, vegetables, monsoon potato and replacement of old traditional varieties with improved high yielding types of comparable shorter duration, have been started. Tribals traditionally have an affinity for mixed cropping. Therefore, mixed cropping of particular sets of crops are being propagated amongst them. Besides extension, the above subjective is being pursued through field demonstrations and supply of inputs at subsidised rate. Actual implementation of the programme will be attempted on mini-watershed basis. In each I. T. D. P. and T. D. A. areas, 4 to 5 villages comprising of about 100 families would be selected covering an area of 150 acres in compact patches. In these areas, inputs will be supplied to the farmers for raising atleast two crops. Besides, training of tribal boys in the villages to take to improved methods of cultivation would be done. All these works will be taken up through different schemes in the Agriculture Plan which will be operated throughout the State. Proportionate outlay will be made to tribal areas under the schemes which are not location specific and it has been roughly calculated that out of a total outlay of Rs. 61 crores in the agriculture sector, a sum of Rs. 22 crores would be under the Tribal Sub-plan of Agriculture sector. Besides funding from the Agriculture State Plan special Central assistance in the Agriculture sector envisaged at a level of Rs. 5 crore would be spent in the tribal areas. The main component of this work would be the following. In irrigated areas in the Tribal Plan, better water management practices would introduced by constructing field channels and drainage system even under minor irrigation projects. This would be done at Government cost and wherever tribal farmers are prepared to take institutional finance for the above purpose or do it at their initiative the work will be taken up by way of demonstration. Besides introduction of new crops or new varieties of crops traditionally grown in tribal areas would be done by adopting a system of overseeing very closely the farm management of the tribals by departmental extension machinery. The involvement of tribal boys through special training for this purpose would also be ensured.

ANNEXURE J

Five-Year Plan 1978—83

CROP PRODUCTION : ACHIEVEMENTS AND TARGETS

Sl. No.	Item	Unit	Actual Production 1973-74	Production 1977-78 (Tentative)	Target 1982-83
(1)	(2)	(3)	(4)	(5)	(6)
1	Foodgrains Total	.. Thousand tonnes.	5,275	5,468	7,965
	(a) Cereals	.. Ditto	4,800	4,900	6,968
	(b) Pulses	.. Ditto	475	568	997
2	Sugarcane (in terms Cane)	.. Ditto	2,406	2,600	4,000
3	Oilseeds Total	.. Ditto	286	349	11,22
	(a) Five major oilseeds	.. Ditto	246	301	1,054
4	Cotton	.. Thousand bales of 180 Kgs. each.	1	7	20
5	Jute	.. Thousand bales of 180 Kgs. each.	401	420	670

ANNEXURE II

Five-Year Plan 1978-83

CROP PRODUCTION : TARGETS FOR TERMINAL YEARS
AREA THOUSANDS HECTARES, PRODUCTION THOUSAND
TONNES, YIELD KHS./ HECTARES.

Sl. No.	Item	Achievement (Tentative)			Target 1982-83		
		Area	Production	Yield	Area	Production	Yield
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. Foodgrains							
(a) Rice							
	(i) Autumn	4,216	4,050	960	4,500	5,152	1,140
	(ii) Winter						
	(iii) Summer	253	362	1,431	390	614	1,570
	Total (Rice)	4,469	4,412	987	4,890	5,766	1,180
	(b) Wheat	67	117	1,746	375	675	1,800
	(c) Maize	132	109	826	175	199	1,140
	(d) Jowar	34	20	588	33	27	820
	(e) Bajra	8	4	500	6	3	500
	(f) Other cereals	501	238	475	491	298	610
	(g) Pulses	1,313	568	433	2,100	997	470
	Total Foodgrains	6,524	5,468	838	8,070	7,965	990
2.	Sugarcane (Cane)	43	2,600	6,046	55	4,000	7,273
3. Oilseeds							
	(a) 5 major	431	301	700	1,260	1,054	840
	(b) Total	545	349	640	1,419	1,122	790
4.	Cotton	6	7	311	20	20	180
5.	Jute and Mesta	86	620	1,298	116	960	1,490
6.	Tobacco	7	..	..	..	..	..
7.	Cashewnut	..	..	..	..	..	..
8.	Potato	..	..	..	..	..	..

ANNEXURE III

Five-Year Plan 1978-83

SELECTED PROGRAMMES : ACHIEVEMENTS AND TARGETS

Sl. No.	Item	Unit	Actual Achievement Targets		
			1973-74	1977-78 (Tentative)	1982-83
(1)	(2)	(3)	(4)	(5)	(6)
1	High Yielding varieties	000' hectares.			
	(a) Paddy	Ditto	359	722	2,000
	(b) Wheat	Ditto	46	67	375
	(c) Maize	Ditto	13	34	75
	(d) Jowar	Ditto	2	6	20
	(e) Bajra	Ditto	..	..	..
	Total (a) to (e)	Ditto	420	829	2,470
2	Consumption of chemical fertiliser (Nutrients).	000' tonnes.			
	(a) Nitrogenous (in terms of 'N')	Ditto	43,590	45,784	70,000
	(b) Phosphatic (in terms of p. 20)	Ditto	11,986	12,034	20,000
	(c) Potassic (in terms of p. 20)	Ditto	7,392	6,858	10,000
	Total (a) to (c)	Ditto	63,068	64,676	1,00,000
3	Increase in gross cropped area over 1973-74.	000' hectares.	..	544	2,901

ANNEXURE—IV

Five-Year Plan 1978-83

SELECTED PROGRAMMES—ACHIEVEMENTS AND TARGETS

Sl. No.	Item	Unit	Achievement 1977-78	Target 1982-83
(1)	(2)	(3)	(4)	(5)
1	Organise Manures and Green Manuring	000' hectares.		
	(a) Urban Compost	.. Ditto	20,223	46.0
	(b) Green Manuring	.. Ditto	195,475	500.0
2	Plant protection			
	(Technical grade material)	.. Tonnes	1067	2700
	(a) Consumption of pesticides	.. Do.	846	2179
	(b) Seed treatment chemical	.. Do.	2	4
	(c) Fungicides	.. Do.	191	438
	(d) Others	.. Do.	28	79
3	Certified seed Quantity distributed	Tonnes		
	(a) Food Crops	.. Do.	..	..
	(i) Cereals	.. Do.	..	..
	(ii) Pulses	.. Do.	254	1,016
	(b) Others	.. Do.	11	45
	(i) Cotton	.. Do.	..	..
	(ii) Oilseeds	.. Do.	4	16
	(iii) Jute	.. Do.	23	100
	(iv) Potato	.. Do.	3	12
	(v) Vegetable	.. Do.	..	..
	(vi) Foodgrains	.. Do.	..	..
4	Agricultural Machinery and Implements.	Nos.		
	(a) Tractors	}	Nil	Nil
	(b) Power tillers			
	(c) Thrashers			
	(d) Seed-cum-fertiliser drill	.. Do.	1,000	4,000
	(e) Sprayers / dusters	.. Do.		
	(i) Hand operated	}	..	..
	(ii) Power operated			

CHAPTER 12

LAND REFORMS

12.1 Land reforms is one of the most important redistributive measures which would influence the existing distribution of assets particularly agricultural land and urban real estate. Land redistribution will increase employment in agriculture because small holdings systematically employ more labour per hectare than large holdings. Land reforms need to be viewed in the context of the planned strategy and as an integral part of employment planning. There should be no apprehension as regards reduction of productivity per hectare because given equal access to credit and material inputs, small farms yield more output per hectare than large farms. Moreover it has been estimated that even with small holdings of a hectare or less, landless farmers can cross the poverty line if the holdings irrigated and income from crop production is supplemented by income from Animal Husbandry, Fishery, Forestry and Cottage industries activities. Just as landless workers ought to be the prime claimants on ceiling surplus self-cultivated land, true occupying self-cultivated tenants and share croppers should be the prime claimants of surplus leased out lands. The assurance of security of tenure on limited rent liability and eventual ownership to the self-cultivating tenants and share croppers will bring about an effective redistribution of leased out land.

12.2 The updating of land records is crucial to the development of agriculture. The investment on preparation of records and their continuous updating has to be accepted as an investment on agriculture and should not be judged as expenditure on schemes which yield no return. Survey and Settlement operations pay a useful role in this regard. Farming operations are more efficient and modernisation of agriculture is more rapid in areas where holdings have been consolidated. Consolidation of holdings with priority for the irrigated tracts will be a key programme for the State in future years.

(A) IMPLEMENTATION OF CEILING LAW :

12.3. Determination of the ceiling surplus land of a land owner and distribution of surplus land is a State Plan scheme. The outlay is mainly for payment of compensation and for entertainment of additional staff at the Tahasils, Districts Board of Revenue levels in implementing the programme.

PROGRESS :

Determination of ceiling

12.4. As on the 1st June, 1978, 47,497 cases have been registered under the Orissa Land Reforms Act for determination of ceiling out of which 29,092 cases were dropped as no ceiling surplus land was revealed in those cases. An area of 1,64,587 acres has been found surplus in 6,500 cases in which statements have been confirmed. 5,490 cases have been finalised and Ac. 1,25,743.380 of land have been declared surplus and vested in Government. Out of the said area 1,10,243.852 acres have been taken over by Government. 92,598.2245 acres have been distributed among 68,402 beneficiaries as detailed below :—

Beneficiaries		Area
Scheduled Castes	22,535	28,405.6685
Scheduled Tribes	27,536	40,504.2785
Others	18,331	23,688.2775

12.5. The remaining 12,915 cases will be disposed of during the year 1978-79.

12.6. The availability of surplus land in the State has not been precisely assessed so far, mainly because land settlement operations were undertaken in some areas thirty to forty years ago and in other areas land records have not been properly updated recording changes in the ownership of land on account of succession, transfer, partition, etc. Large scale changes effected by tenancy legislations, like Orissa Estates Abolition Act, Orissa Land Reforms Act and other Acts also have not been fully reflected in the records. It is however, roughly estimated that, in all 200,000 acres may be available as surplus after disposal of the pending cases, and also such cases which are yet to be started after the disposal of cases under the Orissa Estates Abolition Act. Land involved in the pending O. E. A Act cases after the abolition of intermediaries is presently in an inchoate stage and hence could not be subjected to ceiling law as the holders are neither raiyats nor land holders as defined under the law

12.7. In all, about 110,000 cases are likely to arise in the implementation of the ceiling law. It has been proposed to dispose of all these cases and distribute the surplus land during the years 1978-79 and 1979-80.

12.8. The normal Tahasil agency cannot cope up with this additional work and hence entertainment of additional officers to exclusively attend to these cases is absolutely necessary. The annual average disposal of cases by an officer has been taken to be 1,000 cases. During 1978-79, 54 Additional Tahasildars are proposed to be entertained for disposal of 60,000 cases. 46 Officers are proposed to be entertained during 1979-80 to complete the programme.

Payment of compensation

12.9. Under the provisions of the Act the land owner is entitled to payment of compensation at prescribed rates, towards land declared as surplus and taken over by Government. No provision has, however, been made in the plan as this scheme was expected to be self financing and was not expected to throw any liability on the State or exchequer. But according to certain provisions in the ceiling law which provide for partial exemption of payment of Salami to the beneficiaries and provides for easy instalments over a long time horizon it is now clear that it is not self financing and a portion of the amount payable as compensation has to be borne by the State Government. It has not been possible for the State Government to accommodate the additional requirement of funds within the existing non-plan budget as a result of which no payment towards compensation has been made yet. Therefore, it is proposed to provide under the plan, the additional financial burden which is the difference between the gross amount payable to the land owners towards compensation for their surplus land and the salami recoverable from the allottees of ceiling surplus land.

12.10. It is proposed to clear up all the compensation dues payable to the surplus land holders during the Sixth Plan period. Hence a sum of Rs. 223.50 lakhs has been proposed to be provided for payment as compensation to the ceiling surplus land holders of the State.

12.11. The requirement of funds year-wise is given below :—

	(Rs. in lakhs)				
	1978-79	1979-80	1980-81	1981-82	1982-83
For staff	45.00	35.00	..	..	..
Compensation	..	58.00	55.50	55.00	55.00

(B) SURVEY AND SETTLEMENT OPERATION

12.12. Survey and Settlement operations have been taken up and completed in Koraput, Kalahandi, Bouth, Ranpur, Angul, Athagarh, Sonapur, Ex-Inam areas of Ganjam, Khurda, Khasamhal, Bkharajat Mahal, Kujanga forest block, Banki Dampara ex-Zamindary, Parikud Jagir Mahal and Dhenkanal town. The urgency to take up large scale settlement operation through out the State under the provisions of the Orissa Survey and Settlement Act, 1958 was felt in the early sixties. The present round of survey and settlement operation is going on through-out the State, and is proposed to be completed by the financial year 1982-83 in the State. Settlement operation has been completed in 28,245 villages by the end of the field season 1976-77. After excluding the area for consolidation the programme of completion of the settlement operation in the remaining 19,477 villages is given below :

1977-78, (Settlement year from the 1st October, 1977 to the 30th September 1978 covering portion of financial year 1978-79.)	1784
1978-79	6288
1979-80	4100
1980-81	3614
1981-82	3691
TOTAL	19,477

12.13. In order to complete settlement operation in the remaining villages by 1981-82 the tentative requirement is of the order of Rs. 2,095.82 lakhs. The year-wise break up is indicated in the table below :

Requirement of funds in financial year

(Rs. in lakhs)

Year	Record of Rights	Survey & Map Publication	Total
1978-79	634.86	24.22	659.08
1979-80	694.72	25.00	719.72
1980-81	265.83	25.00	290.83
1981-82	201.19	25.00	226.19
1982-83	175.00	25.00	200.00
TOTAL	1,971.60	124.22	2,095.82

12.14. Out of the above a sum of Rs. 228.50 lakhs is required to complete the settlement operation in Tribal areas in the districts of Keonjhar, Mayurbhanj, Phulbani, Sundargarh, Ganjam Agency area of Ganjam district, Bonda Hills area of Koraput district unsurveyed area of Motu Tahasil of Koraput District and Kuchinda subdivision of Sambalpur district. Additional Employment potential expected to be generated during these five years is indicated below :—

1978-79	.. 7,972 persons
1979-80	.. 6,612 persons
1980-81	.. 4,252 persons
1981-82	.. 3,990 persons
1982-83	.. 3,882 persons

12.15. Against the requirement of Rs. 2,095.82 lakhs, current year's budget grant (1978-79) is Rs. 410 lakhs of which Rs. 135 lakhs is from State Plan, 5 lakhs from Special Central assistance to the Tribal Sub-Plan and Rs. 270 lakhs from non-plan funds. After deducting the non-plan allocation of Rs. 270 lakhs allotted during 1978-79 from the total requirement of Rs. 2,095.00 lakhs during the Sixth Plan period 1978—83, the net requirement is Rs. 1,825 lakhs which is proposed to be met from the plan allocation, since the allotment from non-plan funds every year during the Sixth Plan period is not expected to be substantial. It is, therefore, proposed that the entire amount of Rs. 1,825 lakhs would be allocated from the State Plan.

12.16. The break up of the projected allocation from State Plan during the 1978—83 is indicated below :—

1978-79	.. Rs.135.00 lakhs (limited to budget grant)
1979-80	.. Rs. 719.72 lakhs
1980-81	.. Rs.444.09 lakhs
1981-82	.. Rs.326.19 lakhs
1982-83	.. Rs.200.00 lakhs
	<u>Rs.1825.00 lakhs</u>

(C) CONSOLIDATION OF HOLDINGS

Objectives

12.17. Scatteredness and fragmentation of agricultural holdings have put serious physical limitations on development of agriculture. Consolidation of holdings has been widely recognised as a curative measure for the evils of subdivisions and fragmentation of holdings and consequently, it gives an impetus to the growth of agricultural economy. The working of the scheme is governed by "The Orissa Consolidation of Holdings and Prevention of Fragmentation of Land Act, 1972". Statutory operations in selected areas of the State—seven districts of Cuttack, Balasore, Puri, Ganjam, Dhenkanal, Mayurbhanj and Sambalpur have been under way since January, 1974.

12.18. The scheme envisages re-arrangement and re-distribution of land in compact blocks and re-planning of the village land structure. This is accompanied also by reservation of land for various communal and infrastructural facilities. Consolidation operation starts with settling the land rights and interests and updating of the record-of-rights and ends with village replanning with the objective of providing farmers with economic farm sized holdings and meeting of communal needs of the village. Consolidation, therefore, is not merely a revenue operation, but is in essence a measure to achieve integrated socio-economic well being of the village community.

12.19. In the process of the consolidation operations, the need for planning economic use of water and other water management practices in irrigated areas came to be realised. For this purpose, the consolidation scheme envisaged reserving the right-of-way for field irrigation channels and drainage channels, on a complementary land development programme to bring about the optimum benefit for the consolidated holdings. The layout and alignment of irrigation and drainage channels are determined by proper topographical survey and taking into account the contour of the land. Under the Command Area Development Programme the alignment of field irrigation channels and drains would be dovetailed with the layout of the chakas (consolidated plans) so that each of the chakas would be ensured of direct and independent access to irrigation and drainage channels. The contour survey and alignment of field irrigation channels and drains would be undertaken by the Engineers employed by the Command Areas Development Authority and the cost would be borne by the said organization.

12.20. The Act envisages implementation of the scheme through people's participation. Village Committees are formed for all the units and function as an advisory body at all stages of the implementation of the scheme. The representatives of the land-owners are to play an important role in respect of the following :—

- (i) In resolving the disputes over land by bringing about conciliation among the parties ;
- (ii) in determining valuation of lands ;
- (iii) in formulating the statement of principles for replanning of the villages with reservation of land for the purpose of public convenience and aid to better agriculture. (Consolidation Committees actually decided the land to be contributed by the individual land owners for such common purposes as chaka roads, channel, land for rural institution etc.) ; and
- (iv) assistance in the allotment of chakas

12.21. The State has a total cultivated area of 66.98 lakh hectares. However certain areas with hilly and undulated terrain and areas prone to repeated flooding and water logging are excluded from the consolidation operation. A rough assessment shows that 44.65 lakh hectares, approximately comprising of about two third of the cultivated area, which are highly fragmented are in urgent need of consolidation.

Review of previous plans

12.22. Statutory consolidation operation commenced in the selected areas of this State from January, 1974, the last year of the Fourth Five-Year Plan. Initially, a modest beginning was made with an area of 1,58,573 hectares. In the year 1976-77 a total area of 95,514 hectares and in 1978 another 1,00,000 hectares were added thus bringing the total area under consolidation operation by the end of 1977-78 to 3.53 lakh hectares. Out of this area 1.25 lakh hectares lie in the Commands of Major Irrigation Projects namely Hirakud, Salandi and Mahanadi Delta. Consolidation of this

area has been included in the World Bank assistance programme. 7,787 hectares in the Sub-Plan area in Mayurbhanj district are also under consolidation. Another one lakh hectare covered in 1978 are under Central plan assistance scheme of Command Area Development. Consolidation of holdings has been completed in 9,706 hectares inclusive of 967 hectares in the Tribal Sub-Plan area and 5,000 hectares in the commands of Major Irrigation Projects by the end of 1977-78.

12.23. This scheme has so far been financed as per details given below :—

(Rs. in lakhs)

Year	State Plan	Non-Plan	Command Area Development (State Plan)	Central Assistance	Total
(1)	(2)	(3)	(4)	(5)	(6)
1974-75	47.07	26.50	..	..	73.53
1975-76	60.48	45.47	..	..	105.95
1976-77	79.87 (Including 4.46 lakhs for Tribal Sub-Plan).	50.67	11.50	..	142.04
1977-78	76.75 (Including 4.05 lakhs for Tribal Sub-Plan).	43.95	35.00	16.00	171.70
Total	264.17	166.59	46.50	16.00	493.26

A world Bank scheme for Command Area Development has been sanctioned for the development of the Major Irrigation Command of Mahanadi Delta Salandi and Hirakud. Consolidation operation in the irrigated areas is a vital strategy in this programme. Under this scheme, it has been programmed to complete consolidation in 2.00 lakh hectares by 1980-81. As stated above, out of 1.25 lakh hectares taken up under consolidation operation, the process has been completed in 5,000 hectares. Hence the continuing operational area accounts for 1.20 lakh hectares. Current year's operation will cover a further area of 75,000 hectares. World Bank assistance would be available at the rate of Rs. 150 per hectare of consolidated irrigated lands.

Tribal Sub-plan

12.24. It has already been stated that 7,787 hectares of area under consolidation operation are under Tribal Sub-plan in Mayurbhanj district. Out of this Consolidation operation has been completed in respect of 967 hectares by the end of 1977-78. The continuing operation is expected to be completed during the plan year 1978-79, involving an expenditure of Rs. 1.77 lakhs.

Central Plan Assistance Scheme

12.25. 1.00 lakhs hectare covered in 1978 in the Commands of Major Irrigation Project namely Mahanadi Delta Stage-I, Mahanadi Delta Stage-II, Salandi and Hirakud are financed under Central Plan Assistance Scheme. The entire operation till completion will be carried over to the plan period (1978-83). Central assistance at the rate of Rs. 120 per hectare of consolidated land will be available. Of this, Rs. 16.00 lakhs was made available during 1977-78 and budget provision for Rs. 40.00 lakhs has been made during this current year 1978-79 and the balance of Rs. 64.00 lakhs will be required during 1979-80.

Ten-Year Perspective

12.26 Encouraged by the success of performance in the field and the overwhelming public response the State Government consider that the Consolidation of holdings will be a key programme in future years, with priority for the irrigated area. To step up Consolidation a ten-year programme has been drawn up with an estimated outlay of Rs. 100 crores. The Command Areas of Major Irrigation Projects like Hirakud, Salandi, Mahanadi Delta and Rushikulya are being covered on a priority basis during 1978-79 and 1979-80. Next priority would go to other irrigated areas or plain areas where there is good ground water potential. The National Commission of Agriculture have emphasised on consolidation in non-irrigated plain areas, as well since that would facilitate the land owners to have lift irrigation on individual private efforts as well.

Strategy for Five Year Plan (1978-83)

12.27 The programme envisages coverage of consolidation operation in an additional area of 27.25 lakh hectares in addition to the continuing area of 3.54 lakh hectares. The year-wise target of coverage is as follows:

1978-79	..	4.50 lakh hectares
1979-80	..	5.00 lakh hectares
1980-81	..	5.50 lakh hectares
1981-82	..	6.00 lakh hectares
1982-83	..	6.25 lakh hectares
		Total ... 27.25 lakh hectares

12.28 The target scheduled for completion by the end of this plan period is 12.94 lakh hectares.

12.29 To implement a massive programme of the above order the consolidation organization has to be backed up by adequately trained man-power. Accordingly, Deputy Directors, Consolidation Officer, Assistant Consolidation Officer, Consolidator Grade I, Surveyors (Amins) will be given adequate training in the methodology of consolidation. Such training facilities have been arranged and this will be a continuing programme till 1981-82. At present, stipend Rs. 150.00 and Rs. 50.00 per month is given to consolidator Grade I and Amins respectively for each course. The estimated cost on this account works out to Rs. 25 lakhs per annum for this four years.

12.30 Another important requirement is the printing of blue prints and not-final map. Our requirement being huge, the Map Printing Organization of the State may not be able to print and ensure timely supply of maps to the field. It is necessary to augment the capacity in the Map office to comply with the requisition for years at an increasing rate. To meet the requirement of Consolidation operation a third shift in the Map Publication and Printing Office has been proposed. This will entail an additional expenditure of Rs. 5.0 lakh per annum. It may still be necessary to print a part of the requirement of maps in the Map Publication Office, Bihar on payment of cost.

12.31 To launch a programme of this dimension it will be necessary to procure huge quantities of forms, stationery survey instruments and other camp equipments. Arrangements have been made for purchase of survey instruments and other camp equipments.

12.32 To educate the rural people on Consolidation methods and benefits derived in such a scheme, multi-media publicity drive from the current year onwards would be launched and continued and the cost for the purpose would be borne under the scheme.

12.33 To support a programme of the above dimension it has been assessed that funds to the tune of Rs. 4700.00 lakhs would be required. Out of this Rs. 104.00 lakhs would be available from central plan assistance, i.e., Rs. 40.00 lakhs during 1978-79 and Rs. 64.00 lakhs during 1979-80. Similarly during the current year, a sum of Rs. 46.54 lakhs has been made available from the non-plan side. On the Non-plan side no funds of any significant order will be available. Even if availability at the present level is taken into account, it can at best be a cushion for possible escalation of expenditure under different items. Hence, the balance requirement is to be

financed from the State Plan and Command Area Development resources, which are Rs. 4271.50 lakhs and Rs. 271.91 lakhs respectively. Details of projection are furnished below:—

Year	(Rs. in lakhs)	
	State Plan	Command Area Development
1978-79	120.00	210.00
1979-80	480.50	61.91
1980-81	996.00	..
1981-82	1,305.00	..
1982-83	1,370.00	..
	4,271.50	271.91

Employment:-

12.34. It is a significant employment generating scheme. The programme requires engagement of huge staff both educated, uneducated, skilled and un-skilled. 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 60,000 persons during the plan period as would be evident from the year-wise break up given below:—

1978-79	16,000
1979-80	12,000
1980-81	16,000
1981-82	16,000
1982-83	..
	60,000

12.35. Of this, unskilled/uneducated manpower works out to 40,000 persons and skilled/educated to 20,000 persons. The main work force would be recruited from rural areas and the statutory requirement of percentage of employing Scheduled Castes and Scheduled Tribes would of course be observed.

12.36. The scheme of Consolidation will bring multidimensional improvement in the land holdings. It will give better facilities of irrigation and augment the irrigation intensity of the water resources. Consolidated irrigated land will provide additional employment throughout the year with introduction of multiple cropping pattern. Thus, consolidation scheme will go a long way in achieving the objective of full employment.

(D) FARMER'S PASS BOOK

12.37. It is with the twin idea of providing the land-holder with a complete record of his lands and to furnish a complete picture of all sorts of credits availed by him from different financial institutions at any point of time so as to facilitate sanction of further credit in his favour, the scheme of Farmers Pass Book (Krushak Pass Book) is proposed to be introduced in the State. This will be a comprehensive pass book to help different financial institutions to assess the credit worthiness of a farmer before sanction of loan. This Pass Book would be different from the rural credit pass book issued by the Co-operative Societies.

12.38. However, after introduction of the Krushak Pass Book, the credit pass book issued by the Co-operative Societies may be amalgamated with the Krushak Pass Book so that the scheme may be financed by the Co-operative Societies.

12.39. The success of the scheme of the Farmers Pass Book will depend more on its continuous maintenance than its initial construction. Once the Pass Book is introduced, it will be required to be maintained up-to-date always. All types of transfers of land are required to be incorporated in the pass book.

Bradma System for maintenance of the Tahsil Accounts

12.40. The land revenue administration was introduced by the British in this country as early as 1855. With the abolition of the Estates, a uniform pattern of Revenue Administration has been introduced in our State since the year 1951. But no systematic approach has been made for simplification of the records maintained in Tahasils and Revenue Circles. Of late, it has been thought desirable to introduce some sort of scientific systematisation into the accounts and records of the aforesaid Revenue Offices. For this the Bradma date writing system to machines the maintenance of land records has been thought to be useful. For the purpose of modernising and reorienting the maintenance of land records and accounts at Tahasil levels, the Bradma system will be immensely helpful. There are at present 113 Tahasils and 1600 R. I. Circles. After the reorganization of Tahasils and R. I. Circles is completed by the end of the current financial year the total number of Tahasils will be 150 and R. I. Circles 1850. The Bradma system is proposed to be introduced in at least ten per cent of the Tahasils, on a selective basis and the coverage would be spread over in a phased manner during the plan period. The requirement of funds will be of the order of Rs. 10 lakhs.

(E) INTRODUCTION OF CARDEX SYSTEM OF INDEXING IN THE REGISTRATION OFFICES

12.41. For the implementation of rural development programme to be executed through loan assistance to farmers, different financing institutions demand a certificate regarding the non-encumbrance of the immovable property offered to be hypothecated as security for such loans. It was found that considerable delay occurs in the grant of non-encumbrance certificate at the Registration Offices. The delay is inevitable in the present system of maintenance of records. The need for devising some new method by which such a certificate could be promptly made available has assumed urgency in the context of increasing emphasis on providing aid and encouragement to small and marginal farmers.

12.42. A scheme for maintenance of Index in Cards was taken up in the district of Dhenkanal in Orissa as a pilot scheme. Evolved through a process of research and investigation, the newly created performance capacity now enables the grant of such non-encumbrance certificate almost within half an hour whereas it took six hours earlier.

12.43. A proposal regarding requirement of funds for introduction of this system in some other districts treating it as a part of the Orissa Agricultural Development Project approved by the World Bank. The World Bank appraisal team visited Dhenkanal in May, 1978 and the working of the Cardex system was demonstrated to them. They were satisfied that the time required in the search and grant of non-encumbrance certificate of any land involved in any transaction for a period of 13 years was less than one hour. Formerly, the grant of a non-encumbrance certificate involved 2 clerk-days (six hours each). The World Bank appraisal team accepted the project in July, 1976 and calculate the cost at Rs.72.38 lakhs breaking up into a four years' phased programme. The present estimate, however, is 75.5 lakhs taking into account the price escalation of building materials, equipment and furniture and stationery goods. The Cardex indexing work which was initially programmed to be started in the CAD areas is now proposed to be extended to 127 Sub-Registration Offices of the State.

12.44. Rs.1.40 crores is required for implementation of the entire scheme. Out of this amount of Rs.1.40 crores an allotment of Rs.12.03 lakhs was received during 1977-78 i. e. within 5th Plan period and this amount has been fully spent. Therefore, Rs.1.28 crores will be required for execution during the Sixth Plan period. The break up of this amount during Sixth Plan period is given below:—

	(Rs. in lakhs)				
	1978-79	1979-80	1980-81	1981-82	1982-83
Building	12.60	12.59	..	10.60	10.25
Equipment	2.00	8.50	..	20.00	19.92
Staff & Stationery	5.40	17.53	1.73	3.97	3.00
TOTAL	20.00	38.62	1.73	34.57	33.17

GRAND TOTAL—Rs.1,28.09 lakhs

STATEMENT-1

FIVE YEAR PLAN 1978—83

Command Area Development Programme (C. A. D. P.)

Outlays in State Sector.

(Rs. in lakhs)

Sl. No.	Name of Irrigation Project.	Actual Expenditure.				Approved outlay 1978-79	Likely requirement 1979-83 (4 years)	Total 1978-83 (5 years)	Remarks
		1974-75	1975-76	1976-77	1977-78				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ONGOING									
1.	Area Development ..								
	Ayacut Development ..								
	(a) Consolidaton of Holdings			11.47	34.98 16.00*	210.00 40.00*	61.91	271.91	
	(b) Cardex System ..				12.03	20.00	108.09	128.09	
				11.47	34.98 16.00*	230.00 40.00*	170.00	400.00	

*Central Assistance

STATEMENT-II

A G R-41

FIVE-YEARS PLAN-1978—83

Programme of works in the State sector showing expenditure / outlays
for various activities of C. A. D. P.

(Rs. in lakhs)

Sl. No.	Item of Works.	Expenditure during 1974—77 (3 years.)	Expenditure during 1977-78	Total 1974—78	Approved outlay 1978-79	Likely requirement during 1979—83 (4 years.)	Total for 1978—83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Area Development	..					
	Ayaout Development	..					
	(a) Consolidation of Holdings.	..	11.47	34.98	46.45	210.00	271.91
				16.00*	16.00*	40.00*	
	(b) Cardex System.	..	..	..	20.00	108.09	128.09
			11.47	34.98	46.45	230.00	170.00
				16.00*	16.00*	40.00*	400.00

* Central Assistance.

FIVE-YEAR PLAN 1978-83

Achievements and Targets for works in the State Sector for various activities of C. A. D. P.

STATEMENT-III

AGR-42

Sl. No.	Item of works	Unit of works	Ach. during 1974-77 (3 years)	Anticipated progress during 1977-78	Total 1974-78	Target for 1978-79	Total for 1979-83 (4 years)	Total for 1978-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Area Development Ayacut Development.							
	(a) Consolidation of Holdings.	Consolidation in Holdings.	..	..	..	5000 hectares to be consolidated.	521.7 hectares to be consolidated.	526.7 hectares.
	(b) Cardex system			Construction of 21 record rooms completed.		Construction of 29 Record Rooms to be taken up. purchase of required equipments to be made.	96 record rooms to be completed & purchase of equipments to be made.	125 Record Rooms to be constructed & necessary equipments to be procured in full.

FIVE-YEAR PLAN 1978—83

Command Area Development Programme outlay

(a) Consolidation of Holdings

(b) Cardex system

A G R —44

Statement —V

(Rs. in lakhs)

Sl. N.	Source of Finance	Actuals of Expenditure during				Approved outlay during 1978-79	Likely requirement during 1979-83 (4 years)	Total requirement during 1978-83 (5 years)	Remarks
		1974-75	1975-76	1976-77	1977-78				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	State Plan	..	..	11.47	34.98	2,30.00	1,30.00	4,00.00	..
2	Centre (a) Grants	..	..	..	16.00	40.00	..	..	..
	(b) Loans	..	..	..	..	..	..	..	..
	(c) S. L. A	..	..	..	..	..	..	..	..
	(d) Equity capital support to L. D. C's etc.	..	..	..	..	..	..	..	..
	Total 1+2	..	..	11.47	50.98	2,70.00	1,30.00	4,00.00	..
3	Institutional	..	..	..	..	..	..	..	..
	Grand Total 1+2+3)	..	..	11.47	50.98	2,70.00	1,30.00	4,00.00	..

FIVE-YEAR PLAN 1978—83

Command Area Development Programme—Outlays Assistance from Government of India

Statement —VI

A G R —45

(Rs. in lakhs)

Sl. No.	Item	Actual Expenditure				Requirement during 1978-79	Likely requirement during 1979—83 (4 years)	Remarks
		1974-75	1975-76	1976-77	1977-78			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I. Area Development—								
Ayacut Development								
	(a) Consolidation of Holdings	..	..	..	16.00	40.00	..	..
	(b) Cardex System	..	..	..	..	..	..	..
	Total				16.00	40.00		

CHAPTER 13

MINOR IRRIGATION (FLOW)

13.1. Orissa is predominantly an agricultural State. 75 per cent of its population are engaged in agricultural operations. The extent of annual rain-fall of Orissa ranges from 1,250 mm. to 2,000 mm. This rain-fall is erratic and is not uniformly distributed through out the year and through out the State. As a result, crops in certain areas suffer either from drought or flood almost every year. The agricultural productivity of the State in terms of output and value per acre of cultivated land is too low in comparison with other neighbouring States. In the removal of this deficiency, the role and importance of minor irrigation cannot be over-emphasised.

13.2. There are many areas in Orissa where the scope of Major and Medium Irrigation is limited. These areas can be served better through minor irrigation. Such areas are mostly in high lands situated in the districts of Kalahandi, Phulbani, Sundargarh, Mayurbhanj and Koraput. Since investment in minor irrigation is not heavy and the potentiality of minor irrigation is vast in these areas, the strategy has to be larger investment on Minor Irrigation Projects. These schemes can be completed quickly and their results can be achieved early.

13.3. To remove the deficiency of irrigation efforts have been made in successive plans for tapping minor irrigation sources in the State. During the Fourth Plan, an amount of Rs. 18,89.25 lakhs had been spent on this score and an area of 74,000 hectares were brought under irrigation by completion of 92 Projects.

Achievement of the Fifth Plan

13.4. The Fifth Plan outlay for minor irrigation was of the order of Rs. 23.10 crores. The expenditure incurred from 1974-75 to 1977-78 was Rs. 21.97 crores. A target of additional irrigation potential of 65,000 hectares was fixed for Fifth Plan and 54,197 hectares were achieved during the four year period 1974-78, as follows:—

1974-75	33,030 hectares
1975-76	1,846 ..
1976-77	9,568 ..
1977-78	9,753 ..

Total ..	54,197 hectares

13.5. There are about 2,460 projects under the R. E. O. up to the end of 1977-78 and the total minor irrigation potential created has been of the order of 2,78,844 hectares Khariff and 37,821 hectares Rabi totalling to 3,16,665 hectares. At the beginning of 1978-79, there are 30 ongoing projects, out of which 28 projects would be providing irrigation by the end of 1978-79 and two projects will spill-over to 1979-80 for completion. The total ayacut of 30 projects would be 44,484 hectares out of which during the current year, it is programmed to achieve an ayacut of 28,652 hectares. It is estimated that for completing these spill-over schemes and to meet the liabilities of earlier completed projects, an amount of Rs. 7.65 crores will be required.

Proposed outlay

13.6. Government of India have relaxed the ceiling limit and the minor irrigation projects have recently been classified on the basis of their ayacuts up to a culturable command area of 2,000 hectares. The Sixth Plan projections have been made keeping the above norm in view.

13.7. An outlay of Rs. 90.00 crores is projected for the Sixth Plan period which would be utilised as per the following:—

	(Rupees in crores)
1. For completion of spill-over projects and clearance of liabilities ..	7.65
2. For new projects ..	67.51
3. For modernisation projects ..	9.84
4. For investigation/Monitoring and strengthening of administrative set up.	5.00
Total ..	90.00

Irrigation potential under the Sixth Plan

13.8. The irrigation potential at the end of the Sixth Plan with an investment of Rs. 90.00 crores is expected to be around one lakh hectares through M. I. Ps. Irrigation deficient areas and drought prone and hilly areas will be given adequate emphasis. More than 40% of the proposed plan outlay has been earmarked for projects to be taken up in the sub-plan areas. Spill-over projects of the Fifth Plan will be completed on a priority basis. Districtwise details of irrigation potential of M. I. (flow) project created up to the end of Fifth Plan are shown in Annexure I. Details of the projects proposed to be taken up in the Sixth Plan are given in Annexures II A and II B.

13.9. In addition to the Plan allocation of Rs. 90.00 crores, an outlay of Rs. 7.00 crores is proposed under Special Central Assistance for implementing projects in the Tribal Sub-Plan areas. The irrigation potential to be created with this amount is of the order of about 12,700 hectares in the ITDP/TDA areas. The various schemes proposed to be implemented under this head has been given in Annexure III.

13.10. The expenditure incurred on Minor Irrigation (Flow) Projects in Tribal Sub-Plan areas during 1974—78 out of the State Plan was of the order of Rs. 451.72 lakhs. Besides this, a sum of Rs. 139.47 lakhs and Rs. 178.27 lakhs has also been spent in the Tribal Sub-plan areas during 1974—78 out of the Special Central Assistance and Centrally Sponsored Schemes respectively. During the current year, i. e., 1978-79 there is a provision of Rs. 274.20 lakhs for the Tribal Sub-plan areas out of the State Plan outlay of Rs. 750.00 lakhs. In addition to this, a provision of Rs. 51.76 lakhs under Centrally Sponsored Scheme and Rs. 150 lakhs under the Special Central Assistance are also available for expenditure during the current year. During the Sixth Plan there is a tentative outlay of Rs. 5,612.00 lakhs under the Tribal Sub-Plan area out of the total State Plan outlay of Rs. 9,000.00 lakhs. It is envisaged to get Special Central Assistance to the extent of Rs. 700.00 lakhs from Government of India and Rs. 700.00 lakhs under Centrally Sponsored Scheme.

13.11. During 1974—78 an area of 15,100 hectares have been irrigated by investing Rs. 769.46 lakhs. It is anticipated that this will go up to 25,200 hectares by the end of 1978-79. It is also envisaged to achieve additional potential of 70,000 hectares by the end of Sixth Plan in the Sub-Plan areas.

13.12. Employment potential to the extent of 12,233,480 mandays (unskilled) and 9,509 (skilled) were generated ranging from 1974-75 to 1977-78. During the current year (1978-79) 3,092,250 mandays (unskilled) and 1,398 mandays (skilled) are likely to be generated. With the Sixth Plan outlay of Rs. 90.00 crores, employment potential to be generated will be 102,213 man-years of which unskilled will be 68,430 man-years and skilled will be 30,630 man-years from 1978-79 to 1982-83.

13.13. In addition to taking up assessment of potential of surface water for M. I. projects, adequate monitoring arrangements have to be made for projects under implementation. Keeping in view the extensive programme being projected in the Sixth Plan, it will be necessary to have a separate monitoring cell to keep a proper watch on the progress of work and to suggest remedial measures wherever needed. In addition to the existing three Investigation Divisions, an additional Investigation Division will be set up at Rayagada so that survey and investigation of M. I. Projects

can be expedited. With 50 per cent assistance from the Government of India, sanction of a separate Hydrological Circle is on the way. This circle will collect hydrological data and prepare guidelines and norms for designing and execution of minor irrigation Projects. The investigation, designing, implementing and monitoring organisations thus will be suitably strengthened. Adequate delegation of administrative and financial powers will be done and co-ordination at various levels will be made more effective.

Renovation of Panchayat Samiti M. I. Ps. and Gram Panchayat Tanks

13.14. Small Minor Irrigation Projects below the ayncut of 60 acres are under the control of Panchayat Samitis. These Projects provide water for irrigation for Khariff specially during the drought years. Many of the projects require renovation as they have not been maintained properly for want of funds. In the wake of drought during the year 1976-77, the State Government had decided to take up the renovation of Panchayat Samitis M. I. Ps. and G. P. tanks for the purpose of raising Khariff crops and for providing employment to the rural labourers. A sum of Rs. 210.00 lakhs was sanctioned during the year 1976-77 and Rs. 125.00 lakhs in the year 1977-78 including Rs. 25 lakhs out of the special central assistance. About 3,350 projects were taken up under the programme.

13.15. A sum of Rs. 50 lakhs has been provided during the year 1978-79 for completion of incomplete projects and for stabilising the irrigation in the completed projects by providing sluice etc.

13.16. It is proposed to provide Rs. 1,200 lakhs in the Five-Year Plan, 1978--83 for improvement and renovation of M. I. Ps. maintained by Panchayat Samitis and G. P. tanks. Out of this amount, a sum of Rs. 400 lakhs is proposed to be provided for the Tribal Sub-Plan area.

ANNEXURE I

**PERCENTAGE OF IRRIGATION CREATED FROM ALL SOURCES DISTRICTWISE UP TO END OF 1977-78
AGAINST THE OVER ALL IRRIGATION POTENTIAL IN THE STATE (AREA IN THOUSAND HECTARES)**

Sl. No.	Name of District	Irrigation Potential up to end of 1977-78				Percentage on Present Irrigation	Proposed potential (Percentage)
		Major & Medium	M. I. (Flow)	Lift Irrigation	Total		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Balasore	77.60	7.40	16.96	101.96	7.29	7.40
2	Balangir	64.50	11.90	1.47	77.87	5.56	5.81
3	Cuttack	296.58	12.50	42.63	351.71	25.15	25.40
4	Dhenkanal	11.11	31.80	4.40	47.31	3.38	3.63
5	Ganjam	96.65	100.00	7.55	204.20	14.60	14.76
6	Kalahandi	13.57	19.00	0.80	33.37	2.38	3.03
7	Keonjhar	0.01	10.30	2.04	12.35	0.88	2.31
8	Koraput	5.07	23.20	7.91	36.18	2.58	3.07
9	Mayurbhanj	7.33	30.50	3.78	41.61	2.98	3.54
10	Phulbani	21.89	11.80	1.16	34.85	2.49	3.00
11	Puri	196.62	23.70	2.89	223.31	15.96	6.31
12	Sambapur	187.82	18.30	3.66	209.78	15.00	15.90
13	Sundargarh	4.23	16.30	3.36	23.89	1.71	3.00
	Total	982.98	316.70	98.61	13,89.29	..	..

ANNEXURE II-(A)

DISTRICTWISE BREAKUP OF SIXTH PLAN OUTLAY (1978-83) UNDER MINOR IRRIGATION (FLOW)

Amount in crores of Rupees
Ayacut in Hectares

Sl. No.	Name of the District	Spill over requirement for continuing schemes and earlier completed projects	Requirement for new schemes	Requirement for renovation schemes	Requirement for investigation	Total proposed outlay for sixth plan	Tribal sub-plan component out of ninety crores
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Balasore	0.12	0.53	0.05	0.004	0.704	0.70
2.	Balangir	0.50	0.56	0.80	0.004	1.864	..
3.	Cuttack	0.79	0.27	0.74	0.002	1.802	..
4.	Dhenkanal	0.52	0.61	0.75	0.005	1.885	..
5.	Ganjam	0.17	1.91	3.00	0.160	5.240	..
6.	Koraput	1.32	5.24	0.50	0.420	7.480	7.48
7.	Kalahandi	0.46	6.91	0.25	0.530	8.150	1.47
8.	Konjhar	0.27	18.12	0.25	1.250	19.890	17.04
9.	Mayurbhanj	0.27	6.57	1.00	0.530	8.370	8.37
10.	Puri	1.16	1.33	0.75	0.110	3.350	..
11.	Phulbani	0.05	7.12	0.50	0.570	8.250	3.90
12.	Sambalpur	1.68	3.52	0.75	0.290	6.240	0.38
13.	Sundergarh	0.33	14.82	0.50	1.125	16.775	16.78
	Total	7.65	67.51	9.84	5.000	90.000	56.12

Serial No.	Name of the District	Ayacut spilled over for ungoing schemes (C. C. A.)	Anticipated ayacut from new schemes (C. C. A.)	Total Col. 9 & 10	Total No. of new projects	Approximate Cost (in crores)	Total ayacut (Approximately) in Hectares	Anticipated ayacut during 6th Plan (in Hectares)
(1)	(2)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
1	Balasore	856	644	1500	4	0.53	644	644
2	Balangir	2864	540	3404	1	0.56	660	540
3	Cuttack	3120	272	3392	2	0.27	272	272
4	Dhenkanal	2800	600	3400	3	0.61	700	600
5	Ganjam	248	1880	2128	10	1.91	2,440	1,880
6	Koraput	2360	4640	7000	18	5.24	6,460	4,640
7	Kalahandi	2400	6600	9000	30	6.91	8,320	6,600
8	Keonjhar	2376	17624	20000	59	18.12	22,440	17,624
9	Mayurbhanj	1400	6464	7864	21	6.57	7,780	6,464
10	Puri	3512	1300	4812	8	1.33	1,520	1,300
11	Phulbani	—	7000	7000	27	7.12	9,740	7,000
12	Sambalpur	9036	3464	12500	14	3.52	5,220	3,464
13	Sundergarh	3920	14080	18000	47	14.82	19,640	14,080
Total		34892	65108	100000	247	67.51	85,836	65,108

ANNEXURE 11 (B)

Serial No.	Name of the District	Name of the Block	Name of the project	Type of project	Probable ayacut in acres	Tentative cost in lakhs	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
BALASORE							
1	Balasore	.. Nilgiri II	.. Khamakote	.. Res	300	10.5	
2	Do.	-- Do.	.. Solabhouni	.. Do.	310	10.5	
3	Do.	.. Do.	-- Haduakendua	.. Do.	950	10.5	
4	Do.	.. Do.	.. Sinduria	.. Do.	650	21.5	
					16,10 Acs.	53.0	
					644 Hecs.		
BALANGIR							
1	Balangir	.. Titilagarh	.. Pakharmunda	.. Res	350	12.0	
2	Do.	.. Bagamunda	.. Chhataranga	.. Do.	350	12.0	
3	Do.	.. Kharakhhal	.. Harisankarpur	.. Do.	200	6.0	
4	Do.	.. Do.	.. Bagjharan	.. Do.	750	26.0	
					1650 Acs.	56.0	
					660 Hects.		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CUTTACK (Non-Tribal)							
1	Cuttack	.. Banki	.. Jakanji	.. Res	..	130	6'00 Investigated
2	Do.	.. Narasinghpur	.. Budheibandha	.. Res	..	550	21'00
						Total .. 680 Acs. 27'00	
						i.e. 272 Hects.	
DHENKANAL							
1	Dhenkanal	.. Hindol	.. Ektali	.. Res.	..	500	17'50 ..
2	Do.	.. Do.	.. Bedapada	.. Res.	..	1,000	35'00 ..
3	Do.	.. Athamalik	.. Mangalpur	.. Res.	..	250	8'50 ..
						Total .. 1,750 61'00	
						i.e. 700 Hects.	

GANJAM DISTRICT

1	Ganjam	..	Kodala	..	Jagataghasi	..	Reservoir	600	21:00
2	Do.	..	Jaganathprasad	..	Chadiagunda	..	Do.	500	17:50
3	Do.	..	Chikiti	..	Bhatughai	..	Do.	500	17:50
4	Do.	..	Do.	..	Bibhutinala	..	Do.	500	17:50
5	Do.	..	Do.	..	Kataranisa	..	Do.	500	17:50
6	Do.	..	Kasinagar	..	Vakrada	..	D/W	1500	30:00
7	Do.	..	Patrapur	..	Puriasahi	..	Res.	400	14:00
8	Do.	..	Khalikote	..	Maharanisagar	..	Do.	500	17:59
9	Do.	..	Jaganathprasad	..	Haripur	..	Do.	400	14:00
10	Do.	..	Do.	..	Nalakula	..	Do.	700	24:50

6,100 191:00

i. e. 2440 Hectares

KORAPUT DISTRICT

1	Koraput	..	Rayagada	..	Slitiguda	..	Res	1,000	35:00
2	Do.	..	Do.	..	Simgipura	..	Do.	1,200	32:00
3	Do.	..	Do.	..	Kuti	..	D/W	1,500	30:00
4	Do.	..	B. Kataka	..	Kundaripadar	..	Res	350	12:50
5	Do.	..	Do.	..	Bankabadi	..	Do.	900	31:50
6	Do.	..	Muniguda	..	Bengorigaon	..	Do.	2,000	70:00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
7	Koraput	..	Ramsanguda	..	Palupai	..	Do.	800	28-00	..	
3	Do.	..	Do.	..	Sorisapadar	..	D/W	500	10-00	..	
	Do.	..	Nandanpur	..	Baradakhals	..	Res	1,000	56-00	..	
10	Do.	..	Chandahandi	..	Janapari	..	D/W	800	16-00	..	
11	Do.	..	Kasipur	..	Kantabandha	..	Res	250	9-00	..	
12	Do.	..	Thorigaon	..	Nijapur	..	Do.	500	17-50	..	
13	Do.	..	Chandrapur	..	Chadrapur	..	Do.	550	19-00	..	
14	Do.	..	Podia	..	Bangaput	..	Do.	700	24-50	..	
15	Do.	..	Khairaput	..	Damadri	..	Do.	1,100	39-00	..	
16	Do.	..	Boriguma	..	Janiguda	..	Do.	1,600	56-00	..	
17	Do.	..	Laxmipur	..	Toyput	..	Do.	400	14-00	..	
18	Do.	..	Kolanara	..	Sankulipadar	..	Do.	400	14-00	..	
Total								..	16150	5,24-0	..

i. e. 6460 Hacts.

KALAHANDI DISTRICT

1	Kalahandi	..	Sinapalli	..	Remela	..	Res	1,000	35-00	..
2	Do.	..	Do.	..	Liar	..	Do.	800	28-00	..
3	Do.	..	Do.	..	Kutlabhata	..	Do.	900	31-50	..

4	Do.	.. Boden	.. Bodennalla	..	D/W	2,000	40-00	..
5	Do.	.. Do.	.. Bilighal	..	Res.	350	12-00	..
6	Do.	.. Sadar	.. Khandabaddhopolla	-	Do.	200	7-00	..
7	Do.	.. Lanjigarh	.. Malkjuda	..	Do.	500	17-50	..
8	Do.	.. Do.	.. Maliguda	-	D/W	500	10-00	-
9	Do.	.. Do.	.. Kutusripadar	..	Res.	600	21-00	-
10	Do.	.. Do.	.. Biswanathpur	..	Do.	800	28-00	..
11	Do.	.. T. Rampur	.. Kalamare	..	Do.	600	21-00	:
12	Do.	.. Ditto	.. Lingapadar	..	Do.	200	7-00	..
13	Do.	.. Kalampur	.. Padmapur	..	Do.	800	28-00	..
14	Do.	.. Do.	.. Sagabadi	..	Do.	400	14-00	..
15	Do.	.. Do.	.. Golduthapa	-	Do.	400	14-00	..
16	Do.	.. Do.	.. Litijore	..	Do.	600	21-00	..
17	Do.	.. Kalampur	.. Badaupalli	..	Res.	500	17-50	..
18	Do.	.. Naria	.. Natikhoja	..	Do.	300	10-50	..
19	Do.	.. Do.	.. Bhaludhar	..	Do.	600	21-00	..
20	Do.	.. Do.	.. Boripada	..	Do.	1,000	35-00	..
21	Do.	.. Lanjigarh	.. Korkata	..	Do.	1,200	42-00	..
22	Do.	.. Nuapada	.. Hissro	..	Do.	400	14-00	..
23	Do.	.. Boden	.. Anlabhata	..	Do.	1,000	35-00	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
24	Kalahandi	.. Golmunda	.. Kathikuta	..	Res.	400	14-00
25	Do.	.. M. Rampur	.. Godamunda	..	Do.	200	7-00
26	Do.	.. Ditto	.. Borighat	..	Do.	600	21-00
27	Do.	.. Bhawanipatna	.. Tikampada	..	Do.	500	17-50
28	Do.	.. Do.	.. Kutirkama	..	Do.	600	21-00
29	Do.	.. Kamuro	.. Roudrawan	-	Do.	2,450	86-50
30	Do.	.. Resigarh	.. Dakigudo	-	Do.	400	14-00
						20,800	6,91-00
						i. e. 8,320 Hects.	

KEONJHAR DISTRICT

1	Keonjhar	.. Champua	.. Jarcijhore	..	Res.	900	31-50
2	Do.	.. Do.	.. Bhutuka	..	D/W	800	16-00
3	Do.	.. Do.	.. Jambudia	..	D/W	500	10-00
4	Do.	.. Keonjhar	.. Handiamala	..	Res.	400	12-00
5	Do.	.. Jhumpura	.. Lojbana	..	D/W	450	9-00
6	Do.	.. Do.	.. Kasipal	..	Res.	400	14-00
7	Do.	.. Joda	.. Unchapali	..	D/W	900	18-00
8	Do.	.. Do.	.. Murgamahadev	..	Res.	600	21-00
9	Do.	.. Keonjhar	.. Kadoi	..	Do.	1,000	35-00

10	Do.	Do.	Jagadala	D/W	2,000	40-00
11	Do.	Do.	Ambajharan	Res	600	21-00
12	Do.	Ghatgaon	Kasia	Do.	500	17-50
13	Do.	.. Keonjhar	.. Hariharpur	.. Do.	200	7-00
14	Do.	.. Ghatgaon	.. Dengana	.. Do.	250	9-00
15	Do.	.. Keonjhar	.. Salia	.. Do.	500	17-50
16	Do.	.. Harichandanpur	.. Harpur	.. Do.	500	17-50
17	Do.	.. Do.	.. Bagira	.. Do.	800	28-00
18	Do.	.. Do.	.. Lemra	.. Do.	400	14-00
19	Do.	.. Do.	.. Kusumijudi	.. Do.	500	17-50
20	Do.	.. Joda	.. Dhubakachada	.. D/W	400	8-00
21	Do.	.. Telkoi	.. Kiajuria	.. Res	600	21-00
22	Do.	.. Do.	.. Kukudiamba	.. Do.	2600	91-00
23	Do.	.. Do.	.. Sulikana	.. Do.	700	24-50
24	Do.	.. Do.	.. Hanumantia	.. Do.	2800	98-00
25	Do.	.. Bansapal	.. Khandadhar	.. Res	600	21-00
26	Do.	.. Keonjhar	.. Tikarapada	.. Do.	300	10-50
27	Do.	.. Bansapal	.. Hiranallah	.. Do.	600	21-00
28	Do.	.. Do.	.. Jaladihi	.. Do.	400	14-00
29	Do.	.. Sabarpada	.. Bhirai	.. D/W	2,500	50-00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
30	Keonjhar	.. Patna	.. Karia	.. Res ..	500	17.50	
31	Do.	.. Joda	.. Chamakapur	.. Do. ..	100	4.00	
32	Do.	.. Do.	.. Reimudi	.. Do. ..	700	24.50	
33	Do.	.. Telkoi	.. Pandiamundia	.. Do. ..	1,000	35.00	
34	Do.	.. Do.	.. Guridia	.. Do. ..	2,000	70.00	
35	Do.	.. Do.	.. Ranibeda	.. Do. ..	1,500	52.00	
36	Do.	.. Do.	.. Dadhajore	.. Do. ..	1,000	35.00	
37	Do.	.. Do.	.. Bauda	.. Do. ..	1,000	35.00	
38	Do.	.. Do.	.. Maukera	.. Do. ..	1,500	52.50	
39	Do.	.. Ghasipur	.. Baistnadi	.. Do. ..	800	28.00	
40	Do.	.. Banrapal	.. Ranima	.. Do. ..	1,000	35.00	
41	Do.	.. Harichandanpur	.. Badakalinjore	.. D/W ..	1,500	30.00	
42	Do.	.. Do.	.. Kurenjori	.. D/W ..	1,000	20.00	

43	Do.	.. Do.	.. Gobra	.. Res.	500	17-50
44	Do.	.. Sadar	.. Ambajhora	.. Do.	500	17-50
45	Do.	.. Ghatgaon	.. Budhi	.. Do.	1,000	35-00
46	Do.	.. Do.	.. Kukarkutia	.. Do.	1,000	35-00
47	Do.	.. Do.	.. Kalimati	.. Do.	1,000	35-00
48	Do.	.. Champua	.. Nekurelpur	.. Do.	1,200	42-00
49	Do.	.. Do.	.. Dhubapitana	.. Do.	1,500	52-50
50	Do.	.. Ghasipura	.. Garah	.. Do.	2,000	70-00
51	Do.	.. Anandapur	.. Gagbara	.. Res	2,000	70-00
52	Do.	.. Saharpada	.. Dhobipatna	.. Do.	1,700	59-50
53	Do.	.. Sadar	.. Raghunathpur	.. Do.	1,000	35-00
54	Do.	.. Harichandanpur	.. Remal	.. Do.	1,000	35-00
55	Do.	.. Do.	.. Dautihandi	.. Do.	500	17-50
56	Do.	.. Telkoi	.. Oriya	.. Do.	1,700	60-00
57	Do.	.. Do.	.. Mankira	.. Do.	1,000	35-00
58	Do.	.. Telkoi	.. Kalima	.. Do.	600	21-00
59	Do.	.. Hatadihi	.. Kapati	.. Do.	600	21-00

56,100
or
22,440
Hectares

Serial No.	Name of the district	Name of the Block	Name of the Project	Type of Project	Probable ayacut in acres	Tentative cost in lakhs	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

MAYURBHANJ DISTRICT

1	Mayurbhanj	.. Suliapada	.. Kanimaludi	.. Reservoir	.. 400	14-00	
2	Do.	.. Do.	.. Bhandarisole	.. Do.	.. 200	7-00	
3	Do.	.. Do.	.. Mahisamunda	.. D/W.	.. 1,600	32-00	
4	Do.	.. Samakhunta	.. Digidigia	.. Reservoir	.. 450	16-00	
5	Do.	.. Do.	.. Kendua	.. Do.	.. 2,000	70-00	
6	Do.	.. Betanoti	.. Andharia	.. Do.	.. 1,200	42-00	
7	Do.	.. Bisoi	.. Lubakani	.. Do.	.. 300	10-50	
8	Do.	.. Do.	.. Sarasapada	.. Do.	.. 200	7-00	
9	Do.	.. Baripada	.. Sandaki	.. Do.	.. 250	9-00	
10	Do.	.. Sukureli	.. Dari	.. Do.	.. 700	24-50	
11	Do.	.. Kusumi	.. Badalabeda	.. Do.	.. 400	14-00	
12	Do.	.. Bisoi	.. Godigaon	.. Do.	.. 650	23-00	
13	Do.	.. Betanoti	.. Dhadasahi	.. Do.	.. 400	14-00	
14	Do.	.. Do.	.. Balijore	.. Do.	.. 2,600	91-00	
15	Do.	.. Joshipur	.. Badamarinda	.. Do.	.. 1,700	59-50	
16	Do.	.. Bangiriposi	.. Nanden	.. Do.	.. 750	26-00	

17	Do.	.. Rasgobindapur	.. Kiakhali	.. Do.	..	1,300	45.5
18	Do.	.. Morda	.. Khapuria	.. Do.	..	350	12.0
19	Do.	.. Badasahi	.. Madhabi	.. Do.	..	1,400	49.0
20	Do.	.. Betanoti	.. Huluhulia	.. Do.	..	1,400	49.0
21	Do.	.. Thakumunda	.. Joram	.. Do.	..	1,200	42.0

19,450 6,57.0

That is 7,780 Hects. 6.57 Crores

1	PURI	.. Bolgarh	.. Gojibandha	.. Reservoir	..	300	10.50
2	Do.	.. Bolgarh	.. Patabandha	.. Reservoir	..	600	21.00
3	Do.	.. Daspaha	.. Panskhul	.. Reservoir	..	500	17.50
4	Do.	.. Khandapada	.. Brahmanijore	.. Reservoir	..	1,000	35.00
5	Do.	.. Khandapada	.. Dattapokhari	.. Reservoir	..	500	10.50
6	Do.	.. Khandapada	.. Kendua	.. Reservoir	..	300	10.50
7	Do.	.. Khandapada	.. Gayapathar	.. Reservoir	..	250	8.75
8	Do.	.. Rampur	.. Randa	.. Reservoir	..	550	19.25
					Total	..	3,800 1,33.00
					i. e.	..	1,520 Hects. i.e. 1.33 Crores.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	PHULBANI	.. Baliguda	.. Sudura	.. Reservoir	..	200	7-00
2	Do.	.. Balliguda	.. Sarakhama	.. Reservoir	..	200	7-00
3	Do.	.. Tumudibandh	.. Purkingarh	.. Reservoir	..	300	10-50
4	Do.	.. Kantamal	.. Phamankhol	.. Reservoir	..	5,000	100-00
5	Do.	.. Kantamal	.. Parher	.. Reservoir	..	600	21-00
6	Do.	.. Kantamal	.. Dhilabari	.. Reservoir	..	2,000	70-00
7	Do.	.. Kantamal	.. Mundra	.. Reservoir	..	300	10-50
8	Do.	.. Kantamal	.. Loisingha	.. D/W	..	1,000	20-00
9	Do.	.. Daringabadi	.. Godapur	.. Reservoir	..	1,000	35-00
10	Do.	.. Daringob di	.. Simabadi	.. Reservoir	..	1,350	47-00
11	Do.	.. Daringabadi	.. Sonepure	.. Reservoir	..	500	17-50
12	Do.	.. Raikia	.. Karadanalla	.. D/W	..	1,200	24-00
13	Do.	.. Tikabaili	.. Garduvigaon	.. Reservoir	..	400	12-00
14	Do.	.. Tikabali	.. Damigudari	.. Reservoir	..	500	17-50
15	Do.	.. Tikabali	.. Gudugudari	.. Reservoir	..	300	10-50
16	Do.	.. Tikabali	.. Bankamajore	.. Reservoir	..	600	21-00

17	Do.	.. Boud	.. Halimunda	- Reservoir	..	300	10-50
18	Do.	.. Boud	- Badajore	D/W	..	2,000	40-00
19	Do.	- Phiringia	.. Gopingia	.. Reservoir	-	400	14-00
20	Do.	.. Harabhanga	.. Pramakarnaba	Reservoir	..	1,000	35-00
21	Do.	.. Harabhanga	- Palasakunti	.. Reservoir	..	600	21-00
22	Do.	.. Harabhanga	.. Adhinigarh	.. Reservoir	..	1,000	35-00
23	Do.	.. Phulbani	.. Kanjinalla	.. Reservoir	..	400	14-00
24	Do.	.. Phulbani	.. Kanjineda	- Reservoir	..	300	10-50
25	Do.	.. Khajuripada	.. Sitabudari	.. Reservoir	-	400	14-00
26	Do.	.. Chhakapada	.. Paitagaon	.. Reservoir	..	1,500	52-50
27	Do.	.. Kotagarh	.. Durgapanga	.. Reservoir	..	1,000	35-00

Total .. 24,350 7,12-00

9,740 Hects.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	SAMBALPUR	.. Rairakhol	.. Bahajore	.. Reservoir	..	750	26-00
2	Do.	.. Do.	.. Mahamal	.. Do.	..	100	3-50
3	Do.	.. Do.	.. Bavabanka	.. Do.	..	1,000	35-00
4	Do.	.. Naktideol	.. Hitasara	.. D/W	..	1,920	38-00
5	Do.	.. Do.	.. Kantiati	.. D/W	..	1,5000	30-00
6	Do.	.. Jamankora	.. Kadalipal	.. Reservoir	..	500	17-50
7	Do.	.. Kuchinda	.. Laikera	.. Do.	..	1,000	20-00
8	Do.	.. Gaisilate	.. Darpanjore	.. D/W	..	900	31-50
9	Do.	.. Padmapur	.. Khairatikira	.. Reservoi	..	1,000	35-00
10	Do.	.. Do.	.. Badimai	.. Do.	..	500	17-50
11	Do.	.. Paikamal	.. Akshjharan	.. Do.	..	400	14-00
12	Do.	.. Jujumara	.. Deojharana	.. Do.	..	650	23-00
13	Do.	.. Sohella	.. Jhavadamuda	.. Do.	..	250	9-00
14	Do.	.. Laikera	.. Hatiansallah	.. D/W	..	2,6000	52-00
						13,050	3,52-00
						5,220 Hectores	

1	SUNDARGARH	..	Bonai	..	Kasada	..	Reservoir	..	300	10-50
2	Do.	..	Do.	..	Subalaya	..	Do.	..	1,200	42-00
3	Do.	..	Do.	..	Bhawanipur	..	Do.	..	200	7-00
4	Do.	..	Do.	..	Sarasarakata	..	Do.	..	200	7-00
5	Do.	..	Do.	..	Sahidia	..	D. W.	..	350	7-00
6	Do.	..	Hemagiri	..	Gauniguda	..	Reservoir	..	800	28-00
7	Do.	..	Do.	..	Kurnsinallah	..	Do.	..	1,900	66-50
8	Do.	..	Do.	..	Singarmunda	..	Do.	..	500	17-50
9	Do.	..	Do.	..	Masinajore	..	Do.	..	1,200	42-00
10	Do.	..	Do.	..	Ghagarpalli	..	Do.	..	2,400	84-00
11	Do.	..	Do.	..	Sitampur	..	Do.	..	200	7-00
12	Do.	..	Do.	..	Satjore	..	Do.	..	300	10-50
13	Do.	..	Do.	..	Dalewar	..	Do.	..	250	8-75
14	Do.	..	Do.	..	Kulabiro	..	Do.	..	1,000	35-00
15	Do.	..	Lepripada	..	Bartewgra	..	Do.	..	1,000	35-00
16	Do.	..	Bargaon	..	Phulabadi	..	Do.	..	200	7-00
17	Do.	..	Tangarpalli	..	Kanakajore	..	Do.	..	600	21-00
18	Do.	..	Do.	..	Petkijore	..	Do.	..	150	5-00
19	Do.	..	Bargaon	..	Sahajabahal	..	Do.	..	300	11-00
20	Do.	..	Do.	..	Bangarkochara	..	Do.	..	300	10-50

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
21	SUNDERGARH	.. Bonai	.. Burgaon	.. Reservoir	..	1,000	35-00
22	Do.	.. Do.	.. Ghuraliara	.. Do.	..	1,800	63-00
23	Do.	.. Do.	.. Turturi	.. Do.	..	1,800	63-00
24	Do.	.. Subdega	.. Meghawamunda	.. Do.	..	150	5-00
25	Do.	.. Do.	.. Teljore	.. Do.	..	250	8-75
26	Do.	.. Do.	.. Kurunkela	.. Do.	..	2,200	77-00
27	Do.	.. Koido	.. Sanji	.. D. W.	..	3,000	60-00
28	Do.	.. Do.	.. Lodua	.. Do.	..	2,400	48-00
29	Do.	.. Do.	.. Karonallah	.. Do.	..	700	14-00
30	Do.	.. Do.	.. Gamua	.. Reservoir	..	200	7-00
31	Do.	.. Rajgangpur	.. Nikitijore	.. D. W.	..	1,300	26-00
32	Do.	.. Bisra	.. Dhatkdhi	.. Reservoir	..	100	3-50
33	Do.	.. Do.	.. Jareikela	.. Do.	..	100	5-00
34	Do.	.. Kutra	.. Bavijhavanollah	.. Do.	..	2,200	77-00
35	Do.	.. Do.	.. Kusumadagi	.. Do.	..	1,000	35-00
36	Do.	.. Nuagaon	.. Godari	.. Do.	..	100	3-50
37	Do.	.. Batimukora	.. Podabhamunda	.. Do.	..	800	28-00
38	Do.	.. Do.	.. Kurli	.. Do.	..	150	5-00
39	Do.	.. Do.	.. Masimallah	.. Do.	..	1,200	42-00

40	Do.	..	Kuarnunda	..	Bijspada	..	Do.	..	1,300	45.50
41	Do.	..	Tangarpolli	..	Saraswatinallah	..	Do.	..	1,000	35.00
42	Do.	..	Tangarpalli	..	Karamdini	..	Do.	..	1,000	35.00
43	Do.	..	Hindri	..	Jharjhar	..	Do.	..	1,200	42.00
44	Do.	..	Do.	..	Ghagarpalli	..	Do.	..	2,000	70.00
45	Do.	..	Do.	..	Basundhara	..	D. W.	..	5 000	1,00.00
46	Do.	..	Bonaigarh	..	Kuradi	..	Do.	..	3,000	60.00
47	Do.	..	Kuarnunda	..	Raminalla	..	Reservoir	..	750	26.59
									49,100	14,82.00
									19,640	Hects.

ANNEXURE III

I. T. D. P. Wise breakup of Special Central Assistance (S. C. A.) for Minor Irrigation Projects during medium term Sub-Plan.

1978—83

Serial No.	Name of I. T. D. P./T. D. A.	Proposed breakup of Rs 700 lakhs S. C. A. for 6th Plan.	
(1)	(2)	(3)	
1	Koraput	53.40	} 207.60
2	Jaypore	29.70	
3	Malkangiri	41.50	
4	Nawarangapur	59.30	
5	Rayagada	23.70	} 154.20
6	Baripada	59.30	
7	Karanja	29.70	
8	Kaptipada	23.70	
9	Rairangpur	41.50	} 100.00
10	Sundargarh	53.40	
11	Bonai	23.70	} 41.50
12	Panposh	23.73	
13	Keonjhar	23.70	} 41.50
14	Champua	17.80	
15	Kuchinda	17.80	17.80
16	Nilgiri	6.00	6.00
17	T. Rampur	11.90	11.90
18	Phulbani	17.80	} 41.50
19	G. Udayagiri	23.70	
20	Paralakhemundi, T. D. A.	29.70	29.70
21	Balliguda, T. D. A.	29.70	29.70
22	Keonjhar, T. D. A.	17.80	17.80
23	Gunpur, T. D. A.	41.50	41.50
		700.00	

**TENTATIVE LIST OF MINOR IRRIGATION PROJECTS FOR MEDIUM TERM SUB-PLAN 1978—83
(UNDER SPECIAL CENTRAL ASSISTANCE)**

ABSTRACT

Serial No.	District	No. of Projects	Approximate cost in lakh	Approximate ayacut in acres		Remarks
				Kharif	Rabi	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Koraput	28	265.00	9,980	1,420	Including Gunpur T. D. A.
2	Mayurbhanj	21	195.10	6,360	1,460	
3	Sundargarh	6	112.50	3,650	1,050	
4	Keonjhar	5	73.50	2,400	500	Including Keonjhar T. D. A.
5	Sambalpur	8	22.90	1,030	—	
6	Balasore	2	8.50	250	90	
7	Kalahandi	1	15.00	500	100	
8	Phulbani	6	38.50	1,595	150	Including Baligada T. D. A.
9	Ganjam	5	39.00	1,200	100	For Pariakhemundi T. D. A.
		82	770.00	26,965 (10,786 ha)	4,870 (1,948 ha)	

Sl. No.	District	Block	I. T. D. P.	Name of Project	Approximate cost in lakhs of Rs.	Approximate ayacut area in acres		Remarks
						Kharif	Rabi	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	KORAPUT	Laxmipur	Koraput	Laxmipur	20.50	650	150	
2	Do.	Dasmantapur	Do.	Dasmantapur	15.00	400	200	
3	Do.	Tentulikhunti	Nawarangpur	Kondaguda	7.50	250	50	
4	Do.	Rayagada	Rayagada	Bisunguda	25.00	800	200	
5	Do.	Kasipur	Do.	Maikanch	9.00	300	50	
6	Do.	Kolanara	Do.	Randikona	22.50	800	100	
7	Do.	Khairput	Malkangiri	Pandraguda	10.00	350	50	
8	Do.	Do.	Do.	Gumaribhata	6.00	200	50	
9	Do.	Baipariguda	Jeypore	Doraput	11.50	400	50	
10	Do.	Kudumuluguma	Malkangiri	Doraguda	25.00	900	100	
11	Do.	Koraput	Koraput	Orangi	9.00	300	50	
12	Do.	Eodia	Malkangiri	Gotali	7.50	250	50	
13	Do.	Mathili	Do.	Mathili	12.00			

14	Do.	.. Nawarangpur	.. Nawarangpur	.. Pilaka	..	6:00	200	50
15	Do.	.. Podia	.. Malkangiri	.. Podia	..	5:00	200	..
16	Do.	.. Katimela	.. Malkangiri	.. Kalimela	..	2:50	100	..
17	Do.	.. Kolnara	.. Rayagada	.. Jharidi (D. W.)	..	6:50	400	60
18	Do.	.. Laxmipur	.. Koraput	.. Marbaiguda (Imp.)	..	1:00	80	..
19	Do.	.. Boriguma	.. Jeypore	.. Bairagipadar	..	4:10	200	..
20	Do.	.. Bandhugaon	.. Koraut	.. Dandabadi	..	2:50	200	..
21	Do.	.. Mathili	.. Malkangiri	.. Bhegiguda	..	2:50	100	..
22	Do.	.. Podia	.. Malkangiri	.. Singanguda	..	6:00	250	..
23	Do.	.. Kolnara	.. Rayagada	.. Ravalkona	..	5:00	400	..

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GUNUPUR T. D. A.

24	Koraput	.. Gunupur	.. Gunupur	.. Peta D. W.	..	1:50	100	..
25	Do.	.. Padampur	.. Do.	.. Totaguda D. W.	..	3:60	400	20
26	Do.	.. Gudari	.. Do.	.. Merenda Res	..	3:20	200	30
27	Do.	.. Bissameuttack	.. Do.	.. Sikabandha	..	10:00	300	50
28	Do.	.. Do.	.. Do.	.. Katabhata	..	25:10	750	110

2,65:00 9,980 1,420

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	MAYURBHANJ	Khunta	.. Kaptipada	.. Gomei	..	25-00	800	200
2	Do.	.. Bangriposi	.. Baripada	.. Dasisoi	..	10-00	300	100
3	Do.	.. Bangriposi	.. Baripada	.. Gokinpal	..	25-00	800	200
4	Do.	.. Karanjia	.. Karanjia	.. Bhirol (Imp.)	..	8-00	200	..
5	Do.	.. Karanjia	.. Karanjia	.. Baghalata	..	10-00	350	50
6	Do.	.. Badasahi	.. Baripada	.. Rajabhandha (Imp.)	..	5-00	130	100
7	Do.	.. Badasahi	.. Baripada	.. Kuldiha	..	5-00	150	50
8	Do.	.. Muruda	.. Baripada	.. Jhankria (Imp.)	..	10-00	350	50
9	Do.	.. Bangriposi	.. Baripada	.. Donbaskhal (Imp.)	..	9-00	300	50
10	Do.	.. Bangriposi	.. Baripada	.. Bharsahi (Imp.)	..	5-50	200	30
11	Do.	.. Muruda	.. Baripada	.. Oantiamuha (Imp.)	..	6-00	200	50
12	Do.	.. Thakurmunda	.. Karanjia	.. Kirkichiapal (Imp.)	..	2-00	200	..
13	Do.	.. Khunta-II	.. Kaptipada	.. Gudaha (Imp.)	..	6-00	200	50
14	Do.	.. Khunta-II	.. Kaptipada	.. Ghantasila (Imp.)	..	9-50	280	180
15	Do.	.. Kaptipada	.. Kaptipada	.. Rajabandha (Imp.)	..	4-40	150	30
16	Do.	.. Udala	.. Kaptipada	.. Nagaon (Imp.)	..	9-50	300	100
17	Do.	.. Jamada	.. Rairangpur	.. Manbir (Imp.)	..	6-00	250	..
18	Do.	.. Thakurmunda	.. Karanjia	.. Khupalan (Imp.)	..	2-80	100	20

19	Do.	.. Murada	.. Baripada	.. Kukudajodi	..	28-90	800	200
20	Do.	.. Karanja	.. Karanja	.. Chandaposi	..	3-75	150	..
21	Do.	.. Jashipur	.. Karanja	.. Jamunai	..	3-75	150	..

						1,95-10	6,360	1,460
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1	SUNDERGARH	.. Koira	.. Bonai	.. Dhamandhar	..	22-50	800	300
2	Do.	.. Gurundia	.. Bonai	.. Kantapali	..	25-00	800	200
3	Do.	.. Hemagiri	.. Sundergarh	.. Chatanjore	..	25-00	800	200
4	Do.	.. Sundergarh	.. Sundergarh	.. Gaijore	..	22-50	700	200
5	Do.	.. Subdega	.. Suudergarh	.. Kiralaga	..	11-00	350	100
6	Do.	.. Tangarpali	.. Sundergarh	.. Gambharidihi	..	6-50	200	50

						1,12-50	3,650	1,050
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	KEONJHAR	.. Ghatgaon	.. Keonjhar	.. Barai	..	24.00	800	200
2	Do.	.. Jhumpura	.. Champua	.. Kutgaon	..	17.50	600	100
Keonjhar T. D. A.								
3	Do.	.. Harichandapur	.. Keonjhar	.. Kureinjodi	..	15.00	500	100
4	Do.	.. Banspal	.. Keonjhar	.. Dudaposi	..	7.00	200	50
5	Do.	.. Banspal	.. Keonjhar	.. Odal	..	10.00	300	50
						73.50	2400	500
1	SAMBALPUR	.. Kuchinda	.. Kuchinda	.. Parabhandi (Imp.)	..	1.80	80	..
2	Do.	.. Gobindapur	.. Kuchinda	.. Baribagarposh (Imp.)	..	3.00	180	..
3	Do.	.. Gobindapur	.. Kuchinda	.. Baladanala (Imp.)	..	2.40	100	..
4	Do.	.. Gobindapur	.. Kuchinda	.. Dharmasagarmanda (Imp.)	..	2.60	110	..
5	Do.	.. Kuchinda	.. Kuchinda	.. Kaintarakata (Imp.)	..	2.40	100	..
6	Do.	.. Kuchinda	.. Kuchinda	.. Gocharkata (Imp.)	..	2.50	120	..
7	Do.	.. Gobindapur	.. Kuchinda	.. Jurbaga-Badarkata	..	2.40	100	..
8	Do.	.. Kuchinda	.. Kuchinda	.. Barriguda (Imp.)	..	5.80	240	..
						23.90	1030	..

1	BALASORE	.. Nilgiri-I	.. Nilgiri	.. Jalaghai	..	5-00	150	50
2	Do.	.. Nilgiri-I	.. Nilgiri	.. Naranpur	..	3-50	100	40
						8-50	250	90
1	KALAHANDI	-- Lanjigarh	.. T. Rampur	.. Dakiguda	..	15-00	500	100
1	PHULBANI	-- Phiringia	.. Phulbani	.. Kanipenu	..	11-30	400	150
2	Do.	.. Phiringia	.. Phulbani	.. Gopingia	..	8-50	400	..
3	Do.	.. Phulbani	.. Phulbani	.. Dakangi	..	2-20	245	..
Baliguda T. D. A.								
4	Do.	.. Baliguda	.. Baliguda T. D. A.	.. Chaugudibali	..	7-50	250	..
5	Do.	.. Baliguda	.. Baliguda T. D. A.	.. Godapinga	..	3-00	100	..
6	Do.	.. Baliguda	.. Baliguda T. D. A.	.. Srirampur	..	6-00	200	..
						38-50	1595	150

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Parlakhemendi T. D. A.								
1	GANJAM	.. Mohana	.. Parlakhemendi	.. Marichan	..	6.00	200	..
2	Do.	.. Mohana	.. Parlakhemendi	.. Damapat	..	6.00	200	..
3	Do.	.. Mohana	.. Parlakhemendi	.. Badakhani	..	15.00	450	50
4	Do.	.. R. Udayagiri	.. Parlakhemendi	.. Tanosal	..	3.00	100	..
5	Do.	.. Mohana	.. Parlakhemendi	.. Jhadabandha	..	9.00	250	50
						39.00	1,200	100

ANNEXURE III
FIVE-YEAR PLAN 1978-83
Selected Programme—Achievement & Targets

Serial No.	Item	Unit	Actual achievement		Target
			1973-74	1977-78	1982-83 (Tentative)
(1)	(2)	(3)	(4)	(5)	(6)
1	Minor Irrigation (flow)	.. 000 hectares	.. 50.00	10.00	30.00
2	Minor Irrigation (lift)	.. Ditto	.. 32.10	61.64 (cumulative)	201.44 (cumulative)

(ii) Minor Irrigation (Lift)

13.17. Orissa has a large reserve of Ground water potential. A preliminary groundwater survey for the entire State has been completed. The results show that about 10,000 Nos. of public tubewells, 28,000 Nos. of filter point tubewells and 5.5 lakh standard open wells can be successfully dug utilising the available groundwater potential to extend Irrigation facilities to about 28.00 lakh hectares of land (17.00 lakh hectares in kharif + 11.00 lakh hectares in Rabi) lying in different parts of the State. Similarly the perennial rivers in the State annually carry about 9.5 million hectare meter of water into the Bay of Bengal. By lifting up 5% of this quantity it is possible to provide assured irrigation facilities to nearly 9.5 lakh hectares of land. River lift projects can be located along the bank of important rivers to lift water and irrigate the adjacent areas.

13.18. The main points in favour of going for a massive programme of lift irrigation are that the programme is rural oriented and it also benefits the small and marginal farmers. It provides adequate employment opportunity for both skilled and unskilled labourers, helps in the mobilisation and optimum utilisation of basic resources like groundwater and manpower of the State and would tap to the maximum extent possible the sources of institutional finance.

13.19. The progress so far achieved in developing the L. I. potential of the State through different sources is briefly stated in Annexure-I.

13.20. The Irrigation potential so far created through construction of different types of L. I. Project is not much compared to the potential available in the State.

13.21. The average annual rainfall is considered more or less adequate for the main kharif crop i. e. paddy, but due to unfavourable topographical features, much of the rain water is lost through surface and sub-surface run off. The distribution of rainfall is also not according to the normal requirement of the crop during the Kharif season. The sub-regional variation has been observed to vary between 48 to 93% from the annual average. Analysis of the rainfall data indicate that drought occurs either in partial or in full every year in some parts of the State or other necessitating supplementary provision of irrigation to ensure stable agricultural production.

13.22. The progress achieved in respect of creation of Lift Irrigation Potential during the 5th Five Year Plan (1974-78) through construction of different types of L. I. Projects are stated in Annexure II.

13.23. From Annexure-II it will be seen that during the fifth Plan period the gross Lift Irrigation Potential created is of the order of 1, 52, 600 hectares.

13.24. The World Bank Team which visited Orissa during the year 1976 have made an appraisal study. They have recommended to extend loan assistance of Rs. 118.00 crores to take up installation of 2, 250 public tubes-wells, 15,000 filter point tube-wells and 2.00 lakh Nos. of dug wells (of which 10,000 will be energised) in course of five years. This programme has started since 1976-77 and it will be continued upto the year 1981-82. Thus it will become a part of the sixth Plan programme for taking up different types of L. I. Projects in the State.

13.25. During sixth Plan period it is proposed to create a gross irrigation potential of 7315.04 hectares (Kharif 484,916 Hect. Rabi 246,588 Hect.) The details are furnished in Annexure-III

13.26. Small and marginal farmers will be technically guided as regards selection of sites, installation and energisation of irrigation wells. Since a high initial cost is involved in the establishment of such irrigation structures and it would be difficult on the part of the small farmers to repay the principal and interest out of the limited additional income to be generated through increase in productivity through irrigation it is proposed to subsidise the capital expenditure by 25% for small farmers 33 1/3% for marginal farmers and 50% for poor tribal farmers.

13.27. Where the L. I. Projects (Tube-well or river lift projects) will be taken up on co-operative basis by small or marginal farmers it is proposed to grant 75% of the capital cost as subsidy to the cultivators. It would be desirable to allow such a high level of subsidy at the starting point of a L. I. project to be owned co-operatively by a Group of farmers as compared to heavy recurring expenditure on maintenance and operation of publicly owned L. I. projects.

13.28. It is programmed to energise 1,00,000 Nos. of pumpsets in about 97,600 L. I. points (77,031 Electrified open wells, 15,000 Filter point Tube wells, 5406 public Sector L. I. projects & 200 Co-operative L. I. Projects) during the sixth Plan period. The finance needed to energise the Irrigation wells would be partly availed in the shape of institutional finance and partly
(7B-18)

covered by sanction under the R. E. Programme. The State will subsidise the cost of Low Transmission line up to 1 Km. from the existing sub-station to any irrigation well. The extension power line to energise L. I. Projects including village electrification will involve in total a sum of Rs. 170 crores (125 crores from plan and other sources, 45 crores through Institutional finance by A. R. D. C.).

13-29. The L. I. Projects to be owned in public sector will be taken up through Orissa Lift Irrigation Corporation. During the sixth Plan it is proposed to take up installation of 5,406 nos. L. I. Projects (3043 tubewells * 2363 River Lift Projects) to create irrigation potential for 2,23,680 hectares (Kharif 1,89,800 * Rabi 83,880). The capital expenditure involved in the installation of these new L. I. Projects has been estimated to be Rs. 52.75 crores out of which Rs. 45.21 crores will be availed as institutional finance and the remaining Rs. 7.54 crores will be met from the State Plan provision, towards margin money.

13-30. By now the Orissa Lift Irrigation Corporation has submitted project reports costing Rs. 19.98 crores to Agricultural Refinance and Development Corporation to avail institutional finance for 2121 nos. of L. I. Projects (1916 T. W. * 205 River Lift Projects). New Schemes will be prepared and submitted to achieve the target for the 6th Plan period.

13-31. It is estimated that in total an investment of Rs. 4303 crores will be needed to achieve the target fixed up for the sixth Plan period. The details are furnished in Annexure IV (enclosed). It consists largely three components namely (i) equity to meet the borrowers' margin and to repay the loan availed details of which can be seen in Annexure V (ii) subsidy on water rate which represents the differences between the actual expenditure to be incurred in the maintenance and operation of L. I. Project during the plan period and the receipt on account of water rate details of which can be seen in Annexure-VI and (iii) grant to continue Ground Water Survey and designing of Ground Water structures, details of which can be seen in Annexure-VII.

13-32. Intensive phase of Ground Water Survey has been started in four different tracts of the State (tertiary tract of Mayurbhanj district, basin of river Rushikulya and Bansadhara sub-basins of river Zank and Indira). The Ground Water Cell (with four hydrological divisions existing and 1 Hydrological division proposed) will continue the work of intensive phase of Ground Water Survey in selected areas during the sixth Plan period. It is estimated that they will cover an area of 50,000 Sq. Kms. by the end of the sixth Plan period under intensive phase of Ground Water Survey. The expenditure involved for this work has been estimated to be Rs. 5.42 crores.

13-33. To improve the design structures of the existing Irrigation wells taken up both in private and public sector as well as to collect the basic hydrological data, a centrally sponsored scheme is being continued from the 5th Plan period. The expenditure under this scheme during the sixth Plan period is estimated to be Rs. 1.38 crores for which Rs. 0.69 crores will be availed as Central assistance and the remaining amount be provided for in the State Plan.

13-34. Under the World Bank Programme it has been proposed to take up installation of 65 nos. of monitoring wells in the alluvial and erosional soil where Ground water development programme through installation of different types of irrigation wells will be taken up in an intensive manner. As per the approved programmes under World Bank, this includes a provision of Rs. 1.44 crores over a period of Five Years during the sixth Plan period. The details can be seen in Annexure-IV.

13-35. The areas which can not receive flow irrigation facilities have been selected for location of public sector L. I. Projects. The number of projects proposed and the extent of irrigation potential to be created for important problem areas of the State can be seen at Annexure VIII.

Programme of Lift Irrigation in the Tribal Sub-Plan areas

13-36. Quite a large part of the State are inhabited by the tribals. Up till now 423 Nos. of public L. I. Projects (90 Tubewells × 333 River Lift) have been installed in the tribal Sub-Plan area creating irrigation potential for 17,757 hectares. During the fifth Plan period 171 L. I. Projects (Tubewell 55 river lift 116) were installed at an expenditure of Rs. 215.31 lakhs (institutional finance Rs. 116.06 lakhs + Rs. 79.89 lakhs plan provision - special central assistance Rs. 88.36 lakhs) to create irrigation potential for 6840 hectares (Kharif 4275 hectares + Rabi 2565 hectares). During the sixth Plan period it is proposed to take up installation of 3.0 Nos. of tubewell projects

and 1200 Nos. of river lift projects to create irrigation potential for 57,600 hectares at an estimated cost of Rs. 25.82 crores (institutional finance Rs. 12.68 crores + State Plan provision Rs. 12.79 crores + Centrally sponsored scheme Rs. 0.35 crores). The details are furnished in Annexure IX (enclosed).

Employment potential to be created through L. I. Projects to be installed in public sector

13.37. The programme of Lift Irrigation being mostly rural oriented, it is likely to create adequate employment opportunity for the rural agricultural labourers on long term basis in addition to creation of the scope of employment for scientists and technicians during the execution and operation of the proposed projects. The employment opportunity to be created has been worked out for different category of personnels as follows :

Sl. No.	Category of persons to be employed	Employment opportunities in term of man years
		Period and execution of projects during 6th Plan
(1)	(2)	(3)
1	Scientists and Engineers	735
2	Technicians	4003
3	Administration	1,848
4	Skilled labourers	18,751
5	Unskilled labourers	23,635

13.38. Besides the above, by end of sixth Plan period the employment opportunities likely to be created on a long-term basis is estimated to be @ 61,000 man years per annum for unskilled agricultural labourer on account of farming operation and 4,463 for skilled technicians to be employed for operation and maintenance of the proper L. I. Projects.

(iii) Dug wells

According to a study made by the State Ground Water Organisation 5.5 lakh dug wells of standard size fitted with pump sets are feasible in the State. By the end of June, 1978 2.36 lakh dug wells have been completed. About 6,000 dug wells have been energised. The Irrigation potential from these wells is about 2 lakh hectares. During the sixth-Plan period it is proposed to take up 3 lakh dug wells out of which about 77,000 will be energised. It is expected that these dug wells will provide additional irrigation potential of about 4.26 lakh hectares. Most of these wells will be financed by Co-operatives and others will be financed by the Commercial Banks.

ANNEXURE V

Minor Irrigation Programmes—Achievements and targets
(Flow & Lift Irrigation)

('000 hectares)

Benefits	Surface water scheme	Ground water schemes		Total		
Gross area under Minor Irrigation after deducting depreciation						
(I) 1973-74 (actuals)	Tube wells & RLP					
(a) (i) Potential (flow)	50.00					
(ii) Potential (Lift)	32.10					
(b) (i) Utilisation (Flow)	..					
(ii) Utilisation (Lift) (Area Irrigated)	9.02					
(II) 1977-78 (actuals)						
(a) Potential (Lift)	61.64					
Potential (Flow)	10.00					
(b) Utilisation (lift) (Area Irrigated)	23.70					
(III) 1982-83 (targets)						
(a) Potential (flow)	30.00					
Potential (lift)	..		201.44			
(b) Utilisation (lift)	..		133.51			
2 Physical Programme	Up to 1973-74	Up to 1977-78	Up to 1982-83			
(a) Surface water Schemes						
(i) Flow Schemes	2,264	2,406	2,683			
(ii) Lift Schemes	923	1,652	4,015			
(b) Ground Water Scheme						
(i) Dug wells (private)		11,991	..			
(ii) Tube wells	457	1,164	4,207			
(iii) Electric Pump sets	..	2,260	..			
3. Outlays and Expenditure						
	Fifth Plan			(Rs. in lakhs) Five-Year Plan, 1978-83		
	State	Institution	Private	State	Institution	Private
1. Surface water Schemes						
(i) Flow Schemes	1,978.52	8,500.00
(ii) Lift Scheme (F/W & RLP)	516.40	407.73	..	3,544.81	4,521.20	..
2. Investigation of Minor Irrigation Schemes						
Flow Schemes	103.21	500.00
Lift Schemes	278.87	755.19

ANNEXURE I

POTENTIAL SO FAR BUILT UP THROUGH INSTALLATION OF DIFFERENT TYPES OF LIFT IRRIGATION PROJECTS

Sl. No.	Category of L. I. Projects	Nos. existing	Irrigation potential created in Hec.			Remarks
			Kharif	Rabi	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Open wells with indigenous water Lift.	1,81,689	72,675	47,240	119,915	} Owned by individual farmers or a group of farmers.
2	Open wells energised	5,651	14,125	8,475	22,600	
3	Filter point T/V projects.	500	1,250	750	2,000	
4	L. I. Projects (Tube-wells and river lift) owned by co-operatives.	10	200	120	320	
5	Public Tube-wells ..	1,164	} 61,640	36,990	98,630	Owned by O. L. I. C.
6	Public river lift projects.	1,652				
Total		190,666	149,898	93,575	243,465	

ANNEXURE II

POSITION OF L. I. PROJECTS INSTALLED AND ENERGISED BOTH IN PRIVATE AND PUBLIC SECTOR DURING FIFTH PLAN PERIOD

Sl. No.	Category of L. I. Projects	Nos. installed and energised	Irrigation potential created in Hea.			Capita expenditure involved in lakh of Rs.		
			Kharif	Rabi	Total	Institutional Finance	Plan Resources	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Open wells with indigenous water lift.	137,059	54,825	25,635	88,460	ARDC. 966	..	..
2	Open wells energised	5,641	14,125	8,475	22,600	Other sources 1,668	..	..
					Total	2,634		
3	Filter Point tube-wells	500	1,250	750	2,000	..	..	..
4	L. I. Ps. owned by Co-ops.	7	170	100	270	..	..	..
5	Public Tube-well ..	707	29,540	17,730	47,270	407.73	509.63	917.36
6	Public River Lift Projects.	729						
	Total	144,643	99,910	52,690	152,600	3,041.73		

ANNEXURE III

PROGRAMME OF INSTALLATION AND ENERGISATION OF L. I. PROJECT
BOTH IN PUBLIC & PRIVATE SECTOR DURING SIXTH PLAN

Sl. No.	Category of Projects	Nos. to be installed or energised	Irrigation potential to be created in hectares		
			Kharif	Rabi	Total
(1)	(2)	(3)	(4)	(5)	(6)
1	Open wells with indigenous water lift.	223,000	89,200	29,700	118,900
2	Electrified open wells ..	77,031	205,416	102,708	308,124
3	Filter point tube-wells ..	15,000	37,500	22,500	60,000
4	Lift Irrigation pumps owned by co-operatives.	200	13,000	7,800	20,800
5	Public tube-wells ..	3,043	139,800	83,880	223,680
6	River lift projects ..	2,363			
Total		320,637	484,916	246,588	731,504

ANNEXURE IV

TOTAL ESTIMATED REQUIREMENT OF RESOURCES UNDER DIFFERENT
HEADS OF EXPENDITURE DURING SIXTH PLAN PERIOD

Year	Equity	Working capital	Subsidy for failed T. W.	Water-rate subsidy	Construction of Divisional Building	Ground Water Survey and Investigation including World Bank Scheme.	Total (lakhs Rs.)	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1978-79	142.05	87.54	1.00	240.75	..	108.66	580.00	
1979-80	217.10	212.46	1.00	131.39	9.17	180.85	751.97	
1980-81	310.10	..	1.00	88.75	7.50	176.61	783.96	
1981-82	409.10	..	1.00	424.98	..	143.86	978.94	
1982-83	508.10	..	1.00	550.82	..	145.21	1,205.13	
	1,586.45	300.00	5.00	1,636.69	16.67	755.19	4,300.00	

ANNEXURE V

EQUITY REQUIREMENT DURING SIXTH PLAN PERIOD

Year	Energisation Programme	Estimated requirement of Institutional Finance in lakhs of rupees	Estimated requirement of Equity (Rs. in lakhs)			
			Borrowers Margin	* Escalation	Annual repayment of loan	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1978-79	1006	810.00 } 39.20 } equipment	90.00 } 7.05 }	45.00	..	142.05
1979-80	1100	999.00	111.00	55.50	50.60	217.10
1980-81	1100	891.00	99.00	49.50	161.60	310.10
1981-82	1100	891.00	99.00	49.50	260.60	409.10
1982-83	1100	891.00	99.00	49.50	359.60	508.10
Total	5406	4521.20	505.05	249.00	832.40	1586.45

* To meet the difference between actual cost to be incurred and the amount sanctioned by Banks.

ANNEXURE VI
REQUIREMENT OF SUBSIDY DURING SIXTH PLAN FOR PLAN PROJECTS

(Rs. in lakhs)

Year	Operable projects	Total Estimate cost of O/M	Repayment of principal	Interest	Total	Utilisation in lakh Ac.	Anticipated water-rate	Receipt from net subsidy required
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1978-79	1939	141.26	78.51	59.81	279.58	14.58	34.99	244.59
1979-80	1053	104.56	..	46.82	151.38	9.93	23.83	127
1980-81	2153	191.08	..	14.39	337.47	20.30	48.72	288.75
1981-82	3253	273.60	..	222.95	496.55	29.82	71.57	424.98
1982-83	4353	356.16	..	289.10	645.26	39.35	94.44	550.82
								1,636.69

ANNEXURE VII
ESTIMATED COST FOR THE GROUND WATER
SURVEY PROGRAMME DURING SIXTH PLAN

Year wise estimated requirement for 6th Plan period

Serial No.	Item of work	1978-79 (Rs. in (lakhs))			
		Establishment	T. & P.	Works	Total
(1)	(2)	(3)	(4)	(5)	(6)
1	Expenditure at the level of circle offices ..	3.25	0.50	..	3.75
2	Five Hydrological Divisions for continuing the intensive phase of groundwater Survey & Circle.	30.50	8.00	12.00	50.50
3	Exploratory drilling and installation of Exploratory-cum-production T/W.	..	..	..	..
4	Design and data collection division ..	2.95	0.80	2.00	5.75
5	Divisions for monitoring and demonstration of well technology.	14.78	17.68	16.20	48.66
	Total ..	..	..	..	108.66

1979-80				1980-81			
Establishment	T. & P.	Works	Total	Establishment	T. & P.	Works	Total
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
3.50	1.00	..	4.50	4.00	1.00	..	5.00
41.00	58.50	30.00	129.50	41.50	58.50	35.00	135.00
..	..	6.25	6.25	..	..	6.25	6.25
3.50	1.00	7.50	12.00	4.00	1.00	3.00	8.00
14.36	9.21	5.03	28.60	14.36	7.38	0.62	22.36
..	..	..	180.85	..	..	..	176.61

ANNEKURE VII
ESTIMATED CGST FOR GROUND WATER
SURVEY PROGRAMME DURING SIXTH PLAN

		Year wise estimated requirement for 6th Plan Period			
Serial No.	Item of work	1981-82 (Rs. in lakhs)			
		Establishment	T. & P.	Works	Total
(1)	(2)	(15)	(16)	(17)	(18)
1	Expenditure at the level of circle offices ..	4.50	1.00	..	5.50
2	Five Hydrological Divisions for continuing the intensive phase of Groundwater Survey and Circle.	42.00	26.00	32.00	100.00
3	Exploratory drilling and installation of Exploratory-cum-production T./W.	..	..	6.50	6.50
4	Design and data collection division ..	4.50	1.50	3.50	9.50
5	Divisions for monitoring and Demonstration of well technology.	14.36	7.38	0.62	22.36
	Total ..	..	..	..	143.86

1982-83				G. Total	
Establishment	T. & P.	Works	Total	Remarks	
(19)	(20)	(21)	(22)			(23)	(24)
4.75	0.75	..	5.50	24.25	Existing (Centrally Sponsored Scheme)
42.50	26.00	33.50	102.00	517.00	Existing 4 divisions and 1 is proposed
..	..	5.60	5.60	24.60	Proposed
4.75	1.50	3.50	9.75	45.00	Existing and approved under Centrally Sponsored Schemes.
14.36	7.38	0.62	22.36	144.34	Existing and approved under World Bank Programme.
..	..	..	145.21	755.19	

ANNEXURE VIII

PROBLEM AREAS OF THE STATE AND DISTRIBUTION OF PUBLIC SECTOR
LIFT IRRIGATION PROJECTS

Sl. No.	Name of the problem area	No. of projects to be installed	Irrigation potential to be created in hectares		
(1)	(2)	(3)	(4)		
1	Flood and cyclone-affected areas.	Tube-well	2,743	Khariff	92,850
		River lift	726	Rabi	55,710
		Total	3,469		1,48,560
2	Tribal sub-plan areas inhabited by socially backward people.	Tube-well	300	Khariff	36,000
		River lift	1,200	Rabi	21,600
		Total	1,500		57,600
3	Drought Prone areas of the State.	Tube-well	Nil	Khariff	10,950
		River lift	437	Rabi	6,570
		Total	437		17,520

ANNEXURE IX

FINANCIAL OUTLAYS UNDER TRIBAL SUB-PLAN

Sl. No.	Head of Development	Actual (1974-78)					1978-79	
		State Plan	Special Central Assistance	Institutional Finance	Centre and Centrally Sponsored Schemes	Total State Plan Outlay	Outlay from State Plan to the sub-Plan	Outlay from Special Central Assistance
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Minor Irrigation (L. I.).	79.89	18.36 (1974-75) only.	116.06	..	580.00	63.35	..

(Rs. in lakhs)

Agreed Outlay

1978-83 Proposed

Outlay from Institutional Finance	Outlay from Centre/Centrally Sponsored Schemes	Total	Total State Plan Outlay	Outlay from State Plan to the sub-Plan	Outlay from Special Central Assistance	Outlay from Institutional Finance	Proposed Outlay from the Centre/Centrally Sponsored Schemes	Total
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
100.94	..	164.29	4,300.00	1,279.00	..	1,268.00	35.00	2,582.00

CHAPTER 14

SOIL AND WATER CONSERVATION

14.1. In view of the fact that accelerated soil erosion has been posing serious problems for agricultural productivity in the State soil conservation measures have assumed a good deal of importance. By 'deduction' studies of the satellite imagery of the State taken in September '75, it has been estimated that out of 60,172 sq. miles, 28,223 sq. miles or 40% of the total area are under moderate to severe soil erosion. Soil erosion in different parts of Orissa results from a number of causes, the more important of which are the following :—

- (i) Practice of shifting or 'podu' cultivation in the predominantly tribal districts like Koraput, Phulbani, Keonjhar and Sundergarh inhabited by tribals.
- (ii) Erosion of crop lands in various parts of the State particularly up lands and the catchment areas of the river valley and irrigation projects.
- (iii) Sand casting and shifting of sand dunes in the coastal areas.

14.2. Large-scale destruction of forests, over grazing of pastures, faulty methods of agricultural practices and stream bank collapse contribute to the erosion hazards. During the Fifth Plan, soil conservation measures were undertaken both under the State and Central sectors. In the State sector the provision was for Rs. 340 lakhs. Out of this, the expenditure incurred during the four years ending 1977-78 has been of the order of Rs. 249 lakhs. Under the Centrally sponsored schemes a sum of Rs. 168.56 lakhs was spent during the four years of the Fifth Plan, 1978—83.

14.3. An area of 54,124 hectares was covered for various soil conservation measures besides the maintenance of plantations, over 7,500 hectares under the Centrally sponsored schemes. The achievement under various soil conservation programmes during the Fifth Plan period is indicated in the following table :—

Programme	Achievement till the end of Fourth Plan	Achievement during the Fifth Plan 1974-78	Cumulative coverage up to 1977-78
(1)	(2)	(3)	(4)
	Ha.	Ha.	Ha.
1. Agricultural land treatment (contour bunding, terracing, land shaping, land reclamation, amelioration of acid soils, etc.).	1,06,872	28,814	1,35,686
2. Plantation of cashew, coffee, sisal, shelter belt, coconanut, bamboo, Sabai.	34,207	9,940	44,147
3. Farm ponds, water harvesting structures, gully control, etc.	36,450 (729 Nos.)	15,050 (301 Nos.)	51,500 (1,030 Nos.)
4. Other soil conservation works	1,930	320	2,250
Total	1,79,459	54,124	2,83,583

14.4. In order to increase production from the crop land as well as from the waste lands (idle land) the pasture (Gochur) and the forest lands, a comprehensive and diversified land use programme on watershed management basis would be continued during the Sixth Plan period. With more emphasis laid on critical watersheds devastated by shifting cultivation and the catchment areas, soil conservation measures have so far mainly consisted of the following programmes :—

- (i) Plantation of cashewnut, sisal, bamboo, coffee and other miscellaneous trees on barren hills and Government waste lands.
- (ii) Contour bunding, field bunding, etc., on agricultural land.

- (iii) Gully control measures
- (iv) Water harvesting structures
- (v) Stream bank protection works
- (vi) Shelter belt and wind belt plantations with casurina, cashewnut, cocoanuts, etc.

14.5. Works are being executed on a priority basis in the watersheds of the catchments of three major river valley projects of Hirakud, Machkund and Rengali. Soil Conservation measures have also been taken up in the watersheds of Medium and Minor Irrigation Projects to prevent rapid silting of the reservoir.

14.6. The scheme of afforestation for Soil Conservation in coastal sand dunes is being executed by the State Forest Department in the coastal districts of Balasore, Ganjam and Puri. During the Fifth Plan period (1974--78) 699.2 hectares have been covered under the scheme with an expenditure of Rs. 7.69 lakhs. For the Sixth Plan period the target for afforestation in the coastal sand dunes is to cover 20,000 hectares with an outlay of Rs. 200.00 lakhs.

14.7. Strategy for the Sixth Plan period will be to concentrate on Integrated Watershed Management. While flood control and drainage programmes will be done through Irrigation & Power Department the Directorate of Soil Conservation will concentrate on schemes for control of erosion in the highly, humid river catchments and slopes under shifting cultivation by spreading natural vegetative cover in the non-culturable areas preferably with cashewnut, sisal and firewood species.

14.8. Where the Soil Conservation works are to be taken up on private lands, as far as practicable, commercially productive species like cashew, sisal, asan trees (for tussar works) Sabai grass, etc. will be attempted. Since the scope of these works are confined mostly to marginal lands, either capital subsidy or grant will have to be paid for initial non-productive years of growth, depending upon the economic status of the land owners. It is proposed to form a cashew development corporation which will implement the programme both in Government and in private lands. Funds for taking up plantations in Government areas and subsidies to farmers for plantations in private lands will be routed through this Corporation. Equity and working capital requirements will be met from plan allocations. Bulk of the funds will however come from sources of institutional finance. It is proposed to sponsor a Multi State Cashew Development Project during the Sixth Plan to cover an area of 35,000 hectares under public and private sectors. The programme will be entrusted to the proposed State Cashew Development Corporation and World Bank assistance will be sought for the purpose. World Bank assistance will be sought for watershed management programmes in the catchment areas of medium irrigation projects to save the reservoirs from rapid silting. Suitable training facilities for soil conservation staff in the Integrated Watershed Management programme will be arranged.

14.9. For scientific planning, it is necessary to have a basic data of the problem areas of the State. This knowledge can be had from the soil and land use survey which is being undertaken to collect data on soil, geology, topography, drainage, land cover management and land use. Under the Centrally Sponsored Scheme, a planning and monitoring cell is already functioning in the Directorate which will take up planning of various soil conservation works and watershed management plan by utilising the data collected during the survey. The soil survey work will be carried out in TDA, ITDP, DPAP areas besides the catchment of command areas. An amount of Rs. 73.20 lakhs will be spent for soil survey and testing during the Sixth Plan period.

Social Forestry and Farm Forestry

14.10. With a view to creating forest raw materials in degraded forest areas, waste lands, Panchayat lands and lands on the side of railway lines, roads and canals to meet the needs of fuel wood and small timber in rural areas and replacement of cow dung as fuel, programmes of Social forestry and Farm forestry will be taken up in selected areas.

14.11. The schemes proposed to be implemented during the Sixth Plan period can be grouped under the following categories :—

- (i) Soil conservation research, demonstration and training
- (ii) Taking up of soil survey in the areas susceptible to erosion like hill areas, Podu and ravaged areas.
- (iii) Watershed management in catchment areas of major medium irrigation projects

- (iv) Development of pastures through treatment of eroded land and Gochar lands
- (v) Utilisation of idle waste land and introduction of plantations like cashew, sisal and coffee
- (vi) Soil conservation on agricultural lands
- (vii) Amelioration of acid soils
- (viii) Control of shifting cultivation

14.12. Certain new schemes are also proposed to be taken up during the 6th Plan period. They are —

(1) Soil conservation scheme for treatment of the catchment areas of the inter-State river valley projects like Subarnarekha, Bhimakund and Upper Kolab.

(2) Taking up of Sisal development in the vast stretch of Government lands in the priority watersheds which are to be treated with comprehensive soil and water conservation measure and will provide useful employment to the tribals

(3) Establishment of a Central Spices Nursery

(4) Reclamation of ravine lands in the river basin of Mahanadi, Baitarani, Subarnarekha and Indravati.

(5) Reclamation of saline soils along coastal belts in the soil conservation sector.

14.13. The State Plan schemes will generate additional employment potential for 1,385 technical, 313 non-technical and 57,850 unskilled and uneducated persons. The Central Sector and Centrally sponsored schemes are likely to generate employment potential for 700 technical 100 non-technical and 76,190 unskilled and uneducated persons. Besides, the proposed investment of Rs. 300 lakhs out of the Special Central Assistance in Tribal Sub-Plan areas is likely to generate rural employment of 41.19 lakhs mandays or 15,088 manyears during the period 1978-83.

14.14. Under soil and water conservation, the expenditure out of State Plan funds incurred in the Tribal sub-plan areas during 1974-78 was of the order of Rs. 61.81 lakhs. Besides this, a sum of Rs. 60.26 lakhs has also been spent in Tribal areas during this period under Centrally sponsored schemes. During 1978-79, it is proposed to spend Rs. 75.68 lakhs in Tribal area out of the total State Plan outlay of Rs. 115.00 lakhs. In addition to this it is also proposed to spend Rs. 45.00 lakhs and Rs. 11.55 lakhs out of the Special Central Assistance and in Centrally sponsored schemes respectively. During the Sixth Plan period it is envisaged to invest Rs. 12,95.00 lakhs in Tribal areas out of the projected State Plan outlay of Rs. 19,29.00 lakhs. Schemewise details are indicated in Annexure I.

ANNEXURE I

FINANCIAL OUTLAY AND PHYSICAL TARGET UNDER SOIL CONSERVATION PROGRAMME

(Rs. in lakhs)

Name of the scheme	Financial Outlay					Institutional finance	Physical target	Employment generation (Mandays)	Remarks	
	State Plan		Special Central Assistance (T. & R. W.)	Central Sector Schemes	Total					
	Other area	Tribal Sub-Plan								
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
1. Headquarters Organisation.	1,79.00	1,60.00	..	..	3,39.00	..	..	..	Staff Scheme
2. Strengthening of Soil Survey.	6.60	30.00	..	36.60	73.20	..	9 lakh hectares	..	..
3. Pre-irrigation Soil Survey.	16 lakh hectares	The scheme cost is Rs. 2.00 lakhs to be provided in Irrigation Department, Budget cost Rs. 152.00 lakhs shown under C.A. D.
4. Soil Survey in C. A. D. areas.	..	..	..	..	..	..	10 lakh hectares	..	..
5. Soil Conservation Training.	..	20.00	..	40.00	60.00	..	1,500 Departmental personnels and 1,000 others will be trained.	..	..

6. Watershed Management.	3,92.40	5.95	3,00.00	..	12,87.40	9,00.00	1,75,800 hectares	..	1,43.01	lakh	
7. Pasture Development	8.00	2.00	..	..	10.00	..	5,000 hectares	..	1.03	Do.	
8. Cashew Plantation	20.00	30.00	..	2,40.00	2,90.00	1,20.00	35,000 hectares	..	40.09	Do.	
9. Sisal Plantation	..	50.00	..	50.00	1,00.00	..	1,500 hectares	..	15.00	Do.	
10. Coffee Plantation	..	4,00.00	..	75.00	4,75.00	..	3,000 hectares	..	56.00	Do.	
11. Soil Conservation in coastal sand dunes.	16.00	..	..	..	16.00	..	..	..	1.35	Do.	The scheme will be transferred to M. A. D. A.
12. S. C. Demonstration Centres.	12.00	8.00	..	..	20.00	..	2,000 hectares	..	2.06	Do.	
13. Soil Conservation in River Valley Projects.	..	..	..	10,00.00	10,00.00	1,20.00	1,40,000 hectares	133.12	Do.		80,000 hectares under Agricultural land will be treated on 50% subsidy and 50% loan basis.
14. Amelioration of Acid Soils.	..	..	..	70.00	70.00	..	94,000 hectares	2.50	Do.		
15. Continuance of Elite coconut garden.	..	..	..	10.00	10.00	..	25 hectares	1.03	Do.		
16. Pilot Project for control of shifting cultivation.	..	..	..	1,50.00	1,50.00	..	1500 Podu families will be rehabilitated.	25.54	Do.		

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
17. Reclamation of ravine land.	2,35.00	2,35.00	..	10,000 hectares	15.00 lakh	
18. Central Spices Nursery.	5.00	5.00	..	20 hectares	0.50 Do.	
19. Reclamation of saline land.	60.00	60.00	..	15,000 hectares	6.11 Do.	
20. Land shaping and land development in ayacut areas of Irrigation Projects.	500.00	60,000 hectares	..	
21. Bamboo and Sabai Plantation.	1,00.00	10,000 hectares	..	
Total	..	6,34.00	12,95.00	3,00.00	19,71.60	4200.60	17,40.00	Soil Survey—35 lakh hectares Training of personnel—2,500 Nos. Soil Conservation work—552,845 hectares.	4,51.54 lakh

ANNEXURE II

AGR-20

Crop Production—Target for Terminal years
 Area—Thousand hectares
 Production—Tonnes
 Yield—Kgs./Hectares

Sl. No.	Item	Achievement, 1977-78			Targets, 1982-83		
		Area	Yield*	Production	Area	Yield	Production
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
8	Cashewnut						
	Soil Conservation Departmental plantation.	25·675	52 Kgs.	870 Tonnes	50·000	500 Kgs.	12,500 Tonnes
	Forest Departmental plantation.	6·000	N. A.	100 Tonnes (Appx.)	20·000	500 Kgs.	3,000 Tonnes*
	Private plantation	5·600	N. A.	80 Tonnes (Appx.)	16·000	500 Kgs.	3,000 Tonnes
	Total ..	37·275		1,050 Tonnes (Appx.)	86·000		18,500 Tonnes

* The yield rate has been arrived at taking into account the income obtained from auction sale of cashew plantation, area of fruiting and the prevailing market price.

ANNEXURE III

AGR-21

Selected Programmes—Achievement and Targets

Serial No.	Item	Unit in thousand hectares	Actual achievement		Target, 1982-83 ending
			1973-74 ending	1977-78 ending	
(1)	(2)	(3)	(4)	(5)	(6)
4	Soil and Water Conservation on Agricultural lands.	'000	133.56	202.683	755.528

ANNEXURE IV

AGR-23

Selected Programme—Achievements and Targets

Serial No.	Item	Units	Achievement, 1977-78	Target, 1982-83
(1)	(2)	(3)	(4)	(5)
6	Land Reclamation	Hectare		
	(i) Alkaline	..	..	15,000 (Saline land)
	(ii) Others	..	5,210	20,000

CHAPTER 15

COMMAND AREA DEVELOPMENT

15.1. During the Fifth Plan period steps were initiated to remove the deficiencies in the development of command areas and to consider measures for optimising agricultural production in such areas. A number of policies and measures, both in the realm of irrigation, engineering and agricultural development, were proposed. Programmes like fixing and enforcing of suitable cropping patterns, strengthening of extension, training and demonstration, planning and ensuring the supply of inputs etc., were considered essential for effective and efficient exploitation of the irrigation potential created in the command areas. The need for an integrated area development approach was also recognised requiring action in several disciplines like irrigation, soil conservation, agricultural extension and co-operation along with due support from credit and service organisations. It was also recognised that a unified agency, namely, the Command Area Development Authority could ensure a better co-ordination of the various disciplines at different levels.

15.2. Accordingly the State Government constituted three Command Area Development Authorities in the State for the three major irrigation systems of Hirakud, Salandi and Mahanadi Delta. Revenue Divisional Commissioner, Northern Division, Sambalpur was appointed as the Chairman of the Command Area Development Authority for Hirakud system and the R. D. C., Central Division, Cuttack as the Chairman of the Command Area Development Authorities of Salandi and Mahanadi Delta System. On account of the huge jurisdiction of the Command Area Development Authority of Mahanadi Delta System, this command area was later on divided into two authorities one for Cuttack Delta comprising 20 Blocks and the other for Puri Delta comprising 12 Blocks. The R. D. C., Central Division, Cuttack is the Chairman of the Command Area Development Authority of Puri Delta. In all the Command Area Development Authorities, the Collectors of the Districts and the Divisional level Officers of the Departments representing Agriculture, Co-operation, Irrigation and Electricity have been taken in as members. Besides, the Director of Agriculture and Food Production, Director of Animal Husbandry and Veterinary Services, Managing Director, O. L. I. C., Director of Consolidation, Director of Community Development Blocks, Joint Director, Agriculture (Engineering) have also been taken in as members. The Chairman of the Authority is being assisted by a senior State Administrative Officer as a Project Director.

15.3. The strategy for the Five-Year Plan, 1978—83 will be—

- (i) Modernisation of pre-plan and earlier plan irrigation systems consisting of—
 - (a) Modernisation of distribution system to enable introduction of Warabandi System
 - (b) Lining of Canals
 - (c) Drainage
 - (d) Upgrading of embankments to serve as roads for market access
- (ii) Construction of Field Channels and Field Drains as part of Government works
- (iii) Support to the Co-operative structure
- (iv) Other on-farm development works
- (v) Extension, etc.
- (vi) Topographical and Soil Survey
- (vii) Accelerate the pace of consolidation of holdings and updating landrecords

15.4. Development of market facilities through regulated markets, etc. form part of the State's Plan under Agricultural Marketing.

15.5. With the strategy outlined above our schemes are described below

Modernisation of distribution system including lining of canals

15.6. In order to ensure the designed discharge of irrigation water from the irrigation projects serving the four major commands of the State, it is essential that the weirs have to be renovated, distribution system improved and suitable hydraulic control structures repaired or re-installed for rotational irrigation and in some stretches, the canals lined. It has, therefore, been proposed that there should be an outlay of Rs. 120.00 lakhs for modernisation and renovation of Hirakud distribution system, Rs. 100.00 lakhs for lining of canals in the Mahanadi Old delta and Rs. 50.00 lakhs for lining of Gudbhaga distributary in the Hirakud Irrigation System.

Drainage

15.7. Large areas in the commands now suffer from water-logging. It will be necessary to provide adequate and prompt drainage in order that the lands can be reclaimed by the beneficiaries with institutional finance. A sum of Rs. 80.00 lakhs for the Mahanadi Old Delta and the Puri Delta, Rs. 35.00 lakhs for Salandi Command and Rs. 35.00 lakhs for the Hirakud Command is, therefore, proposed to be provided for the drainage of this accumulated water.

Market Access Roads

15.8. For providing an access to markets in these command areas, it has been felt essential that suitable all-weather roads should be laid on the net work of canal and river embankments serving the area. This will facilitate transport of inputs into the interiors and provide links to the markets for agricultural and other produce. An outlay for Rs. 200.00 lakhs in all, i. e., Rs. 80.00 lakhs for Mahanadi old Delta and the Puri Delta, Rs. 20.00 lakhs for the existing Salandi command and Rs. 40.00 lakhs for the proposed Salandi Command and Rs. 60.00 lakhs for the Hirakud Command have been proposed.

Field Channels and Field Drainage

15.9. Attempts have been made in the past to induce the beneficiaries to finance construction of field channels and field drains through institutional credit arranged for them through Commercial and Co-operative Banks. But field experience shows that response to such a scheme of loans is poor. In view of the large social benefits that would accrue by proper distribution of irrigation water and that too, as early as possible there is, therefore, no other alternative than to execute these works departmentally. This also appears to have been the experience in many other States and also was emphasized in the Seminar on Command Area Development held at Hyderabad. It has therefore been suggested to make a provision of Rs. 270.00 lakhs for construction of field channels and field drains in 30,000 hectares each in Mahanadi Old Delta, Puri Delta and Hirakud Commands and 20,000 hectares in Salandi Command.

Support to the Co-operative Structure, On-farm Development, Extension, etc.

15.10. Co-operative institutions in the command area have to be considerably strengthened and their activities adequately supported in order to ensure the timely flow of adequate institutional credit for various schemes intended to develop the rural economy. It is, therefore, proposed to make adequate provision for managerial subsidy to Co-operatives non-overdue cover loan to C. C. Banks, share capital loan to members for enrolment, subsidy for repair and construction of godowns, custom service subsidy, assistance for market-yards and feeder roads, ways and means advance for procurement, etc. It is also proposed to continue the scheme for contribution to the special loan account constituted for taking up on-farm development works, such as, land levelling and land reclamation on behalf of ineligible farmers. A provision of Rs. 291.00 lakhs is proposed for these Co-operation Schemes. It is to be added here that provision of Rs. 60.00 lakhs is also proposed for bridging finance for on-farm works under the Centrally sponsored schemes. The Fifth Plan Scheme excluding Co-operation schemes under the C. A. D. Programme in the State Sector have been reviewed and some of them dropped. For the Schemes proposed to be continued, the provision for the Sixth Plan has been reduced or increased as justified by circumstances. For all these schemes, the provision proposed is Rs. 635.75 lakhs.

Topographical & Soil Survey

15.11. There are 4 Central Plan Schemes, viz., Topographical Survey, Soil Survey in Major Command Areas, State-level Monitoring Cell and Project Administration. In respect of these, Government of India disburse 50 per cent of the cost. Provision for Topographical Survey has to be considerably increased in order to keep pace with the Consolidation Programme. The provision for the State Share in respect of this group of schemes is proposed at Rs. 487.00 lakhs.

15.12. The State Plan Outlay for the C. A. D. Programme for the medium term plan 1978-83 is thus proposed to be Rs. 2056.75 lakhs.

15.13. Under the Centrally Sponsored Group of Schemes for command areas, soil and water management pilot projects figure prominently. The terms of Salandi and Puri Projects are expected to be completed in the 2nd year of the Medium-term Plan. Two more pilot projects, one for old Mahanadi Delta and the other for the tail-end areas of Hirakud System have been proposed to Government of India for sanction. Their sanction is awaited. Similarly, in respect of soil and water management pilot project in Hirakud Command, the term of which expired last year, Government of India have been moved to sanction a new scheme for 3 years or to extend the term of the project for one year more. Provision has been proposed in respect of these schemes pending administrative approval of the Government of India. As mentioned above, provision for bridging finance to the various CADAs for taking up on-farm works on behalf of the farmers is proposed to be continued through the Medium-term Plan, though at a reduced level as field channels and field drains are proposed to be taken up at Government cost to serve up to small commands of 5 hectares or so. There is one scheme under this group for grant of subsidy to small and marginal farmers for O. F. D. works including ground water schemes. It is now proposed to provide institutional credit to small and marginal farmers to bring under cultivation the area that is proposed to be reclaimed from water-logging. Subsidy has to be paid to such farmers owning lands in these areas. It is, therefore, proposed to provide for Rs. 100.00 lakhs under this scheme. Thus, a programme of Rs. 235.00 lakhs is proposed for the Centrally Sponsored Group of Schemes for the Medium-Term Plan.

Consolidation of Holdings

15.14. One of the important aspects of the on-farm development works is consolidation of holdings. The World Bank Scheme for this purpose has been sanctioned for development of Major Irrigation Command of Mahanadi, Salandi and Hirakud. Under this scheme it has been programmed to complete consolidation in 2 lakhs hectares by 1980-81. Consolidation operation has been completed in 5,000 hectares so far, out of 125,000 hectares brought under consolidation operation. Hence, the continuing operational area will be 1.20 lakhs hectares and with the addition of 75,000 hectares during the current financial year, operation will be started in a full fledged manner. It is expected that the World Bank assistance to the extent of Rs. 150 per hectare of consolidated irrigated lands would be available. Hence during the Sixth Plan period, the target is to complete consolidation of holdings in 1.95 lakh hectares in command areas.

Employment

15.15. An outlay of Rs. 20.56 lakhs for the Command Area Development has been envisaged during the Sixth Plan period and it has been estimated that the employment opportunity for 521 technical persons, 399 non-technical and educated persons and 20,067 skilled and unskilled labourers would be created.

ANNEXURE I
COMMAND AREA DEVELOPMENT PROGRAMME

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Financial Outlay					Employment potential				
		Agriculture & Co-operation Plan	Tribal Sub-Plan	Special Central Assistance	Central sector	Total	Physical target	Skilled & Unskilled	Technical	Non-technical	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Salandi Irrigation Programme.	30.00	..	..	..	30.00	(i) Cropping pattern—Kharif 186 ha. Rabi 181 ha. (ii) Training of farmers—3,120 Nos.	9	11	7	27
2	Area Development in Mahanadi Delta.	27.00	..	..	..	27.00	(i) Survey & Investigation—60 outlets. (ii) Preparation of Chalk maps—240. (iii) Preparation of P. & E.—26 Nos. (iv) Earthen field channels—30,000 Mtrs.	9	55	9	73

(v) Lined channels
—24,000 Mtrs.

(vi) Control structure—40 Nos.

(vii) Crop Demonstrations—Kharif 790 ha.,
Rabi 790 ha.,
Summer 790 ha.

3	Pre-Irrigation Aya- cut Survey.	80.00	..	..	..	80.00	X	9	13	10	32
4	National Remote Sensing through N. R. S. A.	7.50	..	..	..	7.50	X	..	..	..	..
5	Development of rural roads in Salandi Command Area.	66.00	..	..	..	66.00	Six rural roads of total length—73.8 Kms.	1,950	..	..	1,950
6	Training of study tour of personnel.	3.00	..	..	..	3.00	..	..	..	..	..
7	Grants-in-aid to CADAS for Con- struction of field channel and field drains (Demonstra- tion).	37.50	..	..	..	37.50	7,100 ha. to be covered under this programme.	1,242	..	..	1,242
8	Farmers Training	3.25	..	..	..	3.25	125,000 farmers will be trained up.	..	..	..	..
9	Multiple crop demonstration.	28.00	..	..	..	28.00	3,000,000 ha will be covered under this programme.	..	..	..	..

(Rs. in lakhs)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
10	Drainage-cum-recycling (Demonstration).	30.00	..	..	..	30.00	X	1,000	..	..	1,000
11	Minikit programme	10.00	..	..	..	1.00	10,000 Nos. of Minikit will be disbursed.	..	..	..	..
12	Fodder Demonstration.	4.00	..	..	..	4.00	40,000 Nos. of Demonstrations can be conducted.	..	..	..	..
13	Pisciculture Development.	10.00	..	..	..	10.00	..	600	..	..	600
14	Development and designing of Agricultural implements.	1.50	..	..	..	1.50	..	1,000	..	..	1,000
15	Giving subsidy to small and marginal farmers for small Agricultural implements.	12.50	..	..	..	12.50	..	6,000	..	..	6,000
16	Incentive for intensification of subsidiary occupations like Dairy, poultry, piggery and goat rearing.	15.50	..	..	..	15.50	..	..	..	..	..
17	Designing and preparing pre-cast structure.	23.00	..	..	..	23.00	..	3,600	..	..	3,600

18	Surface Drainage ..	150.00	..	..	..	150.00	x	250	16	..	266
19	Lining of canals ..	150.00	..	..	..	150.00	x	380	24	..	404
20	Renovation and modernisation of irrigation distribution system.	120.00	..	..	..	120.00	..	..	..	..	..
21	Roads on canal banks and river embankments.	200.00	..	..	..	200.00	..	270	17	..	287
22	Construction of field channel and field drains.	270.00	..	..	..	270.00	..	..	..	..	..
23	Grants-in-aid Co-operation schemes to CADAs. for non-over due cover loan to C. C. Bs.	22.50	..	..	..	22.50	..	..	..	..	..
24	Grants-in-aid to CADAs. for share capital loan to members for enrollment.	17.00	..	..	..	17.00	..	..	..	..	..
25	Grant-in-aid to CADAs. for managerial assistance to L. D. Bs.	2.00	..	..	..	2.00	..	..	..	..	..
26	Grants-in-aid to CADAs. for managerial assistance to C. C. Bs.	2.00	..	..	..	2.00	..	..	..	..	..

(Rs. in lakhs)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
27	Provisions of loan to ineligible farmers (Special Loan Account Fund).	18·00	..	..	..	18·00	..	..	..	..	..
28	Managerial subsidy to Co-operation.	40·00	..	..	..	40·00	..	..	..	..	..
29	Subsidy for repair and construction of godowns.	12·00	..	..	..	12·00	..	..	..	..	..
30	Risk fund	16·00	..	..	..	16·00	..	..	..	..	..
31	Price fluctuation subsidy.	3·50	..	..	..	3·50	..	..	..	..	..
32	Operation of custom service subsidy.	27·00	..	..	..	27·00	..	..	..	..	..
33	Assistance to market yard and fodder roads.	95·00	..	..	..	95·00	..	..	..	..	..
34	Ways and means advance for procurement.	20·00	..	..	..	20·00	..	..	..	..	..
35	Working capital loan to IICs.	16·00	..	..	..	16·00	..	..	..	..	..
36	State Level Monitoring Cell for C. A. D. A.	13·00	..	..	13·00	26·00	..	8	8	10	26

37	Survey Topographical.	3,89.00	..	..	3,89.00	7,78.00	Topographical— 12,50,000Ha.	800	82	20	920
38	Soil Survey in major Command Area.	59.00	..	..	59.00	118.00	Reconnaissance Survey—387.283 Ha. 2. Detailed survey 392,500 Ha.	2,940	175	140	3,255
39	Project Administration.	26.00	..	..	26.00	52.00	..	..	..	120	120
Total		20,56.75	..	..	4,87.00	25,43.75					

CENTRALLY SPONSORED PLAN

1	Subsidy to small and marginal farmers for O.F. D. Works.	..	..	..	100.00	100.00					
2	Loans to beneficiaries for construction of field channels and field drains.	..	..	..	60.00	60.00					
3	Soil & Water Management Pilot Project, Salandi Command Area.	..	..	..	8.30	8.30	Contour Survey— 1,557ha. Demonstration land shaping and levelling—20ha. Detailed Soil Survey—547ha Demonstration on Drainage—50ha. Construction of field channel on demonstration basis—498.28ha. Crop Demonstration—37ha.—3 crops. Training of farmers—400 farmers.	..	24	17	41

(Rs. in lakhs)

(1)	(2)	(3)	(5)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
4	Soil and Water Management Pilot Project. Puri Delta (Consolidation Area).	..	..	13.00	13.00	.	Detailed Soil Survey—2,000 hectares, Field Channel—500 hectares, Soil mapping—1,000 hectares, Earthen channel—8,000 metres, Interpretation of Soil Survey—1,000 hectares, Lining channel—2,000 metres, Contour Survey—500 hectares, Brick lining—500 metres, and levelling—500 hectares, Concrete lining—1,000 metres, Crop Demonstration—17 hectares.		24	15	39
5	Soil and Water Management Pilot Project in Hirakud Command Area.	..	..	23.70	23.70	..	..	..	24	17	41
6	Soil and Water Management Pilot Project in old Mahanadi Delta, Cuttack.	..	..	15.00	15.00	..	..	..	24	17	41
7	Soil and Water Management Pilot Project in tail-end of Hirakud.	..	..	15.00	15.00	..	..	..	24	17	41
Total ..				235.00	235.00						

Command Area Development (CADP) Outlays in State Sector

STATEMENT I

AGR—39

(Rs. in lakhs)

Serial No.	Name of Irrigation Projects	Actual expenditure				Approved outlay. 1978-79	Likely requirement 1979—83 (4 years)	Total 1978—83 (5 years)	Remarks
		1974-75	1975-76	1976-77	1977-78				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Opening								
1	Water management demonstration in other command areas.	0.90	..	0.48	..	..	..	..
2	Land shaping and land development.	0.50	1.00	..	..	..	..	..
3	Medium irrigation project in command area.	..	..	..	0.05	..	..	..
4	Crop demonstration in command areas.	—	..	..	5.13	..	..	..
5	Salandi Irrigation Programme.	4.51	4.61	5.61	3.57	5.00	25.00	30.00	
6	Area development in Mahanadi Delta.	5.60	6.10	6.19	4.34	7.00	20.00	27.00	

(7B-26)

Rs. in lakhs

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
7	Pre-irrigation ayacut survey—								
	(a) Normal	..	..	..	0.37	10.55	63.25	80.00	
	(b) Tribal	..	..	..	0.45	6.20	..	..
8	State Level Monitoring Cell	..	..	..	2.12	3.00	10.00	13.00	
9	Topographical survey and investigation.	..	..	..	4.11	28.84	360.16	389.00	
10	National resources survey through N. R. S. As.	..	0.44	1.00	0.52	0.50	7.00	7.50	
11	Development of rural roads in the Salandi command area.	..	..	6.00	19.18	16.00	50.00	66.00	
12	Training and study tour of personnel at State and C. A. D. A. level.	..	..	..	0.62	1.00	2.00	3.00	
13	Soil survey in major command area.	..	2.71	0.21	9.59	10.16	48.84	59.00	As this is a Central Plan Scheme 50% of the expenditure has been exhibited in Column 6 (1977-78).
14	Grants in aid to C. A. D. As.	..	..	13.64	..	59.25	185.50	244.75	
15	Contribution to Special Loan Account Fund of A. R. D. C.	..	..	..	2.00	2.50	15.50	18.00	

16	Water management demonstration in Hirakud command area.	0.50	0.98	..	..	..	..	..	..
New Schemes, 1979-83									
1	Surface Drainage	..	..	..	..	..	..	150.00	150.00
2	Lining of canals	..	..	..	..	..	..	150.00	150.00
3	Renovation and modernisation of irrigation distribution system.	..	..	..	..	..	..	120.00	120.00
4	Roads and canal banks and river embankments for market access.	..	..	..	..	..	..	200.00	200.00
5	Construction of field channels and field drains.	..	..	..	..	..	..	270.00	270.00
6	Marginal subsidy to Co-operatives.	..	..	..	..	..	..	40.00	40.00
7	Subsidy for repair and construction of godowns.	..	..	..	..	..	..	12.00	12.00
8	Risk fund	..	..	..	..	..	..	16.00	16.00
9	Price fluctuation subsidy.	..	..	..	..	..	..	3.50	3.50
10	Operation of custom service subsidy.	..	..	..	..	..	..	27.00	27.00
11	Assistance to market yard and fodder roads.	..	..	..	..	..	..	95.00	95.00
12	Wages and means advance for procurement.	..	..	..	..	..	..	20.00	20.00
13	Working capital loan for L. I. Cs.	..	..	..	..	..	..	16.00	16.00

STATEMENT II
AGR. -40

Programme of Works in the State Sector showing Expenditure/Outlays for various activities of C. A. D. P.

(Rs. in lakhs)

Sl. No.	Item of works	Expenditure during 1974-77 (3 years)	Expenditure during 1977-78	Total 1974-78	Approved outlay, 1978-79	Likely requirement during 1979-83 (4 years)	Total for 1978-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Establishment of C. A. D. Authorities both at State and Project level.	1.46	5.20	6.60	12.00	40.00	52.00
2	Survey, Planning, Design and Supervision of O. F. D. Works.	0.38	23.01	23.39	78.00	818.00	896.00
3	Construction of field channels and related structures.	..	..	..	..	270.00	270.00
4	Special loan fund for ineligible farmers ..	..	2.00	2.00	2.50	15.50	18.00
5	Consolidation of holdings, realignment of field boundaries.	4.49	35.00	46.49	210.00	..	..
6	Construction of roads in Command Areas ..	65.75	..	65.78	16.00	250.00	266.00
7	Construction of markets in Command Areas	2.45	5.50	7.95	..	70.00	70.00

Achievements and Targets for Works in the State Sector for various activities of C. A. D. P.

STATEMENT III

AGR.—42

Name of the Irrigation Project—Hirakud—Mahanadi Delta—Salandi

Serial No.	Item of Works	Unit of work	Achievement during 1974-77 (3 years)	Progress during 1977-78	Total 1974-78	Target for 1978-79	Target for 1978-83 (4 years)	Total for 1978-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Preparation of Plans and Designs	Ha.	4,756	48.69		75.00	6,15,000	6,90,000
2	Construction of Field Channel	Km/Ha.	..	44.77 Km.	44.77 Km.	5.600 Ha.	1,94,200	2,00,000
3	Other On-farm Development Works—							
	(a) Land Levelling/Land Shaping	Ha.	270	130	400	100	500	600
4	Consolidation of land holdings/Realignment of Field Boundaries.	Ha.	..	84,000	1,25,000	1,52,000	4,13,000	5,65,000
5	Construction of roads in Command areas	Km.	30	25	55	74	200	274
6	Construction of markets in Command areas	No.	1	1	1	1	30	21

Command Area Development Programme Outlays

STATEMENT V

AGR. 44

(Rs. in lakhs)

Sl. No.	Source of Finance	Actual expenditure during				Approved during 1978-79	Likely requirement during 1979-83 (4 years)	Total requirement 1978-83 (5 year)	Remarks
		1974-75	1975-76	1976-77	1977-78				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	State ..	11.51	15.36	38.11	69.92	150.00	19,06.75	20,56.75	
2	Centre—								
	(a) Grants ..	..	..	0.89	14.11	48.00	437.50	485.50	
	(b) Loans ..	..	..	..	..	20.00	40.00	60.00	
	(c) S. L. A. ..	..	..	..	2.00	2.50	15.50	18.00	
	(d) Equity Capital support to L. D. C. S. etc. ..	..	..	..	..	..	..	..
3	Institutional ..	..	..	..	..	..	..	—
Grand Total 1+2+3 ..		11.51	15.36	39.00	86.03	220.50	23,99.75	26,20.25	

OUTLAYS

Assistance from Government of India

(Rupees in thousands)

Sl. No.	Item	Actual expenditure				Requirement during 1978-79	Likely requirement during 1979-83 (4 years)	Remarks
		1974-75	1975-76	1976-77	1977-78			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I. Grant—								
1	Establishment of C. A. D. authorities both at State and Project level.	..	..	70	2,60	6,00	20,00	
2	Survey, Planning, Design and Supervision of O. F. D. works.	..	..	..	..	39,00	4,69,00	
3	Subsidy to Small and Marginal Farmers ..	..	..	..	..	20,00	80,00	
4	Crop compensation ..	..	..	..	..	..	..
5	Consolidation/realignment of land holdings	..	..	..	..	..	..
II. Loans—								
1	Loan for construction of field channels ..	..	..	..	..	20,00	40,00	
2	Loan to Agro Industries Corporation, etc. for purchase of equipment for O. F. D. works.	..	..	..	..	..	..
3	Debtenture support to Primary L. D. Bs., etc./Injection of share capital in L.D.Bs., etc.	..	..	..	..	..	..
III.	Special Loan Fund for eligible farmers..	..	..	..	2,00	2,50	15,50	
IV.	Equity capital support to L. D. Cs., etc. ..	..	..	..	..	..	..

CHAPTER 16

ANIMAL HUSBANDRY AND DAIRY DEVELOPMENT

16.1. During the Sixth Five-year Plan, Animal Husbandry Programme will be suitably geared to ensure participation of a large number of people belonging to the economically weaker section of the population with a view to providing them whole time/part time employment and augmenting production of feeds of animal origin to fight against mal-nutrition and under nourishment which is rampant in the rural areas. The principal objectives of Animal Husbandry and Dairy Development programmes in the Plan would be as follows :—

- (i) To augment considerably production of livestock products, such as milk, eggs and poultry, wool and mutton, etc.
- (ii) To promote adoption of improved methods of animal husbandry such as better feeding and breeding, proper management and animal health control for improvement in the productivity of livestock.
- (iii) To organise marketing of produce through a functional system of co-operatives on the lines similarly to those adopted by Dairy Co-operative Unions in Gujarat.

16.2. In the direction of achieving these objectives, the productivity of stock will be maintained at a high level by introducing superior germ plasm even in remotest areas of the State. Special efforts will also be made to ensure availability of cheap and nutritious feed and fodder. In order that the cost of production of milk, meat and eggs, etc. is brought down so as to be within the reach of at least lower middle class consumers in the urban areas, suitable programme will also be implemented to maintain an effective health cover against the new emerging diseases particularly seen in exotic or cross-bred livestock. A major livestock marketing activity will also be taken up and the farmer will be assured of a reasonable price for his products. It will, thus, be seen that in respect of Animal Husbandry activities concerning all the species of livestock, the various inputs and services, such as, breeding, feeding, management, marketing, disease control, technical know-how etc. will be made available to the farmers in the form of a package deal. A sizeable share of the outlay will be earmarked for the programmes to be implemented in the Tribal Sub-Plan areas. The tribal people who are used to keeping livestock will be encouraged to take livestock farming as one of the major subsidiary occupations with a view to weaning them away from shifting cultivation and persuade them to earn their livelihood through animal farming besides their other vocations like collection of minor forest produce etc.

16.3. In order to achieve the above, the programme initiated during the Fifth Five-year Plan will be intensified with a greater area coverage while a number of new schemes will be initiated with a view to making available inputs and services on a priority basis. For this purpose, beside drawing funds from the State and Central resources, institutional finance and World Bank assistance will be made use of to provide larger coverage in the implementation of the programmes. The Sixth Plan outlay for Animal Husbandry has been suggested at a level of Rs. 22 crores (exclusive of institutional finance) as against a provision of Rs. 4.29 crores during the Fifth Five-Year Plan. Implementation Animal of Husbandry programme of this order will bring about an increase in the milk production from 2.12 lakh tonnes by the end of 1977-78 to 2.80 lakh tonnes by the end of Sixth Five-Year Plan. There will be a similar increase respect of egg production from 307 millions by the end of 1977-78 to 371 millions by the end of 1982-83. It has also been estimated that Animal Husbandry programmes will create a higher employment potential by providing direct employment to 3,600 families as against 974 during 1974-78. In respect of indirect employment, the increase will be of the order of 500 per cent from 2.58 lakh families during the Fifth Plan to 11.26 lakhs during Sixth Plan period. It will thus be seen that during the Sixth Five-Year Plan livestock farming will assume commercial proposition to the farmers.

Cattle Development

Frozen Semen Technology

16.4. With a view to increasing the productivity of cattle, artificial insemination programme will be given a new look by introducing Frozen Semen Technology in preference to the use of liquid semen. A Frozen Semen Bank has been set up at Cuttack in collaboration with the Government of India and Government of Denmark, which will be provided with all the required facilities to

feed a large number of centres with frozen semen. This centre will also be expanded to increase its production potential so as to cover all the insemination centres atleast in six to seven districts of the State. A second Frozen Semen Bank will be established in one of the western districts to cover the remaining districts of the State. Use of Frozen Semen will increase the percentage of utilisation and allow greater coverage. This work will be supplemented by another special programme being launched in the D. P. A. P. districts of Phulbani and Kalahandi in collaboration with the Bharatiya Agro Industries Foundation, Pune. This organisation will take up insemination with Frozen Semen in 21 centres, each centre covering about 5,000 breedable cows. For the above service, they will be paid an amount of Rs. 150 for every successful insemination. Liquid semen will continue to be used till its replacement by Frozen Semen. In outlying areas where communication facilities are inadequate, natural breeding programme will be intensified by supplying cross-bred bulls to such areas. Jersey will continue to be the breed of choice for all these programmes while Holstein Frisien and Brown Swiss will be sparingly used in urban areas.

Calf Rearing Centre

16.5. To salvage the cross-bred calves, which are lost due to malnutrition and ill management in a number of cases in the hands of the farmers, Calf Rearing Centres will be established in each of the Livestock Farms of the department where cross-bred calves purchased from the farmers will be reared up to the age of maturity and will be sold back after insemination and confirmation of pregnancy at cost price. The centrally sponsored Calf Rearing Programme under which a portion of feed requirements of the cross-bred calves up to its calving is provided as Government subsidy, will be extended to the districts of Balasore and Koraput where cross breeding work has already has an impact. This programme was under implementation during 1977-78. There was a target of giving calf subsidy to 4,000 calves against which 2,609 calves were covered under the programme. Besides covering this shortfall it is proposed to cover 20,000 calves during the Sixth Plan period. Besides, the I. C. D. Project at Jeypore will be expanded to cover a breedable cow population of one lakh against its present capacity of 50,000.

Fodder Development

16.6. Fodder Development activities will also be simultaneously intensified to ensure availability of optimum nutrition to the livestock. Minikits of fodder seeds both for kharif and rabi will be supplied to the farmers with a target of 2,000 kits per district per year. Pasture development will be encouraged in gochar land and periphery forests. Hundred acres of pasture in private lands will be covered in each district and 5 acres of irrigated fodder in each of the 314 blocks. In addition to this, Forest Department will take up fodder cultivation in 4,000 acres of Forest land and 6,000 acres of social Forestry in the D. P. A. P. districts of Kalahandi and Phulbani for implementation of the Integrated Village Development Project with cross-breeding of cows in collaboration with Bharatiya Agro Industries Foundation. Two Fodder Banks one around Bhanjanagar and the other in the district of Mayurbhanj will be established to harvest forest grass and to convert it into hay before supplying to different areas. Two new Fodder Seed Farms will be established to make available high yielding and drought resistant varieties of fodder seeds in larger quantities. There was a target of establishing one fodder farm with a coverage of 40 acres under fodder by the end of 1977-78 which has been achieved. A large Feed Plant with a capacity to produce 60 tonnes of pallet feed a day, will be established in the Phulnakhara dairy complex "New Dairy Development Project" a centrally sponsored scheme. This will facilitate despatch of feed in trucks moving to rural areas for collection of milk.

Disease Control

16.7. *Veterinary Dispensary*—Disease control aspect will receive much greater attention during the Sixth Five-Year Plan to create a greater confidence in the minds of farmers with regard to the ability of the A. H. Department to meet disease control needs at any place throughout the year. There was a target of opening seven Veterinary Dispensaries during 1977-78 which has been achieved bringing the total to 365 Veterinary Dispensaries by the end of 1977-78. Two hundred more Veterinary Dispensaries will be established which will provide one institution on an average for every 25,000 livestock as against the average of 40,000 at present. There was a target of opening 31 Livestock Aid Centres during 1977-78 which has been achieved bringing the total to 1,165 Livestock Aid Centres by the end of 1977-78. The number of Livestock Aid Centres will be increased by another 430 so as to have one such centre for every 10,000 cattle population.

Biological Product Institute

16-8. The Orissa Biological Products Institute at Bhubaneswar is the only institution for the entire State and it will be expanded by having two regional centres one at Sambalpur and another at Berhampur. It will also have 15 vaccine depots—one in each Veterinary district.

Mobile Disease Investigation Units

16-9. Thirty-five Mobile Disease Investigation and Control Units will be set up and will be located in Intensive Livestock Production areas so that Veterinary aid can be provided to the farmer at his door. Poly-clinics will also be introduced initially at selected District Headquarters Hospitals. To check ingress of cattle disease from outside the State, 30 check posts will be established.

Dairy Development and Marketing

16-10. The present constraint of lack of organised marketing facilities will be removed during the Sixth Five-Year Plan. A large number of Milk Producers Co-operative Societies will be organised in the rural areas and this number will be raised from 211 at the end of 1973-78 to 792 by the end of the Sixth Plan. Similarly, District Milk Unions will be organised in all the districts. These District Unions will then be federated into a State Level Milk Marketing Federation through which milk grids will be established covering all the cities and towns of the State. For the time being, a Dairy Development Corporation will be set up in the corporate sector which will take up milk marketing throughout the State. This corporation will also be responsible for organising the federation and hand over all the activities to it as and when the federation is in a position to take over. To enable the institutions to take up milk marketing on scientific lines, all the district unions will be provided with milk chilling plants and diesel transport carriers. Six District Milk Producers' Co-operative Unions have been established by the end of 1977-78. Three district Milk Unions have been supplied with chilling plants and Milk transport carriers. During the Sixth Plan all the districts will be provided with such facilities. Managerial subsidy will also be provided in a declining scale. The Milk Producers' Co-operative Societies will be financed and technically assisted in procuring the dairy equipments. The societies handling a sizeable quantity of milk will also be eligible to managerial subsidy.

16-11. The Milk Plant at Phulnakhara with an installed capacity of 6,000 litres will be expanded to handle 10,000 litres of milk a day. A new Dairy Plant will be set up here with a capacity of 30,000 litres and another milk chilling plant of 20,000 litres capacity will be set up in Jajpur Road. These activities will be financed under the Centrally sponsored scheme "New Development Programme" previously known as 'Operation Flood I'. Four more cities, namely Rourkela, Sambalpur, Bhubaneswar and Berhampur with population of more than 1 lakh will be covered under 'Operation Flood Phase II'. Milk plants and processing units will be provided for these cities under the scheme.

Extension

16-12. The extension organisation of the department will be suitably streamlined to provide technical know-how to the farmer at his doorstep. For this purpose all the 314 C. D. Blocks will have Animal Husbandry Extension Officers who will move from village to village and contact the farmers for maintaining optimum efficiency in livestock keeping. In addition to the present 16 A. H. districts, there will be 40 more Animal Husbandry districts which will ensure provision of district administration facilities in each Revenue Subdivision. This will facilitate efficient supervision and implementation of Intensive Livestock Production Programmes. Each District Veterinary Officer will be assisted by subject matter specialists on Animal Husbandry and Poultry.

Poultry Development

16-13. The Poultry Breeding Programme undertaken at the Central Poultry Breeding Farm Angul, will be further intensified to ensure dissemination of generically superior stock amongst farmers. Special efforts will be made to bring down cost of feed without diluting its quality. For this purpose, a Fish Meal Plant will be established either through private entrepreneur or through corporate sector. At present, there is one Feed Analytical Laboratory at Bhubaneswar. Another such Laboratory will be established in the southern range at Berhampur. Manufacture of meat

meal, bone-meal and mineral mixtures will be taken up through the agency of the State Level Egg Marketing Federation, and these essential ingredients made available to all the Food Mixing Centres for incorporation in the Poultry Feed. To streamline marketing of eggs throughout the State, the number of Poultry Co-operative Societies in the rural areas will be increased from the present number of 25 to 210 by end of 1982-83. The State Level Egg Marketing Federation will be suitably strengthened to take up marketing of eggs in Paradeep, Rourkela and if necessary in Calcutta also under the Centrally sponsored scheme for encouraging small and marginal farmers and landless agricultural labourers. The Commercial Poultry Farming Programme was taken up in the districts of Cuttack, Puri and Sambalpur with a target of setting up 3,000 Nos. of units by the end of 1977-78 out of which 1,863 Nos. of units of 50 birds each have been established. In the Sixth Plan the scheme will be extended to the districts of Dhenkanal and Sundargarh. The target for Sixth Plan is fixed at 20,000 units which will also cover the shortfall of 1977-78. Intensive Broiler Production Programmes will be taken up around Cuttack, Bhubaneswar which would provide part-time employment to a large number of Farmers.

16.14. Besides, similar programmes under the Applied Nutrition Programme will also be taken up in a number of blocks utilising financial assistance from UNICEF.

Duck Farming

16.15. Duck Farming will also receive much greater attention during the Sixth Five-Year Plan. A Duck Breeding Farm will be established at Cuttack and Khaki Campbell Stock imported from England will be multiplied for propagation in suitable areas. Large number of drakes will also be supplied to the farmers for upgrading the local indigenous ducks. Simultaneously, custom hatching facilities will be made available to enable the farmers to get their duck eggs hatched and replacement stocks raised.

Sheep and Goat Development

16.16. Dual purpose sheep will be popularised in the State with a view to increasing the availability of mutton along with some yield of coarse wool. The Intensive Sheep Development Projects initiated in the districts of Balangir and Puri under the Centrally sponsored scheme will be implemented. Similar programmes will also be intensified in the Districts of Koraput and Mayurbhanj as well as in the D. P. A. P. Districts of Kalahandi and Phulbani. As recommended by the Australian Sheep experts, cross-bred corriedale rams will be used for upgrading the local indigenous ones to meet the requirements of these projects. The Sheep Farms at Chiplima and Deogaon (Balangir) will be suitably strengthened. There was a target of expanding the Sheep Farm, Deogaon to have 300 ewes for cross breeding with corriedale rams by the end of 1977-78. This has been achieved. As regards goats, a large number of Beetal Crossbred Bucks will be distributed in the Northern and Western parts of the State for crossing with the local Black Bengal Does with a view to producing meat-animals of higher weight range without losing the twinning factor. In case of Southern Districts some milk-type breed will be introduced. A sheep shearing and marketing unit will also be set up to provide the required marketing support to the farmers.

Piggery Development

16.17. The Intensive Piggery Development Projects taken up in the districts of Keonjhar and Koraput will be further intensified and similar programme will be taken up in the districts of Mayurbhanj and Ganjam to meet the requirements of superior breeding stock. There was a target of setting up 300 piggery units by 1977-78 against which 642 piggery units have been set up. 2,000 piggery units are proposed to be set up during Sixth Plan period. The Pig Farm at Chiplima has already been strengthened with imported stock.

16.18. To ensure marketing of Pig Products, a bacon factory in the private Sector is proposed to be established at Rourkela.

Strengthening of Departmental Infrastructure

16.19. To build up the man-power requirements, the training programme of farmers and officers will be suitably streamlined. In addition to training of farmers, village unemployed educated youth will be given special training in Artificial Insemination technique and assisted to take up insemination of village-cattle. In service training facilities will be provided to Livestock Inspectors, Veterinary Assistant Surgeons and District Veterinary Officers. The training facilities available at Orissa Veterinary College under O. U. A. T. will be fully availed to train the officers of this department and farmers.

16-20. Lack of suitable building for the Veterinary Institutions as well as for the residences of V. A. S. and L. Is has been a constraint in the direction of efficient functioning in rural areas. At present there are departmental buildings in respect of only 210 dispensaries and 430 L. A. Centres out of the total No. of 365 dispensaries and 1,221 L. A. Centres. Besides 200 new Veterinary Dispensaries and 430 L. A. Centres will be added during the Sixth Plan. It is therefore proposed to provide suitable accommodation to 250 Veterinary Dispensaries and 280 L. A. Centres during Sixth Five-Year Plan.

Tribal Sub-Plan

16-21. Special attention will be paid to ensure that the tribal population of the State get a fair share of the Plan investment of the Sixth Five-Year Plan period. Out of an outlay of Rs. 22 crores about Rs. 7 crores will be spent on schemes directly benefiting the Tribals while they will continue to share other benefits indirectly under the State Level schemes meant for production of Inputs and extension of Services. Under the Centrally sponsored scheme of "Live-stock Production Programme", 4,000 farmers of Koraput district will be benefited under the Scheme. Similarly under the Poultry Production Programme, 4,000 farmers in the district of Sundargarh will be subsidised for setting up Poultry Units during Sixth Plan Period. In addition to districts of Koraput and Keonjhar already taken up under Piggery Production Programme, Mayurbhanj district will also be included during the Sixth Plan Period. 1,000 farmers will be subsidised to establish Pig Units during the Sixth Plan Period in the above districts. Further Sheep Production Programme will be taken up in the districts of Koraput and Mayurbhanj during the Sixth Plan. Under this programme 8,000 farmers will be subsidised for setting up Sheep Units. The other schemes for the tribal Sub-Plan area will be expansion of the I. C. D. Project at Jeypore, benefiting farmers in two Key Village Blocks 25, Livestock Aid Centres and 35 Artificial Insemination Centres. Mobile Diseases Units will also be established in such areas. A large number of Milk Producers Co-operative Societies and six districts Milk Union will be organised in tribal Sub-Plan areas. Special Central Assistance to the tune of Rs. 300.00 lakhs will be utilised in the Sub-Plan area for implementation of different A. H. Schemes to provide benefits and services to Tribal people.

16-22 During the Sixth Plan Period ending in 1982-83, it is proposed to establish 50,000 Goat Units, 10,000 Sheep Units, 5,000 Pig Units in the Sub-Plan area out of funds from the Special Central Assistance. Besides, 3,000 cows are to be supplied to tribal people by forming 30 Milk Producers Co-operative Societies. Upgrading of local Livestock is planned by supplying 5,000 Bucks, 1,000 Rams, 1,000 Boars and 20,000 Cocks of improved type at suitable places. In order to feed the vast programme Goat, Sheep, Pig and Poultry Farms of the A. H. Department will be strengthened to produce the required breeding sires. Necessary health cover of livestock training of about 25,000 farmer beneficiaries have also been provided. Teaching of A. H. subject in tribal schools is envisaged so that tribal boys become job oriented through practical training. 50 number of such schools will have small Goat and Poultry Units for the purpose. All these programmes will benefit 8.3 lakhs families.

World Bank Project

16-23. A composite Livestock Development Project in the district of Koraput has been prepared with an Outlay of Rs. 25.00 crores. This Project aims at providing full time/part time employment to 1,02,700 No. of families, viz., 1,00,000 families in Dairy Farm, 1,300 families in Sheep/Goat Farm, 400 families in Poultry Farm and 1,000 families in Pig Farm. As far as possible, suitable infrastructure will be built up in the Co-operative Sector to provide required inputs and services to the farmers including processing and marketing of milk, meat and eggs. The district of Koraput provides a highly suitable agro-climatic condition for successful implementation of such projects. This scheme has been forwarded to the Government of India for presentation to the World Bank for Financial Assistance. Final scrutiny by Government of India indicates that this particular project can be expected to be on ground during the Sixth Five-Year Plan.

Integrated Rural Development Project

16-24. The locations of Animal Husbandry Programmes formulated for implementation during the Sixth Five Year Plan will be so worked out that bulk of investment required for I. R. D. P. in 114 Blocks of the State will be made available out of Animal Husbandary Plan also. Detailed programmes will be drawn up after necessary inventory survey.

Institutional Finance

16.25. Schemes that can be implemented by availing institutional finance have been given due importance so that financial investment made by Government along with farmers' own capital can attract institutional finance to ensure optimum production and increase employment opportunities. Institutional finance will be available in the following schemes :—

- (a) Financial assistance to Poultry Marketing Federation
- (b) Financial assistance to Poultry Co-operative Society
- (c) Establishment of Carcass Utilisation Centre
- (d) Establishment of Livestock Development Corporation
- (e) Financial assistance to District Milk Producers' Co-operative Union
- (f) State Dairy Federation
- (g) Special Livestock Production Programme

16.26. The first six schemes are to be implemented under co-operative set up. The last scheme will be implemented as a centrally sponsored scheme. As against an investment of Rs. 168.48 lakhs in the State plan in all these schemes, institutional finance to the extent of Rs. 1,401.55 lakhs is estimated to be available for implementation during the Sixth Plan period.

Centrally Sponsored Schemes

16.27. As per the guidelines issued by the Planning Commission all the following schemes which were in operation during Fifth Five-Year Plan (except serial No. 7) are included in the Sixth Five-Year Plan for continuance as the programme envisaged under each could not be completed by the end of Fifth Five-Year Plan. The pattern of Central Assistance operative during the Fifth Plan period may be continued during Sixth Five-Year Plan period.

Name of the Scheme	Cost 1978—83 (State Share)	Pattern of Central Assistance
1. Expansion of Orissa Biological Products Institute.	25.98 lakhs	.. 50% grant
2. Decentralisation of Orissa Biological Products Institute.	56.00 lakhs	.. 50% grant
3. Control of Foot and Mouth disease ..	10.00 lakhs	.. 33½% grant
4. Rinderpest Surveillance Unit ..	0.41 lakhs	.. 75% grant
5. Resources Survey in Egg, Milk and Meat.	6.10 lakhs	.. 50% grant
6. Special Livestock Production Programme (New districts to be covered Dhenkanal and Sundargarh under Poultry, Balasore and Koraput under Calf Rearing, Mayurbhanj and Ganjam under piggery, Mayurbhanj and Koraput under Sheep Development).	100.48 lakhs	.. 50% for Hqrs. staff, 66.2% calf subsidy & fodder. 100% on Poultry, Piggery & Sheep & Project level staff.
7. Operation Flood Project	533.26 lakhs (includes Central share also)	..

16.28. Besides, the following schemes have also been included for continuance during plan period with 100% Central Assistance.

Name of the Scheme	Cost 1978—83 (in lakhs)	Pattern of Central Assistance
1. Exotic Cattle Breeding Farm	115.45	75% Grant 25% Loan
2. Establishment of Vigilance Unit	9.85	100% grant
3. Establishment of Check-Posts	7.10	100% grant

Employment

16.29. The Animal Husbandry and Dairy Development Sector provides vast opportunity in the direction of removing under employment in the rural areas. It is estimated that when the schemes outlined in this plan are implemented, nearly 11,26,610 beneficiaries will get subsidiary employment. This employment figure is based on the number of farmers and agricultural labourers who are to be provided with a unit of cross-bred female calls sheep, goat, pig, poultry or duck each. Besides, it is also assumed that about 3,651 persons will get full time employment during the period 1978—83, out of which 1,332 are unskilled or uneducated, 1,995 are technical and 524 are non-technical having general education.

ANNEXURE VI AGR-18

ANIMAL HUSBANDRY AND DAIRYING

Targets of Production and Selected Physical Programmes (Cumulative)

Sl. No.	Item	Unit	Actuals, 1973-74	Achievement, 1977-78	Targets, 1982-83
(1)	(2)	(3)	(4)	(5)	(6)
I. Live-stock Products					
1.	Milk	000 tonnes	196	212	280
2.	Eggs	In million	252	307	371
3.	Wool	Lakh Kgs.	..	..	..

II. Physical Programmes (Cumulative)

ANIMAL HUSBANDRY

1.	I. C. D. Projects	Nos.	3	4	4
2.	Frozen Semen Stations	Nos.	..	1	2
3.	Artificial Inseminations—				
	(a) Performed with exotic bull semen.	In lakhs	0.50	1.20	3.00
	(b) Cross breed calves born	In lakhs	0.17	0.40	1.00

Sl. No.	Item	Unit	Actuals, 1973-74	Achievement, 1977-78	Targets, 1982-83
(1)	(2)	(3)	(4)	(5)	(6)
4.	Sheep Breeding Farms ..	Nos.	1	2	2
5.	Sheep & Wool Extension Centres.	Nos.	1	1	1
6.	Intensive Sheep Development Projects.	Nos.	.	.	3
7.	Poultry Breeding Farms ..	Nos.	9	9	9
8.	Intensive Egg & Poultry Production-cum-Marketing Centres.	Nos.	2	3	3
9.	Pig Breeding Units/Farms ..	Nos.	1	1	1
10.	Piggery Development Blocks ..	Nos.	..	2	4
11.	Fodder Seed Production Farms	Nos.	..	3	3
12.	Veterinary Hospitals ..	Nos.	17	17	17
13.	Veterinary Dispensaries ..	Nos.	320	365	565
14.	Veterinary Stockman Centres ..	Nos.	1,119	1,165	1,595
DAIRYING					
15.	Fluid Milk Plants (including composite & feeder/balancing milk plants) in operation.	Nos.	1	1	1
	(a) Capacity ..	Lakhs litres	21.90	21.90	21.90
	(b) Quantity ..	Ditto	12.77	12.77	12.77
16.	Milk Products Factories including creameries in operation.	Nos.	..	..	1
	(a) Capacity ..	Lakhs litres	..	..	0.01
	(b) Quantity ..	Ditto	..	..	0.01
17.	Dairy Co-operative Unions ..	Nos.	..	6	13
18.	Rural Dairy Producer's Co-operative Societies.	Nos.	..	211	792

CHAPTER 17

FISHERIES

17.1. There is a great scope for the exploitation of the Fisheries resources of Orissa in the sectors of Inland, Marine and Brackish water. The development of these sectors will not only offer vast opportunity for large scale employment in the rural sector and betterment of the socio-economic conditions of the rural people particularly the fishermen class, but add to the nutritive value of the food consumed by the masses.

Achievement during the Fifth Five-Year Plan (1974—78)

17.2. The fisheries development in the Fifth Plan period aimed at improving the socio-economic condition of the fishermen by subsidising them to acquire country boats and nets to fish both in inland and marine waters and to take up pisciculture in tanks. 101 inland fishermen and 184 marine fishermen were benefited. Forty-eight Fishermen Co-operative Societies were organised to bring fishermen into the co-operative fold and to avail institutional finance. The societies worth mentioning are Kirtania and Rajlaxmi P. C. S. at Balasore which took up marine development schemes for operation of mechanised boats with ARDC assistance and Government subsidy. The fish production both inland and marine was raised to 56,000 tonnes from the Fourth Plan level of 40,000 tonnes. During this period 228 additional mechanised boats were acquired. 7 Ice Plants and 6 Freezing Plants have been set up in the State in private sector. To increase supply of quality spawn, 53 hectares of nursery area have been brought under pisciculture. Fishing jetty at Chandipur and small jetties at Balugaon and Kaluparaghat have been taken up to provide landing and berthing facilities to the fishing crafts. Construction of a fishing harbour at Dhamra has been completed. Provision of infrastructural facilities in fishing villages of Kasafal and Balltutha have been taken up.

17.3. The aim of the Sixth Plan in the Fisheries sector in the State is to make optimum utilisation of the existing resources through development efforts and create additional potential for development of pisciculture and to strengthen the extension services. Emphasis is given for the development of fisheries through the system of non-Government entrepreneurs either through individuals or co-operative societies specifically formed for the purpose. The strategy would be to encourage family based labour intensive inland and brackish water fish-culture. Improving the harvest from marine fisheries will also be given due emphasis. Bankable sectorwise regionwise schemes would be prepared for which commercial Banks and other financing institutions will provide credit assistance and Government would provide the necessary technical support and subsidy in deserving cases.

17.4. The financial outlay on fisheries for the Fifth Five-Year Plan was Rs. 2,70 lakhs. The Sixth plan outlay has been suggested at Rs. 2,000 lakhs.

17.5. The broad aspects of the Five-Year Plan programme for 1978—83 in fisheries are as follows :—

Direction and Administration

17.6. The existing Directorate staff will be suitably strengthened to take up the programme with the enhanced outlay by adding cells on Planning Inspection Intelligence and Evaluation and by expansion of the existing publicity and extension wing. These additional cells and wings will be headed by officers in the rank of Deputy Director of Fisheries with supporting technical and Ministerial staff.

Inland Fisheries

17.7. Production of fish from inland waters is of great significance as it is based on water resources spread throughout the State. It is capable of making substantial contribution to the requirement of animal protein in the food consumed by the masses. As the sources of production are close to the consuming centres, the problems of storage preservation and transport are not many, and this reduces the cost of production. During the Sixth Plan it is envisaged to strengthen the marketing organisation with a market intelligence wing, which will also provide extension service for improvement of marketing in the private sector. Fish from inland water sources are generally preferred to the salt water fish in Orissa and fetch a better price in the market. The main thrust on the development of inland fisheries is to increase spawn and fry collection and

to provide quality fish seed to the pisciculturists in close proximity, for which it has been proposed to have composite fish seed farms in all the districts so as to increase quality fry production from the level of 288 million in 1977-78 to the level of 600 million at the end of 1982-83. Distribution machinery will be extended to provide quality fish seed at the Grama Panchayat level. The traditional method of collection of spawn and fry from riverine sources has got two disadvantages in Orissa. The first is that, in years of heavy rainfall most of the rivers are flooded and collection of spawn and fry becomes impossible. The second disadvantage is that the quality of spawn and fry collected can not be always ensured. Therefore, major emphasis henceforth will be given on induced breeding in nursery tanks so that not only the increasing demand for quality spawn and fry would be met but also the element of uncertainty will be reduced to a great extent. Two major fish seed farms with hatcheries one at Kausalyagang for the coastal districts and the other at Sambalpur for the western districts would be set up. Besides, district fish seed farms would also be remodelled.

17-8. Another important programme is intensive demonstration of composite fish-culture in the private tanks to demonstrate the increase of per hectare yield. The assistance to traditional inland fishermen and pisciculturists would be continued but on a bigger scale. Fishermen families will be identified to take up fish-culture in tanks, jheels, etc. New schemes will be introduced for development of inland fisheries particularly in the abandoned and swampy water areas. Selected minor irrigation reservoirs are being identified for stocking them with adequate fry. Exploitation of such M. I. Ps. will be done as far as possible through Co-operatives on share basis or by leasing them out. Development of reservoir fisheries will also be intensified in medium and major irrigation reservoirs. Rengali and Upper Kolah reservoirs will be included for this purpose.

17-9 Panchayat tanks will be developed by the concerned panchayats out of their funds. Some tanks will be leased out to private pisciculturists on long-term lease and will be developed by the pisciculturists with the institutional finance under FFDA, etc. Necessary subsidy and technical guidance will be given by the Department. Besides, some of the selected panchayat water areas hitherto not properly cultured are proposed to be managed by the department, till the panchayats come to a stage to handle them on their own.

17-10 The inland fish production will be raised from the level of 28,000 tonnes in 1977-78 to the level of 40,000 tonnes in 1982-83.

Marine Fisheries

17-11 Orissa has got vast water spread areas like salt water lake Chilka and a long coast line of 480 kms. which have high potentialities for marine fisheries. In the absence of proper resource appraisal survey and adequate investment, development of the fisheries in this sector has lagged behind. The 480 Km. coast line of Orissa has an annual potential of 120,000 tonnes. But the present level of exploitation is only 23,000 tonnes per annum which is about 14 per cent of the potential and 1.9 per cent of the total marine fish landing of India. Technological developments have replaced empirical knowledge and traditional skill in certain aspects of the fishing industry, namely mechanised fishing and fish freezing, opening up new avenues for employment of the educated unemployed.

17-12. The marine fisheries programme would cover inshore, off shore and deep sea fishing. Traditional marine fishermen would be given assistance in the form of subsidy for acquiring improved boats and nets for small scale fishing, and water up to 3 Km. from the shore in the Central and South Orissa coast and 5 Km. from the shore in the North Orissa coast are proposed to be reserved exclusively for operation by country crafts. Infrastructure and improved marketing facilities in the coastal fishing villages will be provided. Private entrepreneurs will be given subsidy for acquisition of mechanised boats for off shore fishing and for setting up of ice plants, cold storages and freezing plants. The number of mechanised boats will be raised from the level of 350 in 1977-78 to the level of 1000 in 1982-83. Beyond the area reserved for traditional marine fishermen up to 10 Kms. from the shore will be used by mechanised boats below 25 tonnes and deep sea vessels above this size will not be allowed to operate in this zone. So far, the Orissa State Financial Corporation has financed for 249 Nos. of mechanised boat and the Banks have financed for 32 Nos. of boats. One of the major objectives in marine fisheries would be to provide landing and berthing facilities by way of jetties and fishing harbours at new fishing bases. The first fishing harbour project in Sixth Plan will be taken up at Astarang for which technical survey has been completed and the project report has been prepared. Another fishing harbour will also be established in the mouth of river Rushikulya which will cover the Southern coast of the State. A number of new marine Fishermen Co-operative Societies will be organised in the new fishing bases. Two such new societies to implement ARDC schemes will be organised at

Dhamara and Astarang in the first year of the Sixth Plan. Deep sea fishing programme will be taken up by private entrepreneurs availing of the loans from financial institutions. The proposed Maritime and Chilka Development Corporation will also participate in the deep sea fishing programme along with brackish water fisheries development and prawn culture in coastal areas. A sum of Rs. 1 lakh has been invested initially towards share capital, which may be raised upto Rs. 50 lakhs in the Sixth Plan Period. The Marine fish production is expected to be raised to 67,000 tonnes at the end of 1982-83 from the level of 28,000 tonnes in 1977-78.

Brackish Water Fisheries

17-13. Although brackish water fish culture by traditional method is prevalent in the State, it has not received adequate attention for planned development. Orissa has got 8,000 hectares of saline waters fit for brackish water fish culture. The major estuarine systems of the Mahanadi and Dhamara rivers along with their distributaries form a network of channels in the Cuttack, Puri and Balasore districts. There has so far been very little utilisation of mangrove swamps for fish culture and vast areas remain totally unproductive. The Khiragachhamadeli fish farm, which was started during 1956-57 has been remodelled during 1977-78 to make it more productive. Keshpur brackish water fish farm having a water area of 22.39 acres is situated adjoining a part of the Chilka lake and offers very good soil-water conditions. A research centre has been started in the Fifth Plan with ICAR's assistance and the farm is being remodelled at a cost of Rs. 5.82 lakhs.

17-14. No survey has yet been done on the existing potential for development of fish culture in other brackish waters. Another hindrance in this field is the lack of communication facilities. A modest beginning was made in developing brackish water fisheries during the last part of the Fifth Plan. During the Sixth Plan an intensive brackish water survey along the coastal areas will be taken up for identifying suitable areas for subsequent establishment of farms mainly for prawn culture. Seed resources for prawn and other varieties of fish will be located for assessing the investment pattern in this sector. Brackish water fish farms will be established with institutional finance in the private and co-operative sectors in deltaic areas close to river mouths such as to Adhuan, Rajnagar, Paradeep, Dhamra, Sonapur and peripheral areas of Chilka lake close to Pansapada, Satpara, Laxmipur, Bhusandpur. The organisational set up will be suitably strengthened to prepare feasibility reports of bankable schemes to attract institutional finance. Monitoring of the implementation of schemes and evaluation of the progress will also be systematically taken up.

Generation of Additional Employment

17-15. In the Fisheries Department direct employment in regular posts would be provided to 341 persons. Under the scheme of subsidies to acquire country and mechanised boats, self employment would be provided to 1,197 traditional inland and marine fishermen and pisciculturists and 654 unemployed educated persons. This would also provide additional employment to 3,591 fishermen engaged to work in country boats and 3,270 fishermen to be engaged in mechanised boats for sea fishing. In addition, employment opportunity to the extent of 732.6 man years would be generated under labour intensive programmes. Details of some of the programmes are outlined below:--

Extension Programme

17-16. At present there are only 90 fisheries extension officers. They are mainly engaged in fishery extension work disseminating Pisciculture technology. They also conduct survey of existing water areas and identify fishermen families for providing them short term loans from Banks and other financing institutions to acquire boats, nets and other equipments. The extension officers formulate bankable schemes in their respective areas for the identified families. They also serve as the basic field staff for Fish Farmers "Development Agencies". In this connection, it may be stated that there are 6 F. F. D. As in the state and there is a proposal to cover up all the districts of the State in a phased manner. During the Sixth Plan Period it is proposed to strengthen extension services by appointing one Fishery Extension Officer for each block in the State.

Education and Training

17-17. Training programme is absolutely necessary in the fisheries activities so as to educate the departmental personnel, fresh recruits and outsiders for achieving better results. 474 candidates have been trained till the end of 1977-78. An outlay of Rs. 15 lakhs has been proposed for the period 1978-83 to train about 1,345 candidates both inside and outside the State, on

different subjects relating to pisciculture and extension, mechanised boat operation, training of Dock-hands Launch drivers and gear technicians. Inservice training at Bombay and Barrackpore to 145 persons, pre-employment training to 850 persons and training of 350 numbers of beneficiaries in Inland and Marine fisheries during the Sixth Plan period is envisaged.

Fishing Harbour and Landing Facilities

17-18. This is a centrally sponsored scheme and the State's share is met out of State Plan. Major items of expenditure would be on Astaranga Fishing Harbour, completion of shore establishment at Dhamra, provision of new fishing harbours at Gopalpur, Santrapur (Chilka) and Rushikulya mouth. The jetty at Chadipur alongwith an approach road is completed. Other infrastructure facilities will be taken up during the Sixth Plan. New Jetties at the river mouths in the Orissa coast will be taken up. These sites are under investigation. It is contemplated to construct small jetties in Chilka lake at Balugaon, Kaluparaghat, Satpara and a few other places.

Off Shore Fisheries

17-19. Assistance to traditional marine fishermen in shape of subsidy will be given for acquisition of new country boats and gears. The fishermen families requiring such assistance will be identified by the extension staff who will also help to arrange loan from financial institutions.

Mechanisation and improvement of fishing crafts :

17-20. This provision is meant for giving subsidy to private entrepreneurs and marine fishermen co-operative societies to acquire mechanised boats. The Fishermen Co-operative Societies, viz., Kirtania, Rajalaxmi, Dhamlei and Astaranga will be given assistance to operate marine fisheries development schemes with A. R. D. C. assistance.

Expansion of Fisheries Co-operatives

17-21. This scheme envisages formation of new Co-operative societies and revitalising of existing societies especially for availing institutional finance and N. C. D. C. assistance. 48 Nos. of Co-operative Societies have been organised during 4 years of the Fifth Plan and it is proposed to organise 100 Nos. of Societies during the Sixth Plan period.

Publicity and Extension

17-22. In order to popularise pisciculture among the people exhibitions and fairs will be organised. More literature, publicity materials, posters, pamphlets, films will be produced and utilised to educate the rural people in the modern technology of pisciculture.

Infrastructure Facilities to Coastal Fishing Villages

17-23. Infrastructural facilities such as road, ice plant and cold storages, tube wells, fish curing yard, jelly, community buildings would be provided in coastal fishing villages. Major portion of the expenditure is borne under Central sector. Supervisory staff along with some contingent expenditure would be met from the State plan. Kasafala village in Balasore district and Balitutha village in Cuttack district have been taken up for integrated development during the Fifth Plan period. The programme will be completed during 1978-79 and three new villages, namely, Parunabandha, Kantadia and Chudamani will be taken up in the Sixth Plan. It is proposed to provide roads to fishing villages, which were not covered under the Central sector scheme, to connect the fishing bases with marketing centres for better marketing of the catch and the expenses will be borne in the State Plan. A road to Astarang has been taken up and similar road will be provided to Satpara and other fishing villages for which a sum of Rs. 1,00 lakh has been earmarked.

Provision of Office and Quarters

17-24. For provision of Office and residential accommodation at fishing harbours, Rs. 2.10 lakhs was sanctioned during 1977-78 for Dhamra Harbour. The programme will be completed during the current year. Such programme has been taken up at Astaranga during the year 1978-79 and expected to be completed in the Sixth plan period.

Survey and Census of Fisheries Resources

17-25. A new scheme for survey of fisheries resources has been included in the Sixth Plan to take stock of the existing inland fisheries resources village wise.

Share Capital to Corporation

17-26. Necessary share capital has been proposed to be invested in the Maritime & Chilka Area Development Corporation for undertaking marine and brackish water fisheries development programmes.

Centrally Sponsored/Central Sector Schemes

17-27. During 1977-78, the Government of India, Ministry of Agriculture & Irrigation have approved the centrally sponsored scheme for provision of infrastructure facilities in two coastal fishing villages, viz., Balitutha in Cuttack district and Kasafal in Balasore district at an estimated cost of Rs. 31.35 lakhs and Rs. 30.60 lakhs respectively. Out of the total amount of Rs. 61.95 lakhs, Rs. 46.46 lakhs would be available as Central assistance out of which Rs. 15 lakhs has been received and the balance amount is likely to be released during the current year. An outlay of Rs. 105 lakhs has been proposed for completion of the project alongwith construction of some new projects for which project proposals are being prepared.

17-28. Lack of landing and berthing facilities is the main reason for under development of marine fisheries in the State. For provision of landing and berthing facilities at Orissa coast a sum of Rs. 200 lakhs has been proposed for provision of jetties at Adhuan Hansua, Kirtania and Rushikulya. The jetty, which was taken up at Chandipur has been completed and some other infrastructural facilities would be provided. Few other locations are likely to be identified for provision of such facilities and they are being further surveyed. It has been decided in consultation with the Planning Commission that Central assistance will be limited to the following item of work :—

1. Break water
2. Landing, berthing and outfitting quays
3. Jetties
4. Dredging of basin and channel, including rock cutting and reclamation to the extent of availability of dredged material.
5. Spillway including workshop
6. Auction hall and its drainage
7. Provision of internal road to connect facilities mentioned

Full central assistance in the form of grant on the above mentioned items will be available subject to the condition that the State Government will arrange for the other facilities which are connected with the provision of landing and berthing facilities such as acquisition of land, installation of storage and processing plants, fishing gear store office, electricity and water supply sewerage, concrete or land pavements for drying of fish and nets etc.

17-29. Six Fish Farmers Development Agencies have been sanctioned by the Government of India for the districts of Ganjam, Balasore, Dhenkanal, Mayurbhanj, Balangir and Phulbani. A sum of Rs. 200 lakhs has been proposed for continuance of these F. F. D. As. along with establishment of new fish farmers Development Agencies in the coastal district of Cuttack and Puri. There is vast scope for execution of central sector schemes in the coastal districts. Hence project reports have been drawn up to establish FFDAS in Cuttack and Puri districts. In addition project reports are under preparation for Keonjhar district where adequate water areas are available. The Government of India, Ministry of Agriculture and Irrigation sanctioned a sum of Rs. 12.33 lakhs during 1977-78 for implementation of the scheme for brackish water fish farming at Inchudi in Balasore district. The work is in progress and expected to be completed during the current year. A sum of Rs. 30 lakhs has been proposed for establishment of brackish water fish farm in other areas for which project reports are being prepared for submission to Government of India.

Intensive Block level Planning

17-30 Intensive block level planning especially under the integrated Rural Development programme has already been launched in Puri district at a cost of Rs. 7.80 lakhs. The programme will cover 760 hectares of water area inclusive of 60 Ha reservoirs water, covering 7 blocks,

The additional fish production would be 21,000 tonnes from 700 hectares at the rate of 3,000 Kgs. per hectare by adopting composite fish culture. This programme will be extended to 107 other selected Blocks in 9 other districts where special programmes like S. F. D. A., M. F. A. L., C. A. D. A. and U. P. A. P. are under operation.

Tribal Sub-Plan Areas Programme

17.31. During the Sixth Plan period flow of funds to the Tribal Sub-Plan Areas for Fisheries Schemes would be of the order of Rs. 38.33 lakhs. Tribals would be induced to take up fish capture and culture as vocation and adequate provision has been proposed in consideration. 195 marine fishermen and 396 inland fishermen and pisciculturists in the tribal districts would be given subsidy to acquire country boats, nets and pisciculture by availing institutional finance to the extent of 75 per cent of the capital cost. Besides, 350 candidates belonging to the tribal districts would be trained both in inland and marine fishery. In addition to State Plan resources Rs. 40 lakhs would be available as special Central assistance for implementation of subsidy schemes for development of pisciculture in I. T. D. P. Blocks.

Institutional Finance

17.32. Fisheries programme in the State are mainly proposed to be developed in private sector. As such, the financing institutions have a great role to play. The private entrepreneurs are not economically sound to invest high capital cost. About Rs. 12 crores of institutional finance would be required for acquisition of 650 mechanised boats, 4 large sized trawlers, 8 ice plants and 1,000 country boats in private sector. Financial assistance from the Commercial Banks and Orissa State Financial Corporation and refinance facilities of A. R. D. C. will be availed of by the private entrepreneurs. In inland sector institutional finance will be sought for development of Ansupa lake by the Ansupa Fishermen Co-operatives Society, pisciculture in dead river of Gangutia, reservoirs fisheries and brackish water fisheries and prawn culture in coastal areas and production of fingerlings.

World Bank Schemes

17.33. In addition, World Bank assistance has been sought for development of Chilka lake brackish water fisheries development project at an estimated cost of Rs. 220.5 million. For development of marine fisheries in north Balasore coast, an integrated project has been formulated at a cost of Rs. 189.2 millions. Government of India have advised the State Government to prepare the project reports by employing a professional consultant. They have been requested to arrange the engagement of South East Asia Fisheries Development Centre, Manila, Philippines to prepare detailed project reports for presentation to the World Bank.

Marine Products Export Development Authority Assistance

17.34. The MPEDA are extending their assistance to the Exporters of the State in the matter of export of marine fish specially prawn to foreign market. They have sanctioned Rs. 40,000 for establishment of a landing platform at Astaranga. Three more such platforms would be provided by them. Besides, they are likely to establish a freezing plant at Paradeep. A regional office would be established by the said authority in Orissa during the Sixth Plan period.

Other programmes for improvements of economic condition of fishermen

17.35. With a view to improving the economic condition of fishermen the subsidy scheme will continue in a bigger scale and they will be paid subsidy for acquisition of country boats and nets and for pisciculture. The fishermen will be brought to co-operative fold by organising 100 fishermen co-operative societies to avail institutional finance and to operate marine and inland fisheries development schemes. Demonstration in composite pisciculture will be taken up at fish farmers' tanks for maximum fish production by providing them inputs subsidy. Margin money will be given to marine fishermen and fishery co-operatives for acquisition of mechanised boats for sea fishing.

SCHEMEWISE BREAK UP OF THE OUTLAY AND EXPENDITURE

State—Orissa
(Rs. in lakhs)

Major head of Development	Minor head of Development/ Scheme	Fifth Plan Outlay (1974—79) (revised)	1974-78		1978-79		Proposed Outlay 1978—83		
			Annual Actual Expendi- ture	Agreed Outlay	Total	Of which M. N. P.	Total	Of which M. N. P.	Foreign exchange content of total Out- lay (as shown in Col. 7)	Capital content of total outlay
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
CONTINUING									
Agriculture and allied services Fisheries—	Direction and Administration								
	Administration of Headquarters.	1.00	0.60	0.75	..	41.00	..	..	30.00
	Administration of Zonal and District level.	3.00	1.24	0.30	..	30.00	..	..	25.00
	Extension								
	Fisheries Extension Programme	6.50	1.55	2.00	..	15.00	..	..	5.00
	Fish Farms								
	Improvement of K. Gang fish farm.	3.00	5.03	14.12	..	24.12	..	..	24.12
	Remodelling of fish farm ..	8.50	6.34	..	..	10.00	..	..	10.00
	Establishment of brackish water fish farm in deltaic areas.	13.00	5.82	..	..	150.00	..	..	150.00
	Hatcheries								
Establishment of riverine spawn collection centre and adjoining nursery centre.	9.00	6.92	1.00	..	20.00	..	..	20.00	
Production of quality spawn by adopting induced breeding technique.	7.70	6.38	2.00	..	2.00	..	..	..

Research								
Applied Research	..	4.00	1.38	1.15	..	4.00	..	1.00
Organisation	..	8.00	8.51	..	..	..	..	..
All India Co-ordinated Research Project on composite culture of Indian and exotic fishes and fishseed production.		2.50	1.74	0.88	..	4.88	..	1.00
All India Co-ordinated Research Project on utilisation of trash fish.		2.80	1.35	0.67	..	5.00	..	1.00
Education and Training								
Training in Fisheries	..	10.50	7.93	3.00	..	15.00	..	5.00
Inland Fisheries								
Assistance to traditional inland fishermen and pisciculturist.		3.00	1.69	2.00	..	6.00	..	6.00
Demonstration of composite pisciculture in private tanks.		4.50	4.68	2.55	..	6.55	..	3.00
Scheme for development of reservoir fisheries.	..	..	..	0.50	..	130.00	..	120.00
Fishing Harbour and landing facilities.								
Construction of Dhamara Fishing Harbour Project including road communication.		28.50	23.00	19.00	..	300.00	..	300.00
Construction of Fishery Jetty and sillway of Chandipur.		14.60	0.93	1.00	..	20.00	..	20.00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Construction of Antasanga Fishing Harbour Project.	..	..	10-00	..	63-00	..	..	63-00
	Scheme for small landing facilities	..	..	5-00	..	20-00	..	..	20-00
	Off-shore Fisheries								
	Assistance to Traditional Marine Fishermen.	2-20	2-21	2-00	..	6-00	..	..	6-00
	Pursecining in Balasore coast	9-00	7-06	..	..	..	..	..	..
	Deep Sea Fisheries								
	Introduction of Medium Trawlers for sea fishing	12-97	12-97	..	..	..	..	..	..
	Repair of Polish trawlers	8-70	8-69	..	..	..	..	..	..
	Processing presentation and marketing								
	Expansion of Marketing of fish and bye-product	5-00	4-60	..	..	..	..	..	..
	Establishment of Ice Plant and Cold Storage facilities.	6-20	..	..	..	..	..	..	..
	Opening of P. L. Account for exploitation and Marketing.	12-00	12-00	..	..	..	..	..	..
	Mechanisation and Improvement of Fishing Crafts.								
	Expansion of Mechanised Wooden Boats.	19-00	6-30	..	..	..	..	..	..

Development of Marine Fisheries in Balasore district under ARDC at Kirtania.	27-00	11-87	10-82	..	30-00	..	..	25-00
Operation of Mechanised Wooden boats by Rajlaxmi Fisherman Co-operative Society under ARDC.	23-50	7-98	..	..	30-00	..	..	25-00
Development of Marine Fishing of Astaranga through Astaranga Marine Fishermen Co-operative Society under ARDC.	..	..	3-00	..	30-00	..	..	25-00
Development of marine Fishing of Dhamara through Ma-Dhamrai Marine Fishermen Co-operative Society under A. R. D. C.	..	..	2-85	..	30-00	..	..	25-00
Scheme for margin money for acquisition of mechanised Trawlers by private entrepreneurs.	..	..	21-06	..	100-00	..	..	100-00
Other expenditure								
Expansion of Fisheries Co-operative.	9-00	9-54	1-98	..	10-45	..	..
Fisheries Propaganda and Fair	1-83	1-88	0-10	..	5-00	..	..	4-50
Infrastructure facilities to coastal fishing villages—								
Balitutha and Kasafala	..	3-50	..	20-50	..	40-00	..	30-00
Provision of office and quarter of Dhamara Fishing harbour.	..	2-07	1-47	..	10-00	..	..	10-00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Provision of office and staff quarter of Astaranga Fishing harbour project.	..	..	2-00	..	2-00	..	..	2-00
	Scheme or Fisheries Corporation share Capital.	..	..	1-00	..	50-00	..	..	50-00
	Survey of Brackish water fish farming in Orissa coast. Fish Farms	..	..	6-30	..	22-30	..	..	2-00
	District composite fish farm	..	..	..	..	3,00-00	..	..	3,00-00
	Inland Fisheries								
	Development of Chilka Lake (including brackish water prawn culture).	..	..	..	..	1,15-00	..	..	1,15-00
	Fishing Harbour and landing facilities								
	Construction of Rushikulya Fishing harbour project.	..	..	..	..	70-00	..	..	70-00
	Other expenditure								
	Infrastructure facilities to coastal fishing villages. Purunabandha, Kankadia, Chudamani.	..	..	..	..	1,00-00	..	..	90-00
	Survey and census of Fisheries resources.	..	..	..	..	7-00	..	..	1-00
	Development of road communication to fishing villages.	..	..	..	..	1,75-70	..	..	1,75-70
	Grand Total	..	2,70-00	1,72-26	1,39-00	..	20,00-00	..	18,60-32

ANNEXURE VII

State Orissa

FISHERIES

AGR-27

Targets of Production and Selected Physical Programme

Sl No.	Name of Item	Unit	Actual achievement		Targets 1982-83
			1973-74	1977-78	
(1)	(2)	(3)	(4)	(5)	(6)

I. PRODUCTION

Fish production—

(a) Inland	000 tonnes	23.00	28.00	40.00
(b) Marine.	Ditto	17.00	28.00	67.00
(c) Total.	Ditto	40.00	56.00	107.00

(1)	(2)	(3)	(4)	(5)
2.	Mechanised boats	Nos.	122 (350 Nos. achieved)	1000
3.	Trawlers	Nos.	4 (11 Nos. achieved)	15
4.	Refrigeration			
	(a) Cold Storage	Nos.	8 15	30
	(i) Capacity	Tones.	11 17	30
	(b) Ice Plants	Nos.		
	(i) Capacity	Tones.	11 17	30
	(c) Freezing plants	..		
	(i) Capacity	Nos.	6 10 12 Nos. achieved)	20

5. Fish seed—

(a) Produced.	Million.			
(i) Spawn.	Do.	350	288	600
(ii) Fry/Fingerlings.	Do.	35	30	85
(b) Distributed				
(i) Fry	Do.	..	23.3 (Departmental)	65
(ii) Fingerlings.	Do.	..		
6. Fish seed farms.	Nos.	95	95	121
(a) Water area	..	90.00	143.00	3415
(nursery areas)				
7. Brackish water Fish farming area.	Hect	..	..	500

CHAPTER 18

FOREST

18.1. Forests play a very vital role in the economy of Orissa and in the well being of its people. The State has about 68,000 sq. Kms. of forests which cover 43.5 per cent of its geographical area. However, it is revealed from a recent satellite survey that the actual area under forests is of the order of 49,000 square Kms. An area of about 19,000 square Kms. is at present without any forest growth due to factors like delay in completing demarcation and reservation after the merger of princely states, podu cultivation, slow pace of afforestation etc. Nearly 8 per cent of the State's non-tax revenue comes from the Forests. What is more important is that a large part of the rural population depend almost entirely on the forests for earning their livelihood.

18.2. Forests occupy a central position in the tribal's economy. An review of forest policy should take into consideration the role of forestry both as a protective measure as also as a development need. In the context of Orissa particularly, Forest based programmes should be so planned that they also subserve the tribal economy.

18.3. The income from forest rose from Rs. 8.24 crores in 1973-74 to Rs. 14.13 crores in 1976-77 and is estimated to be of the order of Rs. 17.29 crores for 1977-78.

18.4. The main objectives of the forestry development during the sixth plan will be the following—

- (i) to meet the economic demand for forest products'
- (ii) to maintain and improve the quality of environment; and
- (iii) to provide substantial employment to the poorest sections of the society.

18.5. The main thrust of the development programme will be accelerating production forestry, substantially enlarging social forestry including farm forestry and linking forestry development with the economy of the people living in and around forest areas.

Achievements

18.6. Under the various forest plantation schemes in the State Sector, 22,156.8 hectares of plantations have been taken up at a total cost of Rs. 183.83 lakhs. while under the Centrally Sponsored Schemes 14,150.7 hectares were planted at a cost of Rs. 138.33 lakhs. Thus the total plantation raised during the Fifth Plan period was 36,307.5 hectares at a cost of Rs. 322.16 lakhs. In addition 4,900 hectares were planted under special schemes i.e. D. P. A. P., I. T. D. P. and T. D. A. Thus in all 41,207.5 hectares of plantation have been raised under various schemes with an investment of Rs. 384.93 lakhs.

18.7. 426 Kms. of new forest roads have been constructed at a cost of Rs. 21.24 lakhs. 8,443 kms. of boundary lines have been demarcated at a cost of Rs. 13.62 lakhs for taking up new reserves. During 1974-78 1,139 Foresters and Forest Guards were trained in the Forest Schools of the State and 83 officers and Rangers were trained in Forest Colleges at a cost of Rs. 4.24 lakhs. Rs. 21.78 lakhs were spent on preparation of working plans and project reports during the 4 year period.

18.8. Against the Fifth-Plan target of 32,525 hectares for 1974-79 under all plantation schemes under forestry in the State Sector 22,156.8 hectares have been planted during the period 1974-78. 7,790 hectares are being taken up for plantation during the Annual Plan 1978-79. Under the Centrally Sponsored Schemes against the target of 27,160 hectares for the 5th Plan 14,150 hectares has been planted up to the end of 1977-78 and 10,566 hectares are proposed to be planted during 1978-79. 30 K. M. avenue plantations is also being taken up along the National Highway. 4,622 hectares have been planted under D. P. A. P. in addition to 14 K. M. of revenue plantation and this year 2400 hectares are under plantation in addition to 20 K. M. of avenue planting against the target of 8,214 hectares for the entire 5th Plan. Under I. T. D. P., 1,034 hectares have been planted up within 4 years and 1,290 hectares are being taken up this year, against a target of 2,500 hectares. 426 K. M. of new forest roads have been constructed and 45 K. M. are under construction and 60 K. M. of old roads are being improved. In the scheme of Forest Development Consolidation, 8,443 K. M. have been cleared for new reservation and 4,000 K. M. are being demarcated and surveyed this year.

18.9. With the increase of population and consequent extension of agriculture and industrialisation a very large area of forests has already been lost. Due to over exploitation and for various other reasons, the stocking has become much less than normal. Due to paucity of funds adequate afforestation operations could not be undertaken to help the establishment of regenerated crop to take its place with the result that the forest wealth has become very much poorer. There is need, therefore, on the one hand to check further depletion of forest growth and on the other hand to restock the less valuable growing stock with more valuable species. Another constraint has been poor communication system in the forest areas.

Strategy

18.10. It is well known that under intensive management and better protection, output of forest produce can be substantially increased as also the revenue from forest. Greater emphasis has been laid in the 6th Plan for taking up schemes in rural areas and particularly in the tribal regions. Almost all forestry schemes are labour intensive in character, particularly the road and plantation schemes since about 90 per cent of the expenditure are incurred on distribution of wages. Therefore, the 6th Plan strategy would be mainly accelerated production and social forestry including farm forestry giving due attention to the need for maintaining ecological balance and protecting the environment. In the tribal areas, the goal shall be to see that the requirement of timber, bamboo, fuel wood and fodder for the local people can be met on a sustained basis. Besides, taking up afforestation programme, our strategy in forest sector will be to double the out-put of forest product by the end of 10 years period ending 1987-88 to achieve this goal. The coastal afforestation programme will be given foremost attention and shelter belt plantation along the coast line of Orissa shall be taken up as an anti-cyclone measure. In addition development of communication and provision of houses to low paid employees and taking up anti-erosion measures in forest areas shall be given due attention in the sixth plan.

Employment potential

18.11. It has been estimated that 34 lakhs skilled and unskilled man years of full employment will be generated when the programme outlined below are taken up. These programmes will benefit particularly the tribals in giving them gainful employment and improve their economy.

Strengthening the Organisation

18.12. An outlay of Rs. 25.00 crores has been proposed under Forests. To handle the programme of this magnitude, the organisation of Forest Department needs to be strengthened. Provision has been made for increasing the number of Divisions and Ranges and for augmentation of staff at lower levels. Programmes for reorganisation of the Department to ensure better efficiency in administration and management have been drawn up.

18.13. A planning cell headed by a Deputy Conservator of Forests is functioning in the office of the Chief Conservator of Forests. An Assistant Conservator of Forests is in charge of a Statistical Section under this cell. This is rather inadequate to successfully formulate plans and monitor the expenditure, budgeting and informations. It is proposed to strengthen the planning and the Statistical Cells in the Office of the Chief Conservator of Forests as well as in the Circles and Divisions. A sum of Rs. 55.00 lakhs is earmarked in the sixth plan to meet the cost of expansion of the above wings and creation of statistical cells in the Circles and Divisions.

Forest Publicity, Public Relation & Extension

18.14. At present there is a publicity wing under the Forest Utilisation Division, but this is not properly equipped to take up the necessary publicity works in the desired scale. Mobile Cinema Units in each circle headquarters with transport vehicles are to be provided to go to the interiors to show publicity films on forest conservancy, tourism and of wild life interest. Posters, brochures, literature etc., will be published and distributed on the utility of conservation of forests as well as proper methods of collection preservation, processing and marketing of minor forest produce. Again, adequate extension work has to be taken up educating tribals on weaning them away from podu cultivation. Equipments like Camera, audio-visual etc. are necessary to activate the publicity efforts. A sum of Rs. 80.00 lakhs is provided to achieve the above objective.

RESEARCH EDUCATION & TRAINING

Forest Research

18-15. With the launching of massive afforestation programmes and introduction of new species, the need for expanding and improving the Forest Research Organisation in the State is being keenly felt. Nearly 20,000 hectares are being planted up annually with various quick growing and economic species under diverse soil and climatic conditions. Experiments are needed to find out the best species and techniques for the different zones and soil conditions which would require the services of specialists in soil science, Genetics and Botany. Research ranges shall be suitably strengthened to ensure better supervision over experimental plots, research gardens etc. It is proposed to have an outlay of Rs. 50 lakhs out of which foreign exchange component will be Rs. 5 lakhs for purchase of sophisticated instruments and other equipments.

Training of personnel

18-16. The existing training facilities in the State consist of two Training Schools for Foresters and one Training School for Forest Guards. This is grossly inadequate even to meet the demand of training the untrained personnel in the Department. Besides strengthening the existing institutions a composite Training School for the training of both Foresters and Forest Guards is proposed to be established in Koraput district in the Tribal Sub-Plan area.

Survey, Demarcation & Settlement of Forest areas

18-17. Out of the estimated forest area of 67,925 Sq. Kms. hardly 25,637 Sq. Kms. constitute the Reserve Forests. About 15,793 Sq. Kms. of forest have been demarcated for reservation. The rest 26,495 Sq. Kms. are under undemarcated forests, vulnerable to adverse biotic influence like illicit felling, grazing unauthorised cultivations etc. So far only 2,200 Sq. Kms. of demarcated forests have been declared as Reserve Forests. To expedite the process of demarcation and reservation Rs. 100 lakhs have been provided.

Working Plans

18-18. At present there are 8 Working Plan divisions, including four divisions under committed side. The Working Plans in Orissa are very much in arrears, for want of adequate staff and funds. More intensive stock-taking and survey are needed to make the working plans up-to-date and modern for intensive management. A sum of Rs. 50 lakhs have been provided under the Scheme which includes staff cost, field expenditure, on enumeration and demarcation as well as on survey and preparation of large scale maps through the Survey of India.

INFRASTRUCTURE DEVELOPMENT

Forest Communication

18-19. According to the National Council of Applied Economics Research, a road intensity of 1 Km. per sq.Km. of forest area is an average working arrangement in well managed forests. In Orissa with a little over 7000 Kms. of forest roads, hardly half of the area can be tapped from a distance of 2 Kms. and the rest be at least 5 Kms. or beyond. The standard of existing forest roads needs improvement to cope up with fast moving heavy motor haulage. The existing forest roads need to be widened and important arterial roads should be metalled for all weather and heavy traffic. The wooden culverts on forest roads need be replaced by R. C. C. culverts and bridges. Rs. 400 lakhs are provided for construction of 400 Kms. of new roads and improvement and metalling of 200 Kms. of existing arterial roads and for construction of R. C. C. culverts and bridge on these roads.

Buildings

18-20. There is a shortage of office and residential accommodation for the field staff which is proposed to be made good in a phased manner.

18-21. The Offices of the C. C. F., Addl. C. C. F., C. F., Development and Forest Utilisation Officer are located in the Old Secretariat buildings at Cuttack and have too inadequate accommodation. Other Forest Officers at Cuttack and Bhubaneswar are held in rented buildings. It is proposed to shift the headquarters of the C. C. F., Addl. C. C. F. and other

State level offices from Cuttack and Angul to Bhubaneswar. A composite office building will be constructed to house all forest offices now located at Cuttack & Bhubaneswar. With the shifting of headquarters to Bhubaneswar about 200 employees will require residential accommodation there. About 100 residential quarters are proposed to be constructed for this purpose. Quarters and offices for the proposed new Divisions shall also be constructed. Rs. 300 lakhs have been provided under this scheme.

PRODUCTION AND SOCIAL FORESTRY

Programmes

18-22. Afforestation will be the main thrust of development work in the forestry sector because of its labour intensive nature and also because of its ameliorative productive potential. A target of 1,96,500 hectares have been proposed in the Sixth Plan both in State and Centrally Sponsored Schemes out of which 90,900 hectares will be under State Sector with an outlay of Rs. 985.00 lakhs and 97,000 hectares will be under Centrally Sponsored Schemes with an outlay of Rs. 1534.00 lakhs. The target for forest roads is 500 Kms. of forest roads under the Revised Minimum Needs Programme at a cost of Rs. 400 lakhs, 80,000 Kms. of boundary lines for new reserves has been proposed at a cost of Rs. 100.00 lakhs and survey of the forest resources of selected divisions is proposed to be taken up at a cost of Rs. 50.00 lakhs.

18-23. Owing to the increased developmental activities in the 6th Plan, large number of staff will be appointed and training programme for the technical staff has been envisaged by expanding the existing schools and opening of a new training school; in the Southern Orissa to train up the Foresters and Forest Guards. Besides, a large number of Rangers would be recruited and because of non-availability of sufficient seats in the training colleges, it is proposed to give a short course training in Schools inside the State and then send them to forest colleges for condensed course after they gain some experience. It is, therefore, proposed to train 35 Gazetted Officers, 150 Rangers, 450 Foresters, 1500 Forest Guards during the Sixth Plan. For training and education an outlay of Rs. 50.00 lakhs has been proposed for the Five-Year Plan 1978-83.

Production Forestry

18-24. **Plantation of quick Growing Species**—This is a continuing scheme. Fast growing species such as Eucalyptus, Accacia, auriculiformis casuarina, pines and bamboo etc., will be planted in suitable sites in Reserve Forests. Rs. 200 lakhs are provided under this scheme to raise 20,000 hectares of plantations.

Plantation of forest species for Industries and Commercial uses (Economic Plantation)

18-25. This is a continuing scheme. Valuable species such as Teak, Gambhar, Bamboo, Cashew etc., will be planted to replace and enrich the existing less valuable miscellaneous low density forests. These plantations will mainly cater to the existing and future needs of the Industries and the market. Rs. 400 lakhs have been provided here with the objective of planting 40,000 hectares.

SOCIAL FORESTRY

Farm Forestry

18-26. Great stress has been laid in the Sixth Plan on Farm Forestry whereby people would be encouraged to take up plantations on their own land. Government will provide technical expertise and extension support and free saplings. This shall also include plantation of fodder trees. Nurseries shall be raised to achieve the objective of providing saplings and prizes and other incentives shall be awarded to receptive and enthusiastic farmers. Rs. 50 lakhs have been provided under this scheme.

Recreation Forestry

18-27. This is a new scheme. Only Rs. 25 lakhs are provided under this scheme to create forests near cities, industrial townships and places to tourist interest to relieve the monotony of the city dwellers by providing recreation facilities. This will also work towards maintaining the ecological balance. Establishment of parks and gardens shall be taken up under the scheme to beautify the surroundings.

Anti-erosion measures in R. F.

18-28. Although there is a good deal of soil erosion in the Reserve Forests no soil conservation programme has yet been taken up in the Reserved Forests. Some of the river catchments are under shifting cultivation. Anti-erosion measures such as gully plugging, check damming, contour trenching, grading the slopes. Planting the areas susceptible to land slides etc. with live hedges, grasses, soil binding herbs and shrubs are envisaged under the scheme. All these measures will be taken up in Reserve Forests, particularly in areas where erosion is active. Rs. 1,00 lakhs are provided for this scheme.

Development of pasture land

18-29. Rs. 20 lakhs has been provided for this new scheme for development of pasture in forest areas near large towns. Some forests have become absolutely unproductive and are unfit to grow big trees. Planting of fodder trees and grass in such sites will achieve the dual objective of preventing erosion and making them productive. Such forest areas situated within easy distance near large towns viz. Berhampur, Rourkela and Sambalpur shall be taken up so that the produce shall be marketable. There is acute shortage of fodder in these towns and the fodder plantations will meet the demand to some extent. Expansion of this scheme to other areas will be taken up in the light of experience to be gained.

WILD LIFE AND NATURE CONSERVATION

Wild Life Conservation and management including biosphere resources, natural parks, sanctuaries, zoological parks, botanical gardens etc.

18-30. Improvements in the Nandankanan Zoological garden and Deer Parks are proposed under this scheme. Besides, there is a long standing proposal to establish a Botanical garden near Sambalpur, for which investigation has been made. A few more deer parks near Sambalpur, Kapilas, Harishankar, Konark, Taptapani and Rourkela are to be established. Some more wild life sanctuaries are proposed to be established. A provision of Rs. 100 lakhs has been made for these programmes.

Protection of Forests (Against man, animals, pest and diseases)

18-31. This scheme aims at supplementing normal protection measures by providing additional protection staff, mobile squads with jeeps and prosecuting staff. This is a continuing scheme, providing of a mobile squad and a prosecution Ranger for each territorial Division and appointment of armed forest guards in vulnerable areas will ensure protection of forests against illicit fellings. Funds under the scheme will be utilised to take up trenches in areas subject to heavy grazing to ward off cattle. Boundary lines and pillars will also be constructed to replace the existing old structures. There is a provision of Rs. 75 lakhs under this scheme. This shall include provisions for fire fighting squad with equipments.

RESOURCES DEVELOPMENT AND UTILISATION

Mechanised logging, extraction and marketing of timber and fuel

18-32. This is a new scheme. For the present, equipments and tools shall be purchased and personnel sent for training in mechanical logging and extraction. Rs. 10 lakhs are provided for this scheme.

Development of Minor Forest Produce

18-33. It is proposed to intensify this programme during the sixth plan to cover Asan cultivation in tribal districts like Mayurbhanj, Sundargarh, Keonjhar and Balasore (Nilgiri sub-division) and plantation of Sabai, Kusum (for lac cultivation), Rauwolfia serpentina and other medicinal herbs such as : Vinca rosea solanum, Khasianum etc. A few herbal gardens shall be established and maintained in suitable localities. A provision of Rs. 65 lakhs is made to cover this programme.

CENTRAL SECTOR

Afforestation for Soil Conservation in the catchment Areas of Hirakud and Machhkund

18-34. This is a continuing scheme with the objective to reduce silt deposits in the Hirakud and Machhkund reservoirs, by taking up anti-erosion measures in the forest lands of the catchment areas of the Mahanadi above the Hirakud Dam and the Machhkund river above the Jalaput Dam. 15,000 hectares are proposed to be tackled on a priority basis in the catchment areas of those important two river valley projects at a cost of Rs. 150 lakhs.

Simillpal Tiger Reserves

18-35. This is a continuing scheme of the 5th Plan. Rs. 35 lakhs have been provided for the Sixth Plan period.

Development of National Parks and Sancturles and Nature Reserves

18-36. This is another continuing scheme of the 5th Plan for conservation of crocodiles in Tikarpada, Bhitarkanika and Nandankanan. Rs. 50 lakhs are provided in the 6th Plan period to continue the projects.

SOCIAL FORESTRY

Reforestation of Regraded Forests

18-37. This is a continuing scheme, the object of which is to restore the vast forest areas which have progressively degenerated and are now devoid of any forest growth. A sum of Rs. 250 lakhs has been provided under this scheme to take up plantations in 25,000 hectares.

Mixed Plantation

18-38. This continuing scheme aims at raising mixed plantation of timber and fuel wood species in waste lands, village common lands etc. inside the Reserve Forests with the assistance of village panchayats to meet the fuel and other requirements of the local people. The scheme also envisages distribution of planting materials to the public for planting trees in their own lands. Rs. 200 lakhs are provided to take up 20,000 hectares under this scheme and another Rs. 50 lakhs for raising seedlings for distribution amongst villagers.

Lac Development

18-39. This is another continuing scheme of the 5th Plan. The objective of the scheme is to educate by following extension measures and package programme in the improved technique of lac cultivation. It is also proposed to continue lac cultivation in the existing package blocks and maintain the brood lac farms. A sum of Rs. 5 lakhs is provided under this scheme.

Research, Survey and Servicing of Social Forestry Programme

18-40. This is a new scheme to be implemented in the 6th Plan. For successful implementation of the social forestry programme, it is essential to have research support to determine species suitable for different areas on the basis of climatic and soil conditions and to experiment and evolve the best technique of growing mutually compatible mixed plantation. A sum of Rs. 5 lakhs is provided here.

Compensatory Afforestation in Pottern Command Areas

18-41. This is a continuing scheme to take up compensatory plantation in Malkangiri subdivision in Koraput district. Rs. 180 lakhs is the outlay of the approved scheme of which Rs. 69 lakhs have been spent already. The balance Rs. 111 lakhs will be utilised in the 6th Plan to raise 9,000 hectares of plantations to compensate for loss of forest area owing to construction of Pottern reservoir.

Shelter Belt Plantation

18-42. This is a new scheme to raise a shelter belt along Orissa coast over 1 K. M. wide as protection against periodic cyclones. A sum of Rs. 773 lakhs is provided to raise 1 K. M. wide shelter belt over a length of 280 K. Ms. A special scheme in this regard has already obtained the sanction of Government of India.

Tribal Sub-Plan

18-43. A substantial amount of plan expenditure has been earmarked for the tribal sub-plan area during the last three years of Fifth Plan. The total provision for the Sixth Plan under Forests is Rs. 25,00 lakhs. Out of this, a sum of Rs. 12,22 lakhs is earmarked for Tribal Sub-Plan out of which Rs. 5,00 lakhs will be spent on plantation Rs. 50 lakhs on survey, demarcation of forests and Rs. 3,50 lakhs for other development works. All these programmes are labour intensive and will create additional employment opportunities for the tribal people.

18-44. Besides, the programme under the State Plan mentioned above, schemes for Rs. 1,00 lakhs are being formulated for execution with special central assistance which are expected to contribute to the improvement of economic conditions of the tribal population.

B. A. I. F. Scheme—Social Forestry

18-45. Each family of the small and marginal farmers and landless labourers under the scheme will be provided with 25 acres of land in degraded forests on revenue lands and 10 Kgs. of food grains and 2 Kgs. of nutrient food, per week assured for a period of 3 years. The family would be required to raise seedlings of various species of plants specified by the Forest Department would take care of the forest for a period of 1 to 3 years and handover the same to the forest Department. The Forest Department will provide technical inputs like technical guidance and supervision and supply the seeds of plants required to be raised. The farmer is to develop forest of 1/2 acres of land and fodder plantation with Kubalbul species on one acre of land (Fodder plantation) but will have no right over that land. He will have also no right on the remaining 1.5 acres under forest or its produce. One cow of the identified family will also be crossbred simultaneously so that by the time the food for works programme is complete the farmer will have atleast one crossbred cow in milk and nutrient fodder for one acre of land.

18-46. It has been decided that 1,500 hectares will be taken up under Social Forestry Programme both for planting Kubalbul and forest species as follows :—

Kalahandi district	— 600 hectares
Phulbani district	.. 600 hectares
Sundargarh district	.. 30 hectares
(Panposh Block)	

18-47. There will be no separate scheme for this. The areas to be decided for raising fodder-cum-forest plantation under this programme should be a part of the total Physical Target under the "Mixed Plantation" already included in the State's proposals for sanction for 1978-79 or physical targets to be included for sanction in subsequent years. A sum of Rs. 15 lakhs has been proposed under this programme during 1978-79.

Labour Co-operatives and T. D. C. C.

18-48. Forty-seven Forest Labour Co-operative and Marketing Societies have been established for collection and Marketing of Minor Forest Produce in the tribal districts with a view to ensuring fair price for the tribals and to improve their economy. The Tribal Development Co-operative Corporation which also collects and markets forest produce have been given leases of minor forest produce in selected tribal areas, at liberal rates of royalty. 15 full fledged branches of the O. S. T. D. C. C. supported by 275 fair-price shops-cum-procurement centres have collected minor forest produce worth Rs. 38.28 lakhs. It is proposed to have larger number of Co-operative Societies to take up collection of M. F. P. throughout the State. It is also envisaged that more Forest Labour Co-operative Societies will be formed to take up timber working with a view to eliminating the timber contractors.

Orissa Forest Corporation Limited

18-49. This Corporation was established in the year 1962 for exploitation of forest resources with the major objectives of proper and scientific exploitation of State's forest resources and maximising its contribution to the State's revenue, to supply timber firewood and other forest produce to the local people at reasonable rates, encourage and establish forest industries, to encourage mechanisation of logging and extraction operations, marketing of Kendu leaves grown in the State and taking up plantations in degraded areas.

18-50. The Corporation now operates with 13 timber divisions, 6 kendu leaves divisions and 2 Plantation divisions along with three sale centres for kendu leaves at Cuttack, Calcutta and Madras. The timber divisions are responsible for production and marketing of round and sawn timbers including firewood etc. The Kendu Leaves Divisions only undertake marketing of kendu leaves produced and collected by the Forest Department. The Corporation will diversify its activities by expanding its operation to fields like creation of man-made forests on the lines recommended by the National Commission on Agriculture and creation of production complex for manufacture of sophisticated processed timber projects. They have been able to establish a Bidi Factory at Angul providing work to the weaker sections of the society. This Corporation generates work for over 5 million man days annually and the benefit is mostly conferred on the weaker sections of the society particularly the tribal people in the forest areas. The Corporation's activities like working of forests and timber exploitation provide employment to the weaker sections of the people during their off season from farm operation. The extensive collection of Sal seeds have provided employment to tribal people during the seed collection season and about Rs. 90 lakhs have been paid as wages during the year 1977-78.

18-51. The Corporation has also commenced industrial plantations and during the current year about 2,000 hectares of Cashew nut is proposed to be planted. They are also undertaking the development of Simlipal forests by implementing a special plantation project costing Rs. 8 crores the bulk of which will be financed by A. R. D. C. All these activities contribute for developing the economic conditions of the tribal people as well as the other weaker sections residing in and near about the forest complex.

Orissa Maritime and Chilka Area Development Corporation

18-52. The State Government have recently set up a Corporation for the development of Maritime Areas and Chilka lake in the State. The Corporation has prepared a shelf of schemes mainly relating to economic plantation in the coastal belt of the State. This Corporation will take up different plantations within its jurisdiction of 15 Kms. stretch along the sea coast which will supplement the activities of the Forest Department in providing Shelter-belt plantation. The Corporation will avail of institutional finance for taking up economic plantations etc. The State Government's share will be met out of the State Plan allocations in the forest sector.

ANNEXURE-VIII
AGR-28

Forestry Programmes—Achievement and Target

Serial No	Programme	Unit	Actual Achievement, 1973-74 (individual year)	Actual Achievement, 1977-78 (individual year)	Target, 1978-83	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Economic plantations					
	(a) Departmental	.. (000 ha)	3.328	2.107	40.0	
	(b) Co-operative	.. ..	..	..	..
	(c) Others	.. ..	..	..	..
2	Special plantations *					
	(a) Departmental	.. (000 ha)	8.875	9.680	147.9	* Under Special plantations includes all State and Central Plan Schemes except State Plan Economic Plantation.
	(b) Co-operative	.. ..	..	..	..
	(c) Others	.. ..	..	..	..
3	Communication					
	(a) Departmental	.. (000 Kms.)	0.186	0.101	3.5	
	(b) Co-operative	.. —	..	..	..
	(c) Others	.. -	..	..	..

CHAPTER 19

COMMUNITY DEVELOPMENT AND PANCHAYAT RAJ

19.1 The involvement of the Panchayat Raj institutions in the development process has not been adequate in the past. It would be desirable to revitalise and involve these bodies as a suitable instrument for the realisation of the major goals of the plan with popular participation. The State Government are examining the entire question of revitalisation of Panchayat Raj bodies and their meaningful involvement in the programmes of rural development. However, concrete policy proposals will be formulated after Shri Asoka Mehta Committee's recommendations are available. The State Government however, desire to revive the three tier system of Panchayat Raj institutions in order to enlist greater participation of the people's representatives in the process of planning and also its implementation. Therefore, they desire to revive the Zilla Parishads on the pattern of Maharashtra and Gujrat with sufficient arrangements for administrative decentralisation at the district level. For the administrative expenses etc. of the Zilla Parishads, it is proposed to keep an outlay of Rs. 67 lakhs during the Plan Period (1978-83) starting from 1979-80.

19.2. Integrated Rural Development Programme envisages block level planning to provide full employment and better standard of living through productive programmes within a definite time frame. Programmes suited to local environment and local capacity will be given priority in aiming at full employment goal. Both in the direction of planning as well as in the implementation stage the Panchayat Samities at the Block level have to play an important role. At the Panchayat level the development works of various Departments are required to be co-ordinated. Agriculture which is the main thrust in rural development programme is implemented directly by the Agriculture Department but the Panchayat Samiti has to link up the works of various organisation in providing inputs assistance to the farmers.

Strengthening of Block staff

19.3. At present the Panchayat Samiti at the Block level has been made responsible for development and improvement of rural roads under the control of Panchayat Samiti and Gram Panchayats renovation and improvement of communal tanks which are used for irrigation, pisciculture and bathing and drinking, execution of works which are provided for tribal development, test relief works in times of flood or drought, administration of various nutrition and feeding programmes in the rural areas. In addition to these works, drawing and disbursing of pay of Primary School Teachers, distribution of controlled commodities at the Block level, repairs of Primary and Middle School buildings and also execution of other various schemes entrusted to the Panchayat Samiti. With all these works being executed by the Block Development Officer as an Executive Officer of the Panchayat Samiti, it is found that the existing staff of the Block are not capable of doing justice to such works. Apart from the difficulties of executing all these works properly, extreme difficulty has been experienced in collecting information regarding the progress of the work. In view of this it has become necessary to strengthen the Block staff. It is therefore, proposed to give one additional U. D. one additional S. A. E., two additional Gram Sevikas and two to three V. L. Ws. and one S. E. O./L. S. E. O. in each Block. Requirement of funds for strengthening the staff has been worked out at Rs. 460 lakhs. This would be required during the five year period 1978—83.

Replacement of the Block vehicles

19.4. During the Fifth Plan period it was proposed to replace 210 Block vehicles. But due to paucity of funds only 75 vehicles could be replaced by the end of 1977-78. The vehicles which have completed 12 years are 181. During Sixth Plan period other 84 vehicles will be completing 12 years of their life span. Therefore the total vehicles requiring replacement comes to 265. A sum of Rs. 73 lakhs only has been provided for replacement of vehicles during the Sixth Plan and with this fund only 146 vehicles will be replaced leaving a balance of 121 vehicles.

Panchayats

19.5. 3,830 Grama Panchayats have been constituted in Orissa covering the entire State. At present the population coverage of each Grama Panchayat varies between 2,000 to 10,000.

Review of Progress up to the end of 5th Plan

19.6. For the Fifth Plan a small outlay of Rs. 45 lakhs was allocated for the various Panchayat Schemes. The aforesaid provision was most inadequate as compared to the requirement of the Panchayats.

The following table will indicate the 5th Plan outlay and achievements:—

Name of the Scheme	5th Plan outlay (Rs. in lakhs) (1974--79)	Amount allocated in 5th Plan (Rs. in lakhs) (1974-78)	Anticipated expenditure by end of 5th Plan (Rs. in lakhs)	Physical achievement in the 5th Plan 1974-78
(1)	(2)	(3)	(4)	(5)
1. Construction of G. P. Ghars.	28.85	27.00	26.85	537 G. P. Ghars
2. Loans to G. Ps. for Productive Schemes.	9.65	9.50	9.40	Renovation of 58 tanks, construction of 23 market-sheds and one Kine house.
3. Construction of staff quarters.	6.50	5.50	5.38	Construction of 7 II-R. B. & 4 III-R. and completion of 22 II-R. B. and 10 III-R. quarters.
Total	45.00	42.00	41.63	

As the schemes included in 5th Five Year Plan were of simple nature with small provision there was no particular difficulty or bottleneck in their execution.

Objectives and targets for the Medium Term Plan

19.7. The broad objective kept in view in preparing the programme for village Panchayats is to augment the resources of the Panchayat and develop them as self sustained units. It is the policy of Government to encourage every Panchayat to derive a substantial income from local resources. Accordingly, various categories of public properties have been transferred to the control and management of the Panchayats and financial assistance is being given by way of loan for remunerative schemes.

Plan Schemes

19.8. A tentative outlay of Rs. 400.00 lakhs has been suggested for implementation of Panchayat Plan Schemes in the Sixth Plan period. The details of various schemes proposed to be implemented are given below schemewise

1. Construction of Grama Panchayat Ghars

19.9. It is very essential to construct one G. P. Ghar in every Panchayat to hold regular office and meeting of the Panchayats. There are altogether 3,830 Grama Panchayats in the State. By the end of 1977-78, 1,641 Grama Panchayat Ghars are estimated to have been constructed. The remaining 2,189 Grama Panchayats do not have office buildings of their own. As the Panchayat are the primary tier in the decentralisation of the administration, it is necessary for

them to function effectively. Resources of the Grama Panchayats are so meagre that they are not able to meet the cost out of their own fund. They depend on Government grant-in-aid. Hitherto Government were giving grants at the rate of Rs. 5,000 per Grama Panchayat Ghar. Any requirement in excess of Rs. 5,000 was met out of Grama Panchayat's own resources. Since the cost of materials and labour charges for construction have increased to a great extent the Grama Panchayats are not able to complete the Grama Panchayat Ghar with the Government grant of Rs. 5,000 only. To encourage the Grama Panchayats to construct the Grama Panchayat Ghar it has been decided to give grant-in-aid at the rate of Rs. 7,500 per Ghar to the Grama Panchayats. Any requirement in excess of this grant will be met by the Grama Panchayats out of their own resources. For construction of 2,189 Grama Panchayats Ghars Rs. 164.18 lakhs is required during the Plan Period. It is proposed to provide Rs. 164.18 lakhs for construction of 2,189 Grama Panchayat Ghars at the rate of Rs. 7,500 each during the years from 1978-79 to 1982-83.

19.10. During the first year of Sixth Plan i. e. 1978-79 a sum of Rs. 2.50 lakhs have been provided for construction of 32 G. Ps. Ghars @ Rs. 7,500 each and 2 G. P. Ghars @ Rs. 5,000.

The proposed tentative outlays and the targets for the subsequent years of the Sixth Plan have been indicated below :

Year	Tentative outlays proposed (Rs. in lakhs)	Physical target proposed
(1)	(2)	(3)
1979-80	40.55	For construction of 540 G. P. Ghars @ 7,500 each and payment of balance amount of Rs. 5,000 for completion of 2 G. P. Ghars @ Rs. 2,500 each.
1980-81	40.43	For construction of 539 G. P. Ghars @ Rs. 7,500 each.
1981-82	40.35	For construction of 538 G. P. Ghars @ Rs. 7,500 each.
1982-83	40.35	For construction of 538 G. P. Ghars @ Rs. 7,500 each

2. Loans to G. Ps. for taking up pisciculture in G. P. Tanks

19.11. The State Government have vested the control and management of 57,046 tanks in the G. Ps. The idea is that by equitable and productive investment G. Ps. can derive substantial income from these properties which will enable them to discharge their optional and obligatory responsibility towards their constituents. Out of these tanks, about 15,000 tanks are suitable for development of pisciculture. Pisciculture has already been taken up in 6,000 tanks. About 9,000 tanks are yet to be renovated for taking up pisciculture. The G. Ps. are not able to develop these tanks for taking up pisciculture for want of funds.

19.12. Pisciculture is a very lucrative scheme and some of the G. Ps. derived good income from pisciculture. It is, therefore, proposed to give more stress in implementation of the scheme. At least a sum of Rs. 9.00 crores is required for development of these 9,000 tanks @ Rs. 10,000 each. It is proposed to provide Rs. 80.00 lakhs under the scheme for renovation of 800 G. P. tanks by way of loan @ Rs. 10,000 per tank during the Sixth Plan period. In the 1st year of Sixth Plan i. e. 1978-79, a sum of Rs. 1.00 lakh has been provided for renovation of 10 G.P. tanks. The proposed tentative outlay and its target for the subsequent years have been indicated below :—

Year	Tentative outlay proposed (Rs. in lakhs)	Physical target proposed
(1)	(2)	(3)
1979-80	20.00	Renovation of 200 G. P. tanks for pisciculture.
1980-81	20.00	Ditto
1981-82	20.00	Ditto
1982-83	19.00	Renovation of 190 G. P. tanks for pisciculture

3. Loans to G. Ps. for Construction of Market Sheds

19-13. Control and management of 1,494 market sheds has been vested in the G. Ps. some of the G. Ps. have derived substantial income from auction sale of these market sheds. So far Government have advanced loans for construction and improvement of 110 market sheds. Development of remaining 1,384 market sheds can be taken up in a phased manner. On a conservative estimate a sum of Rs. 20,000 is required to bring up a market to a certain standard of convenience and services of the market users.

19-14. To improve the standard of 1,384 markets a sum of Rs. 276.80 lakhs will be required. It is proposed to provide Rs. 65.00 lakhs in shape of loan under the scheme for construction of 325 market sheds Rs. 20,000 per shed during the sixth plan period. In the first year of sixth plan a sum of Rs. 0.80 lakh has been provided for construction of 4 market sheds. The proposed tentative outlays and physical targets for the subsequent years have been indicated below:—

Year	Proposed tentative outlay (Rs. in lakhs)	Proposed physical target
(1)	(2)	(3)
1979-80	17.00	Construction of 85 market sheds
1980-81	16.00	Construction of 80 market sheds
1981-82	16.00	Ditto
1982-83	15.20	Construction of 76 market sheds

4. Grants to G. Ps. for Improvement of Orchards

19-15. It is a new scheme and is proposed to implement it during the sixth plan period. Government have vested the control and management of 67,560 orchards in G. Ps. It is necessary to improve these orchards to derive more income. The Grama Panchayats are not able to improve these orchards for want of funds. It is, therefore, necessary to provide funds in the medium term Plan to give grants-in-aid to Grama Panchayats for improvement of 848 orchards. A sum of Rs. 25.44 lakhs will be required for improvement of the orchards @ Rs. 3,000 each on an average.

19-16. It is proposed to provide Rs. 25.44 lakhs under the scheme for improvement of 848 orchards during the 4 years of Sixth Plan period. Due to inadequate provision of funds under the Panchayat Plan Schemes no provision has been made under the Scheme in the first year of Sixth Plan. The proposed tentative outlay and targets for the four years of the Sixth Plan have been indicated below—:

Year	Proposed tentative outlay (Rs. in lakhs)	Proposed physical target
(1)	(2)	(3)
1979-80	7.44	For improvement 248 orchards
1980-81	6.00	For improvement of 200 orchards
1981-82	6.00	Ditto
1982-83	6.00	For improvement of 200 orchards

5. Construction of Staff Quarters

19-17. A large number of staff has been posted in the District and Subdivisional Level to administer Panchayat Programme. To be exact the number of these Officers and staff is 241. Out of them 176 Officers have not been provided with any residential quarters. Housing problem is very acute at the District and Subdivisional headquarters, for want of suitable residential accommodation or private rented building. For providing quarters to these 176 Officers at least a sum of Rs. 65.38 lakhs would be required.

19-18. It is proposed to provide Rs. 65.38 lakhs under the Scheme for construction of 173 IIRB and 3 IIR quarters and completion of about 20 URB and one IIR quarters during the Sixth Plan period. In the first year of Sixth Plan a sum of Rs. 0.70 lakh has been provided for completion of 10 IIRB and one IIR quarters. The proposed tentative outlays for the subsequent years have been indicated below:—

Year	Proposed tentative outlay (Rs. in lakhs)	Proposed target
(1)	(2)	(3)
1979-80	17.52	For construction of 3 IIR, 42 IIRB quarters and completion of 10 IIRB quarters.
1980-81	16.20	For construction of 45 IIRB quarters
1981-82	15.84	For construction of 44 IIRB quarters
1982-83	15.12	For construction of 42 IIRB quarters

Priority will be given for construction of quarters situated in Tribal Sub-Plan areas.

Employment

19-19. The investment in Panchayat sector is Rs. 4.00 crores. This will generate employment potential of about 3,774,400 mandays. In other words the schemes of this sector is likely to provide employment to about 13,826 persons out of which 2,158 will be skilled labourers and 11,668 will be unskilled labourers.

19-20. In the Community Development Sector, the Scheme of strengthening of Block staff will provide employment to educated persons. By the end of 1977-78 total 479 persons were in employment out of which 200 were technical. It is expected that the total employment by the end of 1982-83 will rise up to 2,483 persons of which 314 will be technical. In the tribal sub-plan the total number of persons in employment by end of 1977-78 were 197 of which 82 were technical. The expected total employment will go up to 1,416 persons of which 118 will be technical.

CHAPTER 20

CO-OPERATION

Present Level of Development

20.1. Organisation of the Primary Agricultural Co-operative Societies at the village level has been streamlined over the years; non-viable village level societies have been liquidated or merged to form larger potentially viable units and now there are 3,250 Primary Agricultural Co-operative Societies each of which is manned by a trained Secretary in most of the cases and also by an Assistant Secretary in respect of a large number of Societies. In the tribal areas, 220 LAMPS have been formed and the existing primary Co-operative Societies in these areas have been converted as their branches. In the non-tribal areas 6 Farmers' Service Co-operative Societies have been formed to try out the concept of integrated credit services recommended by the National Commission of Agriculture. Of the total number of 36.72 lakhs agricultural families in the State, 21.90 lakhs are members of PACS including LAMPS by end of June, 1977. Short-term loan advanced in the year 1977-78 was of the order of Rs. 26 Crores. Of the 22 lakhs members of Co-operative Societies in the State only 9.5 lakhs are indebted members of which 6.5 lakhs were defaulters by the end of 1976-77, Poor recovery position is therefore, one of the main reasons for non-expansion of credit. Of the loan advanced in 1976-77, 45 per cent has gone to the small and marginal farmers.

20.2. As regards medium term loans co-operative have come away from the old system of giving loans for unproductive and more and more loans are being given for dug-wells, dairy programme etc. The Table below would show the short and medium term loans advanced at the Central Co-operative Bank (CACS level) and outstandings for the years from 1974-75.

TABLE No. 1

Short-term Loan (Rs. in crores)

Year	Outstanding		Investment	
	C. C. B.	PACS	C. C. B.	PACS
1974-75	14.91	26.10	13.86	14.40
1975-76	15.09	27.06	17.31	16.82
1976-77	17.03	28.93	17.41	21.69
1977-78	N. A.	N. A.	23.83	26.06

Medium Term Loan (Rs. in crores)

1974-75	7.66	5.16	7.31	4.90	
1975-76	3.91	8.46	4.85	3.84	
1976-77	2.83	9.79	8.48	9.49	Includes Rs. 4.23 crores towards conversion.
1977-78	N. A.	N. A.	6.80	8.88	

20.3. As regards long-term loans, in the last three years, State Co-operative Land Development Bank with its 55 primaries have taken up organised lending through schemes reimbursed by ARDC while investment under normal schemes of Land Development Banks have grown only marginally, investment under special loan schemes of ARDC have increased substantially and this is a hopeful sign for future expansion of credit in this sector. The following table would indicate loans advanced at the level of Primary Land Development Banks under the normal

and special schemes, the debenture floated in the concerned year under normal and ARDC Schemes and drawals from ARDC from the year 1974-75.

TABLE No. 2

Long Term Loan (Rs. in crores)

Year	Outstanding at the beginning of the year	Investment		Debentures floated		Amount obtained from A. R. D. C.
		Normal	Special	Normal	Special	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1974-75	17.94	2.72	0.71	0.93	0.55	0.46
1975-76	19.49	2.35	0.96	1.98	1.15	1.01
1976-77	20.61	2.80	4.63	2.55	4.00	3.57
1977-78	29.46	3.02	3.26	2.65	3.35	2.98

20.4. Per hectare investment of long-term finance in Orissa is of the order of Rs. 30 which is much less than the National average. Any sustained programme of agricultural development must be matched by a programme of capital investment by the farmer in his agricultural operations. Therefore need for expansion of long-term credit in the coming years of the Sixth Plan cannot be over emphasised. The total number of persons indebted to long-term co-operative credit institution is 1.28 lakh out of which small and marginal farmers account for 89,680 thus representing about 2.45 per cent of the total number of agricultural families in the State. The objective in the long-term sector for future years is larger coverage of the farming community.

20.5. Special mention requires to be made of the dug well programme taken up in the State. In the fourth Plan the programme was assisted from subsidies from SFDA and by additive subsidy of 25 per cent from the State plan funds. Later on additive subsidy was withdrawn. In the years from 1970-71 till 1976-77, 1.82 lakh dug wells have been financed by the Co-operatives in the medium and long-term sectors. Progress of energisation has however, lagged behind and in the coming years, while the dug well programme will be continued energisation of completed dug wells would be given greater importance than before. The following table would indicate the dug wells financed in the years from 1970-73 in the Co-operative sector and the number energised.

TABLE No. 3

Year	No. of Dug wells financed by Co-operatives	No. of private dug wells energised
(1)	(2)	(3)
1970-71	7597	N. A.
1971-72	12,532	N. A.
1972-73	19,679	204
1973-74	15,110	246
1974-75	35,052	372
1975-76	35,027	362
1976-77	56,297	583
1977-78	32,000	727
	Total	2,494

20.6. Under the conditions of subsistence agriculture, prices of agricultural commodities influence investment decisions of the cultivators. Marketing of agricultural produce therefore, becomes an important plank in agricultural development. Orissa State Co-operative Marketing Federation with its affiliated 52 R.M.C.S. and some of the P.A.C.S. have been engaged mostly in marketing of paddy/rice. 42 R.M.C.S. have rice mills most of which are modernised or in the process of modernisation. Under the system of procurement of paddy/rice prevalent in the State, Co-operative could function only as agents of Government for procurement of paddy/rice and as such, their working was circumscribed by Government policy and instructions with regard to procurement/storage/distribution of rice. Capacity utilisation is therefore, poor. It is expected that with the formation of a single food zone and consequent relaxation of Government policy with regard to procurement of paddy/rice, Marketing Societies would play a larger role in marketing paddy/rice which works out to about 72% of the agricultural produce in the State. Besides paddy, Orissa State Co-operative Marketing Federation has been marketing some quantities of oilseeds and pulses as well.

20.7. As already stated, bulk of the marketing activity by co-operatives has been confined to the marketing of paddy/rice. Following table would indicate the quantum of paddy/rice procured by co-operatives, in the last 5 years.

TABLE No. 4

(In M. T./Paddy)

Year (1)	Quantity procured (2)
1972-73	.. 21260.2
1973-74	.. 30214.6
1974-75	.. 25762.1
1975-76	.. 51879.2
1976-77	.. 22520.5
1977-78	.. 12636.00

20.8. From the above it would be seen that procurement during 1977-78 was quite low compared to 1976-77 mainly because of non-disposal of stocks procured in earlier years which aggravated the problem of inadequate storage facilities.

20.9. Besides, there are five oil mills and three Dal mills constructed by the RCMS.

20.10. Co-operatives play an important role in the matter of supply of inputs to the cultivator. As regards supply of fertilisers private dealers have been concentrating more on railhead points and co-operatives have virtually the sole responsibility of supplying fertilisers in the interiors. The following table would indicate the value of fertilisers consumed in the State in the year 1977-78 and the quantity handled by the co-operatives.

TABLE No. 5

(Rs. in crore)

Year	Value of total fertiliser consumed in the State	Value of fertiliser handled by Co-operatives
1977-78	Rs. 21.35	Rs. 8.46

20.11. Out of 3,120 P. A. C. S. only about 2,750 Co-operative Societies handle fertilisers in Kharif or Rabi. The main difficulty in expanding the Co-operative outlet in fertiliser distribution is inadequate margin, heavy transport cost, lack of adequate storage facility as the society level and problem of finance. Steps have been taken to solve the last problem by introducing cash and carry system under which the Central Co-operative Banks give cash credit accommodation to the primary Societies for drawal of fertilisers from the R. C. M. S. of the 3,120 P. A. C. S. only 2,510 have storage godowns many of which are in a precarious state needing repairs. In the matter of distribution of pesticides and seeds, Co-operatives have not yet done much and their efforts in this regard are required to be stepped up in the coming year.

20.12. Orissa State Co-operative Consumers' Federation with 31 wholesale Stores in the urban areas and 585 primary stores in the rural areas have given a good account of themselves in the last two years in meeting the challenge of rising prices. Primary Agricultural Co-operative Societies have also taken up consumer activities with margin money and managerial assistance provided to them in the Fifth Plan. Value of consumer articles handled by Co-operative in the State in the year 1976-77 has been of the order of Rs. 22.91 crores.

20.13. Organisationally, Co-operatives in Orissa are not weak in any sector and they can do much more than what they have done in the past. The main draw back lies in the absence of a proper tie up between functions of the different Co-operatives, lack of adequate managerial ability at the society level and absence of finance in some cases. Thus the deficiencies will be sought to be corrected in the Sixth Plan.

20.14. 118 out of 314 Blocks in the State come under Tribal Sub-Plan area. In accordance with the recommendations of the Committee set up for reorganising the co-operative structure in the tribal areas to meet their special developmental needs, the entire Tribal Sub-Plan area has been covered by 220 LAMPS. This has resulted in substantial stepping up of the activities of the co-operatives in these areas in all sectors. The following table would indicate the quantum of loan advanced, value of consumer articles and agricultural produce handled by LAMPS and the TDCC in the last two years.

TABLE No. 6

Year	Total loans advanced by LAMPS/TDCC		Value of consumers articles handled by LAMPS/TDCC		Value of agricultural produce/Forest produce handled by LAMPS/TDCC		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1975-76		30.35	5.12	5.86	262.63	Nil	132.12
1976-77		244.28	0.37	45.00	260.83	55.91	170.29

20.15. It would be seen that there has been substantial increase in the activities and the trend would continue in the coming years. In the tribal areas, the strategy of agricultural development will have to be slightly different than in the normal areas. Emphasis here would be on increasing the productivity of minor millets and other crops like niger which tribals grow traditionally. Agriculture is carried out on marginal lands threatened with Soil erosion and the need for soil conservation measures is very great. In the Podu ravaged areas, plantation of coffee and fruit trees is considered crucial for weaning the tribals away from destructive cultivation practices. All these activities will have to be properly supported by co-operatives with provision of credit adequately and in time. This will require nothing less than reorientation of the management of co-operatives in those areas. Tribal economy is to large extent dependent on various forest produces. In the Third and Fourth Plans and even earlier, Forest Marketing Co-operative Societies were organised which in course of time did a lot to provide tribals with a fair price for their produce and also agricultural produce marketed by them. Forest Marketing Co-operative Societies have now been redesignated as Lamps and they continue to buy from the tribals their forest and agricultural produce. The basic weakness of co-operative structure in the tribal areas is non-involvement of the tribals in their co-operative institution. If co-operatives are to function, as the most important instrument for economic change in these areas, the system of involving the tribals in the activities of the co-operatives would be a pre-condition to their success. Thus to sum up, in the tribal areas, more ground is yet to be covered to nurture the co-operatives to involve the tribals in their co-operative institutions so as to bring both the institution and the individual together in a working and fruitful relationship.

20.16. Objectives under the Co-operative Development in the Sixth Plan are—

- (a) Strengthening and improving the work of agricultural co-operatives (credit, marketing and processing).
- (b) Reorienting the Primary Agricultural Co-operatives for helping the small and marginal farmers and Agricultural labourers and other under-privileged sections of our people.

(c) To build up viable consumer co-operative movement as an important element in consumer-oriented distribution system.

(d) Making the co-operatives in tribal areas function as the main instrument of economic betterment.

20.17. Since the 4th and 5th Plan, special development on agencies like Small and Marginal Farmers, C. A. D. As., D. P. A. P. and Tribal Development Agencies have been operating in different parts of the State. A number of their schemes are implemented on a loan-cum-subsidy basis and bulk of these loans have come so far from the co-operative institutions. While some of the schemes have fared well in some districts, only a section of the people i. e. beneficiaries under the particular scheme have improved their economic conditions thereby. In the sixth Plan, emphasis will be on integrated rural development which would take into account the totality of the developmental efforts in a particular areas and most of the development programmes to be taken up under I. R. D. would be on a loan-cum-subsidy basis. Here the co-operatives would naturally be called upon to play a very important role. On the question of provision of credit would depend the entire success of I. R. D. programme.

20.18. An outlay of Rs. 14.95 crores was allocated for Co-operative development in the 5th Plan period out of which the expenditure up to the year 1977-78 was of the order of Rs. 9.89 crores. i. e. 65% of the total estimated outlay. The following table would indicate the outlay in the co-operative plan and expenditure out of that and as against the expenditure in the Tribal Sub-Plan areas for the years 1974-75 to 1977-78.

TABLE No. 7

(Rs. in lakhs)

PLAN IN THE CO-OPERATIVE SECTOR

Year	Outlay	Expenditure	Amount provided for Tribal Sub-Plan Expenditure
(1)	(2)	(3)	(4)
1974-75	220.00	138.80	28.25
1975-76	250.00	159.94	33.54
1976-77	359.00	351.59	100.30
1977-78	474.00	248.08	39.56
1978-79	510.00	..	171.54 (Provision)

20.19. In the year 1978-79, an outlay of Rs. 5.10 crores has been fixed out of which Rs. 1.72 crores would be spent in tribal area. A sum of Rs. 59 crores would be required for Co-operatives in the Sixth Five-year Plan 1978--1983.

20.20. The primary objectives set for credit co-operatives in the sixth plan period are (i) to increase the coverage of agricultural families brought into co-operative fold from 62 per cent at present to 92 per cent by 1982-83, (ii) to increase the percentage of borrowing members to total membership from 28 per cent at present to 70 per cent by 1982-83 and (iii) increase the percentage of loans advanced to weaker sections from 45 per cent to 70 per cent. The level of investment of co-operatives in short/medium and long term sectors by the end of 1977-78 has been of the order of Rs. 26 crores, Rs. 9 crores and Rs. 11.41 crores, respectively.

20.21. By the end of 1982-83, it is envisaged that short-term investment would go up to Rs. 70 crores of which co-operatives would account for Rs. 63 crores and Commercial Banks Rs. 7 crores, medium term investment to Rs. 20 crores and long term investment to Rs. 30 crores. The level of deposits in the Central Co-operative Banks is Rs. 25 crores in 1977-78. It is expected to grow up to Rs. 65 crores by the end 1982-83. The number of dug wells financed by the

Co-operative institutions by 1976-77 is Rs. 1.82 lakh. It is proposed to finance another 3 lakh dug wells in the five years of the Plan. The number of dug wells energised by the end of 1977-78 is about 6,000. Recently, O. S. B. B. has given certain relaxations for drawing of lines for energising dug wells. It is expected that with such relaxation it will be possible to energise one lakh more dug wells in the Sixth Plan period out of which co-operatives would finance about 75,000.

Marketing Co-operatives

20.22. The total outlay in the Fifth Plan under this programme was Rs. 71.40 lakhs against which the expenditure till the end of 1977-78 has been of the order of Rs. 56.90 lakhs. The outlay proposed during the Sixth Plan period is Rs. 700 lakhs. During the Sixth Plan period it is proposed to strengthen the co-operative marketing structure and to make optimum use of the institutions which were set up during the earlier plans. Attempts will be made to achieve larger turnover in marketing of agricultural produce as also certain crucial items like oilseeds, pulses, fruits etc. With the expansion of irrigation and increase in crop intensity envisaged in the Sixth Plan, the problem of ensuring remunerative price to the growers would assume importance and marketing co-operatives will be fully involved in this task. It is also proposed to strengthen the commodity marketing societies functioning in the tribal areas of Ganjam, Phulbani, Suddargarh, Koraput, Keonjhar and Mayurbhanj districts. Some of the existing R. M. C. S. have become weak. It is proposed to rehabilitate such societies through adequate funding from the Plan. Co-operatives will continue to play a dominant role in the matter of servicing of agriculturists by supplying fertilisers and pesticides. Consistent with the target of crop loan it is envisaged that co-operatives would handle fertilisers valued at Rs. 40 crores by the end of the Sixth Plan. In the matter of distribution of pesticides, co-operatives have not yet been largely involved. This is proposed to be done in the Sixth Plan period. Marketing arrangements are weak in respect of specific commodities like oilseeds. It is proposed to set up commodity marketing societies to handle such crops and these societies eventually might go into processing as well. Co-operatives are inhibited in their task of larger coverage of marketing of agricultural produce as also supply of inputs to farmers. Because of absence of storage godowns at the Primary and regional levels on IDA assisted scheme has already been formulated and is expected to be effective from the 1st April 1979. Financing by NCDC in line with the scheme has already started. Under the scheme it would cover a period of four years from the 1st April 1979 and would thus coincide with the Sixth Plan period. It is envisaged to construct godowns with capacity of 1,00,000 tonnes at the primary level, 80,000 tonnes at the regional level and 30,000 tonnes at the level of Apex Marketing Society and T. D. C. C.

Processing Co-operatives

20.23. The main agricultural produce marketed in the State is paddy and rice mills constitute the largest number of processing units built up over the years in the co-operative sector. Their capacity utilisation has been low for a variety of reasons. The emphasis in the Sixth Plan would be to increase capacity utilisation to the fullest extent possible. This will also be done in respect of Dal Mills and Oil Mills set up in the co-operative sector. New processing units for pulses and oilseeds will also be set up. Assistance would be obtained from the NCDC towards modernisation of the rice mills. State Governments share of such modernisation scheme will be met from the amount of Rs. 15.00 lakhs envisaged under the scheme.

20.24. It is proposed to set up some more processing facilities for pulses in the current year. Some of the existing units would require margin money for availing institutional finance to undertake procurement of pulses. This will also be met from source.

20.25. In the year 1977-78 there were about 50,000 ha. under jute and another 40,000 ha under mesta. The production of jute and mesta has been of the order of 6 lakh bales in 1977-78. There is no processing facility for jute in the State and a Jute Factory is coming up in the joint sector with the participation of National Agricultural Marketing Federation. It is proposed to set up a jute mill in the heart of jute area in the Sixth Plan for providing processing facilities. This will go a long way to provide remunerative price to the cultivators as at present the market price is dictated by the price situation obtained at Calcutta. On this, an outlay of Rs. 45 lakhs is proposed.

20.26. It is proposed to set up two oil mills and to provide them with margin money in the Sixth Plan. For this, an outlay of Rs. 5 lakhs is proposed.

20.27. There is no Vanaspati Factory in Orissa. Most of the stocks of oilseeds in the State go out of the State for processing. It is proposed to set up a Vanaspati Factory under the State Oilseed Marketing Co-operative Society. For this an outlay of Rs. 40 lakhs is proposed.

Sugar Co-operative

20:28. The following table would indicate the quantity of cane produced and crushed in the State in the last five years in the two co-operative sugar factories.

TABLE No. 8

Year	Sugarcane produced	(Figure in M. T.) Cane crushed by two Co-operative Sugar Factories
(1)	(2)	(3)
1973-74	2.41	0.64
1974-75	2.75	1.27
1975-76	2.98	0.94
1976-77	2.77	1.07
1977-78	N. A.	1.69

20:29. With large areas coming under stable irrigation in the Sixth Plan and with the shift to high value crop, sugarcane development would be a major area of activity and additional processing facilities of sugarcane in the co-operative sector will have to be found out. It is proposed to set up three co-operative sugar factories in the Sixth Plan period. For this an outlay of Rs. 500 lakhs is proposed in the Sixth Plan.

20:30. The existing sugar factory at Bargarh is without a distillery unit. This factory after an initial period of acute difficulty is well on its way to rapid recovery and at this stage, it is proposed a distillery unit attached to the factory which would lead to more remunerative use of the by-product thus improving the financial condition of the Bargarh Sugar factory. On this an outlay of Rs. 40 lakhs is envisaged.

Co-operative Cold Storage

20:31. There are 15 Co-operative Cold Storages in the State of which 13 are functioning. Because of uneconomic size and gradual erosion of the share capital some of the co-operative cold storages have become sick and are closed. It is proposed to rehabilitate the existing co-operative cold storages for which there is an outlay of Rs. 10 lakhs. New Co-operative Cold Storages are proposed at three places and for this an outlay of Rs. 30 lakhs has been envisaged. Some of the existing cold storages require godown facilities and for this the State Government will have to fund a certain portion of the expenditure in order to draw assistance of NCDC. An outlay of Rs. 10 lakhs has been proposed for this.

Housing Co-operative

20:32. Housing Co-operative in our State have been attempted to meet another basic need for our people by giving finance for construction of improved and fire proof houses in rural and urban areas. The organisational structure of co-operative societies in this sector is weak particularly at the field level and recovery performance of the Housing Corporation and primary housing co-operative societies affiliated to it has been bad year after year. At present the Corporation is only engaged in disbursing very small quantum of loan funds which they are getting from Government. The need for providing housing in the rural and urban areas with the help of institutional finance cannot be over emphasised. In this context, it is proposed to give substantial financial support to the Housing Co-operatives in the Sixth Plan period. For this an outlay of Rs. 248 lakhs is proposed. Besides, a sum of Rs. 2 lakhs is proposed to be spent for a survey of housing co-operatives with a view to finding out non-viable societies which will be either liquidated or merged with bigger units.

Labour Co-operatives

20:33. Large extent of under employment and seasonal unemployment in our rural areas drive out people to labour intensive works. They work as contract labourers and notwithstanding various labour legislations protecting their rights they do not get a due return

for their labour. In order to ensure this return labour contract co-operative societies were organised in the Third Plan. To make such co-operative function, in a co-ordinated fashion, labour contract units were also organised at the district level through which labour contract co-operative societies functioning in the district were affiliated. Substantial relaxation with regard to tender, depositing of security money etc. is being given by the State Government to such societies. Notwithstanding this, most of these societies are now defunct because of bad management, inability to compete with private contractors lastly and mainly because of the fact that most of these societies have been captured and managed by contractors themselves. In the Sixth Plan, Plan expenditure on labour intensive works would be of a high order and it would become necessary to revitalise such societies and organise new societies wherever necessary to ensure that the labourers get a fair wage for their labour. An outlay of Rs. 200 lakhs is envisaged for revitalising existing societies and organising new societies.

Consumers Co-operatives

20:34. In the Sixth Plan period, large areas coming under irrigation would hopefully witness rapid strides in agriculture development along with establishment of agro-based industries. Demands of people in these areas for consumer goods will have to be met to a large extent by co-operatives and it will be necessary therefore to organise new consumer stores at primary level notwithstanding our mixed experience of these societies in the past. In the urban areas, the emphasis would be to achieve larger coverage. In this sector, an outlay of Rs. 350 lakhs is proposed.

20:35. It is proposed to organise rural consumer co-operative societies in potential high consumption points and for this an outlay of Rs. 63 lakhs by way of share capital and subsidy is proposed.

20:36. It is proposed to organise some more wholesale co-operative stores in the urban area. On this an outlay of Rs. 80 lakhs by way of share capital and managerial subsidy of Rs. 10 lakhs is proposed to be spent.

20:37. In times of acute distress of particular essential commodities, Consumer Federation takes up procurement and distribution at the instance of the State Government. But such operations are often fraught with risk as transactions in edible Oil etc., would indicate in the recent past. It is, therefore, proposed that there should be a system of giving subsidy to the Consumers Federation for undertaking such operations.

Co-operative Training

20:38. In the context of projected development of co-operatives in the Sixth Plan, it is necessary to arrange on an unprecedented scale the training of co-operative personnel as well as non-officials connected with co-operative movement. For this, certain facilities have been made available under the IDA assisted (Orissa Agricultural Development Programme). While the need for basic training of the employees of the co-operative societies would be met to some extent by the arrangements envisaged under the OADP, firm arrangements than at present will have to be made for training and motivating non-officials as well as for giving specialised training to employees of co-operative institutions. The need for this is all the more important in the tribal areas where involvement of the members of the societies in their functioning is at present minimum. An outlay of Rs. 200 lakhs is proposed towards training. Out of this the funding of co-operative training component of O. A. D. P. would be of the order of Rs. 87 lakhs and Rs. 71 lakhs would go as recurring subsidy of the State Co-operative union and the Co-operative Council at almost the same level as at present. For other infrastructural facilities like information and publicity, printing press, Samabaya Bhawan etc., an outlay of Rs. 42 lakhs is proposed.

Other Co-operatives

20:39. Four Engineering Co-operative Societies have come up in our State and these are functioning well. These have been organised by the unemployed Engineering Graduates who are taking up Government contracts for execution. It will be possible to organise more such Co-operative Societies and for this share capital and managerial subsidy to the tune of Rs. 40 lakhs is proposed to be made available from the Plan.

20.40. In the Sixth Plan, an ambitious programme of utilisation of groundwater resource will be executed. While private groundwater projects like dug wells, shallow tube-wells and filter point tube-wells have been taken up mostly with efforts of individuals with institutional finance, bigger projects with larger ayacut are not coming up, because of lack of co-operative effort. Fragmentation of holding is also another inhibiting factor. L. I. Co-operative Societies have come up in some cases. These can be developed as a more suitable alternative to bigger Lift Irrigation points which are now being taken up through Lift Irrigation Corporation. Such Co-operative Societies would be given subsidy up to 75 per cent of their project cost and the subsidy amount would be passed on to the financing institution to reduce repayment liability and interest burden of the society. Unless heavy subsidy is provided to such L. I. Co-operative Societies at the initial period, the programme will not catch up and exploitation of ground water potential for irrigation purposes will continue to remain entirely or mainly as Government's sponsored activity. On this, an outlay of Rs. 60 lakhs is proposed.

20.41. The Co-operation Plan indicated above envisages an outlay of Rs. 59 crores of which Rs. 20 crores would be the drawal from LTO Fund of R. B. I. This has been tied up effectively with the State resources outlay of Rs. 39 crores. Besides this, under IRD Scheme, funds would be made available to the selected Blocks, outside the Plan. The programmes to be financed by IRD grants on loan-cum-subsidy basis and this entire development programme envisaged under IRD would cover all the points of availability of credit and in this respect, co-operatives will have to play a very critical role. Guidelines of IRD Programme envisage financial support to Co-operatives in these areas from IRD funds. The exact nature of quantum of this would depend upon the reception of a number of schemes under the IRD in the selected Blocks.

Employment

20.42. Investment of Rs. 59 crores would create regular employment opportunity for 3,030 educated non-technical persons during the Sixth Plan period. Besides, with an investment of this order subsidiary employment would be available to 1,17,243 persons.

CHAPTER 21

WATER DEVELOPMENT

(i) Major and Medium Irrigation

21.1. Orissa is rich in water resources and its potential for major and medium irrigation is estimated to be approximately 35.65 lakh hectares. But the pace of development of irrigation in the State has been rather slow, as a result, agricultural production in the State is far behind the national average. Prior to the start of planned development in the country two important irrigation systems, namely, Orissa canal system (i.e. Mahanadi canal system and Baitarani system) and Rushikulya canal system were existing in the State. There were also two other comparatively smaller systems namely, Baladiha system in the district of Mayurbhanj and Jayamangal system in the district of Ganjam. The irrigation potential accruing from these sources was 1.48 lakh hectares.

21.2. By the end of Fourth Five-Year Plan total plan investment on major and medium irrigation was Rs. 142.83 crores. During these four plans, four major schemes namely, Hirakud, Mahanadi-Delta, Salandi and Anandapur and 19 medium irrigation schemes were taken up for execution. One major scheme i.e., Hirakud and one medium scheme i.e., Hiradharabati were completed by the end of the Fourth Plan and the rest 3 major and 18 medium schemes spilled over to Fifth Year Plan though some of these projects had started providing partial irrigation before the start of the Fifth Plan. By the end of the Fourth Plan cumulative irrigation potential of 5.97 lakh hectares (annual 7.91 lakh hectares) was created from these sources. This constitutes roughly 10.16% of the total area under cultivation (as per 1976-77 figure) in the State.

21.3. During the Fifth Five-Year Plan (1974-78) priority was given to major and medium irrigation an investment went up to Rs. 70.63 crores. Substantial increase in the creation of irrigation potential and improvement in the utilisation of created potential were two major objectives of the Fifth Plan (1974-79). During this plan, apart from the spill over schemes of Fourth Plan, 2 new major projects viz, Rengali and Upper Kolab, Modernisation of Rushikulya system and extension and improvement of Hirakud Project and fifteen new medium irrigation projects were taken up for execution. Thus altogether five major and 33 medium projects were under execution during the Fifth Five-Year Plan. Out of these, one major scheme namely, Salandi (excepting improvement to Dasamouza system) and 10 medium schemes, namely, Budhabudhiani, Dhanei, Salia, Salki, Darjang, Bahuda, Ghodahado, Baghua, Uttei and Pitamahai have been completed by the end of 1977-78. Thus, the remaining four major schemes, Dasamouza system of Salandi and 23 medium schemes including the two modernisation schemes have spilled over to the Sixth Five-Year Plan commencing from 1978-79. During the Fifth Plan (1974-78) additional irrigation potential of 0.95 lakh hectares (annual 1.88 lakh hectares) has been created. Thus, by the end of Fifth Plan ending March, 1978 cumulative potential from completed and ongoing major and medium schemes has been in the order of about 6.92 lakh hectares (9.79 lakh hectares annual). This constitutes 11.77% of the total area under cultivation (as per 1976-77 figure) in the State.

21.4. Keeping in view the prime objective of achieving full employment in the next ten years through plan efforts, agricultural productivity will be increased through irrigation, multiple cropping and improved technology. The main thrust of the planning strategy would be to expand the area under irrigation as quickly as possible. Therefore high priority is given to the development of irrigation in the Sixth Plan. Consistent with this approach, the outlay for major and medium irrigation in the Sixth Plan has been tentatively fixed at Rs. 450.00 crores and target of additional annual potential of 4.93 lakh hectares is envisaged. The following strategy will be adopted to achieve this target :-

- (i) Completion of all ongoing medium schemes and most of the ongoing major schemes in the 5 year period 1978-83.
- (ii) Implementation of new projects in a fixed time frame
- (iii) Modernisation of the existing irrigation systems with a view to ensuring equitable supplies to all areas, particularly the tail end users.

ONGOING MAJOR AND MEDIUM SCHEMES

21.5. The estimated cost of the ongoing major and medium irrigation schemes is Rs. 442.26 crores against which expenditure in the order of Rs. 119.63 crores has been incurred by end of 1977-78. So the spill over amount of these projects at the commencement of Sixth Plan is Rs. 322.63 crores. Against this, an outlay of Rs. 188.92 crores including average escalation of 20 per cent is provided in the Sixth Plan for the spill over schemes. The programme of completion for these spill over schemes is as follows:—

Mahandi Delta

21.6. It was initially programmed to complete this project in 1978-79. The balance works left are canalisation in Biluakhar island, Devi Kandal island and Kushabhadra-Bhargavi Doab, construction of a few distributaries and minors and V. R. Bridges. These works are programmed for completion by 1979-80. The recast second revised estimate of the project is under compilation for transmission to the Central Water Commission.

Salandi

21.7. This project has been completed by 1976-77 except improvement to Dasamouza system. This system consists of inundation canals which are being modernised for regulated supply. Work in connection with such improvement are programmed for completion during 1978-79. The second revised estimate of the project has been sent to Central Water Commission and Planning Commission.

Anandapur

21.8. The modified Anandapur project is estimated to cost Rs. 9.65 crores out of which an amount of Rs. 2.55 crores has been spent up to the end of 1977-78. The canal works linking to Bidyadharpur barrage of Salandi system is under progress. The project is programmed to be completed in the year 1981-82. The modified project report is under compilation for transmission to the Central Water Commission and Planning Commission.

Upper Kolab

21.9. This is an approved multipurpose project and has been started from 1976-77. The cost of the Dam is equally shared by power and irrigation sectors. The revised cost has been tentatively worked out at Rs. 27.08 crores. By 1977-78 an expenditure of Rs. 3.04 crores has been incurred. During the Sixth Plan, an outlay of Rs. 28.33 crores (Dam share Rs. 9.29 crores + irrigation Rs. 19.04 crores) has been provided. The project is scheduled for completion by 1983-84 but it is likely to give partial irrigation from 1979-80 and by end of Sixth Plan an annual potential of 65,000 hectares is envisaged.

Rengali

21.10. Rengali Dam is under execution from the year 1972-73 and its revised cost has been tentatively worked out to be Rs. 85.00 crores. The cost allocated to each sector excluding expenditure of Rs. 2.7 crores incurred up to the Fourth Plan is indicated below:—

	(Rs. in crores)
(i) Flood Control (30 %)	24.69
(ii) Power (46 %)	37.86
(iii) Irrigation (24 %)	19.75

The irrigation and power components are charged to the State Plan and the flood control component to Central plan. Expenditure of Rs. 23.03 crores has been incurred for the dam by end of 1977-78. Out of the balance Rs. 61.97 crores on the dam, Rs. 58.75 crores are to be spent in the Sixth Plan. The contribution of irrigation sector to the dam in the Sixth Plan comes to Rs. 14.00 crores. The dam envisages excavation of 4.10 lakhs Cum. against which work of 3.27 lakhs Cum. has been done up to 1977-78 and the balance work is proposed to be completed during the year 1978-79. Out of 8.11 lakhs Cum. of masonry and concreting 0.67 lakhs Cum. has been done up to end of 1977-78. During the year 1978-79, it is proposed to complete 1.46

lakhs Cum. of concreting and masonry. The work of the Coffor Dam of deep channel portion has already been taken up and 0.38 lakhs Cum. has been completed during the year 1977-78 and the balance 1.75 lakhs Cum. is proposed to be completed during 1978-79. Originally it was programmed to complete the dam by June, 1981. But the programme has been revised due to short-fall in concreting and masonry work, as well as other hindrances, such as, strike of workers and squatting of the submerged area people on the dam. As per the revised programme, the dam is to be completed by the end of June 1983.

21.11. The Rengali Irrigation Scheme has been recently approved by the Planning Commission at a cost of Rs 233.64 crores including dam share of Rs. 18.75 crores. The project envisages construction of a Barrage at Samal across river Brahmani. 34 Kms. down stream of Rengal dam and distribution system on either side. The project will provide annual irrigation to 42,36,000 hectares in the districts of Dhenkanal, Cuttack and Keonjhar. In the Fifth Plan a sum of Re. 1 crore was spent to procure machineries and materials for the Barrage. In the Sixth Plan, outlay of Rs. 65.21 crores has been provided. Partial irrigation is expected from the project by the year 1982-83 for 65,000 hectares.

21.12. Twenty-three medium schemes including modernisation of Rushikulya system and extension and improvement of Hirakud Dam Project have spilled over to Sixth Plan. All these on going medium projects excluding Ong are programmed for completion during the Sixth Plan and Ong is programmed to be completed in 1983-84.

New Projects

21.13. In the Sixth Plan, selection of new major and medium irrigation projects has been made on the considerations, of removing regional imbalances within the State and keeping in view the need of backward and tribal areas as well as the drought prone areas. Emphasis has also been aid for utilisation of our share of water potential of rivers having inter-State character.

21.14. The names of the new major and medium schemes including modernisation proposals proposed for execution in the Sixth Plan are given below :—

Major

(1) Upper Indravati, (2) Mahanadi-Birupa Barrage, (3) Samokoi, (4) Subarnarekha, (5) delta Deferred Area, (6) Manibhadra Phase I, (7) Ib, (8) Rushikulya Dam, (9) Indra Dam (Dargaon), (10) Chiroli, (11) Burtang, (12) Kanupur and (13) Lower Lanth.

Medium

(1) Harbhangi, (2) Kanjhari, (3) Badanala, (4) Hariharjore (7) Upper Suktel, (6) Bhalujodi (Bankabal), (7) Derjang (Stage II), (8) Deo, (9) Kansabaha, (10) Gumadi, (11) Baghua (Stage II), (12) Tel Dam, (13) Aherajore, (14) Surabali, (16) Chheligada and (16) Mahendra Tanaya.

MODERNISATION

Baladdiha and Baitarani system

21.15. For the new schemes, the total provision in the Sixth plan is Rs. 251.08 crores, out of which Rs. 191.59 crores are for major, Rs. 56.24 crores for medium and Rs. 3.25 crores are for modernisation schemes. Among the major projects, Upper Indravati and Mahanadi-Birupa Barrage and among the medium projects Upper Suktel and Hariharjore have been approved by the Planning Commission. The project reports of Subarnarekha Major Project as well as Harbhangi, Badanala and Kanjhari Medium Projects have been sent to the C. W. C. and Planning Commission for approval. The remaining major and medium projects are in the advanced stage of investigation and project reports are being made ready for onward transmission to Central Water Commission and Planning Commission. Among the two modernisation schemes, the estimate for Baladia project has been prepared and modernisation of Baitarani system is under investigation.

21.16. Four new major schemes, namely, Upper Indravati, Rushikulya Dam, Delta Deferred Area and Samakoi and seven new medium schemes, namely, Harbhangi, Kanjhari, Badanala, Hariharjore, Upper Suktel, Derjang (Stage II) and Gumadi will provide annual Irrigation to 16,380 hectares in the Sixth Plan.

21-17. From the ongoing major and medium schemes additional annual potential of 3.77 lakh hectares and from the new schemes potential of 1.16 lakh hectares is envisaged in the Sixth plan. Thus the total additional potential envisaged in the Sixth plan with the investment of Rs. 450.00 crores is 4.93 lakh hectares. Under the Central Sector additional annual potential of 1.13 lakh hectares is envisaged in the Sixth Plan. Thus cumulative net potential at the end of the Sixth plan will be in the order of 10.55 lakh hectares (annual 15.85 lakh hectares) which works out to 17.25 per cent of the cultivated area of the State.

WORLD BANK PROJECT

21-18. According to the agreement executed with I. D. A., 52.30 million U. S. dollars will be available as credit assistance for execution of medium irrigation projects in the State. The credit assistance will be available for 65 per cent of the expenditure to be incurred on civil works.

21-19. So far, the following 11 projects have been sponsored for being financed under the I.D.A. credit. Four more projects are in the pipe line and will be referred for credit assistance as soon as the project reports are cleared by the Central Water Commission.

Name of the Project	Latest estimated cost (Rs. in crores)	District which will be benefited by the project
(1)	(2)	(3)
1. Ramial ..	11.54	Dhenkanal
2. Daha ..	7.59	Ganjam
3. Sunei ..	9.86	Mayurbhanj
4. Remal ..	4.30	Keonjhar
5. Gohira ..	10.86	Sambalpur
6. Dumberbahal ..	3.73	Sambalpur
7. Kuanria ..	6.60	Puri
8. Pitasalki ..	2.07	Phulbani
9. Jharbandha ..	0.78	Sambalpur
10. Sarapagarh ..	1.37	Sundargarh
11. Talasara ..	2.61	Sundargarh
Projects in the pipe line		
1. Harabhangi ..	7.95	Ganjam
2. Kanjhari ..	8.35	Keonjhar
3. Badanala ..	8.96	Koraput
4. Hariharjore ..	9.25	Balangir

21-20. The total estimated cost of the above projects is Rs. 95.82 crores. The projects are programmed to be completed during the Sixth Plan period. Taking into consideration the requirement of funds for each of these projects, a provision of Rs. 86.07 crores has been suggested in the present proposals.

21-21. According to the terms of agreement, the expenditure as admissible incurred on these projects from the 11th October 1977 will be reimbursed by the I.D.A. Claims for reimbursement of expenditure in respect of Sunei and Daha Projects have been preferred to the World Bank authorities.

21-22. Out of the 11 projects already sponsored for financing under the credit assistance project reports for six projects have already been submitted to the World Bank for necessary appraisal. The World Bank have already accepted the project reports of Sunei and Daha Projects and the remaining reports are under consideration. Steps are being taken to submit the project reports in respect of the remaining five projects as well as for the four projects in the pipe line.

TRIBAL SUB-PLAN

21-23. In the Fifth Five-Year Plan, under State Sector Schemes one major i.e. Upper Kolah and 9 medium Irrigation schemes, namely, Pitamahat Kalo, Khadkei, Remal, Nesa, Pilsalki, Sunei, Saralgarh and Talsara were under execution in the Tribal sub-plan areas. During this plan period (1974-78) expenditure of Rs. 1,438.99 lakhs was incurred which works out to 21.6 per cent of the total expenditure of Rs. 7,063.11 lakhs under Irrigation sector. Irrigation potential of 5,410 hectares khariff and 2,320 hectares Rabi from Kalo, Khadkei and Pitamahat projects has been achieved in the Fifth Plan. Pitamahat project has been completed by the end of 1977-78.

21-24. In the Sixth Plan, the outlay projected for major and medium Irrigation scheme in Tribal Sub-plan areas is Rs. 132.42.98 lakhs, which roughly works out to 29.4 per cent of the outlay of Rs. 450.00 crores under Irrigation sector. Apart from continuing major and medium schemes, the new schemes to be taken up in the Tribal sub-plan areas in the Sixth plan are as follows :-

Major

- (1) Upper Indravati (Dam)
- (2) Subarnasekha
- (3) Ib.

Medium

- (1) Kanjhari
- (2) Badanala
- (3) Bhalujodi
- (4) Deo
- (5) Kansabahal
- (6) Gumadi
- (7) Tel D
- (8) Risia
- (9) Harabhangi (Head Works)
- (10) Baladiha (Modernisation).

The ongoing and new projects are expected to create potential of 64,550 hectares khariff and 45,290 hectares Rabi by the end of 1982-83.

21-25. In the Central Sector, Potteru major Irrigation project has been taken up in the district of Koraput from 1972-73 and during the Fifth Plan, expenditure of Rs. 8,33.78 lakhs was incurred. The outlay provided for the project in the Sixth plan is Rs. 3,233.50 lakhs and potential of 61,000 hectares in khariff and 48,850 hectares in Rabi is envisaged. Similarly Bondapipili medium project which was taken up in the district of Phulbani in the Fifth Plan will be completed in the Sixth Plan, An outlay of Rs. 306.00 lakhs has been kept for the project in the Sixth Plan and potential of 1,500 hectares khariff and 750 hectares Rabi is envisaged.

21-26. Thus, both in State and Central sectors, the total outlay to be invested in the tribal sub-plan areas will be of the order of Rs. 16,782.48 lakhs and potential of 1,27,050 hectares in Khariff and 94,890 hectares in Rabi is proposed to be created during the Sixth Plan.

Drought Prone Area Programme

21-27. During the Fifth Plan, Bondapipili medium project was executed in the Baliguda subdivision of Phulbani district where a Drought Prone Area Programme is implemented. This project is fully financed by the Government of India. In the Sixth Plan, it is proposed to execute another medium project, namely, Pendrawan in the district of Kalahandi under this programme. The outlay for both the projects in the Sixth Plan is Rs. 3.98 crores which is to be provided in the Central Sector by Government of India in the Ministry of Agriculture and Irrigation, Department of Rural Development. Both these projects will create annual potential of 3,340 hectares in the Sixth Plan.

21-28. The State Government are also executing projects in other chronically drought affected areas in the districts of Balangir, Kalahandi, Sambalpur, Puri and Ganjam. The investment in the Sixth Plan under the State sector for these projects will be in the order of Rs. 53.70 crores and additional potential of 35,100 hectares is likely to be created.

Inter-State Projects

21-29. The State's share of water of inter-State rivers should be utilised for maximum benefit of the people. With this end in view it is proposed to utilise Orissa's share of 12 lakh acre feet of water in the Subarnrekha basin through Galudihri barrage along with right bank main canal up to Orissa's border and Subarnarekha Irrigation Project. The barrage is proposed to be executed jointly with the Government of Bihar and the Subarnarekha Irrigation Project for Orissa will be executed by Orissa within her own territory. The Galudihri joint project is estimated to cost Rs. 31.44 crores out of which Orissa's share is Rs. 29.10 crores. The allocation of share has been arrived at in pursuance of agreement drawn up between Bihar and Orissa on the 17th January 1976. The construction of the joint project; will be taken up simultaneously with the construction of Chandil Dam in Bihar as per terms of agreement, dated the 25th October 1976 between Bihar and Orissa. Government of Bihar is taking up Chandil Dam in the Sixth Plan. As per terms of agreement with Bihar Project report of the joint project was to be prepared by the Chief Engineer (Irrigation), Orissa with the concurrence of Chief Engineers (Irrigation) Bihar. Accordingly, the project report prepared by Chief Engineer (Irrigation) has been sent to Government of Bihar for concurrence of their Chief Engineer (Irrigation). Simultaneously, the Project Report has been sent to Central Water Commission and Planning Commission for their clearance. The Subarnarekha Irrigation Project is estimated to cost of Rs. 65.92 crores. This envisages annual Irrigation of 1,56,600 hectares in the districts of Mayurbhanj and Balasore. In the Sixth Plan, an outlay of Rs. 12 crores for the Galudihri joint project as well as for the Subarnarekha Irrigation Project has been provided.

Modernisation of existing projects

21-30. Two pre-plan projects, namely, Baladia system in the district of Mayurbhanj and Baitarani system in the districts of Cuttack and Balasore are proposed to be modernised during the Sixth Plan. The cost of modernisation of Baladia system is Rs. 25 lakhs which envisages replacement of old structures and renovation of canals. The entire requirement is provided in the Sixth Plan. The modernisation of Baitarani system is estimated to cost Rs. 15 crores and in the Sixth Plan an outlay of Rs. 3 crores has been provided. This will involve replacement of old anicut and structures as well as renovation of canal system. Baladia system will not provide any additional irrigation but the existing ayacut will be stabilised. But, Baitarani system, after modernisation, envisages additional irrigation of 8,000 hectares over and above the existing potential of 32,700 hectares.

INVESTIGATION AND RESEARCH

21-31. For sustaining the tempo of irrigation development and making full utilisation of water resources in the next two or three decades, it has to be ensured that there are sufficient projects in the pipe-line. For undertaking detailed investigation of new schemes, adequate funds will have to be set apart. Also new methodology and technology would have to be developed by carrying out intensive research in various fields.

21.32. State Government have approved a programme of 108 projects in the Fifth Plan for investigation, out of which project reports of 10 projects have been approved by the Planning Commission, 9 projects are pending in the Central Water Commission for clearance, 61 projects are under investigation, 2 projects have been dropped and balance 26 projects are proposed to be investigated.

21.33. In the Fifth Plan (1974-78) expenditure of Rs. 2.25 crores has been incurred under investigation and research. In order to complete the investigation of the ongoing projects as well as to take up investigation of the new projects and to prepare a Master Plan for irrigation in Orissa for the coming 25 years, an outlay of Rs. 10.00 crores is provided in the Sixth Plan, inclusive of the requirement for research. In order to examine the factors why the projected benefits of the investments made in the execution of various irrigation projects have not been achieved studies will be initiated in respect of selected projects so that the constraints and deficiencies are identified for taking necessary corrective measures.

Organisational Capability

21.34. Execution of irrigation projects involving a total outlay of Rs. 450 crores would obviously necessitate a good deal of strengthening of the existing organisation. The present organisation consists of Chief Engineer (Ex-officio Additional Secretary), Additional Chief Engineer in charge of Flood Control and Delta, Additional Chief Engineer for Medium Projects, Additional Chief Engineer, Balimela and Potteru and one Chief Construction Engineer for Rengali Dam Project with supporting circles and division. During the current year outlay for major and medium irrigation projects is Rs. 32.00 crores. In order to fully utilise this outlay, steps are being taken to augment the organisational structure by creating two independent posts of Chief Construction Engineers for Upper Indravati and Rengali Irrigation Projects along with Superintending Engineers and Executive Engineers, as considered necessary, for the present. For the remaining period of 1979-83, an outlay of Rs. 418.00 crores is proposed to be invested and the average yearly expenditure will be of the order of Rs. 105.00 crores. For proper and efficient management of the outlay of this order substantial increase in the staff, machinery and equipment etc. would be needed.

Centrally Sponsored Schemes

21.35. Three Centrally sponsored schemes, namely, Rengali Flood Control, Potteru Major and Bondapili Medium Projects were under execution in the Fifth Plan. These will be continued in the Sixth Plan.

21.36. Potteru project is under execution from 1972-73 to utilise the tail race water of Balimela Power House with the assistance of Government of India, Ministry of Supply and Rehabilitation, Department of Rehabilitation. The tentative revised estimated cost of the project is Rs. 41.43 crores. By the end of Fifth Plan expenditure of Rs. 9.10 crores has been incurred and in the Sixth Plan, an outlay of Rs. 32.33 crores is provided. The project is programmed for completion by the end of Sixth Plan and annual irrigation to 1.10 lakh of hectares is envisaged.

21.37. Bondapili Medium Project is under execution in the district of Phulbani under D. P. A. P. It is also proposed to execute a new project i. e. Pendrawn Medium Project in the district of Kalahandi under this programme. For the Bondapili Project an outlay of Rs. 306 lakhs and for Pendrawn Project Rs. 92 lakhs have been provided in the Sixth Plan. Both the projects will be completed during the Sixth Plan and an annual irrigation of 33,40 hectares is envisaged.

Generation of additional Employment

21.38. The manpower engagement in the major and medium irrigation sector at the end Fifth Plan period (1977-78) was 77,740 persons. During the Sixth Plan period it is expected to raise the employment potential to 172,813 persons with an outlay of Rs. 50.60 crores. The total number of engineers including graduate engineers and diploma holders in position at the end of 1977-78 were 1,240 which is likely to increase to 4,121 at the end of Sixth Plan. The numbers of skilled and unskilled labourers which were 12,500 and 64,000 respectively at the end of 1977-78 are likely to increase to 26,225 and 214,467 at the end of 1982-83 under this sector.

STATEMENT
MAJOR & MEDIUM IRRIGATION

Serial No.	Name of Projects	Approved estimated cost	Lastest estimated cost		Expenditure up to end of 1973-74	Expenditure during 1974-77
			Amount	Year		
(1)	(2)	(3)	(4)		(5)	(6)
A. COMPLETED SCHEMES						
I. MAJOR						
1	Hirakud	..	..	6,559.85	6,559.85	..
II. MEDIUM						
1	Hiradbarbati	..	..	41.34	41.34	..
2	Budhabudhiani	..	148.64	159.69	156.12	3.57
3	Dhanei	..	132.09	168.57	163.66	4.91
4	Salki	..	166.00	231.33	186.10	43.92
5	Godabada	..	197.34	359.12	343.84	15.27
6	Bahuda	..	158.93	159.15	126.86	32.09
7	Uttei	..	90.20	201.13	84.07	117.06
8	Derjang	..	372.36	494.47	403.84	72.00
9	Salia	..	67.78	435.38	374.55	55.33
10	Pitamahal	..	46.29	252.59	158.67	91.42
11	Baghua	..	65.62	134.90	51.79	75.08
Total A and B-II				9,197.52	8,650.69	510.65

IF-3 (a)

PROJECTS—OUTLAYS & EXPENDITURE

(Rupees in lakhs)

1977-78		Total expenditure to end of 1977-78	1978-79		Proposed outlay 1979—83		
Approved outlay	Actual expenditure		Approved outlay	Anticipated expenditure	Total	Capital	Foreign exchange
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
..	..	6,559.88	..	..	..	..	..
..	..	41.34	..	..	..	..	..
..	..	159.69	..	..	..	..	..
..	..	168.57	..	..	..	..	..
1.40	1.40	231.33	..	..	..	..	..
0.01	0.01	359.12	..	..	..	..	..
0.20	0.20	159.15	..	..	..	..	..
..	..	201.13	..	..	..	..	..
19.00	19.00	494.84	..	..	..	..	..
5.50	5.50	435.38	..	..	..	..	..
0.01	0.01	250.10	..	..	..	..	..
6.00	6.00	132.87	..	..	..	..	..
32.12	32.12	9,193.46	..	..	..	..	..

(7B-41)

Serial No.	Name of Project	Approved estimated cost	Latest estimated cost		Expenditure up to end of 1973-74	Expenditure during 1974-77
			Amount	Year		
(1)	(2)	(3)	(4)		(5)	(6)
(FOR ITEM B & C i. e. PRE-FIFTH PLAN & FIFTH PLAN SCHEMES ESCALATION)						
B—CONTINUING SCHEMES						
PRE-FIFTH PLAN						
I. MAJOR						
1	Mahanadi Delta ..	3,433.88	6,269.07	1976	4,193.73	1,090.58
2	Salandi ..	1,307.68	1,559.10	1976	1,399.61	130.83
3	Anandapur ..	2,193.71	965.00	1976	36.45	100.06
II. MEDIUM						
1	Dahuka ..	56.05	150.35	1975	23.38	68.95
2	Ong ..	288.12	1,100.00	1977	20.58	209.01
3	Sundar ..	160.48	372.71	1976	20.80	242.92
4	Sajpal ..	111.66	191.03	1976	15.63	130.68
5	Kala ..	196.21	452.22	1976	43.77	250.49
6	Dadaraghati ..	136.62	360.79	1977	4.75	212.03
7	Ramial ..	432.99	1,154.00	1977	2.16	170.15
8	Khadkai ..	299.23	483.70	1975	28.30	300.54
Total— B—(I+II) ..			13,057.97		5,789.16	2,906.24

(Rupees in lakhs)

1977-78		Total expenditure to end of 1977-78	1978-79		Proposed outlay 1979-83		
Approved outlay	Actual expenditure		Approved outlay	Anticipate expenditure	Total	Capital	Foreign exchange
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

OF AVERAGE 20% HAS BEEN TAKEN INTO ACCOUNT)

500.00	500.00	5,784.31	425.00	425.00	77.03	77.03	..
10.00	10.00	1,540.44	20.00	20.00	..	..	..
118.00	118.00	254.51	150.00	150.00	675.54	675.54	--
27.00	27.00	119.33	30.00	30.00	..	..	--
100.00	100.00	329.59	151.00	151.00	777.52	777.52	..
64.00	64.00	327.72	45.00	45.00	..	..	..
42.00	42.00	188.31	3.00	3.00	..	..	..
80.00	80.00	374.26	67.00	67.00	12.13	12.13	..
36.17	36.17	252.95	94.00	94.00	16.82	16.82	..
148.99	148.99	321.30	165.00	165.00	827.87	827.87	..
80.00	80.00	408.84	50.00	50.00	24.26	24.26	--
1,206.16	1,206.16	9,901.56	1,200.00	1,200.00	2,410.17	2,410.17	--

Serial No.	Name of Project	Approved estimated cost	Latest estimated		Expenditure up to end of 1973-74	Expenditure during 1974-77																					
			Amount	Year																							
(1)	(2)	(3)	(4)	(5)	(6)	(7)																					
C. NEW SCHEMES OF FIFTH PLAN																											
I. MAJOR																											
1	Upper Kolab	2404.76	<table border="0"> <tr> <td>{</td> <td>Dam share</td> <td>{</td> <td>1,062.00</td> <td>}</td> </tr> <tr> <td></td> <td>758.64</td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td>Irrig.</td> <td></td> <td>1,646.12</td> <td></td> </tr> <tr> <td></td> <td>1646.12</td> <td></td> <td></td> <td></td> </tr> </table>	{	Dam share	{	1,062.00	}		758.64					Irrig.		1,646.12			1646.12				2,708.00	1976	..	101.37
{	Dam share	{	1,062.00	}																							
	758.64																										
	Irrig.		1,646.12																								
	1646.12																										
2	Renzali	23,364.00	23,364.00	1976	..	190.00																					
II. MEDIUM																											
1	Ramal	276.73	532.00	1976	..	32.13																					
2	Ramanadi	58.32	57.95	1975	..	23.39																					
3	Daha	270.53	759.00	1977	..	113.07																					
4	Nasa	44.71	122.88	1976	..	19.92																					
5	Pilasalki	167.80	300.00	1976	..	35.88																					
6	Dumerbahal	139.30	300.00	1976	..	46.68																					
7	Gohira	479.46	725.00	1977	..	49.49																					
8	Sunai	445.46	986.00	1977	..	25.57																					
9	Aunil	53.19	53.19	1976	..	5.12																					
10	Modernisation of Rushikulya system.	128.63	133.17	1975	..	17.44																					
11	Extn. & improvement of H. D. P.	27.26	32.48	1975	..	4.43																					
12	Kuanria	436.62	580.00	1976	..	9.4																					
13	Jharbandh	63.03	112.00	1976	..	0.04																					
14	Sarafgarh	114.58	140.00	1976	..	0.04																					
15	Talasara	217.30	265.00	1976	..	0.05																					
Total—II		..	5,898.67	382.69																					
Total—C (I+II)		..	31,170.67	674.06																					

(Rupees in lakhs)

1977-78		Total expenditure to end of 1977-78	1978-79		Proposed outlay 1979-83		
Approved outlay	Actual expenditure		Approved outlay	Anticipated expenditure	Total	Capital	Foreign exchange
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
103.00	103.00	103.00	124.00	124.00	805.00	805.00	..
100.00	100.00	201.37	176.00	176.00	1,728.00	1,728.00	..
222.00	222.00	412.00	282.00	282.00	1,118.00	1,118.00	..
100.00	100.00	100.00	68.00	68.00	6,453.40	6,453.40	..
100.00	100.00	132.13	100.00	100.00	369.69	369.69	..
30.00	30.00	53.39	4.00	4.00	..	..	..
131.00	131.00	244.07	110.00	110.00	499.91	499.91	..
33.00	33.00	52.92	50.00	50.00	24.26	24.26	..
70.00	70.00	105.88	80.00	80.00	139.24	139.24	..
90.00	90.00	136.68	80.00	80.00	101.72	101.72	..
125.00	125.00	174.49	150.00	150.00	494.07	494.07	..
72.00	72.00	79.57	160.00	100.00	975.89	975.89	..
12.00	12.00	17.12	35.00	35.00	1.30	1.30	..
20.50	20.50	37.94	30.00	30.00	80.72	80.72	..
14.00	14.00	18.43	11.00	11.00	3.71	3.71	..
55.00	55.00	64.44	90.00	90.00	525.12	525.12	..
25.00	25.00	25.04	30.00	30.00	69.58	69.58	..
35.00	35.00	35.04	40.00	40.00	79.23	79.23	..
50.00	50.00	50.05	50.00	50.00	203.28	203.28	..
862.50	862.50	1,245.19	960.00	960.00	3,567.72	3,567.72	..
1,387.50	1,387.50	2,061.56	1,610.00	1,610.00	13,672.12	13,672.12	..

Serial No.	Name of Project	Approved estimated cost	Latest estimated cost		Expenditure up to end of 1973-74	Expenditure during 1974-77
			Amount	Year		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
D. NEW SCHEME OF SIX PLAN.						
I MAJOR						
1	Upper Indravati Dam Irrgn.	7,765.71 3,491.65 4,274.00	7,765.71	1978	..	..
2	Mahanadi Birupa Barrage.	4,203.70	4,208.70	1978	..	..
3	Samakoi	..	1,000.00	1978	..	..
4	Subarna rekha Share of Galudih Irrigation	2,910.09 6,591.78	9,501.87	1978	..	..
5	Delta Defred Area	..	1,500.00	1978	..	..
6	Manjhadra (Phase I)	..	9,500.00	1978	..	..
7	Ib	..	6,490.00	1978	..	..
8	Rushikulya Dam	..	1,500.00	1978	..	..
9	Indra Dam (Dargaon)	..	2,300.00	1978	..	..
10	Chiroli	..	2,300.00	1978	..	..
11	Burtang	..	1,600.00	1978	..	..
12	Kanupur	..	2,800.00	1978	..	..
13	Lower Lanth	..	2,500.00	1978	..	..
II. MEDIUM						
1	Harbhangi	..	910.00	1978	..	..
2	Kanjhari	..	1,000.00	1978	..	..
3	Badanala	..	750.00	1978	..	..
4	Hariharijore	725.67	726.00	1978	..	..
5	Upper Juktel	127.83	128.00	1978	..	..
6	Bhalujodi (Bankabal)	..	600.00	1978	..	..

(Rupees in lakhs)

1977-78		Total expenditure to end of 1977-78	1978-79		Proposed outlay 1979-83		
Approved outlay	Actual expenditure		Approved outlay	Anticipated expenditure	Total	Capital	Foreign exchange
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
..	{ 130.00	130.00	3,250.00	3,250.00	..
..	{ 130.00	130.00	2,620.00	2,620.00	..
..	{	5,870.00	5,870.00	..
..	80.00	80.00	3,733.00	3,733.00	..
..	800.00	800.00	..
..	1,200.00	1,200.00	..
..	1,046.00	1,046.00	..
..	2,200.00	2,200.00	..
..	100.00	100.00	..
..	1,000.00	1,000.00	..
..	1,000.00	1,000.00	..
..	500.00	500.00	..
..	500.00	500.00	..
..	500.00	500.00	..
..	500.00	500.00	..
..	20.00	20.00	830.00	830.00	..
..	20.00	20.00	980.00	980.00	..
..	40.00	40.00	710.00	710.00	..
..	726.00	726.00	..
..	128.00	128.00	..
..	100.00	100.00	..

Serial No.	Name of Project	Approved estimated cost	Lastest estimated cost		Expenditure up to end of 1973-74	Expenditure during 1974-77
			Amount	Year		
(1)	(2)	(3)	(4)		(5)	(6)
7	Darjang (age II)	..	200.00	1978	..	..
8	Deo	..	1,000.00	1978	..	..
9	Kansabahal	..	450.00	1978	..	..
10	Gumadi	..	300.00	1978	..	..
11	Baghua (Stage II)	327.58	328.00	1978	..	..
12	Teldam	..	1,000.00	1978	..	..
13	Ahebjore	..	300.00	1978	..	..
14	Surubali	..	1,100.00	1978	..	..
15	Chheligada	..	550.00	1978	..	..
16	Mahendratanya	..	700.00	1978	..	..
17	Rissia	..	95.00	1978	..	..
III. M O D E R N I S A - T I O N S C H E M E S.						
1	Baladlha	..	25.00	1978	..	..
2	Baitarani System	..	1,500.00	1978	..	..
Total—D—(I + II + III)		..	64,628.28		..	..
E. I N V E S T I G A T I O N & R E S E A R C H						
F. (a) Investment of Share Capital of O. C. C.						
(b) Engineering Research Institute.						
(c) Flood Restoration						
Grand Total—A+B+C+D+E+F.		..	1,18,054.44		14,439.85	4,303.11

* Subject to final verified figures

(Rupees in lakhs)

1977-78		Total expenditure to end of 1977-78	1978-79		Proposed outlay 1979-83		
Approved outlay	Actual expenditure		Approved outlay	Anticipated expenditure	Total	Capital	Foreign exchange
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
..	..	..	..	..	200.00	200.00	..
..	..	..	..	..	300.00	300.00	..
..	..	..	..	..	200.00	200.00	..
..	..	..	..	..	300.00	300.00	..
..	..	..	..	..	100.00	100.00	..
..	..	..	..	..	200.00	200.00	..
..	..	..	..	..	200.00	200.00	..
..	..	..	..	..	200.00	200.00	..
..	..	..	..	..	100.00	100.00	..
..	..	..	..	..	70.00	70.00	..
..	..	..	..	..	25.00	25.00	..
..	..	..	..	..	300.00	300.00	..
..	..	..	290.00	290.00	24,818.00	24,818.00	..
83.00	83.00	224.82	100.00	100.00	900.00	900.00	..
50.00	50.00	50.00	..	..	..	..	..
1.22	1.22	1.22	..	..	..	..	..
..	..	70.34	..	..	..	..	..
2,760.00	2,760.00	21,502.96	3,200.00	3,200.00	41,800.29	41,800.29	..
..	..	..	..	Or say	41,800.00	41,800.00	..

form A.-G., Orissa,
(7B-43)

MAJOR & MEDIUM IRRIGATION PROJECT—PHASING OF OUTLAYS

(Rs. in akhs)

Sl. No.	Name of the Projects	Total outlay proposed for 1978—83	Phasing of outlays				
			1978-79	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. Pre-fifth Plan Scheme							
(a) Major							
1	Mahanadi Delta	502.03	425.00	77.03	..	..	..
2	Saiandi	20.00	20.00	..	..	..	..
3	Anandapur	825.54	150.00	242.20	248.34	185.00	..
(b) Medium							
1	Ramiala	992.87	165.00	278.97	285.59	263.31	..
2	Ong	927.52	151.00	218.32	223.51	152.20	82.49
3	Dahuka	30.00	30.00	..	..	..	..
4	Sunder	45.00	45.00	..	..	..	..
5	Saipal	3.00	3.00	..	..	..	..
6	Kala	79.13	67.00	12.13	..	..	..
7	Dadaraghata	110.82	94.00	16.82	..	..	..
8	Kharakhai	74.26	50.00	24.26	..	..	..
Total—I		3,610.17	1,200.00	869.73	757.44	700.51	82.49

II. Fifth Plan Schemes

(a) Major

1	Rengali	Damshare	..	1,400.00	282.00	360.00	336.00	278.00	144.00
		Irrigation	..	6,521.40	68.00	909.74	1454.05	1913.43	2,176.18
2	Upper Kolab	Damshare	..	929.00	124.00	275.00	272.00	267.00	51.00
		Irrigation	..	1904.00	176.00	463.00	510.00	497.00	258.00

(b) Medium

1	Remal			469.69	100.00	145.55	149.00	75.14	..
2	Ramanadi			4.00	4.00	..	..	..	..
3	Daha		..	609.91	110.00	192.84	196.19	110.88	..
4	Nesa		..	74.26	50.00	24.26	..	..	..
5	Pilasalki		..	219.24	80.00	78.84	60.40	..	..
6	Dumerbahal		..	181.72	80.00	72.76	28.96	..	..
7	Gohira		..	644.07	150.00	200.13	199.92	94.02	..
8	Sunei		..	1,075.89	100.00	337.91	345.19	292.79	..
9	Aunli		..	36.30	35.00	1.30	..	..	..
10	Modernisation of Rushikulya system		..	110.72	30.00	42.45	38.27	..	..
11	Extn. & Impvt. of H. D. P.		..	14.71	11.00	3.71	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
12	Kuanria	.. 615.12	90.00	188.00	192.34	144.78	..
13	Jharbandha	.. 99.58	30.00	48.52	21.06	..	..
14	Sarafgarh	.. 119.23	40.00	60.65	18.58	..	..
15	Talasara	.. 253.28	50.00	84.90	86.92	31.46	..
Total—II		.. 15,282.12	1,610.00	3,489.56	3,908.88	3,644.50	2,629.18
Total—I+II		.. 18,892.29	2,810.00	4,359.29	4,666.32	4,345.01	2,711.67
Or say		.. 18,892.00	2,810.00	4,359.00	4,666.00	4,345.00	2,712.00

II. NEW SCHEMES OF MEDIUM TERM PLAN

(a) Major

1	Upper	} Dam share	.. 3,380.00	130.00	400.00	950.00	950.00	950.00
	Indravati		} Irrigation	.. 2,620.00	..	400.00	650.00	650.00	920.00
2	Mahanadi-Birupa Barrage	.. 3,813.00		80.00	663.00	770.00	1,100.00	1,200.00
3	Samakoi	.. 800.00	..	100.00	200.00	200.00	300.00	
4	Subarnarekha	.. 1,200.00	..	200.00	200.00	300.00	500.00	
5	Delta Deferred Area	.. 1,046.00	..	150.00	250.00	300.00	346.00	
6	Manibhadra Phase I	.. 2,200.00	..	200.00	500.00	700.00	800.00	
7	Ib	.. 100.00	..	..	..	..	100.00

8	Rushikulya Dam	..	1,000-00	..	—	200-00	350-00	450-00
9	Indra Dam (Dargaon)	..	1,000-00	—	..	200-00	300-00	500-00
10	Chiroli	..	500-00	..	..	..	200-00	300-00
11	Burtang	..	500-00	..	..	..	200-00	300-00
12	Kanupur	..	500-00	..	..	..	200-00	300-00
13	Lower Lanth	.	500-00	..	..	..	200-00	300-00

(b) MEDIUM

1	Harbhangi	..	850-00	20-00	200-00	250-00	250-00	130-00
2	Kanjhari	..	1,000-00	20-00	200-00	250-00	300-00	230-00
3	Badanaia	..	750-00	40-00	200-00	200-00	200-00	110-00
4	Hariharjore	..	726-00	..	100-00	200-00	200-00	226-00
5	Upper Suktel	..	128-00	..	28-00	50-00	50-00	..
6	Bhalujodi (Bankal)	..	100-00	..	..	25-00	35-00	40-00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
7	Derjang (Stage II)	..	200-00	..	25-00	50-00	75-00	50-00
8	Deo	--	300-00	..	..	..	100-00	200-00
9	Kansabahal	..	200-00	..	..	25-00	75-00	100-00
10	Gumadi	..	300-00	..	25-00	50-00	125-00	100-00
11	Baghna (Stage II)	..	100-00	..	..	25-00	25-00	50-00
12	Tei Dam	..	200-00	..	..	50-00	50-00	100-00
13	Ahebjore	.	200-00	..	..	50-00	50-00	100-00
14	Surabali	.	200-00	..	--	..	50-00	150-00
15	Chhetigada	.	200-00	..	..	..	50-00	150-00
16	Mahendra Tanaya	..	100-00	--	..	..	10-00	90-00
17	Rissia	..	70-00	..	..	20-00	20-00	30-00

MODERNISATION SCHEMES

1 Baladiha	25.00	..	..	..	10.00	15.00
2 Baitarani system	300.00	..	..	..	100.00	200.00
<hr/>						
Total—III	25,108.00	290.00	2,891.00	5,165.00	7,425.00	9,337.00
<hr/>						
IV. Investigation and Research	1,000.00	100.00	150.00	200.00	250.00	300.00
<hr/>						
Total (State Scheme)	45,000.00	3,200.00	7,400.00	10,031.00	12,020.00	12,349.00

MAJOR & MEDIUM IRRIGATION PROJECTS

Sl. No.	Name of Scheme	District to be benefited	C. C. A.	Ultimate Irrigation Potential	
				K	R
(1)	(2)	(3)	(4)	(5)	(6)
A. COMPLETED SCHEMES					
I MAJOR					
1	Hirakud	.. Sambalpur and Balangir.	133.24	153.24	97.91
II MEDIUM					
1	Hiradharbati	.. Ganjam ..	5.68	5.68	0.22
2	Budhabudhiani	.. Puri ..	3.02	3.02	0.19
3	Dhanei	.. Ganjam ..	3.85	3.85	1.42
4	Salki	.. Phulbani ..	19.87	19.87	2.02
5	Godahada	.. Ganjam ..	6.06	6.06	..
6	Bahuda	.. Ganjam ..	8.54	8.54	0.61
7	Uttei	.. Kalahandi ..	9.61	9.61	2.43
8	Derjang	.. Dhenkanal ..	6.47	6.47	3.24
9	Salia	.. Puri and Ganjam ..	8.09	8.09	2.73
10	Pitamahal	.. Sundargarh ..	2.61	2.61	1.62
11	Baghua	.. Ganjam ..	3.24	3.24	0.81
Total—A—(I + II)		.. ..	240.28	240.28	114.10

BENEFITS TARGETS AND ACHIEVEMENT

STATEMENT IF 3 (a)

Area in 000' Hectares

Cumulative benefits to end of											
4th Plan actual				1974-75 Actual				1975-76 Actual			
Potential		Utilisation		Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R	K	R	K	R
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
152.73	97.91	152.63	97.94	152.73	97.91	152.73	85.20	152.73	97.91	152.73	107.14
5.31	0.20	5.31	0.20	5.68	0.22	5.31	0.20	5.68	0.22	5.68	0.17
2.95	0.81	0.81	0.38	2.95	0.81	2.95	0.38	3.00	1.09	3.00	0.83
3.80	1.42	3.63	1.02	3.80	1.42	3.80	0.36	3.85	1.42	3.85	0.59
16.81	2.02	16.81	2.02	18.50	2.02	12.53	0.30	18.60	2.02	18.41	0.46
3.24	0.61	3.24	0.61	3.26	..	3.26	0.81	5.61	..	5.61	0.09
6.14	0.61	6.14	0.61	6.15	0.61	6.15	0.61	6.93	0.61	6.68	0.31
..	..	..	..	0.60	0.20	0.61	0.20	3.41	2.43	3.18	0.41
2.34	0.80	2.34	0.80	4.27	1.22	4.27	1.22	5.76	2.03	5.66	2.03
3.24	2.55	3.24	1.62	4.45	2.73	4.45	2.05	6.47	2.73	5.35	3.30
..	..	..	..	0.41	..	0.41	..	1.21	0.61	1.09	0.28
..
196.56	106.93	194.15	105.20	202.80	107.14	196.47	91.33	213.25	111.07	211.24	115.61

(7B-45)

MAJOR & MEDIUM IRRIGATION PROJECTS

Sl. No.	Name of Scheme	District to be benefited	Cumulative benefits to end of			
			1976-77 Actual			
			Potential		Utilisation	
			K	R	K	R
(1)	(2)	(3)	(19)	(20)	(21)	(22)
A. COMPLETED SCHEMES						
I MAJOR						
1	Hirakud	.. Sambalpur and Balangir.	153.24	97.91	153.24	100.97
II MEDIUM						
1	Hiradharbati	.. Ganjam ..	5.68	0.22	5.68	0.19
2	Budhabudhiani	.. Puri ..	3.00	1.09	3.02	0.24
3	Dhanei	.. Ganjam ..	3.85	1.42	3.85	0.41
4	Salki	.. Phulbani ..	19.87	2.02	19.65	0.13
5	Godahada	.. Ganjam ..	6.06	..	6.05	..
6	Bahuda	.. Ganjam ..	7.42	0.61	7.06	0.43
7	Uttei	.. Kalahandi ..	9.61	2.43	9.61	0.12
8	Derjanga	.. Dhenkanal ..	6.47	2.03	5.85	0.30
9	Salia	.. Puri and Ganjam ..	8.09	2.73	7.45	2.92
10	Pitamahal	.. Sundargarh ..	2.00	1.62	1.88	1.70
11	Baghua	.. Ganjam ..	1.24	0.81	2.27	..
Total--A--(I + II)			226.53	112.89	225.61	107.41

Serial No.	Name of Scheme	District to be benefited	C. C. A.	Ultimate Irrigation Potential	
				K	R
(1)	(2)	(3)	(4)	(5)	(6)
B. CONTINUING SCHEMES					
PRE-FIFTH PLAN					
I MAJOR					
1	Mahanadi Delta	.. Cuttaok and Puri ..	303·00	333·30	225·05
2	Salandi	.. Balasore and Keonjhar	37·26	37·26	16·18
3	Anandapur	.. Balasore and Keonjhar	40·00	40·00	..
Total—I ..			380·26	410·56	241·23
II MEDIUM					
1	Dahuka	. Puri ..	3·96	3·96	..
2	Ong	.. Balangir ..	24·69	24·69	..
3	Sundar	.. Kalahandi ..	2·76	2·76	1·47
4	Saipala	.. Kalahandi and Sambalpur	2·06	2·06	1·09
5	Kala	.. Mayurbhanj ..	3·64	3·64	1·94
6	Dadaraghati	.. Dhenkanal ..	2·63	2·63	1·48
7	Ramiala	.. Dhenkanal ..	8·50	8·50	6·00
8	Khadkai	.. Mayurbhanj ..	5·94	5·94	3·04
Total—II ..			54·18	54·18	15·02
Total B—(I+II) ..			434·44	464·74	256·25
C. NEW SCHEMES OF FIFTH PLAN					
MAJOR					
1	Upper Kolab (Irrigation)	.. Koraput ..	44·52	44·52	49·41
2	Rengali (Irrigation)	.. Cuttack, Dhenkanal, and Keonjhar	214·30	214·30	209·30
Total—I ..			258·82	258·82	258·71

(Area in 000" hectares)

Cumulative benefits to end of											
Fourth Plan Actual				1974-75 Actual				1975-76 Actual			
Potential		Utilisation		Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R	K	R	K	R
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
260.02	67.67	259.50	67.67	277.35	80.95	277.35	80.95	303.62	98.41	302.12	98.53
36.54	16.18	36.54	10.12	36.54	16.18	36.54	9.71	37.11	16.18	36.94	10.00
..
296.56	83.85	296.04	77.79	313.89	97.13	313.89	90.66	340.73	114.59	339.06	108.53
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..
296.56	83.85	296.04	77.79	313.89	97.13	313.89	90.66	340.73	114.59	339.06	108.53
..
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Serial No.	Name of Scheme	District to be benefited	Cumulative benefits to end of			
			1976-77 Potential		Actual	
			Utilisation			
			K	R	K	R
(1)	(2)	(3)	(19)	(20)	(21)	(22)
B. CONTINUING SCHEMES						
PRE-FIFTH PLAN						
I MAJOR						
1	Mahanadi Delta	.. Cuttack and Puri	307.12	123.00	307.12	123.00
2	Salandi	.. Balasore and Keonjhar	37.26	16.18	37.26	11.08
3	Anandapur	.. Balasore and Keonjhar	..	..	..	..
	Total—I	..	344.38	139.18	344.38	134.08
II MEDIUM						
1	Dahuka	.. Puri	..	..	..	..
2	Ong	.. Balangir	..	..	..	..
3	Sundar	.. Kalahandi	..	..	..	..
4	Saipala	.. Kalahandi and Sambalpur	0.80	0.20	0.80	0.03
5	Kala	.. Mayurbhanj	..	..	..	..
6	Dadarghati	.. Dhenkanal	..	..	..	..
7	Ramiala	.. Dhenkanal	..	..	..	..
8	Khadkai	.. Mayurbhanj	..	..	..	..
	Total —II	..	0.80	0.20	0.80	0.03
	Total— B— (I+II)	..	345.18	139.38	345.18	134.11
C. NEW SCHEMES OF FIFTH PLAN						
MAJOR						
1	Upper Kolab (Irrigation)	.. Korajut	..	..	..	..
2	Rengali (Irrigation)	.. Cuttack, Dhenkanal and Keonjhar	..	..	..	..
	Total —I	..	..	..	..	..

(Area in 000' Hectares)

Cumulative benefits to end of											
1977-78 Actual				1978-79 Target				1978 83 (Target)			
Potential		Utilisation		Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R	K	R	K	R
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)
314.12	151.00	314.12	151.00	321.09	194.26	321.09	194.26	333.30	225.05	333.30	225.05
37.26	16.18	37.26	16.18	37.26	16.18	37.26	16.18	37.26	16.18	37.26	16.18
..	..	..	..	8.00	..	8.00	..	40.00	..	40.00	..
351.38	167.18	351.38	167.18	366.35	210.44	366.85	210.44	410.56	241.23	410.56	241.23
1.00	..	1.00	..	3.96	..	3.96	..	3.96	..	3.96	..
..	..	..	..	10.00	..	10.00	..	22.00	..	22.00	..
1.00	0.50	1.00	0.50	2.76	1.47	2.76	1.47	2.76	1.47	2.76	1.47
1.00	0.20	1.00	0.20	2.06	1.09	2.06	1.09	2.06	1.09	2.06	1.09
0.80	0.20	0.80	0.20	3.64	1.94	3.64	1.94	3.64	1.94	3.64	1.94
1.00	0.40	1.00	0.40	2.63	1.48	2.63	1.48	2.63	1.48	2.63	1.48
..	..	..	..	3.00	1.50	3.00	1.50	8.50	6.00	8.50	6.00
2.00	0.50	2.00	0.50	5.94	3.04	5.94	3.04	5.94	3.04	5.94	3.04
6.80	1.80	6.80	1.80	33.99	10.52	33.99	10.52	51.49	15.02	51.49	15.02
358.18	168.98	358.18	168.98	400.34	220.96	400.34	220.96	462.05	256.25	462.05	256.25
..	..	..	..	..	..	..	..	33.40	31.60	33.40	31.60
..	..	..	..	..	..	..	..	40.00	25.00	40.00	25.00
..	..	..	..	..	..	..	..	73.40	56.60	73.40	56.60

Serial No.	Name of Scheme	District to be benefited	C. C. A.	Ultimated Irrigation Potential		
				K	R	
(1)	(2)	(3)	(4)	(5)	(6)	
III. MEDIUM						
1	Remal	.. Keonjhar	.. 4.05	2.73	1.27	
2	Ramanadi	.. Ganjam	.. 0.99	0.99	0.33	
3	Daha	.. Ganjam	.. 4.85	4.85	1.63	
4	Nesa	.. Mayurbhanj	.. 0.92	0.92	0.40	
5	Pilasalki	.. Phulbani	.. 1.79	1.79	1.03	
6	Dumorbahal	.. Sambalpur	.. 2.13	2.13	1.13	
7	Gohira	.. Sambalpur	.. 6.07	6.07	3.24	
8	Sunei	.. Mayurbhanj	.. 7.20	7.20	3.96	
9	Aunli	.. Dhenkanal	.. 1.19	0.89	..	
10	Modernisation of Rusikulya	.. Ganjam	.. 3.24	3.24	..	
11	Extension and improvement of H. D. P.	.. Sambalpur	.. 1.30	1.30	0.65	
12	Kuanria	.. Puri	.. 3.60	2.70	1.19	
13	Jharbandh	.. Sambalpur	.. 1.37	1.37	..	
14	Sarafgarh	.. Sundargarh	.. 1.61	1.61	0.32	
15	Talasara	.. Sundargarh	.. 2.12	2.12	0.43	
Total—II			..	42.43	39.91	15.58
Total—C—(I+II)			..	301.25	298.73	274.29

Cumulative benefits to end of											
4th Plan Actual				1974-75 Actual				1975-76 Actual			
Potential		Utilisation		Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R	K	R	K	R
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
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Serial No.	Name of Scheme	District to be benefited	Cumulative benefits to end of			
			1976-77 Actual			
			Potential		Utilisation	
			K	R	K	R
(1)	(2)	(3)	(19)	(20)	(21)	(22)
III. MEDIUM						
1	Remal	Keonjhar	..	..	..	..
2	Ramanadi	Ganjam	..	..	..	..
3	Daha	Ganjam	..	..	..	..
4	Nesa	Mayurbhanj	..	..	..	..
5	Pilasalki	Phulbani	..	..	..	..
6	Dumerbahal	Sambalpur	..	..	..	..
7	Gohira	Sambalpur	..	..	..	..
8	Sunei	Mayurbhanj	..	..	..	..
9	Aunli	Dhenkanal	..	..	..	..
10	Modernisation of Rushikulya	Ganjam	..	..	..	..
11	Extesion and improvement H. D. P.	of Sambalpur	..	..	..	..
12	Kuanria	Puri	..	..	..	..
13	Jharbandh	Sambalpur	..	..	..	..
14	Sarafgarh	Sundargarh	..	..	..	..
15	Talasara	Sundargarh	..	..	..	..
Total--II			..	..	..	..
Total--C- (I II)			..	..	..	..

(Area in 000' Hectares)

Cumulative benefits to end of

1977-78 Actual				1978-79 Target				1978-83 (Target)			
Potential		Utilisation		Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R	K	R	K	R
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)
..	2.73	1.27	2.73	1.27
..	0.09	0.33	0.99	0.33	0.99	0.33	0.99	0.33
..	4.85	1.63	4.85	1.63
..	0.92	0.40	0.92	0.40
..	1.79	1.03	1.79	1.03
..	2.13	1.13	2.13	1.13
..	6.07	3.24	6.07	3.24
..	7.20	3.96	7.20	3.96
..	0.89	..	0.89	..
..	3.24	..	3.24	..
..	1.30	0.65	1.30	0.65	1.30	0.65	1.30	0.65
..	2.70	1.19	2.70	1.19
..	1.37	..	1.37	..
..	1.61	0.32	1.61	0.32
..	2.12	0.43	2.12	0.43
..	2.29	0.98	2.29	0.98	39.91	15.58	39.91	15.58
..	2.29	0.98	2.29	0.98	113.31	72.18	113.31	72.18

Sl. No.	Name of Scheme	District to be benefited	C. C. A.	Ultimate Irrigation Potential	
				K	R
(1)	(2)	(3)	(4)	(5)	(6)
D. NEW SCHEME OF SIXTH PLAN.					
I. MAJOR					
1	Upper Indravati	.. Kalahandi	.. 109.31	109.31	76.52
2	Mahanadi-Birupa Barrage	.. Cuttack	.. ..	..	..
3	Samakoi	.. Dhenkanal	.. 12.00	12.00	6.40
4	Subarnarekha	.. Mayurbhanj	.. 89.31	89.31	67.30
5	Delta Defred Area	.. Cuttack and Puri	.. 65.35	65.35	48.36
6	Manibhadra (Phase I)	.. Cuttack and Ganjam	151.32	151.32	..
7	Ib	.. Sundagarh and Sambalpur.	110.00	110.00	55.00
8	Rushikulya Dam	.. Ganjam	.. 15.00	15.00	30.00
9	Indra Dam (Darugan)	..	24.00	24.00	13.00
10	Chiroli	.. Sambalpur	.. 24.30	24.30	13.00
11	Burtang	.. Puri	.. 18.00	18.00	9.60
12	Kanupur	.. Keonjhar	.. 31.60	31.60	16.80
13	Lower Lanth	.. Balangir	.. 28.70	28.70	15.30
Total- I			678.89	678.89	351.28

Sl. No.	Name of Scheme	District to be benefited	Cumulative benefits to end of			
			1976-77 Actual			
			Potential		Utilisation	
			K	R	K	R
(1)	(2)	(3)	(19)	(20)	(21)	(22)
D. NEW SCHEME OF SIXTH PLAN.						
I. MAJOR						
1	Upper Indravati	.. Kalahandi	..	..	..	..
2	Mahanadi-Birupa Barrage	.. Cuttack	..	..	..	..
3	Samakoi	.. Dhenkanal	..	..	..	..
4	Subarnarekha	.. Mayurbhanj	..	..	..	..
5	Delta Defred Area	.. Cuttack and Puri	..	..	..	..
6	Manibhadra (Phase I)	.. Cuttack and Ganjam	..	..	..	..
7	1b	.. Sundagarh and Sambalpur.	..	..	..	..
8	Rushikulya Dam	.. Ganjam	..	..	..	..
9	Indra Dam (Darugan)	..	..	..	..	..
10	Chiroli	.. Sambalpur	..	..	..	..
11	Burtang	.. Puri	..	..	..	..
12	Kanupur	.. Keonjhar	..	..	..	..
13	Lower Lanth	.. Balangir	..	..	..	..
Total-I			..	..	..	..

(Area in 000' Hectares)

Cumulative benefits to end of											
1977-78 Actual				1978-79 Target				1978-83 (Target)			
Potential		Utilisation		Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R	K	R	K	R
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)
..	30.00	..	30.00	..
..
..	3.00	1.00	3.00	1.00
..
..	30.00	10.00	30.00	10.00
..
..
..	15.00	..	15.00
..
..
..
..
..
..
..	63.00	26.00	63.00	26.00

MAJOR & MEDIUM IRRIGATION PROJECTS

Sl. No.	Name of Scheme	District to be benefited	C. C. A.	Ultimate Irrigation Potential		
				K	R	
(1)	(2)	(3)	(4)	(5)	(6)	
II. MEDIUM						
1	Harbhangi	.. Ganjam	.. 7.33	7.33	3.28	
2	Kanjhari	.. Keonjhar	.. 9.80	7.35	3.72	
3	Badanala	.. Koraput	.. 9.80	8.65	3.60	
4	Hariharjore	.. Balangir	.. 7.96	7.96	4.97	
5	Upper Suktel	.. Balangir	.. 1.01	1.01	0.51	
6	Bhalujodi (Bankabal)	.. Mayurbhanj	.. 6.30	6.30	2.40	
7	Derjang (Stage II)	.. Dhenkanal	.. 4.25	4.25	1.70	
8	Deo	.. Mayurbhanj	.. 9.90	9.90	4.95	
9	Kansabahal	.. Sundargarh	.. 3.75	3.75	2.00	
10	Gumadi	.. Phulbani	.. 2.70	2.70	1.40	
11	Baghua (Stage II)	.. Ganjam	.. 3.07	3.07	2.31	
12	Tel Dam	.. Koraput	.. 9.80	9.80	5.00	
13	Ahebjore	.. Sambalpur	.. 3.05	3.05	1.60	
14	Surubali	.. Balangir	.. 9.90	9.90	4.80	
15	Chhellgada	.. Ganjam	.. 5.40	5.40	2.90	
16	Mahendra Tanaya	.. Ganjam	.. 6.75	6.75	2.70	
17	Rissia	.. Balasore	.. 0.65	0.65	0.35	
Total—II			..	101.42	97.82	48.19
III. MODERNISATION SCHEME						
1	Baladiha	..	..	..	..
2	Baltarani System	..	.. 8.00	8.00	..
Total—III			..	8.00	8.00	..
Total D—(I+II+III)..			..	788.31	784.71	399.47
E. SURVEY, RESEARCH & INVESTIGATION						
Total State Sector (A+B+C+D+E)			..	1,754.28	1,778.46	1,044.11

MAJOR & MEDIUM IRRIGATION PROJECTS

Sl. No.	Name of Scheme	District to be benefited	Cumulative benefits to end of			
			1976-77 Actual			
			Potential		Utilisation	
			K	R	K	R
(1)	(2)	(3)	(19)	(20)	(21)	(22)
II. MEDIUM						
1	Harbhangi	.. Ganjam	..	..	..	..
2	Kanjhari	.. Keonjhar	..	..	..	..
3	Badanala	.. Koraput	..	..	..	..
4	Hariharjore	.. Balangir	..	..	..	..
5	Upper Suktel	.. Balangir	..	..	..	..
6	Bhalujodi (Bankabal)	.. Mayurbhanj	..	..	..	..
7	Derjang (Stage II)	.. Dhenkanal	..	..	..	..
8	Deo	.. Mayurbhanj	..	..	..	..
9	Kansabahal	.. Sundargarh	..	..	..	..
10	Gumadi	.. Phulhani	..	..	..	..
11	Baghua (Stage II)	.. Ganjam	..	..	..	..
12	Tel Dam	.. Koraput	..	..	..	..
13	Ahebjore	.. Sambalpur	..	..	..	..
14	Surubali	.. Balangir	..	..	..	..
15	Chheligada	.. Ganjam	..	..	..	..
16	Mahendra Tanaya	.. Ganjam	..	..	..	..
17	Rissia	.. Balasore	..	..	..	..
Total --II			..	..	..	..
III. MODERNISATION SCHEME						
1	Baladiha	..	..	..	..	..
2	Baitarani System	..	..	..	..	..
Total --III			..	..	..	..
Total --D-- (I+II+III)			..	..	..	..
E. SURVEY, RESEARCH AND INVESTIGATION						
Total State Sector			..	71.71	252.27	570.79
(A+B+C+D+E)			..			241.52

BENEFITS TARGETS AND ACHIEVEMENT

STATEMENT IF 3 (a)

(Area in 000' Hectares)

Cumulative benefits to end of											
1977-78 Actual				1978-79 Target				1978-83 (Target)			
Potential		Utilisation		Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R	K	R	K	R
(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)
..	4.33	2.28	4.33	2.28
..	4.00	1.00	4.00	1.00
..	2.00	1.00	2.00	1.00
..	4.00	1.00	4.00	1.00
..	1.01	0.51	1.01	0.51
..
..	2.25	1.00	2.25	1.00
..
..
..	2.00	1.00	2.00	1.00
..
..
..
..
..
..
..
..
..
..
..
..	19.59	7.79	19.59	7.79
..
..
..
..
..
..
..
..
..	82.59	33.79	82.59	33.79
588.46	283.08	588.46	283.08	632.91	336.04	632.91	336.04	888.23	476.32	888.23	476.32

MAJOR & MEDIUM IRRIGATION

Statement IF 3 (b)

(Area in)

Sl. No.	Name of Scheme	Target of additional				
		1978-79				
		Potential		Utilisation		
		K	R	K	R	
(1)	(2)	(3)	(4)	(5)	(6)	
I PRE-FIFTH PLAN ONGOING SCHEMES						
(a) MAJOR						
1	Mahanadi Delta	..	6.97	43.26	6.97	43.26
2	Salandi	..	..	..	..	..
3	Anandapur	..	8.00	..	8.00	..
(b) MEDIUM						
1	Ramiala	..	3.00	1.50	3.00	1.50
2	Ong	..	10.00	..	10.00	..
3	Dahuka	..	2.96	..	2.96	..
4	Sundar	..	1.76	0.97	1.76	0.97
5	Saipala	..	1.06	0.89	1.06	0.89
6	Kalo	..	2.84	1.74	2.84	1.74
7	Dadaraghati	..	1.63	1.08	1.63	1.08
8	Khadke	..	3.94	2.54	3.94	2.54
Total -I		..	42.16	51.98	42.16	51.93

PROJECTS PHASING OF BENEFITS

000' Hectares)

benefits during 1978 to 1983

1979-80				1980-81			
Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
12.21	7.00	12.21	7.00	..	23.79	..	23.79
..
8.00	..	8.00	..	8.00	.	8.00	..
1.50	0.50	1.50	0.50	1.00	1.00	1.00	1.00
3.00	..	3.00	..	3.00	..	3.00	..
..
..
..
..
..
..
24.71	7.50	24.71	7.50	12.00	24.79	12.00	24.79

Sl. No.	Name of Scheme	Target of additional 1981-82			
		Potential		Utilisation	
		K	R	K	R
(1)	(2)	(15)	(16)	(17)	(18)
1 PRE-FIFTH PLAN ON GOING SCHEMES					
(a) MAJOR					
1	Mahauadi Delta	..	..	..	..
2	Salandi	..	..	..	..
3	Anandapur	..	8.00	..	8.00
(b) MEDIUM					
1	Ramiala	..	2.00	1.00	2.00
2	Ong	..	3.00	—	3.00
3	Dahuka	..	..	..	..
4	Sundar	..	..	..	..
5	Saipala	..	..	..	..
6	Kulo	..	..	..	..
7	Dadaraghati	..	..	..	..
8	Khadkei	..	..	..	..
Total - 1			13.00	1.00	13.00

benefits during 1978 to 1983

1982-83				Total Additional benefits during 1978--83			
Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R
(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
		..	..	19.18	74.05	19.18	74.05
	
8.00	..	8.00	..	40.00	..	40.00	..
1.00	2.00	1.00	2.00	8.50	6.00	8.50	6.00
3.00	..	3.00	..	22.00	..	22.00	..
..	..	..	..	2.96	..	2.96	..
..	..	..	..	1.76	0.97	1.76	0.97
..	..	..	..	1.06	0.89	1.06	0.89
..	..	..	..	2.84	1.74	2.84	1.74
..	..	..	..	1.63	1.08	1.63	1.08
..	..	..	..	3.94	2.54	3.94	2.54
12.00	2.00	12.00	2.00	103.87	87.27	103.87	87.27

Serial No	Name of Scheme	Target of additional			
		1978-79			
		Potential		Utilisation	
		K	R	K	R
(1)	(2)	(3)	(4)	(5)	(6)
II. FIFTH PLAN ONGOING SCHEMES					
(a) MAJOR					
1	Rengali (Irrigation)	..	..	..	..
2	Upper Kolab	..	..	..	..
(b) MEDIUM					
1	Remal	..	..	..	..
2	Ramanadi	..	0.99	0.33	0.99
3	Daha	..	..	..	..
4	Nesa	..	..	..	..
5	Pillasalki	..	..	..	..
6	Dumerbahal	..	..	..	..
7	Gohira	..	..	..	..
8	Sunei	..	..	..	..
9	Aunli	..	..	..	..
10	Modernisation of Rushikulya System	..	..	..	..
11	Extension & Improvement of H. D. P.	..	1.30	0.65	1.30
12	Kuanria	..	..	..	..
13	Jharbunth	..	..	..	..
14	Sarafgarh	..	..	..	..
15	Talasara	..	..	..	..
Total—II		..	2.29	0.98	2.29
Total Ongoing (I+II)		..	44.45	52.96	44.45

benefits during 1978 to 1983

1979-80				1980-81			
Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
0.40	0.40	0.40	0.40	2.00	1.50	2.00	1.50
..	..	..	..	1.73	0.27	1.73	0.27
..
1.00	0.50	1.00	0.50	1.00	0.50	1.00	0.50
0.50	0.20	0.50	0.20	0.42	0.20	0.42	0.20
1.00	0.30	1.00	0.30	0.60	0.40	0.60	0.40
1.75	0.25	1.75	0.25	0.38	0.88	0.38	0.88
2.50	0.50	2.50	0.50	3.25	2.00	3.25	2.00
..
0.50	..	0.50	..	0.39	..	0.39	..
..	..	..	..	2.00	..	2.00	..
..
..
..	..	..	..	1.00	..	1.00	..
..	..	..	..	0.50	..	0.50	..
..
7.65	2.15	7.65	2.15	13.27	5.75	13.27	5.75
32.36	9.65	32.36	9.65	25.27	30.54	25.27	30.54

Serial No.	Name of Scheme	Target of additional			
		1981-82			
		Potential		Utilisation	
		K	R	K	R
(1)	(2)	(15)	(16)	(17)	(18)
II FIFTH PLAN ONGOING SCHEMES					
(a) MAJOR					
1	Rengali (Irrigation)	..	..	..	..
2	Upper Kolab	..	14.50	13.50	14.50
(b) MEDIUM					
1	Remal	..	1.00	1.00	1.00
2	Ramanadi	..	..	..	..
3	Daha	..	2.00	0.50	2.00
4	Nesa	..	..	..	..
5	Pillasaiki	..	0.19	0.33	0.19
6	Dumberbahal	..	..	..	..
7	Gohira	..	0.32	0.74	0.32
8	Sunei	..	2.50	0.50	2.50
9	Aunli	..	..	..	..
10	Modernisation of Rushikulya System	..	1.24	..	1.24
11	Extension & Improvement of H. D. P.	..	..	..	..
12	Kuanria	..	1.50	0.50	1.50
13	Jharbunth	..	0.37	..	0.37
14	Sarafgarh	..	1.11	0.32	1.11
15	Talasara	..	1.00	..	1.00
Total—II		..	25.73	17.39	25.73
Total Ongoing (I+II)		..	38.73	18.39	38.73

benefits during 1978 to 1983

1982-83				Total additional benefits during—1978—83			
Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R
(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
40.00	25.00	40.00	25.00	40.00	25.00	40.00	25.00
16.50	16.20	16.50	16.20	33.40	31.60	33.40	31.60
..	..	..	..	2.73	1.27	2.73	1.27
..	..	..	..	0.99	0.33	0.99	0.33
0.85	0.13	0.85	0.13	4.85	1.63	4.85	1.63
..	..	..	..	0.92	0.40	0.92	0.40
..	..	..	..	1.79	1.03	1.79	1.03
..	..	..	..	2.13	1.13	2.13	1.13
..	..	..	..	6.07	3.24	6.07	3.24
4.70	3.46	4.70	3.46	7.20	3.96	7.20	3.96
..	..	..	..	0.89	..	0.89	..
..	..	..	..	3.24	..	3.24	..
..	..	..	..	1.30	0.65	1.30	0.65
1.20	0.69	1.20	0.69	2.70	1.19	2.70	1.19
..	..	..	..	1.37	..	1.37	..
..	..	..	..	1.61	0.32	1.61	0.32
1.12	0.43	1.12	0.43	2.12	0.43	2.12	0.43
64.37	45.91	64.37	45.91	113.31	72.18	113.31	72.18
76.37	47.91	76.37	47.91	217.18	159.45	217.18	159.45

Serial No.	Name of Scheme	Target of additional			
		1978-79			
		Potential		Utilisation	
		K	R	K	R
(1)	(2)	(3)	(4)	(5)	(6)

III. NEW SCHEMES

MEDIUM TERM PLAN

(a) MAJOR

1	Upper Indravati	..	..	..	..
2	Mahanadi-Birupa Barrage	..	..	..	..
3	Samakoi	..	..	..	..
4	Subarnarekha	..	..	..	..
5	Delta Deferred Area	..	..	..	..
6	Manibhadra (Phase I)	..	..	..	..
7	lb	..	..	..	..
8	Rushikulya Dam	..	..	..	..
9	Indra Dam (Drugaoon)	..	..	..	..
10	Chiroli	..	..	..	..
11	Burtang	..	..	..	..
12	Kanapur	..	..	..	..
13	Lower Lanth	..	..	..	..

(b) MEDIUM

1	Harbhangi	..	..	..	..
2	Kanjhari	..	..	..	..
3	Badanala	..	..	..	..
4	Harihar jore	..	..	..	..

Serial No.	Name of Scheme	Target of additional			
		1981-82			
		Potential		Utilisation	
		K	R	K	R
(1)	(2)	(15)	(16)	(17)	(18)
III. NEW SCHEMES		..			
MEDIUM TERM PLAN		..			
(a) MAJOR		..			
1	Upper Indravati	..	..	..	..
2	Mahanadi-Birupa Barrage	..	..	..	..
3	Samakoi	..	..	..	..
4	Subarnarekha	..	..	..	..
5	Delta Deferred Area	10.00	3.00	10.00	3.00
6	Manibhadra (Phase I)	..	..	..	..
7	Ib	..	..	..	..
8	Rushikulya Dam	..	..	..	..
9	Indra Dam (Darugaon)	..	..	..	..
10	Chirol	..	..	..	..
11	Burtang	..	..	..	..
12	Kanapur	..	..	..	..
13	Lower Lanth	..	..	..	..
(b) MEDIUM					
1	Harbhangi	..	..	..	..
2	Kanjhari	..	..	..	..
3	Badanala	..	..	..	..
4	Hariharjore	..	..	..	..

benefits during 1978 to 1983

1982-83				Total additional benefits during 1978-83			
Potential		Utilisation		Potential		Utilisation	
K	R	K	R	K	R	K	R
(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
30.00	..	30.00	..	30.00	..	30.00	..
..
3.00	1.00	3.00	1.00	3.00	1.00	3.00	1.00
..
15.00	4.00	15.00	4.00	30.00	10.00	30.00	10.00
..
..
..	15.00	..	15.00	..	15.00	..	15.00
..
..
..
..
..
..
4.33	2.28	4.33	2.28	4.33	2.28	4.33	2.28
4.00	1.00	4.00	1.00	4.00	1.00	4.00	1.00
2.00	1.00	2.00	1.00	2.00	1.00	2.00	1.00
4.00	1.00	4.00	1.00	4.00	1.00	4.00	1.00

Serial No.	Name of the Scheme	Target of Additional				
		1978-79				
		Potential		Utilisation		
		K	R	K	R	
(1)	(2)	(3)	(4)	(5)	(6)	
5	Upper Suktel	..	..	..	..
6	Bhalujodi (Bankbal)	..	..	..	..
7	Derjang (Stage II)	..	..	..	..
8	Deo	..	..	..	..
9	Kansabahal	..	..	..	..
10	Gumadi	..	..	..	..
11	Baghua Stage II	..	..	..	..
12	Tel Dam	..	..	..	..
13	Aherajore	..	..	..	..
14	Surubali	..	..	..	..
15	Chelligada	..	..	..	..
16	Mahendra Tanaya	..	..	..	..
17	Risia	..	..	..	..
C. MODERNISATION SCHEMES						
1	Baladiha	..	..	..	..
2	Baitarani System	..	..	..	..
Total -III		..	..	..	..
IV. SURVEY, RESEARCH & INVESTIGATION						
Grand Total (State Sector)		..	44.45	52.96	44.45	52.96

Serial No.	Name of Schemes	Target of Additional				
		1981-82				
		Potential		Utilisation		
		K	R	K	R	
(1)	(2)	(15)	(16)	(17)	(18)	
5	Upper Suktel	..	..	..	..
6	Bhalujodi (Bankbal)	..	..	..	..
7	Derjang (Stage II)	..	..	..	..
8	Deo	..	..	..	..
9	Kansabahal	..	..	..	..
10	Gumadi	..	..	..	..
11	Baghna Stage II	..	..	..	..
12	Tel Dam	..	..	..	..
13	Aherajore	..	..	..	..
14	Surubali	..	..	..	..
15	Chelligada	..	..	..	..
16	Mahendra Tanaya	..	..	..	..
17	Risia	..	..	..	..
C. MODERNISATION SCHEMES						
1	Baladiha	..	..	..	..
2	Baitarani System	..	..	..	..
Total -III		..	10.00	3.00	10.00	3.00
IV. SURVEY, RESEARCH & INVESTIGATION						
Grand Total (State Sector)		..	48.73	21.89	48.73	21.89

STATEMENT I F. 4

Major Irrigation Projects Costing more than Rs. 30 crores—Check lists

1. Name of Projects with brief description, location and districts **Mahanadi Delta Irrigation Project.** It is a diversion scheme to utilise benefited. In case of Multipurpose and inter-state projects the tail race release of Chiplima P. H. of Hirakud Project for Irrigation details of sharing of cost and benefits among various purposes and in the districts of Puri and Cuttack. states may be indicated.
2. Date of commencement 1957
3. Target date of completion 1979-80
4. Indicate the various main components of the Project completed up to 1977-78 and the works proposed for 1978-79 and 1979—83. The details of expenditure and outlay for 1978-79 and 1979—83 may be indicated as below.

Part I Expenditure

(Rs. in lakhs)

Item	Latest cost	Expenditure up to Fifth Plan		Phasing of outlay in the next Five-year						
				1978-79	1979-80	1981-82	1981-82	1982-83	Total (1979-83)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(a) Land compensation		264.45	219.45	35.00	10.00	..	..	..	45.00	
(b) Head works		787.62	767.62	20.00	..	..	..	..	20.00	
(c) Main canal		1921.22	1861.22	60.00	..	..	..	..	60.00	
(d) Distribution system upto 1 cusec or 40 hectares block		2256.64	2063.16	160.00	47.00	..	..	..	207.00	
(e) Lining										
(i) Main canal		82.23	82.23	..	..	..	..	..	..
(ii) Distribution system		
(iii) Drainage		425.09	347.09	70.00	8.00	..	..	..	78.00	
(iv) Establishment		478.91	408.91	60.00	10.00	..	..	..	70.00	
(v) Other items		52.91	34.63	20.00	2.03	..	..	..	22.03	
Total		6269.07	5784.31	425.00	77.03	..	..	..	502.03	

STATEMENT I-F-4

Part II Physical Progress and Programme

Item	Unit	Total estimated quantity	Works done to end of fifth Plan	Target for 1978-79	Target for 1979—83
(1)	(2)	(3)	(4)	(5)	(6)
1	Head Works—				
	(i) Excavation	}	Constructed about one hundred years back		
	(ii) Concreting				
	(iii) Masonary				
	(iv) Earth Works				
2	Main Canals K. V.	859.06	859.06	..	—
	(i) Earth Work M-Cum	35.62	34.90	0.72	..
	(ii) Lining K. M.	42.00	42.00	..	..
	(iii) Cross drainage structures				
	(a) Nos.	1,810.00	1,625.00	170.00	15.00
	(b) Cost	471.49	459.49	11.00	1.00
3	Distribution System—				
	(i) Length K. M.	5,141.24	4,791.29	250.00	100.00
	(ii) Quantity of earth work M-Cum	150.90	134.30	12.00	4.00
	(iii) No. of structures (Outlets)	15,941.00	14,441.00	1,000.00	500.00
4	Man Power requirement Category (Peak Nos. Mandays)				
	(a) Unskilled and Skilled labourers (In thousands).	..	..	14/2736	2/450
	(b) Technical (In thousands)	..	..	0.18/54.00	0.03/9.00

STATEMENT I-F

*Major Irrigation Projects costing more than Rs, 30 crores-Check-list***2—Rengali Irrigation Project**

- | | |
|--|---|
| 1. Name of Projects with brief description, locaton and districts benefitted in case of multipurpose and inter-State projects details of sharing cost and benefits among various purposes and states may be indicated. | This projects envisages construction of barrage at Samal in the district of Dhenkanal across River Brahmani 34 K. M. downstream of Rengali Dam and distribution system on either side. The barrage will pick up the tail Race water from Rengali Power House and will provide annual Irrigation of 4,23,600 hectares in the districts of Dhenkanal, Cuttack and Keonjhar. |
| 2. Date of Commencement | February 1978 |
| 3. Target date of completion | 1987-88 |
| 4. Indicate the various main components of the Project completed up to 1977-78 and the works proposed for 1978-79 and 1979-83. The details of expenditure and out lay for 1978-79 and 1979—83 may be indicated as below. | A sum of Rs. 100.00 lakhs was spent towards purchase of machineries and materials for the Samal barrage during 1977-78. During the Year 1978-79 the provision is Rs. 68.00 lakhs to takeup preliminary works. The Project will make rapid progress in the remaining four years of the 6th plan. |

(Rupees in lakhs)

Item	Latest cost	Expenditure up to 5th plan	Phasing of outlay in the next Five-years Plan 1978—83					Total 1978—83	Remarks	
			1978-79	1979-80	1980-81	1981-82	1982-83			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
(a) Land Compensation	.. 1,108.83	}								
(b) Head works	.. 3,063.85									
(c) Main Canals	.. 10,881.66									
(d) Distribution system up to 1 cusec or 40 hectares block.	.. 3,581.83									
(e) Lining	.. ..								
(i) Main Canals	.. 273.84		100.00	68.00	824.74	1,380.05	1,919.43	2,250.18	6,442.40	..
(ii) Distribution system	.. 96.32									
(iii) Drainage	.. 259.10									
(iv) Establishment	.. 1,862.45									
(v) Other Items	.. ..								

(Rs. in lakhs)

Item	Unit	Total estimated quantity	Works done to end of 5th plan	Target for 1978-79	Target for 1979-83
(1)	(2)	(3)	(4)	(5)	(6)
1. Head Works—					
(i) Excavation ..	Lakhs cum ..	3.50	Nil	Nil	3.50
(ii) Concreting ..	Lakhs cum ..	2.20	Nil	Nil	2.20
(iii) Masonry ..	Lakhs cum ..	11.20	Nil	Nil	11.20
(iv) Earth Work ..	Lakhs cum ..	12.00	Nil	Nil	12.00
2. Main Canals—					
(i) Earth Work ..	Lakhs cum ..	815.70	Nil	Nil	300.00
(ii) Lining ..	Rs. in lakhs ..	27.34	Nil	Nil	5.00
(iii) Cross drainage structures..					
(a) Nos. ..	No. ..	N. A.	--	Nil	..
(b) Cost in lakhs ..	Rs. in lakhs ..	648.78	Nil	Nil	200.00
3. Distribution System—					
(i) Length ..	K. M. ..	60.00	Nil	Nil	15.00
(ii) Quantity of Earth Work ..	N. A. ..	N. A.	Nil	Nil	} N. A.
(iii) No. of structures ..	..	N. A.	Nil	Nil	
4. Man power requirement category (Peak Nos./Man days)					
(a) Unskilled/Skilled labourers (In thousands)		..	..	1.25/450.2	40.3/43576.6
(b) Technical (In thousands)		..	..	0.023/8.40	2.2/800.9

Major Irrigation projects costing more than Rs. 30 Crores—check lists

3. Upper Indravati Project

1. Name of Projects with brief description, location and districts benefited. In case of multipurpose and interstate projects details of sharing cost and benefits among various purposes and states may be indicated.

The project envisages transbasin diversion of water of Indravati river (Godavari basin) into the Mahanadi valley for power generation and irrigation. The tailrace water of the Power House will be picked up by a diversion weir in river Hati to provide annual irrigation of 1,85,830 hectares in the district of Kalahandi. The estimated cost of the Upper Indravati Multipurpose projects is Rs. 20,814.49 lakhs out of which cost chargeable to irrigation Rs. 7,765.71 lakhs and power Rs. 13,048.78 lakhs.

2. Date of commencement

1978-79

3. Target date of completion

1887-88

4. Indicate the various main components of the project completed upto 1977-78 and the work proposed for 1978-79 and 1979-83. The details of expenditure and outlay for 1978-79 and 1979-83 may be indicated as below, —

There is provision of Rs. 130.00 lakhs during the year to take up preliminary works for the project. Rapid progress is expected in the remaining years of the 6th plan.

Part I—Expenditure

(Rupees in lakhs)

Item	Latest cost	Expenditure up to 5th Plan	Phasing of outlay in the next Five Year Plan 1978—83					Total 1978—73	
			1978-79	1979-80	1980-81	1981-82	1982-83		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
(a) Rand Compensation ..	486.36	}							
(b) Head works ..	3,280.34								
(c) Main Canals ..	1,635.94								
(d) Distribution system up to 1 cusec or 40 hec- tares block.	1,019.31								
(e) Lining—			Nil	130.00	800.00	1,600.00	1,600.00	1,870.00	6,000.00
(i) Main Canal ..	38.25								
(ii) Distribution system	Nil								
(iii) Drainage —	15.00								
(iv) Establishment ..	736.92								
(v) Other items ..	553.59								

STATEMENT IF 4—Contd.

Part II—Physical progress and programme

(Rupees in lakhs)

Item	Unit	Total estimated quantity	Works done of to end of 5th Plan	Target for 1978-79	Target for 1979-83
(1)	(2)	(3)	(4)	(5)	(6)
1. Head Works—					
(i) Excavation	Lakh Cum.	19.38	Nil	Nil	18.00
(ii) Concreting	Ditto	3.82	Nil	Nil	3.80
(iii) Masonry	Ditto	24.47	Nil	Nil	23.00
(iv) Earth Work	Ditto	46.69	Nil	Nil	45.00
2. Main Canals—					
(i) Earth work	Ditto	60.68	Nil	Nil	35.00
(ii) Lining	Ditto	0.15	Nil	Nil	Nil
(iii) Cross drainage Structures	Ditto	62	Nil	Nil	..
(a) Nos.	62	62	Nil	Nil	30 nos.
(b) Cost in lakhs	..	382.75	Nil	Nil	195.00
3. Distribution System—					
(i) Length	..	25 Miles	Nil	Nil	10 Mile
(ii) Quantity of Earth work	..	N. A.	..	..	..
(iii) Number of structures	..	134 Nos.	Nil	Nil	50 Nos.
4. Main Power requirement category (Peak nos./Man days)—					
(a) Unskilled and skilled labourer (In thousands)	..	..	..	2.3/844.0	34.6/351.70
(b) Technical (In thousands)	..	..	..	0.044/116.0	0.63/691.3

STATEMENT—IF-4

Major Irrigation Projects costing more than Rs. 30 crores —Check lists

4. Mahanadi-Birupa Barrage Project

- | | |
|--|--|
| 1. Name of projects with brief description, location and districts benefited. In case of Multipurpose and inter-State Projects details of sharing of cost and benefits among various purposes and states may be indicated. | Mahanadi Barrage is proposed to be constructed across river Mahanadi 7.2 K.M. downstream of the existing century old weir at Cuttack. The total length of the barrage is about 1200 M. It is also stipulated to construct a barrage across river Birupa 0.25 K. M. downstream of the existing weir. The total approved cost of the project is Rs. 42.08 crores. The details of the project are subject to alteration after result of model study is known. The project will provide benefit to the existing ayacut 1,83,211 ha. of C. C. A. in Cuttack district. |
| 2. Date of commencement .. | 1978-79 |
| 3. Target date of completion .. | 1983-84 |
| 4. Indicate the various main components of the projects completed up to 1977-78 and the works proposed for 1978-79 and 1979-83. The details of expenditure and outlay for 1978-79 and 1979-83 may be indicated as below. | The project work is programmed to commence during the current financial year 1978-79 to start with infrastructure works. |

Part I—Expenditure

(Rs. in lakhs)

Item	Latest cost	Expenditure up to Fifth Plan (1977-78)	Phasing of outlay in the next Five years					Total
			1978-79	1979-80	1980-81	1981-82	1982-83	
			(4)	(5)	(6)	(7)	(8)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(a) Land compensation	.. 27.77	..	5.00	22.77	..	..	..	22.77
(b) Head works	.. 35,39.63	..	63.50	545.23	634.28	951.00	1,047.62	3,241.63
(c) Main Canal	..	..	..	..	..	..	..	..
(d) Distribution system up to 1 cusec or 40 hectares block.	..	..	..	..	..	..	..	..
(e) Lining								
(i) Main Canal	..	..	..	..	..	..	..	..
(ii) Distribution system	..	..	..	..	..	..	..	..
(iii) Drainage	.. 1,83.21	..	..	20.00	40.00	48.00	40.21	148.21
(iv) Establishment	.. 3,81.72	..	11.00	60.00	80.72	85.00	95.00	320.72
(v) Other items (Tools & Plants Audit & Accounts charges, etc.).	76.37	..	0.50	15.00	15.00	16.00	17.17	63.67
Grand Total	.. 42,08.70	Nil	80.00	663.00	770.00	1,100.00	1,200.00	3,813.00

[7 P. & C. - 56]

STATEMENT-IF4-

Part II—Physical Progress and Programme

Item	Unit	Total item quantity	Works done to end of Fifth Plan (1977-78)	Target for 1978-79	Target for 1979-83
(1)	(2)	(3)	(4)	(5)	(6)
1. Head Works—					
(i) Excavation	..	10,11,139 Cum	..	..	10,11,139 Cum
(ii) Concreting	..	13,11,570 Cum	..	..	10,00,000 Cum
(iii) Masonary
(iv) Earth work	..	46,76,330 Cum	..	..	44,00,000 Cum
2. Main Canals					
(i) Earth work	}				
(ii) Lining					
(iii) Cross drainage structures.					
(a) Nos.					
(b) Cost.					
3. Distribution system					
(i) Length	}				
(ii) Quantity of earth work.					
(iii) No. of structures (Outlets).					
4. Man-power requirement Category (Peak Nos./Mandyas).					
(a) Unskilled and skilled labourers (In thousands).				1.4/520.0	22.2/25021.0
(b) Technical (In thousands).				0.03/9.86	0.41/463.2

*Major Irrigation Projects costing more than Rs 30.00 crores - Check Lists***Rengali Dam**

1. Name of the Projects with brief description, location, and districts benefited. In case of Multipurpose and Inter State Projects, details of sharing of cost and benefits among various purposes and States may be indicated.

Rengali Multipurpose Project has been planned in two stages of development. Stage-I of the project, now under execution, having been sanctioned by the Planning Commission envisages the construction of Rengali Dam for purpose of flood control, and Hydro Power generation. The Rengali Dam is being constructed across river Brahmani, near village Rengali, in the District of Dhenkanal at 21° 15' N. Lat. & 85° 08' E Long. The Dam will be a gravity masonry type founded on rocky bed where the river flows in a narrow section with hill ranges extending on both sides. The total length of the dam will be 1040 M., out of which 469 M. will be Spillway with 24 gates of size 15.55 M × 14.8 M. The average height of the dam is about 45M and height above deepest foundation level is about 68M. The dam will store 4.40 lakh hectre-metre of water at F. R. L. and 5.15 lakh hectre-metre at M. W. L. which is at R. L. 125.40 M. After this dam comes up, about 2600 Sq. K. M of developed area in Dhenkanal and Cuttack districts will be protected from the vagaries of flood thereby benefiting a population of ten lakhs. The project also envisages generation of 60 M. W. of firm power. The Rengali Dam had been approved by the Planning Commission at a cost of Rs. 41.92 crores. The estimate was prepared in the year 1971-72. As per 1975 Schedule of rates and latest revision in the wages of labourers as per minimum wages Act, this estimate has been tentatively revised to Rs. 85.00 crores. The sharing of cost by different components from the commencement of 5th Plan is as follows.

Power	46%	} Charged to State Sector
Irrigation ..	24%	
F. C. ..	30%	.. Charged to Central Sector

2. Date of commencement .. The work in the dam proper has been taken up since 1-12-1975.
3. Target date of completion .. June, 1983
4. Indicate the various main components of the project completed up to 1977-78 and the works proposed for 1978-79 and 1979-83. The details of expenditure and outlay for 1978-79 and 1979-83 may be indicated as below.

Part I—Expenditure

[Rs. in lakhs]

Item	Latest cost	Expenditure up to fifth plan 1977-78	Phasing of outlay in the next Five-Year Plan 1978—83				
			1978-79	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) Land compensation and rehabilitation ..	2,916·00	578·16	250·00	500·00	616·23	600·00	371·61
(b) Head Works ..	5,584·00	1,722·37	925·00	1000·00	783·77	600·00	228·39
Total ..	8,500·00	2,302·53	1,175·00	1,500·00	1,400·00	1,200·00	600·00
(c) Irr. component (24% from the commencement of 5th Plan).	1,975·12	487·90	282·00	360·00	336·00	278·00	44·00

Item	Unit	Total Estimated quantity	Work done to the end of fifth plan	Target for 1978-79	Target for 1979—83
(1)	(2)	(3)	(4)	(5)	(6)
1. Head Works—					
(a) Excavation	Cum.	4,99,481	4,00,564	83,496	..
(b) Concreting	Cum.	2 82,830	19,860	47,625	2,15,345
(c) Masonry	Cum.	5,28,500	46,760	97,830	3,83,910
2. Main Canals—					
(i) Earth work	}	Does not arise	..	..	..
(ii) Lining					
(iii) Cross drainage structures					
(a) Nos					
(b) Cost					
3. Distribution System—					
(i) Length	}	Does not arise	..	..	..
(ii) Quantity of earth work					
(iii) No. of structures					
4. Man-power requirement category (Peak Nos./Man days—					
(a) Unskilled and skilled labourers	..	..	..	11·8/2,827·3	15·04
(In thousands)					1,1303·5
(b) Technical	..	..	..	0·460/110·15	585
(In thousands)					<u>440·6</u>

Irrigation Schemes benefitting

Serial No.	Name of Scheme	Districts to be benefitted	Latest Estimated cost	Expenditure up to end of 1973-74	Expenditure during 1974-78	1978-79 approved outlay	1979-83 outlay proposed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Central Sector							
1	Bondapippli	Phulbani	356.00	..	50.00	98.85	207.15
2	Pendrawan	Kalahandi	92.00	..	..	..	92.00
Total			448.00	..	50.00	98.85	299.15
State Sector							
1	Ong	Balangir	1,100.00	20.58	309.01	151.00	776.52
2	Harharjore	Balangir	726.00	..	..	..	726.00
3	Upper Suktel	Balangir	128.00	..	..	..	128.00
4	Lower Lanth	Balangir	2,500.00	..	..	..	500.00
5	Ramanadi	Ganjam	57.95	..	53.39	4.00	..
6	Baghua Stage-II	Ganjam	328.00	..	..	..	200.00
7	Chheligada	Ganjam	550.00	..	..	..	200.00
8	Indra Dam	Kalahandi	2,300.00	..	..	..	1,000.00
9	Kuanria	Puri	580.00	..	64.44	90.00	525.12
10	Burtang	Puri	1,600.00	..	..	..	500.00
11	Jharbandh	Sambalpur	112.00	..	..	..	60.58
12	Chiroli	Sambalpur	2,300.00	..	..	..	500.00
Total			12,281.95	20.58	426.84	245.00	5,125.22
Grand Total			12,729.95	20.58	476.84	343.85	5,424.37

the Drought Prone Areas

Statement IF-9

K—Kharif

R—Rabi

(Rs. lakhs/000 hec. Gross)

Ultimate Irrigation Potential (Annual)		Benefits to end of fifth plan (1977-78)				Target of Additional benefits during 1978-83 plan			
K	R	Potential		Utilisation		Potential		Utilisation	
		K	R	K	R	K	R	K	R
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1.50	0.75	..	..	..	..	1.50	0.75	1.50	0.75
0.69	0.40	..	..	..	..	0.69	0.40	0.69	0.40
2.19	1.15	..	..	..	..	2.19	1.15	2.19	1.15
24.69	..	..	..	..	..	22.00	..	22.00	..
7.96	4.97	..	..	..	..	4.00	1.00	4.00	1.00
1.01	0.51	..	..	..	..	1.01	0.51	1.01	0.51
28.70	15.30	..	..	..	..	..	..	..	..
0.99	0.33	..	..	..	..	0.99	0.33	0.99	0.33
3.07	2.71	..	..	..	..	..	..	..	..
5.40	2.90	..	..	..	..	..	..	..	..
24.00	13.00	..	..	..	..	..	..	..	..
2.70	1.19	..	..	..	..	2.70	1.19	2.70	1.19
18.00	4.60	..	..	..	..	..	..	..	..
1.37	..	..	..	..	..	1.37	..	1.37	..
24.30	13.00	..	..	..	..	..	..	..	..
142.19	58.51	..	..	..	..	32.07	3.03	32.07	3.03
44.38	59.66	..	..	..	..	34.26	4.18	34.26	4.18

STATEMENT-IF-10

IRRIGATION SCHEME BENEFITTING THE TRIBAL AREAS & BACKWARD CLASSES

(Rs. lakhs) (000' hectare gross)

Sl. No.	Name of Schemes	District/Taluk or Thasil to be Benefitted	Latest Estimated cost	Expenditure upto end of 1973-74	Expenditure during 1974-78	1978-79 approved outlay	1979-83 outlay proposed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
I. PRE-FIFTH PLAN SCHEME							
1	Pitamahal (Completed)	Sundargarh & Panposh	2,52.59	1,58.67	91.43	..	..
2	Kala Irrigation Project	Mayurbhanj & Kaptipada	4,52.22	43.77	3,30.49	67.00	12.13
3	Khadkai	Mayurbhanj & Rairangpur	4,83.70	28.30	3,80.54	50.00	24.26
II. FIFTH PLAN							
A. MAJOR							
1	Upper Kolab	Koraput, Jeypur	27,08.00	..	3,04.37	3,00.00	25,33.00
B. MEDIUM							
1	Remal	Keonjhar, Keonjhar	5,32.00	..	1,32.13	1,00.00	3,69.69
2	Nesa	Mayurbhanj, Rairangpur	1,22.88	..	52.92	50.00	24.26
3	Pilasalki	Phulbahi, Phulbani	3,00.00	..	1,05.88	80.00	1,39.24
4	Sunei	Mayurbhanj, Kaptipada	9,86.00	..	97.57	1,00.00	9,75.89
5	Sarafgarh	Sundargarh, Sundargarh	1,40.00	..	35.04	40.00	79.23
6	Talasara	Sundargarh, Sundargarh	2,65.00	..	50.05	50.00	2,03.28

(Rs. lakhs) (000' hectare gross)

(7B-58)

Ultimate potential		Benefit to end of 5th plan (1977-78)				Target of additional benefits during 1978-83			
K R		Potential		Utilisation		Potential		Utilisation	
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
2.61	1.62	2.61	1.62	2.61	1.62	..	..	..	..
3.64	1.94	0.80	0.20	0.80	0.20	2.84	1.74	2.84	1.74
5.94	3.04	2.00	0.50	2.00	0.50	3.94	2.54	3.94	2.54
44.52	49.41	..	..	..	..	33.40	31.60	33.40	31.60
2.73	1.27	..	..	..	..	2.73	1.27	2.73	1.27
0.92	0.40	..	..	..	..	0.92	0.40	0.92	0.40
1.79	1.03	..	..	..	..	1.79	1.03	1.79	1.03
7.20	3.96	..	..	..	..	7.20	3.96	7.20	3.96
1.61	0.32	..	..	..	..	1.61	0.32	1.61	0.32
2.12	0.43	..	..	..	..	2.12	0.43	2.12	0.43

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
III--NEW SCHEMES OF VI PLAN							
A. MAJOR							
1	Subarnarekha	.. Mayurbhanj, Baripada	.. 9,502.00	..	..	..	1,200.00
2	Ib	.. Sundargarh, Sundargarh	.. 6,490.00	..	..	..	100.00
3	Upper Indravati (Dam Share)	.. Koraput, Nawarangpur	.. 3,496.65	..	..	130.00	3,250.00
B. MEDIUM							
1	Kanjhari	.. Keonjhar, Keonjhar	.. 1,000.00	..	..	20.00	980.00
2	Badnalla	.. Koraput, Gunupur	.. 750.00	..	..	40.00	710.00
3	Harbhangi (Headwork)	.. Ganjam, R. Udayagiri	.. 420.00	..	..	20.00	400.00
4	Bhalujodi	.. Mayurbhanj, Rairangpur	.. 600.00	..	..	..	100.00
5	Deo	.. Mayurbhanj Karnjia	.. 1,000.00	..	..	..	300.00
6	Kansbahal	.. Sundargarh, Rajgangpur	.. 450.00	..	..	..	200.00
7	Gumadi	.. Phulbani Baliguda	.. 300.00	..	..	..	300.00
8	Tel Dam	.. Koraput, Umerkot	.. 1,000.00	..	..	..	200.00
9	Rissia	.. Balasore, Nilgiri	.. 95.00	..	..	..	70.00
10	Baldiha (Modernisation)	.. Mayurbhanj, Baripada	.. 25.00	..	..	..	25.00
Total			.. 31,371.04	230.74	1,580.42	1,047.00	12,195.98
CENTRAL SCHEME							
1	Potteru	.. Koraput, Malkangiri	.. 4,142.76	75.48	833.78	560.00	2,673.50
2	Bondapipili	.. Phulbani, Baliguda	.. 356.00	..	50.00	98.85	207.15

(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
89.31	67.30	..	..	..	..	..	..	..	..
110.00	55.00	..	..	..	..	..	..	..	..
..
7.35	3.72	..	..	..	..	4.00	1.00	4.00	1.00
8.65	3.60	..	..	..	..	2.00	1.00	2.00	1.00
-	-
6.30	2.40	..	..	..	..	..	..	..	..
9.90	4.95	..	..	..	..	..	..	..	..
3.75	2.00	..	..	..	..	..	..	..	..
2.70	1.40	..	..	..	..	2.00	1.00	2.00	1.00
9.80	5.00	..	..	..	..	..	..	..	..
0.65	0.35	..	..	..	..	..	..	..	..
..
321.49	209.44	5.41	2.32	5.41	2.32	64.55	45.29	64.55	45.29
61.00	48.85	..	..	..	..	61.00	48.85	61.00	48.85
1.50	0.75	..	..	..	..	1.50	0.75	1.50	0.75

This excludes Balidiha in the district Mayurbhanj/Baripada Kharif Potential 38.30 Ha. and Rabi 50 Ha. and Bhaskel in the district Koraput/Nawarangpur with Kharif poten. of 28.20 Ha. and Rabi 22.50 Ha.

(II) FLOOD CONTROL AND DRAINAGE

21-39. The Eastern Region of the country is visited by repeated natural calamities such as flood, drought and cyclone often accompanied by tidal waves. The total area liable to damages caused by flood and saline inundation in the State is around 7,000 Sq. Kms. A few flood protection works have been executed during the previous Plan periods, which include construction of Hirakud Dam Project, embankment system in Delta etc. which have checked floods in the Mahanadi system to a considerable extent. But, in the other rivers the flood menace continues unabated. There is also the acute problem of water logging in the coastal reaches of the rivers of Subarnarekha, Budhabalanga, Salandi, Baitarani, Brahmani and Mahanadi. This problem is much more severe in the irrigated coastal areas where large patches of low lands are submerged under water for a period of 5 to 7 months during a year. Saline erosion has posed another problem in the coastal areas. Therefore, steps have to be taken to protect the agricultural lands from frequent damage by flood, inundation, water logging and saline erosion. Long range Master Plan for the rivers Brahmani, Baitarani and Subarnarekha have been prepared and are under scrutiny in the Central Water Commission.

21-40. There is growing need to take up the following types of flood control works—

- (1) Construction of new embankments and improvement of existing embankments for protection against flood and prevention of sand casting.
- (2) Anti-erosion works
- (3) Improvement and construction of saline embankments
- (4) Improvement of Test Relief embankments
- (5) Construction of drainage channels etc.

21-41. Construction of the Rengali Dam across the river Brahmani has been taken up and the project is likely to be completed by 1981-82. With the construction of this project, it is necessary to start construction of flood protection embankments and complete them by 1982-83. The Rengali Dam, along with its protection embankments will ensure protection of an area of 65,000 ha. from floods.

21-42. In the river basin of Baitarani alongwith Raba, Kapali and Salandi rivers, 45,000 ha. are affected at present, due to inundation and water logging. To prevent this, construction of the Bhimkund Dam across the river Baitarani has been proposed and the project report is now under examination by the Planning Commission. With the construction of the dam, construction of flood protection embankments has to be taken up. It is estimated that the proposed dam along with its flood protection embankments will protect an area of 45,000 ha. from flood ravages.

21-43. Besides the above two major works, it is necessary to provide flood protection embankments in different rivers at vulnerable points to prevent erosion by floods and sand casting. The flood embankments in Mahanadi system also need improvement so as to accommodate a flood of 11 lakh cusecs by release of water from the Hirakud reservoir which at times becomes inevitable due to heavy rainfall in the catchment areas of river Mahanadi.

21-44. In the tidal reaches of the Mahanadi, Brahmani and Subarnarekha rivers there is aggressive erosion of river banks. Subarnarekha Anti-erosion works like spurs, revetment, etc. have to be provided in order to check such erosion and to protect valuable agricultural land and populous villages from destruction.

21-45. Saline inundation has presented a special problem. After the disastrous cyclone of 1971, State Government have given much attention for providing saline embankments at vulnerable points in the tidal areas. It is felt necessary that the scope of saline protection and provision of drainage culvert should be extended to new areas. Besides, it is necessary to improve the existing saline embankments to make them more secure and less prone to breaches.

21-46. The Test Relief embankments constructed by the Revenue Department have been transferred to the Irrigation Department. Such of these embankments as are technically necessary would be taken up for improvement to bring them to the prescribed standard.

21.47. Lack of adequate drainage facilities particularly in the deltaic areas has created serious problems. Since construction of two dams in Bihar in river Subarnarekha is likely to take sometime, it is urgently necessary to provide drainage works in this basin so as to protect an area of about 20,000 ha. In the deltaic area of Mahanadi, the water logged area has now increased and the lands which at one time were rich paddy lands, are sub-merged in a depth of one or two metres of water. Besides, in the districts of Balasore, Mayurbhanj and Puri, considerable improvement can be done to non-irrigated lands by removal of drainage congestion. The deltaic area needs immediate attention in this regard.

21.48. The necessity for substantial investment on this account can not be over emphasised. However during the previous plans this sector has not been given due attention mostly due to paucity of funds. The amount of expenditure incurred during the four years of the Fifth-Year plan are as follows.

Year	Actual expenditure incurred (in lakhs)
1974-75	Rs 68.69
1975-76	Rs 262.60 (Includes Rs 205.37 lakhs towards F.D.R works)
1976-77	Rs 105.37 (Includes Rs. 47.91 lakhs towards F.D.R. works)
1977-78	Rs 148.83
Total	Rs 585.49

21.49. Out of Rs. 585.49 lakhs already spent a sum of Rs. 253.28 lakhs has been utilised for restoration of flood-damaged works. This, however, excludes the utilisation of the allocation of Rs. 150 lakhs as advance plan Assistance received in the year 1977-78 for repairing the Flood Control works damaged by severe floods in that year. Thus, only a sum of Rs. 232.21 lakhs has been spent to take up original schemes. By any standard, this is inadequate in consideration of the actual need.

21.50. As will be seen from the table below, the physical achievement during the period has not been very heartening either. Upto the end of 1977-78, reasonable protection from flood could be provided to an area of 100.65 lakhs hectares only.

Sl. No.	Type of work	Achievement upto 4th Plan	Achievement				Total 1974-78
			1974-75	1975-76	1976-77	1977-78	
1	Construction of embankment (KMS.)	155	30	60	25	100	215
2	Town protection works (Numbers).	9	Nil	1	..	Nil	1
2	Raising of villages	29	Nil	Nil	Nil	Nil	Nil
4	Construction of drainage channels (KMS).	15	1	1	2	3	7
5	Construction of Saline embankments (KMS).	27	1	1	1	3	6

21.51. At present there are 126 ongoing works and these will spill-over to the Sixth plan (1978-83) Besides, there are 13 schemes for which survey and investigation are in progress. A sum of Rs. 470.00 lakhs is required for completion of the above 126 works and a further sum of

Rs. 30.00 lakhs will be required for completion of the survey and investigation schemes. Thus, it is estimated that a sum of Rs. 500.00 lakhs will be required for completion of all the spill-over works.

21.52. Keeping the above in view, a work programme with an investment of Rs. 45 crores has been drawn up for implementation during the Five Year Plan period (1978--83). The broad physical programmes are detailed below:

Name of the work	Target	Estimated cost
(i) New construction and Improvement of embankments.	500 Km.	Rs. 1,500 lakhs
(ii) Anti-erosion works	1,000 Km.	Rs. 1,000 lakhs
(iii) Construction/improvement of saline embankments.	1,000 Km.	Rs. 850 lakhs
(iv) Improvement of Test Relief embankments.	700 Km.	Rs. 350 lakhs
(v) Drainage works	700 Km.	Rs. 800 lakhs
Total		Rs. 4,500 lakhs

Above works will, inter alia, provide protection to different areas as below:

	(In thousand hectares)
(a) Area to be protected from flood during the year 1978--83	112
(b) Area to be protected from saline inundation during the year 1978--83.	60
(c) Area to be protected from erosion during 1978--83	50
(d) Area to be protected from water logging during 1978--83	48
	270

21.53. The programme envisages raising and strengthening of the existing embankments in the Mahanadi system to withstand a flood of 11 lakh cusecs, to strengthen the embankments of Rushikulya system and construction of new embankments/strengthening of existing embankments at vulnerable points. The provision suggested for anti-erosion works mainly consists of anti-erosion works in the estuaries of the big rivers and construction of a sea-wall with sluices having regulating gates. Provision has been suggested for improving the existing saline embankments and to provide new embankments. For improving the Test Relief embankment of about 700 KM and bringing it to prescribed standard, a sum of Rs. 350 lakhs has been suggested. For the existing drainage congestions in the deltaic region and at other places, a provision of Rs. 800 lakhs has been suggested.

Employment

21.54. With the investment of Rs. 7.6 crores during the fifth plan (1974-78) under flood control, the engagement of man power was 130 engineers, 1050 skilled labourers and 5930 unskilled labourers. During the sixth plan with a higher investment of Rs. 45 crores, creation of additional employment potential in respect of graduate engineers and diploma holders and skilled and unskilled labourers will be of the order of 1,800, 13,000 and 90,000 respectively.

STATEMENT--IF. I.

LIST OF INTER-STATE SCHEMES

(A) Multipurpose and Irrigation Schemes

The Subarnarekha Irrigation Project comprises of Galudh barrage to be executed in Bihar jointly by Bihar and Orissa and irrigation system in Orissa. Out of Orissa's share of 12 lakh acre feet of water at Kokpara in the Subarnarekha-Kharkai basin, 10 lakh acre feet will be conveyed through this Barrage along with right bank main canal up to Orissa's border. The barrage is estimated to cost Rs. 31.44 crores out of which Orissa's share is Rs. 29.10 crores. Subarnarekha Irrigation System is estimated to cost Rs. 65.92 crores. Thus, the total cost of the Subarnarekha Irrigation Project is Rs. 95.02 crores. In the Sixth Plan, an outlay of Rs. 12.00 crores has been provided.

(B) Flood Control Schemes

Subarnarekha Flood Control :—As per agreement reached by Bihar, Orissa and West Bengal there will be a flood storage of 3.75 lakh acre feet in the Chandil Dam for flood moderation benefits in West Bengal and Orissa. It is further stipulated in this agreement that, Bihar, Orissa and West Bengal will jointly request the Government of India to meet the cost of the flood moderation portion of the Chandil Dam fully. Accordingly, the State Government has approached the Government of India in this regard. In case Government of India does not agree to bear the cost, the aforesaid cost is to be borne by West Bengal and Orissa in proportion to be mutually agreed between themselves. If they will be unable come to an agreement on this within six months from the date of signing the agreement by the Chief Ministers of Bihar, Orissa and West Bengal, the matter will be left to an arbitrator to be appointed by the President of India whose decision shall be final and binding on the two States. No provision has been kept in the Sixth Plan towards flood control component of the Chandil Dam.

STATEMENT IF, 5
STATE ORISSA

Flood Control, Drainage, Anti-sea erosion and water logging Projects—Outlays and Expenditure

(Rs. in lakhs)

Sl. No.	Name of Schemes	Districts to be benefited	Estimated cost		Expr. upto end of 1973-74	1974-77 Actual expr.	1977-78		Total expr. to end of 1977-78	1978-79		1979-83 Proposed Outlay	
			Apprd. (year)	latest (year)			Apprd. outlay	Ant. expr.		Apprd. outlay	Antd. Expr.	Total Capital-Freign exchange	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
A—Pre-Fifth Plan Schemes													
Flood Control Projects													
1	Spill over works of Fourth Plan 129 Nos.	Cuttack, Puri, Balasore, Keonjhar, Mayurbhanj, Dhenkanal, Ganjam and Kalahandi.	366.16	457.74 (1977)	297.60	78.81	81.33	81.33	160.14	..	..	..	..
B—New Schemes of Fifth Plan													
Flood Control Projects													
1	On going works 139 Nos.		598.60	639.38	..	94.71	74.67	74.67	169.38	110.00	110.00	360.00	360.00
2	Flood Restoration works 1414 Nos.	All 13 districts	355.37	403.28	..	..	..	..	..	..	..	..	..
	Total		953.97	1,042.66	..	94.71	74.67	74.67	169.33	110.00	110.00	360.00	360.00
C—New Schemes of 1978-83													
1	Original Schemes.	All 13 districts	3,900.00	3,900.00	..	..	..	..	..	176.00	176.00	3,724.00	3,724.00
D—Water Dev. Services													
Surveys & Investigation Research (a) Continuing Schemes.													
		Mayurbhanj, Balasore, Dhenkanal, Cuttack and Puri.	43.73	57.26	..	17.26	10.00	10.00	27.26	14.00	14.00	16.00	16.00
	(b) New Schemes	All Districts	100.00	100.00	..	..	..	..	..	..	..	100.00	100.00
Grand Total—(A+B+C+D)			4,563.86	4,757.66	297.60	435.66	166.00	148.83	585.49	300.00	300.00	4,200.00	4,200.00

STATEMENT IF-7

Requirement of materials

(Metric tonnes)

Item	1978-79 requirements				1979-83	
	Major & Medium Irrigation Project		Flood Control	Major & Medium Irrigation Project		Flood Control
	Anticipated 1977-78	Target 1978-79	Target 1979-83	Anticipated 1977-78	Target 1978-79	Target 1979-83
1. Cement ..	80,000		150	11,25,000		1,500
2. Steel ..	14,000		Nil	1,90,000		2,000
3. Coal ..	..		Nil	..		Nil
4. Explosives ..	300		Nil	4,200		Nil

STATEMENT-IF 8

Employment	Absolute No. or Nos. of man-days					
	Major & Medium Irrigation			Flood Control		
	Anticipated 1977-78	Target 1978-79	Target 1979-83	Anticipated 1977-78	Target 1978-79	Target 1979-83
A—Engineers						
(a) Graduate Engineers ..	400	60	1,244	40	70	600
(b) Diploma Holders ..	840	90	1,867	90	150	1,200
B—Skilled Workmen and labours	12,500	661	13,725	1,050	1,800	13,000
C—Unskilled labourers ..	64,000	7,480	142,987	5,930	10,700	90,000

CHAPTER 22

POWER

22.1. Orissa had an installed capacity of 681.5 MW at the beginning of the Fifth Five-Year Plan. By the end of the year 1977-78 the installed capacity has been of the order of 921.5 MW including 7.5 MW of Choudwar Thermal Station. The installed capacity and the energy capability under optimum generation condition of different major power stations in the State at present (excluding small diesel/thermal stations) are as follows.—

Sl. No.	Power Station	Installed capacity in MW	Peak available in MW	Energy in MU
(1)	(2)	(3)	(4)	(5)
1	Hirakud Stage I & II ..	270	210	1050
2	Machkund M. E. Scheme (Orissa Share) ..	34	34	205
3	Talcher Thermal Station ..	250	153	1005
4	Balimela H. E. Project, Stage I ..	360	250	1176
Total		914	647	3436

22.2. Needless to say power is a basic need for economic development and is a pre-requisite to agricultural and industrial development. Therefore, it is necessary to step up power generation and build a net work of transmission lines in the State to cater to the needs of the marine, forest and mineral based industries and agricultural production.

22.3. Integrated operation of power system in various regions has been accepted as an essential requirement for optimum utilisation of resources and maximum operational efficiency. One of the strategies of the Five-Year Plan 1978—1983 accepted by the Planning Commission is to reinforce the transmission system adequately, evolve 400 KV net work through out the country, establish a locational load despatch centre and move towards the evolution of a national grid. Since our State has vast natural resources for power generation it is necessary to step up investment in power projects to meet the minimum needs and cater to the demands projected both within and outside the State.

22.4. The allocation and utilisation of financial resources for the power sector during the first four Plans was nearly 25 per cent of the State Plan (except in the Second Plan). During the four years of the Fifth Five-Year Plan out of the total expenditure of 461 crores in the State Plan, investment in the power sector has been of the order of 183.38 crores which comes to 39.77 per cent of the total plan expenditure for that period. Keeping in view the shortages of power for the eastern region as a whole, it is necessary, to keep the tempo of power development in the State during the Sixth Plan Period.

Review of progress up to the end of Fifth Plan

22.5. Balimela Power Scheme utilises Orissa's share of water impounded in the Balimela (joint dam) on river Sileru for generation of electricity. The installed capacity of Balimela power house is 360 MW 6 units of 60 MW each. Out of these, two units were commissioned during the Fourth Plan Period and the rest of the units have been commissioned during the Fifth Plan (1974—78) period.

22.6. Talcher-Balimela double circuit 220 KV line has been completed and charged. Out of 192 KM total length of Talcher-Rourkela 220 KV second circuit transmission line which was started during the Fourth Plan, drawing of lines has been completed to the extent of 108 KMs. Out of the total length of 923 KMs. of 132 KV lines a length of 324 KMs. has been completed by the end of 1977-78. The remaining length of 599 KM. will be completed by the end of March 1980.

22.7. At the beginning of the Fifth Plan period 8,077 villages were electrified which was about 20 per cent of the total inhabited villages of the State. During the Fifth Plan period (1974—78) 6,084 more villages have been electrified bringing the total coverage to 14,161 villages which is 30.13 per cent of the total inhabited villages and 51 per cent of the rural population. A total number of 3,431 L. I. Points have been energised during 1974—78 bringing the cumulative total to 5,665.

Objective and Targets for the Sixth Plan

22.8. The following power/multipurpose projects are under execution in the State

(1)	Installed capacity in MW.	Peak available in MW.	Energy in MU.
(1)	(2)	(3)	(4)
1. Talcher-Thermal Expansion 2 × 110 MW.	220	135	886
2. Rengali Multipurpose Project 2 × 50 MW.	100	90	523
3. Upper Kolab H. E. Project 3 × 80 MW.	240	220	828

22.9. The commissioning of the Units under construction has been planned as below :—

(a) Talcher Expansion	1st Unit	1979-80
	2nd Unit	1980-81
(b) Rengali 1st Stage	1st Unit	1982-83
	2nd Unit	1983-84
(c) Upper Kolab	1st Unit	1982-83
	2nd Unit	1983-84
	3rd Unit	1983-84

With the completion of the continuing projects, the capacity in Orissa by the year 1983-84 would be as follows :—

1. Installed capacity	..	914 + 560 = 1474 M. W.
2. Peak capability	..	647 + 445 = 1092 M. W.
3. Energy capability	..	3436 + 2237 = 5673 M. U.

22.10. According to the Tenth Load Survey the peak power requirement and energy requirement of Orissa State during the next decade are as follows :—

	1978-79	1979-80	1980-81	1981-82	1982-83	1983-84	1988-89
Peak in M. W.	569	666	710	787	910	999	1730
Energy in M. U.	3488	4085	4354	4825	5581	6126	10600

It may be noticed that there may be a marginal shortfall in the requirement by 1983-84 (the year of completion of all continuing projects) if the output from the completed and continuing projects are taken into account.

22.11 A Hydro-project takes about 7 to 10 years for commissioning and a Thermal Project takes around 4 to 6 years. In order to cater to the demand of the State by 1988-89 :

1. Peaking capability required is .. 1730 M. W.
2. Energy capability required is .. 10600 M. U.

After the completion of the ongoing projects the peaking capability and energy capability of the State will be 1092 M. W. and 5673 M. U. respectively. Thus there will be deficits of (i) peaking capability of 648 M. W. and (ii) energy capability of 4927 M. U.

22.12. Tenth Load Survey has not taken into consideration some projects like TISCO's sponge iron Plant, Expansion of IMFAL's Ferro Silicon Plant, N. M. D. C.'s Iron-ore and Manganese ore mines, Naha Bharat Plant, Wagon Repair Workshop at Mancheswar as well as the proposed Alumina/Aluminium Plant in Orissa. If these projects materialise during the Sixth Plan Period, Orissa will have an additional load demand of 270 M. W. and a further energy demand of 2,360 M. U.

22.13. Project report of Upper Indravati Multipurpose Project has been cleared recently and the Project Report of Bhimkund Project is under scrutiny by the Central Water Commission and the Central Electricity Authority. The estimated generation of capacities would be as follows :-

	Installed capacity in M. W.	Peaking capability in M. W.	Energy in M. U.
(1)	(2)	(3)	(4)
(a) Upper Indravati Project ..	600	500	2,065
(b) Bhimkund Project, 1st stage ..	393	314	1,357
	993	814	3,422

Upper Indravati Project has been approved to be included in the State's Sixth Plan and the Bhimkund Project has been offered to the Central Government to be included in the Central Sector Projects in the Sixth Plan. Bhimkund Project will also serve as a peaking station for supplying peaking power to Orissa, Bihar, DVC and West Bengal. This project is expected to take at least eight to nine years to complete and the estimated cost is Rs. 228.75 crores tentatively. Even after considering the out-put of these two projects there would still be a deficit in energy requirement of 1,505 M. U. (4,927 M. U. - 3,422 M. U.). It is necessary to start some other projects during the sixth Five-Year Plan in order to meet this deficit.

22.14. To meet the energy shortfall in Orissa it is necessary to take up a Super Thermal Station at Talcher with an initial installation of three 200 MW sets which should be available by 1982-83. In view of the availability of abundant quantity of low grade non-metallurgical coal, sufficient water in the river Brahmani, extensive flat uncultivated land near the coal fields and other infrastructure such as railways, all weather roads, power, central location with respect to load centres etc. Talcher offers an ideal combination of around facilities for a super Thermal Station of 1,000 MW capacity with expansion facilities for 2,000 MW ultimately. Necessary provision for funds has to be made in the Central Sector, likely investment of Sixth Plan being of the order of 184.50 crores

22.15. The additional installations at Rengali, Upper Kolab and Indravati will be an expenditure of the Seventh Plan. When these Schemes are completed, the total peaking capacity of Orissa system would be 2,131 MW against the projected demand of 1,730 MW and the energy potential would be 10,660 M. U. against the projected 10,600 M. U. Thus, the requirement of 88-89 will be met, when the Super Thermal Scheme is in operation. Orissa then, may be able to give peaking support to the region to the tune of 350 to 400 MW.

22.16. With the construction of Rengali, Upper Kolab, Indravati and Bhimkund Projects, Orissa has no other Hydro Power or Thermal Power Projects properly investigated to be taken up. The investigation of Middle Kolab and other Hydro and Thermal Projects has to be taken up seriously and project reports cleared during the Sixth Plan for execution of Balimela Stage-II, Hirakud Stage-III, Micro Hydel Projects like Pottery, Hadgarh and Bargarh and Thermal Power Station in 'Ib' valley as new projects.

ONGOING SCHEMES

I. Rengali Multipurpose Project

22.17. The Rengali Multipurpose Project (Rengali Dam) is under execution from the year 1972-73. The estimated cost of the Dam and appurtenant work which was approved by the Planning Commission at Rs 4,192.00 lakhs has been tentatively revised to Rs. 8,500.00 lakhs on account of increase in cost of labour, materials, additional facilities proposed for displaced persons and with contingencies for future price escalation. The cost allocated to each item, expenditure incurred upto end of Fifth Plan, i.e., upto March, 1978 and amount proposed to be spent for the period 1978-83, is indicated below :—

(Rs. in lakhs)			
Item	Total cost	Expenditure up to March 1978	Expenditure proposed 1978-83
(1)	(2)	(3)	(4)
1. Flood Control 30%	2,550	390.65	1,803.00
2. Power 46%	3,910	934.63	2,672.00
3. Irrigation 24%	2,040	552.35	1,400.00
Total	8,500	1,877.63	5,875.00

22.18. The Irrigation & Power components are charged to the State Plan and the flood control component is charged to the Central Plan. During the year 1978-79, the total outlay envisaged on Rengali Dam is Rs. 1,175.00 lakhs, out of which Rs. 282.00 lakhs is allocated to irrigation, Rs. 353.00 lakhs to flood control and Rs. 540.00 lakhs to power.

22.19. The Dam envisages excavation of 4.10 lakhs Cum. against which, work of 3.27 lakhs Cum. has been done up to 1977-78 and the balance work is proposed to be completed during the year 1978-79. Out of 3.11 lakhs Cum. of masonry and concreting 0.67 lakhs Cum. has been done up to end of 1977-78. During the year 1978-79, it is proposed to complete 1.46 lakhs Cum. of concreting and masonry. The work of the Cofferdam of the deep channel portion has already been taken up and 0.38 lakhs Cum. has been completed during the year 1977-78 and the balance 1.75 lakhs Cum. is proposed to be completed during 1978-79. The total expenditure up to end of the year 1977-78 is Rs. 2,302.53 lakhs. Originally, it was programmed to complete the Dam by June, 1981. But the programme has been revised due to short-falls in concreting and masonry work, as well as other hindrances, such as, strike of workers and squatting of the inhabitants of the submersible villages. As per the revised programme, the Dam is to be completed by the end of June, 1983. Erection of gates will commence from the year 1979-80. Out of 334 MT of steel required for the gates, 265 MT have already been procured and the balance has been programmed to be procured during the year 1978-79.

22.20. In consideration of the above work programme, the following will be the year-wise requirement of funds in order to complete the Dam and appurtenant works by the end of June, 1983 :—

Year	(Rs. in lakhs)
1978-79	1,175.00
1979-80	1,500.00
1980-81	1,400.00
1981-82	1,200.00
1982-83	600.00
1983-84	322.47

II. RENGALI POWER PROJECT

(a) Civil works

22-21. The Rengali Power Project contemplates installation of two units of 50 MW each initially with provision of three more units at a later date. The regulated discharge from the Power Station will offer irrigation facilities, which will be taken up in stage-II of the Project. The firm Power to be available is 60 MW (100% load factor) in Stage-I, which will increase to 91 MW after the Koel-Karo and Sankha Projects in Bihar, upstream of Rengali are constructed. The works in power development included in stage-I are (i) construction of Power House building intake structures for 5 units (ii) installation of 2 Nos. of generating units of 50 MW each with associated control instruments, switchgear and switchyard.

22-22. With regard to the power House Civil Works, out of excavation of 165,000 cum. on rock and flood deposits, 75,000 cum. have been done up to May 1978 and the balance 90,000 cum. have been programmed to be completed during the year 1978-79. Out of the total quantity of 80,000 cum. of concreting, it has been programmed to complete 23,125 cum. 40,000 cum. and 16.875 cum. during the years 1979-80, 1980-81 and 1981-82 respectively. For penstock, 900 MT of steel is required, out of which, 590 MT of steel has already been procured and the balance has been programmed to be procured during the year 1978-79. For manufacturing of penstock, necessary work order has already been issued to M/s. Orissa Construction Corporation, Ltd. The Fabrication shall be taken up during the year 1979-80 and erection will be completed during the year 1980-81.

(b) Electrical works

22-23. Physical Achievement upto end of 1977-78

- (1) Letter of intent for supply of E. O. T. Crane has been placed with M/s Hindustan Motor Ltd.
- (2) Draft tube knee and pier linings have arrived in site.
- (3) Technical Project Report for main generating units has been approved and is subject to revision of drawings as discussed with M/s Bharat Heavy Electrical Ltd.
- (4) Manufacture of turbine and generator is in progress
- (5) Design and specification of cooling water and oil handling system, dewatering and drainage system is in progress at Central Electricity Authority level.
- (6) Purchase order of Power Transformers has been Placed with M/s Telx manufacturers Preliminary drawings are under scrutiny.
- (7) Electrical installation and service composition to 48 Nos. of labour shed, 24 Nos. of 'F' type Quarters, 6 Nos. of 'D' type Quarters completed. Tenders for lat floor works of Erector's hostel is in progress. In respect of other buildings casting, layout and excavation is in progress.

22-24. There was delay in excavation of Power House. Due to this the concreting operations in the power station may be delayed.

22-25. Yearwise work programme for Rengali for the period from 1978-79 to 1982-83 :—
1978-79

- (1) Receipt and verification of embedded parts at site for unit Nos. I & II.
- (2) Despatch of speedring and scroll case for unit-I
- (3) Tendering and award of dewatering and drainage system
- (4) Specification and tendering for switchyard equipments and structures. C. T.'s, P. T.'s control and protection panel cooling water and oil handling system.

1979-80**Stage I**

- (1) Delivery and erection of E. O. T. Crane.
- (2) Receipt of speeding and scroll case for Unit I's and II and turbine and generator for Unit I.
- (3) Ordering for L. T. Switch gear, Battery and D. C. equipment
- (4) Delivery of Power Transformer for Unit I Excavation and levelling of switchyard to be completed.

Stage II

- (1) Ordering of generating Units III, IV & V

1980-81**Stage I**

- (1) Erection of speeding and scroll case for Units I and II to be completed.
- (2) Commencement of Erection of generator and turbine cooling water and oil handling system.
- (3) Erection of dewatering and drainage system.
- (4) Delivery of 11 KV busduct and terminal equipment and erection to commence.
- (5) L. T. switchgear, control and protection panel, cables, Battery and D. C. equipment illumination equipments to be delivered.
- (6) Delivery of power transformers, switchyard equipment P. T.'s. and C. T.'s.
- (7) Foundation and Concreting of switchyard, laying of ground mat, fabrication and delivery of switchyard structures to be completed.

Stage II

- (1) Ordering for power Transformers for Units III, IV and V

1981-82**Stage I**

- (1) Erection and commissioning of generator, turbine, cooling water and oil handling system, Bus duct and terminal equipment, unit Auxillary transformer, L. T. switch gear, control and protection panel, cabling, battery and D. C. equipment, Air conditioning and ventilation equipment, illumination power transformer, switchyard equipments, stringing C. T.'s and P. T.'s.

Stage II

- (1) Receipt of embedded parts for Units 3, 4 and 5.

1982-83**Stage I**

- (1) Erection of equipments to be completed.
- (2) Testing of Units 1 and 2.

Stage II

- (1) Receipt of embedded parts, speedings and scroll case, turbine for Units III, IV and V.

22:26. Financial outlay of Rengali (Electrical Works) (Rs. in lakhs)

Year	Stage I	Stage II	Total
1978-79	80	Nil	80
1979-80	800	180	980
1980-81	450	30	480
1981-82	300	100	400
1982-83	110	750	860
1983-84	Nil	800	800
1984-85	Nil	700	700

III. UPPER KOLAB HYDRO-ELECTRIC PROJECT

(a) Civil works

22:27. The Hydro-Electric Project comprises construction of a dam on Kolab, Two Dykes, a pressure tunnel, surge shaft, three penstock tunnels, a value house, three lines of surface penstocks, a power house, a tailrace, a switch-yard and a double-circuit 220 KV transmission line.

22:28. The following are the achievement of the Project upto March, 1978:—

- (i) The road from N. H. 43 to Dam site from Dam site Dahudapadar and other roads are in progress. Out of 50 Km., 15 Km. is completed.
- (ii) Out of the total quantities of 1,41,830 Cum. of excavation for river diversion a quantity of 85,000 Cum. has already been completed.
- (iii) As regards dam and appurtenant works out of 2,55,200 Cum. of excavation, a quantity of 30,000 Cum. has been excavated.
- (iv) The construction of spillway is proposed to be taken up departmentally during the next working season.
- (v) The specification drawings for the 40'×40' radial gate are being finalised by the C. W. C.
- (vi) The work of the main tunnel and penstock tunnel will be put to tender after receipt of the specification drawing from the C. E. A. which is expected this month.

Power House

22:29. Out of the total quantity of 4,10,000 Cum. of foundation excavation, a quantity of 40,000 Cum. has been excavated. The construction of Power House will be entrusted to M/S Orissa Construction Corporation Ltd. The work on the Tail Race channel is proposed to be completed during this financial year. The tenders for gates and hoist of Head Race Tunnel and tenders for value house excavation will be invited sometime in the next financial year. Procurement of plates for the penstocks will be taken up this year.

(b) Electrical works

22:30. The electrical works of this project consist of procurement, erection and commissioning of 3 Nos. of 80 MW turbine generator units with associated control instruments, switchgear equipments, step-up transformers and the switchyard.

22:31. Physical Achievement upto end of 1977-78

1. Construction of one No. 'CR' type, 4 Nos. 'D' type and 12 Nos. of 'F' type Qrs. at Bariniput is in progress.
2. Construction of 8 Nos. 'E' type Qrs. completed and electrified.
3. Electrical installation to temporary labour shed at Bariniput is completed.
4. 11 KV trunk line from 132 KV grid S/S to dam site is completed.

(7 B—62)

5. Construction of 33 KV line from Bagra Junction to Dallda Padar 33 KV S/S completed.
6. Some T. & P. stock materials have been procured from Balimela, Hirakud and Vishakhapatnam.
7. Contour Survey for fixing the location of switchyard store, garage and workshop is completed.
8. Letter of Intent for 3 generator sets has been placed with M/s. Bharata Heavy Electricals Ltd. and an advance amount of Rs. 121.00 lakhs has been paid to them.

22.32. Programme of work from 1978-79 to 1982-83

1978-79

- (i) The preliminary working drawings of turbine generators will be scrutinised and approved.
- (ii) Tenders will be invited and orders placed for power transformers, EOT cranes, Butterfly valves, station auxiliaries and instruments and control equipments.
- (iii) Studies for switchyard arrangement and equipment will be made and after finalisation of specifications for out door switchyard equipment will be invited.

1979-80

- (i) Working drawings of the turbine-generators as received from suppliers will be studied and approval/modifications if necessary will be intimated. After approval of drawings, orders for manufacture of instrument and control equipments, station auxiliaries, power and control cables will be placed.
- (ii) Manufacturer's drawings for P. H. Cranes, 220 KV switchyard & power transformers will be studied and approved in consultation with C. E. A.
- (iii) Delivery of embedded parts of turbine-generator will be made.

1980-81

- (i) P. H. Cranes will be delivered and erection work will be taken up. After delivery, laying of cables in various premises will be taken up.
- (ii) Approval of working drawings for Butterfly valve, Instrument and control equipments, Station auxiliaries and power transformers will be given and Manufacture will continue.
- (iii) Delivery of Switchyard equipments will commence.
- (iv) Delivery of main equipment of turbine and generator will start.

1981-82

- (i) Erection of E. O. T. Cranes including testing will be completed.
- (ii) Erection of Turbine-Generator and 220 K. V switchyard will start.
- (iii) After delivery, erection of B. F., Values, station auxiliaries and power transformers will be taken up.
- (iv) Erection of instrument and control equipments will be done and testing of the same will continue.
- (v) After laying cable trays and trenches, all power and control cable laying will be completed.
- (vi) Construction of all types of buildings at project site will be completed.

1982-83

- (i) Erection of all the three Butterfly valves will be completed
- (ii) Erection works of instrument and control equipments and station auxiliaries will be completed.
- (iii) Testing of 220 K. V. switchyard will be completed.
- (iv) Erection including testing of power transformers of Unit-I will be completed and that of other units will continue.
- (v) Erection of 1st Unit will be completed and pre-commissioning tests will be done.
- (vi) The first unit will be commissioned in September, 1982.

IV. UPPER INDRAVATI MULTIPURPOSE PROJECT

22-33. The Upper Indravati Project envisages construction of four dams, one on the main river Indravati at village Patrapur of Koraput district and one each on three of its tributaries to form a single reservoir through two link channels. The reservoir will have a gross storage at the full level of 95.70 T. M. C. and a live storage of 66.30 T. M. C.

22-34. The firm power available at the power station will be 227 MW at 100% load factor. It is proposed to instal 5 generating units of 120 MW capacity each. The power station shall be connected to the Orissa grid at Jeypore and Theruvalli s/s by 220 K. V. Double Circuit lines and at Rourkela by a 400 K. V. Single Circuit line. All the equipments for electrical works are proposed to be procured from indigenous sources. The cost of power generated works out of 5.96 paise per unit. The cost of Dam and appurtenant works will be shared by Power and Irrigation on 50:50 basis.

22-35. The general abstract of the cost of the project is as follows :—

	Rs. in lakhs
(a) Dam and appurtenant Works	.. 6983.30
(b) Irrigation	.. 4274.06
(c) Power Development	.. ..
(i) Civil Works	.. 3404.22
(ii) Electrical Works	.. 6152.91
Total	.. <u>20814.49</u>

a) Civil Works—

22-36 It is proposed to take up the Dams and appurtenant works within the Sixth Plan period alongwith all Civil Works of Power House. The phasing of executing programme in not shell are furnished below.

1978-79 1st year	Construction of approach roads to Dam sites and power house site, Construction of housing colonies, office and godowns and workshops, land acquisition for dams dykes, cut power house and tailrace and canal head works and Procurement of T. & P. and stock materials,
1979-80 2nd year	Foundation excavation for all the 3 masonry dams and base stripping for the earth dam and excavation of river diversion channele, Finalisation of designs for Dams, spillway and dykes, cuts and power house.
1980-81 3rd year	Construction of Dams; Excavation of cuts, headrace channel power house foundation excavation, power tunnel excavation, tailrace channel excavation, alignment grading for penstocks surge tank and valve house execution.

- 1981-82 4th year Construction of dams, dykes and cuts and all the above works will continue and orders will be placed for gates.
- 1982-83 5th year Construction of all the 4 dams, dykes, spillway, Headrace channel, power Tunnel surge tank, Penstocks, Value House, Power House and tailrace channel will be completed in all respects except the spillway gates and Bridge.

(b) Electrical Works—

22:37. The programme of construction is spread over a period of 9 years. The first unit will start generating power in the seventh year of construction and the other units will be commissioned at 6 months interval each. The budget provision for the power portion of the project is Rs. 35.00 lakhs for the year 1978-79. The Project has been approved by the Planning Commission in May, 1978.

22:38. Yearwise programme of works from 1978-79 to 1982-83

1978-79

1. Procurement of construction power equipment worth Rs. 25 lakhs
2. Procurement of Special T. & P. and Vehicles

1979-80

1. Construction—Power Supply to Power House site
2. Preparation of Specification for machineries
3. 10% advance for Hydro-generator sets

1980-81

1. Construction—Power Supply to different points
2. Construction of storage, workshop and colony
3. Preparation of layout and specification for Power House equipments

1981-82

1. Construction—Power Supply to different points
2. Construction of stores, workshop and colony
3. Preparation of layout and specification for Power House equipments

1982-83

1. Laying out of Embedded parts and switchyard
2. Preparation of layout and specification for Power House equipments
3. Construction of stores, workshop and colony
4. Construction of Power Supply to different point

Talcher Thermal Power Station Expansion

22:39. The original estimated cost of the project was Rs. 38.40 crores in 1972. The estimate has been recast on the basis of 1975 prices and the revised cost was Rs. 75.18 crores. Subsequently this was discussed with C. E. A. on the 25th November 1975 and the revised estimated cost of the project was fixed by C. E. A. at Rs. 72.26 crores, which excludes Coal Handling Plant and Equipment at Mine end. During the Annual Plan (1978-79) discussion with the Planning Commission it was indicated that cost of the project basing on the latest price of the plant equipment and

essential spares will be of the order of Rs. 75.00 crores. Since the order for Coal Handling Plant (Mine end) equipments are yet to be finalised that cost of which is Rs. 250 lakhs approximately, as per tenders received, it now transpires that the estimated cost of the project will be around Rs. 77.52 crores. The yearwise plan allocation so far made and anticipated in the coming years are as follows:--

Year	Plan Allocation (Rs. in lakhs)
1973-74	12.00
1974-75	330.00
1975-76	352.00
1976-77	2,450.00
1977-78	2,500.00
1978-79	1,595.20
1979-80	300.00
1980-81	104.80
Total	7,752.00

22.40. According to the schedule of commissioning, as discussed with CEA and Planning Commission in December, 1977, first unit will be commissioned during December, 1979 and the second in June, 1980. Therefore, Rs. 300.00 lakhs and Rs. 104.80 lakhs will be needed during 1979-80 and 1980-81 respectively to complete the project.

WORK PERFORMANCE (UP TO END OF MARCH 1978)

(i) Plant Civil Works--

22.41. The Plant Civil Works together with structural steel fabrication and erection with R.C.C. Stack was awarded to M/s. Orissa Construction Corporation Ltd. in July, 1976. Periodical review of the civil works revealed slow progress and therefore, the Orissa State Electricity Board decided to delete the R. C. C. Stack from the scope of M/s. O. C. C. Ltd. and has now awarded it to M/s. Bridge & Roof, a Government of India Undertaking. The progress of balance Civil works together with the structural fabrication and erection has not been upto the work schedule which will ultimately result slippage in the commissioning schedule.

(ii) Boiler Erection--

22.42. Boiler Erection of first unit was commenced by M/s. BHFL in March, 1977 and till end of March, 1978 they have erected about 1500 MT out of about 5300 MT for each unit.

(iii) Turbo-Generator Erection--

22.43. Turbo-Generator Erection has not yet commenced. M/s. BHEL while indicating various inputs for this work, require the T. G. foundation in October, 1978 to achieve the commissioning schedule in December, 1979. All efforts are being made with M/s. OCC to cast the T. G. foundation as quickly as possible so as to avoid slippage in T. G. Erection.

(iv) Procurement of Plant and Equipment--

22.44. Except a few major items viz. Water Treatment plant, L. P. Piping, Coal Handling Plant, almost all the Major items of Plant and Equipment have been ordered. Constant monitoring is being made in respect of delivery/ completion schedule dates.

(v) Survey and Investigation of Power Projects--

22.45. In order to meet the anticipated power demand in the State, the detailed investigation of several power projects have been undertaken with a view to economising the ultimate costs of the projects and to save time for execution.

22:46. Detailed survey and investigation of Upper Indravati and Bhimkund Projects have been done. Bhimkund Project is now under scrutiny by the Central Water Commission, and their queries are being met from time to time.

22:47. Investigation of Upper Indravati Hydro Electric Project—The fixation of layout of Power House tail race and switchyard are in progress.

22:48. Interconnection of Lower Kolab and Lower Machkund with Orissa Grid—

- (i) The route alignment of 33 KV Line is in progress.
- (ii) The surrounding map of Mukhiguda village was prepared and relevant drawings for supply of construction power have been collected.
- (iii) The reconnaissance survey has been done for 65 Kms.
- (iv) The theodolite and levelling survey has been done for 51.51 K. M.

22:49 Power Potential of river Baitarani with specific reference to Bhimkund Project :

- (i) Investigation regarding Fixation of proposed power House and switchyard site at fall No. I is in progress.
- (ii) The detailed route alignment of 220 K. V. transmission line from Baigundi to Baripada has been completed for 71.26 K. M.
- (iii) The draft of the technical report on 220 K. V. Transmission line from Nuapada to Joda has been completed.
- (iv) The route map for 220 K. V. Transmission line from Baigundi to Baripada has been completed.

22:50 Investigation of Micro Hydel Projects :

The feasibility reports on Micro Hydel Schemes at Hardgarh and Bargarh has been completed.

22:51 Thermal Station in Ib valley Coal Field :

Preliminary exercises relating to the extent of coal deposit and river discharge data have been done.

22:52 The following projects have been programmed to be undertaken for detailed Survey and Investigation during the period from 1978-79 to 1982-83.

- (i) Middle Kolab Project
- (ii) Lower Machkund Project
- (iii) Budhabalanga H. E. Project
- (iv) Lodani project site on river Brahmani
- (v) Investigation of thermal station in Ib Valley
- (vi) Investigation of Micro-Hydel Schemes in the State
- (vii) Development of Hydro power on Potteru Irrigation Canal
- (viii) Low Head Generation project on Baragarh Canal
- (ix) Hadgarh Micro Hydel Project
- (x) Talcher Super Thermal Station
- (xi) Power potential of river Baitarani with specific reference to Bhimkund project
- (xii) Interconnection of power stations with powersystem stability study

22:53 A brief note on the schemes under investigation is enclosed

Middle Kolab Project

22:54 The Middle Kolab Project envisages construction of a dam near Gadaghati in Koraput district. It is also proposed to divert a part of the Indravati water into Middle Kolab Reservoir. The Power House will utilise a net head of 345 feet and generate 70 M. W. at 100 % load factor. The installed capacity proposed is 180 M. W. with 3 units of 60 M. W. each. The annual generation will be 2,615 million units against the firm power and annual irrigation will be 3,42,000 areas. The estimated cost of the project is about Rs. 295 crores.

Lower Machkund Project

22:55 The Scheme envisages construction of an open headrace out of about 1,000 ft. length with a tunnel of about 3.5 miles long and a tail-race, channel of 500 long to produce 10 M.W. of firm power by utilising the head between the tail of the existing Machkund Power House and F. R. L. of Balmela Reservoir. The entire project will be constructed within Orissa territory. This project does not involve any inter-state aspect, since the water after producing power is again let down into Machkund river (Sileru). The estimated cost of the project is Rs. 578.17 lakhs.

Budhabalanga Hydro Electric-Projects

22:56. This project envisages construction of two dams one at Nawana and the other at Basilkachha. The dam at Nawana will provide a regulated flow of 194 cusecs and will generate a firm power of 17.16 M. W. The dam near Basilkachha will impound the water discharged from the power house up-stream and form the intermediate catchment. The regulated flow from the reservoir will be 463 cusecs. The firm power to be generated at this site is 4.70 M. W. physical targets of the work on power side are for 1978-79-(a) contour survey of power house and switchyard sites at Nawana, (b) survey and route alignment of 30 Kms. of 132 KV. Transmission lines from Nawana to Baripada (total distance 65 Kms.). Plant provision of the work during the current year is Rs. 1,00,000. The project may be an ideal pumped storage scheme having peak load capacity of 10.00 to 12.00 MW.

Lodani Project Site on river Brahmani

22:57. This project site on the river Brahmani at a place about 25 miles down-stream of Panposh is under investigation. The Koel and Karlo Projects are in the up-stream of Lodani site. These are under execution by the Bihar Government. The regulated flow that may be available after completion of these projects can be utilised throughout the year at Lodani by constructing a low head dam there. The feasibility report of the project is yet to be prepared and therefore, the exact power potential of this project has not been assessed. Physical target of the work on power side for 1978-79 are (a) Preparation of feasibility report of Lodani Dam Project, (b) Survey and investigation of 132 KV. Transmission lines from Lodani to Rourkela (30 Kms. approximate), (c) Drilling along the Dam axis of the Lodani Project. Plan provision for the work during this year is Rs. 70,000.

Thermal station in 'IB' Valley coal field

22:58. In Rampur area, Sambalpur district, there are large deposits of low grade coal which could be utilised for thermal power generation for which the feasibility report has been prepared. The size of plant, the transmission system for inter connection of the power station with Orissa grid and regional grids would be decided after investigation is taken up. The physical target kept for the year 1978-79 of the work is (1) Selection of Power House and Switchyard site (2) Survey of water supply in taken point and drilling of bore holes with a plan provision of Rs. 70,000. This project is proposed for execution during the Plan period 1978-83 and an outlay of Rs. 50.00 crores has been proposed.

Micro-Hydel Generation Schemes in the State

22:59. There are a number of possible sites in the State for setting up Micro-Hydel Schemes. This includes low head schemes with large discharge as well as high head (20-30) metres) schemes with relatively small water discharge. On careful study of the topographical maps, suitable locations for about 30 such micro-hydel generation projects have been identified. A preliminary estimate for Rs. 30,000 has been sanctioned to collect certain initial data after which scheme report on individual projects will be prepared. The plan provision on the scheme for the current year is Rs. 55,000.

Development of Hydro Project on Potteru Irrigation Canal (Potteru H. E. Project)

22-60 The Scheme envisages construction of dam and a power house for generation of power at Gompakonda on Potteru Irrigation Canal. A preliminary study has indicated that it is possible to generate about 7 M. W. firm power at a head of 100' on this canal. A brief report on the scheme has already been prepared. It is proposed to carry out further investigations and prepare a detailed project report on the scheme. Physical target of the scheme for the year 1978-79 is contour survey of power house and switchyard sites with a plan provision of Rs. 30,000.

22-61 This scheme is proposed to be implemented during the Sixth Plan period with an outlay of Rs. 5-00 crores.

Low head generation on Bargarh Canal

22-62 During the present energy crisis it is considered to generate power with maximum head from run-off river or from canals. Bargarh canal is the largest canal of Hirakud Irrigation system. For low head generation the pattern of flow in Bargarh Canal, which takes off from Hirakud Reservoir at right dyke is a favourable proposition for seasonal generation of electricity up to 9 M. W.

22-63. It is confirmed from the study of pattern of flow that about 3,000 cusecs of water is ensured for 110 days in a year and 2,500 cusecs can be ensured for 180 days. Water before going to the canal from the reservoir can be utilised for seasonal generation of electricity of the order of 9 M. W. (maximum) to 3 M. W. (minimum). 2 nos. of 4.5 M. W. sets have been suggested which can take care of maximum flow of 2,800 cusecs to minimum 1,000 cusecs with net head varying from 52' to 17'. Two nos horizontal bulb turbines of 6000 B. H. H. P. shall be used. No spiral casing and draft tube are necessary for such installation and investment for foundation concreting and super structure will be reduced to about 2/3rd of conventional design.

22-64 Total cost for civil works and electrical installations is estimated as Rs. 418 lakhs. The pooled cost per unit work out to be 18-59 paise which includes reserves and profit of 3 per cent. The project is expected to be completed by 1985 and by that time the pooled cost of unit at H. T. will be 22-3 paise.

22-65 This project is programmed to be taken up in the Sixth Plan with an outly of Rs. 2-00 crores.

Hadgarh Microhydel Project—

22-66 Hadgarh Micro-Hydel Project is situated on river Salandi in Keonjhar district. The river after the joining of tributary and nallas has been bottle necked at Hadgarh in the district of Keonjhar. The location of the project is 35 miles north-west to Bhadrak. The direct rail-link is available upto Bhadrak. Site-conditions for construction of project are quite favourable for location of a small power plant and seasonal generation of electricity is possible very economically by taking advantage of the head of water available and quantity of water let out for irrigation with a very modest outlay. A probable discharge pattern with F. R. L. of 270, has been derived from study. This study ensured about 15,000 Mcft. of water for generation of electricity out of total average yield of 25,000 Mcft. which is normally expected with average yield of 25,000 Mcft. which is normally expected with average rainfall of 61" in catchment. Average net head available is 30 metres. 5 MW power can be generated assuming average discharge of 750 cusecs. Two sets of 5 MW generators can take care of the discharge from 450 cusecs to 15000 cusecs with net operating head varying from 135' to 85'. The cost of generation is 8-5 paise per unit. This will also contribute to the uplift of tribals of the sub-plan area.

22-67 This project is included in the Sixth Plan for execution and an outlay of Rs. 2-80 crores has been provided.

Balimela Stage-II

22-68 The rated head of Balimela Power House is 274-5 M. W. and firm power is 135 M. W. For the Balimela Power Project eight generating sets of 60 M. W. each were initially planned. The State Government in consultation with Central Water and Power Commission decided to install six sets in Stage-I and the balance two sets in Stage-II. Installation of six generating sets of 60 M. W. each were completed by 1976-77. While constructing Stage-I the following works of Stage-II were also taken up and completed.

(i) The leading channel (ii) Power Tunnel (iii) Surge Shaft (iv) Penstock Tunnel (v) Butterfly valves for the surface penstock (vi) Power House Building (vii) Civil works for Generator-Turbine Unit, Transformer deck, etc. (viii) Draft-tube and damper gates for idle discharge valve and (ix) Tail race channel.

22-69 It is now proposed to take-up construction work of Stage-II during the 6th Plan period. If the erection works of the two generating sets are taken up immediately from 1978-79 the commissioning of machines can be accomplished by 1982-83. This would increase the installed capacity of Balmela from 360 M. W. to 480 M. W. Thus Orissa Power Grid peak capability will be boosted by another 120 M. W. A provision of Rs. 20-00 crores has been made during the 6th Plan for its execution.

Hirakud Stage-III

22-70 In Burla Power House at present six units are installed. A penstock has been embedded in the Power House for the seventh unit. For sometime past it was being considered to open the dividing wall for installation of suitable sluice gates therein near the Power House. This would have been made possible to run all the six machines during the monsoons when adequate water is available. At present this is not possible due to limitation in discharge capacity of existing power channel.

22-71 Generation capability of Burla Power House during the monsoons when syphon spillway continuously functions with tailrace at RL 525 maximum is at present 140 MW (M. D.) and 110 MW (Average). If an escape is provided thereby bringing down the tailrace level to RL 516 and making it possible to run all the six existing machines at full load, the capacity will rise to 175 MW (M. D.) and 140 MW (Average). It is proposed to instal the 7th Unit to utilise water during rainy season for generation of secondary power. In that event the capability will further rise to 210 MW (M. D.) and 170 MW (Average).

22-72 The reservoir need not be kept as high as RL 605/610 right from the beginning of July as is now necessary to provide the designed working head to the Turbines. As escape to the river near the tailrace may bring down the tailrace water level to RL 515/516 and comparatively lower reservoir level could be required. A lower reservoir level during early monsoon would provide a greater margin for flood protection and would reduce siltation in the live storage area. The 7th unit can be installed at a low capital cost to provide seasonal power as well as peaking power during monsoons. Another benefit will be that the maintenance of Thermal machines can be planned during the monsoon for overhaul and repairs.

22-73 The detailed investigation for this project is under progress. A provision of Rs. 15 crores has been kept in the 6th Five-Year Plan for this project.

Talcher Super Thermal Station (Progress of Investigation)

22-74 (a) Talcher Super Thermal Station is proposed to be located about 12 KM away to the north of the existing 250 MW Talcher Thermal Station. This station will have 5 units of 200 MW each, built on unit system. Each boiler and turbine generator will constitute a single unit. The detailed project report has already been prepared on the basis of indigenous equipment rates. The cost of the 1000 MW station had been estimated as Rs. 148-00 crores (1971 prices) The cost per KW of power installed comes to Rs. 1480-00 This is exclusive of the cost of transmission system. Physical target of the work for the year 1977-78 is (a) preparation of lay-out plan as per the project report (b) maintenance of bore holes for reference of CEA and other experts. The plan allocation for the work in 1978-79 is Rs. 5000-00 only.

Inter-Connection of Talcher Super Thermal with Orissa Grid

22-75 The work relating to this scheme are (i) preparation of technical report and plotting of profiles for 400 KV Talcher-Bhimkund (Balgundi) transmission lines; (ii) Preparation of technical report and plotting of profile for 400 KV Talcher-Rourkela transmission line (iii) Measurement of earth resistivity for 400 KV Talcher Rourkela transmission line. The plan provision of the Scheme for the year 1978-79 is Rs. 2000-00.

Power Potential of River Baltarani with Specific Reference to Bhimkund Project

22:76 The works involved in this scheme are (i) Survey and investigation of last 18 Kms. of Baigundi to Baripada 220 KV transmission line (ii) preparation of technical report of Baigundi to Baripada 220 KV transmission line, (iii) preparation of technical report for the 220 KV transmission lines from Nuapada to Joda (iv) Measurement of earth resistivity for resistivity for 220 KV transmission lines from Nuapada to Joda and Baigundi to Baripada. The plan provision for the work for 1978-79 is Rs. 10,000.

Inter-Connection of Power Stations with for system Stability Study

22:77 The system study for Orissa in particular and Eastern region at large has been undertaken with the assistance of B. N. E. L. They have submitted quotation of Rs. 3.5 lakhs for undertaking the study transmission net work connecting various existing power stations have been surveyed for effective and economical power evaluation. 400 K. V. Transmission system is likely to materialise in the central Sector from the proposed study between Kothagudem-Lower Sileru-Ballmela-Jeypore-Upper Indravati-Super Thermal-Bhimkund and Kelaghat in West Bengal.

Transmission and Distribution Schemes

22:78 Under Transmission and Distribution Scheme, construction of 757 Circuit Km. of 220 KV lines, 923 Circuit Km. of 132 KV lines alongwith associated 220/132/33 KV Sub-stations at different places has started. Out of the above, 306 Km. of 220 KV lines and 324 Km. of 132 KV lines have completed. The construction work related to E. H. T. Sub-stations is progressing as per schedule. Procurement of major equipments of State Load Despatch Station has been completed. The Building works will commence soon.

22:79 Keeping in view the commissioning schedule of the on-going power Projects and the new generation projects, the transmission system has been adequately re-inforced for integrated operation of all power stations and to achieve maximum operating efficiency.

22:80 It has also been proposed to construct a 400 KV Indravati-Bhimkund-Jeypore-Talcher-658 Km long Transmission line to evolve a work for national grid. This line has been further proposed to be extended under the Centrally sponsored Scheme for Bhimkund to Kolaghat in the north and Jeypore to Kothagudem in the South for integrated operation of Orissa System with West Bengal State Electricity Board and Andhra Pradesh State Electricity Board.

22:81 An abstract indicating the funds required during 1978-83 under different works of T & D. Schemes is given in Table I below. The funds indicated for 1978-79 is the Plan Allocation for Plan Allocation for the current year approved by the Planning Commission excluding the Centrally Sponsored Schemes. The requirement may undergo revision as the lines and sub-station under the Sixth Plan-Seventh Plan Schemes are yet to be approved by the Central Electricity Authority including the proposal under the Centrally Sponsored Schemes.

TABLE I

Abstract—(a) Estimated outlay of T. & D. Scheme for Sixth Five-Year Plan, 1978—1983 (Continuing and New)

Serial No.	Name of the Schemes	Estimated Expenditure (Rs. in lakhs)					Total 1978-79 to 1982-83	Remarks
		1978-79 Approved by P. C.	1979-80	1980-81	1981-82	1982-83		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(a)	I. D. A. Scheme (Conti.) ..	687.58	296.39	11.74	..	..	995.71	E. H. T. Works
(b)	R. E. C. Special (Conti.) ..	504.00	156.00	..	..	-	660.00	Ditto
	(New) ..	..	36.00	110.00	210.00	304.00	660.00	Ditto
(c)	B. T. Scheme including Therovelli-Kesinga 132 KV line (Continuing).	130.00	38.00	..	..	..	168.00	Ditto
(d)	Boards E. H. T. (Conti.) ..	446.00	429.84	295.53	124.20	52.05	1,347.62	Ditto
	(New) ..	73.42	544.00	1,483.92	1,853.34	3,798.00	7,752.68	Ditto
(e)	Railway Electrification in Koraput district (Conti.)	100.00	92.00	62.79	..	..	254.79	Ditto
(f)	System Improvement (Conti.) ..	90.00	52.54	135.30	91.00	91.00	459.84	33 K.V. and below
	(New) ..	..	70.00	100.00	100.00	100.00	370.00	Ditto
(g)	R. E. Supporting line not included in R. E. Scheme (Conti.)	65.00	62.97	60.00	60.00	60.00	307.97	Ditto
	(New) ..	..	..	35.00	50.00	50.00	135.00	Ditto
(h)	Other T. & D. Work, i. e. power supply to Industries and extension in urban areas (Conti.)	50.00	67.70	120.00	120.00	120.00	477.70	Ditto
	(New) ..	..	50.00	120.00	120.00	120.00	410.00	Ditto
	Total—Continuing ..	2,072.58	1,195.44	685.36	395.20	323.05	4,671.63	
	Total—New ..	73.42	700.00	1,848.92	2,333.34	4,372.00	9,327.68	
	Grand Total ..	2,146.00	1,895.44	2,534.28	2,728.54	4,695.05	13,999.31 or 14,000.00	

Abstract—(b) Estimated outlay for Transmission line under Centrally Sponsored Schemes (New)

Serial No.	Name of the Schemes	Estimated Expenditure (Rs. in lakhs)					Total
		1978-79 (As approved by P. C.)	1979-80	1980-81	1981-82	1982-83	
1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	400 K.V. Bhirakund-Kolaghat—161 Km. State Share : 550 lakhs.	..	..	5.00	100.00	200.00	305.00
2	400 K.V. Jeypore-Kothagodem—272 Km. State Share : 650 lakhs.	..	..	..	1.00	40.00	41.00
	Total	..	..	5.00	101.00	240.00	346.00

Rural Electrification

22.82. There are 46,992 inhabited villages in the State having a total rural population 200.99 lakhs as per 1971 Census. Up to the end of March 1978, 14,161 villages (30.13 per cent) have been electrified covering a total population of 102.29 lakhs (51 per cent). The number of pump sets energised within that period is 6,427. Keeping in view the targets for revised Minimum Needs Programme, it has been decided to electrify 11,050 villages to achieve 54 per cent of village electrification, by 1982-83. Under the M. N. P. it has been proposed to extend power supply to 4,080 villages and energise 1256 power pumps to limit the expenditure at a level of Rs. 37.89 crores during 1978-83.

22.83. One lakh L. I. pumps have been proposed to be energised during 1978-83. The year wise requirement of funds and physical targets are indicated below. It may be noticed that the funds required for the proposed targets of village electrification and pump energisation during 1978-83 is Rs. 170 crores.

22.84. Out of the requirement of Rs. 170.00 crores during 6th plan Rs. 114.79 crores relate to energisation of 1,00,000 pump sets and Rs. 55.21 crores relate to electrification of 11,050 villages. The detailed break up of requirement is given below -

(1)	For energisation of L. I. Points	For electrification of villages
	Rs. (lakhs)	Rs. (lakhs)
1. R. E. C. (M. N. P.) ..	1424.00	2365.00
2. R. E. C. (Normal) ..	508.2.00	2299.00
3. R. E. & L. I. ..	4973.00	857.00
	11,479.00	5,521.00
	or	or
	114.79 crores	55.21 crores

PHYSICAL TARGET OF RURAL ELECTRIFICATION

Items	1978-79 (As appvd. by P. C.)	1979-80	1980-81	1981-82	1982-83	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Village (Nos) ..	2,250	2,200	2,200	2,200	2,200	11,050
L. I. pumps ..	2,550	7,450	12,000	25,000	53,000	1,00,000

SCHEMewise ESTIMATED OUTLAY FOR RURAL ELECTRIFICATION

Name of the Scheme for Rural Electrification	Estimated outlay for the year					Total
	1978-79 (Appvd. by Pl. Comsn.)	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
R. E. C. (Normal) ..	350.00	955.00	1,126.00	1,725.00	3,225.00	7,380.00
R. E. C. (M. N. P.) ..	780.00	510.00	610.00	810.00	1,079.00	3,789.00
R. E. & L. 1. ..	300.00	495.00	769.00	1,405.00	2,861.00	5,830.00
Total ..	1,430.00	1,960.00	2,505.00	3,940.00	7,165.00	17,000.00

MISCELLANEOUS SCHEMES

22.85. The names of Schemes and the outlay required yearwise indicated below —

Name of the Scheme	Estimated outlay					Total
	1978-79 (As appvd. by P. C.)	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Hirakud Generation Scheme.	81.40	410.00	435.00	435.00	638.60	2,000.00
2. Talcher Thermal Scheme						
3. Civil works Scheme						
4. Spl. Repair Scheme						
5. T. & P. General						

22.86. The above provision includes special repair and modification in existing power plants for better capacity utilisation and to improve resources.

22.87. Under Civil Works Scheme it has been programmed to complete all the ongoing residential and non-residential buildings for better maintenance and operation of Power System and to take up a few more buildings which are absolutely necessary.

Central Sector Schemes

22.88. The following Schemes have been programmed for implementation under Central Sector.

(i) Bhhmkund Multipurpose Project

22.89. The scheme envisages installation of 393 M. W. initially with peaking capability of 300 M. W. and energy capability of 1357 M. U. It is programmed to install 3 units of 16 M. W. each and 3 units of 115 M. W. each initially with provision for installation of 508 M. W. ultimately at an approximate cost of Rs. 131.89 crores for power portion. The total estimated cost of the project including flood control and irrigation component comes to Rs. 228.25 crores tentatively.

22-90. The project report is under scrutiny of the Central Water Commission and Central Electricity Authority.

22-91. The requirement of funds for the sixth plan for taking up the preliminary works as well as other works is Rs. 50.94 crores.

(ii) Super Thermal Project at Talcher

22-92. This project envisages installation of 1,000 M. W. (5×200 M. W.) with expansion facilities for 2,000 M. W. ultimately. But initially it has been programmed to install 3 units of 200 M. W. each.

22-93. As discussed earlier Talcher is by far the most suitable site for a large thermal power station of 2,000 M. W.

22-94. With the commissioning of the first unit of Rengali and Upper Kolab Hydro Electric Projects and the Talcher Thermal Power Station Expansion, the total energy available in the system would be 4552 M. U. against the projected demand of 5581 M. U. by 1982-83. Thus, there will be an energy shortfall to the tune of 1029 M. U. at the end of the sixth Plan. To meet the energy shortfall in the Orissa system by 1982-83 no other scheme is available. The likely investment on the Super Thermal is expected to be Rs. 184.50 crores in the Sixth Plan.

(iii) 400 K. V. Bhimkund-Kolghat and 400 K. V. Jeypore-Kothagudam transmission lines

22-95. These inter-State Transmission lines are also programmed to be taken up during Sixth Plan for which the requirements are Rs. 3.05 crores and Rs. 0.41 crores respectively.

22-96. Year-wise requirement of funds for these Central Sector Schemes are indicated below--

(Rs. in crores)

Name of the Scheme	Year-wise requirement					Total
	1978-79	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bhimkund Project	8.43	7.51	13.87	21.13	50.94
Super Thermal Project, Talcher.	..	15.00	49.50	60.00	60.00	184.50
400 KV Bhimkund-Kolghat..	0.05	1.00	2.00	4.05
400 KV Jeypore-Kothagudam	0.01	0.40	0.41
Total	..	23.43	57.06	74.88	83.53	238.90

Employment

22-97. Power sector provides direct employment not only to the technically educated but also to the skilled, semi-skilled and unskilled persons. The total number of persons employed under the sector by the end of 1977-78 was 29,468 of which about 7694 are educated (technical) and 21774 are uneducated and unskilled. It is estimated that during the period, 1978-83, additional employment to the extent of 1,15,725 will be generated. Of this 12,715 will be technical, 13,890 will be educated non technical and the rest 89,120 will be unskilled and uneducated. Thus the employment generation in this sector will be about fourfold of the total manpower in position as on 31-3-1978.

Tribal Sub-Plan

22-98. The amount likely to be spent in Sub-Plan area is quantified as noted below. This includes flow of funds from State Plan as well as Central assistance received from R. E. C. and Institutional Finance. Few works under R. E. Schemes are amenable to ITDP wise break up and flow of funds out of State Plan allocation to Sub-Plan area has been quantified and shown in the Statements T. Sub Plan I & II.

(Rs. in lakh)

Sl. No.	Name of the Scheme	Tentative allocation for midterm Sixth Plan	Amount quantified for Sub-Plan area
(1)	(2)	(3)	(4)
1	Upper Kolab Project	7500.00	7500.00
2	Upper Indravati	11494.00	11494.00
3	Balimela Stage-II	2000.00	2000.00
4	Potteru Micro Hydel	500.00	500.00
5	Hadgarh Micro Hydel	280.00	280.00
6	T. & D. Scheme	14000.00	5744.84
7	R. E. Scheme	17000.00	3732.48
8	Misc. Schemes	2000.00	27.00
Total			312,78.32

22-99. Out of 18,683 villages which are in the Sub-Plan area, 3,046 villages have been electrified by the end of 1977-78. The target of rural electrification in the sub-plan area during the 6th Plan is to cover 2,392 villages.

TABLE
Rural Electrification

Orissa State Electricity Board
Annexure—XI. T. S. P. 2-F

Sl. No.	Name of I. T. D. P.	No. of villages Electrified			Population covered by 3/78 (Approximate)	
		Total Village	No. Electrified up to 3/78	Percentage	Nos.	Percentage of State population
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Baripada	1,776	565	31.81	18 lakhs	8.20
2	Rairangapur	753	105	13.94		
3	Karanja	745	173	23.22		
4	Kaptipada	479	122	25.46		
5	Nilagiri	127	39	30.71		
6	Sundargarh	706	426	60.34		
7	Panposh	388	192	49.48		
8	Bonai	531	157	29.56		
9	Keonjhar	635	217	34.17		
10	Champua	398	190	45.11		
11	Kuchinda	481	167	34.72		
12	Koraput	1,206	35	2.90		
13	Rayagada	1,068	87	8.14		
14	Jeypore	530	205	38.67		
15	Malkangiri	725	13	1.79		
16	Nawarangpur	873	188	21.53		
17	G. Udyagiri	753	95	12.61		
18	Phulbani	1,102	11	1.00		
19	Thuamula Rampur	667	5	0.75		
	Total	13,944	29,82	21.39		

Total Tribal Village—18,683

Total State Village—46,992

Target for next Plan (78—83)

(i) Tribal Village—2,392

(ii) State Village—11,050

(7 B—66)

Name of scheme	Estimated cost		Expenditure to end of 1977-78	1978-79 outlays approved by P. C.	Estimated 1979-80
	As per investment approved by P. C.	Revised cost (Latest)			
(1)	(2)	(3)	(4)	(5)	(6)
I. GENERATION					
(a) Approved and ongoing scheme					
1. T. T. P. S. expansion ..	3,840.00	7,752.00	5,752.00	1,595.20	300.00
2. Rengali Multipurpose Project—					
(i) Contribution from power side for Dam.	1,932.00	3,785.64	934.63	540.00	690.00
(ii) Civil works of Power Project.	330.00	900.00	65.88	75.00	300.00
(iii) Electrical works of Power Project.	1,270.00	1,800.00	259.71	150.00	980.00
3. Upper Kolab Multi-purpose Project—					
(i) Contribution from power side for Dam.	759.00	1,062.00	148.71	328.60	394.97
(ii) Civil works of Power Project.	2,070.00	2,898.00	295.86	332.40	1,189.40
(iii) Electrical works of Power Project.	2,288.00	3,235.00	160.87	49.00	359.00
Sub-Total (a) — ..	12,489.00	21,432.64	7,617.66	3,070.20	4,213.37

MENT I

lays and expenditure Abstract

(Rs. in lakhs)

out lay for				Spill over beyond 1982-83	Completion schedule		Remarks
1980-81	1981-82	1982-83	Total 1978-83		As per 1978-79 plan discussion	As now anticipated	
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
104.80	..	..	2,000.00	..	1st unit 12/79 2nd unit 6/80	12/79 6/80	As per plan allocation.
644.00	522.00	276.00	2,672.00	149.02			
300.00	159.00	..	834.00	..			
480.00	400.00	790.00	2,800.00	..	1st unit 6/82 2nd unit 12/82	6/82 12/82	This provision is meant for Stage I & II.
170.41	74.71	23.31	992.00	..	3/84	3/84	
1,287.60	710.80	397.80	3,918.00	4.86	3/84	3/84	
560.00	868.00	754.00	2,590.00	645.00	1st unit 9/82 2nd unit 6/83 3rd unit 3/84	9/82 6/83 3/84	
3,548.81	2,734.51	2,241.11	15,806.00	798.88			

Name of scheme	Estimated cost		Expenditure to end of 1977-78	1978-79 outlays approved by P. C.	Estimated 1979-80
	As per investment approved by P. C.	Revised cost (Latest)			
(1)	(2)	(3)	(4)	(5)	(6)
(b) New Scheme proposed to be started from 1978-79 and thereafter					
1. Upper Indravati Multi-purpose Project.					
(i) Contribution from power side for Dam.	3,491.65	3,491.65	..	..	640.00
(ii) Civil works of power Project.	3,404.22	3,404.22	..	..	535.00
(iii) Electrical works of power project.	6,152.91	6,152.91	..	35.00	820.00
2. Balimela Stage II ..	..	1,826.00	..	..	400.00
3. Hirakud Stage III ..	..	1,800.00	..	..	100.00
4. Micro Hydel Project					
(i) Potteru ..	..	530.00	..	..	..
(ii) Hadgarh ..	..	347.00	..	..	..
(iii) Bargarh ..	..	413.00	..	..	..
5. Establishment of Thermal power station in Ib Valley.	..	8,492.00	..	..	300.00
Sub-total (b) ..	13,048.78	26,456.78	..	35.00	2,795.00
Total Generation (a)+(b)	25,537.78	47,889.42	7,617.66	3,105.20	7,008.37

outlay for				Spillover beyond 1982-83	Completion schedule		Remarks
1980-81	1981-82	1982-83	Total 1978-83		As per 1978-79 plan discussion	As now anticipated	
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
950'00	950'00	900'00	3,440'00	51'65			
569'00	1,050'00	1,250'00	3,404'00	..			
400'00	1,324'00	2,071'00	4,650'00	1,502'91			
€00'00	600'00	400'00	2,000'00		Can be forecast after finalisation of project report.		
200'00	600'00	600'00	1,500'00		Can be forecast after finalisation of project report.		
100'00	200'00	200'00	500'00	30'00			
--	100'00	180'00	280'00				
..	50'00	150'00	200'00				
1,500'00	2,000'00	1,200'00	5,000'00		Can be forecast after finalisation of project report.		
4,319'00	6,874'00	6,951'00	20,974'00				
7,865'81	9,608'11	9,192'11	36,780'00				

(7 B-67)

Name of scheme	Estimated cost		Expenditure to end of 1977-78	1978-79 outlays approved by P. C.	Estimated 1979-80
	As per investment approved by P. C.	Revised cost (Latest)			
(1)	(2)	(3)	(4)	(5)	(6)
II. Transmission and Distribution.					
(i) Transmission ..	} Schemes are constantly being revised to match with yearly allocation and priority need of system.		5,166.20	2,146.00	1,895.44
(ii) Distribution ..					
(iii) Reduction of Transmission Losses.					
III. Rural Electrification					
(i) R. E. C. (Normal) ..	Ditto		1,015.40 (1974-78 actual)	350.00	955.00
(ii) Revised M. N. P. ..	Ditto		1,300.00 (Plan allocation)	780.00	510.00
(iii) Board's R.E. and L. I.	Ditto		1,513.91 (1974-78 actual)	300.00	495.00
Total (i) + (ii) + (iii) ..			3,829.40	1,430.00	1,960.00
IV. Survey and investigation of Power Project.					
(i) Civil works ..	..	184.23	109.87	12.40	23.51
(ii) Electrical works ..	..	132.03	45.68	15.00	24.00
V. Others					
(i) Purchase of Shares in R. E. Co-operative Society of Athgarh.	..	..	15.00	10.00	10.00
(ii) Miscellaneous Schemes of capital nature.	Executed as per yearly programme.		252.87 (1974-78 actual)	81.40	410.00
Grand Total (I to V)		48,205.68	17,036.68	6,800.00	11,331.32

outlay for				Spillover beyond 1982-83	Completion schedule		Remarks
1980-81	1981-82	1982-83	Total 1978-83		As per 1978-79 plan discussion	As now anticipated	
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
2,534.28	2,728.54	4,695.05					T and D Schemes of 6th and 7th plan are under scrutiny. Please refer col 19 of Statement III
1,126.00	1,725.00	3,225.00	7,381.00				New Schemes to be formulated and approved. Please refer Statement V
610.00	810.00	1,079.00	3,789.00				
769.00	1,405.00	2,861.00	5,830.00				
2,505.00	3,940.00	7,165.00	17,000.00				
18.23	17.68	17.18	89.00				
24.00	24.00	24.00	111.00	21.03			
..	..	..	20.00	..			
435.00	435.00	638.60	2,000.00	..			Schemes are formulated annually
13,382.32	16,753.73	21,732.63	70,000.00	..			

STATEMENT
POWER : GENERATION PROJECTS :

Name of Scheme	Approved capacity (MW)	Capacity added up to end of 1977-78	Capacity additions	
			1978-79 Target	Anticipated
(1)	(2)	(3)	(4)	(5)
A. Approved/Ongoing Schemes				
1. Rengali Power Project (Stage I)	100	..	..	..
2. Upper Kolab Power Project ..	240	..	..	..
3. Talcher Stage II ..	220	..	..	..
Sub-Total ..	560	..	..	..
B. New Scheme proposed to be started from 1978-79 and thereafter.				
1. Upper Indravati H. E. Project	600	..	..	..
2. Bhimkund H. E. Project ..	393	..	..	..
3. Rengali Stage II ..	150	..	..	..
4. Balimela Stage II ..	120	..	..	..
5. IB Thermal ..	240	..	..	..
6. Talcher Super Thermal ..	600	..	..	..
Lower Generation Potteru H. E. Project.	15M. W.	..	..	..
Bargarh H. E. ..	9M. W.	..	..	..
Hadgarh M M. Scheme ..	10M. W.	..	..	..
Sub-Total ..	2137	..	..	..
Total (A+ B) ..	2697	..	..	..

II

PHASING OF BENEFITS (MW)

Capacity additions						
1979-80 Target	1980-81 Target	1981-82 Target	1982-83 Target	Total 1978-83	Spillover beyond 1982-83	Remarks
(6)	(7)	(8)	(9)	(10)	(11)	(12)
..	50	50	50	
..	80	80	160 M. W.	
220	220	Nil	
220	130	350	210 M. W.	
..	600 M. W.	
..	393 M. W.	
..	150 M. W.	
..	120 M. W.	
..	240 M. W.	
..	600 M. W.	Central Sector Scheme.
..	15 M. W.	
..	9. M. W.	
..	10. M. W.	
..	2137	
220	130	350	2347	

(7 B-68)

STATEMENT
ORISSA STATE

220 KV AND ABOVE LINES AND SUB-STATIONS TRANSMISSION SYSTEM—

Major Transmission

Name of Scheme	Financial			
	Total Cost		Expr. to the end of 1977-78	1978-79 Appvd. outlay
	As per invest- ment appvd. by P. C.	Revised cost latest		
(1)	(2)	(3)	(4)	(5)
I. Continuing works, Lines & Sub-stations.				
(a) 400 KV. } (b) 220 KV. }			NIL	
(i) 220 KV. Talcher-Rourkela SC line & Sub-stations (I.D.A.).	654.73	864.19	697.41	176.58
(ii) 220 KV Bali mel a-Theruvelli Line & S/s (I. D. A.).	571.10	688.27	562.18	97.50
(iii) 220 KV. Talcher-Joda 2nd Ckt. Stringing (I. D. A.).	165.32	196.51	139.79	31.57
(iv) Stringing of 220 KV. line from Talcher to Rourkela with terminal arrangement (Board's EHT).	..	305.00	9.00	200.00
(c) 132 KV. Scheme (as a whole).	..	4,898.21	} 3,797.82 (1974--78)	1,348.93
(d) Other L. V. Line (as a whole).	..	1,258.51 (1978--83)		218.00
Sub-Total	..	1,391.15	5,166.20	2,072.58

III
ELECTRICITY BOARD
OUTLAYS AND EXPENDITURES--TARGETS & ACHIEVEMENTS.

Lines & Sub-stations

(Rs. in lakhs)

Estimate for					
1979-80	1980-81	1981-82	1982-83	Spillover beyond 1982-83	Total length in Kms.
(6)	(7)	(8)	(9)	(10)	(11)
..	..	..	..	..	192
81.69	6.90	..	..	..	224
5.15	..	..	..	..	149
39.37	56.63	..	..	..	192
886.00	306.53	124.20	52.05	..	923
183.21	315.30	271.00	271.00	..	..
1,195.42	685.36	395.20	323.05	..	1,680

STATEMENT
ORISSA STATE

220 KV AND ABOVE LINES AND SUB-STATIONS TRANSMISSION SYSTEM—

Major Transmission

Name of Scheme	Physical Programme in circuit Kms. for the			
	Completed to end of 1977-78	1978-79 Target	Estimate	
			1979-80	1980-81
(1)	(12)	(13)	(14)	(15)
I. Continuing Works.				
Lines & Sub-stations				
(a) 400 KV. } (b) 220 KV. }		Nil		
(i) 220 KV. Talcher-Rourkela SC line & Sub-stations (I.D.A.).	108	84	..	..
(ii) 220 KV. Balimela-Theruvuli Line & S/s (I.D.A.).	..	..	100	124
(iii) 220 KV. Talcher-Joda 2nd Ckt. Stringing (I. D. A.).	90	59	..	..
(iv) Stringing of 220 KV. line from Talcher to Rourkela with terminal arrangement (Board's EHT.).	108	84	..	..
(c) 132 KV. Scheme (as a whole).	324	304	295	..
(d) Other L. V. Line (as a whole).	The lines are many. Estimates are being framed and			
Sub-Total	630	531	395	124

III.

ELECTRICITY BOARD

OUTLAYS AND EXPENDITURES—TARGETS & ACHIEVEMENTS

Lines & Sub-stations

lines and No. of Sub-stations			Target date of completion	REMARKS
for				
1981-82	1982-83	Beyond 1982-83		
(16)	(17)	(18)	(19)	(20)
..	12/78	Line to evacuate power from TTPS & Balimela to West Orissa including R. S. P., Rourkela.
..	4/80	For system stability
..	12/78	Evacuation of power to Load Centre at Joda.
..	3/80 (Line to be completed by 12/78).	For feeding power to new industries at Rourkela area.
..	3/80	These lines are meant for evacuating power improving T. & D. losses, power supply to industries & improving system stability.
revised each year.				
..	

	(1)	(2)	(3)	(4)	(5)
II. New Works					
Lines and Sub-stations					
(a) 400 KV					
(i) 400 KV Indravati-Jey-pore-Talcher-Bhimakund.	..		4,700.00	..	..
(b) 220 KV					
(i) 200 KV D. C. line from Jey-pore to Upper Kolab.	.		321.70	..	44.42
(ii) 220 KV Joda-Rourkela line.	..		165.55	..	..
(iii) 220 KV Talcher-Jajpur Road-Paradeep line.	..		451.50	..	..
(iv) 220 KV D.C. line, Talcher. Talcher Super Thermal.	..		44.10	..	..
(c) 132 KV Schemes (as a whole).	..		9,039.25	..	29.00
(d) Other L. V. line (as a whole).	..		915.00	..	..
Sub-Total	15,637.10	..	73.42
III. Inter-State lines					
(Centrally sponsored programme).					
(a) On going Schemes	..			N I I.	
(b) New (proposed)					
(i) 400 KV Bhimkund-Kolaghat 161 Km line with S/S.	..		500.00 (Orissa share)	..	..
(ii) 400 KV Jey-pore-Kothagudem 271 Km. line.	..		650.00 (Orissa share)	..	..
Sub-Total	1,150.00	..	..
Grand-Total	..	1,391.15	24,997.79	5,166.20	2,146.00

(6)	(7)	(8)	(9)	(10)	(11)
4.00	800.00	1,000.00	2,800.00	96.00	658
187.00	90.28	..	..	..	15
1.00	5.00	36.00	100.00	23.55	17
13.00	25.00	154.28	200.00	59.22	210
..	10.00	10.00	20.00	4.10	10
375.00	663.64	863.06	982.00	6,126.95	415
120.00	255.00	270.00	270.00	..	.
700.00	1,848.92	2,333.34	4,372.00	6,309.82	1,325

N I L

..	5.00	100.00	200.00	245.00	161
..	..	1.00	40.00	609.00	272
..	5.00	101.00	240.00	854.00	433
1,895.42	2,539.26	2,829.54	4,935.05	7,486.87	3,438

(1)	(2)	(13)	(14)	(15)
II. New Works				
Lines and Sub-Stations				
(a) 400 KV.				
(i) 400 KV. Indravati-Jeypore-Talcher-Bhimakund.	200
(b) 200 KV.				
(i) 220 KV. D. C. line from Jeypore to Upper Kolab.	5	10
(ii) 200 KV. Joda-Rourkela line.
(iii) 220 KV. Talcher-Jajpur Road-Paradeep line.
(iv) 220 KV.D.C. line, Talcher. Talcher Super Thermal.
(c) 132 K. V. Schemes (as a whole).	100
(d) Other L.V. line (as a whole)	..	The lines are many. Estimates are being		
Sub-Total	5	310
III. Inter-State lines				
(Centrally sponsored programme).				
N I L				
(a) Ongoing Schemes				
(b) New (proposed)				
(i) 400 KV. Bhimkund-Kolaghat 161 Km. line with S/S.
(ii) 400 KV. Jeypore-Kothagudem. 272 Km. line.
Sub-Total
Grand-Total	..	630	531	400
				434

(16)	(17)	(18)	(19)	(20)
200	200	58	3/84	Evacuation of Indravati power and to form a part of National Grid.
..	..	..	3/80	To Grid power of Upper Kolab.
..	50	27	3/84	Absorption of off-peak Thermal surplus power of Eastern Region at Load Centre, Rourkela.
50	100	60	3/85	Power supply to industries around Paradeep.
..	..	10	3/85	For inter-linking Talcher and Talcher-Super-Thermal.
100	120	95	..	For Evacuation of power, improving T&D loss, power supply to future load centres & improving system stability.
framed and revised each year.				
350	470	250	..	
N I L				
..	50	111	..	These lines will form a part of National grid and help parallel operation of WBSEB and APSEB system with OSEB system.
..	..		272	
..	50	111	272	
350	520	361	272	

STATEMENT
ORISSA STATE
TRANSMISSION & DISTRIBUTION PROGRAMME FOR

1978-79 ESTIMATE

Details of work	Expenditure of Equipment &			
	To end of 1977-78 Actuals	% Losses	1978-79 Estimate	% Losses
(1)	(2)	(3)	(4)	(5)
1. Talcher—Rourkela 220KV line 1st Ckt.	587·61		176·58	
2. Talcher—Joda 220KV 2nd Ckt. line.	159·79		31·57	
3. Balimela—T h e r u v e l i 220KV 3rd Ckt. line.	502·18		97·50	
4. 132KV Chainpal—Chou- dwar 2nd Ckt. line.	231·55		35·82	
5. Talcher—Rourkela 220KV line 2nd Ckt.	9·00		200·00	
6. 132KV S/s. at Dhenkanal	..		15·00	
7. 132KV Balani—Baripada— Rairangpur line.	..	13·30	..	13·00
8. 132KV Bhubaneswar— Cuttack line.	..		12·00	
9. 132KV Khurda—Puri line	..		..
10. Sub-station at Puri	..		..
11. S/s. at Baripada	..		..
12. Improvement of 33KV System.	..		41·95	
13. Measures to prevent pilferage	..		..
Total	1490·13	13·30	610·42	13·00

IV

ELECTRICITY BOARD

REDUCING TRANSMISSION LOSSES

(Rs. in lakhs)

Works incurred for reducing Transmission losses

1979-80 Estimate	% Losses	1980-81 Estimate	% Losses	1981-82 Estimate	% Losses	1982-83 Estimate	% Losses
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
..		
5.15		..		..		..
81.69		6.90		..		..
0.78		..		..		..
39.37		56.63		..		..
105.00		7.70		3.20		..	
..	13.50	40.00	14.20	100.00	14.70	80.00	15.30
83.00		34.00		..		..
..		10.00		40.00		40.00	
..		15.00		40.00		40.00	
..		15.00		40.00		68.00	
39.36		92.30		50.00		50.00	
5.00		10.00		10.00		10.00	
359.35	13.50	287.53	14.20	283.20	14.70	278.00	15.30

STATEMENT V
RURAL ELECTRIFICATION SCHEME
(For Pump-set energisation, village electrification and Service Connections)

I. Physical Programme Achievement	Cumulative progress up to the 31st March 1978	Number of Pump-sets/Tube-wells energised during					Total Sixth Plan
		1978-79 (Target)	1979-80 (Estimate)	1980-81 (Estimate)	1981-82 (Estimate)	1982-83 (Estimate)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) Programme of Pumps/Tube-wells energisation under:							
(i) Normal State Plan funds for (Rural electrification)	4,255	1,334	2,580	4,930	10,940	23,459	43,243
(ii) R. E. C. normal programme ..	1,601	696	4,000	5,330	10,540	23,626	44,192
(iii) M. N. P. ..	571	520	870	1,740	3,520	5,915	12,565
(iv) D. P. A. P./S. F. D. A./M. F. A. L.* ..	N. A.						
(v) Tribal/Hilly area Plan —	N. A.						
(vi) Service connections under normal distribution.	..	..	..	—	..	..	..
(vii) Institutional finance like A. R. D. C. ..	(1,191)	(1,942)	(5,015)	(8,465)	(17,970)	(38,230)	(71,622)
(viii) Other sources (like consumer deposits scheme, etc. (please specify source) Orissa Lift Irrigation Corporation.	(1,970)	..	..	"	..	..	..
(ix) Total by end of the year —	6,427	2,550	7,450	12,000	25,000	53,000	1,00,000

(Bracketed figures are included in the total figure of (i), (ii), (iii) above).

(b) Village electrification under (Nos.)

(i) Normal State Plan	..	8,986	400	392	363	356	356	1,867
(ii) R. E. C. Programme	..	3,419	600	1,103	1,132	1,136	1,132	5,103
(iii) M. N. P.	..	1,756	1,250	705	705	708	712	4,080
(iv) DPAP/SFDA/MFAL	..	..	..	..	..	..	..	..
(v) Tribal/Hilly area plan	..	(3045)	out of total at (ix)	..	..	..	..	..
(vi) Normal distribution programme	..	..	..	..	..	..	..	..
(vii) Institutional finance like ARDC/LDB/ CB/CCB*.	..	Nil	Nil	Nil	Nil	Nil	Nil	Nil
(viii) Other sources like consumer deposits, etc. (Please specify sources).	..	..	..	..	..	..	..	..
(ix) Total by end of the year	..	14,161	2,250	2,200	2,200	2,200	2,200	11,050
(x) Rural population benefitted according to 1971 census by end of year—102.29 lakhs.	..	..	..	..	..	..	..	40 lakhs Between 1978—83.

(c) End benefits by end of the year

1. Small Industries

(a) No. of connections	..	5,700	6,830	8,200	10,250	12,800	16,650	The figures exhibited are approximate.
(b) Connected Load (M. W.)	..	70	75	90	110	140	180	
2. Domestic commercial service (Nos.)	..	1,68,740	1,42,490	2,30,990	2,88,730	3,60,910	4,69,180	
3. Street light (Nos)	..	390	460	540	670	820	1,050	
4. Other rural connections (Nos)	..	46,380	7,680	15,950	24,500	43,500	60,500	
5. Harijan Bastis/Village	..	3,425	3,900	4,500	5,200	6,000	6,900	

N. B.—Please check (/) appropriate source of energisation of pumpsets/tube-wells and village electrification

STATEMENT VI
RURAL ELECTRIFICATION

II. Financial allocation expenditure on Rural Electrification

(Rs. in lakhs)

Programme	1978-79 (Appvd.)	1979-80 (Estimated)	1980-81 (Estimated)	1981-82 (Estimated)	1982-83 (Estimated)	Target 1978-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(a) Outlay within the normal State Plan for R. E. Works.	300	495	769	1405	2861	5830
(b) REC Normal Loans ..	350	955	1126	1725	3225	7381
(c) M. N. P. ..	780	510	610	810	1079	3789
(d) Tribal/Hilly Area Plans* ..	..	..	..	..	..	-
(e) Funds utilised for R E works from within the provision under normal development sub-transmission and distribution.	..	..	..	..	..	..
(f) Institutional finances from ARDC/LDB/CB/CCB*	122	316	532	1128	2410	4508
		(Estimate attached)				
(g) Other sources like consumers deposit scheme etc. (Please specify source in each case ).	..	..	..	..	..	..
(h) Total 'a' to 'g', 'a' to 'c' item (f) is included in a+b+c.	1430	1960	2505	3940	7165	17000

ESTIMATE FOR A. R. D. C. LOAN DRAWAL

I. Physical Target

STATEMENT VIA

Name of the scheme	1978-79	1979-80	1980-81	1981-82	1982-83	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(a) R. E. C. (M. N. P.)	520	870	1,740	3,520	5,915	50 per cent of points in R. E. C. and M. N. P. area and 100 per cent in Normal Development area as proposed has to be included for estimating A. R. D. C. loan draw.
(b) R. E. C.	696	4,000	5,330	10,540	23,626	
(c) R. E. & L. I.	1,334	2,580	4,930	10,940	23,459	
Total	2,550	7,450	12,000	25,000	53,000	

H. A. R. D. C. Loan proposed to be drawn

(Rs. in thousands)

Name of the scheme	1978-79		1979-80		1980-81		1981-82		1982-83		Remarks
	No. of points	Loan from A.R.D.C.	No. of points	Loan from A.R.D.C.	No. of points	Loan from A.R.D.C.	No. of points	Loan from A.R.D.C.	No. of points	Loan from A.R.D.C.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(a) Under R. E. C. (M. N. P.) works.	O.L.I.C.--80	840	O.L.I.C.--130	1,365	O.L.I.C.--260	2,730	O.L.I.C.--520	5,460	O.L.I.C.--900	9,450	(1) Loan expected from OLIC. point and Pvt. points are Rs.10,500 & Rs. 4,500 respectively assumed.
	Pvt.	180 810	Pvt.	305 1,372.5	Pvt.	610 2,745	Pvt.	1240 5,580	Pvt.	2,058 9,261	
(b) Under R. E. C. works.	O.L.I.C.--100	1,050	O.L.I.C.--600	6,300	O.L.I.C.--780	8,190	O.L.I.C.--1,570	16,485	O.L.I.C.--3,600	37,800	(2) Load for O. L. I. C. points 20 H. P. and Pvt. points 5 H. P.
	Pvt.	248 1,116	Pvt.	1,400 6,300	Pvt.	1,885 8,482.5	Pvt.	3,700 16,650	Pvt.	8,213 36,958.5	
(c) Under R. E. & L. I. works.	O.L.I.C.--400	4,200	O.L.I.C.--780	8,190	O.L.I.C.1480	15,540	O.L.I.C.--3,240	34,020	O.L.I.C.-- 700	73,500	
	Pvt.	934 4,203	Pvt.	1,800 8,100	Pvt.	3,450 15,525	Pvt.	7,700 34,650	Pvt.	16,459 74,065.5	
Total (a)+(b)+(c)=45.08 crores.		12,219		3,16,27.5		53,21,2.5		1,12,845		2,41,035	

STATEMENT VII
INVESTIGATIONS AND SURVEYS

(Rupees in lakhs)

T B-72)	Name of the Scheme	Total cost	Expenditure incurred upto the end of 1977-78	Annual phasing of outlay					Total 1978-83	Spillover if any beyond 1982-83
				1978-79	1979-80	1980-81	1981-82	1982-83		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	A—Civil works of Power Projects.	184.23	109.87	12.40	23.51	18.23	17.69	17.18	89.00	
	3—Electrical works	132.03	45.68	15.00	24.00	24.00	24.00	24.00	111.00	21.03
	Total	316.26	155.55	27.40	47.51	42.23	41.68	41.18	200.00	21.03

POWER

Man-Power Planning and Requirements

State Project

STATEMENT VIII

Category Type of skill	Man Power required during construction			
	Peak Require- ment	No. in position as on 31-3-1978	1978-79 No. required	No. required during operation, Maintenance phase
(1)	(2)	(3)	(4)	(5)
1. Managerial/Supervisory				
(a) Technical ..	2,013	1,052	742	1,030
(b) Non-Technical ..	868	648	354	110
2. Skilled				
(a) Technical ..	4,615	3,212	3,069	3,273
(b) Non-Technical ..	2,184	1,312	1,026	603
3. Semi-Skilled ..	6,275	1,470	4,985	2,550
4. Unskilled ..	7,563	21,063	14,940	2,225
5. Others (if any) ..	..	711	711	248
Total ..	23,518	29,468	25,827	10,041

-VIII

1979-80		1980-81		1981-82		1982-83	
No. required for construction	No. required for operation and maintenance	No. required for construction	No. required for operation & maintenance	No. required during construction	No. required during operation	No. required during construction	No. required during operation
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
857	202	1,663	202	1,915	207	1,959	222
432	120	2,221	130	660	230	1,065	325
1,971	1,570	2,961	1,570	4,810	1,775	6,785	2,075
1,678	1,200	1,669	120	1,895	270	3,005	320
3,740	1,015	3,775	925	9,715	2,025	18,545	4,000
18,210	2,725	16,865	4,225	14,660	5,725	12,300	6,800
463	248	463	248	463	248	463	248
27,351	7,080	29,617	7,420	34,118	10,480	44,122	13,990

CHAPTER 23

INDUSTRIES

23.1. Successive Five Year Plans have not had a significant impact on Orissa's industrial scene. The State continues to be at the low end of the spectrum of industrialisation. Compared with the other regions of the country, the economy of Orissa appear to depend largely upon the primary producing sectors rather than secondary and tertiary sectors. The percentage of working force engaged in manufacturing industry is one of the lowest when viewed against the All India position. This perspective needs to be altered radically.

23.2. The Industrial strategy to be adopted in the Sixth Five Year Plan would be in line with the Industrial Policy Statement of Government of India. While the natural tendency of entrepreneurs to go where the infrastructure is strong, markets are close and various services are readily available cannot be ignored, what is needed is a strategy which identifies clearly the natural, physical and human endowments and potential in different districts and regions and identifies viable projects which are based on these resources. Growth of industries within and close to large metropolitan cities will be prevented. Industrialisation can play an important role in some backward regions, particularly those that are densely populated and few opportunities for traditional and non-agricultural occupations.

23.3. One of the major objectives of the plan as a part of the primary goals of reducing unemployment and under-employment in the country is the rapid and widespread development of small industries including cottage, household and small scale industries. The major components of the strategy proposed to be adopted in formulating and implementing the development programmes for these industries to be taken up in the Five Year Plan 1978—83 are :

- (i) to generate opportunities for fuller and full time employment by,
 - (a) revitalising and developing the existing traditional and other Small Scale Industries, and
 - (b) promoting intensive development of new viable small industries,
- (ii) to raise the level of earnings of rural artisans, handloom weavers, craftsmen and others employed in this industries ;
- (iii) to promote the growth of these industries in rural areas and small towns ; and
- (iv) to provide subsidies selectively for credit and development of skills, designs and marketing.

Large and Medium Industries

23.4. In the Sixth Plan an attempt will be made to diversify the economic structure of the State through the development of Large, Medium and Small Scale Industries. The industrial development programme will aim at (i) diversification of the industrial base by promotion of industries for the manufacture of new products in public, private and joint sectors (ii) decentralisation of location of industries through the promotion of new industrial units in the identified growth centres and backward regions of the State (iii) creation of increased opportunities of employment in the industrial and related sectors so that benefits of industrialisation are spread as equitably as possible among the population living in different parts of the State and (iv) promotion of industrial projects with the aim of utilising the natural resources available in Orissa.

Industrial Promotion and Investment Corporation

23.5. The Industrial Promotion and Investment Corporation of Orissa, Ltd. was incorporated in 1973-74 to take various promotional measures such as financial, technical and managerial, to stimulate growth of Large and Medium industries. Specifically, the activities include investment in joint sector projects, grant of financial assistance in the shape of loan and shares to private sector projects, provision of infrastructural facilities, consultancy services and merchant banking facilities.

23.6. During the Fifth Plan period IPICOL started implementation of five joint sector projects, viz., Tyre and Tube Project, Refractory Project, Tool Room Project, Watch Assembly Unit, Electrolytic Manganese Dioxide and Synthetic Detergent Project and 24 Private Sector Projects. With IPICOL'S assistance 12 projects have gone into production and the other 12 projects are under implementation. The total capital mobilised by IPICOL during the Fifth Plan period for setting up large and medium industries aggregated to Rs. 6,018.00 lakhs. 5,659 persons have been provided with employment.

23.7. One of the significant achievements of the Corporation during the Fifth Plan period is identification of new projects and new entrepreneurs. In this area IPICOL has laid sufficient stress and has identified 92 number of entrepreneurs with project. In the Sixth Plan, it has been proposed to invest Rs. 310.99 lakhs in the continuing projects and Rs. 1,590.00 lakhs in the new projects. With this amount it is expected that 17 continuing projects and 63 new projects will be completed during the Sixth Plan period. These industries will provide direct employment to 13,000 persons.

Ongoing Projects

23.8. In joint sector, five projects have been taken up by IPICOL. The total project cost of these projects is Rs. 45.40.25 lakhs and IPICOL'S equity participation is Rs. 2,80.97 lakhs. They are as follows:—

Joint Sector Projects

1. Refractory Project, Dhenkanal

Capacity	..	23,000 tonnes
Total cost	..	Rs. 7.00 crores
Joint Sector Collaborator	..	M/s. Belpahar Refractories, Ltd.
IPICOL'S equity share	..	Rs. 62.50 lakhs
Amount invested during 5th Plan	..	Rs. 8.00 lakhs
Amount proposed during 6th Plan	..	Rs. 54.50 lakhs
Progress achieved	..	All the infrastructure has been arranged

2. Tool Room Project—Sunabeda

Total cost	..	Rs. 100 lakhs
Capacity	..	Rs. 140.70 lakhs worth of tools per annum
Joint Sector Collaborator	..	D. Gaughli & Associates
IPICOL'S equity share	..	Rs. 12.5 lakhs
Amount invested during 5th Plan.	..	Rs. 3.00 lakhs
Amount proposed during 6th Plan.	..	Rs. 9.5 lakhs
Employment	..	155 persons

3. Tyre and Tube Project—Mancheswar

Total cost	..	Rs. 33.59 crores
Capacity	..	4 lakhs tyres and 4 lakhs tube per annum
Joint Sector Collaborators	..	Phillips Carbon Black, Ltd., Transport Corporation of India, Ltd.
IPICOL'S equity share up to.. 1977-78.	..	Rs. 87 lakhs

Requirement for 6th Plan ..	Rs. 179 lakhs
Progress achieved ..	1. Required infrastructure has been arranged and site office and godown constructed. 2. Sanction of Government of India for import of capital goods received. 3. Foreign technical collaboration agreement has been approved.
4. Watch Assembly Unit—Puri district	
Capacity ..	150,000 watches per annum
Total cost ..	Rs. 31.25 lakhs
IPICOL's contribution to equity.	Rs. 8.5 lakhs
Investment up to 5th Plan ..	Rs. 1.43 lakhs
Requirement for 6th Plan ..	Rs. 7.07 lakhs
Loan to be availed from OSFC.	Rs. 14.90 lakhs
5. Electrolytic Manganese Dioxide	
Total cost ..	Rs. 3.5 crores
Capacity ..	300 tonnes per annum
Joint Sector Collaborator ..	M/s. Rungta Mines Private, Ltd.
Equity participation of IPICOL ..	Rs. 36.4 lakhs
Fifth Plan investment ..	Rs. 5.5 lakhs
Sixth Plan requirement ..	Rs. 30.9 lakhs
Power requirement ..	1.5 Mw.
Employment to be generated ..	230 persons
Progress achieved ..	The Company has been incorporated

Private sector

23.9. In the private sector there are 24 projects. Implementation of 12 projects have been completed. The total cost of these projects is Rs. 2,241.79 lakhs. IPICOL has sanctioned Rs. 132.82 lakhs for investment in these projects. An amount of Rs. 53.62 lakhs has been disbursed during the Fifth Plan. For completing the continuing projects during the Sixth Plan an amount of Rs. 30.02 lakhs will be required. Out of these projects 11 projects are located in Tribal areas and will provide employment to 1,937 persons.

NEW PROJECT

Synthetic Detergent Complex

23.10. There are five detergent slurry manufacturing units located in and around Jagatpur in Cuttack district which are continuously facing raw material and marketing difficulties for their products since there is no local detergent manufacturing unit to convert their intermediate product to finish product. In view of high demand for detergent powder in the country IPICOL have identified the scope for setting up a detergent complex in the State consisting of one Mother Unit which will convert detergent slurry to detergent powder, to be fed, initially, by the existing five detergent slurry units and subsequently by two more new units. This complex is to be set up in the joint sector in collaboration with M/s Indian Chemicals, New Delhi who have experience and expertise in this line of production. The project is to cost Rs. 18 lakhs with equity component of Rs. 12 lakhs and loan component of Rs. 6 lakhs. The equity is to be jointly contributed by IPICOL, O. S. F. C. and Indian Chemicals. IPICOL's contribution during the Sixth Plan for this project will be of the order of Rs. 7 lakhs. O. S. F. C. has sanctioned the term loan for the project. Joint sector agreement has already been concluded.

23-11. With a capital input of Rs. 19 lakhs, the Complex will be having an annual output of Rs. 250 lakhs and as such, the capital output ratio will be low. The Mother Unit will provide employment to 160 persons and the feeder units providing assured employment to 40 persons.

Myrobalan Extraction Unit

23-12. With the growth of leather industry, projected for the Sixth plan in this State, the requirement of tanning particularly to meet the State's demand would be considerable. A detailed project report for a myrobalan extraction unit has already been prepared. The project is estimated to cost Rs. 74.8 lakhs and will be set up in joint sector in collaboration with M/s Shri Laxmi Chemicals and Industries Private Ltd., Kharagpur who have got long experience in this project. In the total project cost, the equity component is Rs. 30.00 lakhs and the loan component is Rs. 54.8 lakhs. IPICOL's participation in the equity during 6th plan will be of the order of Rs. 6.6 lakhs. Term loan has been sanctioned by the financing institutions.

23-13. The value of annual output from this industry will be of the order of Rs. 77 lakhs. Therefore, the capital output ratio appears to be favourable. It will provide employment to 125 persons.

Sponge Iron Project

Tor Steel Research Foundation

23-14. Orissa is endowed with huge reserves of high grade iron ore and non-coking coal. The results of tests conducted by IPICOL & M/s Torsteel Research Foundation have proved beyond doubt that these raw materials are quite suitable for sponge iron. As the demand for sponge iron in the country is going up in view of gradual revival of mini steel plants and scarcity of scrap, IPICOL and TORSTREL have decided to set up a sponge iron project in this State in the joint sector. MECOIN have already prepared a detailed project report. The process know how is proposed to be obtained from M/s Allis Chalmers of USA. The capacity of the project will be of 1,50,000 tons per annum.

23-15. The project cost is estimated at Rs. 2,360 lakhs out of which equity is Rs. 600 lakhs and term loan is Rs. 1,760 lakhs. IPICOL will contribute Rs. 126 lakhs towards equity during the Sixth plan for implementation of this project. The financing institutions have been approached for sanction of term loan. F. I. B. clearance and C. G. clearance at the Government of India level are in advanced stage of consideration.

23-16. The value of the out turn of this project will be of the order of Rs. 10.5 crores. This project will contribute substantially to the national economy by conserving limited availability of metallurgical coal for steel making. It also helps in the revival of mini steel plants. The project will provide employment to 314 persons directly and to many more persons by mining activity. It will come up in the tribal area of Keonjhar.

Tisco

23-17. Tata Iron and Steel Company are evincing interest to set up a sponge iron plant in this State with IPICOL's collaboration. They have already prepared a detailed feasibility report for production of 90,000 tonnes per annum.

23-18. The project cost is estimated at Rs. 1,838 lakhs out of which equity will be Rs. 600 lakhs and loan Rs. 1,238 lakhs. IPICOL proposes to contribute its share of equity amounting to Rs. 156 lakhs during the Sixth plan. The term loan will be obtained from financing institutions. This industry will provide employment to 266 persons. As it will be located in Keonjhar, the tribals will be benefited.

Ferro Vanadium Project

23-19. Mayurbhanj District has substantial reserves of vanadium bearing titaniferrous magnetite ore, estimated at more than 5 million tons. So far, only two million tons of reserves have been proved. This reserve can sustain a Ferro-Vanadium Project having a capacity to produce 480 tons of Ferro Vanadium per annum for about 20 years.

23-20. M/s. M. N. Dastur & Co., who prepared the original project report for a Ferro Vanadium project have updated the same and the project cost now stands at Rs. 25 crores for producing 480 tons of Ferro Vanadium and 47,500 tons, of low phos. pig iron. The equity-component is of the order of Rs. 800 lakhs and loan component is Rs. 1,700 lakhs. IPICOL will contribute its share of equity amounting to Rs. 350 lakhs during the Sixth Plan period to implement this project.

23-21. The annual value of the products to be turned out by this project will be of the order of Rs. 9 crores. The project will be the first of its kind in India and will save foreign exchange by meeting part of the Ferro Vanadium requirement of the country. The project will come up in a tribal area and will provide employment to 750 persons directly besides a large number of tribals in the mining operation.

Oil Expeller-cum-Refining Unit

23-22. Orissa produces around 1.22 lakh tons of groundnut per year but there is no major oil processing unit in the State at the result of which most of the produce is sent outside the State. IPICOL proposes to set up an Oil Expeller-cum-Refining Plant for which the letter of intent has been obtained. The project will have a capacity of expelling 15,000 tons of seeds refining 6,000 tons and solvent extraction of 3,000 tons. The project has an employment potential of 250 persons. The project cost is estimated at Rs. 200 lakhs with equity of Rs. 70 lakhs and loan of Rs. 130 lakhs. IPICOL's contribution to equity will be Rs. 7.77 lakhs which is suggested in the Sixth plan. Term loan will be obtained from the financial institutions. This project will set up at Rayagada which comes within the Sub-Plan area.

Maleic Anhydride

23-23. There has been rapid expansion of market for polyester, resins, fumeric acid, malathion and tartaric acid, which are intermediates for manufacture of paints, pesticide, fibreglass, food preservatives etc. Maleic Anhydride is the starting material for manufacture of the above chemical intermediates. Benzene, which is one of the major by-products of Rourkela Steel Plant is the main raw material needed for manufacture of Maleic Anhydride.

23-24. IPICOL propose to set up a Maleic Anhydride project in the State with a capacity of 3,000 tonnes per annum and has secured a letter of intent from Government of India. The project cost has been estimated to be Rs. 350 lakhs out of which Rs. 120 lakhs will be equity and Rs. 230 lakhs loan. IPICOL's contribution to equity will be Rs. 13 lakhs which is suggested in the Sixth Plan. Term loan will be obtained from financial institutions. The project has employment potential of 150 persons.

Export oriented Bi-cycle Project

23-25. IPICOL propose to set up a unit to manufacture export model SLR multi-speed bi-cycles for which a letter of intent has been obtained. The proposed unit in Orissa will be able to cater to the needs of the foreign buyers. The product can be exported through Paradeep Port, which is well connected to Bhubaneswar. The growth of Engineering Industry in the State of Orissa has been limited to only a few major industries. The proposed bi-cycle complex will generate employment opportunity for 300 persons and will earn substantial foreign exchange.

23-26. The project envisages manufacture of 3.00 lakh bi-cycles per annum out of which 1.50 lakh will be export model SLR type bi-cycles and the annual sales turn-over is expected to be around Rs. 7.00 crores. The project cost is estimated at Rs. 2.42 crores with equity of Rs. 119 lakhs and long term loan of Rs. 123.00 lakhs. IPICOL will invest in equity of this project to the tune of Rs. 12 lakhs. Term loan will be obtained from financial institutions.

Calcium Carbide Project

23-27. Calcium Carbide, an inorganic chemical, is used for manufacture of Acetylene Black which in turn is used for the purpose of lighting and in conjunction with oxygen is used for metal welding and it has assumed great importance because of high prices of Petroleum. IPICOL has proposed to set up a Calcium Carbide Project during Sixth Plan period.

23-28. The Project will have a capacity of 15,000 tonnes and is estimated to the cost of Rs. 500 lakhs consisting of equity of Rs. 176 lakhs and loan of Rs. 309 lakhs. IPICOL will contribute Rs. 15 lakhs to equity shares. The Project has been employment potential of 350 persons. It will be set up in tribal area of Keonjhar.

Sulphuric Acid and Oleum

23.29. Sulphuric Acid and Oleum are heavy chemicals used in the manufacture of fertilisers, detergents, dichromate, alum, caustic soda and metallurgical industries. IPICOL has obtained a Letter of Intent from the Government of India to set up a plant of 50 TPD Sulphuric Acid and 10 TPD Oleum in an industrially backward district of Mayurbhanj. The project cost is estimated to be Rs. 150.00 lakhs, with an equity component of Rs. 50 lakhs and loan component Rs. 1.00 lakhs. IPICOL has proposed to invest Rs. 15 lakhs in the shares of this project during the Sixth Plan Period. The project has an employment potential of 100 persons.

Private Sector Projects

23.30. In private sector, 45 new projects have been identified by IPICOL and entrepreneurs. These are in preliminary stages and will be implemented during the Sixth Plan Period. The total cost of these projects is estimated at Rs. 4,900 lakhs with equity component of Rs. 1,659.00 lakhs and loan component of Rs. 3,241.00 lakhs. IPICOL's participation in these project will be of the order of Rs. 263 lakhs. These projects include nine (9) electronic units which are low capital and high employment oriented. The Projects namely, oxygen Gas, Ball Bearing and Jewels for watches are also highly employment oriented. The chemical industries, such as, Reactive Dye, Dye Intermediate, Benzal Dehyde, Anthroquinium, are based on by products of Rourkela Steel Plant. The projects will generate employment for 3,500 persons. 20 of these projects will be located in tribal areas having employment content of 1,700 persons.

THE INDUSTRIAL DEVELOPMENT CORPORATION OF ORISSA LIMITED

23.31. The Industrial Development Corporation of Orissa Limited was incorporated in March, 1962. The Corporation has the following operating units:—

- (a) *Ultra Cement Works*—Bargarh, for production of portland cement with a licence capacity of 3,96,000 M. T. per annum.
- (b) *Hira Cable Works*—Hirakud, for production of conductors and winding wires with a licence capacity of 3,000 M. T. conductors and 660 M. T. winding wire per annum.
- (c) *Re-Rolling Mill*—Hirakud, for production of M. S. rods with a licence capacity of 15,000 M. T. per annum.
- (d) *Ferro Chrome Plant*—Jajpur Road, for production of low carbon ferrochrome with a licence capacity of 10,000 M. T. per annum.
- (e) *Tile Factory*—Choudwar, for production of (Manglore Pattern) Tiles with a licence capacity of 48,00,000 nos. per annum.
- (f) *Kalinga Iron Works*—Barbil, for production of pig Iron.
- (g) *Hirakud Industrial Works*—Hirakud, for fabricating towers for Electrification and executing other jobs.

23.32. The total investment in I. D. C. as on the 31st March 1978 is around Rs. 4,413.52 lakhs. A provision of Rs. 1,051.73 lakhs has been suggested during the Sixth plan for the following projects.

1. Ongoing Projects

- (a) *Diversification of Kalinga Iron Works*—

23.33. An Expert Committee, consisting of representatives of State Government, Government of India and H. S. L. was set up to review the working of Kalinga Iron Works. The Committee

(a) Diversification of Kalinga Iron Works

23-33. An expert committee, consisting of representatives of State Government, Government of India and H. S. L. was set up to review the working of Kalinga Iron Works. The Committee among other things, suggested revival of the scheme for manufacturing cast-iron pipes. The Industrial Development Bank of India however was of the view that ductile iron spun pipes would be preferable to cast iron spun pipes since the former had got export potentiality. A bankable project has been submitted to I. D. B. I. and the case for sanction of a term loan of Rs. 309 lakhs is under their consideration. Requirement of funds from the State Plan would be of the order of Rs. 154 lakhs in the Sixth Plan and the project will generate additional employment of 648 persons in tribal areas. The K. I. W. will be expanded by setting up two more furnaces to raise the production of pig-iron from 30,000 M. T. to 1 lakh M. T. per annum.

(b) Diversification of the Choudwar Tile Unit

23-34. The tile factory at Choudwar, set up with a capital investment of Rs. 25.00 lakhs has an annual capacity of producing 48 lakhs of roofing tiles including ridges. Because of the unfavourable market situation, this Unit has been incurring losses since its inception. The product-mix needs to be diversified to manufacture refractories with an annual capacity of 2,100 tonnes which may ultimately be expanded up to 4500 tonnes.

23-35. The requirement of fire-bricks of the various units of the I. D. C. itself is of the order of 1,400 tonnes annually and mortar requirement is 300 tonnes, which could be fully met from this unit. The capital investment as per the project report is Rs. 15.00 lakhs. This Unit will create employment potentiality for 100 persons. The total annual turn-over of this Unit will be Rs. 20 lakhs.

New Projects**(a) Expansion at Sumandi**

23-36. The East Coast Salt & Chemical Industries Ltd., a subsidiary of IDCOL is presently operating only 536 acres of land at Sumandi out of total area of 1,234 acres taken on lease from the Salt Department, Government of India. The balance area could not be developed for production of salt because of resources constraints. Thus during the last 10 years the average annual production is 4,000 MT and with such low production, the Unit is not becoming viable. It is, therefore, proposed to invest further Rs. 8.00 lakhs in two phases during the 6th plan to develop a further area of 600 acres in order to augment the production from the existing annual average of 4,000 tonnes to 8,000 tonnes, by which the Unit is expected to make profit.

23-37. This unit will produce edible and industrial grade salt. It will generate direct employment for 25 persons. As the project will be located in the rural area it will provide seasonal employment particularly to the weaker sections.

(b) Additional Cement Mill at Hira Cement Works

23-38. There is all India scarcity of cement, which calls for substantial expansion of production capacity to meet the increasing demand for this basic input.

23-39. The I.D.C. has got a cement plant at Bargarh having an annual capacity of 3,96,000 tonnes. The entire capacity is now being utilised. In view of the priority being accorded to this industry it is proposed to add a cement mill to the existing plant, which will further increase the capacity by 60,000 MT per annum. The additional cement mill will use the clinker of the existing plant and other pozzolanic materials like granulated slag/fly ash/pozzolanic clay, etc. The I. D. C. is negotiating with steel plants for supply of granulated slag. Fly ash would be available from Korba/Talcher Thermal Power Station and the Fertilizer Plant at Talcher. The pozzolanic clay is abundantly available in the district of Sambalpur, where the existing plant is located.

23-40. Out of the total estimated project cost of Rs. 300.00 lakhs the equity component will be Rs. 100.00 lakhs and the rest will be loan component from financing institutions.

23-41. The scheme will create direct employment for 50 persons and the additional turn-over of expanded capacity will be Rs. 180.00 lakhs per annum.

(c) Spinning Mill

23-42. Handlooms occupy a position of priority in the strategy of rural industrialisation. The State Government is taking up a programme to expand the handloom Sector by organising 200 new Weavers' Co-operative Societies and to extend substantial assistance to weavers outside the organised sector. As a result of the increased emphasis on the handloom sector, the demand for yarn, not only inside the State but also at the national level, will go up substantially. To match this demand, I. D. C. proposes to set up a Spinning Mill in the State with an annual capacity of 25,000 spindles. The proposed mill would come up in an industrially backward area, where there is concentration of weaver population and particularly, weavers belonging to the scheduled caste and scheduled tribe community.

23-43. The total investment is estimated to be of the order of Rs. 500.00 lakhs out of which equity will be Rs. 166.00 lakhs and Rs. 334 lakhs would be a term loan. The project will provide direct employment to 1,000 persons. The turnover is expected to be Rs. 300.00 lakhs per annum and as such the capital output ratio appears to be favourable compared to other large scale industries. It is proposed that the project would be taken up in the Joint Sector I. D. C. has identified the private collaborator for this project.

(d) Modification of Kalinga Iron Works

23-44. The Kalinga Iron Works, has 3 Low Shaft Furnaces with annual capacity of 1.00 lakh tonnes of pig-iron. Since this Plant has to compete with Integrated Steel Plants, it is sustaining losses continuously. It is, therefore, essential to reduce the cost of production in different area of operation where ever possible and with this end in view M/s. MECON were engaged to prepare a feasibility report, which has been received. They have suggested modification, extension, additional provision in Wharf, Conveyors and other existing facilities. The modifications, etc, envisage a total capital cost of Rs. 41 lakhs, out of which Rs. 22 lakhs will be the cost of equipment. The feasibility study envisages that the production cost of pig-iron will be reduced by about Rs. 50 per tonne and its viability will be improved on carrying out the suggested modification.

(e) Mini Cement Plants

23-45. Government of India have commended to the State Governments to encourage setting up of mini cement plants. The Cement Research Institute has identified two locations in the State, namely, Lanjiberana and Gatitnagar, Tikentoli and Kujutoli group in the Sundargarh district where pocket deposit of lime-stone is available for sustaining mini cement plants.

23-46. I. D. C. has already acquired sufficient experience and expertise in cement manufacture. It is therefore, decided to set up one mini cement plant in the State. The total capital cost is estimated to be Rs. 200.00 lakhs. The equity component would be Rs. 66.00 lakhs and loan component would be Rs. 134 lakhs. The annual turn-over will be about Rs. 100 lakhs. The unit will employ about 100 people directly and in mining and other allied operation another 100 persons will be employed.

(f) Modification to Hira Cable Works

23-47. The Hira Cable Works of I. D. C. has the facilities for manufacturing aluminium and aluminium steel cored conductors. It has got also a section for the manufacture of enamelled wires and covered aluminium and copper wires. The factory is often experiencing difficulty in the matter of wire drawing and also for the manufacture of aluminium strips because of availability of only one bull block with inadequate capacity. Therefore, it has been felt necessary to have one more bull block for full capacity utilization.

23-48. For the manufacture of fine enamelled wires the existing imported equipment need modification. For providing this balancing equipment and modification an investment of Rs. 10.00 lakhs is needed. The products of this Plant will support the Rural Electrification Programme.

(g) Steel sheathed telephone cables

23-49. The use of steel sheathed telephone cables in the Tele-communication industry has been a recent development. The P. & T. Department of Government of India commended it for commercial use. These cables will be 25 to 30 per cent less costly than the lead-sheathed cables and will be much lighter and stronger. Because of elimination of lead,

which is being imported, this will save foreign exchange. There is also opportunity for exporting these products and earn foreign exchange. Hira Cable works of I. D. C. has got necessary infrastructure facilities including the wire drawing machine to be used for manufacture of this product. Besides this product is reserved for the public sector.

23-50. This project is expected to cost Rs. 210-00 lakhs of which equity would be Rs. 70-00 lakhs and loan Rs. 140-00 lakhs. The capacity of this plant will be 2,500 Kms. per year and it will create employment for 450 persons. The turn-over from this plant will be Rs. 350-00 lakhs.

(h) XLPE & P. V. C. Cables

23-51 Transmission of power through the medium of XLPE and P. V. C. Cables is a recent innovation. This has been commercially used in developed countries like Sweden, Norway, Japan, etc. The internal demand for this cable is good in India and it has been proposed to manufacture these cables upto a voltage of 66 KV. The IDC proposes to set up a manufacturing Unit of XLPE & P. V. C. cables of 700 Kms. per annum.

23-52 This project will be set up in the joint sector with M/s. National Insulated Company of India Limited, who have got experience and expertise in the Manufacture of power cables. The capital investment in this Project will be Rs. 600-00 lakhs out of which Rs. 200-00 lakhs will be equity and Rs. 400 lakhs loan from financing institutions. The annual turn-over will be approximately Rs. 600-00 lakhs. This industry will create employment for 249 persons. The export potential of the product is also quite high.

(i) Chrome Chemicals

33-53. Orissa is having large deposits of chrome ore and it is proposed to use this raw material to the extent possible instead of exporting the same. It is, therefore, proposed to set up one Sodium Dichromate plant. Sodium Dichromate is used in leather industries, textiles, and other paint and chemical industries. The export potential of this product is equally high. This project is proposed to be set up at Jajpur-Keonjhar Road, where IDCOL is already having a Ferro-chrome Plant in operation and infrastructure facilities are already available. The chromite ore mines are close to the proposed location.

23-54. The total capital investment is estimated to be Rs. 400-00 lakhs out of which equity will be Rs. 133-00 lakhs and the rest Rs. 267-00 lakhs will be obtained from financing institutions. This unit will create employment for 400 persons. The annual turnover is about Rs. 250-00 lakhs.

(j) Expansion of Hirakud Industrial Work

23-55. Hirakud Industrial works of IDC has been manufacturing High Tension Transmission Line towers since its inception and is now one of the leading tower manufacturers in India. Besides supplying towers to Orissa State Electricity Board, H. I. W. has already supplied towers to other States of India. The present production capacity is approximately 5000/6000 MTs. per annum. The demand of towers in the country has already gone up and has an increasing trend because of longer investment in the power sector. Moreover the demand in the export market is extremely high and of late, H. I. W. has submitted tender for supply of towers to Malayasia. I. D. C. also proposes to take up supply and creation of towers on a turn key basis in the country as well as abroad. Therefore, to cope up with the demand for towers and sub-station structures, IDC proposes to expand the Tower Shop of Hirakud Industrial Works to have a capacity of 12,000 MT/year.

23-56. This will not only meet the growing demand in the country but also will be able to earn valuable foreign exchange. The capital investment for this expansion will be approximately Rs. 75-00 lakhs out of which equity will be Rs. 25-00 lakhs and loan Rs. 50-00 lakhs. Employment will be generated for 150 persons of different categories. The increase in the turn-over will be approximately Rs. 50-lakhs.

(k) Expansion of Ferro-chrome Plant

23-57. IDCOL is having a Ferro-chrome Plant with a licenced capacity to produce 10,000 MT of low carbon Ferro-chrome. It is found from experience that whereas the demand for low Carbon Ferro-chrome is either gradually decreasing or remaining constant, the demand for high-carbon Ferro-chrome is increasing mainly in export market. It is, therefore, proposed to set up a High Carbon Ferro-chrome Plant of 15,000 MT. capacity, where Ferro-silicon can also be produced. This will be under the expansion scheme of the existing Ferro-chrome Plant and the existing infrastructure facilities could be utilised for this expansion. The main raw material is chrome ore and the same are available in plenty nearby.

23.58. The total capital cost of the project is estimated to be Rs. 750.00 lakhs, equity being Rs. 250 lakhs and term loan Rs. 500 lakhs. This scheme will give employment to about 400 persons directly, besides giving employment to a number of persons in the mining and transportation work. The estimated turn-over will be Rs. 600.00 lakhs per annum.

(i) Properzi Mill:

23.59. The Hira Cable Works Unit of IDC is a leading manufacture of AAC and ACSR conductors and Aluminium and Copper Enamelled and covered wires in the country. The present capacity of the plant is 3,000 MT. per annum as regards conductors and 660 MT/Annum for the enamelled and covered wires. The main raw material for the product is Aluminium rods. Presently Hira Cable works is getting Aluminium ingots and converts them to rods in different factories mostly located in Hyderabad, Satna, Baroda etc., and thereby incurring a lot of expenditure on transport of Aluminium ingots as well as the rods after conversion. At the same time because of delay in conversion, the supply of Aluminium rods to Hira Cable Works Unit has been very often irregular. As a result, Hira Cable Works is failing in its commitment to supply conductors to its customers in time. Therefore, I. D. C. proposes to set up a Properzi Mill in the Hira Cable Works for the conversion of Aluminium ingots into rods. By setting up this captive Unit, Hira Cable Works, will be able to cater to the needs of Aluminium rods of local small industries.

23.60. The capacity of the proposed properzi Mill is 6,000 MT/annum, which is the minimum capacity of an economically viable unit.

23.61. The capital investment will be Rs. 70.00 lakhs. The equity would be of the order of Rs. 23.33 lakhs and term loan Rs. 46.67 lakhs. It will have employment potential of 50 persons of different categories and the turn over will be approximately Rs. 60.00 lakhs per annum.

23.62. To sum up, it is proposed to invest Rs. 1,035.73 lakhs in the different projects of I. D. C. during the Sixth Plan which would generate employment opportunities for 812 skilled and 1,624 semi-skilled personnel.

Spinning Mill in the Co-operative Sectors

23.63. Handloom and powerloom sectors will receive increased emphasis during the Sixth Plan in view of their scope for generating additional employment in rural areas.

23.64. Currently the requirement of yarn for weavers, both in handloom and powerloom sectors is about 13 lakhs of Kgs. per month. This is likely to go up to 18 lakh Kgs. per month in view of the expansion of activities envisaged during the Sixth Plan for these sectors. The State however, has a spinning capacity of only 6.5 lakh Kgs. per month and the balance requirement of yarn is met from sources outside the State. Dependence of this magnitude on sources of supply external to this State places a number of constraints in the yarn supply and distribution system. Fluctuation in price count-wise requirement and dislocation in transport links are some of the major handicaps which the handloom sector is likely to face unless sufficient spinning capacity is built up within the State. Shortages affect the production system and leads to under-employment of weavers. The State Government would like to expand the spinning capacity over a period of years keeping in view the count-wise output of existing mills and the future requirements. At present there are two mills in the co-operative sector in the State. A third mill in the co-operative sectors mainly for handloom weavers needs to be set up to raise the local spinning capacity to 160.02 lakhs Kgs. per annum. Preparation of a project report has been entrusted to the Federation of Co-operative Spinning Mills.

23.65. The estimated cost of a spinning mill of Rs. 25,000 spindle capacity is about Rs. 500 lakhs. The project is proposed to be financed in the following manner :

	(Rs. in lakhs)
1. Member share 5% of the project cost	25.00
2. Government share out of own fund	52.90
3. Government share out of N. C. D. C.	157.90
4. Central Subsidy	15.00
5. Term loan	250.00
Total	500.00

23-66. A sum of Rs. 52.50 lakhs is to be provided during the Sixth Plan. The spinning mill has an employment potential of 1,200 skilled/semi-skilled operators.

Developed Area

23-67. Lack of infrastructural development has been recognised as one of the major hurdles for rapid industrialisation of the State. This is a symptom of the general backwardness of the State. The strategy followed for development of industrial infrastructure in the State consists of identification of selected growth centres having potential for growth of large and medium industries, selection of compact blocks of land in the area and developing them with facilities of road, drainage, internal power, and water supply lines, common facility centres, administrative block, etc. and allotting suitable plots of developed sites to the new industries. Prior to the Fifth Plan Industrial Area Programme was taken up in Rourkela and Bhubaneswar to provide integrated infrastructural facilities to large and medium industries. Compact blocks of about 800 acres in Rourkela and 200 acres in Bhubaneswar have been taken up for development. As the progress through departmental execution was found to be slow it was decided during the Fifth Plan to implement this scheme through the Industrial Promotion and Investment Corporation of Orissa Ltd. Out of 14 selected growth centres work has started in 3 centres only because of inadequate provision during the Fifth Plan. During the Sixth Plan developed area programme will be taken up in 10 selected growth centres comprising 639 hectares of land for which a sum of Rs. 647.55 lakhs will be required. IPICOL has approached IDBI for refinancing facilities for higher coverage under the programme.

Preparation of Feasibility Report

23-68. A shelf project profiles, pre-investment survey reports, feasibility reports and project reports needs to be built up to encourage entrepreneurs and create their interest in industrial possibilities of Orissa.

23-69. A scheme to subsidise upto 75 percent of the cost of such reports is in operation. Of the 25 feasibility reports prepared so far, 10 reports have been taken up for implementation. During the Sixth Plan more than 100 project reports are proposed to be prepared for identifying various projects. A lump provision of Rs. 25.00 lakhs has been suggested for this purpose.

Power Subsidy

23-70. Orissa is comfortably placed in the national power and has tremendous prospects for power based industries in the State. Many entrepreneurs have evinced keen interest in setting up calcium carbide plants, a power intensive industry, in the State. The capacities of the existing aluminium industries are also to be expanded. A number of other electro-metallurgical and electro-chemical industries have been programmed to be set up during the Sixth Plan. There is a need to support these industries with suitable power subsidy during the initial 5 year period of production for which a provision of Rs. 30.00 lakhs has been suggested.

Weights and Measures

23-71. The Weights and Measures organisation in the State has been entrusted with the responsibility of ensuring uniformity and accuracy in weighing and measurement in transactions of trade and commerce.

23-72. In course of the Fifth Plan 1977-78, the Weights and Measures organisation has taken up testing and verification of weights, measures and instruments manufactured within the State and procured from outside the State. In addition to the initial testing of above items, re-verification and testing of different kinds of weights, capacity measures, beam scales, counter machines, spring-balances platform machines, weight-bridges and petrol pumps etc. were taken up and their accuracy certified. 55 Working Standard Laboratories have so far been set up at various important and Subdivisional Headquarters to provide facilities for verification and stamping of the weights, measures etc. used in trade and commerce.

23-73. A State Standards Laboratory has been set up to verify the working standards used in the Field Laboratories.

23-74. Verification facilities have also been provided to take up verification of weights, measures etc. used in the Railways and Postal Department. The Department has also taken up inspection and testing of sealed packages of important commodities in light of the packaged Commodities (Regulation) Order, 1975.

23-75. In accordance with the decision of Government of India steps have been taken to amend the rules to provide re-verification of all kinds of weights, measures, and instruments once in every calendar year with a view to ensure accuracy as well as to save the consumers to get their requirement in correct quantity.

23.75. During the 5 year Plan period, 1978—83 it is proposed—

- (1) To extend facilities to the public as well as to the traders for accurate weighing and measurement of the commodities transacted by them in the important Centres of the State.
- (2) Verification and testing of weighing and measuring instruments used in Railways and Postal Department.
- (3) Testing and inspection of sealed packages of important commodities like baby-food, soap, detergent, tea, vanaspati, biscuit etc.
- (4) Survey of sophisticated weighing and measuring instruments used in the trade and industries.
- (5) To make available at subsidized rates standard weights and measures to tribal traders in backward areas to save them from exploitation and to help them to switch over to Metric System.
- (6) To take up Education and Extension Programmes.

(ii) VILLAGE AND SMALL INDUSTRIES

23.77. Village and Small Industries consist broadly of (i) traditional Cottage and Household Industries (for example : Handloom, Khadi & Village Industries, Handicrafts, Sericulture, Coir, Salt and Leather Industries and (ii) modern Small Scale Industries (defined as those having investment up to Rs. 10 lakhs in plant and machinery and Rs. 15 lakhs in the case of ancillary industries). The traditional cottage and household industries as distinguished from modern small scale industries, are located mostly in rural and semi-urban areas and a large number of them do not use power-operated appliances and equipments. A number of these industries produce certain essential articles required by the masses and also items which are exported, yet, a very large number of persons dependent on traditional industries belong to the poorer section of the society and live below the poverty line. Much of the employment provided by these traditional cottage and household industries is neither full time nor well remunerative.

23.78. As a major contributor to the planned growth of employment, these sectors will receive high priority. It is the capacity to absorb more funds rather than the availability of resources which has limited the growth of these sectors. Therefore the organisational, managerial and training efforts have to be maximised so that, this capacity is expanded to the optimum. When the requisite assistance in finance, raw materials and guidance in areas like marketing and technology is given, people are generally anxious to become self-employed and would work hard. In the Integrated Rural Development Programme which envisages detailed block level planning for full employment, the scope for setting up traditional and other small industries, will be identified taking into account the skill levels, local raw material resources and markets.

23.79. According to the new Statement on Industrial Policy announced in December 1977 the main thrust of the policy will be on effective promotion of cottage and small industries widely dispersed in rural areas and small towns. The number of industries reserved for exclusive development in the small industries sector has been significantly expanded and Government of India will consider introducing special legislation for protecting the interests of Cottage and Household industries with a view to ensuring that these activities which provide self-employment in large numbers get due recognition in the gamut of industrial development.

23.80. Inadequacy of complete and up-to-date statistics for the traditional rural industries is the handicap for assessing the physical progress of the development programmes undertaken towards achieving the objectives and strategy envisaged in the preceding Plans. There has been a tendency earlier to proliferate agencies and organisations for the development of different cottage and small industries. This has tended more to confuse the average rural and small entrepreneurs than coming to their assistance. To overcome this, one agency in each district called the District Industries Centre has been established mainly to provide and arrange a package of assistance and facilities for credit guidance, raw materials, training, marketing etc. to the entrepreneurs. These Centres will establish close linkages with the community development blocks on the one hand and with specialised institutions concerned with the development of small industries on the other. The staff of the

new District Industrial Centres will work in close consultation and collaboration with the concerned State level departments and institutions as well as the Central and other institutions functioning in the district including the financial and voluntary institutions and organisation engaged in the development of cottage, household and other small industries. Measures such as purchase preference and reservation for exclusive purchase by the Government departments and the public sector undertakings will be used to support the marketing of the products of these industries. A closer marketing linkage will be established between the products of small scale industries and the requirement of medium and large industries particularly the public sector undertakings.

23:81. Since training facility is another important input for raising the level of earnings of those employed in these industries as well as for creation of new employment opportunities, the on-going training schemes will be reviewed with a view to reorienting them suitably in the context of the new strategy. Government personnel engaged in extension and promotional activities should be trained adequately and training facilities for artisans, craftsmen, workers and unemployed educated youth will be suitably expanded wherever considered necessary.

23:82. By the measures envisaged under the new Industrial Policy Statement and by the development programme subsequently outlined, viable rural and small industries will be promoted on a decentralised basis. It will be possible to achieve this pattern of development by increasingly providing the viable small industries, credit and development of skills, designs and marketing and progressively reducing the role of subsidy including sales rebate. However, in respect of the poorer sections of the society engaged in some traditional industries some subsidies would be required for limited purposes. The staff of the District Industries Centre would make efforts to identify technological and other problems of small industries and arrange for research and investigation on them through local and other concerned educational and technical institutions. Simultaneously, greater attention will be given to the training of unemployed educated youths in management of small scale industries so as to assist them to set up small industries and service units.

23:83. Programmes for the development of different rural industries have so far consisted mainly of certain fiscal measures and a number of different disjointed schemes for providing assistance and facilities in different forms to all types of these industries without a careful assessment of their appropriateness and viability. The proposal for the present plan however is to formulate development programmes for some selected industries based on in-depth studies of their present position and potential. Development programmes will be formulated in blocks in a phased manner with a view to formulating special programmes for Integrated Rural Development covering mostly the backward areas and backward classes at the outset. Besides, the schemes of comprehensive agricultural development and for promotion of employment opportunities in the tertiary sector, these special programme include schemes for intensive development of small agro-based and other suitable industries. It is proposed to revitalise the potential of viable industrial co-operative societies and to assist the organisation of new societies by undertaking a concerted drive for the purpose and providing the necessary financial, managerial and marketing assistance.

Programmes of development

Handlooms

23:84. Programme contents under Handlooms are designed to assist individual weavers and co-operative societies in several ways such as training and design support share capital investment and providing the marketing infrastructure so that they may acquire the capacity to participate and contribute more effectively to the growth of the economy. Keeping these objectives in view the schemes to be implemented in the handloom sector are—(i) Assistance to individual weavers and co-operatives through share capital participation in the State Handloom Development Corporation which is entrusted with the implementation of intensive handloom development and export of handloom products. (ii) Loan and grant to weavers to contribute to the share capital of co-operative societies and towards membership subscription. (iii) Loan to Weavers' Co-operative Societies towards initial working capital (iv) Interest subsidy for share capital and working capital loans from the State Government. (v) Interest subsidy for loans of central co-operative Banks (vi) Arranging training of weavers and their visit outside the State. (vii) Subsidising the modernisation of looms (viii) Establishing raw material banks as a shield against market fluctuations. (ix) Providing pre-weaving centres in the form of warping sheds (x) Contributing to the share capital of the processing co-operative societies (xi) Grant to Central Co-operative Banks for supervision of handloom societies (xii) Loan to Weavers' Co-operative Societies for construction of godowns.

23:85. A prize scheme will be introduced for those weavers of Orissa who demonstrate a distinctly higher order of renovation and adaptability. A sizeable segment of the weavers of the State belong to Scheduled Castes and Scheduled Tribes. Because of their low

productivity they are found to abandon the profession and switch over to other occupations. It is proposed to set up production centres in tribal districts of Sundargarh, Kalahandi and Mayurbhanj to rehabilitate these weavers by providing them continuous employment in handloom industry. Which would be equipped, managed and operated departmentally. It is proposed to set up seven departmentally controlled production centres where weavers will be employed on a regular basis for production of fabrics for export. These centre will be ultimately converted to weavers Co-operative Societies. Since most of the membes-weavers of Weavers' Co-operative Societies are poor and do not have sufficient living accommodation, unsatisfactory working conditions hinder the un-interrupted working of looms and productivity is affected. To encourage weavers to improve their environment, a housing-cum-workshed loan with a subsidy component of 25 per cent is proposed as advance to the weavers which could be recovered over a period of 15 to 20 years. The supervisory and administrative linkages both at the level of Directorate of Textiles and its field agencies will be considerably strengthened for implementing the development programmes as envisaged for the handloom, powerloom and sericulture sectors during the Sixth Plan.

23-86. During the Fifth Plan period 11,400 looms were set up in the Co-operative Sector and 1,500 looms outside the co-operative fold, providing employment to 23,000 persons. A total quantity of 188.94 million metres of cloth was produced. During the Sixth Plan, the target is to introduce 30,000 looms in the Co-operative Sector and 9,500 looms in the private sector. With this additional capacity production of 418.10 million metres of cloth is envisaged and 79,000 weavers will get employment.

Power looms

23-87. The approach to the power loom industry in the State during the Sixth Plan is to revive and revitalise the existing co-operative societies and to assess individual licensees to instal and operate their power looms. The Orissa State Power Loom Society will be the agency for assisting the sick co-operatives by way of supply of raw materials to societies, making available sized beams to private individuals marketing the products of co-operative societies, providing finances to co-operatives to renovate their looms and other ancillary facilities to improve the productivity. Upto the end of Fifth Plan 1004 power looms were functioning in the State including 700 looms in the co-operative sector. The production of cloth during the Fifth Plan (1974-78) was of the order of 24.20 million metres. An investment of Rs. 241.00 lakhs has been envisaged during the Sixth Plan for this sector, the objective being to organise 3423 power looms on two-shift basis which would employ about 8500 persons with monthly incomes varying between Rs. 400 to Rs. 500 and producing 20,000 metres of fabric per loom per annum. It is expected that 2,219 power looms would come into operation during the Sixth Plan. The total production is expected to go up to 131.50 million metres of cloth during the Sixth Plan period. To provide pre-weaving facilities to the individual allottees of power looms, seven more preparatory units would be set up which would assist 2,100 looms. One processing house is proposed to be set up during the Sixth Plan which would process about 25 per cent of the total estimated product by the end of the Sixth Plan. Co-operatives will be operating 1,120 power looms by 1982-83. Power Looms in the co-operative fold were acquired as far back as 1957. About 700 power looms out of the existing 900 require to be modernised for diversification of the product range in order to have greater consumer appeal. Educated unemployed youths can be encouraged to take to the power loom industry provided the intial handicaps would be removed. It is proposed that units of 8 power looms would be established on turn-key basis by the Apex Society for being handed over to enterpreneurs on hire purchase basis.

Khadi and Village Industries

23-88. The Orissa Khadi and Village Industries Board is developing as many as 21 types of village and Khadi Industries in the State according to the pattern approved by the Khadi and Village Industries Commission by availing financial assistance from them. With the expansion of this activity, in view of the emphasis laid down on this sector in the new Industrial Policy Statement of Government of India and its impact for uplift of the rural poor, the State Government will extend the required suport in areas of mangement and marketing. Marketing support will be provided to the existing 13 Gramadyoga Marketing Co-operative Societies in the form of share capital assistance. 37 new Gramadyoga Marketing Co-operative Societies are also proposed to be set up during the plan.

23-89. In order to popularise the manufacture and use of soap, match, ghani oil, hand-made paper, cereals, etc., aggressive advertisement and publicity campaigns have to be mounted by the O. K. and V. I. Board. To popularise the use of Khadi, Khadi and Village Industries Commission have a scheme of providing 10 per cent rebate on the sale of Khadi cloth, if the State Government arrange matching subsidy of 10 per cent. Since expansion of production of Khadi depends on its popularisation this scheme of subsidy on sale of Khadi is proposed to continue during the Sixth Plan period.

23-90. For effective implementation of village Industries Programme under the IRDP it is necessary to strengthen the administrative set up of the State Khadi Board. To intensify supervision, inspection and guidance, new Development Officers will be appointed to be put in charge of specific groups of industries and the Central Workshop for manufacturing implements and equipments needed by the production units. A number of non-official organisations are now engaged in development of Khadi and Village Industries. It is necessary to strengthen these institutions and support other new institutions during the Sixth Plan by providing them grant to employ qualified and skilled staff to manage them.

Small Scale Industries

23-91. The development programmes envisaged in this sector during the Sixth Plan are mainly for providing various infrastructural inputs for supporting an accelerated programme of rural industrialisation. The sixth plan coverage of small scale industries and rural cottage household industries may be nearly 8,000 units for whom a package of infrastructural inputs and other supporting measures had to be provided.

23-92. The Government of India have earmarked 504 items for exclusive production and manufacturing in the small scale sector. A strategy for growth of small industries within the frame work outlined by Government of India cannot be formulated without proper techno-economic and marketing survey to identify the capacities already available and the paths of future action. A broad spectrum market study through competent consultants will be taken up to identify resources potential in specific areas under different items.

23-93. To match the needs of larger programme of development and village and small industries it is proposed to take up a programme of development of entrepreneurs in the State to initiate the prospective entrepreneurs into basis of management, project formulation and implementation, marketing and other sources, financial aspects, etc. A course of 3 months duration has been taken up this year in four important growth centres such as Cuttack, Berhampur, Sambalpur and Rourkela. The District Industries Centres will be responsible for organising the entrepreneurial development programmes in the respective districts. About 85,000 artisans are working in rural areas covering trades like shot making and repairing, blacksmithy, pottery, tailoring, carpentry, electroplating, welding, sheet metaling, etc. To assist these artisans for improving their standard of living, it is proposed to organise training courses for improving their skill and productivity. In this regard, the extension agency will also be strengthened and expanded to the block level by the appointment of Block Level Extension Officers.

23-94. Supports to Small-Scale Industries will be extended in the shape of subsidy for feasibility and project reports, subsidy for capital investment, interest subsidy, seed capital subsidy, power subsidy, rent subsidy, subsidy towards the cost of developed sites, subsidy for supply of improved tools and equipments to artisans, etc.

Orissa Small Industries Corporation

23-95. The Orissa Small Industries Corporation is a nodal agency to perform a variety of services for small scale industrial units such as consultancy, raw material banks, construction of industrial estates and providing developed sites. During the Fifth Plan, the Corporation has supplied costly and scarce raw material worth Rs 4.33 crores. It has constructed 105 industrial sheds at a cost of Rs. 67.20 lakhs through Government support and institutional finance. It has disbursed Rs. 67.97 lakhs as seed capital to 351 entrepreneurs. It has also invested Rs. 72.30 lakhs in providing machinery to 97 small scale industries on hire purchase basis. Goods worth Rs 5.35 lakhs were exported through its export houses and the internal sale was of the order of Rs. 25.08 lakhs. Under the scheme of sub-contracting exchange the Corporation has received orders worth Rs. 22.00 lakhs which has been farmed out to small scale industries for execution. The Corporation arranged training of 193 entrepreneurs to improve their skill. It

has also given technical guidance and assistance to 781 entrepreneurs through its Consultancy Cell and has prepared 170 project reports during the Fifth Plan. The Corporation has a production unit for manufacture of T. V. sets. It has produced 7,486 Konark T. V. sets and sold 7,080 sets during the Fifth Plan period. The raw material depots will be maintained at suitable locations so that they can serve two District Industrial Centres. The O. S. I. C. will be taking up construction of 3,295 sheds at a cost of Rs. 1 lakh per shed with a provision for power and water connection in industrial estates for promotion of small scale industries. The Corporation has an Electronics Products Division which at present concentrates on manufacturing of T. V. sets. The annual licenced capacity of 5,000 sets, is proposed to be expanded to accommodate production of 10,000 sets in view of the good market response to Konark Brand T. V. sets.

23-96. The O. S. I. C. as the main promotional agency of small scale industries provides expert guidance and consultancy facilities to the entrepreneurs in identifying viable projects and in preparing bankable feasibility/project reports on their behalf. The strength of staff engaged in this task would be suitably augmented to match the heavier assignment envisaged for the Sixth Plan.

23-97. The entrepreneur belonging to Scheduled Caste/Scheduled Tribe and the physically handicapped entrepreneurs will be paid a sum of Rs. 50,000 as an interest free loan through O. S. I. C. which will be utilised as margin money for setting up small scale units. The O. S. I. C. will select entrepreneurs providing them training and assist them in setting up industries.

Share Capital Investment in Industrial Co-operatives

23-98. A bold programme of industrial regeneration through Panchayat Samiti and Gram Panchayats was taken up in Orissa in the early sixties in order to create an awareness about industries in rural areas and to emphasize their role in rural economy. Of the 120 small scale Panchayat Samiti industries set up in rural areas, in the cooperative sector, 14 units were revived and 20 units were revitalised in 1977-78 with an investment of Rs. 40.93 lakhs. It is proposed to assist 60 existing units which have potential for operations on a sustained basis and organise 30 new units of producers and artisans co-operatives during Sixth Five-Year Plan.

Orissa State Financial Corporation

23-99. The O. S. F. C. provides the bulk of term borrowings of small scale industrial units. The authorised capital is Rs. 10 crores and its subscribed capital by 31-3-1978 is Rs. 14.50 crores. The borrowing limit of the corporation has been fixed at 10 times of the paid-up share capital and reserves taken together. In case of refinance from I. D. B. I., the outstanding refinance is not to exceed 3 times at any point of time, of the paid-up capital and the reserves. Thus, the Corporation's capacity to merge the demand to S. S. I. units during Sixth Plan would depend upon its share base. During the Fifth Plan period the Corporation has disbursed loan to the extent of Rs. 12.70 crores to 690 industrial units. It availed refinance from the I. D. B. I. of the order of Rs. 7.44 crores during that period up to the end of the Fifth Plan. The State Government have invested Rs. 85.66 lakhs as share capital in this Corporation out of which Rs. 21.50 lakhs was invested during the Fifth Plan period.

23-100. The Share Capital base of the Corporation will be strengthened to enable it to fulfil the target set for the Five-Year Plan, 1978-83. The ordinary share capital of the Corporation needs augmentation by Rs. 6 crores and its special capital should be of the order of Rs. 2 crores (which are to be contributed on 50:50 basis by the State Government and the I. D. B. I.) to assist trained entrepreneurs towards seed capital provision. With this, the Corporation would be able to advance loans to the extent of Rs. 38 crores during the Sixth Plan period.

23-101. Industrial Units are entitled to concessional finance as a major of incentive to backward areas. Interest subsidy limit to 1% of the lending rate is allowed and it is administered through O. S. F. C. About 35 % of the 8,000 industries programme for the Sixth Plan are likely to come up in backward district. It is proposed to place Rs. 15 lakhs with O. S. F. C. towards interest subsidy on this account.

Marketing Societies and Quality Control

23-102. Government have laid down a price preference policy for the benefit of small scale industries. A price preference up to 15 percent an additional price preference of 3 per cent for I. S. I. marking is admissible to Small Scale Industries of the State. A rate contract scheme is

also being implemented and monitored through the Directorate of Marketing. For industrial products which are in regular use by Government and semi-Government organisation, rate contract are concluded with the local small scale industries for supply of these items without calling for tenders. So far, 35 items have been covered under the rate contract involving 165 industries. During the Sixth Plan 200 items will be included under the rate contract benefitting 1,000 small industries. The Directorate of Marketing intends to take up the exercise of analysis of budget provision of major purchasing Department/Organisation with a view to advising them for placing timely orders for the store items on the manufacturers so that the industries which are covered by rate contract would be fed with orders regularly and are not saddled with large orders at the fag-end of the financial year. This will lead to satisfactory marketing tie-up of the rate contract items.

23.103. There are 2 laboratories in the State for testing raw materials and Finished Industrial products to ensure their quality. Through these laboratories, 7,495 samples of products of industries like Chemical Electro-technical, Mechanical, Textiles, agro-based industries, Food Processing, and civil engineering industries equipments have been tested. The facilities for the existing laboratories will be grossly inadequate to meet the Sixth Plan requirement particularly when more than 8,000 small scale industrial units are proposed to be set up. It is proposed to expand the existing facilities during the Sixth Plan by setting up 5 new laboratories at strategic locations to provide testing facilities to small scale industries for quality control.

23.104. District Industries Centres have been set up in 13 districts of the State. The monitoring, evaluation and administrative supervision of the District Industries Centres has to be done at the headquarters level as well as at the Zonal level. It is proposed to set up a planning, monitoring and evaluation cell in the Directorate for this purpose. Zonal supervising centres will also be set up for facilitating monitoring evaluation functions.

Salt Industry

23.105. Salt production as an economic activity offers immense scope for seasonal employment to a large skilled and semi-skilled rural labour force. The present annual out-put of salt in the State is nearly 60,000 M.T. and the area under salt is only 73,000 acres. Domestic consumption of salt in the State is estimated to be around 2 lakhs M. T. per annum while the requirement for annual use is nearly another 1 lakh M. T. Twenty Salt Co-operative Societies have been formed with 2,924 members by the end of 1977-78 by salt labourers, who were encouraged to have their own production unit. According to surveys conducted by the Regional Research Laboratory, Bhubaneswar and CSMCRI of Bhavanagar, the State has an additional of 46,000 acres which can be developed for salt production and employ 92,000 worker families. The Sixth Plan projection is to bring an additional area of 50,000 acres for salt production in the State with the objective of providing employment to nearly 60 000 families for a period of about 6 months in a year. A provision of Rs. 183 lakhs is proposed to be made in the Sixth Plan for organising new Salt Co-operative Societies and assisting the existing societies in the shape of demonstration, share capital assistance for societies, subsidy for construction of office buildings, managerial subsidy, interest subsidy, etc. Various welfare measures like provision of drinking water, rest sheds, approach and internal roads, schools, dispensaries, etc. will be undertaken in salt areas and Government of India would reimburse the cost up to $\frac{2}{3}$ rd of the expenditure incurred.

23.106. The Orissa Maritime and Chilka Area Development Corporation which has been set up recently has schemes of taking up salt farms in the coastal belts. It will also take up schemes of setting up salt based chemical industries. It has identified 1,000 acres of land along the coastal belt of the State for production of salt. Their target is to cover 5,000 acres.

Handicrafts

23.107. Orissa has a rich heritage of as many as fifty varieties of handicrafts. Nearly 35,000 artisan families depend on this sector for their livelihood. However, the benefits of different development programmes under the plan have so far reached only 6 545 artisan families. There are at present 182 co-operatives of artisans with the total annual production of Rs. 42 lakhs. In order to enable this sector to contribute more fully to the task of rural regeneration in the form of higher productivity and maximisation of employment. The Sixth Plan Programmes aim at larger co-operative coverage, revitalisation of existing societies and extension of benefits at least to 15,000 more artisan families. Handicrafts and their expansion would be a vital link in the strategy of Integrated Rural Development Programme because they are predominantly rural based and labour intensive in character. Since under-employment is widespread among the rural artisans, this sector has a sizeable potential for improving the lot of rural artisans and reducing rural unemployment.

and under-employment to a considerable extent. A detailed survey is proposed to be conducted on the dispersal of handicraft units and the economic condition of artisans and their families so that a data base could be organised for more purposeful programming of developmental efforts and evaluation of their impact on the economic conditions of these people. Support will be provided to individual artisans, co-operatives and voluntary organisations in the shape of grant to individual artisans and craftsmen, share capital for co-operatives of artisans and craftsmen, interest subsidy to handicraft co-operatives and managerial subsidy to individual societies.

23·108. The training, designing and other infrastructural activities in this sector will be suitably expanded and strengthened.

23·109. The Orissa Co-operative Handicraft Corporation is an Apex Institution in the State for undertaking marketing of various handicraft products of the organised and in-organised sectors. Due to its low capital base, the impact of the Corporation activities has not so far been widespread. The Corporation has marketed goods worth of about Rs. 12 lakhs during the year 1977-78. A package of assistance is proposed to be extended through the Corporation to individual craftsmen and co-operative societies by opening raw material banks, sales emporium, organising exhibitions and arranging exports. Certain welfare measures like providing old age pension to master-craftsmen, providing housing assistance to poor craftsman etc. are also proposed to be taken up during the Sixth Plan. During the Sixth Plan the corporation proposes to export handicraft goods worth Rs. 25 lakhs and sell goods worth Rs. 3·00 crores through its emporia. The raw material banks to be opened in the districts are expected to have a total turn over of Rs. 25 lakhs.

Sericulture

23·110. Tassar rearing is well established in Orissa. Tribals engaged in this occupation should be exposed to modern techniques and technology in this area of activity for optimising the output from their efforts. The geophysical characteristics of Orissa such as hilly tracks along alluvial coastal stretches would respond equally well and sustain Mulberry culture on a larger magnitude. Some of the essential programmes for fortifying the development and growth of sericulture in Orissa are seed farms and motivating individual beneficiaries to take up sericulture as an economic activity. Training in improved rearing and spinning of mulberry cocoons and tassar cocoons and training in reeling and spinning for tribal youths and other artisans will be provided on an expanded scale during the Sixth Plan. So far, 2,160 Tassar Rearers have been brought under the co-operative fold by organising 33 societies. It is proposed to organise 13 new societies and assist 2,000 individual spinners and reelers by providing them with the margin money requirement and improved hand operated machineries.

23·111. The State Tassar Co-operative Society is the Apex Institution for the primary societies. It renders a variety of services to them such as financing needy spinner for collection of tassar cocoons, taking forest areas on lease for tassar rearing and arranging market for tassar cocoons. The Apex society will be assisted in the shape of providing its requirement of margin money and interest subsidy.

23·112. The existing Research Centre for improving the Silk worm races has been working in close collaboration with the Central Tassar Research Station at Ranchi. Controlled rearing of tassar silk, one of the activities of this centre has yielded encouraging results. It is proposed to strengthen this centre during the Sixth Plan and equip it to take up research on tassar and mulberry.

COIR INDUSTRY

23·113. The development of coconut based industry in the State has not so far been appreciable although Orissa has 13,244 hectares of coconut plantation with an annual out-put of more than 53 million nuts. Coir alone holds the promise of providing higher incomes and purchasing power to a large number of artisans who belong to the weaker sections of the population. The strategy of investment in this area during the Sixth Plan is to increase the out-put of brown fibre which would trigger off a chain of other productive and employment oriented activities. Individual artisans and co-operative societies would be mobilised for energising efforts in this sector during the Sixth Plan. The main programmes are training of artisans, providing them with sufficient capital support to take up remunerative activities, organising

co-operative societies and providing infrastructural facilities. To enable the new societies and the revitalised existing societies to acquire machinery and equipment, construct new sheds and godowns and other administrative buildings and to provide the margin money required for working capital, investment will be made in share capital of 40 societies out of which 25 societies will be organised during the Sixth Plan. To improve the quality of coir products and educate the coconut growers about the commercial value of coir training programmes will be organised in a more systematic and permanent basis.

LEATHER INDUSTRY

The Leather Corporation of Orissa

23-114. The Leather Corporation of Orissa will be the prime instrument for organising and implementing development of leather industry in the State. Set up during the Fifth Plan, the Corporation has an authorised capital of Rs. 100 lakhs and subscribed capital till date stands at Rs. 5-80 lakhs. The Corporation is a State Government undertaking entrusted with management of two tanneries, a shoe manufacturing unit and one industrial glove manufacturing unit.

23-115. About 10,000 families in Orissa are engaged in flaying hides, collection of skins, cottage tanning, household foot wear and leather goods manufacturing. The schemes of Khadi and Village Industries Board have covered only about 1,000 families so far. During the period of 1978-83 it is envisaged to cover at least 4,000 additional families and enable them to achieve a better standard of living. In the direction of achieving this objective, the supporting programmes would be training of artisans, increasing out-put of hides and skins, expansion of facilities for processing leather into finished goods and arrangement for marketing them in International as well as overseas markets. The Corporation has a scheme of collecting minor forest produce such as Myrobalan, Sunari Bark, Kannado bark, etc. which are being used in tanneries in the State and for supply to markets outside the State. This activity benefits the landless labourers and other unemployed people in rural areas apart from providing additional source of employment to the under-employed. The various development programmes of the Leather Corporation during the Sixth Plan envisage a grant-in-aid from the State of Rs. 21-14 lakhs and share capital investment of Rs. 64-00 lakhs which will enable the Corporation to avail of Rs. 99-10 lakhs of institutional resources and would provide employment to 1,884 cobblers, shoe makers and other weaker sections of the population. For organisational support and greater co-ordination, the Leather Corporation will be operating through the District Industries Centres.

Schemes of Film Development Corporation of Orissa

23-116. The Film Development Corporation of Orissa is a State Government undertaking entrusted with the task of building up of the necessary infrastructure so that a faster rate of growth can be attained in the sector of film production. During the Fifth Plan, allocation of Rs. 6 lakhs only was made available to the Corporation as share capital. But this has been found to be rather meagre for its manifold objectives, promotional as well as commercial. In order that the Corporation carries out some of its basic responsibilities, it has to be supported by large investments in share capital during the Sixth Plan period. The specific programmes of development which the Corporation would undertake during the Sixth Plan are provision of soft loan for margin money, promoting construction of Janata Theatres in the rural and semi-urban locations and setting up of a Studio to facilitate production of films in Oriya language. Government are considering to grant subsidy of Rs. 1 lakh as a supporting measure to each of such films made in the regional languages which would stimulate the forces for greater efforts on the part of the people to reverse the rising poverty line. Production of film in the State is inhibited because of the lack of infrastructural facilities such as Studios and availability on hire, of equipment for outdoor shooting. Since a modern studio is an essential pre-requisite for film making in the State, the Corporation propose to set up a Studio with an investment of Rs. 35 lakhs out of which 50 per cent would be equity support from the Government and the rest would be available from financing institutions.

Centrally Sponsored Schemes

23-117. The Orissa State Handloom Development Corporation is implementing two centrally sponsored schemes, viz., (1) Intensive Handloom Development Project and (2) Handloom Export Production Project for the benefit of weavers outside the co-operative fold. Till the year 1977-78, the Corporation has received financial assistance to the extent of Rs. 82-50 lakhs from the Government of India. During the sixth plan period the Corporation requires Rs. 104-09 lakhs as Central assistance for implementation of the projects by the Corporation.

23-118. District Industries Centres have been set up during 1978-79 in all the 13 districts of the State. According to the approved pattern of financing, the Government of India and the State Government are to share the recurring cost in the ratio of 3:1. The total amount required from the Government of India for the sixth plan in this regard is Rs. 243.75 lakhs. Besides this, Government of India will also provide 100% assistance amounting to Rs. 5.00 lakhs for each D. I. C. towards non-recurring expenditure for construction of office building, purchase of equipments, furniture and vehicles, etc. Thus, the total requirement has been projected at Rs. 308.75 lakhs during the sixth plan period.

23-119. With the introduction of the D. I. C. the R. I. P. programme will be merged into D. I. C. and various developmental schemes will be implemented through the D. I. C.

23-120. Government of India provide out of the Cess funds up to 2/3rd of the cost of the welfare works to be undertaken by State Government for the benefit of the salt workers. Provision of drinking water, rest sheds, approach and internal roads, schools, dispensaries, etc., are some of the approved projects. The salt Department contribution is reimbursed after completion of the works by State Government or its agencies.

23-121. During the sixth plan the following programme involving an amount of Rs. 180.00 lakhs is proposed:

(i) Provision for supply of drinking water	Rs. 30.00	lakhs
(ii) Road and Infrastructural development	Rs. 90.00	lakhs
(iii) Educational facilities	Rs. 45.00	lakhs
(v) Recreation facilities	Rs. 15.00	lakhs
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	Rs. 180.00	lakhs
	<hr/>	

23-122. The State Government will bear an expenditure of Rs. 60.00 lakhs. The balance amount of Rs. 120.00 lakhs may be provided by the Government of India during the Sixth Plan for this purpose.

STATEMENT IM-1

FIVE-YEAR PLAN 1978-83 STATES/INDUSTRY AND MINING PROJECTS

(Rs. in lakhs)

Sl. No.	Name of the projects/scheme	Status regarding approval etc.	Date of start of project	Date of completion	Cost of the project		F. E. components
					Original	Revised	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IPICOL ONGOING PROJECTS							
(i) Joint Sector Projects							
1	Refractory Project at Dhenkanal	Letter of Intent received Licence for import of capital goods applied for.	January 1977	October 1981	4,80.00	7,00.00	37.00
2	Tool Room at Sunabeda	Letter of Intent received Licence for import of capital goods and raw materials applied for.	January 1978	December 1979	95.99	1,00.00	22.36
3	Tyre and Tube Project at Bhubaneswar.	Industrial licence received C. G. clearance obtained. Foreign Technical collaboration approved.	July 1975	July 1982	24.00 00	33.50 00	687.00
4	Watch Assembly Unit at Konark	Letter intent not required Registered with Director of Industries. Licence for import of capital goods received.	March 1978	October 1979	31.25	40.25	..
5	Electrolytic Manganese Dioxide, Bilaspada, Keonjhar.	Letter of Intent received Market survey conducted Project Report under preparation.	January 1978	December 1981	3.50.00	3.50.00	..
Total					33,57.24	45,40.25	7,46.36

STATEMENT IM-I
OUTLAY AND EXPENDITURE

Expenditure up to 1973-74	For the Plan Expr., 1974-78	Proposed outlay, 1978-83		Yearwise phasing outlay/Approved outlay					Value of output	Employment	
		Total	F. E.	1978-79	1979-80	1980-81	1981-82	1982-83		During construction	During operation
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
..	8.00	54.50	37.00	7.00	25.00	22.50	..	..	425.00	250	752
..	3.00	9.59	22.36	6.00	3.50	..	..	..	138.00	40	155
..	87.00	179.00	687.00	..	..	18.00	87.00	74.00	2,952.00	300	800
..	1.43	7.07	4.20	4.00	3.07	..	..	..	14.00	40	105
..	5.50	30.90	..	3.00	15.00	12.90	..	..	213.00	90	230
..	104.93	281.06	750.56	20.00	46.57	53.40	87.00	74.00	3,742.00	720	2,042

[73-74]

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>(ii) Private Sector Projects</i>							
1	Orissa Auto Ancillary at Dhenkanal.	Letter of intent not required	January, 1977	January, 1980	45.29	45.29	..
2	Orissa Auto Products at Dhenkanal.	Ditto	January, 1977	January, 1980	45.56	45.56	..
3	Orissa Pressing and Tools at Dhenkanal.	Ditto	January, 1977	January, 1980	36.73	36.73	..
4	Deep Sea Trawler (6 Trawlers) ..	Import Licence secured	January, 1978	July, 1979	321.00	321.00	289.00
5	Zinc Refinery at Rairangpur ..	Letter of intent not required	January, 1978	January, 1980	74.00	74.00	..
6	Solvent Extraction at Kesinga ..	Ditto	January, 1978	September, 1980	70.00	70.00	..
7	Paper Project at Jagatpur ..	Ditto	February, 1977	July, 1979	70.00	70.00	..
8	Fish Processing and Freezing Plant of Paradip Marine Pvt. Ltd. at Bhubaneswar.	Ditto	October, 1977	June, 1979	31.39	31.39	..
9	Coke Oven Manufacturing Unit of Otto India Pvt. Ltd. at Kalunga (Expansion Project).	Ditto	October, 1977	June, 1979	27.32	27.32	..
10	Spinning Mill of Orissa, Spinning Mills Ltd. at Rajgangpur.	Ditto	October, 1977	March, 1979	72.00	72.00	..
11	Jute Twine at Rnpsa (Expansion Project).	Ditto	Existing Project under expansion		43.83	43.83	..
12	Soft Drink Project at Rourkeia..	Ditto	Ditto		27.00	27.00	..
Total ..					864.12	864.12	289.00

(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
..	0:50	2:00	..	..	2:00	..	..	..	47:89	23	47
..	0:25	2:34	..	..	2:34	..	..	..	62:38	23	47
..	0:42	2:28	..	..	2:28	..	..	..	21:90	16	39
..	1:00	5:00	289	5:00	..	..	..	..	279:60	120	300
..	1:00	1:00	..	1:00	..	..	..	..	106:92	30	83
..	2:75	1:75	..	1:75	..	..	..	..	194:63	40	104
..	2:84	5:36	..	2:00	3:36	..	..	..	43:20	28	58
..	1:00	1:64	..	1:64	..	..	..	..	83:54	13	27
..	0:84	0:20	..	0:20	..	..	..	..	700:00	25	75
..	3:55	2:45	..	2:45	..	..	..	..	356:40	200	540
..	5:00	1:00	..	1:00	..	..	..	..	88:83	..	247
..	2:85	5:00	..	5:00	..	..	..	..	41:25	..	50
..	22:00	30:02	289	20:04	9:98	..	..	..	2,026:54	518	1,617

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
NEW PROJECTS								
	Private Sector—45 Projects	..	..	..	..	4,900-00	..
Joint Sector								
1	Synthetic Detergent Complex	.. Registered with Director of Industries.	..	November, 1978	March, 1979	18-00	18-00	
2	Myrobalan Extraction	.. Letter of intent not required	..	November, 1978	June, 1980	74-80	74-80	
3	Sponge Iron (Tata Steel) Collaboration (Joda and Keonjhar).	.. Letter of intent received	..	December, 1978	June, 1981	2,360-00	2,360-00	
4	Oil Expeller-cum-Refinery Plant	.. Letter of intent received	..	April, 1979	October, 1980	200-00	200-00	
5	Calcium Carbide	.. Letter of intent received	..	April, 1979	April, 1982	500-00	500-00	
6	Malic Anhydride	.. Letter of intent received	..	April, 1979	June, 1981	350-00	350-00	
7	Export Oriented Bicycle	.. Letter of intent received	..	April, 1979	April, 1980	242-00	242-00	
8	Sulphuric Acid Oleum	.. Letter of intent received	..	April, 1979	October, 1980	150-00	150-00	
9	Sponge Iron (TISCO Collaboration), Joda, Keonjhar.	.. Letter of intent received	..	January, 1979	June, 1983	1,838-00	1,838-00	
10	Ferro Vanadium at Rairangpur..	.. Letter of intent received	..	March, 1979	June, 1982	2,000-00	2,500-00	
Total						7,732-80	8,232-80	2,513-00

(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
..	..	263.00	..	..	53.00	70.00	70.00	70.00	..	..	..
..	..	7.00	--	7.00	..	..	..	..	250.00	50	160
..	..	6.60	..	0.60	4.00	2.00	..	..	77.00	30	126
3.16	..	156.00	11.73	5.00	70.00	50.00	31.00	..	1,025.00	120	314
..	..	7.77	..	..	4.70	3.00	..	..	40.00	90	250
..	..	15.00	..	..	5.00	5.00	5.00	..	427.50	40	150
..	..	13.00	40.00	..	4.00	4.00	4.00	..	270.00	120	350
..	..	12.00	..	..	6.00	6.00	..	..	900.00	40	122
..	..	15.00	..	..	3.00	2.00	..	..	80.00	30	120
3.16	..	156.00	800.00	..	6.00	70.00	50.00	30.00	625.00	90	266
11.01	..	350.00	500.00	..	50.00	150.00	100.00	50.00	1,000.00	150	750
17.33		738.37	2,513.00	12.60	152.70	292.00	190.00	80.00	5,054.50	760	2,608

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(7B-79)

STATEMENT BIL-1

Project undertaken/to be undertaken by State Industrial Development Corporation (SIDCOL)

Serial No.	Name of the Corporation/Name of Project	Annual Capacity	Status of the Project	Date of start	Expected date of completion
(1)	(2)	(3)	(4)	(5)	(6)
ONGOING PROJECT					
PRIVATE SECTOR—					
1	Grissa Auto Ancillary at Dhenkanal ..	8,000 sets	.. Letter of intent not required.	January, 1977	January, 1980
2	Orissa Auto Products at Dhenkanal ..	Spare parts 8,000 sets	.. Ditto	January, 1977	January, 1980
3	Orissa Pressings and Tools at Dhenkanal	Pressing, Tooling and Heating Treatment 8,000 sets per annum.	Ditto	January, 1977	January, 1980
4	Deep Sea Fishing Trawlers (6 Trawlers) ..	Fish (180 tonnes varieties of fishes) (100 tonnes of quality fish).	.. Import licence secured	January, 1978	July, 1979
5	Zinc Refinery at Rairangpur ..	990 T.P.A.	.. Letter of intent not required.	January, 1978	January, 1980
6	Solvent Extraction at Kesinga ..	13,000 T.P.A.	.. Ditto	January, 1978	September, 1980
7	Paper Project at Jagatpur, Cuttack ..	4 tonnes per day	.. Ditto	February, 1977	July, 1979
	Fish Processing and Freezing Plant of Paradeep Marine Pvt. Ltd. at Bhubaneswar.	Fish Processing 5 tonnes per day. Plate Freezing.	Ditto	October, 1977	June, 1979
9	Coke Oven Manufacturing Unit of Auto-India Private Ltd. at Kalunga (Expansion Project).	2,000 tonnes per annum	.. Letter of intent not required.	October, 1977	June, 1979
10	Spinning Mills of Orissa Spinning Mills Ltd. at Rairangpur.	129,000 Spindles	.. Ditto	October, 1977	March, 1979
11	Jute Twine at Rupsa, Balasore (Expansion Project).	2,820 T. P. A.	.. Ditto	Existing project under expansion	
12	Soft Drink Project at Rourkela ..	7.20 lakhs Crates	.. Ditto	Ditto	

Total cost estimated			If Joint Sector Equity Capital contribution by Government/ Corporation			Up to 1977-78	Approved outlay					Total outlay for Five-Year Plan period, 1978-83	Employment	
Total cost	Equity	Debt	Name of Private Sector/ participation	Extent of participation	Equity capital to be provided by Government/ Corporation		1978-79	1979-80	1980-81	1981-82	1982-83		During construction	During operation
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
45-29	10-29	30-00	..	..	..	0-50	..	2-00	..	..	..	2-00	23	47
45-56	7-52	32-94	..	..	..	0-25	..	2-34	..	..	..	2-34	23	47
36-73	7-18	25-02	..	..	..	0-42	..	2-28	..	..	..	2-28	16	39
335-10	57-00	278-10	..	..	..	1-00	5-00	..	..	..	..	5-00	120	300
74-00	18-50	48-00	..	..	..	1-00	1-00	..	..	..	..	1-00	30	83
70-00	20-00	43-00	..	..	..	2-75	1-75	..	..	..	..	1-75	40	104
70-00	23-50	46-50	..	..	..	2-84	2-00	3-36	..	..	..	5-36	28	58
31-90	10-12	21-78	..	..	..	1-00	1-64	..	..	..	..	1-64	13	27
59-16	38-16	21-00	..	..	..	0-80	0-20	..	..	..	..	0-20	25	75
72-00	24-00	48-00	..	..	..	3-55	2-45	..	..	..	..	2-45	200	540
43-83	10-00	33-83	..	..	..	5-00	1-00	..	..	..	..	1-00	..	247
27-00	12-00	15-00	..	..	..	2-83	5-00	..	..	..	..	5-00	N. A.	50
910-57	237-57	642-57	..	..	..	31-96	20-04	9-98	..	..	..	30-02	518	1,617

STATEMENT III-I
Industry and Mining Projects—Outlays and Expenditure

Serial No.	Name of the Project/Scheme	Status regarding approval, etc.	Date of start of project	Date of completion	Cost of Project (Rs. in lakhs)		F. E. Components (Rs. in lakhs)	
					Original	Revised		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
INDUSTRIAL DEVELOPMENT CORPORATION								
A. CONTINUING SCHEMES								
1	Diversification of K. I. W.	.. Letter of intent obtained	1973-74	1980-81	618-00	523-00	82-00	
2	Refractories Unit Tile Factory (Diversification of Choudwar Tile Factory).	No approval necessary	1977-78	1979-80	15-50	—	..	
B. NEW STARTS/SCHEMES/PROJECTS								
1	Expansion at Sumandi	.. No approval necessary	1979-80	1980-81	4-00	..	—	
2	Additional Cement Mill at Hira Cement Works.	Ditto	1979-80	1981-82	300-00	..	..
3	Spinning Mill	.. Letter of intent received	1979-80	1981-82	500-00	..	..
4	Modification of Kalinga Iron Works	No approval necessary	1981-82	1982-83	41-00	..	..
5	Mini Cement Plant (1 No.)	.. Applied for Industrial Licence	1978-79	1980-81	200-00	..	..
6	Modification of Hira Cable Works	Approval not necessary	1981-82	1982-83	10-00	..	..
7	Steel Shethed Cable	.. Applied for Industrial Licence	1980-81	1982-83	210-00	..	..
8	XIPE & PVC Cables	Ditto	1979-80	1981-82	600-00	..	430-00	
9	Chrome Chemical Plant	.. Applied for Industrial Licence	1981-82	1982-83	400-00	..	..
10	Creation of new Salt Industry	.. Proposal stage	1981-82	1982-83	50-00	..	..
11	Expansion of Tower shop (HIW)..	Approval not necessary	1979-80	1980-81	75-00	..	..
12	Expansion of Ferrochrome Plant..	Proposal stage	1979-80	1982-83	750-00	..	Not yet assessed.	
13	Properzi Mill	.. Letter of intent received	1979-80	1981-82	70-00	—	..	
Total					..	3,748-50	..	512-00

Expenditure up to 1973-74 (Rs. in lakhs)	5th Plan expenditure up to 1974-78 (Rs. in lakhs)	Total	Proposed outlay—year-wise phasing 1978—83) (Rs. in lakhs)					Value of output (Rs. in lakhs)	Employment		
			F. D.	1978-79 approved outlay	1979-80	1980-81	1981-82		1982-83	During co-instruction (Nos.)	During operation (Nos.)
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1.00	213.00	154.00	..	..	100.00	54.00	..	..	823.00	160	637
..	1.00	14.50	..	8.00	6.50	..	..	..	20.00	25	100
..	..	4.00	..	..	2.00	2.00	..	..	2.00	6	25
..	..	100.00	..	..	7.00	33.00	60.00	..	180.00	62	250
..	..	42.90	..	..	13.00	21.00	8.90	..	300.00	250	10.00
..	..	41.00	..	..	..	..	30.00	11.00	..	..	..
..	..	66.00	..	8.50	26.10	39.40	..	..	100.00	25	100
..	..	10.00	..	..	..	..	5.00	5.00	40.00	..	..
..	..	70.00	..	..	..	17.00	20.00	33.00	350.00	112	450
..	..	102.00	..	..	2.00	50.00	50.00	..	600.00	62	249
..	..	133.00	..	..	..	..	50.00	83.00	250.00	100	400
..	..	16.00	..	..	..	..	8.00	8.00	28.00	37	150
..	..	25.00	..	..	..	..	13.00	12.00	50.00	37	150
..	..	250.00	..	..	15.00	100.00	100.00	35.00	600.00	125	500
..	..	25.33	..	2.50	2.50	15.00	3.33	..	600.00	12	50
1.00	214.00	1,051.73	..	11.00	174.10	331.40	348.23	187.00	3,943.00	1,013	4,061

(7B-80)

PROJECTS UNDERTAKEN/TO BE UNDERTAKEN BY STATE

Sl. No.	Name of the Corporation/Name of the project	Annual Capacity	Status of the project	Date of start
(1)	(2)	(3)	(4)	(5)
IPICOL ONGOING JOINT SECTOR				
1	Refractory	.. 23,000 tonnes..	Letter of Intent received. Application for import of capital goods submitted to Government of India on the 21st March 1978 Joint Sector agreement signed between IPICOL & Belpahar Refractories Ltd. with approval of State Government Company registered. Technical knowhow tied up appraisal completed by financing institutions viz. ICICI, IFCI, Infrastructure arranged.	January 1977
2	Tool Room	.. Rs. 140.70 lakh worth of tool.	Letter of intent received. Joint Sector agreement signed with a technically qualified and professionally experienced entrepreneur company registered project appraised by ICICI, which has agreed to participate in equity shares up to Rs. 70 lakhs. Land and building acquired along with part of capital goods and raw materials supplied for.	January 1975
3	Tyre & Tube	.. 4 lakh tyres .. 4 lakh tubes ..	Industrial licence has been received. Company has been registered. Sanction of Government of India for import of capital goods obtained. Foreign technical collaboration agreement approved by Government of India. Land acquired and civil construction taken up. Sanction of financing institutions for underwriting & term loan partly received. The project implementation has been delayed at the instance of IDBI	July 1975

IM-3

INDUSTRIAL DEVELOPMENT CORPORATION

(Rs. in lakhs)

Expected date of completion	Latest cost estimated			If joint Sector equity capital contribution by Government/Corporation		
	Total cost	Equity	Debt	Name or private sector/ participation	Extent of participation	Equity capital to be provided by Government/ Corporation
(6)	(7)	(8)	(9)	(10)	(11)	(12)
October 1981	700	240	445	Belpahar Refractories Ltd.	60	62.50
December 1979.	100	37	51	Mr. D. Ganguly ..	12	12.50
July 1982 ..	3359	1075	21.09	Transport Corporation of India Ltd. (TCIL.) Philips Carbon Black Ltd. (PCBL).	TCIL. 15 PCBL. 133.	266

STATEMENT

PROJECTS UNDERTAKEN/TO BE UNDERTAKEN BY STATE

Sl. No.	Name of the Corporation/ Name of the project	Up to 1977-78	Approved outlay			
			1978-79	1979-80	1980-81	
(1)	(2)	(13)	(14)	(15)	(16)	
1	Recfactory	..	8	7	25	22.5
2	Tool Room	..	3	6	3.5	..
3	Tyre & Tube	..	87	..	..	18

IM-2

INDUSTRIAL DEVELOPMENT CORPORATION

(Rs. in lakhs)

		Total outlay for Five-Year Plan period 1978-79	Employment	
1981-82	1982-83		During construct- ion	During operation
(17)	(18)	(19)	(20)	(21)
--	..	54.50	250	752
..	..	9.5	40	155
87	74	179	300	800

(1)	(2)	(3)	(4)	(5)
4	Watch Assembly Unit.	150,000 Watches	Letter of Intent not required. H. M. T. has agreed to allot one of the assembly units to IPICOL. This will be taken up as an unit of IPICOL eventually to be converted into a joint sector project in collaboration with a technical entrepreneur. Infrastructure arranged. Tenders invited for construction of factory building.	March 1978
5	Electrolytic Manganese Dioxide.	3000 tonnes	Letter of Intent has been received. Joint sector agreement has been signed with Rungta Mines (p) Ltd. with approval of Government Company registered. Market survey conducted. Project Report under preparation.	January 1978
Total				
NEW PROJECT				
Joint Sector				
1	Synthetic Detergent complex.	5,000 tonnes	Letter of Intent is not required. Joint Sector collaboration agreement has been signed with Mr. J. Jawhar of Indian Chemicals, New Delhi.	January 1978
2	Myrobalan Extraction.	18,000 tonnes	Letter of Intent not required, Joint Sector agreement finalised.	March 1978
3	Sponge Iron (T.I.S.C.O).	90,000 tonnes	Letter of Intent received. Joint Sector proposal has been received. (TISCO).	June 1979
4	Sponge Iron (TOR STEEL)	153,000 tonnes	Letter of Intent received, agreement has been signed with Tor Steel Research Foundation with approval of Government. Government of India, has recently approved technical collaboration agreement with Allis Cambers.	December 1978.
5	Ferro-Venadium	480 tonnes of Ferro-venadium, 47,500 tonnes Pig Iron.	Letter of Intent received. Project Report has been prepared. Norway and Soviet Union have been approached by Government of India for financial assistance. They have been shown keen interest. A team is proceeding to these countries in August 1978 to finalise arrangements	March 1978

(6)	(7)	(8)	(9)	(10)	(11)	(12)
October 1979	31.25	16.35	14.90	..	7.85	8.50
December 1981	350	140	210	Rungta Mines (p) Ltd.	35	36.40
..	4,540.25	1,508.35	741.99	..	262.85	385.90
March 1979.	19	12	6	Mr. J. J a w a h a r of Indian Chemicals.	3	7
June 1978	74.8	20	54.8	M/s. Laxmi Chemi- cals, and Industries, (P.) Ltd.	6.50	6.60
June 1983	1838	600	1230	TISCO ..	150	156
June 1981	2360	600	1768	Tor Steel Research Foundation (Tor Steel 60), (Allis Chamber.)	90	156
June 1983	2500	800	1700	..	..	350

(1)	(2)	(13)	(14)	(15)	(16)
4	Watch Assembly Unit ..	1.43	4	3.07	..
5	Electrolytic Manganese Dioxide	5.5	3	15	12.9
		104.93	20	46.57	53.40
NEW PROJECT					
Joint Sector					
1	Synthetic Detergent complex ..	..	7	..	..
2	Myrobalan Extraction ..	..	0.6	4	2
3	Sponge Iron (TISCO) ..	316	—	6	70
4	Sponge Iron (TOR STEEL) ..	3.16	5	70	50
5	Ferro-Vanadium ..	11.01	..	50	150

(17)	(18)	(19)	(20)	(21)
..	..	7.07	40	105
..	..	30.9	90	230
..	74	280.97	720	20.42
..	..	7	50	160
--	..	6.6	30	125
50	30	156	90	266
31	..	156	120	314
100	50	350	250	750

(1)	(2)	(3)	(4)	(5)
6	Oil Expeller-cum-refinery Plant.	15,000 tonnes expelling. 6,000 tonnes refinery, 30,000 tonnes solvent extraction.	..	April-1979
7	Calcium Carbide ..	15,850 tonnes	..	April-1979
8	Maleic Anhydride..	3,000 tonnes ..	..	April-1979
9	Export Oriented Bicycle.	3 lakhs ..	..	April-1979
10	Sulphuric Acid Oleum.	15,000 tonnes of sulphuric Acid.	..	April-1979
			Total ..	..

INDUSTRIAL DEVELOPMENT CORPORATION

1	Ductile Spun Pipe Plant.	36,000 MT Spun Pipe.	Originally implemented for production of spun pipe is now being altered for production of ductile pipe as advised by IDBI. Plant and machinery worth Rs. 37.00 lakhs imported. Detailed Project Report prepared. Financial Institutions are currently apprising the project. Infrastructure arranged. Part of the machinery installed. Civil construction completed.	1973-74
2	Refractories Unit (Tile Factory).	4,500 MT Refractory Bricks.	Detailed Project Report prepared. As it is a diversification programme of present Tile Factory, no further infrastructure is required.	1977-78

B. NEW STARS/SCHEMES/PROJECTS

1	Expansion of Sumandi.	2,000 MT Salt	Infrastructure is available at Sumandi. The idle areas can be better utilised for a value of output of Rs. 2.00 lakhs.	1979-80
2	Additional Cement Mill at Hira Cement works.	60,000 MT Cement	Project Report under preparation. Enquiry regarding supply of machineries has been initiated. Infrastructure is available at Hira Cement work, Bargarh.	1979-80

(6)	(7)	(8)	(9)	(10)	(11)	(12)
October-1980	200	70	130	Nalal & Verma & Co. (P) Ltd.	28	7.7
April-1982	500	176	309	Indian Carbide & Chemicals, Ltd.	75	15
June-1981	350	120	230	Philips Carbon & Black, Ltd.	12	50
October-1980	242	119	123	Dalmia Dairy Industry, Ltd.	12	50
October-1980	150	50	100	Rasoi International, Ltd.	5	21
	8,232.80	2,567	5,650.8	..	381.5	819.30
1980-81	523.00	214.00	309.00	..	..	..
1979-80	15.50	15.50	..	..	..	..
1980-81	4.00	4.00	..	..	..	..
1981-82	300.00	100.00	200.00	..	..	..

(1)	(2)	(13)	(14)	(15)	(16)	
6	Oil Expeller-cum-refinery Plant	..	..	4.7	3
7	Calcium Carbide	..	..	5	5
8	Maleic Anhydride	..	..	4	4
9	Export Oriented Bi-cycle	..	..	6	6
10	Sulphuric Acid Oleum	..	..	3	2
Total		..	330.17	12.6	152.7	292

INDUSTRIAL DEVELOPMENT CORPORATION

1	Ductile Spun Pipe Plant	..	60.00	..	100.00	54.00
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2	Refractories Unit (Tile Factory)	..	1.00	8.00	6.50	..
---	----------------------------------	----	------	------	------	----

B. NEW STARS/SCHEMES/PROJECTS

1	Expansion of Sumandi	2.00	2.00
---	----------------------	----	----	----	------	------

2	Additional Cement Mill at Hira Cement works.	7.00	33.00
---	--	----	----	----	------	-------

(17)	(18)	(19)	(20)	(21)
..	..	7.7	90	250
5	..	15.0	120	350
4	..	12	40	150
.	..	12	40	122
..	..	5	30	120
190	80	727.30	860	2,608

..	..	154.00	160	637
----	----	--------	-----	-----

..	..	14.50	25	100
----	----	-------	----	-----

..	..	4.00	6	25
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60.00	..	100.00	62	250
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(1)	(2)	(3)	(4)	(5)
(Negotiation has started with Bhilai Steel				
3	Spinning Mill ..	25,000 spindles per year.	Joint sector collaboration with M/s. Ramalingam Spinning Mill, Madurai is being finalised. Project report under preparation. Location under process of finalisation.	1979-80
4	Modification of Kalinga Iron Works.		Feasibility report under preparation by MECON. Infrastructure is available at plant site.	1981-82
5	Mini Cement Plant (1 No.).	33,000 MT portland cement.	Detailed probe on limestone deposit has been undertaken.	1978-79
6	Modification of Hira Cable Works.		Infrastructure is available at Hira Cable Works, Hirakud. Consultants are on the job of preparing report regarding modification to the plant.	1981-82
7	Steel Sheathed Cable.	2,500 Kms. cables	Preliminary work is in progress. Infrastructure is available at Hira Cable Works, Hirakud.	1980-81
8	XLPE & PVC Cable.	700 Kms. Cables	Under joint sector collaboration with NICCO, Calcutta is being finalised. Infrastructure is available at Hira Cable Works, Hirakud.	1979-80
9	Chrome Chemical Plant.	5,000 M. T.	Infrastructure is available at Ferrochrome Plant.	1981-82
10	Creation of New Salt Industry.	20,000 M. T. Salt.	Scheme is expected to be implemented as soon as finance is available. Infrastructure is yet to be created.	1981-82
11	Expansion of Power Shop (H. I. W.).	12,000 M. T. Powers.	Infrastructure is available at Hirakud Industrial Works Hirakud. Technical Officers, have already joined I D C O L for implementation.	1979-80
12	Expansion of Ferrochrome Plant.	15,000 M. T. H. C. F. C.	This is an expansion scheme. Infrastructure is available at Ferrochrome Plant, Jajpur Road.	1979-80
13	Properzi Mill ..	6,000 M. T. Aluminium Rod	Preliminary work is in progress. Infrastructure is available at Hira Cable Works, Hirakud.	1979-80
Total ..				

(6)	(7)	(8)	(9)	(10)	(11)	(12)
Plant regarding supply of granulated slag)						
1981-82	500.00	166.00	334.00	Ramalingam Spinning Mill, Madurai.	41.50	42.90
1982-83	41.00	41.00	..	..	..	..
1980-81	200.00	66.00	134.00	..	..	..
1982-83	10.00	10.00	.	..	..	..
1982-83	210.00	70.00	140.00	..	..	..
1981-82	600.00	200.00	400.00	NICCO CALCUTTA	..	102.00
1982-83	400.00	133.00	267.00	..	..	..
1982-83	50.00	16.00	34.00	..	..	..
1980-81	75.00	25.00	50.00	..	..	..
1982-83	750.00	250.00	500.00	..	..	..
1981-82	70.00	23.33	46.67	..	..	..
	3,748.50	1,333.83	2,414.67	--	41.50	144.90

(1)	(2)	(13)	(14)	(15)	(16)
3	Spinning Mill	..	..	13·00	21·00
4	Modification of Kalinga Iron Works.	..	..	..	..
5	Mini Cement plant (1 No. ) ..	..	0·50	26·10	39·40
6	Modification of Hira Cable Works.	..	..	..	..
7	Steel Sheathed Cable	..	..	..	17·00
8	XLPE & PVC Cable	..	..	2·00	50·00
9	Chrome Chemical Plant	..	..	..	..
10	Creation of New Salt Industry	..	..	..	..
11	Expansion of Power Shop (H. I. W.).	..	..	..	..
12	Expansion of Ferrochrome Plant.	..	..	15·00	100·00
13	Properzi Mill	..	2·50	2·50	15·00
		61·00	11·00	174·10	331·40

(17)	(18)	(19)	(20)	(21)
8.90	..	42.90	250	1,000
30.00	11.00	41.00	..	..
..	..	66.00	25	100
5.00	5.00	10.00	..	..
20.00	33.00	70.00	112	450
50.00	..	102.00	62	249
50.00	83.00	133.00	100	400
8.00	8.00	16.00	37	150
13.00	12.00	25.00	37	150
100.00	35.00	250.00	125	500
3.33	..	23.33	12	50
348.23	187.00	1,051.73	1,013	4,061

NOTE—Sl. No. B-3. Spinning Mill: 49% amounting to Rs. 81.50 lakhs capital of the total equity will be opened for public participation. 26% will be given by IDC and 25% will be given by Joint Collaborator M/s. Ramalingam Spinning Mills Madurai.

Sl. No. B-8. X L P E & P V C. CABLE. IDC will contribute 51% of total equity capital which comes to Rs. 102.00 lakhs out of the equity portion of Rs. 200.00 lakhs and balance 49% will be given by Joint Collaborator.

STATEMENT

INDUSTRIAL AREA UNDER DEVELOPMENT/PROPOSED

Sl. No.	Location & District	Total programme				
		Land to be Developed (hectares)	No. of plots (in hectrs.)	Estimated cost (Rs. in lakhs)	Date of Start	Expected date of completion
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Bhubaneswar ..	(a) 72 ..	60	66.72	1978	1983
2	Sunabeda ..	100 Nos. of houses	..	20.00	1979	1981
3	Dhenkanal ..	(a) 62 ..	50	66.00	1978	1983
		(b) 500 Nos. houses	100	1,900.00	1978	1981
4	Rairangpur ..	(a) 180 ..	150	110.00	1978	1985
		(b) 300 Nos. houses	..	60.00	1979	1981
5	Joda-Barbil ..	(a) 50 ..	40	40.00	1978	1985
		(b) 100 houses	..	20.00	1979	1981
6	Talcher ..	(a) 65 ..	50	65.00	1979	1985
		(b) 200 houses	..	40.00	1980	1982
7	Paradip ..	(a) 100 ..	80	250.00	1980	1987
		(b) 200 houses	..	40.00	1980	1982
8	Jagatpur ..	(a) 60 ..	50	65.00	1980	1986
		(b) 100 houses	..	20.00	1980	1982
9	Jajpur Road ..	(a) 60 ..	50	60.00	1982	1987
		(b) 100 houses	..	20.00	1982	1984

N. B.—Finance Pattern of Housing Project—

(i) 70% Institutional finance ..	Rs. 217 lakhs
(ii) 30% Margin to be provided by the State Government ..	Rs. 93.00 lakhs

Total Cost of Housing Project .. Rs. 310.00 lakhs

IM-3

TO BE TAKEN UP DURING 1978-83

Progress up to the end of 1977-78			Programme for Five Year Plan 1978-83			
Land acquired (hectares)	Land developed (hectares)	Expenditure (Rs. in lakhs)	Land to be acquired	Land to be developed	No. of plots to be allotted (in hectrs.)	Outlay proposed (Rs. in lakhs)
(8)	(9)	(10)	(11)	(12)	(13)	(14)
72	72	60	55.22
..	100 houses	..	20.00
62	..	2.67	..	62	50	63.33
..	500 houses	..	100.00
180	..	1.00	..	180	150	44.00
..	300 houses	..	60.00
..	50	500	40	40.00
..	100 houses	..	20.00
..	65	40	34	40.00
..	200 houses	..	40.00
..	100	25	20	50.00
..	200 houses	..	40.00
..	60	30	24	30.00
..	100 houses	..	20.00
..	15	10	15.00
..	50 houses	..	10.00
		3.67			647.55	
Total of land development			..	(a) 337.55		
Total housing project			..	(b) 310.00		
Total			..	647.55		

VILLAGE & SMALL INDUSTRIES
Summary Statement on Outlay/Expenditure

ANNEXURE I

(Rs. in lakhs)

Serial No.	Industry	Fifth Plan		1978-83			Five Year Plan 1978-83 (proposed)				
		Outlay as finalised in October 1976	1974-78 (Actual expes.	Total	Capital	Foreign Exchange	1978-79 approved outlay	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Handloom Industry ..	105.00	96.13	903.44	241.50	..	55.00	268.04	203.88	195.06	181.46
2	Powerlooms ..	20.00	20.60	235.60	235.23	..	13.00	85.20	72.00	52.80	12.23
3	Khadi & Rural Industries ..	8.00	6.43	59.00	..	..	5.00	11.95	13.15	13.35	15.55
4	Small Scale Industries, Industrial Estates. ..	..	171.74	3541.13	1682.10	14.00	110.76	71.77	856.01	901.44	871.15
		220.00									
5	Salt ..	..	9.32	187.84	141.84	..	12.44	38.85	43.95	45.30	47.30
6	Handicrafts ..	40.00	32.01	480.40	88.50	..	20.00	135.64	114.93	107.98	101.85
7	Sericulture ..	35.00	24.11	412.00	23.00	..	15.00	115.66	117.25	108.76	55.33
8	Coir Industry ..	10.00	6.28	75.00	35.00	..	4.80	19.90	21.35	14.70	14.25
9	Leather Industry ..	*	5.80	85.14	64.00	..	*	19.91	19.91	19.91	20.16
10	Film Development Corporation. ..	*	5.00	550.00	550.00	..	..	98.75	143.75	153.75	153.75
	Total ..	438.00	377.42	6529.18	3056.37	14.00	236.00	1565.67	1606.18	1613.05	1473.03

* Shown under large and medium Industries

ANNEXURE IV
VILLAGE AND SMALL INDUSTRIES
Scheme-wise details of Outlay/Expenditure

(Rs. in lakhs)

Sl. No.	Industry	Fifth Plan 1974-78 Actual Expr.	Five Year Plan 1978-83 proposed				1978-83				When likely to be completed.
			Total	Capital	Foreign Exchange	1978-79 Approved outlay	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
I. HANDLOOM INDUSTRY											
A. Continuing Scheme											
1	Assistance to Individual Weavers through intensive Handloom Dev. Project.	10.30	61.49	40.17	..	10.00	13.00	13.00	12.00	13.49	
2	Loans to weavers to contribute to the share capital of co-op. societies.	2.76	52.50	52.50	..	3.88	14.50	14.87	10.50	8.75	
3	Grant to weavers towards membership subscription of co-operative societies.	..	6.00	..	..	0.40	1.45	1.45	1.45	1.25	
4	Loans to weavers co-operative societies towards initial working capital.	5.21	75.00	75.00	..	..	20.00	20.00	20.00	15.00	
5	Interest Subsidy for share capital and working capital loans.	0.79	10.00	-	..	0.47	2.00	2.20	2.40	2.93	
6	Interest subsidy for loans of Central Co-operative Banks.	1.26	14.00	..	..	1.50	2.50	3.00	4.00	3.00	

(73-85)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
7	Training of weavers & Visit outside the State.	0.44	2.25	..	..	0.45	0.45	0.45	0.45	0.45	
8	Post weaving processing	5.05	11.00	11.00	..	11.00	..	..	..	..
9	Subsidy for Managerial Expenses and subsidy.	0.38	12.60	..	..	0.72	2.97	2.97	2.97	2.97	
10	Loans to weavers co-operative societies for construction of godown.	..	20.00	10.00	..	2.60	4.00	4.00	4.00	5.40	
11	Share capital contribution to the Orissa State Handloom Weavers co-operative Society.	33.00	32.05	32.05	—	8.50	8.00	8.00	7.55	..	
12	Rebate on sale of Handloom cloth.	33.23	96.00	..	..	11.25	15.25	20.50	24.00	25.00	
13	Propaganda, Exhibition & Fairs	1.49	15.00	..	..	1.00	3.50	3.50	3.50	3.50	
14	Organisational Expenses (Headquarters Organisation).	2.09	51.00	..	..	3.04	8.00	12.00	13.96	14.00	
15	Export Promotion of Handloom.	0.22	0.19	..	..	0.19	..	..	..	..
TOTAL—A—Continuing Schemes.		96.13	459.08	..	..	55.00	95.62	105.94	106.78	95.74	

B—NEW SCHEMES

1.	Peripatatic demonstration training for weavers.	..	2.95	..	—	..	0.55	0.80	0.80	0.80
2.	Study tour of the weavers outside the state.	..	2.00	..	..	..	0.50	0.50	0.50	0.50
3.	Raw material bank	.. ..	30.00	..	—	..	30.00	..	..	..
4.	Pre-weaving centres	.. ..	12.00	..	..	..	5.00	5.00	2.00	..
5.	90% credit Guarantee scheme	..	3.20	..	—	—	0.80	0.80	0.80	0.80
6.	Grant to Central Co-op. banks for supervisory staff.	..	1.80	..	—	..	1.00	0.53	0.27	..
7.	Prize for progressive weavers.	..	0.50	..	..	..	0.12	0.12	0.12	0.14
8.	Formation of handloom societies for educated unemployed personnel.	..	19.20	..	..	..	12.80	6.40	..	..
9.	Handloom Production units for Adivasi areas.	..	12.30	..	—	—	1.64	3.28	3.28	4.10
10.	Controlled Production centres.	..	11.41	..	..	..	3.20	3.20	3.20	1.81
11.	Opening of inter state sales emporia for handloom products.	..	15.00	..	..	..	3.75	3.75	3.75	3.75
12.	Grant-in-aid to thrift deposit fund of weavers co-op. societies.	..	12.00	..	..	..	3.00	3.00	3.00	3.00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
13	Loan-cum-Subsidy for construction of workshed-cum-house.	..	272.00	2,04.00	..	..	90.06	60.56	60.56	60.82	..
14	Modernisation of looms	..	50.00	37.50	..	—	20.00	10.00	10.00	10.00	..
Total—B—New Schemes		..	444.36	241.50	..	..	172.42	97.94	88.28	85.72	..
Total Handloom (A+B)		96.13	903.44	241.50	..	55.00	268.04	203.88	195.06	181.46	..
II—POWERLOOM											
A—Continuing Schemes											
1	Establishment of sizing unit.	2.00	19.00	19.00	..	3.00	5.50	5.50	5.00	..	..
2	Marketing of Powerloom products.	18.00	42.33	42.33	..	10.00	10.00	10.00	10.00	2.33	..
3	State capital contribution in Siminoi powerloom Co-operative Society.	0.60	—	..	..	..	..	..	..	..	..
Total—(A)—Continuing schemes.		26.60	61.33	61.33	..	13.00	15.50	15.50	15.00	2.33	..

A—New Schemes

1	Raw material Supply	31.25	31.25	..	..	10.00	10.00	11.25	.
2	Processing unit for Powerloom Fabrics.	32.00	32.00	..	..	10.00	15.00	7.00	..
3	Primary Powerloom Co-operative Societies.	48.50	48.50	..	..	20.00	20.00	8.50	..
4	Renovation of looms	10.50	10.50	..	..	10.50	..	..	..
5	Revitalisation of sick Powerloom units.	7.35	7.35	..	..	7.35	..	..	..
6	Managerial subsidy	4.80	..	..	..	2.00	1.60	1.20	..
7	Powerloom units for educated unemployed.	39.50	39.50	..	..	9.85	9.90	9.85	9.90
<hr/>										
	Total—B—New Schemes	173.90	169.10	..	..	69.70	56.50	37.80	9.90
<hr/>										
	Total—Powerlooms (A + B)	20.60	235.23	230.43	..	13.00	85.20	72.00	52.80	12.23

Sl. No.	Industry	Fifth plan 1974—78 Actual Expenditure	Five year plan 1978—83 proposed			1978—83					When likely to be completed
			Total	Capital	Foreign Exchange	1978-79 approved outlay	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
III KHADI & VILLAGE INDUSTRIES											
A—Continuing Scheme											
1	Subsidy on Khadi ..	2.00	27.50	..	..	2.50	5.00	6.00	6.00	8.00	..
2	Strengthening of State Khadi Board.	4.43	14.00	..	..	2.50	2.60	2.80	3.00	3.10	..
Total—A—Continuing		6.43	41.50	..	..	5.00	7.60	8.80	9.00	11.10	..
B—New Schemes											
1	Share capital Assistance to Gramodyoga marketing Co-operative Society.	..	5.00	..	..	..	1.25	1.25	1.25	1.25	..
2	Publicity	..	2.50	..	..	..	0.60	0.60	0.60	0.70	..
3	Staff support to Khadi Institutions.	..	10.00	..	..	..	2.50	2.50	2.50	2.50	..
Total—B—New Schemes		..	17.50	..	..	..	4.35	4.35	4.35	4.45	..
Total (A+B)		6.43	59.00	..	..	5.00	11.95	13.15	13.35	15.55	..

IV. SMALL-SCALE INDUSTRIES

A. Continuing Schemes

1	Interest subsidy on seed capital loan.	0.92	35.50	..	..	2.50	5.00	7.50	9.50	11.00	..
2	Interest subsidy to S.S.I. through O. S. F. C.	3.00	15.00	..	..	2.00	2.50	3.00	3.50	4.00	..
3	Rent subsidy and hire purchase of sheds.	2.19	78.87	..	..	1.50	10.45	18.22	22.50	26.20	—
4	Consultancy services of O. S. I. C.	1.26	5.00	..	..	0.50	1.00	1.00	1.00	1.50	..
5	Electronic Industry complex.	2.00	40.81	20.81	..	3.00	20.00	10.00	7.81	..	..
6	State-aid to Industries Act.	16.80	45.00	45.00	—	5.00	10.00	10.00	10.00	10.00	..
7	Share capital investment in Industrial Co-operative (P. S. I. units).	45.09	100.00	100.00	..	28.00	12.00	20.00	20.00	20.00	..
8	Share capital for Government Companies and State undertakings (P. P. Companies).	4.35	5.00	5.00	..	1.00	2.00	2.00	..	..	..
9	Pottery Development Centre	3.08	5.00	5.00	..	1.00	2.00	2.00	..	..	..
10	Orissa State Financial Corporation.	23.00	700.00	700.00	..	*	150.00	200.00	200.00	120.00	..
11	Price preference and Rate contract scheme	..	24.00	..	..	1.07	4.52	5.52	6.66	6.23	..

* Shown under large and medium Industries

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
12	Testing Facilities (Expn. & strengthening of existing Laboratories).	12-92	125-55	91-99	10-00	7-45	23-98	29-47	29-86	34-79	..
13	Publicity and Publication ..	0-40	5-80	..	..	..	1-00	1-60	1-60	1-60	..
14	State Export award ..	0-20	1-00	..	..	0-20	0-20	0-20	0-20	0-20	..
15	Planning, monetary and Evaluation Cell.	1-35	9-60	..	..	1-40	1-60	2-00	2-10	2-50	..
16	Entrepreneurial Assistance and Guidance Cell.	1-53	12-55	..	..	1-55	3-50	2-50	2-50	2-50	..
17	Ancillary Development Cell	1-19	8-20	..	..	0-70	1-50	1-75	2-00	2-25	..
18	Exhibition and Fairs ..	3-72	14-00	..	..	1-00	3-00	3-00	3-00	4-00	..
19	Interest subsidy for Industrial Co-operation.	1-99	15-00	..	..	0-50	3-00	3-50	4-00	4-00	..
20	Margin money for weaker section.	2-50	..	..	..	..	..	..	..	..	..
21	Indian International Trade Fair.	12-50	..	..	..	..	..	..	..	..	..
22	Equalisation of Power Tariff.	0-02	..	..	..	..	..	..	..	..	..
23	S. S. I. Consortium and Sub-contracting Exchange.	1-50	20-00	20-00	..	0-50	5-00	5-00	5-00	4-50	..
24	T. V. Project ..	4-00	..	..	..	..	..	..	..	..	..

25	Loans to O. S. I. C. for equity share for S. S. I. unit.	0.50	..	..	..	..	..	..	..	..
26	Export Promotion	0.48	12.33	0.05	4.00	0.37	3.13	2.80	2.95	3.08
27	Industrial Estate	25.25	573.75	573.75	..	7.59	112.41	132.50	151.25	170.00
Total—A—Continuing Schemes		171.74	1,851.96	1,561.60	14.00	66.83	377.79	463.56	485.43	428.35

B— New Scheme

1	Techno-economic Survey	..	27.00	..	..	4.15	5.00	5.00	6.00	6.35
2	Entrepreneurial Development Programme.	..	49.00	..	..	13.00	9.00	9.00	9.00	9.00
3	Extension service to improve the traditional skill of artisans.	..	116.00	..	..	..	35.00	30.00	30.00	21.00
4	Subsidy for feasibility/Project Report.	..	26.00	..	—	..	4.00	5.50	6.00	10.50
5	Capital Investment subsidy in non-backward districts.	..	520.00	..	—	5.00	124.00	134.00	120.00	137.00
6	Power subsidy	..	66.80	..	..	..	8.75	12.49	18.29	27.27
7	Subsidy towards the cost of developed sites.	..	256.17	..	..	..	50.00	50.00	75.00	81.17

(7B—87.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
8	Subsidy to artisans for tools and equipments.	..	10.00	..	..	.	2.50	2.50	2.50	2.50	..
9	Raw material bank ..	..	50.00	50.00	..	..	10.00	10.00	15.00	15.00	..
10	Investment in O. S. I. C. for developed sites.	..	127.85	127.85	..	..	40.00	30.00	30.00	27.85	..
11	Bridging Finance ..	..	32.50	32.50	..	7.50	10.00	5.00	5.00	5.00	..
12	Seed capital for ST/SC.	..	3.00	3.00	..	3.00	..	..	..	..	..
13	Rehabilitation of sick units.	..	75.00	..	..	5.00	18.00	18.00	17.00	17.00	..
14	State purchase of Store	..	45.00	2.00	..	2.50	10.00	10.51	10.73	11.26	..
15	Statistics and marketing intelligence.	..	5.60	..	..	0.68	1.33	1.15	1.19	1.25	..
16	Regional Inspection Centre	..	12.00	..	..	..	1.75	2.65	3.10	4.50	..
17	'Q' marking	..	10.00	..	..	.	2.00	2.50	2.50	3.00	..
18	Marketing outlet for educated unemployed.	..	20.00	20.00	..	..	5.00	5.00	5.00	5.00	..
19	Export Development Corpn. and export house.	..	18.50	18.50	..	0.50	5.00	5.00	4.00	4.00	..
20	Exhibition, Fairs & Publicity.	..	14.00	..	..	..	4.00	4.00	3.00	3.00	..
21	Trade Centre	..	5.00	..	..	..	1.00	1.20	1.30	1.50	..
22	Supervision and Control of P. S. L. Units.	..	7.50	..	..	2.60	1.40	1.20	1.15	1.15	..
23	Provision for Office-cum-Residence for D. I. C Staff.	..	80.00	80.00	..	..	20.00	20.00	20.00	20.00	..

24	District Industries Centre	--	81.25	..	..	..	19.00	20.00	21.00	21.25
25	Grants-in-aid to voluntary Association and Organisation.	..	3.00	..	..	..	0.75	0.75	0.75	0.75
26	Industrial Museum	..	10.00	..	..	..	2.50	2.50	2.50	2.50
27	Publicity	..	16.00	..	..	..	4.00	4.00	4.00	4.00
<hr/>											
	Total—B—New Schemes	..	1689.17	120.50	..	43.93	393.98	392.45	416.01	442.00	
<hr/>											
	Total Small Scale (A+B)	..	171.74	3541.13	1682.10	14.00	110.76	771.77	856.01	901.44	871.15

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(Rs. in lakhs)

V. SALT INDUSTRY
A. CONTINUING SCHEME

1	Strengthening of the administrative set up of the salt Industry.	1.16	5.50	0.60	1.10	1.20	1.30	1.30
2	Demonstration of Salt Industry.	0.75	12.50	..	..	..	3.00	3.00	3.25	3.25
3	Subsidy for construction of office buildings, godown and pump sets.	..	9.00	..	..	..	1.00	1.00	1.00	1.00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
4	Managerial Subsidy	2.61	3.00	..	..	5.00	0.75	0.75	0.75	0.75	0.75
5	Joint Programme for salt Industry.	1.10	60.00	60.00	..	2.00	10.00	15.00	16.00	17.00	
6	Loan to Co-operative societies.	3.70	4.84	4.84	..	4.84	..	..	..	..
Total—A—Continuing ..		9.32	94.84	64.84	..	12.44	15.85	20.95	22.30	23.30	
B—NEW SCHEME											
1	Exploration of Sub-soil brine.	..	10.00	..	..	..	2.50	2.50	2.50	2.50	
2	Interest subsidy	..	6.00	..	..	..	1.50	1.50	1.50	1.50	
3	Share capital assistant to salt co-operative.	..	77.00	77.00	..	..	19.00	19.00	19.00	20.00	
Total—B—New Scheme		..	93.00	77.00	..	..	23.00	23.00	23.00	24.00	
Total—(A+B)		9.32	187.84	141.84	..	12.44	38.85	43.95	45.30	47.30	
VI. HANDICRAFTS											
A—Continuing Schemes											
1	Survey of artisans and Craftsmen engaged in Handicrafts in the State.	0.06	5.00	..	..	0.50	1.50	1.00	1.00	1.00	
2	Training in State training centres.	0.26	18.00	..	..	1.27	4.00	4.00	4.00	4.73	

3	Handicrafts Model Production Centre at the State level.	1.59	5.00	..	..	0.24	3.00	1.26	0.25	0.25	..
4	Share Capital investment in the Orissa Co-operative Handicrafts Corporation.	4.90	18.00	18.00	..	5.00	3.50	3.50	3.50	2.50	..
5	Exhibition and Publicity	1.38	10.00	..	..	0.49	3.00	2.51	2.00	2.00	..
6	Rebate on Sale of Handicrafts.	4.02	10.00	..	..	0.87	3.00	3.13	2.00	1.00	..
7	Handicrafts Design Centre.	1.99	5.00	..	..	0.25	2.00	1.00	1.00	0.75	..
8	Managerial subsidy	..	12.50	..	..	..	3.25	3.25	3.00	3.00	..
9	Sales Emporia	0.92	15.00	..	..	0.20	3.00	3.50	4.00	4.30	..
10	Loans to Handicraft Co-operative Societies.	7.48	1.00	..	..	1.00	..	..	..	..	..
11	Grant to Handicraft Co-operative Societies.	9.41	..	..	..	..	..	..	..	..	..
TOTAL -A- CONTINUING SCHEMES		32.01	99.50	18.00	..	9.82	26.25	23.15	20.75	19.53	..

B- New Schemes

1	Grant to individual artisans and craftsmen.	..	12.00	2.50	3.00	2.50	2.00	2.00	..
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(7B-88)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2	Share capital for co-operatives of artisans and craftsmen.	..	1,00-00	1-00	39-00	25-00	20-00	15-00	..
3	Interest subsidy to handicrafts co-operatives.	..	80-00	..	..	0-40	19-60	20-00	20-00	20-00	..
4	Grants to voluntary organisations engaged in handicrafts.	..	5-00	..	..	..	2-00	1-00	1-00	1-00	..
5	Training of artisans and craftsmen outside the State.	..	4-50	..	..	0-20	1-30	1-00	1-00	1-00	..
6	Handicrafts research at State level.	..	5-00	..	..	0-25	1-00	1-15	1-25	1-35	..
7	Opening of new craft school and strengthening of existing school.	..	5-10	..	..	2-83	0-84	0-48	0-48	0-47	..
8	Crafts training under Master craftsman.	..	4-00	..	..	..	1-00	1-00	1-00	1-00	..
9	Training of societies personnel.	..	5-00	..	..	0-20	0-40	0-40	2-00	2-00	..
10	Market survey for handicraft products.	..	3-00	..	..	..	0-75	0-75	0-75	0-75	..
11	Share capital for non-ferrous metal co-operative societies.	..	10-50	10-50	..	1-00	2-50	2-50	2-25	2-25	..
12	Old age pension to master craftsmen.	..	5-00	..	..	..	2-00	1-00	1-00	1-00	..
13	Housing assistance to craftsmen.	..	120-00	60-00	..	..	30-00	30-00	30-00	30-00	..

14	Administration and supervision of Handicrafts programme.	..	0.30	..	..	1.30	2.00	1.00	1.00	1.00
15	Rehabilitation of ex-trainees.	..	0.50	..	—	0.50	..	..	..	..

TOTAL B—NEW SCHEMES

Total Handicrafts (A+B)

..	380.90	70.50	..	10.18	109.39	91.78	87.23	82.32	..
32.01	480.40	88.50	..	20.00	135.64	114.93	107.98	101.85	..

VII. SERICULTURE

A—Continuing Schemes

1	Mulberry Basic Seed Farm	1.04	5.00	..	...	0.62	1.38	1.00	1.00	1.00	..
2	Mulberry Cocoons Demonstration Farm.	0.89	50.00	..	..	3.58	11.42	12.00	13.00	10.00	..
3	Rearing of Tassar Cocoons.	1.45	4.00	..	..	0.53	0.77	0.85	0.90	0.95	..
4	Reeling & Spinning training for tribal youths.	1.30	10.00	..	..	0.96	3.00	1.84	2.00	2.20	..
5	Reeling & Spinning training for other artisans.	1.33	13.30	..	..	1.50	2.50	3.00	3.00	3.00	..
6	Tassar rearing in compact block.	6.52	21.00	..	..	3.00	4.50	5.00	5.50	3.00	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
7	Assistance to Tassar Co-operative Societies.	2.39	6.00	..	..	0.84	1.26	1.26	1.26	1.38	..
8	Marketing support to State Tassar Co-operative Societies.	2.45	23.00	23.00	..	..	8.00	8.00	5.00	2.00	..
9	Subsidy to State Tassar Co-operative Societies.	2.90	7.00	..	..	0.80	1.30	1.40	1.70	1.80	..
10	Organisational support	3.84	22.40	..	..	2.32	5.08	5.00	5.00	5.00	..
Total—A—Continuing Schemes.		24.11	161.40	23.00	..	14.15	39.21	39.35	38.36	30.33	..
B—NEW SCHEMES											
1	Seed Station for Silk Worm (Mulberry).	..	25.00	..	..	..	7.00	8.00	5.00	5.00	..
2	Pilot Project Centre ..	..	15.00	..	..	..	4.00	5.00	3.00	3.00	..
3	Establishment of chawki rearing centre for Mulberry.	..	5.60	..	..	..	1.40	1.40	1.40	1.40	..
4	Eri Cocoons Production Centre.	..	10.00	..	..	0.45	1.55	2.00	3.00	3.00	..
5	Plantation of Tassar food plant.	..	20.00	..	..	..	7.50	7.50	5.50	..	..
6	Assistance to individual Tassar beneficiaries.	..	5.00	..	..	..	2.00	1.00	1.00	1.00	..
7	Financial Assistance to individual Co-operatives in Mulberry growing.	..	160.00	..	..	..	50.00	50.00	50.00	10.00	..
8	Research in Sericulture.. (A+B)	..	10.00	..	..	0.40	3.00	3.00	2.00	1.60	..
Total—B—New Schemes		..	250.60	..	..	0.85	76.45	77.90	70.40	25.00	..
Total Sericulture A+B		..	412.00	23.00	..	15.00	115.66	117.25	108.76	55.33	..

VIII. COIR INDUSTRIES

A—Continuing schemes

1	Training of coir artisans	0.73	4.00	..	..	1.00	0.75	0.75	0.75	0.75	..
2	Share capital investment in Coir Co-operatives.	..	30.00	30.00	..	0.80	7.20	8.00	7.00	7.00	..
3	Subsidy for coir societies	1.87	6.00	..	..	0.50	1.50	1.50	1.50	1.00	..
4	Coconut Ware Housing and Marketing societies.	1.35	5.00	5.00	..	0.15	1.20	1.20	1.20	1.25	..
5	Coconut Industrial complex.	0.78	7.50	..	..	0.85	3.00	3.65	..	..	..
6	Loans for Coir Industries	1.55	0.30	..	..	0.30	..	..	..	..	..
Total—A—Continuing ..		6.28	52.80	35.00	..	3.60	13.65	15.10	10.45	10.00	..

B—New Schemes

1	Assistance to individual artisans.	..	1.50	..	..	..	0.50	0.50	0.25	0.25	..
2	Model demonstration units for coir.	..	5.00	..	..	1.00	1.50	1.00	0.75	0.75	..
3	Establishment of Common facility and service centres for Coir.	..	6.50	..	..	..	2.00	2.50	1.00	1.00	..
4	State Coir Design and Training Centre.	..	4.00	..	..	..	1.00	1.00	1.00	1.00	..

(7 B—89)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
5	Celebration of Coir Week and publicity.	..	2.20	..	..	0.20	0.50	0.50	0.50	0.50	..
6	Strengthening the apparatus for direction and control of Coir Development Programme.	..	3.00	..	..	..	0.75	0.75	0.75	0.75	..
Total B—New Schemes		..	22.20	..	..	1.20	6.25	6.25	4.25	4.25	..
Total Coir Industries (A+B)		6.28	75.00	35.00	..	4.80	19.90	21.35	14.70	14.25	..

IX. LEATHER INDUSTRY

New Schemes

(a)	Training of Artisans in Leather processing.	..	4.82	..	..	0.10	1.18	1.18	1.18	1.18	..
(b)	Training of Artisans in Footwear making.	..	16.32	..	..	0.15	4.00	4.00	4.00	4.17	..
2	Common Facility Centre for finished leather.	..	30.00	30.00	..	..	7.50	7.50	7.50	7.50	..
3	Collection of Hide & Skin.	..	3.22	3.22	..	1.50	0.43	0.43	0.43	0.43	..

4	Creation & Expansion of facilities for processing hide & skin	..	7-55	7-55	..	2-00	1-35	1-35	1-35	1-50	..
5	Expansion of existing units & setting up new footwear units.	..	3-23	3-23	..	1-50	0-45	0-45	0-45	0-38	..
6	Raw material depots	..	20-00	20-00	..	..	5-00	5-00	5-00	5-00	..
7	Leather Corporation	5-80	..	..	..	..	..	..	..	..	..
Total		5-80	85-14	64-00	..	5-25	19-91	19-91	19-91	20-16	..

X. FILM DEVELOPMENT CORPORATION		5-00									
New Schemes											
1	Soft loan for margin money.	..	15-00	15-00	..	..	3-75	3-75	3-75	3-75	
2	Establishment of a Studio	..	35-00	35-00	..	..	15-00	20-00	..	..
3	Construction of Cinema house.	..	500-00	500-00	..	..	80-00	120-00	150-00	150-00	
Total		..	5-00	550-00	550-00	..	..	98-75	143-75	153-75	153-75

ANNEXURE III

VILLAGE AND SMALL INDUSTRIES—DRAFT FIVE-YEAR PLAN 1978—83

Statement of physical targets & achievements

Sl. No.	Industry	Five-Year Plan 1978—83— Targets					1982-83
		Fifth Plan 1974—78 Achievement	1978-79	1979-80	1980-81	1981-82	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
HANDLOOM INDUSTRY							
1	No. of handlooms in co-operative sector	11.400	7000	6000	6000	6000	5000
2	Outside Co-operative Sector	1.500	4000	4500	1000	..	..
3	Production of handloom cloth (Million metres).	188.94	64.42	77.02	85.42	92.62	98.62
4	No. of weavers employed (lakhs)	0.23	0.22	0.21	0.14	0.12	0.10
5	Amount of working Capital loans obtained by the Weavers Co-operatives under R. B. I. Scheme of finance (Rs. in lakhs).	166.72	243.00	262.20	280.80	299.40	314.00
POWERLOOMS							
1	No. of Powerlooms	11.00	200	500	500	500	500
2	Production (M. Metres)	24.2	6.5	16.5	26.5	35.5	46.5
3	No. of persons employed (lakhs)	0.006	0.002	0.005	0.005	00.05	0.005
I KHADI & RURAL INDUSTRIES							
Employment (total in 1000)							
(i) Khadi							
(ii) Rural Industries							

SMALL SCALE INDUSTRIES

1	No. of new units set up						
	(a) In urban areas ..	1301	400	400	500	500	452
	(b) In rural areas ..	1650	700	900	1000	1150	1642
2	Types of industries (viz., Engineering chemicals, Leather products, rubber and plastic products, textiles, food products, wood products, repairing and servicing, etc.).						
3	Investment proposed ..	14 crores	15 crores	16 crores	15 crores	17.3 crores	
	No. of units going in for expansion diversification.						
4	No. of units—						
	(a) In urban areas ..	260	80	80	100	100	90
	(b) In rural areas ..	330	140	180	200	230	330
5	Type of industries	As in IV. I. (b) above					
6	Investment proposed (Rupees in lakhs) ..	116.78	119.34	465.27	509.02	532.31	586.95
7	Additional employment created (No. of persons)—						
	(a) In urban areas ..	8601	4030	4030	5040	6040	8060
	(b) In rural areas ..	13038	7037	1038	12251	12500	22300

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
8 Loans Loans advanced under State Aid to Industries Act/Bizos.							
—Amount (Rupees in lakhs) ..	16.00	5.00	10.00	10.00	10.00	10.00	
—No. of units ..	245	50	100	100	100	100	
9 Margin/Seed money advanced							
—Amount (Rupees in lakhs) ..	2.50	10.00	128.25	142.59	184.78	222.93	
—No. of units ..	18	40	2.50	270	2.90	410	
INDUSTRIAL ESTATES							
1 No. of estates/areas completed but not functioning.		Nil					
2 No. of functioning estates/areas		20					
No. of sheds ..	432+105 (OSIC)	330	390	450	525	600	
No. of units working ..	480	..	..	..	..	..
No. of persons employed ..	250	2,210	2,800	3,300	3,675	4,200	
HANDICRAFTS							
1 Additional employment Additional employment created (No.) ..	16,445	8,555	5,000	10,000	5,000	5,000	
Sales through State emporia (Rs. in lakhs).	14.04	30.00	50.00	65.00	85.00	100.00	

SERICULTURE

1	Production (lakh Kgs.)	0.00089	0.048	0.12	0.30	0.36	0.22
	Mulberry	0.36 Kahan	0.38 Kahan	0.39 Kahan	0.40 Kahan	0.43 Tassar	0.44 Tassar
	Non-mulberry	0.01 (Eri)	0.02 (Eri)	0.06 (Eri)	0.10 (Eri)	0.14 (Eri)	0.18 (Eri)
2	Additional employment created (No.)	3,980	3,970	7,247	11,033	9,476	9,508

COAL INDUSTRY

1	No. of Co-operative Societies	19					
	Viable	3	2	4	5	5	5
	Potentially Viable	12	..	..	..	..	..
	Others	4	..	..	..	..	..
2	Institutional credit obtained by Co-operative Societies (Rupees in lakhs)						
	No. of Societies						
	Amount (Rs. lakhs)						
3	Employment (lakhs)						
	Total	1,836	500	600	2,000	2,500	2,500
	Within co-operative fold						

CHAPTER 24

MINERAL DEVELOPMENT

24.1. Mineral resources are one of the major natural resources of the State and the State has the unique distinction of leading the country in the production of several minerals such as Iron-ore, Chromite, Limestone and Dolomite. The mineral development programmes for the Five Year Plan (1979—83) has laid emphasis on the following three aspects :—

- (a) Systematic Mineral Exploration
- (b) Intensive Mineral Exploitation
- (c) Research and quality Control

Systematic Mineral Exploration

24.2. As a result of the continuous efforts by the Directorate of Mines, G. S. I., I. B. M., and other organisations in the field of geological mapping and mineral exploration, large number of mineral deposits have been discovered in the State. The State has got the favourable geological background for occurrence of a host of other valuable and strategic minerals. However, in order to ensure their location and exploitation it is desirable to continue not only mineral exploration of the unsurveyed areas by modern sophisticated methods, but also proving of the reserves of different minerals to ascertain their grade and extent of reserves. The estimated reserves of different minerals on the basis of present day knowledge are described below—

	(In million tonnes)
Iron Ore (+58% Fe) ..	Over 3,300
Manganese Ore (+30% Mn.) ..	43
Chromite (+40% Cr ₂ O ₃) ..	19
Nickel Ore (+1% Ni) ..	65
Vanadium Ore (+1% V ₂ O ₅) Proved ..	2
Copper Ore (1.5% Cu) ..	1.6
Lead Ore (5% pb) ..	5.6
Bauxite (+40% Al ₂ O ₃ & 5% SiO ₂) ..	Over 1,000
Coal (Non-cooking) ..	Over 10,000
Limestone ..	700
Dolomite ..	360
Fireclay ..	62
Chinaclay ..	35
Quartzite ..	Over 15
Mineral Sand (Ilmenite, Sillimanite, Rutile, Monazite, Zircon, etc.) ..	50

24.3. The G. S. I., have so far covered 80,000 sq. kms. and prepared maps on different scales out of the total area of 155. thousand square kilometres. Geological maps over an area of 50,000 sq. kms are available. Hence balance 70,000 sq. kms. have to be covered leaving the rest 35,000 sq. kms. of coastal alluvial tract. It is proposed to take up 12,000 sq. kms. of reconnaissance and Mineral inventory survey during the 6th plan period with the help of modern sophisticated methods of investigation including geophysical and geochemical surveys, remote sensing and satellite imagery techniques etc., out of which 9,500 sq. kms. will be taken up under the new schemes and the rest 2,500 sq kms with the existing non-plan components. Detailed proving of Chromite, Tin, Bauxite, Gold, Graphite, Limestone and Dolomite. Clays, Base metals

Pegmatite and rare minerals would be taken up on project basis by detailed mapping, drilling, trial excavation and sampling and analysis of mineral and rock samples. It is proposed to provide technical assistance to other agencies in the matter of drilling proving of ore reserves and drilling of Dam reservoir sites.

Intensive Mineral Exploitation

24.4. Mineral exploitation is done both in the private sector and in the public sector. The Orissa Mining Corporation, a State Government undertaking, the first of its kind in the public sector in India operates eighteen Iron, Manganese and Chromite mines in different parts of the State. The activities of the Corporation also extend to exploration, development sale and export of these ores. There are about 229 working mines in the State engaging about 60,000 persons. The total annual mineral production of the State is about 15 million tonnes constituting about 9 per cent of the total all India output. The total annual mineral export is of the order of 2.5 million tonnes.

24.5. The Achievement of the Directorate of Mines in brief up to the end of 1977-78 are indicated in Annexure-1.

Streamlining the Mining Administration

24.6. Production of various minerals has increased during the Fifth Plan period in spite of various constraints in the despatches and exports of minerals. At the end of the 4th Plan period production of minerals of the State was about 12.6 million tonnes and it reached 15 million tonnes at the end of 1977. It is anticipated that the production of all minerals would reach 20 million tonnes by the end of 6th Plan period. Mining revenue has increased from Rs. 99.74 lakhs during 1973-74 to Rs. 409.23 lakhs during 1977-78 including Agency Fees from the O. M. C. It is expected that the normal revenue would reach the level of Rs. 824.00 lakhs by the end of 6th Plan period. Similarly the total number of mines which have increased from 200 to 395 during the 5th Plan period is expected to reach 500 by the end of 6th Plan. For regular inspection of mines supervision of the increasing production and despatches, effective check on movement of ores, conservation of minerals and timely assessment, demand and collection of mining revenues, the administrative machinery both at the field level as well as at the headquarters of the Directorate has to be strengthened. Adequate number of weigh-bridges and check-gates have to be provided to plug leakage of mining revenue.

Mineral development and information cell

24.7. The target of production of various minerals has been kept at 20 million tonnes by the end of 6th Plan period which would earn a revenue of Rs. 824 lakhs. To reach the target of production and despatch of minerals infrastructure facilities have to be provided to the mining industry. Besides immediate construction of roads and railway communications for economic transport of minerals/ores, there is an urgent need to study and analyse the cost structure of minerals in Orissa. For this an enormous amount of compilation of data on Mineral Production, Transport, Industrial consumption Export, cost of production and productivity, Revenue and constant co-ordination with the Railway, Roads and Port authorities, M. M. T. C. and other undertakings in private and public sectors has to be effected so as to enable a reduction in the cost structure of minerals in the State and formulation of guide lines for prospective planning. The Mineral Development and Information Cell has to be strengthened accordingly.

Encouraging private entrepreneurs in the field of Mineral Exploitation

24.8. The Assaying and Analytical Laboratories of the State analysed about 10,000 samples with 20,000 constituents at the end of 4th Plan period. It was estimated at the beginning of the 5th Plan that the laboratories would analyse about 12,000 to 15,000 samples with 30,000 to 35,000 constituents by the end of 5th Plan period. But it was found that the target was far exceeded even before completion of the Fifth Plan. During 1976-77 the Laboratories analysed 17,343 samples with 45,938 constituents which included 1,600 samples with 8,000 constituents of commercial nature. The laboratories at Joda and Jajpur Road have been recognised by Export Council of Government of India for analysing ores and minerals for export purposes. The laboratories are analysing commercial samples and earning substantial revenue for the State. It is proposed to analyse additional samples of 20,000 with 50,000 constituents annually in addition to the present work load. To cope up with the increasing work load of analysing samples of the prospecting section and to keep pace with analysis of samples of minerals despatched for assessment of mining revenue the scopes of Analytical Laboratories should be increased. The

present laboratories have to be equipped with additional equipments, chemicals and man-power and additional laboratories have to be opened in the mining areas to cope with increasing work load.

Research and Analysis

24.9. Despite paucity of funds substantial progress has been made in beneficiation studies of low grade Limestone, China clay, Bauxite, Chromite, Kyanite among others. Some of the experiments on laboratory scale have been completed and process made ready for pilot plant scale studies. The petrological section of the research laboratory has prepared thin sections of the minerals and rock samples of the exploration programme in order to find out genesis and origin of the rock types and mineral groups which help in exploration programme. The increasing work load due to augmentation of exploration programme would necessitate widening the scope of research laboratory. It is proposed to take up pilot plant studies on upgradation of china clays and beneficiation of cassiterite.

24.10. Lack of infrastructural facilities such as roads and railways has been the greatest bottleneck to mineral development programme during all the previous plans. Absence of a direct rail link between Paradeep Port and the mineral rich hinterland and a net work of roads in and around the mining areas of the State has impeded the growth of this sector of State's economy and reduced the export potential of Paradeep considerably.

24.11. Commensurate with the around mineral Development Programmes envisaged during the Sixth Plan period covering all phases of activities of the Directorate in the field of mineral exploration, exploitation, administration, research and quality control the additional administrative work load would considerably be increased at the headquarters level which can not be coped up with by the existing officers and staff. Hence, there is a necessity of strengthening the headquarters organisation as well.

24.12. On the above background, the Sixth Plan targets and objectives have been summarised in Annexure III and the proposed plan outlay is given in Annexure IV.

Schemes of the Orissa Mining Corporation

24.13. The Corporation proposes substantial expansion and diversification in its activities during this period by taking up schemes for mineral processing and development of mineral based industries. It is proposed to develop deposits of bauxite, graphite, limestone, magnetite, china clay and fire-clay for the first time. An outlay of Rs. 1,200 lakhs has been proposed for this purpose during 1978-83, which includes a provision of Rs. 244.25 lakhs required for completion of the ongoing schemes.

24.14. As a result of implementation of these schemes involving a total outlay of Rs. 1,200 lakhs, annual production of ores and minerals is expected to step up to 2.8 million tonnes by 1983. The annual sales turnover is expected to reach a figure of Rs. 50 crores. The scheme will provide additional employment to about 3,500 persons.

24.15. The Orissa Mining Corporation is now operating, in all, 18 mines in different parts of the State. Each mine has to be provided with statutory buildings, namely, creche, canteen, rest shelters, vocational training centre, dispensary, explosive magazine in accordance with mining regulations. Besides, residential quarters for mine workers and supervisory staff have also to be constructed. The total requirement of funds for such construction is estimated at Rs. 125 lakhs. It has been proposed to construct these buildings in phases. It is proposed to invest a sum of Rs. 46 lakhs during the period, 1978-83, which includes an outlay of Rs. 5 lakhs during 1978-79.

24.16. The continuing schemes are Stage II of Daltari Iron-ore Project and Gandhamardan Iron-ore Project. The basic information regarding these projects are given in Annexures II-A and II-B respectively.

Assessment of Chrome Ore reserves

24.17. A sum of Rs. 19.80 lakhs has been sanctioned for this scheme, which is being implemented jointly by G. S. I., M. E. C. and the State Directorate of Mines. The scheme which has been initiated during 1977-78 will be completed during 1979-80. This scheme essentially consists of 4,500 metres of drilling. Implementation of the scheme is of great importance to the corporation, considering the urgent need for providing the reserves of ore of different grades in

the quarries under operation and also in the context of the proposal for establishment of a charge-chrome plant in Sukinda area. The scheme also aims at locating and proving reserves of chromite containing less than 35 per cent Cr_2O_3 , which can be beneficiated and utilised for export, as well as by industries in the country including the proposed charge-chrome plant.

Replacement of stocks and spares for Daltari Iron-ore Project

24.18. To achieve the rated production in Daltari Iron-ore mines, it is necessary to keep adequate stock of spares and accessories for the O. H. P. and for heavy earth moving machineries. It has been estimated that a sum of Rs. 55 lakhs would be needed to meet the cost of such items. The break-up is as follows:—

- | | |
|--|--------------|
| (a) Cotton belts | Rs. 20 lakhs |
| (b) Electrical spares to be imported from Hungary, Cummins spares of O. H. P., spares for Mack dumpers, spares for Wabco drills, traxcavators, shovels and dozers. | Rs. 25 lakhs |
| (c) Replacement of mining machinery, vehicles, etc. | Rs. 10 lakhs |

It would be necessary to provide an outlay of Rs. 55 lakhs during the next four years including Rs. 5 lakhs provided for 1978-79.

Development of Chrome, Iron and Manganese Ore Mines

24.19. The Corporation is operating 8 Iron-ore Mines, 6 Manganese Ore Mines and 4 Chromite Mines in the State of Orissa. During the year 1975-76, the Corporation was asked by the State Government to operate Manganese Mines in Dalki, Roida, Sermda-Bhadrasahi Blocks in Keonjhar district, which were earlier held under lease by the private mine owners. These mines were worked rather haphazardly by the previous lessees, as a result, the Corporation is now required to make sizable investment to bring the mines to a stage of regular production.

24.20. In order that current level of production in the Manganese and Iron-ore Mines which are respectively 1.50 lakh M. T. and 15 lakh M. T. could be sustained, it would be necessary to provide additional compressors, drilling equipment and accessories, pumps, vehicles, etc. This would cost around Rs. 30 lakhs, which includes a provision of Rs. 5 lakhs during 1978-79.

Establishment of 50,000 t/y High Carbon (Charge-Chrome) Ferro-Chrome Plant

24.21. Orissa Mining Corporation is now holding 10 mining leases for Chromite in the State. The total reserves of Chromite of different grades in these properties are estimated to be of the order of 4 million tonnes. There are, however, substantial reserves of ore containing less than 35 per cent Cr_2O_3 which can be utilised after beneficiation. Chromite constitutes the major source of revenue for O. M. C. It also provides employment to over 2,500 workers.

24.22. Proposal to set up a 50,000 t/y High Carbon (Charge-Chrome) Ferro-Chrome Plant has been conceived on the following considerations:—

- Bulk of the ore produced in the mines of the O. M. C. is of friable type, for which there is very limited demand in the country. These ores are either to be exported or marketed after processing.
- Of late, export demand for high grade friable ore is on the decline. This is because of the fact that recent technology has made it possible to utilise lower grade ore for manufacture of Charge-Chrome.
- The quarries now under operation by the O. M. C., Ltd., have been developed to depths varying between 40 to 60 metres. The quarries cannot be abandoned at this stage or else, these will be flooded and recovery of ore in future will become difficult and costly.
- Total internal sales by the O. M. C., Ltd., are of the order of 45,000 M. T./year. This is estimated to increase to 55,000 M. T./year during the next 5 years. A minimum annual production and sales of the order of 1.50 lakhs M. T./year has

to be done in order to sustain the viability of the O. M. C., Ltd., and to ensure continued employment for a labour force of about 2,500. In other words, we have to find outlet for about 1 lakh M. T. of Chrome ore of different grades. The plant proposed to be set up will ensure utilisation of 1 lakh M. T. of Chrome ore of friable type every year.

24-23. The proposal has been examined both in the Ministry of Steel and Mines and O. M. C., Ltd. This was also included in the 5th Five-Year Plan. The technology proposed to be adopted is based on S. R. C. process patented by M/s. Showa-Denko of Japan. The collaborators are M/s. Klockner Nippon, Ltd., who have undertaken to market the entire quantity of ferro-chrome to be produced at the prevailing international price. According to preliminary estimates made by MECON, a total capital outlay of the order of Rs. 23 crores would be needed for completion of the Plant. The foreign exchange component is likely to be of the order of Rs. 9 crores. With an equity debt ratio of 1:3, the total equity capital to be raised for the project would be roughly Rs. 5.75 crores which can be shared between O.M.C., and SAIL with O. M. C. holding the major share. It would be possible to meet O.M.C. share of the proposed equity capital from the internal resources of the Corporation spread over a period of 3 years.

24-24. The beneficiation plant and the ferro-chrome plant will provide employment to about 1,000 persons. This will mostly benefit the tribal population of Keonjhar and Dhenkanal districts.

24-25. A technical delegation consisting of representatives from Government of India, MECON and O.M.C. visited Japan recently and held detailed discussions with M/s. Showa Denko, K. K. and Klockner Nippon regarding specifications of equipment, process know-how, consultancy fees and cost estimates. A provision of Rs. 6 lakhs has been provided during 1978-79. This can be reasonably increased depending upon the progress of the project. As the plant can be set up within a period of 3 years, an outlay of Rs. 300 lakhs, estimated to be the O.M.C.'s share of the equity, has been proposed. The scheme has been formally included in the medium term Five-Year Plan (1978-3).

Setting up a Sponge Iron Plant

24-26. M/s. Orissa Mining Corporation Ltd. are holding a mining lease for iron-ore in Sakradih area of Keonjhar district. Investigations undertaken have indicated the reserves to be of the order of 15 million tonnes of average 65 per cent Fe. The deposit is not being exploited at present in view of its long lead to the nearest rail head at Banspani and also due to lack of adequate demand for iron-ore both in the internal and export market.

24-27. It is proposed to exploit this deposit to meet the requirement of a Sponge Iron Plant proposed to be set up in the area. An Industrial Licence has been granted in favour of M/s. Tor Steel Research Foundation for setting up a sponge iron plant of 1.65 lakh tonnes/year capacity. This will require annually 2.25 lakh tonnes of iron-ore. A site near Joruri has been considered suitable for locations of the proposed plant. The proposal has been discussed at length with the Ministry of Steel and Mines and with MECON. It has been since decided to adopt Alis-Chalmers Process for production of sponge iron. Bulk samples of Sakradih ore have been collected and sent for detail metallurgical tests.

24-28. The total project cost has been estimated to be Rs. 23 crores, inclusive of a foreign exchange component of Rs. 9 crores. Financing of the project will be in the proportion of Rs. 6 crores as equity and the balance Rs. 17 crores as loan. The equity component is proposed to be shared between O.M.C., M/s. Tor Steel and its associates. Implementation of the project will be advantageous to the Corporation in the sense that it would help in exploitation of the Sakradih deposit which has been lying idle so long and for promotion of an industry in a predominantly tribal and backward region of the State. The mine and the plant will provide employment to about 1,000 persons on continuing basis.

24-29. A small provision of only Rs. 4 lakhs has been provided during 1978-79. The total equity contribution by O.M.C. during the Sixth Plan period would amount to Rs. 156 lakhs.

Development of a China clay mine and Washery in Mayurbhanj District

24-30. The Corporation has recently acquired a mining lease for china clay in the district of Mayurbhanj, which is predominantly a tribal and backward area of the State. It is proposed to develop the mine to produce china clay and to set up a washing plant for production of washed and refined clay. The reserves of the clay available in the property would permit an annual production of 50,000 tonnes of crude clay and production about 20/25,000 tonnes of washed

clay therefrom. Preliminary tests have been undertaken about the washability characteristic of the clay. The estimated cost for detail proving development of the mine and setting up a washing plant is of the order of Rs. 100 lakhs. A small provision of only Rs. 1 lakh has been made during 1978-79. O. M. C. Ltd. will be required to contribute a sum of Rs. 50 lakhs within a period of three years.

24.31. Apart from providing employment to the tribal people of the area, the production of washed clay will promote development of small scale industries such as pottery, sanitary wares, insulators etc. The mine and the washing plant together are expected to provide employment to about 500 persons.

Chrome ore beneficiation

24.32. The total reserves of chrome ore containing less than 35 per cent Cr_2O_3 in the lease holds of O.M.C. Ltd. are estimated to be over 1.5 million tonnes. Such type of material cannot be marketed in the present form. In order to utilise these off-grade material it would be necessary to undertake beneficiation. Tests already conducted have proved amenability of these materials to simple beneficiation techniques.

24.33. It is proposed to put up a beneficiation plant for processing of the low grade ores from the point of view of conservation of our scarce resources and also for utilisation of lower grades of ore. It is estimated that a plant to process 50,000 M.T. of ore annually would cost about Rs. 100 lakhs, for which necessary provision has been proposed.

Electrolytic Manganese Dioxide (MnO_2) Plant

24.34. There is very limited market for the high phosphorus manganese ores of Nishkhal deposit of Koraput district, which is held under lease by O. M. C. Ltd. It is, however, found that high phos. content in the ore does not constitute a deterrent factor for production of electrolytic manganese dioxide. The Nishkhal deposit can sustain a plant of 10 tonnes/day capacity for which an investment of Rs. 2.50 crores would be necessary. O. M. C. Ltd. propose to invest Rs. 90 lakhs for putting up the plant. The balance amount can be arranged from the financial institutions.

Market Intelligence Cell

24.35. The O.M.C. is primarily engaged in production and sale of iron ore, manganese ore and chromite. For iron ore, it depends almost exclusively on the M. M. T. C. of India Ltd. For sale of chrome ore in the international market, O. M. C., is being guided by price indications obtained through tenders or sporadic offers received from various trading firms. In respect of manganese ore, the market is mainly limited to Steel Mills, Ferro-Manganese producers and battery manufacturers in the country. The O. M. C. has very scanty information about export prices. O. M. C. has not been able to promote the marketing and sale of Daitari Iron Ore through M. M. T. C. Ltd. O. M. C. Ltd. proposes to develop other mineral deposit, such as, china-clay, bauxite, graphite, limestone among others, during the next few years. In order to obtain the best prices for all such products, it is very much necessary for the Corporation to develop its own market intelligence and maintain up-to-date information about various elements of costs involved in mineral trade so that it would be in a position to negotiate prices on a firm footing. This has to be a permanent feature in the Corporation and it is proposed to make a start during 1979. An outlay of Rs. 4.75 lakhs is proposed for this purpose.

Development of new mines

24.36. A number of mineral concessions have been granted in favour of O. M. C. Ltd. These include limestone, graphite, vanadiferous, magnetite, chinaclay and fireclay. O.M.C. has submitted applications for grant of mining leases for bauxite. These apart, the Corporation is holding a number of lease for iron ore, manganese ore and chromite in different parts of the State which are yet to be developed. For development of all these mineral bearing areas, it would be necessary to make substantial investment on infrastructure, geological investigation, preparation of mining plan and necessary mining and transportation equipment. A very modest outlay of Rs. 120 lakhs has been proposed for the purpose.

Gandhamardan Iron Ore Project

24.37. Detailed investigation of the iron ore deposits in Gandhamardan is earmarked for completion during 1978-79. A feasibility report is under preparation by MECON Development of Gandhamardan iron ore complex will involve development of a mine for production of 3-3.5 million tonnes of R. O. M. ore, an ore handling and processing plant and pellet plant of 2 million M. T. capacity. The project is vitally linked with the proposal for extension of railway line from Daltari to Bansapani and export of iron ore, and pellets through Paradeep Port. As the project will involve substantial capital investment, necessary tie-up arrangement will have to be finalised at the appropriate time. The proposed outlay of Rs. 100 lakhs is just a token provision for completion of pre-investment formalities, pilot plant tests, preparation of D. P. R., site development, survey for railway siding, initial instalment payments for consultancy and know-how fees. The outlay has to be substantially augmented at the appropriate time.

Sodium Dichromate Plant

24.38. Bulk of chrome ore production from the mines of O. M. C. Ltd., is of high grade friable type, eminently suitable for manufacture of sodium dichromate. With decline in export of high grade friable ore and also corresponding decrease in export price, O. M. C., is keen to develop industries based on such type of ores to maintain a certain minimum level of production in its mines and to ensure employment at the current level.

24.39. In consideration of these factors, it is proposed to put up a sodium dichromate plant of 3000 M.T. annual capacity. The total capital investment for such a plant is estimated to be of the order of Rs. 2.50 crores. The annual requirement of ore will be of the order of 7/8000 M. T. It would be possible to meet this modest ore requirement from the mines under operation by O. M. C. Ltd. for at least 25 years and it is possible to obtain market for the products both within the Country and abroad.

24.40. A provision of Rs. 35 lakhs has been proposed during the 1978-83 plan period which O. M. C. Ltd. would be able to contribute as its share of the equity. The balance amount can be located from the financial institutions and other sources.

Employment

24.41. Under the Mining and metallurgical Industries an outlay of Rs. 26.50 crores proposed, out of which departmental investment will be about Rs. 14.50 crores. The department schemes are estimated to provide employment opportunity to 759 technical, 692 non-technical having general education and 462 unskilled persons during the Sixth Plan period.

24.42. The O. M. C. proposes to invest Rs. 12.00 crores in different schemes which would employ 1,700 persons during the construction and 3,010 persons during the operation stages.

ANNEXTURE I

Achievements made by the Directorate of Mines during the last 4th & 5th Plan Periods from 1969-70 to 1977-78

Organisation

During the period from 1969-70 to 1977-78 (4th and 5th plan periods) a new zone office at Keonjhar, a new Circle office at Koira (for Bonai Subdivision only) were opened for better and efficient mineral exploration and exploitation. New checkgates (six Nos.) at Jamdih, Rengalbera (under Koira Mining Circle), Baliparbat, Bhimtangar, Talabasta (under administrative control of Jajpur Road Mining Circle), Bidyadharpur in Anandapur Subdivision (under administrative control of Joda Mining Circle) were opened to ensure prevention of leakage of mining revenue. The control of two dial type of lorry weighbridges installed at Paradeep by the Commerce (Port) Department were taken over by the Mining & Geology Department for their efficient operation with the staff and structures at Chakradharpur near Paradeep Port. At the Headquarters organisation of the Directorate a new Mineral Information & Development Cell was created for job involving mineral statistics and study of infrastructure development etc.

Exploration

During this period preliminary and detailed exploration of promising mineral occurrences proved the existence of about 1000 million tonnes of Iron ore, chromite, bauxite, coal limestone and dolomite, clays and quartzite among others including 500 million tonnes of Bauxite deposits in the Gandhamardan areas of Balangir district and Panchpatmali areas of Koraput district under a special investigation scheme of assessment of Bauxite reserves from 1974-75. New occurrences of bauxite in Koraput and Keonjhar district, Gold in Keonjhar district, Tin in Koraput district, Chromite in Cuttack district, Coal in Sambalpur and Sundargarh, Phulbani and pegmatites containing strategic minerals in Phulbani, Dhenkanal and Sambalpur districts amongst others were brought to light. A scheme of Geological assistance to other agencies was sponsored during the 5th plan period and a sum of Rs. 8.50 lakhs derived towards cost of commercial drilling from Coal India Ltd., Sukinda Nickel Project etc. etc.

Intensive Mineral Exploitation & Administration

During the period from 1969-70 to 1977-78, the total number of working mines in the State increased upto 234 Nos. Annual mineral production increased from 11 million tonnes by the end of 3rd plan upto 15.35 million tonnes in 1976 and 14.47 million tonnes in 1977 the annual mineral revenue also increased as indicated below:—

3rd Plan period (1) Rs. in lakhs	4th Plan period (2) Rs. in lakhs	5th Plan period (3) Rs. in lakhs
1964-65—160.34	1969-70—194.39	1974-75—301.22
1965-66—172.20	1970-71—220.63	1975-76—431.13
1966-67—166.12	1971-72—199.70	1976-77—686.86
1967-68—155.38	1972-73—217.56	1977-78—408.13
1968-69—161.50	1973-74—239.96	
815.74	1,072.24	1,847.34

The employment potential in the State's mines increased from 50,000 to 60,000. Nearly 3500 applications for mineral concessions were processed.

A sum of Rs. 11.91 lakhs was derived towards cost of weightment charges during the aforesaid period.

Mineral Analysis & Research

The annual analysis capacity of the 3 laboratories at Joda, Jajpur Road and Balangir and the Research Laboratory at Bhubaneswar under the Directorate increased from 10,000 samples to 12,000 samples per annum involving 25,000—30,000 ingredients.

During the period from 1969-70 to 1973-74 (4th plan period) and during 1974-75—1977—78 (5th plan period) around 40,000 and 60,000 samples respectively have been analysed in the above noted laboratories under the Directorate of Mines

The Laboratory at Joda and Jaipur Road started functioning in the commercial scale during the period and around 12.00 lakhs have been earned towards cost of analysis of commercial samples.

Building Projects under the Directorate of Mines, Orissa

During the two plan periods from 1969-70 to 1973-74 and 1974-75 to 1977-78, construction of Circle Mining Office buildings at Koraput, Baripada and Zonal Office building at Sambalpur with staff quarters were taken up and completed. Besides this, few departmental staff quarters at Joda and Rourkela were also taken up and completed from plan allocations.

Infrastructure Development

Construction of an arterial road leading from Mangalpur to Bhimtangar was taken up during 4th plan period at an estimated cost of Rs. 3.09 lakhs from plan allocations.

ANNEXURE II-A

BASIC INFORMATION ABOUT INDUSTRIAL AND MINERAL PROJECTS

1. Name and capacity of the Projects

(i) Name of the Project	..	Completion of stage-II of Deitari Iron Ore Project.
(ii) Location (actual or likely)	..	Harichandanpur Block of Sadar Subdivision of Keonjhar district.
(iii) Nature of the Project	..	Mechanised Iron Ore Mines
(a) New Project	..	Continuing Spillover Project
(b) Expansion of an existing Project	..	Completion
(iv) Products/Output	..	Lumpy Iron Ore-2.5 million tonnes R. O. M. ore 1.6 million tonnes of lumpy Saleable Iron Ore.
(a) Capacity	..	800 tonnes per hour.

2. Schedule of Implementation

(i) Whether feasibility study/D. P. R. prepared.	..	Yes
(a) By whom	..	Orissa Mining Corporation Ltd., Bhubaneswar.
(b) Present status—whether approved, submitted for approval, etc.	..	Approved
(ii) Nature of foreign collaboration required Technical or Financial.	..	Technical
(iii) Date of start of construction	..	1974-75
(iv) Date of commencement of production	..	Phased production programme, from 1973-74
(v) Achievement of rated capacity	..	Likely date 1979-80.

3. Project expenditure .. 1857.97 lakhs (till 1977-78)

4. Financing and Execution of the Projects

(i) Name of the executing agency	..	O. M. C.
(ii) Arrangements for financing	..	O. M. C's. internal resources

5. Material Requirements

(i) Steel	..	2000 M. T.
(ii) Cement	..	1000 M. T.

6. Employment Potential

(i) During construction	..	800
(ii) After construction	..	200

ANNEXURE II-B
BASIC INFORMATION ABOUT INDUSTRIAL AND
MINERAL PROJECTS

1. Name and Capacity of the P projects

- | | | |
|--------------------------------------|----|--|
| (i) Name of the Projects | .. | Gandhamardan Iron Ore Project |
| (ii) Location (actual or likely) | .. | Suakati Block of the Sadar subdivision of Keonjhar district. |
| (iii) Nature of the Project | .. | Iron Ore Project |
| (a) New Project | .. | Continuing, spillover project |
| (b) Expansion of an existing project | | Completion |
| (iv) Products/Output | .. | Lumpy Iron Ore |
| (a) Capacity | .. | Preparation of feasibility report for ultimate production of 3.5 M. tonnes of ROM Ore. |

2. Schedule of Implementation

- | | | |
|---|----|--|
| (i) Whether feasibility study/DPR prepared, | | Feasibility report under preparation |
| (a) By whom | | Metallurgical & Engineering Consultants (India) Ltd., Ranchi |
| (b) Present status | .. | Approved |
| (ii) Nature of foreign collaboration required Technical or Financial. | | No |
| (iii) Date of start of construction. | | 1974-75 |

3. Project Expenditure .. 56.32 lakhs till 1977-78**4. Financing and Execution of the Projects**

- | | | |
|----------------------------------|----|----------------------------------|
| (i) Name of the executing agency | .. | Orissa Mining Corporation, Ltd., |
| (ii) Arrangements for financing | .. | OMC's internal resources |

5. Employment Potential

- | | | |
|-------------------------|----|-------|
| (i) During Construction | .. | 100 |
| (ii) After construction | .. | 4,300 |

ANNEXURE III

(a) Mineral Exploration

- (i) Mineral Inventory and Reconnaissance of 12,000 sq. kms. out of which 9,500 sq. kms. shall be taken-up under new schemes and 2,502 sq. kms. by the existing components of the Non-Plan Sector.
- (ii) Detailed mapping of 70 sq. kms. in 1:2000 scale under different projects.
- (iii) 42,000 Metres of drilling
- (iv) Trial Excavations of 20,000 cu.m.
- (v) 45,000 numbers of sampling and analysis
- (vi) Detailed proving and assessment of reserves of the following important minerals on project basis.
 - A. Chromite
 - B. Tin
 - C. Bauxite
 - D. Gold
 - E. Graphite
 - F. Limestone & Dolomite
 - G. Clay and Refractory minerals
 - H. Pegmatite and Rare minerals
 - I. Basemetals
- (vii) Providing technical Assistance to other agencies in the matter of proving of ore reserves by drilling, mining and foundation drilling of dams and reservoir sites.

(b) Intensive Mineral Exploitation

- (i) Supervision of Annual production of 15-20 million tonnes of minerals and ores
- (ii) Checking of despatches of 15—20 million tonnes of Mines on way of despatch for accurate determination of quantity and quality for assessment of Mining Revenue.
- (iii) Timely assessment demand and collection of Rs. 686 to Rs. 824 lakhs of mining revenue per annum.
- (iv) Supervision of annual export of about 6 to 8 million tonnes
- (v) Inspection of 395—500 mines to ascertain proper working and conservation of minerals and export guidance to small mineowners.
- (vi) Annual earning of Rs. 5.00 lakhs to Rs. 7.00 lakhs from Lorry Weigh-bridges as weightment charge s
- (vii) Processing of nearly 400 fresh applications annually for mineral concessions.
- (viii) Providing infrastructure for development of mines by constructing and developing feeder mining roads.

(c)—Research and Quality Control

- (i) Analysis of annually additional 20,000 samples with 50,000 constituents in addition to present level of analysis of 17, 343 samples with 45938 constituents.
- (ii) Earning of Rs. 3-5 lakhs annually from the analysis of commercial samples.
- (iii) Beneficiation studies of chromite and kyanite and other low grade ores and minerals available in the State.
- (iv) Pilot plant studies on upgradation of china clay and cassiterite.

(d)—Direction and Administration

- (i) Strengthening Headquarters organisation to cope with the additional work load for implementation of various schemes in the field.
- (ii) Compilation, processing and analysis of vital statistical data on infrastructure, trends of mineral production, transport, internal consumption and export etc. and formulation of remedial measures for solving current problems of the mining industry with specific emphasis on reduction of the cost structure on minerals, transport bottlenecks and vital rail routes and mineral traffic survey etc.
- (iii) Construction of a ret work of buildings for the zonal exploration units, Circle mining Offices and Laboratories throughout the State.

ANNEXURE IV
MID TERM FIVE-YEAR PLAN (1978—83)
 (Schemes of Directorate of Mines, Orissa)

(Rs. in lakhs)

Serial No.	Name of the Scheme	Proposed allocation
(1)	(2)	(3)
(A) Mineral Exploration		
1	(a) Mineral Exploration and Inventory including Remote sensing, Aerial Photo, Geophysical prospecting.	3,16·00
	(b) Mineral Popularisation	.. 15·00
	(c) Technical Cell	.. 15·00
2	Special Projects for assessment of reserves	
	(a) Chromite	.. 58·00
	(b) Tin	.. 65·00
	(c) Bauxite	.. 46·00
	(d) Gold	.. 58·00
	(e) Graphite	.. 44·00
	(f) Limestone and Dolomite	.. 43·00
	(g) Clay and Refractories	.. 26·00
	(h) Engineering Geology Division	.. 21·00
	(i) Pegmatite and Rare Minerals	.. 28·00
	(j) Base Metals	.. 30·00
3	Technical Assistance to other Agencies	.. 73·00
	Total (A)	8,38·00
(B) Intensive Mineral Exploitation		
4	Field Administration	.. 1,15·00
5	Development of Minor Minerals	.. 30·00
6	Blocks of Granite and Decorative stones for export	.. 24·00
7	Departmental Mining	
	(a) Chromite ore	.. 34·00
	(b) Manganese ore	.. 24·00
8	Infrastructure Development (Mining Roads)	.. 50·00
	Total (B)	2,77·00

(1)	(2)	(3)
(C) Research and Quality Control		
9	Expansion of laboratories	92·00
10	Beneficiation and Research	71·00
Total (C)		163·00
(D) Direction and Administration		
11	Strengthening of Directorate of Mines	30·00
12	Mineral Information and Development Cell	25·00
Total (D)		55·00
(E) Building Projects		117·00
A B S T R A C T		
(A) Mineral Exploration		838·00
(B) Intensive Mineral Exploitation		277·00
(C) Research and Quality Control		163·00
(D) Direction and Administration		55·00
(E) Building Projects		117·00
Grand Total		1,450·00

CHAPTER 25

ROADS AND BRIDGES

25.1. Lack of communication facilities in respect of railways and roads is one of the basic constraints of economic growth in Orissa.

25.2. Facility for railway traffic in this State is one of the lowest. In terms of length of railway lines it has only 13 Kms. of railway line per 1,000 square Kms. of area compared to all India average of 18 Kms. 32 Kms. in Hariyana. 43 Kms. in Punjab, 43 Kms. in West Bengal and 31 Kms. in Bihar. This could have been compensated by net-work of road communication, but this facility in this State is equally poor. As against all India average of 16 Kms. surface road per 100 square Kms. area, Orissa has only 10 Kms. roads. This lags very much behind most of the other States such as West Bengal (23 Kms.), Andhra (18 Kms.), Bihar (16 Kms.), Hariyana (30 Kms.) and Kerala (111 Kms.), etc. Likewise the State has only 61 Kms. of surface roads against all India average of 90 Kms. per lakh of population.

25.3. Even to-day there are a number of tribal pockets which are not accessible. Six subdivision headquarters have not been connected with district headquarters, 95 Block headquarters, 85 police-stations and 18 tehsils have not been provided with all-weather communications. Rural roads position is worse. Many big villages with population of 1,500 or 1,000 have no fair-weather communication to subdivisional headquarters, industrial towns, market centres, tehsils, police-stations' and Bandies etc. The attempt made during the Fifth-Plan under Minimum Needs Programme to provide all-weather communications to the identified villages having a population of 1,500 and above did not bring in satisfactory result because of inadequate allocation under the plan in view of the fact that communication sector was treated as a non-core sector item. Even the rural roads taken up under Minimum Needs Programme did not serve the desired objective in view of the prescribed limit of expenditure of Rs 50,000 only per Km. of road including culverts, wooden bridges and minor bridges within a length of 20 feet as per the norms under Minimum Needs Programme. There are many rivers, hill-streams, big nullas of more than 20 feet width over these roads which could not be bridged within the prescribed limits and construction of major and medium bridges over them is inevitable which needs heavy investment. Unless these are provided, these roads can not be all-weather roads and will be of no avail to the villagers during the rainy season.

25.4. From the beginning of the fourth plan the plan allocations to road sector development gradually decreased as it was declared as the non-core item of the plan. Consequently a large number of roads and bridges included in the third plan and fourth plan still remain incomplete. The meagre allocation made during the fifth plan under the road development programme other than rural roads under the Minimum Needs Programme was grossly inadequate to accelerate the progress of non-continuing schemes and a further sum of nearly Rs. 15.00 crores is required for their completion. During the said period taking up any new construction works was out of question. As a result, the condition of the roads have been deteriorated and in some cases the existence of road surface is not located. It is eminently necessary to complete the spill-over works as quickly as possible and take up new surface roads along with new bridges, replacement of narrow and dilapidated bridges and culverts and to improve the road communication of the State to proper standard. Similarly the selected village roads under Minimum Needs Programme should be completed without loss of time and in addition, the facility should be extended to villages having population of 1,000 in pursuance of the national objective.

25.5. Development of communication system in the State is the paramount need at the present moment because of rapid development of agriculture, industry and commerce etc., which solely depends on infrastructural facilities in the communication sector. In order to achieve this objective it is absolutely necessary to have adequate flow of plan allocations to this sector and this can be possible only if the "communication" is included in the core-sector of the Plan. This need of the State has been repeatedly stressed in the past. The Transport Development Council in their meeting held on 24-9-1977 have strongly recommended for this and in the meeting of the Standing Committee, it was suggested to take up the matter in the meeting of the National Development Council for finalisation. Accordingly, in the last National Development Council meeting held on the 18th March 1978 the State Chief Minister stressed the need for inclusion of communication sector of backward States like Orissa in the core sector of the plan. When the Prime Minister of India visited the State in April 1978 this aspect was also presented to him. In fact, the field organisation in the State have developed the capacity to execute road construction works worth Rs. 50 crores per year.

Road Development Programme

25.6. Even though traffic has increased enormously and revenue from roads has gone up four to five times, roads did not get proper attention in the allocation of plan funds particularly in the Fifth Plan. The allocation to this head of development in the Fifth Plan was Rs. 8.81 crores compared to the Fourth Plan expenditure of Rs. 11.17 crores.

25.7. The road system in Orissa has approximately 51,816 RM of missing bridges, 15,820 RM of narrow/dilapidated bridges to be replaced, 800 Kms. of missing road links to be constructed and 7,000 Kms of road crust (S. H. and M. D. R.) to be strengthened. To bring the existing roads in Orissa to all India average about Rs. 450 crores would be required. Tribal areas require special attention and to improve communication in these areas about Rs. 100 crores would be necessary. Thus the total requirement is about Rs. 550 crores.

25.8. The Sixth Plan is formulated with a view to overcome the handicaps and deficiencies of the previous plans with the strategy (i) to complete spill-over works, upgrade important existing roads to desired standard and connect inter-district headquarters through short routes; (ii) to connect subdivisional headquarters to district headquarters; (iii) to connect Block headquarters to subdivisional headquarters; and (iv) to connect Gram Panchayat headquarters to Block headquarters.

25.9. With the above objectives in view 327 numbers of road works of which 25 are spill-over works and the remaining 302 are new works have been selected on the basis of their relative importance and conforming to the above-mentioned objectives for execution during the Sixth Plan period. The financial requirement for the above works has been assessed at Rs. 1,76,02 lakhs against which the tentative allocation is Rs. 1,35,65 lakhs in the Sixth Plan. In the Sixth Plan, it is proposed to take up construction of important over/under railway bridges, renovation of the Inspection Bungalows, etc. Provision has also been made for land acquisition, survey and investigation, planning and research, clearance of decretal dues, old claims and *pro rata* charges. Details of works, their financial requirement and tentatively allocation for the Sixth Plan are indicated in the following table.

(Rs. in lakhs)

Category of works	No. of works	Amount required	Amount proposed during the Sixth Plan
(1)	(2)	(3)	(4)
(1) Completion of spill-over works, upgradation of important existing roads etc.	113	74,10.97	67,02.51
(2) Connection of subdivisional headquarters to district headquarters.	8	3,20.00	2,85.00
(3) Connection of Block headquarters with subdivisional headquarters.	85	34,70.50	20,04.00
(4) Connection of Grama Panchayat headquarters with Block headquarters.	121	35,68.00	22,97.20

(1)	(2)	(3)	(4)
(5) (a) Railway over/under bridges.			60.00
(b) Survey & Investigation			30.00
(c) Planning & research			50.00
(d) Land acquisition		4,70.00	20.00
(e) Clearance of old claims & decretal dues.			30.00
(f) Renovation of inspection Bungalows.			30.00
(6) Pro rata charges ..	..	23,63.00	18,06.29
Total ..	327	1,76,02.00	1,35,65.00

25.10. The proposed plan provision of Rs. 1,35,65.00 lakhs is inclusive of Rs. 75.00 lakhs allotted during 1978-79 to the 8 ongoing works under the arterial roads in progress which had been merged in the general road development programme. Beyond 1978-79 no provision is proposed for arterial road programme separately under the Minimum Needs Programme.

25.11. With the proposed plan provision of Rs. 1,35,65.00 lakhs under road development programme the following physical targets are envisaged.

Item	Target
Bridges ..	639 Nos.
Culverts	3,010 Nos.
New construction of roads ..	94 Kms.
Black topping ..	2,727 Kms.
Metalling ..	2,424 Kms.
Mooruming ..	725 Kms.

25.12. With the investment of Rs. 1,35,65 lakhs in the Sixth Plan period it is proposed to generate employment potential of 6,58.50 lakh mandays during the Sixth Plan under Road Development Programme.

Minimum Needs Programme

25.13. Under the State Plan the rural roads programme under the Minimum Needs Programme are executed by different agencies, such as, the National Highway Organisation executes the rural roads under the P. W. D. as well as the Gram Panchayat and Panchayat Samiti roads; the Rural Engineering Organisation executes the rural roads under its charge, Chief Engineer, Irrigation executes the improvement of canal embankments; Forest Department executes the development of forest roads and the Community Development and Panchayati Raj Department executes the improvement of some link roads belonging to Panchayat Samitis and Gram Panchayats. The position relating to the programmes of different agencies are separately indicated in this chapter.

25.14. Government have assigned the highest priority for rural road development during the Sixth Plan period. Provision for a net work of roads is an essential necessity. In the Sixth Plan within the tentative allocation it may be possible to provide all-weather communication to villages having population of 1,500 and above. The national objective to provide all-weather communication facility to 50% of the total number of villages having population of 1,000 cannot be attempted at present unless allocation of a very high order is made as a core sector Plan. 344 roads with the length of 4,657 Kms. had been assigned to the National Highway Organisation during the Fifth Plan. But due to paucity of allocations it could be possible to take up only 177 roads. The progress attained with the expenditure of Rs. 494.00 lakhs to the end of 1977-78 is indicated below:

Road formation including	
C D Works (culverts and causeways)	963 Kms.
Metalling (two coats)	621 Kms.
Metalling (one coat)	342 Kms.

25.15. The existing norm for rural roads under Minimum Needs Programme is an expenditure of Rs. 50,000 per Km. excluding structures beyond 6 M span. In the Sixth Plan this norm is proposed to be increased to Rs. 80,000 per Km. in order to cater to the rise in the cost of materials and labour and providing culverts and causeways as per actual requirements instead of limiting to 2 M in plain areas and 4 M in hilly areas per Km. As already stated earlier the programme will remain unfulfilled if major and minor bridges are not constructed to provide all-weather communication. It is, therefore, propose to construct the missing major and minor bridges on Minimum Needs Programme roads wherever necessary during the Sixth Five-Year Plan. During the Sixth Plan period it is proposed to improve a total road length of 3,694 Kms. (2,558 Kms. of P. W. D. rural roads and 1,136 Kms. of G. P. and Panchayat Samiti roads) with an investment of Rs. 29,55.50 lakhs. It is also proposed to take up improvement of 14,026 RM length of bridges (12,206 RM of P. W. D. and 1,820 RM of G. P. and Panchayat Samiti bridges) with investment of Rs. 2,244.80 lakhs. Thus the total requirement of the National Highway Organisation for the Minimum Needs Programme roads to be taken up during the Sixth Plan is Rs 5,200.00 lakhs. With this investment, 252 Nos. of bridges (1,4026 RM) will be taken up besides road formation of 3,694 Kms. metalling (two coats) of 3,494 Kms. metalling (one coat) of 342 Kms. and construction of 7,000 Nos. (11,800 RM) culverts and causeways. With the achievements of the above targets 864 villages having population of 1,500 and above will be connected by all-weather roads.

TRIBAL SUB-PLAN

Road Development Programme

25.16. From the proposed outlay of Rs. 13,565.00 lakhs during the Sixth Plan, the financial flow to the tribal areas will be 3,947 lakhs representing 29 per cent of the above plan outlay. 104 schemes fall in tribal areas out of the total of 327 schemes proposed during the Sixth Plan. The physical targets to be achieved from the outlay for the tribal areas are furnished below:—

Item	Target
Bridges	264 Nos.
Culverts	1,304 Nos.
Metalling	885 Kms.
Blacktopping	1,006 Kms.
Improvement to road crust	152 Kms.
New construction of road	28 Kms.
Moorum	293 Kms.

25.17. With the flow of plan outlay to the tribal areas, employment potential likely to be generated is approximately 187 lakh mandays.

(ii) Minimum Needs Programme

25-18. From the proposed outlay of 5,200 lakhs during Sixth Plan, the financial flow to the tribal areas will be Rs. 2,633.40 lakhs representing 51 per cent of the above outlay. 98 schemes fall in the tribal areas out of the total 344 schemes proposed during the Sixth Plan. The physical targets to be achieved from the flow to tribal areas is furnished below—

Bridges	..	205 Nos. (5,912 RM)
Road formation	..	2,208 Kms.
Metalling 2 coats	..	2,208 Kms.
Metalling 2nd coat only	..	200 Kms.
Culverts and causeways	..	4,220 Nos. (8,200 RM)

25-19. With the flow of plan outlay to the tribal area, the employment potential proposed to be generated is approximately 245 lakhs mandays.

25-20. Thus the outlay on tribal sub-plan under R. D. P. and M. N. P. is Rs. 6,580.40 lakhs which represent 35 per cent of the total outlay of R. D. P. and M. N. P. (Rs. 18,765 lakhs). This will generate employment potential of 433 lakhs mandays.

Rural Roads under the Charge of Rural Engineering Organisation

25-21. There are 697 Nos. of rural roads with a total length of 7,180.5 Kms. under the Rural Engineering Organisation.

25-22. In the Fourth-Plan period, the target was to take up improvement to 83 Nos. of roads of 1,004 Kms. length and construct 19 bridges with an outlay of Rs. 275.87 lakhs. Against this an expenditure of Rs. 276.79 lakhs was incurred during the Fourth Plan. All these roads spilled over to the Fifth Plan. During the Fifth Plan period, an amount of Rs. 118.54 lakhs was spent on these spill-over roads, but the roads could not be made all-weather due to inadequate provision of funds. In order to make these spill-over roads all-weather, a further provision of Rs. 5.21 crores has been proposed in Sixth Plan, by which the cross drainage works will be constructed making the road water bound macadam type. During execution, an additional amount of Rs. 25.00 lakhs approximately has been spent on these spill-over roads, which stands as a liability. Thus liability needs clearance in the first instance.

25-23. In Fifth Plan period, 136 roads with a total length of 1,525.6 Kms. were entrusted to R. E. O. for construction/improvement under the Minimum Needs Programme to connect villages with population of 1,500 and above out of which 135 Nos. have been taken up. The road that could not be taken up during the Fifth Plan will be taken up in Sixth Plan period. Out of the 135 Nos. of roads taken up, 36 numbers having a length of 230.4 Kms. have been made all-weather with provision of soling stone and mooruming till end of 1977-78. During 1978-79, another 25 numbers of roads having a length of 277.0 Kms. are proposed to be made all-weather with soling and mooruming.

25-24. It is not possible to make the roads all-weather firstly because bridges more than 20 feet span were not admissible under Minimum Needs Programme and secondly, the monetary ceiling of Rs. 50,000 per Km. prescribed under Minimum Needs Programme for improvement of roads was inadequate. In the Sixth Plan, it is proposed to invest Rs. 80,000 per K. m. and also to provide cross drainage works more than 20 feet span wherever necessary by constructing culverts/medium or minor bridges. To complete all the continuing Minimum Needs Programme roads during the Sixth Plan and make them all-weather with water bound macadam standard for plying of buses, provision of Rs. 10.00 crores is proposed.

25-25. Besides the 83 Nos. of spill-over roads of the Fourth Plan and 136 Nos. of Minimum Needs Programme roads of the Fifth Plan there still remains 478 Nos. of roads with a length of 4,651 Kms. to be improved. Moreover, the Collectors have in the meantime proposed for transfer of some unclassified rural roads to be taken care of by the R. E. O. It is proposed to

provide Rs. 46.7 crores to take up construction/improvement of new roads in the Sixth Plan period as far as possible. In selecting the new roads for the Sixth Plan the following priorities will be kept in view.

1. Roads to connect villages having more than 1,000 population.
2. Roads to connect Subdivisional headquarters, Block headquarters and Panchayat headquarters.
3. Roads to connect market centres, N. H., S. H. and M. D. R.
4. Roads to connect cluster of villages which are in tribal sub-plan areas having a population of 1,000 or less.

25.26. Employment potential of 26,17,400 mandays (unskilled) was generated from 1974-75 to 1977-78. During the current year (1978-79) 8,90,777 mandays are likely to be generated. With the investment of Rs. 62 crores in the Sixth Plan it is tentatively estimated that employment potential of 76,880 (skilled and unskilled) mandays will be generated from 1978-79 to 1982-83.

Tribal Sub-Plan Roads

25.27. There have been practically negligible improvement of the communication system in the tribal sub-plan areas. During the Plan period 1978-83 it has been proposed to open up these inaccessible areas in connecting those with market centres and nearby highways. Out of the outlay of Rs. 62.00 crores for the rural roads, Rs. 25 crores has been tentatively earmarked for tribal sub-plan roads. While selecting the individual roads the roads, which will connect market centres and other nearby important villages and clusters of villages having population of 1,000 and more will be given preference. While fixing priorities for construction of earthen crusts it has been proposed to improve them with soling and metalling by two layers and moorum surface on the top. The yearwise target and proposed outlay during the Plan period in tribal Sub-Plan roads is as shown below :

Year	Outlay (in lakhs)	Target (in Kms)
1978-79	67.00	60
1979-80	633.00	580
1980-81	600.00	550
1981-82	600.00	550
1982-83	600.00	560
	2,500.00	2,300

Special Central Assistance

25.28. Besides the above it is proposed to provide Rs. 2.60 crores under Central assistance (special) for road projects in the Sub-Plan areas. Care has been taken to see that roads in tribal pockets are given priority. Now that it is programmed to have a road to every village with a population of 1,500. The investment of Rs. 27.60 crores will go a long way in meeting the communication needs of the tribal people.

Improvement of Embankment roads under M. N. P.

25.29. There is great need to improve the canal as well as river embankments in various part of our State as these will serve as communication to the interior areas, which are otherwise not approachable. In the Fifth-Plan, the outlay for improvement of embankment roads was Rs. 74.00 lakhs for a length of 171.10 Kms. Out of this, 123 Kms. of road was completed during the Fifth Plan by end of March, 1978 and expenditure of Rs. 51.41 lakhs was incurred. The requirement of funds for the balance length of 48.10 Kms. is Rs. 22.59 lakhs.

25.30. The allocation in the Sixth Five-Year Plan under embankment roads is Rs. 400.00 lakhs. After meeting the requirement of Rs. 22.59 lakhs for the spill-over roads, the balance available for new roads comes to Rs. 377.41 lakhs. The target under new roads is 755 Kms. Thus, the total target under embankment roads is 803.10 Kms. in the Sixth Plan.

Forest Roads

25.31. Orissa has a little over 7,000 K. Ms. of forest road. For better management of the forests as well as to provide link roads to the rural interiors, the standard of the existing forest roads needs improvement for all-weather traffic. The wooden culverts on forest roads are required to be replaced by R. C. C. culverts and bridges so as to make them all-weather. A sum of Rs. 400 lakhs has been provided for construction of 400 K. Ms. of new roads and improvement and metalling of 200 K. Ms. of existing roads with provision for cross drainage works. Rural roads which will link up interior villages with the main roads will be given priority.

Improvement of Panchayat Samiti and Grama Panchayat Roads

25.32 Due to paucity of fund, it has not been possible to provide funds for construction of rural roads and improvement of the existing rural roads. The Panchayat Samiti and the Grama Panchayats also have constructed some roads with their own funds out of funds received for Test Relief Works on account of floods or drought. By now, there are 24,000 Kms. of Panchayat Samiti roads and 60,000 Kms. of Grama Panchayat roads throughout the State.

25.33. From the last financial year, wheat has been allotted under 'Grains for Works Programme' for improvement of these roads and quite a number of roads have been made. The Government have decided that the specifications for the Panchayat Samiti and Grama Panchayat roads would be same as the other classified village roads.

25.34. It has been proposed to provide funds for improvement of these rural roads and also for cross drainages for which sufficient funds could not be allotted so far. It is expected that nearly half of the amount provided will be required for providing cross drainages for the roads which have been improved or to be improved under Food for Works Programme and the funds are to be provided for this purpose in the State Plan Budget. Hence a sum of Rs. 2,650 lakhs has been suggested for the Plan period 1978-83.

25.35. It has been roughly estimated that about Rs.20,000 per Km. in cash will be required for improving these roads into the standard specifications. With the amount now provided, it is expected that it would be possible to develop 13,000 Kms. of roads during the Sixth Plan period. This will be supplemented by the wheat allotted under the Food for Works Programme. If the Food for Works Programme continues during the Sixth Plan period, it is expected that the coverage can be stepped up considerably.

Municipal Roads

25.36. Financial Assistance is given to the Urban Local Bodies for improvement of existing roads and also for construction of new roads, which include construction of culverts and small bridges. The Urban Local Bodies are required to bear matching contribution equal to the Government grant. An allocation of Rs. 50 lakhs was earmarked for the scheme during the Fifth Plan period. An expenditure of Rs. 39.35 lakhs has been incurred during the four years ending 1977-78. With this expenditure, 235 Kms. of new roads have been constructed, 205 Kms. of existing roads have been improved and 10 Nos. of new culverts have been provided.

25.37. At present the total length of different types of roads maintained by the Municipalities and Notified Area Councils in the State are as follows:-

(a) Earthen	1,446 Kms.
(b) Metal Moorum	1,197 Kms.
(c) Metal	1,160 Kms.
(d) Black Topped	1,092 Kms.

Total	4,895 Kms.
or Say	5,000 Kms.

25.38. The cost of conversion of roads 12' width in categories (a), (b) and (c) above to improved type of roads as per the State P. W. D. standard is as follows:—

From Earthen to Metal Moorum	--	Rs. 68,000 per Km.
From Earthen to Black Topped	..	Rs. 1,00,000 per Km.
From Metal to Black Topped	..	Rs. 35,000 per Km.

(Rs. 15,00) per Km. as additional expenditure for second layer of metal, if required)

25.39. A tentative Plan outlay of Rs. 275 lakhs has been fixed for expenditure against the Scheme for Five-Year Plan period 1972-83 with this allocation, it is estimated to develop 800 Kms. of Municipal Roads with matching contribution during the Sixth Plan period as detailed below:—

(a) Conversion of 500 Kms. of Moorum Metal Road to Black Topped road at the Rate of Rs. 50,000 per Km.		Rs. 250 lakhs
(b) Conversion of 300 Kms. of Earthen Road to Black Topped Road at the rate of Rs. 1,00,000/- per Km.		Rs. 300 lakhs
	Total	Rs. 550 lakhs
	Matching contribution by Municipalities/N. A. Cs.	Rs. 275 lakhs
	Government Grant	Rs. 275 lakhs

STATEMENT—T. R. I.

(Rs. in lakhs)

Serial No.	Item	Total cost	Fifth Plan outlay	Expdr. upto 1977-78 in the case of spill over scheme	Proposed outlay 1978-83	Outlay					Employment potential in mandays		
						1978-79	1979-80	1980-81	1981-82	1982-83	Unskilled (in lakh mandays)	Skilled Tech. (in lakh mandays)	Non-Tech. (in lakh mandays)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
P. W. D. ROADS—													
1	Schemes for removal of deficiencies in the existing road net work.												
A. MISSING ROAD LINKS—													
(i) Spill over													
1	Construction of road from Basudevpur to Dhamara Via-Kaithakols R. R.	223.00	10.00	10.00	213.00	35.00	80.00	50.00	30.00	18.00	18.10	..	3.20
Total		223.00	10.00	10.00	213.00	35.00	80.00	50.00	30.00	18.00	18.10	..	3.20

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(i) NEW SCHEMES—													
1	Improvement to Jaupur-Binjharpur-Singpur road to join Cuttack-Chandabali road—MDR.	114.71	..	..	50.00	1.50	8.50	20.00	10.00	10.00	4.25	..	0.75
2	Improvement to Batadimal-Dharmagarh road including bridges and C. D. work—MDR.	48.00	..	..	30.00	..	9.00	9.00	6.00	6.00	2.55	..	0.45
3	Improvement to Bhabani-patna to K. Singpur road upto border including bridges and C. D. works—MDR.	110.00	..	..	50.00	1.50	8.50	15.00	15.00	10.00	4.25	..	0.75
4	Construction of Marine drive from Konark to Puri—MDR.	140.00	..	..	50.00	..	20.00	10.00	10.00	10.00	4.25	..	0.75
5	Improvement to Road from Jiranga to Thumbaguda-Via - Konpur - Burkha-pasa and Alanda including C. D. works—CVR.	250.00	..	..	150.00	..	2.00	50.00	35.00	40.00	12.75	..	2.25
Total ..					330.00	3.00	71.00	104.00	76.00	76.00	28.05	..	4.25

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
IB. Missing Major Bridges—													
(i) Spill over scheme													
1	Construction of Subarna- rekha bridge on M.D.R. 74.	108·00	78·00	78·00	30·00	4·00	26·00	..	..	..	0·96	..	0·24
2	Construction of H. L. Bridge over river lantn on Balangir Bh. Patna road—SH.	61·22	41·87	41·87	19·35	14·71	4·84	..	..	..	0·62	..	0·15
3	Construction of H. L. Bridge over river Tel near Balgaon on Balgaon -Balangir Bh. Patna road—SH.	276·57	76·57	76·57	150·00	13·87	38·00	38·00	37·00	23·12	4·30	..	1·20
4	Improvement to the road connecting Sarala Temple with M. D. R. 84 inclu- ding construction of C.D. works and bridge over river Bansua at Birtolghat --ODR.	14·08	9·50	9·50	4·58	4·18	0·40	..	..	..	0·14	..	0·04
5	Construction of Bridge on Boriguma-Kumuli road over river Belguri—CVR.	15·25	10·03	10·03	5·22	5·22	..	..	..	..	0·16	..	0·05
6	Construction of bridge over Jhanjabati Nullah on Narayanpatna - Bandhu- gaon road—MDR.	14·00	9·46	9·46	4·54	2·00	2·54	..	..	..	0·14	..	0·04
7	Construction of bridge over river Daya on Pipli-Jatni road including improve- ment to the road—MDR.	54·73	40·31	40·31	14·42	2·12	12·30	..	..	..	0·46	..	0·12
Total					228·11	33·23	83·88	38·00	37·00	36·00	7·28	..	1·84

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Aterial Road Programme													
8	Construction of bridge over river Deo on K. T. S. A. road—MDR.	33.59	11.00	11.00	22.59	22.59	..	..	..	..	0.72	..	0.18
9	Construction of bridge over Kaligiri on Kalapathar-Fategarh road—MDR.	18.07	10.00	10.00	8.07	8.07	..	..	..	..	0.26	..	0.06
10	Construction of bridge over Chauldhua Nullah on Bissam Katak-Chandrapur road near village Hanumantapur—CVR.	15.04	8.00	8.00	7.04	7.04	..	..	..	..	0.23	..	0.06
					265.81	83.80	83.80	38.00	37.00	23.13	8.49	..	2.14
(ii) New Schemes													
1	Improvement to Kendrapara-Pattamundai-Aul-Chandabali road including construction of bridges—MDR.	200.00	..	..	149.00	..	30.00	54.00	35.00	30.00	4.77	..	1.19
2	Construction of H.L. bridge over river Brahmani near Patrapur ghat on Cuttak-Chandabali road—MDR.	189.00	..	..	189.00	..	19.00	50.00	50.00	70.00	6.05	..	1.51
3	Construction of H. L. bridge over Taladanda Canal, Kendrapara Canal, river Lunc, Paika and Chitrapala on Katikata-Jaipur road including improvement of the road—CVR.	285.00	..	..	200.00	..	20.00	80.00	60.00	40.00	6.40	..	1.60

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
4	Improvement to Dhenkanal-Kamakshyamagar road including bridge over Brahmani and Ramial—ODR.	345-00	..	..	300-00	..	45-00	75-00	85-00	95-00	9-60	..	2-40
5	Improvement to Berhampur-Tama na-Chikiti-Surangi-Rangiri-Jiranga-Narayapur-Parlakhemundi road including C. D. works—ORD.	89-00	..	..	89-00	..	18-00	22-00	27-00	22-00	2-85	..	0-71
6	Improvement to Bisankatak-Gunupur road including construction of bridges over Markhama and Achhabu nullah and other C. D. works—MDR.	26-50	..	..	26-50	1-50	6-00	10-00	7-00	2-00	0-85	..	0-21
7	Construction of mojar bridge over river Mahanadi near Boudh-Rairakhol road connecting district Headquarters Sambalpur and Phulbani—MDR.	447-00	..	..	400-00	..	75-00	125-00	125-00	75-00	12-80	..	3-20
8	Improvement to Soheia-Barpali-Binka road including construction of Ranijore and other bridges and C. D. works—MDR.	65-50	..	..	65-50	..	14-00	19-00	19-00	13-50	2-10	..	0-53

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	III												
9	Construction of bridge over river Aunga and other nullah on Salahhata-Agalpur road including improvement of the road—CVR.	80·00	..	..	40·00	..	5·00	15·00	10·00	10·00	1·28	..	0·32
10	Improvement to Jaipur-Baruan road including construction of bridges and C. D. works—MDR.	185·00	..	..	100·00	..	25·00	25·00	30·00	20·00	3·20	..	0·30
11	Improvement to Samal-Bamra road including construction of bridges over Singara and Tikra—ODR.	111·00	..	..	50·00	..	10·00	15·00	15·00	10·00	1·60	..	0·40
12	Improvement to Baripada-Chitrada-Amarada Rly. Station road including bridges and C. D. works—MDR.	53·00	..	..	40·00	..	15·00	20·00	5·00	..	1·28	..	0·32
13	Improvement to Joshipur-Raruan road including construction of bridges and C. D. works—ODR.	20·00	—	—	20·00	..	5·00	10·00	5·00	..	0·64	..	0·16
14	Improvement to Baripada-Baghra road including bridges and C. D. works—ODR.	35·00	..	..	35·00	..	10·00	10·00	10·00	5·00	1·12	..	0·28

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
15	Impvt. to Satpada-Krishna-prasad road including constn. of C. D. works—CVR.	85·00	..	..	50·00	..	10·00	15·00	15·00	10·00	1·60	..	0·40
16	Construction of bridges on Gop-Balighai-Puri road including improvement of the road.—MDR.	140·00	..	..	100·00	..	25·00	30·00	30·00	15·00	3·20	..	0·80
17	Improvement to Gudubhaga-Turum road including bridges and C. D. works—CDR.	59·00	..	..	20·00	..	10·00	5·00	5·00	..	0·64	..	0·16
18	Improvement to Nuagaon-Bisra road including construction of bridges and C. D. works—CVR.	97·00	..	..	50·00	..	15·00	17·00	10·00	8·00	1·60	..	0·40
19	Construction of H. L. bridge over river Mahanadi on Tirtol-Ketar road—CVR.	100·00	..	..	100·00	..	20·00	25·00	40·00	15·00	3·20	..	0·80
20	Improvement to Badachana-Balichandrapur road including bridges and C. D. works—ODR.	45·00	..	..	30·00	..	13·00	15·00	2·00	..	0·96	..	0·24
21	Construction of bridge over river Baghua on Polsara-Aska road—CVR.	24·00	..	..	24·00	..	4·00	7·00	7·00	6·00	0·77	..	0·19
22	Construction of bridges over river Dhanei on Polasara-Kabisuryanagar road including approaches—CVR.	19·00	..	..	19·00	..	4·00	5·00	5·00	5·00	0·61	..	0·15

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
23	Improvement to Sanyasiku- mahanal-Basikukhura- Atignon road including bridges and C. D. works—CVR.	57-00	..	..	20-00	..	12-00	3-00	5-00	..	0-64	..	0-16
24	Improvement to Joka-Merda- Anala road including con- struction of bridges— CVR.	16-00	..	..	16-00	..	6-00	6-00	4-00	..	0-51	..	0-13
25	Improvement to Baki- Badamstaliya road in- cluding construction of bridges—CVR.	20-00	..	..	10-00	..	3-00	4-00	3-00	..	0-32	..	0-08
26	Improvement to Patnaikia- Kharada road including bridges and C. D. works except 5 km. from Patnaikia—ODR.	32-00	..	..	32-00	..	15-00	10-00	7-00	..	1-02	..	0-26
27	Improvement to Krishna- prasad-Mahad Prayagi road including construc- tion of bridges and C. D. works except 4 km. from Prayagi—CVR.	130-00	..	..	100-00	..	40-00	35-00	15-00	10-00	3-20	..	0-30
28	Improvement to Padmapur- Jagadipur road including construction of bridges— MDR.	82-00	..	..	60-00	..	15-00	27-00	18-00	..	1-92	..	0-48
29	Improvement to Mahulipali- Furi road including bridges and C. D. works —CVR.	68-00	..	..	20-00	..	5-00	5-00	5-00	5-00	0-64	..	0-16
					2355-00	1-50	494-00	739-00	654-00	466-50	75-37	..	19-84

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
I. C. Missing Minor bridges—													
(i) Spill over Schemes													
1	Construction of bridge over Bansa nullah on Jhiskira-Balipitha road—CVR.	17.21	14.26	14.26	2.95	2.95	..	..	..	..	0.10	..	0.02
2	Construction of road connecting Nandankanan with New Capital Via—Sainik School—ODR.	35.55	30.60	30.60	4.95	2.95	2.00	..	..	..	0.16	..	0.04
3	Improvement to Tumari-banda-Belgarh Jhiripani-road including bridges and C. D. Works—CVR.	60.36	10.36	10.36	50.00	..	10.00	15.00	15.00	10.00	1.60	.	0.40
4	Improvement to Manamunda-Katamala-Ghatapada road including construction of bridge & C. D. Works—MDR.	82.32	11.32	11.32	72.00	2.00	16.00	18.00	18.00	18.00	2.30	..	0.58
5	Construction of bridge over Budasuhagi nullah on Narasinghpur-Baliput road—ODR.	6.86	4.85	4.85	2.01	2.01	..	..	..	..	0.65	..	0.16
					131.91	9.91	28.00	33.00	33.00	28.00	4.81	..	1.20

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(iii)—New Schemes													
1	Improvement to the road from Amst to Phulbani border Via Palam and Rampur including construction of bridges and C. D. Works—SH.	84·00	..	..	84·00	..	16·00	21·00	26·00	21·00	2·69	..	0·67
2	Improvement to Karanja-Thakurmunda-Satkosia-Anandapur road up to Keonjhar district border including construction of bridges and C. D. Works—MDR.	68·30	..	..	68·30	1·81	16·30	19·00	19·00	12·19	2·19	..	0·55
3	Improvement to Thakurmunda-Danga dihi-Podadihi-Udala-Baisingha-Rupsa Rly. Station road including construction of bridges and C. D. Works—MDR.	258·75	..	..	150·00	..	35·00	40·00	45·00	30·00	4·80	..	1·20
4	Improvement to Satkutunia-Patna road including construction of Kalinagar and other bridges and C. D. Works—CVR.	82·00	..	..	82·00	..	17·00	20·00	25·00	20·00	2·62	..	0·65
5	Improvement to Joda-Bamabari road including construction of bridge over river Song Nallah and other C. D. Works—CVR.	16·00	..	..	16·00	1·00	5·00	5·00	5·00	..	0·51	..	0·13

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
6	Improvement to Asanda- pur-Karanja road up to Keonjhar district border including cons- truction of bridges and C. D. Works—MDR.	16·00	..	..	16·00	..	3·00	5·00	5·00	3·00	0·51	..	0·13
7	Improvement to Daringi- badii-Gajabari road up to Phulbani district border including cons- truction of bridges and C. D. Works—MDR.	18·00	..	..	18·00	2·00	5·00	7·00	2·00	2·00	0·58	..	0·15
8	Improvement to Phulbani- Tikarpara road inclu- ding construction of bridges and C. D. Works —MDR.	52·00	..	..	52·00	2·50	15·00	14·00	11·50	9·00	1·66	..	0·41
9	Improvement to old C. S. Road from Sankarpur to Nuapatna via Kakhadi-Khunti- Mancheswar and cons- truction of bridges— ODR.	16·00	..	..	16·00	1·00	5·00	5·00	5·00	..	0·51	..	0·13
10	Improvement to Bolpara- Kantabani-Chandutara road—MDR.	80·00	..	..	40·00	..	15·00	18·00	7·00	..	1·28	..	0·32

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
11	Improvement to Jagat-singpur-Sirle-Nuagaon-Raghunathpur road including Paika, Taldanda Canal bridge and other bridges—ODR.	20.50	..	..	20.50	..	5.00	8.00	7.50	..	0.66	..	0.16
12	Improvement to Jiridamali-Kakarada road including C. D. Works—CVR.	66.00	..	..	40.00	..	13.00	15.00	7.00	5.00	1.28	..	0.32
13	Improvement to Bhela-Boden road including C. D. Works—CVR.	105.00	..	..	40.00	..	12.00	12.00	16.00	..	1.28	..	0.32
14	Improvement to Dharmagarh-Golmunda road including C. D. Works—CVR.	20.00	..	..	20.00	1.00	12.00	4.00	3.00	..	0.64	..	0.16
15	Improvement to Keonjhar-Udayapur road including construction of bridge and C. D. Works—CVR.	60.00	..	..	30.00	..	5.00	7.00	10.00	8.00	0.96	..	0.21

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
16	Improvement to Karanjia-Dankikote road including construction of C. D. Works—M. D. R.	66·00	..	..	40·00	..	5·00	10·00	15·00	10·00	1·28	..	0·32
17	Improvement to Pandapara-Hasi-Chandrapur road including Construction of C. D. Works—C.V.R.	48·00	.	..	30·00	..	5·00	8·00	10·00	7·00	0·96	..	0·24
18	Laxmipur-Narayanp a t n a road including construction of bridges & C. D. Works—M. D. R.	20·00	..	..	20·00	..	5·00	5·00	5·00	5·00	0·6.	—	0·16
19	Telanga Padar—Chandarpur road—C. V. R.	27·00	.	..	25·00	..	12·00	8·00	5·00		0·80	..	0·20
20	Improvement to Kashipur-Mandhib hi-Sikharpara road including C. D. Works 10 KM. from Sikarpai—C. V. R.	10·00	..	..	10·00	..	3·00	4·00	3·00	..	0·32	..	0·08
21	Improvement to Kalyasinghpur-Gunupur road up to border including C. D. Works—C. V. R.	94·00	..	..	40·00	..	15·00	10·00	10·00	5·00	1·28	..	0·32
22	Improvement to Kutraguda to Dangasuruda road—C. V. R.	29·00	..	..	20·00	..	12·00	3·00	5·00	..	0·64	..	0·16
23	Improvement to Baripada-Badasahi Maniri road—O. D. R.	110·00	..	..	50·00	..	15·00	10·00	10·00	15·00	1·60	..	0·40

24	Improvement to Rairangapur-Jashipur-Karanjia Dhanakhet road—M. D. R.	10-00	..	..	10-00	..	2-00	3-00	5-00	..	0-32	..	0-08
25	Improvement to Dalita-Barnar Muskat-Talcher border road including C. D. Works—O. D. R.	77-00	..	..	30-00	..	10-00	7-00	8-00	5-00	0-96	..	0-24
26	Improvement to Karandihitalsora-Lakera road including C. D. Works—M. D. R.	76-00	..	..	40-00	..	15-00	8-00	10-00	7-00	1-28	..	0-32
27	Improvement to Dhamaragarh-Dubel-Sandhapur including C. D. works—C. V. R.	8-50	..	..	8-50	..	2-50	3-00	3-00	..	0-27	..	0-07
28	Improvement to Barapada-Agapada road—O.D.R.	10-00	..	..	10-00	..	2-00	3-00	5-00	..	0-32	..	0-08
29	Improvement to Dalrapata-Bai—Jalsagar-Dhampur-Pithapkhari including C. D. works—C. V. R.	39-00	..	..	20-00	..	12-00	5-00	3-00	..	0-64	..	0-16
30	Improvement to Kapasila Gudu-Bhola road—C. V. R.	160-00	..	..	50-00	..	10-00	15-00	15-00	10-00	1-60	..	0-40
31	Improvement o Balangir-Mohimanda-Arjunpur road—C. V. R.	40-00	..	..	20-00	..	5-00	5-00	5-00	5-00	0-64	..	0-16
32	Improvement to Burda-Arjunpur road—C.V.R.	40-00	..	..	20-00	..	12-00	3-00	5-00	..	0-64	..	0-16
33	Improvement to Binjarpur-Mangada road—M. D. R.	13-00	..	..	13-00	..	3-00	5-00	5-00	..	0-42	..	0-10

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
34	Improvement to Salipur-Chhatta roads including Constn. of Major and Minor bridges & other C. D. works—O. D. R.	78-00	..	..	50-00	..	15-00	17-00	10-00	8-00	1-60	..	0-40
35	Improvement to Makanga-Katikata road including Constn. of C. D. works—C. V. R.	10-00	..	..	10-00	..	2-00	5-00	3-00	..	0-32	..	0-08
36	Improvement to Dhanipur—Kantilo road C. V. R.	26-00	..	..	15-00	..	5-00	5-00	5-00	..	0-48	..	0-12
37	Improvement to road from Badakera-Maidhar p u r road including C. D. works—O. D. R.	38-80	..	..	20-00	..	7-00	10-00	3-00	..	0-64	..	0-16
38	Improvement to Gara-Narsing Prasad-Damsala road including C. D. works—C. V. R.	19-20	..	..	19-20	..	7-00	7-20	5-00	..	0-62	..	0-15
39	Improvement to Dhenkanal-Sankarpur road with Constn. of bridge & C. D. works—O. D. R.	10-00	..	..	10-00	..	4-00	4-00	2-00	..	0-32	..	0-08
40	Improvement to Pandra-Gunibili-Jiraj-Marthapur road including C. D. Works—C. V. R.	20-00	..	..	20-00	..	7-00	8-00	3-00	2-00	0-64	..	0-16
41	Improvement to Angul-Sankarpur-Karatapata road including C. D. works—C. V. R.	28-00	..	..	10-00	..	2-00	3-00	3-00	2-00	0-32	..	0-08

42	Improvement to Lokanathpur-Birasaal-Damasal road including C. D. works—C. V. R.	30-00	..	..	20-00	..	2-00	13-00	3-00	2-00	0-64	..	0-16
43	Improvement to Gulehi-Nimabahal road including C. D. works.	22-00	..	..	10-00	..	2-00	3-00	3-00	2-00	0-32	..	0-08
44	Improvement to Kalapani-Basingi-Radhaidipur-Kalarin road including C. D. works.—C. V. R.	20-00	..	..	10-00	..	2-00	3-00	3-00	2-00	0-32	..	0-08
45	Improvement to Thakurgarh-Tapdel road including C. D. works—C.V.R.	25-00	..	..	10-00	..	2-00	3-00	3-00	2-00	0-32	..	0-08
46	Improvement to Srirampur-Handilua road including C. D. works—C.V. R.	11-00	..	..	11-00	..	4-00	5-00	2-00	..	0-35	..	0-09
47	Improvement to Cheliguda-Ramagiri road including C. D. works—C. V. R.	13-20	..	..	13-20	..	2-20	4-00	4-00	3-00	0-42	..	0-11
48	Improvement to Khajuripada-Scranga road, via Nungada including C. D. works—C.V.R.	9-00	..	..	9-00	..	4-00	3-00	2-00	..	0-29	..	0-07
49	Improvement to Telsing-Gallery road including C. D. works—O.D.R.	20-00	..	..	20-00	1-50	5-00	5-00	5-00	3-50	0-64	..	0-16
50	Improvement to Bhanupada-Kankarda-Jaganathpur road including C. D. works—O. D. R.	9-00	..	..	9-60	..	4-00	3-00	2-60	..	0-31	..	0-08

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
51	Improvement to Pajibahal-Mohangiri road including C. D. works—C.V.R.	65·00	..	..	20·00	..	12·00	3·00	3·00	2·00	0·64	..	0·16
52	Improvement to Thuamal-Rampur-Kasipur road including C. D. works—C. V. R.	40·00	..	..	20·00	..	12·00	3·00	3·00	2·00	0·64	..	0·16
53	Improvement to Thuamui-Rampur-Kalampur road including C. D. works—C. V. R.	34·00	..	..	20·00	..	8·00	5·00	5·00	2·00	0·64	..	0·16
54	Improvement to Dalkibandh-Kalampur road including C. D. works—C. V. R.	30·00	..	..	20·00	..	12·00	3·00	3·00	2·00	0·64	..	0·16
55	Improvement to Lanjigarh-Pokhariabandha road including C. D. works—C. V. R.	12·00	..	..	12·00	..	4·00	3·00	3·00	2·00	0·38	..	0·09
56	Improvement to Lanjigarh-Bijepur road including C. D. works—C. V. R.	30·00	..	..	30·00	..	14·00	6·00	6·00	4·00	0·96	..	0·24
57	Improvement to Bambari-Gadiatopa road including C. D. works except 8 Km. between Bamebasi and Debuna—C. V. R.	40·00	..	..	40·00	..	13·00	14·00	10·00	3·00	1·28	..	0·32
58	Improvement to Ghatgaon-Barichandanpur-Daitar i road including C. D. works—C. V. R.	64·00	..	..	50·00	..	15·00	18·00	10·00	7·00	1·60	..	0·40

59	Improvement to Pipta- Patna Road including C. D. works—CVR.	21.50	..	...	21.50	..	8.00	9.00	4.50	..	0.69	..	0.17
60	Improvement to Rama- chandrapur-Bhagamunda Road including C. D. works—CVR.	100.00	..	..	60.00	..	15.00	18.00	15.00	12.00	1.92	..	0.48
61	Improvement to Kuanar- Banapal Road including C. D. works—MDR.	26.00	..	..	26.00	..	12.00	9.00	3.00	2.00	0.83	..	0.21
62	Improvement to Pratapur- Khunta-Jajpur Road including C. D. works— ODR.	41.00	..	..	20.00	..	7.00	8.00	3.00	2.00	0.64	..	0.16
63	Improvement to Shyam- sundrapur-Budikhamari Road including C. D. works—C. V. R.	10.00	..	..	10.00	..	2.00	3.00	3.00	2.00	0.32	..	0.08
64	Improvement to Deuli- Baghara-Muruda Road including C. D. Works— O. D. R.	55.00	..	..	30.00	..	13.00	10.00	5.00	2.00	0.96	..	0.24
65	Improvement to Handa- Sirsa Road including C. D. Works.—O. D. R.	1.00	..	..	19.00	..	7.00	7.00	3.00	2.00	0.61	..	0.15
66	Improvement to road from Sankarkhota to Khojuri- pada including C. D. Works—C. V. R.	6.00	..	..	6.00	..	1.00	2.00	2.00	1.00	0.19	..	0.05
67	Construction of bridge over Sagadia Nallah on Hara- bhanga Chaturanga Road including its improve- ment—O. D. R.	7.00	..	..	7.00	..	2.00	4.00	1.00	..	0.22	..	0.06

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
68	Improvement to Kotagarh-Subarnagiri Road including C. D. Works—C. V. R.	38-00	..	..	29-00	..	12-00	3-00	3-00	2-00	0-64	..	0-16
69	Improvement to Bhimipara-Banamalipur Road including C. D. Works—C. V. R.	8-00	..	..	8-00	..	2-00	3-00	3-00	..	0-26	..	0-06
70	Improvement to the Road from N. H. 5 to S. H. 8, via Nirakarpur except 10 Km.—C. V. R.	10-00	..	..	10-00	..	3-00	4-00	3-00	..	0-32	..	0-08
71	Improvement to Nayagarh-Patulisahi Road—C.V.R.	25-00	..	..	15-00	..	7-00	3-00	3-00	2-00	0-48	..	0-12
72	Improvement to Begunia-Lothachua Road including C. D. Works—C. V. R.	35-00	..	..	15-00	..	7-00	3-00	3-00	2-00	0-48	..	0-12
73	Improvement to Rampur-Darpanaranpur-Sarakul Road including C. D. Works—O. D. R.	25-00	..	..	25-00	..	13-00	9-00	3-00	..	0-80	..	0-20
74	Improvement to Gania-Kantilo-Patharacha k a d a Road—O.D.R.	21-00	..	..	21-00	..	10-00	6-00	3-00	2-00	0-67	..	0-17
75	Improvement to Khalisahi-Kiska-Adakota Road ODR.	15-00	..	..	15-00	..	3-00	4-00	4-00	4-00	0-41	..	0-12
76	Improvement to Rampur-Scrapsali via Giripur Road—CVR.	56-00	..	..	30-00	..	12-00	13-00	3-00	2-00	0-96	..	0-24

77	Improvement to Govindapur Garposh Road—CVR.	36.00	..	..	15.00	..	7.00	3.00	3.00	2.00	0.48	..	0.12
78	Improvement to Khanda- dhara-Karadhi Road— CVR.	28.00	..	..	15.00	..	5.00	5.00	3.00	2.00	0.48	..	0.12
79	Construction of Bridge and Culvert on Duduka-Gopal- pur-Taparia Road including road improvement—CVR.	35.00	..	..	15.00	..	4.00	6.00	3.00	2.00	0.48	..	0.12
80	Improvement to Kukura- bhuka-Khatku r a b a b a l- Bihar Border Road—MDR.	90.00	..	..	40.00	..	13.00	16.00	6.00	5.00	12.8	..	0.32
Total		..	..	..	2,071.80	10.81	656.00	619.20	509.10	276.69	66.62	..	16.65

Improvement to Lowgrade Section—

(i) Spill over Schemes

1	Improvement to Rampur- Rusida—Kariam und a Road including con- struction of C. D. work —C. V. R.	21.59	16.59	16.59	5.30	..	5.00	..	..	..	0.43	..	0.07
2	Construction of Approach Road to Subarnarekha Bridge on M. D. R. 54.	72.00	5.59	5.59	25.41	..	25.41	..	..	..	2.16	..	0.38
(M. D. R. 41.00 to be sent out of E. & I. Scheme)													
					30.41	..	30.41	..	..	..	2.59	..	0.45

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<i>(ii) New Scheme</i>													
1	Improvement to Batagaon-Huguli handeswar-Digha Road—C. D. R.	14-00	..	..	14-00	1-00	3-00	5-00	5-00	..	1-19	—	0-21
2	Improvement to Lalitagiri-Udayagiri-Ratnagari Road including construction of C. D. Works—C. D. R.	60-26	..	..	60-26	..	15-00	17-00	17-00	11-26	5-12	..	0-90
3	Improvement to the Road from Hindol Town to Maidharpur—M. D. R.	10-00	..	..	10-00	..	3-00	4-00	3-00	..	0-85	..	0-15
4	Improvement to Sambalpur-Sonepur Road including construction of Bridge across river Mahanadi and other C. D. works—M. D. R.	340-00	..	..	40-00	1-00	9-00	10-00	10-00	10-00	3-40	..	0-60
5	Improvement to Champua-Chamatpur-Bansdevpur Road including C. D. works—C. V. R.	12-70	..	..	12-70	.	2-70	5-00	5-00	..	1-08	..	0-19

6	Improvement to Narayanpur-Pandapara road including construction of C. D. Works—M. D. R.	22:30	..	..	22:30	..	2:00	13:00	5:00	2:30	1:90	..	0:33
7	Improvement to Komtel-peta-Kalyansingpur road including C. D. Works—M. D. R.	10:00	..	..	10:00	..	2:00	3:00	3:00	2:00	0.85	..	0:15
8	Improvement to Pipli-Dohaga-Kanas road including C. D. Works—except 5 Km. O. D. R.	11:00	..	..	11:00	..	2:00	3:00	3:00	3:00	0.93	..	0:17
9	Improvement to Jharsuguda-Beipahar road—O. D. R.	10:00	..	..	10:00	..	2:00	3:00	3:00	2:00	0.85	—	0:15
10	Improvement to Bihpur-Dabalbahal-Gaisilet road including C. D. Works—C. V. R.	50:00	..	..	20:00	..	15:00	2:00	3:00	..	1.70	..	0:30
11	Improvement to Deogarh-Rampur road including C. D. Works—C. V. R.	23:00	..	..	15:00	..	5:00	8:00	2:00	—	1.28	..	0:22
12	Improvement to Baragarh-Bhatli-Ambabona road including C. D. Works—M. D. R.	8:00	..	..	8:00	—	2:00	2:00	2:00	2:00	0.68	..	0:12
13	Improvement to Turikela-Kantabanji-Gudighat-Tikarpada-Deogarh road including Construction of bridge and C. D. Works except 7 Km. between Tikarpada and Deogarh—C. V. R.	63:00	..	..	30:00	..	15:00	5:00	5:00	5:55	2.55	..	0:45

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14	Improvement to Deogarh-Tusra-Arjampur road—C. V. R.	44-00	..	..	20-00	..	3-00	12-00	2-00	3-00	1-70	..	0-30
15	Improvement to road from Bangarkota to Expressway-via-Patharbandha—C. V. R.	5-00	..	..	5-00	..	2-00	2-00	1-00	..	0-45	..	0-07
16	Improvement to road from Rambag to Biripat including C. D. Works—C. V. R.	10-00	..	..	10-00	..	3-00	2-00	2-00	3-00	0-85	..	0-15
17	Improvement to Kustia-Gadamadhapur-Dhenkanal Boarder road including C. D. works—C. V. R.	7-00	..	..	7-00	..	3-00	3-00	1-00	..	0-60	..	0-10
18	Improvement to Kendrapara-Golar ghat road—C. V. R.	16-00	..	..	16-00	..	11-00	3-00	2-00	..	1-36	..	0-24
19	Panikoli-Ragadivikorei—C. V. R.	5-70	..	..	5-70	..	2-00	2-00	1-70	..	0-48	..	0-09
20	Improvement to Badachana-Darpana-Mahabinayak road including C. D. Works—C. V. R.	7-00	..	..	7-00	..	3-00	3-00	1-00	..	0-60	..	0-10
21	Improvement to Patialigaon-Palasala road including C. D. Works—C. V. R.	10-50	..	..	10-50	..	8-00	2-50	..	..	0-89	..	0-16

22	Improvement to Maidhar-para-Govindapur road including C. D. Works—C. V. R.	7'00	..	..	7'00	..	3'00	2'00	2'00	..	0'60	..	0'10
23	Improvement to Kakada-had-Mahabir road including C. D. Works—C. V. R.	37'00	..	..	20'00	..	14'00	2'00	2'00	2'00	1'70	..	0'10
24	Improvement to Joranda-Bainsia-Karmul road including C. D. Works—C. V. R.	10'00	..	..	10'00	..	8'00	2'00	2'00	..	0'85	—	0'15
25	Improvement to Kulad-Talcher road including C. D. Works—O. D. R.	15'00	..	..	15'00	..	11'00	2'00	2'00	..	1'28	..	0'22
26	Improvement to Chhendi-pada-Barudia road including C. D. Works—C. V. R.	6'00	..	..	6'00	..	2'00	2'00	2'00	..	0'51	..	0'09
27	Improvement to Biranchipur-Jirabadi-Jagannath Prasad road including C. D. Works—C. V. R.	10'00	..	..	10'00	8'00	..	2'00	..	..	0'85	..	0'15
28	Improvement to Jhumpura-Ukhunda road including C. D. Works—C. V. R.	9'50	..	..	9'50	..	5'00	4'50	..	..	0'81	..	0'14
29	Improvement to Tangabilla-Sukruli road—C. V. R.	11'00	..	..	11'00	..	6'00	5'00	..	..	0'94	..	0'16
30	Improvement to Boudha-Dhalpur road including C. D. Works—C. V. R.	15'00	..	..	15'00	..	3'00	5'00	5'00	2'00	1'28	..	0'22

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
31	Improvement to Grand military road from Jhanjhumundi to Daringabadi road—M. D. R.	5.00	..	..	5.00	..	2.00	2.00	1.00	..	0.43	..	0.07
32	Improvement to Ghantapura-Sindhaidiga-Khamakhhol road including C. D. Works—C. V. R.	93.00	..	..	20.00	..	12.00	3.00	2.00	3.00	1.70	..	0.30
33	Improvement to Beigarh-Ambadola road including C. D. Works—C. V. R.	19.00	..	..	19.00	..	12.00	6.00	1.00	..	1.68	..	0.08
34	Improvement to Banamajipur-Balanga road via Basharamal-Alanda—C. V. R.	9.00	..	..	9.00	..	6.00	2.00	1.00	..	0.77	..	0.13
35	Improvement to Nuagaon-Bahadajhola-Odagaon road including C. D. Works except 8 Km.—C. V. R.	13.00	..	..	13.00	..	8.00	4.00	1.00	..	1.10	..	0.20
36	Improvement to Jagadaiपुर-Dora road—C. V. R.	22.00	..	..	22.00	..	11.00	9.00	2.00	..	1.87	..	0.23
37	Improvement to Dhama-Jujumura road—C.V.R.	18.00	..	..	18.00	..	11.00	5.00	2.00	..	1.53	..	0.27
38	Improvement to Ambapur-Kuchinda road—C. V. R.	6.00	..	..	6.00	..	2.00	2.00	2.00	..	0.51	..	0.09
Total		..	..	..	559.96	2.00	236.70	169.00	101.70	50.56	47.59	..	8.35

REPLACEMENT OF WEAK MAJOR BRIDGES

i) Spill over Schemes

IV. 1. Construction of bridge over river Indravati on S. H. 2.—S. H.	64.13	44.13	44.13	20.00	20.00	0.64	..	0.16
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				20.00	20.00	0.64	..	0.16
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(ii) New Scheme

1 Improvement to Baragarh-Balangir-Bhawani a t n a road from Sambalpur boarder to Kalahandi Boarder—S. H.	3.00	20.00	..	40.00	60.00	60.00	40.00	6.40	..	1.60
2 Improvement to the road from Ama-Titilagarh-Bagamunda-Kalahandi boarder road.—S. H.	95.00	..	..	95.00	..	25.00	25.00	25.00	20.00	2.88	..	0.72
3 Construction of bridge over Badanadi on Aska-Karachuli-Odagan road—M. D. R.	80.00	..	..	80.00	..	20.00	25.00	20.00	15.00	2.56	..	0.64
4 Improvement to Sunamunhi-Stapada road including C. D. Works except 4Km. from Sunamunhi—O. D. R.	36.00	..	..	20.00	..	5.00	10.00	5.00	..	0.64	..	0.16
5 Improvement to Nimapara-Balanga-Satasankha road including C. D. Works except 15Km. from Satasankha—M. D. R.	34.00	..	..	34.00	1.00	9.00	10.00	10.00	4.00	1.08	..	0.27

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
6	Improvement to Padmapur-Patnagarh road including C. D. Works—MDR.	40-00	..	..	30-00	..	5-00	10-00	10-00	5-00	0-96	..	0-24
7	Improvement to Baragarh-Bijepur road including C. D. Works—O. D. R.	35-00	..	..	35-00	..	15-00	10-00	5-00	5-00	1-12	..	0-28
8	Improvement to Sambalpur-Sonepur road including C. D. Works—MDR.	16-00	..	..	16-00	..	5-00	5-00	6-00	..	0-51	..	0-13
					510-00	1-00	124	155-00	141-00	89-00	16-15	..	4-04

STRENGTHENING WEAK PAYMENT

(i) Spill over scheme

1	Construction of road from Angul to Chhendipada including construction of C. D. Works.—MDR.	43-39	6-39	6-39	37-00	1-00	10-00	10-00	10-00	6-00	3-15	..	0-55
					37-00	1-00	10-00	10-00	10-00	6-00	3-15	..	0-55

(ii) New Schemes—

1	Improvement to Balasore Jaleswar road up to Bengal boarder—MDR.	693-00	..	..	600-00	..	10-00	150-00	150-00	200-00	51-00	9-00	..
2	Improvement to Janujhari-Basudevpur road including C. D. Works—CVR.	50-00	..	..	5-00	..	1-00	2-00	2-00	..	0-43	..	0-07
3	Improvement to Bhadrak-Chandabali road—SH.	1-30	..	..	100-00	..	25-00	25-00	25-00	25-00	8-50	..	1-50

4	Improvement to Jaleswar-Batagon road including C. D. works—MDR.	31-00	..	..	31-00	..	5-00	8-00	10-00	8-00	2-63	..	0-47
5	Improvement to Bisdrak-Bonth Basantia road. MDR.	29-00	..	..	29-00	..	5-00	10-00	10-00	4-00	2-47	..	0-43
6	Improvement to Bara bil-lapur road portion in Cuttack district—SH.	25-00	..	..	25-00	..	10-00	10-00	5-00	..	2-13	..	0-37
7	Improvement to Cuttack-Paradeep road.—MDR.	40-00	..	..	40-00	1-50	11-50	13-00	12-00	2-00	3-40	..	0-60
8	Improvement to Chorda-Sukinda Bhuban road up to Cuttack District boarder including construction of bridges and culverts.—MDR.	21-00	..	..	21-00	..	5-00	8-00	5-00	3-00	1-78	..	0-32
9	Construction of road from Talcher to Bhuban and upto Cuttack district boarder including construction of major and minor bridge and C. D. works.—MDR.	62-00	..	..	62-00	1-20	15-80	15-00	20-00	10-00	5-26	..	0-94
10	Improvement to 132 K. V. line road from Lukhagudi to Rajpanka including construction of C. D. works—MDR.	25-00	..	..	25-00	0-50	9-50	5-00	5-00	5-00	2-13	..	0-37

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
11	Improvement to Bhanjanagar-Talsing -Tarasing-Daspalla road including construction of C. D. Work—M D R.	14.00	..	..	14.00	1.00	6.00	4.00	2.00	1.00	1.20	..	0.20
12	Improvement to Chatikuda—Naria—Rampur road including construction of C. D. Work—M D R.	51.00	..	..	51.00	..	13.00	13.00	13.00	12.00	4.33	..	0.77
13	Improvement to Jajpur-Barbil road portion from Jorada to Champua of S.H. 11 under Keonjhar district including construction of C. D. Works—S H.	360.00	..	..	360.00	3.98	76.02	110.00	95.00	75.00	30.60	..	5.40
14	Improvement to Remili-Bhadrasahi—Barbil road including of construction of C. D. Works—SH.	12.00	..	..	12.00	..	5.00	4.00	2.00	1.00	1.02	..	0.11
15	Improvement to Anandapur-Banth road up to Keonjhar district boarder including construction of C. D. Works—M D R.	10.00	..	..	10.00	..	2.00	3.00	5.00	..	0.85	..	0.15
16	Improvement to 132 KV. line road from Luhagudi to Kamatapeta including construction of C. D. Works—SH.	82.00	..	..	82.00	3.00	20.00	23.00	18.00	18.00	6.97	..	1.23

17	Improvement to Gunupur-Vasansai road up to Ganjam district boarder including construction of C. D. Work—SH.	11.50	..	..	11.50	..	4.00	6.00	1.50	..	0.98	..	0.17
18	Improvement to road from Muniguda to Phalbani border Kutragada including construction of C. D. Works—SH.	8.62	..	..	8.62	..	3.00	4.00	1.62	..	0.73	..	0.13
19	Improvement to Boriguma-Papadahandi-Maidalpur road including construction of C. D Works—SH.	47.00	..	..	47.00	..	10.00	14.00	13.00	10.00	4.00	..	0.70
20	Improvement to Madhupur-Boudh road including construction of bridges and C. D. Works—MDR.	44.00	..	..	44.00	2.00	11.00	13.00	12.00	5.00	3.74	..	0.66
21	Improvement to Pipili-Konark road including construction of bridges and C.D. Works—MDR.	95.00	..	..	95.00	1.88	18.12	25.00	25.00	25.00	9.07	..	1.43
22	Improvement to Bhubaneswar-Puri road including construction of bridges and C.D. Works—SH.	48.00	..	..	48.00	..	17.00	17.00	7.00	7.00	4.08	..	0.72
23	Improvement to Rampur-Kiakata-Boudh road including construction of C.D. Works—MDR.	10.00	..	..	10.00	..	5.00	5.00	..	..	0.85	..	0.15
24	Improvement to Barkote-Darjia road—SH.	25.00	..	..	25.00	1.00	6.00	7.00	6.00	5.00	2.13	..	0.37

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
25	Improvement to Rourkela-Bisra-Jarekela road including construction of C.D. Works—MDR.	14·00	..	..	14·00	..	5·00	6·00	3·00	..	1·20	..	0·20
26	Improvement to Rajgangpur-Panposh road—SH.	14·50	..	..	14·50	..	4·00	6·00	4·50	..	1·23	..	0·22
27	Improvement to Kaptipada-Nilagiri-Saragada road in Balasore District—MDR.	11·00	..	..	11·00	..	3·00	5·00	3·00	..	0·93	..	0·17
28	Improvement to Sonapur-Bolangir-Patnagarh-Belapada road including C.D. Works—MDR.	90·00	..	..	73·00	..	13·00	20·00	20·00	20·00	6·19	..	1·11
29	Improvement to Nawapara-Khatiar road S.H. 3 (from Sambalpur District boarder to Bolangir District boarder)—SH.	65·00	..	..	65·00	..	16·00	18·00	18·00	13·00	5·53	..	0·97
30	Improvement to Seragarh-Nilgiri-Kaptipada-Udla-Baripada-Deuli-Bengal boarder road—MDR.	40·00	..	..	40·00	..	10·00	20·00	10·00	..	3·40	..	0·60
31	Improvement to Baruan-Brahma-Barada road including construction of C. D. Works—CVR.	179·30	..	..	50·00	..	14·00	16·00	10·00	10·00	4·25	..	0·75
32	Improvement to Anantapur Soro-Kupari-Mahantipada (Agarpara) road including C. D. Works—MDR.	9·00	..	..	9·00	..	2·00	4·00	3·00	..	0·77	..	0·13

33	Improvement to Bhadrak- Ichhapur-Basude v p u r Road—MDR.	10-00	..	..	10-00	1-00	2-00	5-00	2-00	..	0-85	..	0-15
34	Improvement to Dhama- nagar-Kothari Road including construction of C. D. works—MDR.	9-00	..	..	9-00	..	2-00	3-00	4-00	..	0-77	..	0-13
35	Improvement to Titilagar- Gadinghat Road via Gulai including C. D. works—CVR.	29-00	..	..	10-00	..	7-00	3-00	..	..	0-85	.	0-15
36	Improvement to Padmapur to Patnagarh Road including C. D. works— MDR.	40-00	..	..	20-00	..	8-00	7-00	5-00	..	1-70	..	0-30
37	Improvement to Kandar- pur-Machhagaon Road MDR.	10-00	..	..	10-00	..	3-00	2-00	5-00	..	0-85	..	0-15
38	Improvement to Narasingh- pur-Hindol Road includ- ing construct on of C. D. works—MDR.	35-30	..	..	20-00	..	8-00	7-00	5-00	..	1-70	..	0-30
39	Improvement to Jajpur- Mangaipur-Kaiyang ola Road including construc- tion of C. D. works— MDR.	10-00	..	..	10-00	..	5-00	2-00	3-00	..	0-85	..	0-15
40	Improvement to Athagarh- Tigiria-Baramba-N a r a- singhpur Road including C. D. works—MDR.	13-00	..	..	13-00	..	8-00	3-00	2-00	..	1-11	..	0-19

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
41	Improvement to Dhenkanal-Deogaon Road including C. D. works—MDR.	14-00	..	..	14-00	..	5-00	9-00	..	..	1-20	..	0-20
42	Improvement to Deogarh-Gandia-Mandar Road including C. D. works—CDP.	7-00	..	..	7-00	..	2-00	3-00	2-00	..	0-60	..	0-10
43	Improvement to Luhagundi-R. Udayagiri-Rayagada-Paralakhemundi Road including C. D. works—MDR.	20-00	..	..	20-00	..	5-00	6-00	4-00	..	5-00	1-70	0-30
44	Improvement to Motor-Jaipatna Road including C. D. works—CDR.	33-00	..	..	10-00	..	3-00	2-00	2-00	3-00	0-85	..	0-15
45	Improvement to Nawarangpur-Tentuli-Khunti Road via Narasinghpur—CVR.	5-00	..	..	5-00	..	2-00	3-00	..	..	0-43	..	0-07
46	Improvement to Odagan-Navagarhkhanda para-Fategarh-Baghamari Road (except 5 Km. from Fategarh to Kalapathar)—MVR.	13-00	..	..	13-00	..	3-00	5-00	5-00	..	1-10	..	0-20
47	Improvement to Puri-Brahmagiri-Sunamuhin including C. D. works—MDR.	5-00	..	..	5-00	..	3-00	2-00	..	..	0-48	..	0-07
48	Improvement to Kimei-Bamara Road including construction of C. D. works—MDR.	15-00	..	..	15-00	..	3-00	12-00	..	..	1-28	..	0-22
					2,223-62	17-06	519-94	663-00	556-62	467-00	189-05	..	33-31

II C. Replacement of Minor Bridges and Culverts—

(i) Spill over schemes

1	Construction of Bridge over river Chikiti on S. H. No. 2—S. H.	9.97	9.35	9.35	0.62	0.62	..	..	..	..	0.02	..	..
2	Improvement to Dharmagarh-Golamunda-Sinapali Road including C. D. works (Portion from Golamunda to Sinapali under Kantabani Division)—CVR.	22.36	10.36	10.36	12.00	..	7.00	5.00	..	..	0.38	..	0.10
3	Construction of Bridge over Khaljori Nullah on Talwar-Batagan Road near village Nampo in the district of Balasore—MDR.	8.82	3.95	3.95	4.87	4.87	..	..	..	..	0.15	..	0.04
					17.49	5.49	7.00	5.00	..	..	0.55	..	0.14

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
<i>(ii) New Scheme—</i>													
1	Improvement to Bhadrak-Ardei Road Portion from Kuthar to Dhusuri)—CVR.	100·00	..	..	100·00	1·00	23·00	27·00	27·00	22·00	3·20	..	0·80
2	Construction of Bridge and Culverts on Basudpur-Ananta pur-Gopalpur-Balasore Road including road improvement—CDR.	135·00	..	..	100·00	1·00	23·00	27·00	27·00	22·00	3·20	..	0·80
3	Improvement to Patnagarh-Harisankar Road including construction of Bridges and C. D. works—MDR.	40·00	..	..	40·00	1·50	13·50	10·00	10·00	5·00	1·28	..	0·32
4	Improvement to Phulnakhara-Nialimadhab Road (Portion in Cuttack district) including construction of Bridge over Kalighai—MDR.	10·00	..	..	10·00	1·00	4·00	3·00	2·00	..	0·32	—	0·08
5	Improvement to Jagatpur-Salepur-Kendrapara Road including construction of C. D. Works—MDR.	30·00	..	..	30·00	1·50	6·50	8·00	8·00	6·00	0·96	—	0·24
6	Improvement to Biridihat Somepur-Kishorena gar Road including completion of Hansha Bridge near Biridihat—CVR.	7·00	..	..	7·00	..	2·00	2·00	3·00	..	0·22	..	0·06

7	Improvement to Angul-Tikarpada Road including C. D. Works—MDR.	109-00	..	..	109-00	1-00	24-00	25-00	30-00	29-00	3-49	..	0-87
8	Improvement to Berhampur-Digapahandi, Govindapur-Taptapani Road including construction of C. D. Works—MDR.	75-00	..	..	75-00	..	19-00	19-00	19-00	18-00	2-40	..	0-60
9	Realignment of Mandosa-Paria khemundi-Varanashi-Gunupur Road within Orissa border—S. H.	38-00	..	..	38-00	1-00	15-00	9-00	9-00	4-00	1-22	..	0-30
10	Improvement to Berhampur-Phulbani Road including C. D. Works (Portion under Ganjam district—S. H.	36-00	..	..	36-00	..	9-00	9-00	9-00	9-00	1-15	..	0-29
11	Improvement to Sorada-Daringabadi-Gazal badi Road including extension of road from Gazal badi to Daringabadi including construction of D. D. Works—MDR.	12-00	..	..	12-00	2-00	3-00	3-00	2-00	2-00	0-38	..	0-10
12	Improvement to Sorada-Saka-Boirari-Khallikho ta Road including construction of C. D. Works—MDR.	76-00	..	..	76-00	..	14-00	19-00	19-00	24-00	2-43	..	0-61
13	Improvement to Dh. Patna-Papalahandi Road including construction of C. D. Works—S. H.	31-50	..	..	31-50	1-50	6-50	8-00	8-00	7-50	1-01	..	0-25
14	Improvement to Dh. Patna-Kharar road including construction of C. D. Works—MDR.	44-00	..	..	44-00	1-42	8-58	13-00	13-00	8-00	1-41	..	0-35

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
15	Improvement to Arang-Khariar road Station (Nuapara including construction of C. D. Works—MDR.	15·00	—	..	15·00	..	3·00	5·00	3·00	4·00	0·48	..	0·12
16	Improvement to Bhawani-patna Amat road including construction C. D. works—SH.	55·50	..	..	55·50	..	12·50	16·00	16·00	11·00	0·96	..	0·24
17	Improvement Phulbani-Khajuripada Phulbani border road including construction of bridges and C. D. works—SH.	41·00	..	..	41·00	—	11·00	10·00	10·00	10·00	1·31	..	0·33
18	Improvement to Phulbani-Sarangagada Nuagaon Balijuda road including construction of bridges and C. D. works—SH.	63·00	..	..	63·00	—	20·00	15·00	15·00	13·00	2·00	..	0·50
19	Improvement to Kalinga-Raikia-lugach road including construction of bridges over Gunjabadi nullah and others—SH.	50·00	..	..	50·00	1·50	13·50	13·00	11·00	11·00	1·60	..	0·40
20	Improvement to Tumudi-bandha-Rampur road upto Kalahandi border, including construction of bridges and C. D. works—SH.	16·00	..	..	16·00	1·50	3·50	6·00	5·00	..	0·51	..	0·13

21	Improvement to Baligud - Muniguda road including construction of coasiguda and other bridge and C. D. works—SH.	50.00	..	..	50.00	1.50	12.50	12.00	12.00	12.00	1.60	..	0.40
22	Improvement to Berham- pur-Phulbani road inclu- ding construction of bridges Over Drugapra- sad nullah and other nullah and C. D. works— SH.	40.00	..	..	40.00	..	10.00	10.00	10.00	10.00	1.28	..	0.32
23	Improvement to Phulakhara-Niali- madhab Gop road including constn. bridges and C. D. works (Excla- ding portion from Madhab to Gop)—MDR.	20.00	..	..	20.00	1.00	7.00	6.00	6.00	..	0.64	..	0.16
24	Improvement to Khurda- Nayagarh Daspalla road upto Puri district border including reconstruction of weak/narrow bridges & C. D. works.SH.	171.00	..	..	171.00	1.00	33.00	44.00	44.00	49.00	5.47	..	1.37
25	Improvement to Telimunda -Sarpal road including constriation of bridges and C. D. wark. MDR.	36.50	..	..	26.50	..	6.50	7.00	7.00	6.00	0.85	..	0.21
26	Improvement to Sohcia- Padmapur Naspada of bridge and C. D. works. —SH.	46.00	..	..	46.00	..	10.00	14.00	14.00	8.00	1.47	..	0.37

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
27	Improvement to Bargharh-Balangir road repair to Balangir district borders including construction of bridges and C. D. works—S.H.	32.00	..	..	32.00	..	7.00	10.00	10.00	5.00	1.02	..	0.26
28	Improvement to the road from Pajamunda to Koira including construction of bridges and C. D. works—S.H.	38.00	..	..	38.00	1.00	7.00	11.00	11.00	8.00	1.22	..	0.30
29	Improvement to Kalunga-Rangamatia road including construction of bridges and C. D. works—MDR.	20.00	..	..	20.00	2.00	3.00	6.00	6.00	3.00	0.64	..	0.16
30	Improvement to Bhasma Sundargarh-Rajgangpur road including construction of bridges and C. D. works—S.H.	85.50	..	..	85.50	..	18.00	23.00	23.00	21.50	2.74	..	0.68
31	Improvement to Ramagiri-Gupteswar road including construction of C. D. works—C. V. R.	25.00	..	..	25.00	2.00	5.00	8.00	5.00	5.00	0.80	..	0.20
32	Improvement and widening with strengthening of Koraput-Laxmipur-Rayagada road from 0/0 to 25/0 mile including construction of bridges and C. D. works—S.H.	38.00	..	..	38.00	1.38	8.62	10.00	10.00	8.00	1.22	..	0.30

33	Improvement and widening with strengthening of Koraput-Laxmipur-Rayagada road from 25/0 to 52/0 mile including C. D. works—S. H.	135.00	..	..	135.00	2.00	30.00	38.00	38.00	27.00	4.32	..	1.08
34	Improvement to Similiguda-Mathalpur road including construction of C. D. works—C. V. R.	25.00	..	..	25.00	..	5.00	8.00	7.00	5.00	0.80	..	0.20
35	Improvement to Gunupur-Parvatipur road including construction of C. D. works and submersible bridge over Sirijholi—M. D. R.	23.00	..	..	23.00	..	7.00	6.00	6.00	4.00	0.74	..	0.19
36	Improvement to Rayagada-Kerada road including construction of bridge and C. D. works—M. D. R.	18.00	..	..	18.00	..	5.00	5.00	5.00	3.00	0.58	..	0.14
37	Improvement to Rayagada-Muniguda-Ambadola Bhawanipatna (S. H. 5 & 6) including construction of bridges and C. D. works—S. H.	44.00	..	..	44.00	..	10.00	12.00	13.00	9.00	1.41	..	0.35
38	Improvement to Kaitaragarh-Boinda road including C. D. works—MDR.	25.00	..	..	25.00	..	7.00	6.00	6.00	6.00	0.80	..	0.20
39	Hindol Town Railway Station Road—MDR.	25.00	..	..	25.00	..	6.00	7.00	7.00	5.00	0.80	..	0.20

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
40	Improvement to Kamarda Bahaspal road including C. D. Works—CVR.	8-00	..	..	8-00	..	2-00	3-00	3-00	..	0-26	..	0-06
41	Improvement to Nilagiri-Mitrapur road including C. D. works—CVR.	5-00	..	..	5-00	..	1-00	2-00	2-00	..	0-16	..	0-04
42	Improvement to Pantnagarh-Tikarpara road including C. D. works—CVR.	53-00	..	..	30-00	..	12-00	13-00	3-00	2-00	0-96	..	0-24
43	Improvement to Darada-Nalatahar-Sartha road including C. D. works—CVR.	8-00	..	..	8-00	1-00	1-00	3-00	3-00	..	0-26	..	0-06
44	Construction of Minor bridges and culverts on Jagatsingpur-Alipin g a l road and its extension to Madha via Sithalo-Pahanga—CVR.	7-00	..	..	7-00	..	3-00	2-00	2-00	..	0-22	..	0-06
45	Improvement to Kendrapara-Indupur road—MDR.	5-00	..	..	5-00	..	1-00	2-00	2-00	..	0-16	..	0-04
46	Improvement to Narasinghpur-Baliput road including construction of C. D. works—ODR.	12-00	..	..	12-00	..	2-00	4-00	4-00	2-00	0-38	..	0-10
47	Improvement to Kujanga-Baitutha road including C. D. works—CVR.	23-00	..	..	13-00	..	12-00	7-00	4-00	..	0-74	..	0-19

48	Improvement to road from Tangi to Haripur including C. D. works—M.D.R.	7.00	..	..	7.00	..	1.00	3.00	3.00	..	0.22	..	0.06
49	Improvement to Chandipat-Mahana-Adawa-Paniganda road including C. D. works—M.D.R.	15.70	..	..	15.70	..	7.00	3.00	3.00	2.00	0.50	..	0.12
50	Improvement to Sorada-Bargada-Saranda, Hingulikatu-Tarini road including C. D. works—M.D.R.	5.75	..	..	5.75	..	1.75	2.00	2.00	..	0.10	..	0.05
51	Improvement to Motor-Ladagon road including C. D. works—C.V.R.	17.00	..	..	17.00	..	9.00	13.00	3.00	2.00	0.44	..	0.11
52	Improvement to Simijuguda-Handipat road including construction of C. D. works—M.D.R.	25.00	..	..	25.00	..	12.00	8.00	3.00	2.00	0.80	..	0.20
53	Improvement to Sakhigopal-Alagum road including C. D. works—C.V.R.	5.00	..	..	5.00	..	1.00	2.00	2.00	..	0.16	..	0.04
54	Improvement to Chandapur-Rajmakhala road—M.D.R.	12.00	..	..	12.00	..	2.00	4.00	4.00	2.00	0.38	..	0.10
55	Improvement to Rampur-Ayatapur road including C. D. works—C.V.R.	6.00	..	..	6.00	..	1.00	2.00	2.00	1.00	0.10	..	0.05

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
56	Improvement to Biramitrapur-Hatibari road including C. D. works—M.D.R.	5·00	..	..	5·00	..	1·00	2·00	2·00	..	0·16	..	0·04
57	Construction of C. D. works on Balasore-Mitrapur road—O.D.R.	5·00	..	..	5·00	..	1·00	2·00	2·00	..	0·16	..	0·04
58	Construction of Bridges on Basta-Baliapal road—M.D.R.	10·00	..	..	13·00	..	5·00	3·00	3·00	2·00	0·42	..	0·11
59	Improvement to Kuakhia bazar-Barikaimatia road including construction of Baliapal, and other bridges and C.D. works—M.D.R.	35·00	..	..	35·00	..	14·00	8·00	8·00	5·00	1·12	..	0·28
60	Improvement to Ballibashuri-Sikhar ghat road including C. D. works—C.V.R.	15·00	..	..	15·00	..	7·00	3·00	3·00	2·00	0·48	..	0·12
61	Improvement to Belaguntha-Jaganath prasad Kairisingh road including C. D. works—M.D.R.	5·00	..	..	5·00	..	1·00	2·00	2·00	..	0·16	..	0·04
62	Replacement of Dilapidated C. D. works on Roroda-Kantapali road—O.D.R.	8·00	..	..	8·00	..	2·00	3·00	3·00	..	0·26	..	0·06
63	Improvement to Jagannathpur-Purusottampur road—M.D.R.	8·00	..	..	8·00	..	2·00	3·00	3·00	..	0·26	..	0·06
64	Improvement to Bhawani-patna-Rayagada road (SH-6) including construction of C. D. works—S.H.	38·00	38·00	..	10·00	14·00	10·00	4·00	1·22	..	0·30

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65	Improvement to Jenagarh-Dasigaon-Kalampur road including construction of C. D. works—C.V.R.	23-00	10-00	..	2-00	3-00	3-00	2-00	0-32	..	0-08
66	Improvement to Jayapur-Lampatpura road including C. D. works (33 K.M.)—M.D.R.	30-00	..	..	30-00	..	14-00	7-00	7-00	2-00	0-96	..	0-24
67	Improvement to Bisoi-Rairanpur Bahaldia Tiringi-Bihar border road—M.D.R.	25-00	..	..	25-00	..	4-00	8-00	8-00	5-00	0-80	..	0-20
68	Improvement to Konark-Kakatpur road including C. D. works except 4.5 K. M. from Kakatpur—C.V.R.	30-00	..	..	30-00	..	6-00	10-00	10-00	4-00	0-96	..	0-24
69	Improvement to Gania-Daspalla road upto Ganjam.—M. D. R.	11-00	..	..	11-00	..	2-00	3-00	3-00	3-00	0-55	..	0-09
70	Improvement to Deogarh-Nalidahi road including bridges and C. D. Works—M. D. R.	60-00	..	..	60-00	1-00	18-00	15-00	15-00	11-00	1-92	..	0-48
71	Improvement to Sinarpank-Samasinga-Bagadihi road including C. D. Works—O. D. R.	112-00	..	..	50-00	..	16-00	18-00	10-00	6-00	1-60	..	0-40

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
72	Improvement to Deogarh-Kuchinda Bamara road including C. D. works—M. D. R.	15·00	..	..	15·00	..	3·00	5·00	5·00	2·00	0·48	..	0·12
73	Improvement to Sundargarh-Kchripada including C. D. works—M. D. R.	16·50	..	..	16·50	..	4·00	4·50	5·00	3·00	0·53	..	0·13
Total ..		..	..	..	2,406·95	29·80	613·65	666·50	633·00	464·00	75·80	..	18·95

III. B. Construction of By—Passes.

(i) Spill over Schemes

Nil

(ii) New Schemes

1.	Improvement to Sambalpur-Jharsuguda road upto Sundargarh district border including construction of C. D. works to by-pass—S. H.	57·00	..	..	57·00	..	27·00	10·00	10·00	10·00	4·85	..	0·85
Total ..		..	..	..	57·00	..	27·00	10·00	10·00	10·00	4·85	..	0·85

V. Abstract of Totals

1 Scheme for removal of deficiencies in the existing road net work:—

(i) Spill over Schemes—

(a) Costing Rs. 5.00 lakhs or over.	..	..	..	641.13	128.71	222.29	121.00	100.00	69.13	33.99	..	6.99
(b) Costing less than Rs. 5.00 lakhs.	..	..	..	0.07	0.07	..	..	..	..	0.22	..	0.06

(ii) New Schemes—

(a) Costing Rs. 5.00 lakhs or over.	..	..	..	5,316.76	17.31	1,457.70	1,631.20	1,340.80	869.75	217.63	..	48.79
(b) Costing less than Rs. 5.00 lakhs.	36.00	2.00	24.00	0.83	..	0.21

Total of (i) and (ii)	5,983.96	148.09	1,703.99	1,752.20	1,440.80	938.88	252.67	..	56.05
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2 Replacement of existing net road works:—

(i) Spill over Schemes—

(a) Costing Rs. 5.00 lakhs or over.	74.49	26.49	17.00	15.00	10.00	6.00	4.34	..	0.85
(b) Costing less than Rs. 5.00 lakhs.	..	..	..	0.01	0.01	..	..	..	..	..	..	..

(ii) New Schemes—

(a) Costing Rs. 5.00 lakhs or over.	5,140.57	47.86	1,257.59	1,484.50	1,330.62	1,020.00	281.00	..	56.30
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	(b) Costing less than Rs. 5·00 lakhs.	28·75	3·00	25·75	0·91	..	0·22
	Total of (i) and (ii) ..	..	..	..	5,243·82	77·36	1,300·34	1,499·50	1,340·62	1,026·00	286·25	..	57·37
3	Additional facilities to outer traffic needs:—												
	(i) Spill over Schemes—												
	(a) Costing Rs. 5·00 lakhs or over.	..	..	..	..	..	..	..	..	..	..	..	..
	(b) Costing less than Rs. 5·00 lakhs.	..	..	..	..	..	..	..	..	..	..	..	..
	(ii) New Schemes—												
	(a) Costing Rs. 5·00 lakhs or over.	..	..	..	57·00	..	27·00	10·00	10·00	10·00	4·85	..	0·85
	(b) Costing less than Rs. 5·00 lakhs.	..	..	..	4·63	..	4·63	..	..	..	0·39	..	0·07
	Total of (i) and (ii) ..	..	..	..	61·63	..	31·63	10·00	10·00	10·00	5·24	..	0·92
4	Expansion of existing network.						Nil						
5	Grand Total:—												
	Spill over works	..	..	..	715·70	155·28	239·29	136·00	110·00	75·13	38·55	..	7·90
	New Schemes	..	..	..	10,573·71	70·17	2,796·67	3,125·70	2,681·42	1,899·75	505·61	..	106·44
	Total of all road works	..	..	..	11,289·41	225·45	3,035·96	3,261·70	2,791·42	1,974·88	544·16	..	114·34
	Total Rural Roads of which.	..	..	..	4,347·04	74·93	6,335·05	1,284·20	1,001·30	651·56	188·94	..	41·30
	(i) M. N. P.	..	..	..	9·13	9·13	..	..	..	..	1·25	..	0·32
	(ii) Other than M. N. P.	..	..	..	4,337·91	65·80	1,335·05	1,284·20	1,001·30	651·56	187·69	..	40·98

BALASORE DISTRICT

Continuing Schemes

1	Rajhat-Olmara P. S. Road, C.V.R.	8.70	8.00	6.70	2.00	1.13	0.22	0.22	0.22	0.21	33,000	50	250
2	Amarda-Baliapal Road, C.V.R.	..	..	..	..	..	..	..	..	..	..	..	..
3	Salt Road Arana via Kharsapur, V. R.	6.20	5.00	3.80	2.40	1.06	0.33	0.33	0.34	0.34	39,000	50	350
4	Gandibed-Oupada Road, C. V. R.	4.43	4.00	3.30	1.13	0.60	0.13	0.13	0.13	0.14	18,000	20	80
5	Sasanga-Malaharana Singh Road, V. R.	..	..	..	..	..	..	..	..	..	..	-	..
6	Sunant-Hadigan-Jaynagar- Road, P. S.	3.36	3.00	2.32	1.04	0.56	0.11	0.11	0.12	0.12	16,800	20	200
7	Baliapal-Chaumukhi Road P. S.	8.65	6.00	2.00	6.65	3.42	0.80	0.80	0.80	0.83	1,10,600	30	200
8	Salt Road-Himpur via Bardhanpur and Badakia, P. S.	6.18	4.50	1.70	4.48	2.41	0.52	0.52	0.51	0.52	74,300	50	250
9	Markona-Anandapur Road, P. S.	6.27	4.00	0.27	6.00	2.36	0.91	0.91	0.91	0.91	99,700	50	250
10	Kalaghatia-Faguna Road, P. S.	9.50	6.00	0.30	9.20	2.77	1.60	1.60	1.60	1.63	1,52,000	100	900
11	Janjhadi-Khirakona Road, P. S.	6.25	2.50	0.25	6.00	1.93	1.00	1.00	1.00	1.07	99,500	100	400
12	Mitrapur-Raj Berham pur Road, P. S.	14.70	7.50	..	14.70	0.74	3.49	3.49	3.49	3.49	2,44,000	200	800

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
NEW SCHEME													
13	Hariपुर Chunida Road, V. R.	4.90	4.00	2.50	2.40	1.29	0.28	0.28	0.28	0.27	59,800	50	150
14	Charampa-Sabarnga Road, V. R.	7.80	5.00	3.00	4.80	3.08	0.77	0.77	0.77	0.77	79,700	50	250
15	Gadi-Panchatikri, G. P. ...	4.90	4.00	2.50	2.40	1.09	0.28	0.28	0.28	0.47	59,800	50	150
BALANGIR DISTRICT													
1	Mundaghat-Jaloi Road, P. S.	12.26	10.00	6.26	6.00	3.22	0.69	0.69	0.70	0.70	86,000	100	500
2	Tikarapara Road, C. V. R.	19.82	5.50	5.42	14.40	0.07	3.58	3.58	3.59	3.58	2,05,000	200	800
3	Deogaon-Tikarapara Road, C. V. R.	3.80	3.50	3.00	0.80	0.34	0.11	0.11	0.12	0.12	11,200	30	200
4	Bangamunda-Gudihat Road, C. V. R.	14.22	5.00	4.22	10.00	0.67	2.37	2.33	2.33	2.34	1,42,000	100	300
5	Sonpur-Binkapur Bungunipalli, M. D. R.	42.40	12.40	1.60	40.80	1.92	9.72	9.72	9.72	9.72	5,55,000	50	350
6	Mahakhandalathre Road, C. V. R.	25.50	8.20	0.30	25.20	1.00	6.05	6.05	6.05	6.05	3,59,000	200	800
7	Kapasita-Naikpara Road, P. S.	9.45	6.00	0.25	9.20	0.50	2.17	2.17	2.18	2.18	1,30,000	50	150
8	Dhanjira-Tusara-Kapasi r a. C. V. R.	8.80	5.50	..	8.80	0.48	2.08	2.08	2.08	2.08	1,25,700	100	200
					115.20								

CUTTACK DISTRICT

1	Pattamundai-Raj nag ar Road, M. D. R.	..	..	..	..	..	..	..	..	..	..	..	..
2	Banki-Kalapa th ar, C. V. R.	13-95	13-00	11-55	2-40	1-25	0-29	0-29	0-29	0-28	34,000	50	150
3	Madhusudanpur, P. S.	..	..	..	..	..	..	..	..	..	..	..	..
4	Tihru-Naharana, C. V. R.	9-60	8-00	5-20	4-40	0-67	0-93	0-93	0-93	0-94	62,600	50	150
5	Kujang-Gandikpur G. P. Road.	..	..	..	..	..	..	..	..	..	..	..	..
6	Dalkhai-Godibandha, V. R.	7-35	5-50	2-55	4-80	2-54	0-56	0-56	0-57	0-57	68,300	50	150
7	Nuatola-Baurising, P. S.	6-55	5-50	2-55	4-00	2-11	0-60	0-60	0-60	0-59	57,000	50	100
8	Damopara-Haladia Road, C. V. R.	8-95	6-50	2-55	6-40	1-40	1-25	1-25	1-25	1-25	93,000	50	160
9	N. H. S-Prathamakhandi, C. V. R.	15-35	7-80	2-55	14-00	0-51	3-37	3-37	3-37	3-38	1,82,600	50	150
10	Pasal-Kanpur, G. P.	7-75	5-50	2-15	5-60	1-93	0-92	0-92	0-92	0-91	79,700	100	200
11	Halingara to Gandpur, P. S.	4-90	2-20	1-70	3-20	1-46	0-43	0-43	0-44	0-44	45,500	50	150
12	Raipur-Balia, P. S.	6-50	2-20	1-70	4-80	1-45	0-84	0-84	0-84	0-83	68,300	50	150
13	Kasarada-Branch, P. S.	11-05	6-65	0-25	10-80	2-23	2-14	2-14	2-14	2-15	1,53,700	50	250
14	Narasingpur-Tigiria, G. P.	3-85	2-50	0-25	3-60	1-93	0-41	0-42	0-42	0-42	51,000	100	200

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
15	Nadia-Sahaspur, P. S.	4.25	2.75	0.25	4.00	0.72	0.82	0.82	0.82	0.82	55,000	50	150
16	Pattamundai-Indupur, C. V. R.	15.05	6.00	0.25	14.80	0.25	0.89	0.89	0.89	0.88	2,11,000	50	250
17	Sikhara-Korua, P.-S.	6.25	4.00	0.25	6.00	0.61	1.34	1.35	1.35	1.35	85,000	50	150
18	Boro-Sunguli, P.-S.	7.85	4.00	0.25	7.60	0.25	0.84	0.83	0.84	0.84	1,08,200	50	250
19	Indupur-Rahasali, G. P.	3.60	2.00	..	3.60	0.25	0.84	0.84	0.84	0.83	50,000	100	200
20	Kurunti-Ranugai, V. R.	6.40	4.00	..	6.40	0.25	1.54	1.54	1.54	1.53	91,000	100	300
21	Khuadole-Umer, P. S.	7.20	4.50	..	7.20	0.25	1.74	1.74	1.73	1.74	1,02,500	100	350
22	Khuruntikharada via Brahmher, P. S.	16.00	10.00	..	16.00	0.25	3.93	3.94	3.94	3.94	2,24,300	200	500
					129.60								
DHENKANAL DISTRICT													
1	Bamurdharapalli-Kaintara- garh, C. V. R.	22.50	23.00	9.70	12.80	2.15	2.67	2.66	2.66	2.66	1,82,500	50	150
2	Kharagprasad-Kamalanagar, P. S.	..	..	..	..	..	..	..	..	..	..	..	..
3	Talcher-Gopal Prasad, C. V. R.	20.00	13.12	6.40	12.60	1.00	3.15	3.15	3.15	3.15	1,79,400	100	500
4	Old C. S. Road Kadalipal to Mahidharpur, C.V.R.	18.60	13.00	5.60	13.00	0.81	3.05	3.04	3.05	3.05	1,71,000	50	350
5	Angul-Manidharpur Road, C. V. R.	13.10	5.39	3.50	9.60	1.65	2.00	2.00	2.00	1.95	1,36,700	100	300
6	Old C. S. Road Sankarpur- Bhapur, C. V. R.	15.30	9.36	5.70	9.60	1.00	2.15	2.15	2.15	2.15	1,36,700	100	300
7	Sarang-Nihal Prasad- Nityanandapur, C. V. R.	22.25	8.36	4.65	17.60	0.20	4.40	4.40	4.40	4.20	2,28,000	50	350

8	Bidharpur-Joranda, C.V.R.	15.95	10.00	3.15	12.80	1.62	2.79	2.79	2.80	2.80	1,59,600	50	3 50
9	N.H. 23 Kantapari-Dugadi, C. V. R.	4.20	3.00	1.00	3.20	1.74	0.36	0.36	0.37	0.37	45,500	50	1 50
10	Bhalumunda- Alujharana, C. V. R.	22.60	14.50	1.00	21.60	1.00	5.15	5.15	5.15	5.15	37,000	100	4 00
11	Kanjara-Tainsi- Jaganath, C. V. R.	27.55	15.97	0.35	27.20	13.75	3.36	3.36	3.36	3.37	38,000	200	6 00
					<u>140.00</u>								

GANJAM

1	Mahana-Jarua, C. V. R. . .	7.65	7.00	6.85	0.80	0.20	0.15	0.15	0.15	0.15	10,500	60	1 00
2	Sarangarh-Kumarpani . . .	..	..	..	..	..	..	..	..	..	..	..	..
3	Jarda-Tumba, O. D. R. . .	4.30	4.00	3.50	0.80	0.40	0.10	0.10	0.10	0.10	10,500	50	1 00
4	Achuli-Junction to Sam village.	5.40	3.10	2.20	3.20	0.80	0.60	0.60	0.60	0.60	41,000	50	2 50
5	Adapoda to B.K.J. Road, P. S.	..	..	..	..	..	..	..	..	..	..	..	-
6	P. W. D. road to Kainpur- Gangaily.	8.40	4.50	2.00	6.40	2.19	1.05	1.05	1.05	1.06	90,000	50	2 50
7	Boirani-Polsara, C. V. R. . .	6.20	4.00	0.60	5.60	1.83	0.90	0.90	0.97	1.00	79,300	100	6 00
8	Sidheswar, Gantari, C.V.R.	7.90	2.90	0.70	7.20	1.46	1.43	1.44	1.44	1.43	1,02,500	50	2 50
9	Mukundpur-Badamani, C. V. R.	3.90	3.00	0.70	3.20	0.68	0.63	0.63	0.63	0.63	56,900	50	1 50
10	Kaluapali-Kirtipur, P. S. . .	3.90	2.00	0.70	3.20	1.10	0.50	0.50	0.55	0.55	45,000	50	1 50

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
11	Ratnapur-Jagadapur C. V. R.	3.90	2.00	0.70	3.20	0.32	0.72	0.72	0.72	0.72	45,000	50	150
12	Samkhadarda-Kaising, P. S.	4.80	3.00	..	4.80	0.45	1.10	1.10	1.10	1.05	90,800	50	150
13	Mantiri P. W. D. to Chilika, P. S.	4.80	3.20	..	4.80	0.45	1.10	1.10	1.10	1.05	90,800	50	150
					43.20								

KALAHANDI DISTRICT

1	Khadial-Sinapali, C.V.R.	16.55	15.00	11.75	4.80	1.47	0.83	0.83	0.83	0.84	68,100	50	250
2	Dharamgarh-Amapani C. V. R.	31.70	20.00	6.90	24.80	3.00	5.45	5.45	5.45	5.45	2,96,000	200	800
3	Nuapara-Dharmabandha, C. V. R.	11.40	9.50	5.80	5.60	3.20	0.60	0.60	0.60	0.60	79,700	50	250
4	Aplamunda-Patna	3.25	..	..	..	..	..	..	..	..	-	..	..
5	Mayapatna-Hirapur	16.50	8.00	0.50	16.00	1.93	1.50	1.50	1.50	1.57	1,70,000	200	800
6	P. W. D. Kuliha-Kankara	10.80	6.00	0.40	10.40	1.84	2.15	2.15	2.15	1.11	1,25,000	100	300
7	Sinapali-Borden	26.40	14.00	..	26.40	0.42	6.50	6.50	6.50	6.50	3,19,000	200	800
					74.40								

KEONJHAR DISTRICT

1	Barabil-Kiribur .. .. .	..	..	..	..	..	..	..	..	..	..	..
2	Sailong-Deogan, C. V. R.	5.30	5.00	4.50	0.80	0.68	0.03	0.03	0.03	0.03	11,000	50	150
3	Telkoi-Kalihat, C. V. R. .	31.40	25.50	9.00	22.40	1.52	5.22	5.22	5.22	5.22	3,76,000	200	800
4	Suakari-Dabugaon, C.V.R.	37.05	28.00	4.25	32.80	1.00	8.00	8.00	8.00	7.80	5,29,000	200	800
5	Banobani-Dabunia, C.V.R.	6.10	4.00	0.50	5.60	3.02	0.65	0.65	0.65	0.63	36,000	200	500
6	Dadhibamanpur-Tartara, P. S.	8.50	5.50	0.50	8.00	4.34	0.90	0.90	0.90	0.96	1,13,000	200	300
7	Harichandanpur-Bhogamunda, C. V. R.	19.70	12.75	0.50	19.20	0.38	4.70	4.70	4.70	4.72	2,73,500	200	400
8	Sahapada-Udaya ..	12.80	8.00	..	12.80	0.22	3.15	3.15	3.15	3.13	1,79,100	200	400
					1,01.60	..	..	..	..	..	..	..	..

KORAPUT DISTRICT

1	Haradapat-Vouge-Kusum, C. V. R.	20.90	18.50	14.50	6.40	2.83	0.87	0.87	0.87	0.86	90,800	50	150
2	Umankote-Kundel, C.V.R.	50.20	21.00	11.00	39.20	8.68	7.63	7.63	7.63	7.63	5,55,000	300	1,000
3	Narayanpatna-Bandhugan, M. D. R.	20.75	17.00	11.15	9.60	5.02	1.15	1.15	1.15	1.13	1,22,500	50	250

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
4	Rupkana-Kasipur, C.V.R.	17.40	12.00	11.00	6.40	0.81	5.59	1.40	1.40	1.39	90,700	50	250
5	Boriguma-Ranigoda, M.D.R.	10.10	9.00	6.90	3.20	1.81	0.35	0.35	0.35	0.34	45,200	50	250
6	Dabugaon-Jharigam, M.D.R.	22.15	16.00	5.35	16.80	4.00	3.20	3.20	3.20	3.20	2,39,000	200	800
7	Umarkot-Maligan Road, M.D.R.	44.15	21.50	8.15	36.00	3.00	8.25	8.25	8.25	8.25	5,13,500	100	400
8	Kodinga-Chhatahandi Road, C.V.R.	..	..	..	..	..	..	..	..	..	..	..	..
9	Baizangivada-Venkata-palam.	19.15	13.00	3.15	16.00	5.92	2.52	2.52	2.52	2.52	2,28,000	100	600
10	Maikangiri-Chandpatil Road, P. S.	9.50	6.50	1.50	8.00	4.35	0.90	0.90	0.90	0.95	79,700	50	250
11	Mathol-Chanlamundi Road, P. S.	7.10	5.00	1.50	5.60	2.86	0.68	0.68	0.68	0.70	79,700	50	250
12	Korapur-Boriguma, M.D.R.	13.00	9.00	2.60	10.40	4.65	1.44	1.44	1.44	1.43	1,48,000	100	600
13	Kakuriguma-Mathulput Road, C.V.R.	12.00	6.00	1.60	10.40	0.72	2.42	2.42	2.42	2.42	1,48,000	100	400
14	Baipariguda-Kundra, C.V.R.	23.30	15.00	0.90	22.40	0.50	5.47	5.48	5.48	5.48	3,09,000	200	800
15	Lamptaput-Chatra	..	..	..	..	..	..	..	..	..	..	..	..
16	Panchura-Giriliguma	..	31.25	16.00	0.85	30.40	0.50	7.47	7.48	7.48	4,25,000	200	800

(7B-104)

17	Sipariput Sambai G. P. ..	8:00	5:00	..	8:00	0:20	1:90	1:90	2:00	2:00	1,13,000	100	400
18	Sunki Ampabali—CVR. ..	19:20	11:00	—	19:20	0:30	4:72	4:72	4:72	4:74	2,69,000	100	900
19	Balda Pukali P.-S. ..	12:00	7:50	..	12:00	0:30	4:00	3:90	3:90	3:90	1,70,000	100	400
20	Padampur Mittingirai P.-S.	8:80	5:50	—	8:80	0:30	2:12	2:12	2:12	2:14	1,15,000	100	400
21	Padampur Gudari Baibiji..	43:20	20:00	—	43:20	0:30	10:72	10:72	10:72	10:74	6,10,000	500	2,500

MAYURBHANJ DISTRICT

1	Thinkirio Aula Titapada ..	12:80	6:70	6:70	6:10	..	1:50	1:50	1:50	1:60	86,700	50	200
2	Kaptipada Sarat Road ..	20:80	7:00	7:00	13:80	..	3:45	3:45	3:45	3:45	1,96,600	50	350
3	Rajghat Amarda Road ..	6:40	4:00	4:00	2:40	..	0:60	0:60	0:60	0:60	33,800	50	200
4	Baripada Kosta Kantisahi	9:6	..	6:00	3:60	..	0:90	0:90	0:90	0:90	51,400	50	150
5	Dukura Banosugali ..	9:6	1:50	1:50	8:10	..	2:00	2:00	2:00	2:10	1,14,000	200	800
6	S u m a r i a - C h a m d n a Bhangirisoile.	18:00	4:20	4:20	13:80	..	3:50	3:50	3:50	3:30	1,40,500	100	400
7	Balidaha Astha Road DD.	9:00	3:41	2:50	6:50	0:83	1:40	1:40	1:40	1:47	68,300	50	150
8	Singatia Betanati Road..	2:40	1:50	1:50	0:90	..	0:22	0:22	0:22	0:24	12,700	50	150
9	Manikpur Kundabai Sriramchandrapur.	3:85	3:00	2:25	1:60	0:64	0:24	0:24	0:24	0:24	22,700	..	100
10	Rarana Fagu Road ODR.	6:25	5:50	4:65	1:60	0:73	0:20	0:20	0:20	0:27	22,700	..	100
11	Gahandi San Sadiha Thakurmunda Road.	5:20	5:00	4:40	0:80	0:50	0:07	0:07	0:08	0:08	11,300	..	100

437

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
12	Chitrada Morada Road ODR.	4-00	2-50	2-50	1-50	..	0-37	0-37	0-33	0-38	20,500	50	150
13	Sriramchandrapur Brun- dagadi CVR.	6-60	5-00	2-60	4-00	2-02	0-50	0-50	0-50	0-48	56,900	50	150
14	Bhalubasa-Jamda Road— C.V.R.	7-80	7-00	3-00	4-80	3-47	0-33	0-33	0-33	0-34	67,800	50	350
15	Sukurali-Baruan— C.V.R.	4-80	3-00	3-00	1-80	..	0-45	0-45	0-45	0-45	25,500	50	150
16	Dokura-Khanua ..	3-20	1-30	1-30	1-90	..	0-50	0-50	0-50	0-40	26,500	50	150
17	Chandampur-Kausapal— G. P.	6-60	5-00	1-80	4-80	2-77	0-50	0-50	0-50	0-53	67,800	50	350
18	Bargirposi-Symsundarpur— G. P.	8-70	6-00	1-50	7-20	3-88	1-20	1-20	1-20	1-22	1,02,600	50	350
19	Kurunti-Kusumi-Jhunti G. P.	2-80	2-00	1-20	1-60	0-70	0-22	0-22	0-22	0-24	22,700	50	100
20	Badundu-Jamda—C. V. R.	13-50	9-00	1-50	12-00	6-52	1-37	1-37	1-37	1-37	1,69,000	100	400
21	Stapatia-Bairaturudi—P.-S.	8-00	3-34	..	8-00	2-90	1-25	1-25	1-25	1-35	1,12,000	100	500
22	Janakideipur via Tapadihi G. P.	2-40	1-28	..	2-40	1-10	0-32	0-32	0-34	0-34	34,000	50	100
23	Singada-Guhai-Dhipaktia— C.V.R.	12-80	8-00	..	12-80	4-29	0-92	0-93	0-93	0-93	1,80,000	200	500
24	Digha Sarat via Kalia m- gadia—C.V.R.	16-00	7-00	..	16-00	2-57	1-12	1-12	1-12	1-13	2,28,000	200	500

PHULBANI

1	S. H. 1 to Khamakhol CVR.	22.60	10.00	2.60	20.00	1.00	4.75	4.75	4.75	4.75	2,85,000	100	100
2	Baburia-Sarangad—CVR.	23.80	5.00	3.00	20.80	1.91	4.50	4.50	4.50	4.59	2,96,000	200	200
3	Raikia-Simanbadi—CVR—	18.25	10.00	2.25	16.00	1.00	3.75	3.75	3.75	3.75	2,28,000	200	200
4	Tikabali-Chakapada— CVR.	38.50	11.30	2.50	36.00	1.00	8.75	8.75	8.75	8.75	5,00,000	500	500
5	Keshagarh-Srirampur— CVR.	19.10	7.00	1.50	17.60	0.67	4.25	4.25	4.28	4.18	2,50,000	200	200
6	Phulbani-Gochhapada— CVR.	27.90	10.00	1.50	26.40	1.00	6.35	6.35	6.35	6.35	3,76,000	250	250
7	Phiringia-Gochhapada— CVR.	48.10	10.00	2.50	45.60	1.00	11.15	11.15	11.15	11.15	6,00,000	500	500
8	Daringabadi-Bamunigan— MDR.	29.50	5.00	1.50	28.00	0.49	7.00	7.00	7.00	6.51	4,00,000	250	250
9	Tikabali-Gadaguda—CVR.	2.40	1.00	..	2.40	..	0.60	0.60	0.60	0.60	30,000	100	50

216.80

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
SAMBALPUR DISTRICT													
1	Belpahad-Lakhanpur—ODR.	..	6.90	..	..	..	..	..	..	..	..	..	..
2	Lakhanpur-Vikampali Rd.—ODR.	13.50	9.85	7.10	6.40	2.16	1.06	1.06	1.06	1.06	90,700	100	200
3	Bimipur-Laumunda Rd.—G. P.	8.35	6.60	5.15	3.20	1.14	0.50	0.50	0.50	0.56	44,700	100	200
4	Jharsuguda P.W.D. road to Aroda—G. P.	12.00	6.60	6.60	5.40	..	1.35	1.35	1.35	1.35	76,700	100	200
5	Gaisilot—Kendume n d a—G. P.	3.20	2.00	2.00	1.20	..	0.30	0.30	0.30	0.30	16,800	50	150
6	Jharsuguda-Samasi n g a—ODR.	9.60	8.00	5.60	4.00	2.02	0.50	0.50	0.50	0.48	51,700	100	200
7	Chandipali Jamala—GP. . .	10.25	7.00	4.65	5.60	1.98	0.90	0.90	0.90	0.92	76,700	100	200
8	T. Vikampali—Kankata r a—ODR.	10.90	3.90	3.70	7.00	0.16	1.70	1.70	1.70	1.74	1,02,700	50	250
9	Rampur Naktidelul—ODR. . .	18.50	12.00	2.50	16.00	0.86	3.78	3.78	3.78	0.80	2,27,000	100	200
10	Junadihi Ladia—GP. . .	11.70	7.50	0.50	11.20	0.50	2.60	2.70	2.70	2.70	1,59,000	100	200
11	Bhatilli Subusulia—GP. . .	9.30	3.50	0.50	8.80	2.79	1.50	1.50	1.50	1.50	1,20,000	50	250
12	Kuchinda Kusumi—CVR. . .	16.50	10.00	0.50	16.00	1.92	3.52	3.52	3.52	3.52	2,27,000	50	250
13	Daigan-Tilia—GP. . .	8.00	4.00	..	8.00	0.24	2.00	2.00	2.00	1.76	1,11,000	50	250
14	Kansal-Bcamal—CVR. . .	24.00	15.00	..	24.00	0.50	6.00	6.00	6.00	5.50	3,40,000	50	250

SUNDARGARH DISTRICT

1	Kanavatta to Jaraikela .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
2	Panditani Bandhakhan .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
3	Purnapani Nuagan .. 6:90	6:00	4:50	2:40	1:38	0:25	0:25	0:25	0:27	33,300	50	250	
4	Banai Gagua via-Tilta—GP. .. .. .	..	..	..	..	..	..	..	..	..	..	..	..
5	Baling Junction to Kalinga— CVR. 17:90	14:00	7:50	10:40	..	2:60	2:60	2:60	2:60	1,40,000	50	250	
6	Rangati-Banaigarh Via Gurundia—MDR. 34:70	24:20	6:70	28:80	..	7:20	7:20	7:20	7:20	4,10,000	200	800	
7	Birmitrapur to Dalkira— MDR. 17:70	14:00	7:30	10:40	5:30	1:25	1:25	1:35	1:35	1,40,000	50	250	
8	Dumabahal Balisankar—CVR. 45:50	29:00	1:50	44:00	4:21	10:00	10:00	10:00	9:79	5,58,000	200	1,800	
9	Gurundia Jarada—CVR. .. 21:60	13:50	—	21:60	1:78	5:00	5:00	5:00	4:82	3,00,000	200	800	
				117:60									

PURI DISTRICT

1	Kalapathar-Fatthegarh— MDR. 6:80	5:00	3:35	3:45	0:96	0:60	0:60	0:60	0:69	41,500	100	400	
2	Nilamadhab Road to Anantpur G. P. 0:25	0:25	..	..	..	..	..	..	..	..	..	..	..
3	N. H. 5 to Goda G. P. .. .. .	..	..	..	..	..	..	..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
4	Patnarka Deiang Kanash — ODR.	3.85	2.50	2.50	1.35	—	0.30	0.30	0.37	0.38	20,000	50	100
5	Nilakantha Road —CVR.	6.50	4.50	3.30	3.20	0.60	0.65	0.65	0.65	0.55	45,000	50	150
6	Jankia Siko—CVR. ..	9.40	3.00	3.00	6.40	0.14	1.56	1.56	1.57	1.57	90,700	100	200
7	Madhab Balighai -MDR.	..	—	..	..	..	..	..	..	..	..	..	..
8	Pratap prasad Darpanara- yanpur—ODR.	6.30	5.00	3.10	3.20	1.50	0.42	0.42	0.43	0.43	44,700	50	250
9	NH 5 to Mandarbasta G.P.	5.60	1.50	1.50	4.10	—	1.00	1.00	1.00	1.00	58,000	..	100
10	Mahipur Bahada Jhola— ODR.	6.10	3.50	0.50	5.60	2.64	0.75	0.75	0.75	0.71	79,600	100	300
11	Banamaipur Jagannath Prasad CVR.	5.30	3.50	0.50	4.80	1.50	0.80	0.80	0.80	0.90	67,700	100	200
12	NH 5 to Chhatabar - CVR.	5.30	3.50	0.50	4.80	1.50	0.80	0.80	0.80	0.90	67,700	100	200
13	Odagan Nuagan-Bahada Jhola ODR	4.80	0.50	0.50	4.30	..	1.00	1.00	1.00	1.30	65,700	100	200
14	Bhapur Sagargan GP— ..	6.10	1.50	0.50	5.60	1.03	1.15	1.15	1.15	1.12	79,600	100	300
15	Kakarpar Konark CVR—	3.60	2.25	..	3.60	0.44	0.79	0.79	0.79	0.79	50,700	50	200
16	Satasankha Balanga— ODR.	12.00	7.00	..	12.00	0.14	3.00	3.00	3.00	2.86	1,69,000	150	350
17	NH 5 to Rameswar CVR—	4.80	2.20	..	4.80	0.21	1.15	1.15	1.15	1.14	67,700	100	200

67.26

NEW SCHEME

BALASORE DISTRICT

1	Bijayapatna Basudevpur road—P.-S.	12'80	8'00	..	12'80	..	3'20	3'20	3'20	3'20	1,82,000	200	800
2	Gaumai-Kubere Block road — GP.	0'50	3'50	..	6'40	..	1'60	1'60	1'60	1'60	90,600	100	300
3	Padhani-Khadiapada via Sodha—P.S.	12'00	7'50	..	12'00	..	3'00	3'00	3'00	3'00	16,900	50	250
4	Gariganj-Ramkrishna pur —P.S.	5'60	3'40	..	5'60	..	1'40	1'40	1'40	1'40	79,700	50	250
5	Chhacina-Chhatabar road—PWD/PS.	11'20	7'00	..	11'20	..	2'80	2'80	2'80	2'80	1,73,000	200	800
6	Nalbahar-Saratha road —P.W.D.	8'00	5'00	..	8'00	..	2'00	2'00	2'00	2'00	1,14,000	50	100
7	Sambalpur Naraharipur G. P. Office via Somnathpur—V.R.	3'20	2'00	..	3'20	..	0'80	0'80	0'80	0'80	45,000	50	100

BALANGIR DISTRICT

1	Balgaon to Anapali road via Siskela and Ganesh—P.S.	14'40	9'00	..	14'40	..	3'60	3'60	3'60	3'60	2,05,000	200	600
2	Sindhakela to Themera road via Alanda—P.S.	12'00	7'50	..	12'00	..	3'00	3'00	3'00	3'00	1,71,000	50	350

CUTTACK DISTRICT

1	Malasana-Badamunda —P.S.	8'00	5'00	..	8'00	..	2'00	2'00	2'00	2'00	1,10,000	50	100
2	Biraja temple-Birajapur—G.P.	4'80	0'92	..	4'80	..	1'20	1'20	1'20	1'20	70,000	50	100
3	Kusiapal-Ambura via Thakurpatna—P.S.	6'40	3'50	..	6'40	..	1'60	1'60	1'60	1'60	90,000	60	120
4	Ankhia Nampur P. W. D. Road & Adhagad via Nailo P.S.—	2'40	1'50	..	2'40	..	0'60	0'60	0'60	0'60	34,000	50	150
5	Damodar Patnaghat Jagannathpur ghat—P.-S.	8'00	4'50	..	8'00	..	2'00	2'00	2'00	2'00	1,14,000	50	150

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
6	Bamdai, Makundapur Road —P.S.	7-20	4-50	..	7-20	..	1-30	1-30	1-30	1-30	1,02,000	50	150
7	Nischatakoili Kajighat— P. S.	8-00	5-00	..	8-00	..	2-00	2-00	2-00	2-00	1,14,000	50	150
8	Gosadapur-Nuapada— V. R.	7-20	4-50	..	7-20	..	1-30	1-30	1-30	1-30	1,02,000	50	150
9	Construction of road from Attanga Mahabhang, Deopur—G. P.	6-40	4-00	..	6-40	..	2-00	2-00	2-00	2-00	90,000	50	250
10	Batti Reduap via Katang— P. W. D.	4-30	3-00	..	4-30	..	1-20	1-20	1-20	1-20	68,000	100	300
11	Anganahat. Nagadahat— G. P.	8-00	4-00	..	8-00	..	2-00	2-00	2-00	2-00	1,14,000	50	150
12	Bardol Banda road—G.P.	5-60	3-50	..	5-60	..	1-40	1-40	1-40	1-40	80,000	50	150
13	Nuapada-Chapada via Bidyadharpur—G. P.	4-00	2-50	..	4-00	..	1-00	1-00	1-00	1-00	57,000	50	150
14	Aul-Bhimpur via Andala— G. P.	4-30	2-00	..	4-30	..	1-20	1-20	1-20	1-20	68,000	100	300
15	Improvement to PWD. road. from Sankhliagada to Aurangabad.—P. W. D.	8-00	4-50	..	8-00	..	2-00	2-00	2-00	2-00	1,14,000	50	150
16	Patasundarpur Junadai Road—G. P.	8-00	6-50	..	8-00	..	2-60	2-60	2-60	2-60	1,14,000	50	150
17	Baipadh River Embank- ment—P.S.	3-20	2-00	..	3-20	..	0-80	0-80	0-80	0-80	45,000	100	400
18	Padmapur Gopinathpur— G.P.	2-40	1-50	..	2-40	..	0-60	0-60	0-60	0-60	34,000	50	150
19	Bamada Bahujanga Road —P.S.	8-00	1-70	..	8-00	..	2-00	2-00	2-00	2-00	1,14,000	50	150
20	Andhati Jati—P. S.	..	2-40	1-50	..	2-40	..	0-60	0-60	0-60	34,000	50	150

21	Pallai Bharatpur road—P.S.	3:20	1:00	..	3:20	..	0:80	0:80	0:80	0:80	45,000	100	400
					120:80								
22	Improvement of road from Sukinda P.W.D. fingsal road.	15:20	1:20	..	15:20	..	4:40	4:40	4:40	4:40	2,17,000	50	150
23	Improvement of Nandipur-Pritipur R.E.O. road—G.P.	2:40	0:42	..	2:40	..	0:60	0:60	0:60	0:60	34,000	50	150
24	Mansara-Pritipur R.&B. road—P.W.D.	8:80	1:50	..	8:00	..	2:20	2:20	2:20	2:20	1,25,000	50	150
25	Improvement to Uttargada-Raghunathpur-Chinkinjara road—P.S.	6:40	1:00	..	6:40	..	1:60	1:60	1:60	1:60	90,000	50	250
26	Arei-Guhali road—P. S.	4:80	0:50	..	4:80	..	1:20	1:20	1:20	1:20	68,000	50	150
					158:40								

GANJAM DISTRICT

1	Aska-Huma road to Badapalli—P. S.	4:80	2:40	..	4:80	..	1:20	1:20	1:20	1:20	68,000	50	150
2	Geoni-Gurandi-Lingipur—P.W.D. (C.V.R.)	4:80	3:00	..	4:80	..	1:20	1:20	1:20	1:20	68,000	50	150
3	M. D. R. 62 at Chasobilte-Kamasasan road—G.P.	2:40	1:20	..	2:40	..	0:60	0:60	0:60	0:60	34,000	50	150
4	Kadapada to Jharaghami road—P.S.	4:00	2:00	..	4:00	..	1:00	1:00	1:00	1:00	57,000	50	150
5	Jiranga-Rangiri road—P. W. D.	7:20	4:00	..	7:20	..	1:80	1:80	1:80	1:80	1,02,000	100	400
6	Dolapata-Domunhani-Kuruttai road—P.S.	8:00	4:00	..	8:00	..	2:00	2:00	2:00	2:00	1,14,000	50	150
7	Dimripalli-Sadangi palli—P. W. D.	4:80	3:00	..	4:80	..	1:20	1:20	1:20	1:20	68,000	50	150

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
8	P. W. D. road Khembari gaon-Bargaon road—P.S.	8-00	3-80	..	8-00	..	2-00	2-00	2-00	2-00	1,14,000	50	150
9	P. W. D. Kamadhenu via Debrajpur—P. S.	2-40	1-20	..	2-40	..	0-60	0-60	0-60	0-60	34,000	50	150
10	Jiranga-Ramgiri road (Por- tion of it) P. W. D.	4-00	2-00	..	4-00	..	1-00	1-00	1-00	1-00	57,000	50	150
11	Balipadar-Khalingi road (Portion of it)—P.W.D.	8-00	4-00	..	8-00	..	2-00	2-00	2-00	2-00	1,14,000	100	300
12	Padamari-Borigaon road— P. S.	4-00	2-00	..	4-00	..	1-00	1-00	1-00	1-00	57,000	50	150
13	P. W. D. road to Kancha- bali Road—P. S.	4-00	2-00	..	4-00	..	1-00	1-00	1-00	1-00	57,000	50	150
14	P. W. D. road-Tandipur road—P. S.	1-60	0-80	..	1-60	..	0-40	0-40	0-40	0-40	22,000	50	150
15	Kabisuryanagar-Darasana— P. S.	4-00	2-00	..	1-00	..	1-00	1-00	1-00	1-00	57,000	50	150
16	P. W. D. road at Nua- pada-Bodakhali—P. S.	5-60	2-80	..	5-60	..	1-40	1-40	1-40	1-40	8,000	..	..
17	Bhuta Sarasingi-Matha Surangi—P. W. D.	10-40	3-30	..	10-40	..	2-60	2-60	2-60	2-60	1,48,000	100	300

28-00

KEONJHAR DISTRICT

1	Balibara to P. W.D. road —G. P.	1-60	1-00	..	1-60	..	0-40	0-40	0-40	0-40	22,000	50	150
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2	Munda-Jungghisa via Manpur —P. S./G. P.	2:40	1:50	..	2:40	..	0:60	0:60	0:60	0:60	68,000	50	150
3	Bidyadharpur-Bangara— G. P.	2:40	1:50	..	2:40	..	0:60	0:60	0:60	0:60	68,000	50	150
4	M. D. R. 73 to Fakirpur— G. P.	1:60	1:00	..	1:60	..	0:40	0:40	0:40	0:40	22,000	50	150

8:00

KALAHANDI DISTRICT

1	Dharmagarh-Charbahali— P. W. D.	8:96	5:60	..	8:96	..	2:24	2:24	2:24	2:24	1,28,000	50	150
2	Dhanurpur-Khantia road— New construction.	16:00	10:00	..	16:00	..	4:00	4:00	4:00	4:00	2,28,000	200	600
3	P. W. D. Road S. H. 2 to Gaudachandia—New construction.	11:52	7:00	..	11:52	..	2:80	2:80	2:80	2:80	1,64,000	100	200
4	Kaulamunda-Tersingh road —P. W. D.	1:60	1:00	..	1:60	..	0:40	0:40	0:40	0:40	22,000	50	150
5	Ladagam-Banur road— P. W. D.	5:12	3:20	..	5:12	..	1:28	1:28	1:28	1:28	73,000	50	150
6	Leypur to Meding road— P. W. D.	2:40	1:50	..	2:40	..	0:60	0:60	0:60	0:60	68,000	50	150
7	Dharmagarh-Appani road— New construction.	1:60	1:05	..	1:60	..	0:40	0:40	0:40	0:40	22,000	50	150

47:20

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
KORAPUT DISTRICT													
1	Papadahandi-Ko di n g a - Kongakusum road— P. W. D.	28-00	17-50	..	28-00	..	7-00	7-00	7-00	7-00	4,00,000	50	150
2	Narangpur-Ambadala road —P. W. D.	10-40	6-50	..	10-40	..	2-60	2-60	2-60	2-60	1,48,000	50	300
3	Nowrangpur-Tentulikhunti via Damer and Nanda- handi—P. W. D.	10-40	6-50	..	10-40	..	2-60	2-60	2-60	2-60	1,48,000	100	300
4	Nowrangpur to Rajoda road—P. W. D.	28-00	8-00	..	28-00	..	7-00	7-00	7-00	7-00	4,00,000	50	150
5	Gumuda-Ukumba road— P.S./P.W. D.	8-80	5-45	..	8-80	..	2-20	2-20	2-20	2-20	1,25,000	50	150
6	Borigumma-Kumuli via Kanta—P. W. D.	22-40	10-00	..	22-40	..	5-60	5-60	5-60	5-60	3,20,000	50	150
7	Gudari-Gunupur (improve- ment)—P.W.D.	24-00	10-00	..	24-00	..	6-00	6-00	6-00	6-00	3,40,000	100	300
8	Dhodra-Singsani road— G. P.	7-20	3-00	..	7-20	..	1-80	1-80	1-80	1-80	1,02,000	100	300
9	Dhokhal Jagadalpur— P. W. D.	9-60	6-00	..	9-60	..	2-40	2-40	2-40	2-40	1,37,000	100	300
10	Padmapur-Dubinis ingi— P. S.	4-00	2-50	..	4-00	..	1-00	1-00	1-00	1-00	57,000	50	150
11	Dabugam-Maidalpur— P. W. D.	12-80	8-00	..	12-80	..	3-20	3-20	3-20	3-20	1,82,000	100	300
12	Nowrangpur-Tentulikhun ti via Kukudabai road— P. S.	14-40	5-00	..	14-40	..	3-60	3-60	3-60	3-60	2,05,000	100	400

13	Dandabada-Ramagiri- Boipariguda—P. W. D./ P. S.	20.80	12.00	..	20.80	..	5.20	5.20	5.20	5.20	2,97,000	50	150
14	Kundra N. H. 43—Nuagam via Kusumi—P. W. D.	20.80	5.00	..	20.80	..	5.20	5.20	5.20	5.20	2,97,000	50	150
15	Govindapalli-Salimi road —P. W. D.	24.00	5.00	..	24.00	..	6.00	6.00	6.00	6.00	3,42,000	100	300
16	Kasipur-Mandibaso-Sikar- pai—P. W. D.	25.60	12.50	..	25.60	..	6.40	6.40	6.40	6.40	3,65,000	100	400

MAYURBHANJ DISTRICT

1	Bansabila-Karanjia road— G. P.	5.00	2.45	..	5.00	..	1.25	1.25	1.25	1.25	70,000	100	300
2	Mahisasuri-Salachuna- Padmapokhari road— G. P.	13.00	7.00	..	13.00	..	3.25	3.25	3.25	3.25	1,85,000	100	300
3	Kucisila-Gornah-Hisani— G. P.	1.60	0.76	..	1.60	..	0.40	0.40	0.40	0.40	22,000	100	300
4	Balijora-Jadunathpur road via Angari—G. P.	7.40	3.00	..	7.40	..	1.85	1.85	1.85	1.85	1,05,000	100	400
5	Dalki-Duba-Aperabeda— P. W. D./G. P.	11.40	2.35	..	11.40	..	2.85	2.85	2.85	2.85	1,62,000	100	300
6	Badua-Kusumi road— G. P.	7.40	4.00	..	7.40	..	1.85	1.85	1.85	1.85	1,05,000	100	200
7	Udala-Gitidighal-Dhirakul —P. S./G. P.	11.40	6.50	..	11.40	..	2.85	2.85	2.85	2.85	1,62,000	100	300
8	Sadas-Krushni—G. P.	4.80	3.00	..	4.80	..	1.20	1.20	1.20	1.20	69,000	50	100

116 B

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
9	Jamada-Manbir road— P. W. D.	7.40	4.00	..	7.40	..	1.85	1.85	1.85	1.85	1,05,000	100	200
10	Samerdafa-Kuldian road P. W. D.	4.80	2.10	..	4.80	..	1.20	1.20	1.20	1.20	69,000	50	100
11	Purunia-Haripur-Bachhani- pada-Mahul Patha road —P. W. D.	6.60	3.50	..	6.60	..	1.65	1.65	1.65	1.65	92,000	100	200
12	Joypur-Saikula road— G. P.	6.60	3.50	..	6.60	..	1.65	1.65	1.65	1.65	92,000	100	200
13	Anarabandha M. D. R. road—P. W. D.	4.80	1.95	..	4.80	..	1.20	1.20	1.20	1.20	69,000	50	100
14	Kanka Biniuha road— G. P.	3.20	2.00	..	3.20	..	0.80	0.80	0.80	0.80	45,000	50	100
15	Karanja-Ankura road— P. W. D.	2.40	1.50	..	2.40	..	0.60	0.60	0.60	0.60	35,000	50	100
16	Bakala-Tangabilla road— G. P.	9.00	5.00	..	9.00	..	2.75	2.75	2.75	2.75	1,25,000	100	200
17	N. H. 5 Kumarmunda- Kata road—G. P.	2.40	1.45	..	2.40	..	0.60	0.60	0.60	0.60	35,000	50	100
18	M. D. R. 5 Pedagadi road —G. P.	2.40	1.30	..	2.40	..	0.60	0.60	0.60	0.60	35,000	50	100
19	Bahajia-Kanki-Kulgi road —P. W. D.	4.00	2.50	..	4.00	..	1.00	1.00	1.00	1.00	55,000	50	100
20	Sukhilahat-Betnati road —G. P.	4.80	2.20	..	4.80	..	1.20	1.20	1.20	1.20	69,000	100	200
21	Panasiha-Ambanadia road P. W. D.	4.00	2.50	..	4.00	..	1.00	1.00	1.00	1.00	55,000	50	100
22	M. D. R. 4- Arnan Road	1.60	1.00	..	1.60	..	0.40	0.40	0.40	0.40	5,000	50	100

23	Sundhal-Rairangapur-Gorumahisani Road—G. P.	4'00	1'50	..	4'00	..	1'00	1'00	1'00	1'00	55,000	50	100
24	Naksera-Bramhani post—P. W. D.	26'80	15'50	..	26'80	..	6'70	6'70	6'70	6'70	3,65,000	200	500
25	Kadadiha-Tangabila Road—P. W. D./G.P.	9'00	3'01	..	9'00	..	2'75	2'75	2'75	2'75	1,25,000	100	200
26	Sunaposi-Bisipur-Balipost Road—G. P.	13'00	7'50	..	13'00	..	3'75	3'75	3'75	3'75	1,85,000	150	300
27	Saukerke-Dhoblonguthan in Nugaon Road—G.P.	8'00	4'45	..	8'00	..	2'00	2'00	2'00	2'00	1,41,000	100	200
28	Betnati-Agadavalia Road—G. P.	5'60	3'50	..	5'60	..	1'40	1'40	1'40	1'40	80,000	75	125
29	Moharada-Sariasal Road—P. W. D/G. P.	5'60	2'31	..	5'60	..	1'40	1'40	1'40	1'40	80,000	75	125
30	Baunsa-Tofa-Sanabaunstila—G.P.	4'80	2'26	..	4'80	..	1'20	1'20	1'20	1'20	70,000	50	100
31	Anasul-Khnta Road—G.P.	6'40	2'82	..	6'40	..	1'60	1'60	1'60	1'60	90,000	80	160
32	Brundabana-Chadupur-Athabada Road—G. P.	4'00	2'50	..	4'00	..	1'00	1'00	1'00	1'00	57,000	50	100
33	Pingu-Nagudiha Road—G. P.	1'60	0'80	..	1'60	..	0'40	0'40	0'40	0'40	23,000	25	50
34	Jamapani-Kulisila—P. W. D/ G. P.	20'80	12'50	..	20'80	..	5'20	5'20	5'20	5'20	2,96,000	250	500
35	Parabada-Panbatri-Manikpur-Phulkoni Road G. P.	8'00	5'00	..	8'00	..	2'00	2'00	2'00	2'00	1,14,000	100	200

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
36	Matigoda—Dhobodiha Road—G. P.	6.40	4.00	..	6.40	..	1.60	1.60	1.60	1.60	90,000	80	160
37	Jamuti-Kusumpur Road—G. P.	4.00	2.50	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
38	Damodarpur-Raikod-Kharan Bonta Road—G. P.	5.60	3.50	..	5.60	—	1.40	1.40	1.40	1.40	80,000	75	125
39	Paramanda-Sarisui Road—G. P.	1.60	0.82	..	1.60	..	0.40	0.40	0.40	0.40	22,000	30	60
40	Syamasundarpur-Gudipada-hari—G. P.	7.20	4.50	..	7.20	..	1.80	1.80	1.80	1.80	1,02,000	100	200
41	Kuliana Digarastia Road—G. P.	4.80	3.00	..	4.80	..	1.20	1.20	1.20	1.20	70,000	75	150
42	Nora-Sasat Road—G. P.	6.40	3.62	..	6.40	..	1.60	1.60	1.60	1.60	90,000	80	160
43	Minigathan-Saichu Road—G. P.	4.00	2.35	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
44	Gambharia-Baramhanemera-Sujaketa Road—G. P.	4.00	2.50	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
45	Nandzour-Singulmundi-Bisua-pur Road—G. P.	6.40	2.52	..	6.40	..	1.60	1.60	1.60	1.60	90,000	80	160
46	Dumeria-Sirasa Road—G. P.	4.00	1.71	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
47	Pasuda-Khunta-Road Via-Damadarpur—G. P.	11.20	5.00	..	11.20	..	2.80	2.80	2.80	2.80	1,60,000	150	300
48	Taisa-Pandupani-Nuzgaon P. W. D./G. P.	10.00	6.00	..	10.00	..	2.50	2.50	2.50	2.50	1,42,000	125	250

49	Sukuali-Khichining-Utara- pesi—G. P.	1.60	1.00	..	1.60	..	0.40	0.40	0.40	0.40	22,000	30	60
50	N. H. 5 Rantua Road— G. P.	4.00	2.50	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
51	Sankhabh a n g a-J h a r a- P o k h a r i a.via. Sinsa —P. W. D./G. P.	24.80	5.52	..	24.80	..	6.20	6.20	6.20	6.20	3,54,000	250	500
52	Haldia-Lagia—G. P.	5.60	3.50	..	5.60	..	..	..	..	..	..	..	..

355.20

PURI DISTRICT

1	Saradeipur-Nimapara Road —P. W. D.	21.60	5.00	..	21.60	..	5.40	5.40	5.40	5.40	3,09,000	225	450
2	Garia-K uturi Road— P. W. D.	25.60	3.00	..	25.60	..	6.40	6.40	6.40	6.40	3,65,000	300	600
3	Balakati-Balianta Road— P. W. D.	9.60	3.00	..	9.60	..	2.40	2.40	2.40	2.40	1,42,000	100	200
4	Raj Sunakhala to Sagargoan Via-Dhalapatnar—C. V. R.	12.80	4.00	..	12.80	..	3.20	3.20	3.20	3.20	1,82,000	150	300
5	Bhimpur-Dhobishahi—P.W. D.	1.60	1.00	..	1.60	..	0.40	0.40	0.40	0.40	22,000	30	60
6	Siko to Begunia Via- Gora Manitiri Road— C. V. R.	4.00	2.00	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
7	Balugaon-Manipur Road Via- Malishahi—P. S.	1.60	1.00	..	1.60	..	0.40	0.40	0.40	0.40	22,000	30	60
8	Machhiapada to Kunda Via- Padmadeipur— G. P.	2.40	0.50	..	2.40	..	0.60	0.60	0.60	0.60	34,000	60	120
9	Haripur to Kuhudi Via- Hatabarudi - C. V. R.	4.00	1.00	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
10	Bahadajola to Sunamunhi—C.V.R.	3.20	0.50	..	3.20	—	0.80	0.80	0.80	0.80	46,000	50	100
11	Nirakarpur to Kaduaghat—C.V.R.	2.40	1.00	..	2.40	—	0.60	0.60	0.60	0.60	34,000	50	120
12	Hantuado to Dhunal Via-Khanata—C.V.R.	2.40	1.50	..	2.40	—	0.60	0.60	0.60	0.60	34,000	50	120
13	Halanda to Berubadi—C.V.R.	3.20	1.50	..	3.20	..	0.80	0.80	0.80	0.80	46,000	50	100
14	Gobakunda to Subarnapur—C.V.R.	2.40	1.50	..	2.40	..	0.60	0.60	0.60	0.60	34,000	50	100
15	Pratap to Kumarranga Sasan—C.V.R.	2.40	1.00	..	2.40	..	0.60	0.60	0.60	0.60	34,000	50	100
16	Proyagi-Krishnaprahsad—P.W.D.	3.20	1.00	..	3.20	..	0.80	0.80	0.80	0.80	46,000	50	100
17	Brahmagiri-Kusubonti-Gadisagoda—C.V.R.	2.40	1.00	..	2.40	..	0.60	0.60	0.60	0.60	34,000	50	100
18	Banpur to Dhankera—C.V.R.	4.00	1.75	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
19	Nagapur to Achyutapur Chak—C.V.R.	2.40	1.00	..	2.40	..	0.60	0.60	0.60	0.60	34,000	40	100
20	Banpur Salia Via-Pratap—P.W.D.	12.00	2.00	..	12.00	..	3.00	3.00	3.00	3.00	1,71,000	150	300
21	Siruli-Dhobandha—C.V.R.	4.00	2.00	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
22	Prataprudrapur to Kantapada Via-Anasasi—C.V.R.	4.00	2.50	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100

23	Mandan Basta-Sadhei Garh—C. V. R.	0.80	0.15	..	0.80	..	0.20	0.20	0.20	0.20	12,000	25	50
24	Sunamui-Satapada— P. W. D.	3.20	2.00	..	3.20	..	0.80	0.80	0.80	0.80	46,000	50	100
25	Sailo-Niali Road—C. V. R.	1.60	0.50	..	1.60	..	0.40	0.40	0.40	0.40	24,000	5	100
26	Panichhara to Konark— C. V. R.	4.00	1.50	..	4.00	..	1.00	1.00	1.00	1.00	57,000	50	100
27	Patolia-Kapileswar Via- Badatara—C. V. R.	2.40	1.00	..	2.40	..	0.60	0.60	0.60	0.60	33,000	50	100
					143.20								

SAMBALPUR DISTRICT

1	Talapuri Hira Road Via- Badasahir—G. P. New Construction.	29.60	18.00	..	29.60	..	7.40	7.40	7.40	7.40	4,24,000	300	600
2	Jumankira-Bhojpur— P. W. D.	11.20	5.00	..	11.20	..	2.80	2.80	2.80	2.80	1,60,000	150	300
3	Reonta-Kirimal Road— P. W. D. New Construc- tion.	2.40	1.00	..	2.40	..	0.60	0.60	0.60	0.60	34,000	50	100
					43.20								

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
SUNDERGARH DISTRICT													
1	Sabdega to Lanjiberna Via-Tengarugaon-E k m a- Pancharia P. W. D.	48'00	30'00	..	48'00	..	12'00	12'00	12'00	12'00	6,85,000	300	600
2	Talasura to Lulukidihi— P. W. D.	21'60	13'50	..	21'60	..	5'40	5'40	5'40	5'40	1,00,000	100	200
3	Koida to Ganua Via-Pat- maunda—R. E. O./G. P. S.	6'40	4'00	..	6'40	..	1'60	1'60	1'60	1'60	90,000	100	200
					76'00								
PHULBANI DISTRICT													
Nil													
DHENKANAL DISTRICT													
Nil													
FOR MAJOR BRIDGES													
BALASORE DISTRICT													
1	Haripur-Chanida Road	15'00	..	..	15'00	..	3'75	3'75	3'75	3'75	49,500	200	300
2	Nalbari-Sarvatha Road	21'60	..	..	21'60	..	5'40	5'40	5'40	5'40	71,500	200	300

BALANGIR DISTRICT

1	Sonepur-Binika-Rampur-Bansunipali Road.	120-20	120-20	..	30-05	30-05	30-05	30-05	4,00,000	170	500
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CUTTACK DISTRICT

1	Rampur-Balia Via-Sondia and Parisa.	16-00	16-00	..	4-00	4-00	4-00	4-00	53,000	130	200
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DHENKANAL DISTRICT

1	Bamurdhurapala-Kantaraya	42-00	42-00	..	10-50	10-50	10-50	10-50	1,39,000	300	700
2	Taicher-Gopalprasad Road	20-00	..	..	20-00	..	5-00	5-00	5-00	5-00	66,000	270	400
3	Old C. S. Road-Kadalipal-Mahidharpur.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
4	Old C. S. Road-Bhampur-Sankarpur-Kadalipal.	22-80	..	..	22-80	..	5-70	5-70	5-70	5-70	75,500	200	300
5	Sarangi-Nihstprasad	8-00	..	..	8-00	..	2-00	2-00	2-00	2-00	26,000	270	400
6	Kanjara-Tamsi	18-40	..	..	18-40	..	4-60	4-60	4-60	4-60	61,000	139	200

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
GANJAM DISTRICT													
Nil													
KALAHANDI DISTRICT													
1	Khariar-Sinapalli Road ..	137.75	..	..	137.75	..	34.43	34.43	34.43	34.43	4,58,000	370	800
2	Dharamgarh-Apari Road	24.00	..	..	24.00	..	6.00	6.00	6.00	6.00	79,000	300	700
3	Nawapara-Dharam-Bhandh Road.	41.00	..	..	41.00	..	10.25	10.25	10.25	10.25	1,36,000	270	400
4	Sinapalli-Borden ..	72.00	..	..	72.00	..	18.00	18.00	18.00	18.00	2,39,000	300	700
5	P. W. D. H2-Gouda Chhadia.	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
KEONJHAR DISTRICT													
1	Suakati-Dabugaon Road	9.00	..	..	9.00	..	2.25	2.25	2.25	2.25	29,500	200	300
KORAPUT DISTRICT													
1	Umerkote-Maligaon Road	25.50	..	..	25.50	..	6.375	6.375	6.375	6.375	84,000	400	600
2	Kodinga Chhattahandi ..	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,000	500	400
MAYURBHANJ DISTRICT													
1	Rajghar-Amarda ..	9.00	..	..	9.00	..	2.25	2.25	2.25	2.25	29,500	200	300
2	Chitrada-Morada Road ..	18.00	..	..	18.00	..	4.5	4.5	4.5	4.5	59,500	200	300
3	Bhulabasa-Jamda ..	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,000	400	600
4	Baripada-Kosta ..	7.00	..	..	7.00	..	1.75	1.75	1.75	1.75	23,000	200	400

5	Sukurali-Barua	..	13:50	..	..	13:50	..	3:375	3:375	3:375	3:375	44,000	200	300
6	Bangiriposi-Syamasinder	..	9:00	..	..	9:00	..	2:25	2:25	2:25	2:25	29,500	200	300
7	Kharanti-Kasamijhanti	..	12:00	..	..	12:00	..	3:00	3:00	3:00	3:00	39,000	300	700
8	Singda-Guhadi	..	14:00	..	..	14:00	..	3:5	3:5	3:5	3:5	46,000	300	700

PHULBANI DISTRICT

1	Phiringia-Goch h a p a d a Road.	..	30:00	..	..	30:00	..	7:05	7:05	7:05	7:05	99,000	400	600
2	Phulbani-Goch h a p a d a Road.	..	30:00	..	..	30:00	..	7:5	7:5	7:5	7:5	99,000	400	600

PURI DISTRICT

1	Nilakantha Road	..	22:50	..	..	22:50	..	5:62	5:62	5:62	5:62	74,000	300	700
2	Madhab-Balighat Road	..	25:00	..	..	25:00	..	6:25	6:25	6:25	6:25	83,000	140	200
3	Pratap Prasad-Darpana-ravana Road.	..	15:00	..	..	15:00	..	3:75	3:75	3:75	3:75	49,500	200	300
4	Kakatpur-Konark	..	12:50	..	..	12:50	..	3:12	3:12	3:12	3:12	41,100	700	200
5	Satasankha-Balanga	..	25:00	..	..	25:00	..	6:25	6:25	6:25	6:25	83,000	140	200

SAMBALPUR DISTRICT

1	Bijipur-Lamunda	..	6:00	..	..	6:00	..	1:50	1:50	1:50	1:50	19,500	200	300
2	Kushinda-Kusumi	..	27:50	..	..	37:50	..	9:37	9:37	9:37	9:37	124,000	300	700
3	Karosal-Riamal	..	38:00	..	..	38:00	..	9:50	9:50	9:50	9:50	1,26,000	270	400
4	Rampur-Naktideul	..	16:00	..	..	16:00	..	4:00	4:00	4:00	4:00	53,000	140	200
5	Talapati to Hirajahi	..	6:00	..	..	6:00	..	1:50	1:50	1:50	1:50	19,500	200	300

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
SUNDARGARH DISTRICT													
1	Dumabahal-Bahsankar	21.00	..	..	21.00	..	5.25	5.25	5.25	5.25	69,000	300	700
2	Pankadihi-Bandhakhana	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
3	Bonai-Gogua	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
4	Purunapani-Nuagaon	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
5	Balinga junction to Kanika	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
6	Rangan-Bonaigarh	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
7	Biramitrapur-Dalki	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
8	Gurundia-Jarada	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
9	Kansveta-Jaroikela	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
Grand Total		.. 2244.00	..	..	2,244.00	..	561.20	561.20	561.20	561.20			

FOR MINOR BRIDGES

BALASORE DISTRICT

1	Rajghat-Olmara Road.	P. S.	8.30	..	..	8.00	..	2.00	2.00	2.00	2.00	26,000	270	400
2	Amarda-Baliapal Road		8.00	..	..	8.00	..	2.00	2.00	2.00	2.00	26,000	270	400
3	Salt Road-Arana via Kharsapur.		10.00	..	..	10.00	..	2.50	2.50	2.50	2.50	33,000	130	200
4	Gandibed-Oupada Road.		..	..	..	..	..	..	..	..	..	..	..	..
5	Sasanga-Malaharana-Singh Road.		1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	100	250
6	Sunahat-Hadigan-Jaynagar Road.		..	..	..	..	..	..	..	..	..	..	..	..
7	Baliapal-Chaumukhi Road.		6.15	..	..	6.15	..	1.5375	1.5375	1.5375	1.5375	2,000	200	300
8	Salt Road-Himpur via Bardhanpur and Badakia.		..	..	..	..	..	..	..	..	..	..	..	..
9	Markona-Anandapur Road.		..	..	..	..	..	..	..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
10	Kalaghatia-Faguna Road..	..	..	..	..	..	..	..	..	..	..	..	..
11	Janjhadi-Khirakona Road	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	100	200
12	Mitrapur-Raj-Berhampur Road.	7.00	..	..	7.00	..	1.75	1.75	1.75	1.75	23,000	130	200
13	Bijayapatna-Basudevapur Road.	10.00	..	..	10.00	..	2.50	2.50	2.50	2.50	33,000	130	200
14	Guamal-Kubero Block Road.	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
15	Pachasi-Khadia puda via Sodha.	..	..	..	..	..	..	..	..	..	..	..	..
16	Gariganj-Ramkrishnapur.	9.00	..	..	9.00	..	2.25	2.25	2.25	2.25	29,000	300	700
New Scheme													
17	Haripur-Chauda Road ..	..	..	..	..	..	..	..	..	..	..	..	..
18	Charampa-Sabaranga Road.	..	..	..	..	..	..	..	..	..	..	..	..
19	Gadi-Panchatikiri	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
20	Chhachina-Chatrabar Road.	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	100	250
21	Narbahar-Samothe Road..	9.45	..	..	9.45	..	2.36	2.36	2.36	2.36	31,000	150	350
22	Sambalpur-Narbaharipur Road.	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	100	250

BALANGIR DISTRICT

1	Mundaghat-Jalsi Road ..	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
2	Tikarpara Road ..	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
3	Deogaon-Tikarpara Road	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
4	Bangamunda-Gudiha Road	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
5	Sonpur-Binka-Rampur-Bhagunipalli	5-00	..	..	5-02	..	1-25	1-25	1-25	1-25	16,000	270	400
6	Mahakhand a-Lathore Road.	8-80	..	..	8-80	..	2-20	2-00	2-20	2-20	29,000	130	200
7	Kapasira-Naikoatar Road	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
8	Dhanjra-Tusara-Kapasi ra	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
9	Balgaon-Anpali Road ..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
10	Sindhakhela to Th amira Road.	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400

CUTTACK DISTRICT
(Contd. Projects)

1	Pattamunda-Raj nag ar Road.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
2	Barki-Rainpethara-Anwari-Baidaswar.	10-00	..	..	10-00	..	2-50	2-50	2-50	2-50	33,000	130	200
3	Mathmundaapur-Tart a n g to Totapada L. P. School via Tartang Matha.	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
4	Tilraji-Nhasans Road ..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
5	Kujang-Gadkipur via Gopikud Road.	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
6	Dalkhali-Godibandha-Champeswar Sagar.	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	100	250
7	Nuatoi Daurisingi Rartipara.	6.50	..	..	6.50	..	1.625	1.625	1.625	1.625	21,000	270	400
8	Dampada-Haladia Road (State from Jatamudia).	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	100	250
9	N. H. 5 Prathamakhandi Bandhadihi via Atalapur Santrapur, Brahmabeda, Chandapur.	5.05	..	..	5.05	..	1.2625	1.2625	1.2625	1.2625	16,000	230	600
10	Pasol-Kanpur via. Purnadhilipal and Kathe.	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	100	250
11	From Express Highway Haldiagarh-Gardpur.	2.00	..	..	2.00	..	0.50	0.50	0.50	0.50	6,000	270	400
12	Raipur-Balja via. Sondia and Pariari.	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	100	250
13	Kasarda to Eranch Palasudha Kulasri-Atlang-Dighi-Sithal.	2.00	..	..	2.00	..	0.50	0.50	0.50	0.50	6,000	270	400
14	Road leading from Narasinghpur-Salanga-Puruna Tigiria.	2.00	..	..	2.00	..	0.50	0.50	0.50	0.50	6,000	270	400
15	Nadia-Sahasapur Padamagiri.	10.00	..	..	10.00	..	2.50	2.50	2.50	2.50	33,000	130	200
16	Pattamundai-Indupur ..	3.00	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
17	Sikhar-Korna via. [Salia-Salijunga.	1.00	1.00	..	0.25	0.25	0.25	0.25	3,000	100	250

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18	Soro Sungai Road	..	1-00	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
19	Indharper Rahasoi	..	1-00	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
20	Khandola Umar	..	6-00	..	..	6-00	..	1-50	1-50	1-50	1-50	19,500	200	300
21	Khuriunti Pahugol	..	6-00	..	..	96-00	..	1-50	1-50	1-50	1-50	18,500	200	300
22	Kharanti Kharda via- Brahmnher.	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
23	Malasura Badamundi	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
24	Biraja Temple Birjharpur	10-00	..	..	..	10-00	..	2-50	2-50	2-50	2-50	33,000	130	200
25	Kusipal, Ambura via- Thakurpatna.	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
26	Akhis Nampar P. W. D. Road and Alhangagad via-Nailo.	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
27	Damodar Patnaghat	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
28	Bamdoi Makradapur Road	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
29	Nischintakolikajeghat	..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
30	Goradapur Nuapada	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
31	Construction of Road from Hittanga kaha b h a n g, Deopur.	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
32	Batti Kuduari via-Katang	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
33	Angasahat Nagasahat	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
34	Bardal Bengal Road	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
35	Nuapada-Cha p a d a via- Bidyadharapur.	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
36	Aut Bhimpur via-Andala	1-00	..	..	1-00	..	0-25	0-25	0-25	0-20	3,000	100	250
37	Improvement to P. W. D. Road from Sonkaligada to Aurangbad.	2-00	-	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
38	Pataundapur G u n a d a l Road.	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
39	Baipadh River embankment	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	250
40	Padmapur-Gopinathpur ..	1-45	..	..	1-45	..	0-36	0-36	0-36	0-36	1,500	130	200
41	Bamanda Bahajanga Road	1-00	..	..	1-00	-	0-25	0-25	0-25	0-25	3,000	100	250
42	Andhuti Joti ..	1-00	..	-	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
43	Pallai Bharatpur Road ..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	100	250
44	Improvement of road from Sakinda P. W. D. Pingol Road.	3-00	-	..	3-00	..	0-75	0-75	0-75	0-75	6,000	270	400
45	Mansora-Pratipur R. & B. Road.	10-00	-	..	10-00	..	2-50	2-50	2-50	2-50	33,000	130	200
46	Improvement to Uttangada-Raghnathpur Chittina Road.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
47	Arei-Gahali Road ..	2-00	..	-	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
48	Improvement of Nandipur Pritipur R. E. O., Road Extension upto Dakhipur.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400

DHENKANAL DISTRICT

1	Bamurdhaurapalli-Kainta-rsgarh.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
2	Kharaprasad-Kamalang Road.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
3	Talcher-Gopalprasad Kania Road.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
4	Old C. S. Road Kadalipai-Mahidharpur.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
5	Angul-Mahidharpur Road	8-00	..	..	8-00	..	2-00	2-00	2-00	2-00	26,000	270	400
6	Old C. S. Road Bhapur-Sankarpur-Kadalaipal.	2-80	..	..	2-80	..	0-70	0-70	0-70	0-70	9,000	130	200
7	Sarangi-Nihalprasad-Nityanandapur.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
8	Bidhapur-Joranda-Allunia	8-00	..	..	8-00	..	2-00	2-00	2-00	2-00	26,000	270	400
9	N. H. 23 (Kantapari-Dugadi-Pangtira-Mahapirad.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
10	Bhallumunda-Allujharana	20-00	..	..	20-00	..	5-00	5-00	5-00	5-00	66,000	270	400
11	Kanjara-Tarasi-Jagnathpur.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300

GANJAM DISTRICT
(CONTINUING SCHEME)

1	Mohana-Jarna Badagada..	10-00	..	..	10-00	..	2-50	2-50	2-50	2-50	33,000	130	200
2	Sarangarab-Kumarpalani Badasingha.	8-00	..	..	8-00	..	2-00	2-00	2-00	2-00	26,000	270	400

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
3	Jarada-Tumba Road ..	8-00	..	..	8-00	..	2-00	2-00	2-00	2-00	26,000	270	400
4	Achulji Junction to Sam village.	5-00	..	..	6-00	..	1-50	1-50	1-50	1-50	19,500	200	300
5	Adapada to B. K. J. Road	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
6	P. W. D. Road to Koimpur Gangabada.	7-00	..	..	7-00	..	1-75	1-75	1-75	1-75	23,000	130	200
7	Boirani-Palsara via. Paika-Jamuna.	10-00	..	..	10-00	..	2-50	2-50	2-50	2-50	33,000	130	200
8	Sidheswar-Goutami Road	8-00	..	..	8-00	..	2-00	2-00	2-00	2-00	26,000	270	400
9	Mukundapur-Badana i-Nakhoipur.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
10	Kaluopali-Kirtipur Road	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
11	Ratanpur-Jagadpur Road	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300
12	Sankhadanda Lalsinga ..	7-00	..	..	7-00	..	1-75	1-75	1-75	1-75	23,000	130	200
13	Maitara P. W. D. Road to Golikhama.	6-00	..	..	6-00	..	1-50	1-50	1-50	1-50	19,500	200	300
14	Bhuta Sarasinga-M a t a Sarangi.	8-00	..	..	8-00	..	2-00	2-00	2-00	2-00	26,000	270	400
15	Aska-Huma Road ..	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	270	400
16	Goutami-Gurandi Lingipur	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
17	M. D. R. 62 At. Chasabila to-Kamrupur Road.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,500	200	300

18	Kadepada to Jhargum ..	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
19	Jirango-Rangiri Road ..	6:00	..	..	6:00	..	1:50	1:50	1:50	1:50	19,500	200	300
20	Dolabeta-Damunahani ..	7:00	..	..	7:00	..	1:75	1:75	1:75	1:75	23,000	130	200
21	Dimarpalli-Shrangipalli ..	3:00	..	..	3:00	..	0:75	0:75	0:75	0:75	9,500	200	300
22	P. W. D. Road Khamari- gaon.	7:00	..	..	7:00	..	1:75	1:75	1:75	1:75	23,000	130	200
23	P. W. D. Kamadhena ..	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
24	Balipadar-Khalingi Road	7:00	..	..	7:00	..	1:75	1:75	1:75	1:75	23,000	130	200
25	Podamari-Barigaon ..	3:00	..	..	3:00	..	0:75	0:75	0:75	0:75	9,500	200	300
26	P. W. D. Road to Karcha- bali.	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
27	P. W. D. Road Tandipur	3:00	..	..	3:00	..	1:75	1:75	1:75	1:75	23,000	130	200
28	Kabisurjyanagar ..	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
29	P. W. D. Road at Nuapada	5:00	..	..	5:00	..	1:25	1:25	1:25	1:25	16,000	270	400

KALAHANDI DISTRICT

1	Khariar-Sinapalli Road ..	..	..	..	..	..	..	..	..	..	..	..	..
2	Dharamagarh-Aprri Road	..	..	..	..	..	..	..	..	..	..	..	..
3	Nawapara-Dharambandha Road.	..	..	..	..	..	..	..	..	..	..	..	—
4	Golamunda-Fatna Road ..	..	..	..	..	..	..	..	..	..	..	..	..
5	Jaipatna-Hirapur via— Kalakatapatrapur.	..	..	..	..	..	..	..	..	..	..	..	..
6	Dharamagarh-Apalind via— Batamunda.	..	..	..	..	..	..	..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
7	Sinapali-Borden	..	..	..	..	..	..	..	..	..	..	—	..
8	C. V. R. 14 Kankar.	Kalham	10·00	10·00	..	2·50	2·50	2·50	2·50	33,000	130	200
9	Dhanpur-Khantia	..	..	..	..	..	..	..	..	..	..	..	..
10	P. W. D.—H2 Chhudia.	Goud	..	..	..	..	..	..	..	..	..	..	..
11	Dharamgarh-Charbatal	..	..	..	—	..	..	..	..	..	..	..	..
12	Kalumandi-Tasinja	..	..	..	..	..	..	..	..	..	..	..	..
13	Ladugaon-Banner	..	..	..	..	..	..	..	..	..	..	..	..
14	Deypur-Meddi	..	..	..	..	..	..	..	..	..	..	..	..
KEONJHAR DISTRICT														
1	Barbil-Kiruburu, via. Bolani	..	2·00	2·00	..	0·50	0·50	0·50	0·50	6,000	270	400
2	Sailong-Deogan - Kasudhar- pal.	..	..	—	..	..	..	..	..	..	..	..	..
3	Telkoi-Kaliahata Bimla.	via.	5·00	5·00	..	1·25	1·25	1·25	1·25	16,000	270	400
4	Suakti-Dabugaon, via-Banarpal.	Road	18·00	18·00	..	4·50	4·50	4·50	4·50	59,000	300	700
5	Bambobani-Dabuna	..	2·00	2·00	..	0·50	0·50	0·50	0·50	6,000	270	400
6	Dadhibamanpir-Tartara- Kantipal Road.	..	5·00	5·00	..	1·25	1·25	1·25	1·22	16,000	270	400
7	Handa-Jangira	..	1·00	1·00	..	6·25	6·25	6·25	6·25	3,000	100	200

8	M. D. R. 73, Fakirpur ..	..	..	..	..	..	..	..	..	..	..	..	..
9	Bidyadharpur-Bangara ..	..	..	..	..	..	..	..	..	..	..	..	..
10	Bababara to P. W. D. Road	..	..	..	..	..	..	..	..	..	..	..	..
11	Harichandapur - B h o g a - munda Road.	15.00	..	..	15.00	..	3.75	3.75	3.75	3.75	49,500	200	300
12	Salyada-Udayapur ..	..	..	..	..	..	..	..	..	..	..	..	..

KORAPUT DISTRICT (Continuing Scheme)

1	Haradaput Rangakusumi Kotpada.	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
2	Umarkota-Kundai Road .	26.25	20.15	..	5.04	..	5.04	5.04	5.04	5.04	67,000	200	300
3	Narayanpatna-Baudhugan- Allumunda.	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
4	Rupkona-K a s h i p u r - Gunupur road.	4.50	..	..	4.50	..	1.12	1.12	1.12	1.12	14,500	200	300
5	Boriguma-Ranigada ..	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
6	Dabugaon Jharigam road	26.20	..	..	26.10	..	6.525	6.525	6.525	6.525	86,500	200	300
7	Papadahandi Kodinga ..	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
8	Nawarangapur-Ambada la	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
9	Nawarangapur-Tontuli- kanta.	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
10	Nawarangapur-Rajoda ..	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
11	Gumoda-Ukumba ..	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
12	Boriguma-Kumudi ..	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
13	Guradi-Gunpur ..	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
14	Dhodra-Singsari ..	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
15	Dohikhal-Jagadalpur ..	2.00	..	..	2.00	..	0.50	0.50	0.50	0.50	6,000	270	400
16	Padmapur Dabarsing ..	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
17	Dabugaon Mahidalpur ..	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
18	Umarkoto-Maligaon road	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
19	Kodinga-Chattahandi Road.	5.50	..	..	5.50	..	1.37	1.37	1.37	1.37	18,000	130	200
20	Baizangivade-Venkata-palem Road.	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
21	Malkanagri-Caidipath Road.	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
22	Mathili-Chaulimunda Road.	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
23	Koraput-Boriguma Road	0.50	..	..	0.50	..	0.12	0.12	0.12	0.12	1,500	70	100
24	Kikurigumma-Mathuput Road.	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
25	Boipariguda-Kundra ..	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
26	Lamtaput-Chatwad Road	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
27	Panchura-Giriliguma Road	5.50	..	..	5.50	..	1.37	1.37	1.37	1.37	18,000	130	200
28	Sipaipur Sambal ..	1.60	1.60	..	0.40	0.40	0.40	0.40	5,000	130	200
29	Sunki-Ampahali ..	4.95	4.95	..	1.24	1.24	1.24	1.24	16,000	200	300

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30	Balda-Pukali ..	8.50	8.50	..	2.12	2.12	2.12	2.12	28,000	130	200
31	Padampur-Mitlingirai ...	6.00	6.00	..	1.50	1.50	1.50	1.50	19,500	200	300
32	Padampur-Gadari-Baibija	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
33	Nawarangpur-Tentulika- Kantia, via. Kukudabai.	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
34	Dandabad-Rangiri ..	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
35	Kandara-N.H. 43 Nungaon	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
36	Gobindpalli-Salim ...	4.00	..	..	4.00	..	1.00	1.00	1.00	1.00	13,000	130	200
37	Kasipur-Mandibasa ..	5.00	..	..	5.00	..	1.25	1.25	1.25	1.25	16,000	270	400
MAYURBHANJ DISTRICT													
1	Jhinkiria-Anla-Totapada ..	1.85	..	..	1.85	..	0.46	0.46	0.46	0.46	6,000	50	150
2	Kaptipada-Sarat ..	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
3	Rajghat-Anarda ..	1.25	..	..	1.25	..	0.31	0.31	0.31	0.31	4,000	60	100
4	Sumari-Chandua-Dhangiri- Sola.	2.65	..	..	2.65	..	0.66	0.66	0.66	0.66	8,500	100	200
5	Baidiha Astha Road ..	1.05	..	..	1.05	..	0.26	0.26	0.26	0.26	3,000	150	200
6	Singatia-Betnati Road ..	1.10	..	..	1.10	..	0.28	0.28	0.28	0.28	3,000	150	200
7	Manikpur-Kundabai- Sriramchadrapur.	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	130	200
8	Rarua-Fagu Road ..	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	130	200
9	Gubandi-Sanishdih- Thakurmund Road.	1.75	..	..	1.75	..	0.44	0.44	0.44	0.44	5,500	130	200
10	Chitrada-Morada Road ..	0.20	..	..	0.20	..	0.05	0.05	0.05	0.05	600	20	50

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
11	Sriramchandrapur- Brundagadi	1.50	..	..	1.50	..	0.37	0.37	0.37	0.37	4,500	200	300
12	Bhalubasa-Jimda Road ..	4.50	..	..	4.50	..	1.12	1.12	1.12	1.12	14,500	200	300
13	Baripada-Kosta-Konhi Sahi.	0.65	..	..	0.65	..	0.16	0.16	0.16	0.16	2,000	70	100
14	Dukura-Barsat ..	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	130	200
15	Sukuruli Barua ..	2.00	..	..	2.00	..	0.50	0.50	0.50	0.50	..	..	..
16	Dokura-Kanua Road ..	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	130	200
17	Chandanpur-Kausapal ..	2.00	..	..	2.00	..	0.50	0.50	0.50	0.50	6,000	270	400
18	Bangiriposi-Svamsundar- pur.	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	130	200
19	Khurunti-Kusumijhunti ..	0.75	..	..	0.75	..	0.19	0.19	0.19	0.19	2,400	30	70
20	Badundu Jamdudu ..	1.50	..	..	1.50	..	0.37	0.37	0.37	0.37	4,500	200	300
21	Salpatia Bairaturudi ..	1.85	..	..	1.85	..	0.46	0.46	0.46	0.46	6,000	50	150
22	Janakideipur, via Tapadihi	1.75	..	..	1.75	..	0.44	0.44	0.44	0.44	5,000	130	200
23	Singada-Guhal-Dhipaktia	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	130	200
24	Dighasarat, via- Kalamgadi.	3.00	..	..	3.00	..	0.75	0.75	0.75	0.75	9,500	200	300
25	Bansibila-Karajia ..	2.00	..	..	2.00	..	0.50	0.50	0.50	0.50	6,000	270	400
26	Malisani-Salachuria ..	2.00	..	..	2.00	..	0.50	0.50	0.50	0.50	6,000	270	400
27	Kahisila-Gorumahisar ..	1.00	..	..	1.00	..	0.25	0.25	0.25	0.25	3,000	130	200

28	Balijora-Jadunathpur	..	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
29	Dalkiduba-Aparbida	..	1:00	..	..	1:00	..	0:25	0:25	0:25	0:25	3,000	130	200
30	Bardra Khsam	..	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
31	Udla-Gitidinal	..	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
32	Barjore-Krishna Chandrapur.	..	1:50	..	..	1:50	..	0:37	0:37	0:37	0:37	4,500	200	300
33	Janda-Manbiri	..	0:50	..	..	0:50	..	0:12	0:12	0:12	0:12	1,500	70	100
34	Samar-Daphia	..	1:00	..	..	1:00	..	0:25	0:25	0:25	0:25	3,000	130	200
35	Parana-Haripur	..	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
36	Joypur-Sahikala	..	1:00	..	..	1:00	..	0:25	0:25	0:25	0:25	3,000	130	200
37	Anarbandha M. D. R.	..	1:00	..	..	1:00	..	0:25	0:25	0:25	0:25	3,000	130	200
38	Kanke-Biraha Road	..	2:00	..	..	2:00	..	0:50	0:50	0:50	0:50	6,000	270	400
39	Karanja-Hakara	..	1:00	..	..	1:00	..	0:25	0:25	0:25	0:25	3,000	130	200
40	Bakala-Tangabila	..	1:00	..	..	1:00	..	0:25	0:25	0:25	0:25	3,000	130	200
41	N. H. 5 Kumaramun	..	0:50	..	..	0:50	..	0:12	0:12	0:12	0:12	1,500	70	100
42	M. D. R. 5 Pedagad	..	0:50	..	..	0:50	..	0:12	0:12	0:12	0:12	1,500	70	100
43	Bhalda-Kanti	..	1:00	..	..	1:00	..	0:25	0:25	0:25	0:25	3,000	130	200
44	Sakhilhat-Betrati	..	1:00	..	..	1:00	..	0:25	0:25	0:25	0:25	3,000	130	200
45	Pausiha-Ambagadia	..	1:50	..	..	1:50	..	0:37	0:37	0:37	0:37	4,500	200	300

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
46	M. D. R. 4 Anuana	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
47	Sendhal-Rairangpur	..	2-00	—	—	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
48	Naksira-Brahmiposi	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
49	Karadhia-Tandahila	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
50	Sanaposi-Sisipur	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
51	Sankeriko-Dhelang	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
52	Betnoti-Agada	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
53	Maharda-Sariasal	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
54	Baunsha-Topha	..	0-50	—	..	0-50	..	0-12	0-12	0-12	0-12	1,500	70	100
55	San Bansha-Tota	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
56	Anshilo-Khanta	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
57	Brundaban Chandra pur- Atthabad.	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
58	Pinga-Augadhia	..	1-00	—	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
59	Jampani-Kulishiia	..	0-50	..	..	0-50	..	0-12	0-12	0-12	0-12	4,000	134	200
60	Perbeda-Panpotaria	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
61	Matiagoda-Dhobadhia	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
62	Jamuti-Kasonpur	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
63	Haldia-Kasia	..	2-00	..	—	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
64	Dandarpur-Raipada	..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
65	Permananda-sariasal	..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400

66	Syamsundarpur-Gudipara ..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
67	Kuliana-DigasaraI ..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
68	Nota-Sarat ..	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
69	Manigathan-Salachua ..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
70	Gambheria-Brahma Mara	1-50	..	..	1-50	..	0-37	0-37	0-37	0-37	4,500	200	300
71	Mondapur-Singali Mundi	2-00	..	..	2-00	..	0-50	0-50	0-50	0-50	6,000	270	400
72	Dumuria-Sirsa ..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
73	Pasuda-Khunta ..	0-50	..	..	0-50	..	0-12	0-12	0-12	0-12	1,500	70	100
74	Talsa-Pandapani ..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
75	Sukurali-Khiching ..	0-50	..	..	0-50	..	0-37	0-37	0-37	0-37	1,500	70	100
76	Sankabhaja-Jharpokhria ..	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	3,000	130	200
											204-85		

PURI DISTRICT

1	Kalapathar-Fatchgarh ..	10-00	..	..	10-00	..	2-5	2-5	2-5	2-5	32,600	100	300
2	Nilamadhaba road to Anantapur.	10-00	..	..	10-00	..	2-5	2-5	2-5	2-5	32,600	100	250
3	N. H. 5 to Gode ..	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	150	100
4	Pattanaikia-Dalang-Kanas Road.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	150	100
5	Nilakantha Road ..	2-50	..	..	2-50	..	0-625	0-625	0-625	0-625	8,150	40	100
6	Jankin-Siko Road ..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,700	200	100

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
7	Madhab-Balighat Road via. Gop	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	240	400
8	Pratap Prasad-Darp narayanpur.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	130	180
9	N. H. 5 to Mandarbast via. Dhulimuhan Railway station.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,700	200	100
10	Mahipur-Bahadajhola ..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,700	200	100
11	Banamalipur-Jagannath Prasad Road.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,700	200	100
12	N. H. 5 to Chatrabar ..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150
13	Odagaon-Nuagan Bada- jhola.	1-00	..	..	1-00	..	0-25	0-25	0-25	0-25	2,900	150	50
14	Khaput-Sagargaon ..	0-50	..	..	0-50	..	0-125	0-125	0-125	0-125	1,500	50	70
15	Kakatpur-Konark ..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150
16	Satasankha-Balanga ..	3-00	..	..	3	..	0-75	0-75	0-75	0-75	9,800	50	150
17	N. H. 5 Rameswar Sikheswar.	3-00	..	..	3	..	0-75	0-75	0-75	0-75	9,800	50	150
18	Nirakarpal to Khadal- ghat.	2-50	..	..	2-00	..	0-5	0-5	0-5	0-5	6,000	100	150
19	Sardeipur to Nimapara	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	150	100
20	Gariakutiri ..	12-00	..	..	12-00	..	3-0	3-0	3-0	3-0	29,500	200	300
21	Balakati,-Balianta ..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150

22	Rajunakhalia to Sagar-ghat.	5-00	..	--	5-00	..	1-25	1-25	1-25	1-25	16,000	150	100
23	Bhiripur-Dhobisahi ..	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	150	100
24	Siko to Begunia ..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	100
25	Balugaon to Monipur ..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	100
26	Machhiapara to Kanda	2-00	..	..	2-00	..	0-5	0-5	0-5	0-5	6,000	50	100
27	Haripur to Kahali ..	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150
28	Bahadajhala to Sunamahi.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150
29	Hamtoadi to Dhuarallah	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150
30	Halanda to Boranbadi	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150
31	Gobakanda to Sabornapur.	4-00	..	..	4-00	..	1-0	1-0	1-0	1-0	12,000	50	100
32	Pratap to Kambharan-gasah.	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	50	100
33	Prayagi Krishna Prasad	3-00	--	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150
34	Brahmagiri-Kumbhanti	2-00	..	..	2-00	..	0-5	0-5	0-5	0-5	6,000	50	100
35	Banapur to Dhankara	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150
36	Nagpur to Achhatpur	3-50	..	..	3-50	..	0-875	0-875	0-875	0-875	11,500	50	100
37	Banpur to Saria ..	5-00	..	..	5-00	..	1-25	1-25	1-25	1-25	16,000	150	50
38	Sirafi to Dhubanda ..	2-00	..	..	2-00	..	0-5	0-5	0-5	0-5	6,000	50	100
39	Pratapnagar a pur to Kantapara.	3-00	..	..	3-00	..	0-75	0-75	0-75	0-75	9,800	50	150

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
40	Mandarbasta to Sadei- garh	5·00	..	..	5·00	..	1·25	1·25	1·25	1·25	16,000	150	100
41	Saw Muhra-Satapara	5·00	..	..	5·00	..	1·25	1·25	1·25	1·25	16,000	150	100
42	Sahilo-Nahali ..	5·00	..	..	5·00	..	1·25	1·25	1·25	1·25	16,000	150	100
43	Panichatra to Konark	5·00	..	..	5·00	..	1·25	1·25	1·25	1·25	16,000	150	100
44	Paralia Kapileswar ..	5·00	..	..	5·00	..	1·25	1·25	1·25	1·25	16,000	150	100
SUNDARGARH DISTRICT													
1	Panka Dihi-B a n d h a- khama.	..	..	..	..	..	..	..	..	—	..	..	..
2	Konabhota—Dorikola	3·00	..	..	3·00	..	0·75	0·75	0·75	0·75	9,500	200	300
3	Bonoi-Gogua —	0·50	(—)	—	0·50	..	0·12	0·12	0·12	0·12	1,400	100	100
4	Purunapani Nuagaon	4·00	..	..	4·00	..	1·00	1·00	1·00	1·00	13,000	130	200
5	Baligaon-Junction to Kanika.	..	..	..	..	..	..	..	..	..	..	..	..
6	Rangati-Banaigarh ..	10·00	..	..	10·00	..	2·50	2·50	2·50	2·50	3,300	130	200
7	Biramitrapur-Dalkol	1·50	..	..	1·50	..	0·37	0·37	0·38	0·38	4,500	200	300
8	Do m a b a h a i-Ba l i- sankar.	36·00	..	..	36·00	..	9·00	9·00	9·00	9·00	119,000	300	700
9	Gurundia-Jorada ..	4·00	..	..	4·00	..	1·00	1·00	1·00	1·00	13,000	130	200

SAMBALPUR DISTRICT

1	Belapahad-Lakhanpur	..	..	..	..	..	..	..	..	..	..	..	..
2	Lakhanpur-Bhikanpalli	..	..	..	..	..	..	..	..	..	..	..	..
3	Jharsuguda-Samasinghar	3:00	..	..	3:00	..	0.75	0.75	0.75	0.75	9,500	100	400
4	Bhikanpalli-Kawaktara	..	..	..	..	..	..	..	..	..	..	..	..
5	Jharsuguda-Arada	..	..	..	..	..	..	..	..	..	..	..	..
6	Gaisita-Kendamunda	..	..	..	..	..	..	..	..	..	..	..	..
7	Bijipur-Lamuada	..	..	..	..	..	..	..	..	..	..	..	..
8	Chandipalli-Jamala	..	..	..	..	..	..	..	..	..	..	..	..
9	Bhatili-Salasalia	5:00	..	..	5:00	..	1.25	1.25	1.25	1.25	16,500	200	300
10	Janadihi-Lahida	2:50	..	..	2:50	..	0.62	0.62	0.62	0.62	8,250	100	150
11	Daigaon-Tiliha	..	..	..	..	..	..	..	..	..	..	..	..
12	Kuchinda-Kasumi	..	..	..	..	..	..	..	..	..	..	..	..
13	Jamankera-Bhojpur	..	..	..	..	..	..	..	..	..	..	..	..
14	Kansal-Riamal	..	..	..	..	..	..	..	..	..	..	..	..
15	Rampur-Naktidoul	..	..	..	..	..	..	..	..	..	..	..	..
16	Talapadi to Hiralohi	..	..	..	..	..	..	..	..	..	..	..	..
17	Remta-Kirtimal	..	..	..	..	..	..	..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
PHULBANI DISTRICT													
1	S. H. T. Khaman Khol Road.	12'00	..	..	12'00	..	3'00	3'00	3'00	3'00	39,000	300	700
2	Pabunia-Sarangada		..	..	..	..	..	..	..	..		..	..
3	Simanbadi-Raikia	13'50	..	..	13'5	..	3'375	3'375	3'375	3'375	44,000	100	200
4	Kothagarh-Srirampur	15'00	..	..	15'00	..	3'75	3'75	3'75	3'75	39,000	100	200
5	Tikabali-Chakapada-Road	19'50	..	..	19'50	..	4'875	4'875	4'875	4'875	64,700	100	200
6	Pniringia-Gochapada-Road	7'00	..	..	7'00	..	1'75	1'75	7'15	1'75	23,000	100	200
7	Phulbani-Gochapada Road	2'00	..	..	2'00	..	0'50	0'50	0'50	0'50	6,400	30	70
8	Daringibadi Bhumigaon Road.	2'00	..	..	2'00	..	0'50	0'50	0'50	0'50	6,400	100	200
9	Tikabali-Godguda	4'00	..	..	4'00	..	1'00	1'00	1'00	1'00	13,000	100	200
V. Abstract of Total													
1	Scheme for removal of deficiency in the existing road net work.												
	(a) Costing Rs. 5'00 lakhs and over												
	Spill over schemes (Roads)	..	..		1,679'20	250'00	357'30	357'30	357'30	357'30	23,50,000	5,000	45,000
	(b) Costing less than Rs. 5'00 lakhs.												
						Nil							

(ii) New Schemes—

(a) Costing Rs. 5·00 lakhs and over (Roads).	..	..	..	1276·00	..	319·00	319·00	319·00	319·00	13,50,000	5,000	45,000
Major bridges	..	..	..	1,020·25	..	255·05	255·05	255·05	255·10	3,40,000	1,000	4,000
(b) Costing less than Rs. 5·00 lakhs.	..	..	..	1,224·55	..	306·10	306·10	306·10	306·25	4,00,000	1,000	4,000
Total	..	..	..	5,200·00	2,50·00	1,237·45	1,237·45	1,237·45	1,237·65	44,40,000	12,000	98,000

R. E. O. Roads

1 Schemes for removal of deficiencies in the existing road net work.

A. Missing Road Link

(i) Spill over Schemes

PURI DISTRICT

1 Patapur Balanga—Rural roads.	12·75	0·75	0·75	12·00	..	4·00	2·50	2·50	3·00
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2 Nagapur Nayahat—Rural roads.	29·39	1·39	1·39	28·00	..	11·00	6·00	6·00	5·00
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3 Palla Anda—Rural roads	6·26	0·60	0·62	5·64	..	5·64
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CUTTACK DISTRICT

4 Jhinkiria Bentakar—Rural roads.	8·28	0·74	0·74	7·54	..	5·00	2·54
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5 Nischintakotli Lalitgiri—Rural roads.	8·30	0·30	0·30	8·00	..	4·00	2·00	2·00
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
6	Tirtol-Kolar—Rural roads	2.60	2.10	2.10	0.50	..	0.50
7	Ibrising-Panchapali—Rural roads.	22.98	1.30	1.30	21.68	..	7.50	4.50	4.50	5.18
8	Chaspada-Tandikul—Rural roads.	6.84	0.58	0.57	6.27	..	6.27	..	..	..	..	..	..
9	Bajikuda-Alabal-Dhaniso—Rural roads.	11.93	0.71	0.71	11.22	..	6.00	5.22	..	..	..	..	..
10	Debendra-Begunia—Rural roads.	14.43	0.86	0.85	13.58	..	6.00	3.00	4.58	..	..	..	..
11	Kishorenagar-Gadama—Rural roads.	15.93	1.95	1.96	13.97	..	6.00	4.00	3.97	..	..	..	..
12	Anguliat-Orta—Rural roads	7.81	0.38	0.38	7.43	..	5.00	2.43	..	..	..	..	..
13	Rajanagar-Chinchin-Satavaya Rural roads.	70.26	1.14	1.14	69.12	..	28.00	14.00	14.00	13.12	..	..	..
14	Sankarua-Murasahi—Rural roads.	18.94	0.27	0.27	18.67	..	6.00	3.00	4.00	5.67	..	..	..
15	Narua-Hulasingi—Rural roads.	10.10	0.70	0.70	9.40	..	6.00	3.40	..	..	..	..	..
16	Subarnapur-Darsanpur including bridge over Hufuhulla—Rural roads.	11.62	3.80	3.78	7.84	..	5.00	2.84	..	..	..	..	..
BALASORE DISTRICT													
17	Bhadrak-Gujidarda—Rural roads.	8.60	0.60	0.60	8.00	..	5.00	3.00	..	..	..	..	..

GANJAM DISTRICT

18	Anka-Jatsoda-Mangajpur— Rural roads.	6-21	1-21	1-21	5-00	..	5-00	..	..	..	..	..
19	Bahampur-Maharajapur— Rural roads.	8-52	0-50	0-52	8-00	..	5-00	3-00	..	..	..	..
20	Pital-Jahar-Kanjiam-Chan- duli—Rural roads.	7-81	0-81	0-81	7-00	..	4-00	3-00	..	..	..	..
21	Janabli-Olumba including bridge over Anguli Nalla —Rural roads.	8-81	0-65	0-66	8-15	..	..	5-00	3-15	..	..	..
22	S.H. 7 to Badakhandioli- Padmanavapur—Rural roads.	6-30	1-30	1-30	5-00	..	..	5-00	..	..	..	..
23	Ankuli-Arangoli including bridge over Badanalla— Rural roads.	5-33	0-21	0-21	5-12	..	..	5-12	..	..	..	..
24	Dangaosta-N. K. Pantha— Road Rural roads.	11-51	1-30	1-31	10-20	..	..	6-00	4-20	..	..	..
25	9th District Embankment road including bridge over Rusitulya Canal— Rural roads.	7-82	0-65	0-66	7-16	..	..	5-00	2-16	..	..	..
KALAHANDI DISTRICT												
26	Attanguda-Jogasahi Patna —Rural roads.	14-33	1-00	1-33	13-00	..	..	6-00	3-00	4-00	..	..
KEONJHAR DISTRICT												
27	Construction of 34 Nos. of Culvert on R. K. B. H. road—Rural roads.	5-00	..	..	5-00	..	..	5-00	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
DHENKANAL DISTRICT													
28	Anantapur-Balibo-Mahulpal —Rural roads.	15.82	0.80	0.82	15.00	..	6.00	3.00	3.00	3.00	..	..	..
29	Thakugarh-Nakchi—Rural roads.	27.40	2.40	2.40	25.00	..	10.00	5.00	5.00	5.00	..	..	..
Total ..		391.88	29.00	29.39	362.49	..	184.03	84.94	53.55	39.97	1.33	0.57	5.13

(ii) New Schemes

(a) M. N. P.

PURI DISTRICT

1	Rajas-Dalabhanpur including Bridge over Dhanua —Rural Roads.	15.93	8.80	5.93	10.00	2.87	3.13	4.00	..	..	..	..	..
2	Kundhei-Raigaon—Rural Road.	13.01	1.50	0.64	12.37	0.86	3.14	3.00	3.00	2.37	..	..	..
3	Barebai-Dhenkura—Rural Road.	13.60	1.00	1.00	12.60	..	4.00	3.00	3.00	2.60	..	..	..
4	Khandapara-Gunt h u n i— Rural Road.	15.10	2.00	2.00	13.10	..	4.00	3.00	3.00	3.10	..	..	..
5	Rajasunakhais-Sagarga o n via Dhalpathar—Rural Road.	10.37	4.00	3.37	7.00	0.97	4.03	2.00	..	..	..	..	..

6	Gurujianga Keranga— Rural Road.	6:00	2:00	1:00	5:00	..	3:00	2:00	..	..	..	..	..
7	Banapur Salia via Pratap— Rural Road.	10:00	2:00	1:78	8:00	..	3:00	2:00	3:00	..	..	..	..
8	N. H. 5 to Tangi Tentuhin- pada—Rural Road.	9:22	5:00	4:22	5:00	0:78	4:22	..	..	..	..	—	..
9	Bhapur Sagargaon—Rural Road.	6:50	1:50	1:50	5:00	..	3:00	2:00	..	..	..	..	..

CUTTACK DISTRICT

10	Adasapur Kasarda—Rural Road.	6:16	0:95	1:16	5:00	..	2:00	3:00	..	..	..	..	—
11	Malasasan Budamundia— Rural Road.	16:72	5:00	3:99	12:73	1:01	3:99	3:00	3:00	1:73	..	..	..
12	Ankala Panikoli—Rural Road.	10:47	5:50	5:47	5:00	0:03	2:97	2:00	..	..	..	..	..
13	Mangalpur Damodarapur— Rural Road.	6:72	3:00	1:72	5:00	0:86	2:14	2:00	..	..	..	..	..
14	Dangadi Bangar k a t a— Rural Road.	21:15	16:00	8:15	13:00	4:60	3:40	3:00	2:00	..	..	..	..
15	Birajampic Birajapur via C h a m p a d e i—Rural Road.	14:08	3:08	3:08	11:00	..	4:00	3:00	4:00	..	..	..	..
16	Bansabuji Metha to Kaipara—Rural Road.	7:60	1:10	1:11	6:50	..	3:00	2:00	1:50	..	..	..	..

BALASORE DISTRICT

17	Singala Raghunath p u r —Rural Road	11:52	3:00	3:02	8:50	..	3:50	2:50	2:50	..	..	..	..
18	Bhogarai Denlihat via Jaleswarpur—Rural Road	11:27	8:00	6:28	5:00	1:19	3:81	..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
19	Soro Manipur—Rural Road	8.78	4.50	3.78	5.00	0.27	2.28	2.00	--	..	..	..	..
GANIAM DISTRICT													
20	Kendupur Bailpada —Rural Road	7.78	2.70	2.70	5.00	..	3.00	2.00	..	..	..	..	..
21	Khanduli Chikiti— Rural Road	6.83	3.00	3.03	3.80	..	3.80	..	..	..	..	..	..
22	Janbili Olamba road Singi- pur via Ragumu Sundhi- pali Sitamba Sidhapur including Bridge over Jarua—Rural Road	17.95	10.00	5.45	12.50	4.55	5.95	2.00	..	..	..	..	..
23	Hatiot Arakhapur—Rural Road	7.00	3.00	3.00	4.00	--	2.50	1.50	..	..	..	..	..
24	Begunapada Mandhakot— Rural Road	7.15	3.50	2.15	5.00	1.35	2.15	1.50	..	..	..	..	..
25	Kacinaga Khandava Rural Road	13.10	2.60	1.60	11.50	--	3.50	2.50	2.50	3.00	..	..	..
26	Narayanpur Arjipali—Rural Road	12.23	5.00	5.23	7.00	..	3.00	2.00	2.00	..	..	..	..
27	Chandrapur Bharamapur via Gaudagon—Rural Road	13.04	2.00	2.04	11.00	..	3.50	2.50	2.50	2.50	..	..	..
PHULBANI DISTRICT													
29	Manamunda Sagada Ganduli—Rural Road	38.23	10.00	7.73	30.50	2.27	7.73	6.00	7.00	7.50	..	..	..

KALAHANDI DISTRICT

30	Khariar Bhajapur Sikuna —Rural Road.	10.38	3.00	2.38	8.00	..	3.00	2.00	3.00	..	..	..
31	Khariar Road to Amodi —Rural Road.	34.93	15.00	7.93	27.00	5.33	5.67	5.00	5.00	6.00	..	..
32	Keonjhar-Sancher gaon— Rural Road.	14.93	12.50	5.23	9.70	7.25	2.45	..	..	..	..	..

KEONJHAR DISTRICT

33	Khairamant to S. H. 11 —Rural Road.	8.34	4.00	2.84	5.50	1.16	2.34	2.00	..	..	..	..
34	Barapada Batto —Rural Road.	9.00	2.50	1.50	7.50	..	3.00	2.00	2.50	..	..	..

DHENKANAL DISTRICT

35	Nihalprasad Nityananda- pur—Rural Road.	13.68	3.20	2.18	11.50	..	4.00	2.00	2.00	3.50
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BALANGIR DISTRICT

36	Dharamasala Subalaya road —Rural Road.	21.55	20.00	11.15	10.00	8.85	1.15
37	Balangir Chandanvati Batakhandi—Rural Road.	32.65	25.00	7.65	25.00	8.00	8.00	9.00	..	..	..	..
38	Cherupali Agulpur—Rural Road.	12.46	10.50	6.46	6.00	4.04	1.96	..	..	..	..	..
39	Loisinga Bhen suja— Rural Road.	17.44	12.00	10.44	7.00	1.56	5.44	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
SAMBALPUR DISTRICT													
40	Ganesh Nagar Junadihi Via Katanbag—Rural Road.	13.13	6.50	6.63	6.50	..	3.50	3.00	..	..	..	..	..
41	Paikmai-Jharbandh Dava— Rural Road.	41.15	13.00	9.65	31.50	3.35	4.65	5.00	10.00	8.50	..	..	..
42	Bhojapur Laimura—Rural Road.	46.61	9.75	2.61	44.00	4.82	5.18	10.00	10.00	14.00	..	..	..
Total—(a)—M. N. P.		613.68	256.68	168.78	444.30	66.42	148.08	103.50	71.50	54.80	16.33	0.7	6.3

(ii) New Schemes

(b) Other than M. N. P.

PURI DISTRICT

1	S. H. S. to Nuassan— Rural Road.	6.00	..	..	6.00	..	3.00	2.00	1.00	..	..	..	..
2	Athantar Banamalipur— Rural Road.	5.00	..	..	5.00	..	3.00	2.00	..	..	..	..	..
3	Satyabadi Temple to Ala- sarani—Rural Road.	5.00	..	..	5.00	..	3.00	2.00	..	..	..	..	..
4	Tankapani-Bentapur— Rural Road.	7.58	..	..	7.58	..	3.00	2.00	2.58	..	..	..	..

5	J. T. R. to Ranch— Via-Jhili—Rural Road	9:60	..	..	9:60	..	3:00	3:00	3:60	..	..	..	..
6	Jagadaipur-Jatni-Pipli Road—Rural Road.	13:76	..	..	13:76	..	3:00	3:00	3:00	4:76	..	..	..
7	Birnarasinghpur Siruli— Rural Road.	10:30	..	..	10:30	..	3:00	2:00	2:00	3:30	..	..	..
8	N. H. 5 to Jankia Kanas— Rural Road.	6:00	..	..	6:00	..	2:00	2:00	2:00	..	..	..	..
9	N. H. 5 to Baliana— Rural Road.	6:00	..	..	6:00	..	2:00	2:00	2:00	..	..	..	..
10	Kendrapati-Pipli-Astara— rang—Rural Road.	6:00	..	..	6:00	..	1:00	1:00	2:00	2:00	..	..	..
11	Gopakunda Balanga Via— Parakana—Rural Road.	6:00	..	..	6:00	..	1:00	1:00	2:00	2:00	..	..	..
12	Brahmagiri-Delang— Rural Road.	50:74	..	..	50:74	..	1:00	15:00	15:00	19:74	..	..	..
13	Kusunda-Kural—Rural Road.	5:00	..	..	5:00	..	2:00	1:00	2:00	..	..	..	..
14	Darapada-Odagaon— Rural Road.	17:00	..	..	17:00	..	2:00	4:00	5:00	6:00	..	..	..
15	Itanati-Khedapada— Rural Road.	27:00	..	..	27:00	..	2:00	6:00	9:00	10:00	..	..	..
16	Godipada Kanaleipali— Rural Road	13:00	..	..	13:00	..	2:00	4:00	4:00	3:00	..	..	..
17	Bhangan Tardabadi— Rural Road.	7:70	..	..	7:70	..	2:00	1:00	2:00	2:70	..	..	..
18	Sisuan Rural Road to Mali- padar—Rural Road.	10:00	..	..	10:00	..	2:00	2:00	3:00	3:00	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
19	N. H. 5 to Pala-Bongida Rural Road.	7:00	..	..	7:00	..	2:00	1:00	2:00	2:00	..	..	..
20	N. H. 5 to Kaipadar Railway Station—Rural Road.	6:40	..	..	6:40	..	2:00	1:00	1:40	2:00	..	..	..
21	Kaipadar to Gadamanitiri—Rural Road.	5:00	..	..	5:00	..	2:00	1:00	1:00	1:00	..	..	..
22	N. H. 5 to Noiri Via Gangadharpur—Rural Road.	7:00	..	..	7:00	..	..	2:00	2:50	2:50	..	..	..
23	Pichukali Deuli—Rural Road.	10:00	..	..	10:00	..	0:50	3:00	3:00	3:50	..	..	..
24	Bijapur Karbar—Rural Road.	5:00	..	..	5:00	..	1:00	2:00	2:00	..	..	..	..
Total		252:08	..	..	252:08	..	47:50	65:00	72:08	67:50	..	..	..

CUTTACK DISTRICT

25	Madhaba-Pahanga—Rural Road.	8:00	..	..	8:00	..	2:00	2:00	2:00	2:00	..	..	..
26	Madhab-Dinipur—Rural Road.	10:01	..	..	10:01	..	1:00	3:00	3:00	3:01	..	..	..
27	Korua-Dhanmadal—Rural Road.	8:20	..	..	8:20	..	3:00	2:00	2:00	1:20	..	..	..
28	Dhanipur-Mandasaahi—Rural Road.	5:00	..	..	5:00	..	2:00	1:50	1:50	..	..	..	..
29	Jeypurghat-Kumudaghat—Rural Road.	11:00	..	..	11:00	..	2:00	3:00	3:00	3:00	..	..	..
30	Paldhubanda-Garia—Rural Road.	6:50	..	..	6:50	..	2:00	1:50	1:50	1:50	..	..	..
31	Kalapada-Akhua-Abhayapur—Rural Road.	15:74	..	..	15:74	..	2:00	4:00	4:00	5:74	..	..	..
32	Aul-Mahoo—Rural Road	6:00	..	..	6:00	..	2:00	1:00	1:00	2:00	..	..	..
33	Taras-Deuli—Rural Road	5:00	..	..	5:00	..	2:00	1:50	1:50	..	..	..	..
34	Paramundai-Kathiapada via-Khadianta—Rural Road.	13:28	..	..	13:28	..	1:00	4:00	4:00	4:28	..	..	..
35	Madbarpara-Sankhataras—Rural Road.	5:00	..	..	5:00	..	1:00	2:00	2:00	..	..	..	..
36	Kurangpradhan-Bhingapur—Rural Road.	7:25	..	..	7:25	..	1:00	2:00	2:00	2:25	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
37	Brahmanasilo-Pata-sundarpur—Rural Road.	5:24	..	..	5:24	..	1:00	2:00	2:24	..	..	..	..
38	Chasikhand-Gelapur—Rural Road.	6:50	..	..	6:50	..	2:00	1:50	1:50	1:50	..	..	..
39	Sidhbhumi-Tarikud—Rural Road.	6:50	..	..	6:50	..	2:00	1:50	1:50	1:50	..	..	..
40	Alanahat-Debidola—Rural Road.	8:00	..	..	8:00	..	1:00	2:00	2:00	3:00	..	..	..
41	Balia-Tarapur—Rural Road.	5:00	..	..	5:00	..	1:00	2:00	2:00	..	..	..	..
42	Haldia-Delanpur—Rural Road.	5:00	..	..	5:00	..	1:00	2:00	2:00	..	..	..	..
43	Indor-Golanhat—Rural Road.	5:00	..	..	5:00	..	1:00	2:00	2:00	..	..	..	..
44	Marsaghai-Tikhiri—Rural Road.	6:00	..	..	6:00	..	1:00	2:50	2:50	..	..	..	..
45	Orata-Baraidih via-Bijayanagar—Rural Road.	10:00	..	..	10:00	..	1:00	3:00	3:00	3:00	..	..	..
46	Chandigarh-Mahisapara—Rural Road.	5:00	..	..	5:00	..	1:00	1:00	1:00	2:00	..	..	..
47	Chandigarh-Manikpatna—Rural Road.	5:00	..	..	5:00	..	1:00	2:00	2:00	..	..	..	..
48	Belitar-Narasinghpur—Rural Road.	6:40	..	..	6:40	..	1:00	2:00	2:00	1:40	..	..	..
49	Guntha-Tantiapai—Rural Road.	7:20	..	..	7:20	..	1:00	2:00	2:00	2:20	..	..	..

50	Chandanagar-Bilpokharia —Rural Road.	6:40	..	..	6:40	..	1:00	2:00	2:00	1:40	.	.	.
51	Chadheya-Satakhudia— Rural Road.	6:40	..	..	6:40	..	1:00	2:00	2:00	1:40	..	..	..
52	Mangalpur-Nizanipur- Solpat—Rural Road.	6:00	..	..	6:00	..	3:00	1:50	1:50	..	..	..	..
53	Korei-Barundi—Rural Road.	5:50	..	..	5:50	..	3:00	1:50	1:00	..	..	..	..
54	Bari-Balibil—Rural Road	5:00	..	..	5:00	..	3:00	2:00	..	..	..	..	..
55	Golkunda-Indapur—Rural Road.	15:47	..	..	15:47	..	2:00	4:00	4:00	5:47	..	..	..
56	Sukal-Mahakalpara—Rural Road.	15:12	..	..	15:12	..	3:00	4:00	4:00	4:12	..	..	..
57	Khadiang-Nohat—Rural Road.	6:43	..	..	6:43	..	2:00	2:00	2:43	..	..	..	..
58	Kuakhia-Jenapur—Rural Road.	12:62	..	..	12:62	..	2:00	3:00	3:00	4:62	..	..	..
59	Kapila-Mainda-Ghantial —Rural Road.	8:25	..	..	8:25	..	2:00	2:00	2:00	2:25	..	..	..
60	Bidharpur-Mampur—Rural Road.	6:00	..	..	6:00	..	1:00	2:00	2:00	1:00	..	..	..
61	Ramachandrapur-Kalapat- thar—Rural Road.	12:00	..	..	12:00	..	2:00	3:00	3:00	4:00	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
62	Godijharia-Anch aikot— Rural Road.	7.50	..	..	7.50	..	1.00	2.00	2.00	2.50	..	..	..
63	Expressway to Arakhput— Rural Road.	5.60	..	..	5.60	..	1.00	2.00	2.60	..	..	..	..
64	Dankari-Turang—Rural Road.	7.50	..	..	7.50	..	1.00	2.00	2.00	2.50	..	..	..
65	Kaiyanpur-Samaipur—Rural Road.	5.00	..	..	5.00	..	1.00	2.00	2.00	..	..	..	..
66	Jatamundi-Patap r—Rural Road.	8.00	..	..	8.00	..	1.00	2.00	2.50	2.50	..	..	..
67	Talabasta-Dhalkata—Rural Road.	8.00	..	..	8.00	..	1.00	2.00	2.50	2.50	..	..	..
Total		..	..	..	328.61	..	67.00	94.00	93.77	73.84	..	..	..

BALASORE DISTRICT

68	Bhadrak-Gelta-Gel p u r— Rural roads.	5-00	..	..	5-00	..	1-00	2-00	2-00	..	..	..	..
69	Banth-Kadaberanga—Rural roads.	13-00	..	..	13-00	..	2-00	3-00	3-00	5-00	..	..	..
70	Chandhali-Arcdi—R u r a l roads.	51-35	..	..	51-35	..	2-00	10-00	20-00	19-35	..	..	..
71	Remma-Durgadevi—Rural roads.	33-09	..	..	33-09	..	2-00	8-00	10-00	13-09	..	..	..
72	Jaleswarpur-Paschimaba di —Rural roads.	16-77	..	..	16-77	..	2-00	4-00	5-00	5-77	..	..	..
73	Jaleswarpur-Dakshinprataraj- pur—Rural roads.	5-52	..	..	5-52	..	1-00	2-00	2-52	..	..	..	..
74	Balipal-Pratappur—R u r a l roads.	5-66	..	..	5-66	..	1-00	2-00	2-66	..	..	..	..
75	Kedarpur-Ghasua—Rur a l road.	11-70	..	..	11-70	..	1-00	3-00	3-00	4-70	..	..	..
76	Tihidi-Bilana—Rural road	19-40	..	..	19-40	..	2-00	5-00	5-00	7-40	..	..	..
77	Dhamnagar-Faipur—Rural Road.	38-00	..	..	38-00	..	2-00	10-00	14-00	12-00	..	..	..
78	O. T. road-Sindha Coast Canal—Rural road.	6-00	..	..	6-00	..	2-00	2-00	2-00	..	..	..	..
79	O. T. road to Sapira— Rural road.	12-00	..	..	12-00	..	1-00	3-00	4-00	4-00	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
80	Langaleswar-Balanga Salt Factory road—Rural road.	6·00	..	..	6·00	..	1·00	2·50	2·50	..	..	..	..
81	Bidu-Jayanagar—Rural road.	6·00	..	..	6·00	..	1·00	2·00	1·50	1·50	..	..	..
82	Dhasuri-Gopabandhu- nagar—Rural road.	10·00	..	..	10·00	..	2·00	2·00	2·00	4·00	..	..	..
83	Mandari-Balichandra- ghat—Rural road.	23·80	..	..	23·80	..	2·00	5·00	7·00	9·00	..	..	..
84	Alda-Palasa—Rural road	3·17	..	..	3·17	..	1·00	1·00	1·17	..	..	..	..
85	Kamarang-Balimed—Rural road.	15·00	..	..	15·00	..	2·00	7·00	6·00	..	..	..	..
86	Khantapara Railway Station to Kuligaon— Rural road.	9·20	..	..	9·20	..	1·00	2·00	3·00	3·20	..	..	..
87	Khantapara-Shrijang— Rural road.	5·22	..	..	5·22	..	1·00	2·00	2·22	..	..	..	..
88	Chhatabar-Manjuri— Rural road.	5·00	..	..	5·00	..	1·00	2·00	2·00	..	..	..	..
89	Arnapati-Rajamamunda- pur—Rural road.	6·40	..	..	6·40	..	1·00	1·50	1·50	2·40	..	..	..
Total		..	..	..	306·08	..	32·00	81·00	102·07	93·01	..	..	..

GANJAM DISTRICT

90	Janibilli-Manikpur—Rural road.	11:00	..	..	11:00	..	3:00	2:00	3:00	3:00	..	..	..
91	Badagada-Merikot—Rural road.	12:02	..	..	12:02	..	4:02	4:00	4:00	..	..	..	..
92	Sunaba Mangalpur Via-Gumba Thengapalli—Rural road.	7:00	..	..	7:00	..	3:00	2:00	2:00	..	..	..	..
93	Munigadi-Kukundi—Rural road.	5:00	..	..	5:00	..	3:00	2:00	..	..	..	..	..
94	Patharpalli-Mangalpur—Rural road.	12:00	..	..	12:00	..	2:00	2:00	4:00	4:00	..	..	..
95	Gangapur-Kurandi—Rural road.	7:00	..	..	7:00	..	2:00	2:00	1:50	1:50	..	..	..
96	Mundamarei-Sundarpali—Rural road.	5:00	..	..	5:00	..	2:00	1:00	2:00	..	..	..	..
97	Patrapur-B. N. Pur—Rural road.	9:00	..	..	9:00	..	1:00	2:00	2:00	4:00	..	..	..
98	Kalambo-Pangiri—Rural road.	6:00	..	..	6:00	..	1:00	1:00	2:00	2:00	..	..	..
99	Khalikote-Mahupalli—Rural road.	7:00	..	..	7:00	..	1:00	1:00	2:00	3:00	..	..	..
100	Vetasingpandia—Rural road.	10:00	..	..	10:00	..	1:00	2:00	3:00	4:00	..	..	..
101	Karapalli-Golabandha—Rural road.	5:00	..	..	5:00	..	2:00	1:00	1:00	1:00	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
102	Garabandha-Kinjili— Rural road.	8-00	..	..	8-00	..	2-00	1-00	2-00	3-00	..	..	..
103	Gopili-Kinchilinga—Rural road.	5-66	..	..	5-66	..	2-00	1-00	2-66	..	..	..	..
Total		.. ..	..	..	109-68	..	29-02	24-00	31-16	25-50	..	..	..

PHULBANI DISTRICT

104	Baghibahal to Dongomunda—Rural road.	11-50	..	..	11-50	..	2-00	2-00	3-00	4-50	..	..	..
105	Katakhatia-Danising— Rural Road.	12-00	..	..	12-00	..	2-00	2-00	3-00	5-00	..	..	..
106	Baunsuni-Gundulia—Rural road.	10-50	..	..	10-50	..	2-00	2-00	2-00	4-50	..	..	..
Total		.. ..	..	..	34-00	..	6-00	6-00	8-00	14-00	..	..	..

KALAHANDI DISTRICT

107	Dharmagarh-Rarang road —Rural road.	11-00	..	..	11-00	..	2-00	2-00	3-00	4-00	..	..	..
108	Palama-Dalakhandi—Rural road.	9-00	..	..	9-00	..	2-00	2-00	2-00	3-00	..	..	..
109	Sinapalli-Kusumajhar— Rural road.	13-00	..	..	13-00	..	2-00	2-00	3-00	6-00	..	..	..
110	Ainapalli-Armai—Rural road.	12-00	..	..	12-00	..	2-00	3-00	3-00	4-00	..	..	..

111	Sirapalli-Karanjamaal— Rural road.	8:00	..	..	8:00	..	2:00	2:00	2:00	2:00	..	..	..
112	Gangabaladi-Mantritarai —Rural road.	13:00	..	..	13:00	..	2:00	3:00	3:00	5:00	..	..	..
113	Parkoda Biswana Via-Kalia- bandha—Rural road.	12:00	..	..	12:00	..	2:00	3:00	3:00	4:00	..	..	..
114	Parhinunda-Lakhana— Rural road.	8:00	..	..	8:00	..	2:00	2:00	2:00	2:00	..	..	..
115	Khativata-Balagaon-Kuta- gaon Rural road.	8:00	..	..	8:00	..	2:00	2:00	2:00	2:00	..	..	..
116	Ranamal-Manamal—Rural road.	8:00	..	..	8:00	..	2:00	2:00	2:00	2:00	..	..	..
117	Jaypatna-Talgada—Rural road.	8:00	..	..	8:00	..	2:00	2:00	2:00	2:00	..	..	..
118	Banashri P. W. D. Road to Palasa—Rural road.	8:60	..	..	8:60	..	2:00	2:00	2:00	2:60	..	..	..
119	Bangamudra-Duduka- Thenga—Rural road.	8:80	..	..	8:80	..	2:00	2:00	2:00	2:80	..	..	..
Total		..	..	..	127:40	..	26:00	29:00	31:00	41:40	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
KEONJHAR DISTRICT													
120	Anandapur-Gayalamunda Via. Pasadihi—Rural road.	19-00	..	..	19-00	..	3-00	5-00	5-00	6-00	..	..	..
121	Katadihi-Somma—Rural road.	13-00	..	..	13-00	..	2-00	3-00	3-00	5-00	..	..	..
122	Sarapada-Nandapara— Rural road.	20-00	..	..	20-00	..	4-00	5-00	5-00	6-00	..	..	..
123	Korali-Salania— Rural road.	7-00	..	..	7-00	..	1-00	2-00	2-00	2-00	..	..	..
Total		..	..	..	59-00	..	10-00	15-00	15-00	19-00	..	..	..
DHENKANAL DISTRICT													
124	Smantarapur-Marthapur —Rural road.	9-25	..	..	9-25	..	1-50	2-00	2-00	3-75	..	..	..
125	Sankhamara-Khamari —Rural road.	9-00	..	..	9-00	..	1-00	2-00	3-00	3-00	..	..	..
126	Talcher-Kankilhandi- Pallalahara—Rural road.	13-00	..	..	13-00	..	2-00	3-00	4-00	4-00	..	..	..
127	Batagaon-Birasal— Rural road.	9-20	..	..	9-20	..	1-00	2-20	2-00	4-00	..	..	..
128	Jiral-Mahulpai Rural— road.	10-00	..	..	10-00	..	1-00	2-00	3-00	4-00	..	..	..
129	S. M. road to Kasipur— Rural road.	8-35	..	..	8-35	..	1-00	2-35	2-00	3-00	..	..	..

130	Baghedra-Kumaloi— Rural road.	10.55	..	..	10.55	..	2.00	2.55	3.00	3.00	..	..
131	Gadumandal-Patrapada— Rural road.	5.00	..	..	5.00	..	1.00	1.00	1.00	2.00	..	..
132	Chhendipada-Jarpada— Rural road.	32.00	..	..	32.00	..	2.00	4.00	10.00	16.00	..	..
133	Seapur-Podabara road— Rural road.	26.50	..	..	26.50	..	2.00	4.50	9.00	11.00	..	..
134	Kukndia Kantia road— Rural Road.	13.00	..	..	13.00	..	1.00	3.00	4.00	5.00	..	..
135	Badakhamari Pangatira Via-Ambapali— Rural road.	40.00	..	..	40.00	..	2.00	2.00	12.00	24.00	..	..
136	Saranghi Nihalprasad to Pingnachhak Baulai— Rural road.	16.00	..	..	16.00	..	1.00	4.00	5.00	6.00	..	..
137	Nantarpur to Pangatira Via-Engadi— Rural road.	11.36	..	..	11.36	..	1.00	2.36	3.00	5.00	..	..
Total		..	..	..	213.21	..	19.50	36.96	63.00	93.75	..	..

BALANGIR DISTRICT

138	Phuinathi-Mahada— Rural road.	11.00	..	..	11.00	..	2.00	2.00	3.00	4.00	..	..
139	Chherupali-Mahal via Digisira— Rural road.	17.00	..	..	17.00	..	2.00	4.00	5.00	6.00	..	..
140	Titilagarh Lathurbandha— Rural road.	11.00	..	..	11.00	..	2.00	2.00	3.00	4.00	..	..

1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
141	Patnagarh-Dumukapalli— Rural road.	27-30	..	—	27-30	—	3-00	5-30	6-00	13-00	..	..	..
142	Khaparkhol-Juria via Dhandamundi—Rural road.	30-00	..	..	30-00	..	3-00	8-00	6-00	13-00	..	..	..
143	Chuibandha-Lakapada— Rural road.	20-00	..	..	20-00	..	2-00	5-00	5-00	8-00	..	..	..
144	Sojavata-Kutasing—Rural road.	10-00	..	..	10-00	..	1-00	2-00	3-00	4-00	..	..	..
Total		..	..	..	126-30	..	15-00	28-30	31-00	52-00	..	..	..

SAMBALPUR DISTRICT

145	Sorela-Padmapur P. W. D. road—Rural road.	9-85	..	..	9-85	..	1-00	2-85	3-00	3-00	..	..	..
146	Barapali Kumbhari road —Rural road.	11-42	..	..	11-42	..	2-00	2-42	3-00	4-00	..	..	..
147	Gangadhar crossing to Chandinimal—Rural road.	7-25	..	..	7-25	..	1-00	2-25	2-00	2-00	..	..	..
148	Kalpada to Saiga, Via Laida—Rural road.	7-50	..	..	7-50	..	1-00	2-50	2-00	2-00	..	..	..

149	Kalakhajuri-Khaman-Khandan road—Rural road.	12:80	..	..	12:80	..	2:68	3:12	3:00	4:00	..	..	..
150	Lekhanpur to Belgaon road—Rural road.	16:00	..	..	16:00	..	2:00	2:00	4:00	8:00	..	..	..
151	Padmapur-Gaisikat road—Rural road.	15:00	..	..	15:00	..	1:00	2:00	4:00	8:00	..	..	..
152	Belgaon-Salihat road—Rural road.	6:00	..	..	6:00	..	1:00	1:00	2:00	2:00	..	..	..
153	Padishal-Badasahi road—Rural road.	7:00	..	..	7:00	..	1:00	2:00	2:00	2:00	..	..	..
154	Bhatili-Nuaganon road—Rural road.	12:00	..	..	12:00	..	1:00	1:00	4:00	6:00	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
155	Sahaspur-Bagchipalli road— Rural road.	13-00	..	..	13-00	..	2-00	3-00	4-00	4-00	..	..	..
156	Gagua-Chhatabar road— Rural road.	17-00	..	..	17-00	..	2-00	2-00	5-00	8-00	..	..	..
157	Lapanga to Rampur. Via Khirida—Rural road.	9-00	..	..	9-00	..	1-00	2-00	2-00	4-00	..	..	..
158	Periphari road to Sunari— Rural road.	6-50	..	..	6-50	..	1-00	1-50	2-00	2-00	..	..	..
Total		150-32	..	..	150-32	..	19-68	29-64	42-00	59-00	..	..	..
Grand Total		1708-68	..	..	1,708-68	..	271-70	408-90	489-08	539-00	..	..	..

C. Missing Minor Bridges

(i) Spill over Schemes

BALASORE

1	Bridge over Reba on Dhamnagar-Chudakuti Road.	16-55	0-05	0-05	13-55	..	6-50	7-05	..	..	..	..
		16-55	0-05	0-05	13-55	..	6-50	7-05	..	..	..	..

(ii) New Schemes (a) M. N. P.

CUTTACK

1	Construction of Minor Bridge Irubina, Japas & Erasma Nalla on Erasma.	18-91	..	..	18-91	..	10-00	8-91	..	..	..	..
		18-91	..	..	18-91	..	10-00	8-91	..	..	..	..

(b) Other than M. N. P.

BALASORE

1	Construction on Bridges on Bhalkana-Dauli via Panakuli.	10-00	..	..	10-00	..	5-00	5-00	..	..	..	..
2	Construction of bridge on Patanapur-Biras Road.	18-28	..	..	18-28	..	9-00	9-28	..	..	..	..

GANJAM

3	Construction of bridge on Hatisota-Arakhapur Road.	10-00	10-00	..	5-00	5-00
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KALAHANDI

4	Construction of Minor Bridge on Khariar-Bhojapur Road.	5-00	5-00	..	5-00
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BOLANGIR

5	Construction of bridge over Suktal on Balangir-Chandavati.	25-00	25-00	..	10-00	15-00
6	Bridge over Hariharjore on Dharmasal-Subalaya Road.	30-00	30-00	..	10-00	10-00	10-00

Total	..	98-28	98-28	..	44-00	44-28	10-00
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Total (a) & (b)	-	117-19	117-19	..	54-00	53-19	10-00
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(i) Spillover Roads			Costing Rupees less than 5 lakhs										
1	Puri district Rural Roads	20.67	12.92	12.92	7.75	..	7.75	..	..	..	..	..	..
2	Cuttack district Rural Roads.	18.09	3.43	3.45	14.64	..	14.64	..	..	..	..	..	..
3	Belasore district Rural Roads.	4.35	4.30	4.30	0.05	..	0.05	..	..	..	..	..	..
4	Ganjam district Rural Roads.	47.67	9.71	9.71	37.96	..	15.00	15.00	7.96	..	..	..	..
5	Kalahandi district Rural Roads.	0.05	0.05	0.04	..	..	..	..	..	..	..	..	..
6	Phulbani district Rural Roads.	2.93	0.90	0.93	2.00	..	2.00	..	..	..	..	..	..
7	Keonjhar district Rural Roads.	9.66	9.66	9.66	..	..	..	..	..	..	..	..	..
8	Sambalpur district Rural Roads.	20.10	14.70	14.69	5.40	..	5.40	..	..	..	..	..	..
9	Dhenkanal district Rural Roads.	2.66	0.50	0.56	2.10	..	2.10	..	..	..	..	..	..
10	Balangir district Rural Roads.	0.50	0.50	0.50	..	..	..	..	..	..	..	..	..
Total		126.68	56.67	56.76	69.90	..	46.94	15.00	7.96	..	..	..	..

(ii) New Scheme

(a) M. N. P. Roads

Puri district	..	..	42.02	37.61	52.07	2.26	15.74	10.00	10.00	14.07	..	..	..
Cuttack district	..	..	21.27	20.28	14.36	1.13	4.87	4.00	4.36	..	..	..	..
Balasore district	..	..	6.00	4.52	3.00	1.71	1.29	..	..	..	..	..	..
Mayurbhanj district	..	..	2.50	2.50	..	..	..	..	..	..	..	..	..
Ganjam district	..	25.46	19.89	19.76	12.29	2.65	3.35	3.00	3.29	..	..	..	..
Kalahandi district	..	24.02	9.50	9.15	14.30	0.02	4.98	4.00	5.30	..	..	..	..
Keonjhar district	..	19.87	14.10	11.86	9.50	2.24	2.76	4.50	..	..	..	..	..
Dhenkanal district	..	13.22	15.00	11.70	4.00	3.37	0.63	..	..	..	..	..	..
Balangir district	..	6.66	6.50	6.46	0.20	0.20	..	..	..	..	..	..	..
Sambalpur district	..	4.50	1.50	1.50	3.00	..	3.00	..	..	..	..	..	..
Total—(1)	..	212.17	138.28	125.34	112.72	13.58	36.72	25.50	22.85	14.07	..	..	..
Roads other than M. N. P.	..	..	12.28	12.72	..	..	..	..	..	..	..	..	..
Investigation	..	..	..	29.58	..	..	..	..	..	..	..	..	..
Flood Repairs	..	..	..	37.00	..	..	..	..	..	..	..	..	..
Total—(2)	..	..	12.28	79.30	..	..	..	..	..	..	..	..	..
Grand Total (1) + (2)	..	..	150.56	204.64	112.72	13.58	36.72	25.50	22.85	14.07	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
<i>(ii) New roads (R. E. O. roads)</i>														
<i>(b) Other than M. N. P.</i>														
1	Cuttack Rural roads	..	71·21	..	..	71·21	..	23·00	18·00	18·00	12·21	..	..	..
2	Balasore Ditto	..	32·21	..	..	32·21	..	8·00	8·00	8·00	8·21	..	..	..
3	Puri Ditto	..	73·87	..	..	73·87	..	22·00	17·00	17·00	17·87	..	..	..
4	Ganjam Ditto	..	142·14	..	..	142·14	..	43·00	33·00	33·00	33·14	..	..	..
5	Phulbani Ditto	..	4·00	..	..	4·00	..	..	4·00	..	..	..	..	..
6	Kalahandi Ditto	..	24·60	..	..	24·60	..	..	8·00	8·00	8·60	..	..	..
7	Dhenkanal Ditto	..	19·60	..	..	19·60	..	5·00	5·00	5·00	4·60	..	..	..
8	Balangi Ditto	..	4·50	..	..	4·50	..	2·00	2·50	..	..	..	..	..
9	Sambalpur Ditto	..	19·04	..	..	19·04	..	6·00	4·00	4·00	5·04	..	..	..
10	Lump provision for Non-R.E.O. roads.	..	480·00	..	..	480·00	8·00	55·03	102·42	152·06	162·49	..	..	..
Total		..	871·17	..	..	871·17	8·00	164·03	201·92	245·06	252·16	..	..	..
<i>A. Missing road link</i>														
1	(i) Spill over scheme Rural roads.	391·88	29·00	29·39	362·49	..	184·03	84·94	53·55	39·97	..	..	..	..
<i>(ii) New schemes—</i>														
<i>(a) M.N.P. Rural roads</i>		613·68	256·68	168·78	444·30	66·42	148·08	103·50	71·50	54·80

(b) Other than M. N. P. Rural roads.	1,708.68	1,708.68	..	271.70	408.90	489.08	539.00
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Total (a) & (b)	2,322.36	256.68	168.78	2,152.98	66.42	419.78	512.48	560.58	593.80
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Missing minor bridges—

(i) Spill over schemes	..	16.55	0.05	0.05	13.55	..	6.50	7.05
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(ii) New schemes

(a) M. N. P.	..	18.91	18.91	..	10.00	8.91
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(b) Other than M. N. P.	..	98.28	98.28	..	44.00	44.28	10.00
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Total (a) & (b)	..	117.19	117.19	..	54.00	53.19	10.00
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Costing Rupees less than 5 lakhs

(i) Spill over Rural roads	126.68	56.67	56.76	69.90	..	46.94	15.00	7.96
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(ii) New schemes

(a) M. N. P. Rural roads	212.17	150.56	204.69	112.72	13.58	36.72	25.50	22.85	14.07
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(b) Other than M. N. P.	871.17	871.17	8.00	164.03	201.92	245.06	252.16
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Total (a) & (b)	..	1,083.34	150.56	204.64	983.89	21.58	200.75	227.42	267.91	266.23
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
V. Abstract of Totals													
1 Scheme for removal of deficiencies in the existing road net work.													
(i) Spill over Schemes													
(a) Costing Rs. 5 lakhs and over Rural Roads		408.43	29.05	29.44	376.04	..	190.53	91.99	53.55	39.97	..	..	..
(b) Costing less than Rs. 5 lakhs Rural Roads.		126.68	56.67	56.76	69.90	..	46.94	15.00	7.96	..	..	..	..
Total—(i)		535.11	85.72	86.20	445.94	..	237.47	106.99	61.51	39.97	..	..	-
(ii) New Schemes													
(a) Costing Rs. 5 lakhs and over Rural Roads.		2439.55	256.68	168.78	2270.17	66.42	473.78	565.59	570.58	593.80	..	-	..
(b) Costing less than 5 lakhs Rural Roads.		1083.34	150.56	204.69	983.89	21.58	200.75	227.42	267.91	266.23	..	..	..
Total—(ii)		3522.89	407.24	373.42	3254.06	88.00	674.53	793.01	838.49	860.03	..	..	..
(iii) Total of (i) and (ii)		4058.00	492.96	459.62	3700.00	88.00	912.00	900.00	900.00	900.00	..	..	..

5	Grand Total—Spill over works.	535.11	85.72	86.20	445.94	..	237.47	106.99	61.51	39.97	..	..	..
	New works.	3522.89	467.24	373.42	3254.06	88.00	674.53	793.01	838.49	860.03	..	..	..
	Total of all Roads works..	4058.00	492.96	459.62	3700.00	88.00	912.00	900.00	900.00	900.00	..	..	..
1	Schemes for removal of deficiencies in the existing road net work.												
	A Missing Road Link												
	(i) Spillover Schemes												
	MAYURBHANJ DISTRICT												
1	Sirsamurunla-Barbe Rural Road.	7.00	1.00	1.00	6.00	..	6.00	..	..	..	..	..	..
	GANJAM DISTRICT												
1	Hadubhangi-Guma Gaiba Rural Road.	21.27	1.20	1.20	20.07	..	8.00	6.00	6.07	..	..	..	..
	SUNDERGARH DISTRICT												
1	Khantagam-Fuljhar Rural Road.	21.40	6.40	6.40	15.00	..	8.00	7.00	..	..	..	..	..
	PHULBANI DISTRICT												
1	S. K. P. M. Road	36.25	8.59	11.55	24.70	..	10.00	5.00	5.00	4.70	..	..	..
	Total	85.92	17.19	20.15	65.77	..	32.00	18.00	11.07	4.70	3.16	0.14	1.22

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(ii) New Schemes.													
(a) M. N. P.													
MAYURBHANJ DISTRICT													
1	Batanoti-Dahikoti Rural Road.	18-03	5-00	5-03	13-00	..	4-00	3-00	3-00	3-00	..	..	..
2	Badakerko-P r a t a p p u r Rural Road.	10-69	1-45	0-69	10-00	0-76	3-24	3-00	3-00	..	..	..	..
3	Mahasumi-Salchua Rural Road.	9-28	5-50	4-28	5-00	1-22	3-78	..	..	..	..	..	..
4	Sukrui-Kuinchi n g-Uttar- posi Rural Road.	14-04	12-00	2-04	12-00	..	4-00	3-00	3-00	2-00	..	..	..
5	12th Mile Barip a d a- Chitrada Rural Road.	14-55	6-00	5-18	9-37	0-80	4-18	3-02	1-37	..	..	..	..
GANJAM DISTRICT													
1	Kinchilingi-Koimpur Rural Road.	9-32	4-00	4-32	5-00	..	5-00	..	..	..	..	..	..
2	Chandragiri-Antarba Rural Road.	17-93	6-50	5-93	12-00	0-57	3-93	3-00	3-00	1-50	..	..	..
3	Mahendragarh-Sialilati Rural Road.	10-80	4-00	2-80	8-00	1-20	2-80	2-00	2-00	..	..	..	..
4	R. Udayagiri-Sambalpur- Krimira-Gufba Rural Road.	58-00	5-00	5-00	53-00	..	17-00	12-00	12-00	12-00	..	..	..

PHULBANI DISTRICT

1	Baliguda-Budaguda Rural Road.	31-92	10-00	9-64	22-28	0-36	6-64	5-00	5-00	5-28	..	..	..
2	Simabadi-Budaguda Rural Road.	13-60	3-00	3-00	10-60	..	6-00	4-60	..	..	..	..	..
3	Jhinjiriguda-Katringia Rural Road.	13-41	3-00	3-03	10-38	..	4-00	3-00	3-38	..	..	..	..
4	Pachhangson-Balskumpaa Rural Road.	21-70	5-00	5-02	16-68	..	9-50	7-18	..	..	..	..	..

KORAPUT DISTRICT

1	Jayangar-Danganposi-Kunra Rural Road.	19-23	6-00	1-68	17-55	4-32	3-68	3-00	3-00	3-55	..	..	..
2	Ranagiri-Aana-Bagdери Rural Road.	30-27	15-00	6-82	23-44	6-77	4-23	4-00	4-00	4-44	..	..	..
3	Namrangpur-Tentulikhuti via Dehara-Nandabandi Rural Road.	16-27	11-50	11-27	5-00	0-23	4-77	..	..	..	..	..	..
4	Musumunguda-Kontagaon-Maidapur Rural Road.	26-91	11-00	5-91	21-00	5-09	1-91	5-00	5-00	4-00	..	..	..
5	Dhandra-Stagsari Rural Road.	12-81	5-00	2-81	10-00	2-19	3-81	4-00	..	..	..	..	..
6	Sipai-Pukri Rural Road..	19-38	5-00	2-95	15-00	2-63	3-37	3-00	3-00	3-00	..	..	..
7	Palwa-Ondragada Rural Road.	23-48	7-50	1-48	22-00	5-44	4-56	4-00	4-00	4-00	..	..	..
8	Kunduli-Kotia Rural Road.	21-46	12-00	8-46	13-00	3-54	3-46	2-00	2-00	2-00	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
9	Adumunda-Lulla Road.	Rural	15.88	6.00	5.88	10.00	0.12	3.88	3.00	3.00	..	..	..
10	Gunupur-Jaltar-Puttasingi Rural Road.		16.75	4.75	4.75	12.00	..	4.00	4.00	4.00	..	..	..

KEONJHAR DISTRICT

1	Saharpada-Machhagar-Banbir Rural Road.		42.08	16.50	7.10	34.98	6.90	9.10	6.00	6.00	6.98	..	..
2	Dhenkikot to Tora via Baratipur Rural Road.		13.00	3.00	3.05	10.00	..	4.00	3.00	3.00	..	..	..

SUNDARGARH DISTRICT

1	Gadiajor-Itma Road.	Rural	11.97	10.50	5.62	6.39	3.49	2.90	..	..	..	..	..
2	Koida-Patamunda Road.	Rural	9.50	4.00	..	9.50	..	6.00	3.50	..	..	..	..
3	Tildega-Khamarunda Rural Road.		14.07	9.00	5.67	8.50	4.03	4.47	..	..	..	..	..
4	Ujainpur-Sargipali-Darlipali Rural Road.		11.16	8.00	6.16	5.00	1.03	3.97

Total	547.49	195.20	135.57	410.67	50.79	142.18	93.28	72.75	51.75
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(7B-130)

OTHER THAN M. N. P.

MAYURBHANJ
DISTRICT

1	Satapada-Kuntisahi-Bholla Road-Rural Road.	13-00	..	--	13-00	..	4-00	3-00	3-00	3-00	..	--	..
2	Jayapur-Kuanm i-R ural Road.	16-00	..	..	16-00	..	4-00	4-00	4-00	4-00	..	..	..
3	Betanati-Badasahi-M a h u- lia-Rural Road.	13-00	..	..	13-00	..	4-00	3-00	3-00	3-00	..	..	..
4	Gohmunda Kata-Kuchinda -Rural Road.	30-00	..	..	30-00	..	8-00	7-00	7-00	8-00	..	..	..
5	Chandua-Haladia-R ural Road.	10-00	..	..	10-00	..	4-00	3-00	3-00	..	..	..	..
6	Bikrampur-P atelipur- Rural Road.	10-00	..	..	10-00	..	3-00	2-00	2-00	3-00	..	..	..
7	Samakhunta-Saratchandra- pur-Rural Road.	10-00	..	..	10-00	..	3-00	2-00	2-00	3-00	..	..	..
8	Jamandiha-Bad keruna- Rural Road.	13-00	..	..	13-00	..	4-00	3-00	3-00	3-00	..	..	..
9	Haradahi-Athangaon- Rural Road.	8-00	..	..	8-00	..	4-00	2-00	2-00	..	..	..	..
10	Haldia-Uttarpos i-R ural Road.	12-00	..	..	12-00	..	4-00	2-00	2-00	4-00	..	..	..
11	Tentala-Jamada R ural Road.	19-00	..	..	19-00	..	4-00	3-00	5-00	7-00	..	..	..
12	Badachima-Jarai R ural Road.	19-00	..	..	19-00	..	4-00	3-00	5-00	7-00	..	--	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
13	Badapakhua Anala jodi Railway Station—Rural Road.	9:60	..	..	9:60	..	3:00	2:00	2:60	2:00	..	..	..
14	Jugal N. Hs. to Haldia- ghat—Rural Road.	7:00	—	..	7:00	..	3:00	2:00	2:00	..	..	..	..
15	Kuchila Khunta Pratapur —Rural Road.	17:42	..	..	17:42	..	3:00	3:00	4:00	7:42	..	..	..
16	Jiridighat Maulidighat— Rural Road.	9:22	..	..	9:22	..	2:00	2:00	2:00	3:22	..	..	..
17	Badasahi Damarpurghat— Rural Road.	5:00	..	..	5:00	..	3:00	2:00	..	..	..	..	..
18	Anala Totapada Paiksahi —Rural Road.	5:00	—	..	5:00	..	3:00	2:00	..	..	..	..	—
BALASORE DISTRICT													
1	Sajanagar Ajodhya Tindes —Rural Road.	14:50	..	..	14:50	..	6:00	4:00	4:50	..	..	..	..
GANJAM DISTRICT													
1	Guma Badakalkata— Rural Road.	5:00	..	..	5:00	..	3:00	2:00	..	..	..	..	..
2	Ramagiri Taban Sing— Rural Road.	7:00	..	..	7:00	..	4:00	3:00	..	..	..	..	..
3	Odasngi Kinchilingi— Rural Road.	13:00	..	..	13:00	..	4:00	2:00	3:00	4:00	..	..	..
4	Mendalsahi Laba via Putura—Rural Road.	14:00	..	..	14:00	..	5:00	3:00	3:00	3:00	..	..	..

5	Kamalpur Gobindpur Rural Road.	7:00	..	..	7:00	..	4:00	3:00	..	..	..	..
5	Birikot Gulaba Rural Road.	9:00	..	..	9:00	..	4:00	3:00	2:00	..	..	..
7	Makapada Chheli g u d a Rural Road.	9:00	..	..	9:00	..	4:00	2:00	3:00	..	..	..
8	Chandragiri Jagannathpur Kankarada Rural Road.	5:00	..	..	5:00	..	3:00	2:00	..	..	..	..

KALAHANDI DISTRICT

1	Bhawaniapatna Gothbhata Lanji Road Rural Road.	9:00	9:00	..	4:00	3:00	2:00
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PHULBANI DISTRICT

1	Sagudabadi Degi Raikia Gumpisimalla Rural Road.	10:00	10:00	..	4:00	2:00	2:00	2:00
2	Mendragada Sarangagada Rural Road.	28:76	..	..	28:76	..	8:00	6:00	7:00	7:76	..	..
3	Subargiri Budaguda Rural Road.	28:00	..	..	28:00	..	8:00	6:00	7:00	7:00	..	..
4	Masaripada Kala p a d a Sadihangia Balandpada Rural Road.	52:00	..	..	52:00	..	13:00	13:00	13:00	13:00	..	..
5	Pamisa Baghiapada Rural Road.	27:30	..	..	27:30	..	6:00	8:00	8:00	5:30	..	..
6	Baghiapada Birigad Rural Road.	20:00	..	..	20:00	..	6:00	4:00	5:00	5:00	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
7	Nungaon Sambepada Rural Road.	5 00	..	..	5 00	..	5 00	..	..	..	..	..	..
KORAPUT DISTRICT													
1	Kuta Malkangiri Road to Majhiguda Dasamanthapur Rural Road.	16 00	..	..	16 00	..	2 00	4 00	4 00	6 00	..	..	..
2	Gupteswar Murtandi Rural Road.	32 00	..	..	32 00	..	2 00	10 00	10 00	10 00	..	..	..
3	Chandili Murtandi Rural Road.	10 00	..	..	10 00	..	2 00	4 00	4 00	..	..	..	..
4	B. Singpur Gujninguda Cheptamba Rural Road.	16 00	..	..	16 00	..	2 00	5 00	5 00	4 00	..	..	..
5	Jatabal Nuakot Rural Road	10 00	..	..	10 00	..	2 00	4 00	4 00	..	..	..	..
6	Kosagumunda Rajada Rural Road.	10 00	..	..	10 00	..	..	2 00	4 00	4 00	..	..	..
7	Jiraguda Padaguda Rural Road.	8 00	..	..	8 00	..	..	4 00	4 00	..	..	..	..
8	Dabugaon Borigaon Rural Road.	13 00	..	..	13 00	..	..	5 00	4 00	4 00	..	..	..
9	Koraput Kelab Rural Road	16 00	..	..	16 00	..	..	4 00	5 00	7 00	..	..	..
10	Doliamba Dudhari Rural Road.	10 00	..	..	10 00	..	..	2 00	4 00	4 00	..	..	..
11	Dodaguda Adamunda Malkangiri Mestipur Rural Road.	37 00	..	..	37 00	..	..	10 00	10 00	17 00	..	..	..

12	Narayanpatna Tentulipada Rural Road.	13:00	..	..	13:00	..	..	..	6:50	6:50	..	..
13	Chalambda Bhejaguda Rural Road.	6:00	..	..	6:00	..	..	..	3:00	3:00	..	..
14	Chikanput Badiguda Rural Road.	5:00	..	..	5:00	..	..	..	2:00	3:00	..	..
15	Tuba Raisingi Rural Road	6:00	..	..	6:00	..	..	..	3:00	3:00	..	..
16	Bisankatak K u t r a guda Rural Road	11:00	..	..	11:00	..	3:50	2 50	2:50	2:50	..	..
17	K. D h a m i n i Bethiaguda Rural Road.	16:00	..	..	16:00	..	6:00	5:00	5:00	..	..	..
18	Jemidipata C h a m p i k o t, Rural Road.	16:00	..	..	16:00	..	6:00	5:00	5:00	..	..	..
19	Suma Serigama, Rural Road.	15:00	..	..	15:00	..	5:00	5:00	5:00	..	..	..
20	Rekhalguda Top Lane Rural Road.	16:00	..	..	16:00	..	6:00	5:00	5:00	..	..	..
21	Rekhana Chadiagad, Rural Road.	10:00	..	..	10:00	..	4:00	3:00	3:00	..	..	..
22	Kujendri Ukamba Dhamini Rural Road.	8:00	..	..	8:00	..	..	..	4:00	4:00	..	..
23	K. V. Line to Rodangi, Road.	18:00	..	..	18:00	..	5:42	4:00	4:00	4:58	..	..
24	Budaguda M a j h i guda, Rural Road.	16:00	..	..	16:00	..	4:00	4:00	4:00	4:00	..	..
25	Kantamoda D e n d u l i Terubhali Rural Road.	10:00	..	..	10:00	..	..	..	5:00	5:00	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
26	Goranda Gotapada Rural Road.	10-00	..	..	10-00	..	2-50	2-50	2-50	2-50	..	..	..
27	Gunupur Padia Khai Rural Road.	10-00	..	..	10-00	..	2-50	2-50	2-50	2-50	..	..	..
28	Padmapur D h e p a g u d a Rural Road.	10-00	..	..	10-00	..	2-50	2-50	2-50	2-50	..	..	..
29	Guduri D h a p a g u d a Dangasuruda. Rural Road.	45-00	..	..	45-00	..	10-00	10-00	10-00	15-00	..	..	..
30	Kolnar Kuli, Rural Road	8-00	..	..	8-00	..	2-00	2-00	2-00	2-00	..	..	..
31	Polama Dapikana, Rural Road.	7-00	..	..	7-00	..	..	..	..	7-00	..	..	..
32	Brundabati Chetikana. Rural Road.	6-00	..	..	6-00	..	..	..	-	6-00	..	..	..
33	Madhuban Paniguda Rural Road.	5-00	..	..	5-00	..	5-00	..	..	..	..	..	..
34	P. C. P. Road to Panimunda. Rural Road.	6-00	..	..	6-00	..	..	6-00	..	..	..	..	..
35	Tentulikhunti Mundaguda. Rural Road.	22-00	..	..	22-00	..	2-00	10-00	5-00	5-00	..	..	..
KEONJHAR DISTRICT													
1	J. C. Main Road to Tara Rural Road.	6-40	..	..	6-40	..	6-40	..	..	..	-	..	..

SAMBALPUR DISTRICT

1	Jamanki Fasimal, Rural Road.	20:40	..	..	20:40	..	7:00	6:00	6:00	1:40	..	..	..
2	Paruabhadi Brahmadihi, Rural Road.	50:20	..	..	50:20	..	14:20	12:00	12:00	12:00	..	..	..
3	Tikilipada Sado, Rural Road.	20:00	..	..	20:00	..	6:00	5:00	5:00	4:00	..	..	..
4	Kesaribahal Jarbag Rural Road.	23:35	..	..	23:35	..	6:35	5:00	5:00	7:00	..	..	..
5	Lad Fasimal, Rural Road	29:20	..	..	29:20	..	8:00	7:20	7:00	7:00	..	..	..
6	Bamara Garposi P. W. D. Road Lutarimal, Rural Road.	27:00	..	..	27:00	..	8:00	6:00	6:00	7:00	..	..	..
7	Gur Posh Nuapali, Rural Road.	30:70	..	..	30:70	..	9:00	7:00	7:00	7:70	..	..	..
8	Saida Purunapani, Rural Road.	16:00	..	..	16:00	..	4:00	4:00	4:00	4:00	..	..	..

SUNDARGARH DISTRICT

1	B a n g a o n Sahajabahal, Rural Road.	8:50	..	..	8:50	..	4:50	4:00	..	..	..	..	..
2	Kutra Khatrubahal, Rural Road.	6:40	..	..	6:40	..	2:40	4:00	..	..	..	..	..
3	Khantagaon M a h u l a t a Rural Road.	13:40	..	..	13:40	..	5:40	4:00	4:00	..	..	..	..
4	Deulipali Kankutra Rural Road.	17:00	..	..	17:00	..	5:00	4:00	4:00	4:00	..	..	..
5	Ingipali Calichuan Rural Road.	23:00	..	..	23:00	..	6:00	5:00	5:00	7:00	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
6	Kusumura-Kinjirikaia Rural Road.	13:00	..	..	13:00	..	4:00	3:00	3:00	3:00	..	..	..
7	Sundargarh-Gadiajora Rural Road.	17:80	..	..	17:80	..	5:29	4:00	4:00	4:51	..	..	..
8	Khatrabahal-Kesanaimai Rural Road.	9:20	..	..	9:20	..	3:20	2:00	2:00	2:00	..	..	..
9	Domujhar-Jhunura Rural Road.	26:00	..	..	26:00	..	7:00	5:00	5:00	9:00	..	..	..
10	Baghiajora-Jhumura Rural Road.	14:00	..	..	14:00	..	2:00	4:00	4:00	4:00	..	..	..
11	Biramitrapur-Pandisila Rural Road.	19:00	..	..	19:00	..	2:00	5:00	5:00	7:00	..	..	..
12	Kolasira-Kanchoe Rural Road.	10:00	..	..	10:00	..	..	2:00	4:00	4:00	..	..	..
13	Bamsdhar-Ankupali Rural Road.	11:00	..	..	11:00	..	..	1:00	5:00	5:00	..	..	..
14	Chandini-Hauhar Ustra Rural Road.	8:00	-	..	8:00	..	..	4:00	4:00	..	..	..	..
15	Mohipani-Janeikela Rural Road.	5:00	..	..	5:00	..	..	2:00	3:00	..	..	..	..
16	Darlipali-Raidih Rural Road.	6:00	..	..	6:00	..	..	3:00	3:00	..	..	..	..
17	Mangaspur-Darlipali Rural Road.	18:00	..	..	18:00	..	..	2:00	8:00	8:00	..	..	..
18	Sandhapani to Sankara Rural Road.	22:00	..	..	22:00	..	..	2:00	10:00	10:00	..	..	..

19	Bonai-Junagarh Rural Road.	9:00	..	..	9:00	..	..	1:00	4:00	4:00	..	..	..
20	Mahuldihi-Talabaha-Via-Badaghat Rural Road.	19:00	..	..	19:00	..	..	1:00	9:00	9:00	..	..	..
21	Badabang-Abankala Tankapatia Rural Road.	20:00	..	..	20:00	..	..	2:00	4:00	14:00	..	..	..
22	Mahulpali-Khamanmandal-Via-Kumarjore Rural Road.	18:60	..	..	18:60	..	..	2:50	8:48	7:62	..	..	..
23	Kutaria-Dabaka Rural Road.	10:00	..	..	10:00	..	..	..	..	10:00	..	..	..
24	Telignana-Kariakhama Rural Road.	6:50	..	..	6:50	..	..	..	..	6:50	..	..	..
25	Chandipur to Dumjha Rural Road.	13:00	..	..	13:00	..	..	..	..	13:00	..	..	..
Total		..	1530:35	1530:35	..	350:16	357:70	401:08	421:41	56:30	1:61	22:59

Missing Minor Bridges

(i) New Scheme

(b) Other than M. N. P.

MAYURBHANJ DISTRICT

1	Construction of bridge over Baunalla & Ambajorei Nalla on 12th mile Bari-pada-Chirada Road.	13:50	13:50	5:00	8:50
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
2	Construction of bridge over Khakhairi Road on Mohadaba deuli Kinching Road.	10-55	10-55	..	5-55	5-00	
3	Construction of bridge over Bauns nalla on Betanati Dahikati, Morda Road.	5-50	..	..	5-50	..	..	..	..	5-50	..	..	..
PHULBANI DISTRICT														
1	Construction of Minor bridge on Pakhangaon Balskumpa Road.	17-50	..	..	17-50	..	8-00	9-50	..	..	..	..	..
2	Construction of 2 Nos. minor bridge on Simanbadi-Badagada Road.	9-52	..	..	9-52	..	4-00	5-62	..	..	..	..	..
KORAPUT DISTRICT														
1	Construction of minor bridges on Dhandra Singsari Road.	16-00	..	..	16-00	..	8-00	8-00	..	..	..	..	..
2	Construction of bridge over Belpori nallah and Bagderi nalla on Nowrangpur-Tentulik hanti Road.	7-14	..	..	7-14	..	..	..	..	7-14	..	..	..
SUNDARGARH DISTRICT														
1	Construction of Minor Bridge on Gadiajore-Itma road.	7-00	..	..	7-00	..	3-50	3-50	..	..	..	..	..
2	Construction of Bridge over Ichha in Hjalpur-Sangipalli Road.	20-00	..	..	20-00	..	..	..	..	20-00	..	..	..
Total		..	106-71	106-71	..	34-05	40-02	..	32-64	3-92	0-17	1-52

Costing rupees less than 5 lakhs M. N. P.

1	Mayurbhanj district Rural Roads.	15.55	15.55	11.80	2.40	1.95	0.45	..	..	..	..	..	..
2	Ganjam district Rural Roads.	5.00	4.00	4.49	..	..	..	..	..	..	..	..	..
3	Koraput district Rural Roads.	8.22	9.52	4.22	4.00	4.00	..	..	..	..	..	..	..
4	Sundargarh district Rural Roads.	11.41	12.50	4.41	7.00	6.34	0.66	..	..	..	..	..	..
Total ..		40.18	41.57	24.92	13.40	12.29	1.11	..	..	..	0.94	0.04	0.36
New Scheme other than M. N. P.													
1	Mayurbhanj Rural Roads	20.00	..	..	20.00	..	..	5.00	5.00	10.00	..	..	..
2	Ganjam Rural Roads ..	3.00	..	..	3.00	..	..	3.00	..	..	..	..	..
3	Koraput Rural Roads ..	3.00	..	..	3.00	..	..	..	3.00	..	..	..	..
4	Keonjhar Rural Roads ..	9.60	..	..	9.60	..	..	..	9.60	..	..	..	..
5	Sundargarh Rural Roads..	4.00	..	..	4.00	..	..	4.00	..	..	..	..	..
6	Sambalpur Rural Roads ..	4.32	..	..	4.32	..	4.32	..	..	..	..	..	..
7	Lump Provision for Non-R. E. O. Rural Roads.	320.00	..	..	320.00	4.00	60.00	79.00	97.50	79.50	..	..	..
Total ..		363.92	..	..	363.92	4.00	64.32	91.00	115.10	89.50	13.37	0.38	5.35

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Spill over													
1	Mayurbhanj District Rural Roads.	7.30	3.40	3.40	3.90	..	3.90	..	..	..	..	..	..
2	Phulbani District Rural Roads.	8.13	5.24	5.35	2.78	..	2.78	..	..	..	..	..	..
3	Koraput District Rural Road.	3.57	1.58	1.57	2.00	..	2.00	..	..	..	..	..	..
4	Sundargarh District Rural Roads.	2.37	1.87	1.87	0.50	..	0.50	..	..	..	..	..	..
Total		12.09	12.19	9.18	9.18	..	..	..	..	0.69	0.03	0.27	..
Missing Road Link													
1	Spill over Scheme—Rural Roads.	85.92	17.19	20.15	65.77	..	32.00	18.00	11.07	4.70	..	..	..
2. New Schemes													
(a)	M. N. P—Rural Roads.	547.49	195.20	135.57	410.67	50.71	142.18	93.28	72.75	51.75	..	..	..
(b)	Other than M. N. P. Rural Roads.	1,530.35	..	..	1,530.35	..	350.16	357.70	401.08	421.41	..	..	..
Total—(a)+(b)		2,077.84	195.20	135.57	1,941.02	50.71	492.34	450.98	473.83	473.16	..	..	..

C. Missing Minor Bridge												
(ii) New Scheme												
(b) Other than M. N. P. 106.71 106.71 .. 34.05 40.02 .. 32.64												
Total—New Scheme .. 2,184.55 195.20 135.57 2,047.73 50.71 526.39 491.00 473.83 505.80												
Costing Rupees less than 5 lakhs.												
(i) Spill over Scheme —Rural Roads. 21.73 12.09 12.19 9.18 .. 9.18												
(ii) New Schemes (R. E. O. Roads).												
(a) M. N. P. (R. E. O. Roads.) 40.18 41.57 24.92 13.40 12.29 1.11												
(b) Other than M. N. P. 363.92 363.92 4.00 64.32 91.00 115.10 89.50												
Total—(a)+(b) .. 404.10 41.57 24.92 377.32 16.29 65.43 91.00 115.10 89.50												
ABSTRACT OF TOTAL												
1 Scheme for removal of deficiencies in the existing rural rest works.												
(i) Spill over Scheme												
(a) Costing Rs. 5 lakhs and over—Rural Roads. 85.92 17.19 20.15 65.77 .. 32.00 18.00 11.07 4.70												
(b) Costing less than 5 lakhs. 21.37 12.09 12.19 9.18 .. 9.18												
(i) New Schemes												
Total—(i) .. 107.29 29.28 32.34 74.95 .. 41.18 18.00 11.07 4.70												

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(ii) New Scheme—													
(a) Costing Rs. 5 lakhs and over.		2,184.55	195.20	135.57	2,047.73	50.71	526.39	491.00	473.83	505.80	..	..	..
(b) Costing less than 5 lakhs.		404.10	41.57	24.92	377.32	16.29	65.43	91.00	115.10	89.50	..	..	..
Total—(ii)		2,588.65	236.77	160.49	2,425.05	67.00	591.82	582.00	588.93	595.30	..	..	..
Total of (i & ii)		..	2,695.94	266.05	192.83	2,500.00	67.00	633.00	600.00	600.00	600.00	..	..
5	Grand Total—Spill over works.		107.29	29.28	32.34	74.95	..	41.18	18.00	11.07	4.70	..	..
	New works	..	2,588.65	236.77	160.49	2,425.05	67.00	591.82	582.00	588.93	595.30	..	..
	Total—All road works	..	2,695.94	266.05	192.83	2,500.00	67.00	633.00	600.00	600.00	600.00	..	..

Statement No. TR. 2.

RURAL ROADS—OUTLAY/EXPENDITURE (Rs. in lakhs)

Sl. No.	Item	Total Cost	Fifth Plan Outlay	Expenditure up to end of 1977-78	Proposed outlay 1978-83	Outlay					Employment potential in mandays (in lakhs)		
						1978-79	1979-80	1980-81	1981-82	1982-83	Un-skilled	Technical	Skilled Non-technical
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1	Total Rural Roads of which ..	1,24,25.13	11,10.38	792.20	1,02,31.70	329.41	27,42.60	26,91.75	24,08.85	20,59.09	188.94	..	41.30
	(i) N. M. P. ..	59,44.82	10,63.00	744.82	52,00.00	250.00	12,37.45	12,37.45	12,37.45	12,37.65	1.25	..	0.32
	(ii) Other than M. N. P. ..	64,80.31	47.38	47.38	53,01.70	79.41	15,05.10	14,54.25	11,71.35	821.59	187.69	..	40.98
2	Rural Roads ..	67,53.94	7,59.00	652.45	62.00	155	1545	1,500	1,500	1,500	372	..	..
CANAL EMBANKMENT ROADS													
3	Total Rural Roads of which (i) N.M.P. 400.00	74.00	51.41	400.00	40.00	90.00	90.00	90.00	90.00	90.00	48.00	..	..

STATEMENT—TR. 3
ROADS—PHYSICAL TARGETS AND ACHIEVEMENTS

(In Kms.)

Item	As on 31-3-1977	As on 31-3-1978	As on 31-3-1979 Anticipated	As on 31-3-1983 Target
(1)	(2)	(3)	(4)	(5)
1. Surfaced	9,588.13	9,598.13	9,717.93	10,896.13
2. Unsurfaced	6,568.20	6,558.20	6,438.40	5,260.20
Total	16,156.33	16,156.33	16,156.33	16,156.33
3. Rural Roads out of total roads length (including other district and village roads) of which—	8,769.36	8,769.36	8,834.16	8,834.16
(i) M. N. P.	..	..	..	..
(ii) Other than M. N. P.	8,769.36	8,769.36	8,834.16	8,834.16
4. Roads other than Rural Roads (3=4)	7,386.97	738.97	7,322.17	7,322.17
5. Rural roads and 8 M. N. P. (All-weather roads).	570.46	963.46	1,472.82	4,657.46
1. Surfaced	15	28	44	544
2. Unsurfaced	7,165.5	7,152.5	7,136.5	6,636.5
Total	7,180.5	7,180.5	7,180.5	7,180.5
Canal Embankment Roads				
1. Surfaced				
2. Unsurfaced				
Total				
3. Rural Roads out of total roads length (including other district roads and village roads) of which—				
(i) M. N. P.	67.00	123.00	205.10	926.10
(ii) Other than M. N. P.	..	..	..	..
4. Roads other than rural roads (3=4)	..	..	..	..

CHAPTER 26

(i) ROAD TRANSPORT

26.1. Measures designed to streamline the tax collecting organisation functioning under the Transport Department would consist of the following during the Sixth plan.

Installation of Weigh Bridges :

26.2. Installation of weigh Bridges at the Important check-gates will yield additional revenue from motor vehicles to the state. With this end in view, two weigh bridges have been installed at Jamsalaghat check-gate and Girisolla check-gate.

26.3. It is now proposed to have four more weigh bridges at border points i. e. two in 1978-79 at Sohella and Birmitrapur and two in 1979-80 at Laxmannath and Sunki. Installation of these four new weigh bridges will cost Rs. 17.40 lakhs, which is proposed to be spent @ Rs. 8.70 lakhs during 1978-79 and 1979-80.

26.4. 13 weigh bridges are now available within the Police-station compounds at different district headquarters and one at Rayagada Police-station. of these 13 weigh bridges, 10 weigh bridges are of 20 ton capacity each and the remaining three are 5 tons capacity. Excluding these three weigh bridges which cannot be used for weighing heavy motor vehicles action is being taken separately to get these weigh bridges transferred from the Police Department to the control of the Transport Department for their proper maintenance and use. It is approximately estimated that a sum of Rs. 55,000/ will be required for repairing these weigh bridges and a sum of Rs. 10.00 lakhs will be required to remove them from the Thana Compounds and to reinstall them near the Regional Transport office. Accordingly, a sum of Rs. 10.55 lakhs for repair and re-installation of these ten weigh bridges is proposed to be spent in the 3rd year of the plan period.

26.5. The creation of posts of Magistrates with their staff has been considered necessary for holding Mobile Courts exclusively for Motor Vehicle cases at regular intervals in different parts of the state to stop vehicles plying without permit, irregular plying of contract carriages and stage caerriages and to prevent the unhealthy competition of private buses with the vehicles of the public under takings. Besides this, contravention of the provisions of M. V. Act and the Rules framed there under can be duly dealt with by the Mobile Courts which will yield additional revenue to the State. Accordingly, provision for appointment of three Judicial Magistrates with their staff and for purchase of three diesel Jeeps has been suggested. The total cost of five years on this account comes to 9.10 lakhs.

Expansion of the Enforcement wing of the S. T. A. and R. T. A.

26.6. Though the vehicle population in 1978 has increased five times than that in 1960, the enforcement work is now being managed with the skeleton staff that was sanctioned in the year, 1969. To check tax evasion and effectively administer the M. V. Act and rules it is now urgently necessary to strengthen the enforcement wing by posting additional staff. It is proposed to post one more M. V. Inspector with one Constable at the headquarter of each region and additional region and one Transport Inspector with one Constable at the important Subdivisional Head quarters and other places viz., Bhadrak, Rairangpur, Jajpur Road, Angul, Jharsuguda, Berhampur, Bhanjanagar, Paralakhemundi, Khurda, Nayagarh, Talcher and Rayagada.

26.7. Four diesel Jeeps are also proposed to be purchased and supplied to each Divisional Headquarters and S. T. A. Headquarters (to be kept incharge of R. T. Os.) for convenience of mobility of the enforcement staff and systematic checking of vehicles.

Office Building and staff quarters

26.8. The Regional Transport Offices are the agencies through which the M. V. Tax and Passenger Tax are assessed and collected. But none of these offices have got own office building. There are also no staff quarters for many of the officers and staff of the R. T. As. Since provision of office building and staff quarters will increase the efficiency of these agencies, it is proposed to have twelve office buildings at twelve Regional Headquarters and 19 'D' Type, 190 'E' type and 50 'F' type quarters each at different Regional Headquarters and also at the S. T. A. Headquarters during the plan period of 1978-83. The total cost on this account comes to Rs. 139.59 lakhs.

26.9. Seizure and detection of vehicles has now become an important item of work due to increase in the number of passenger vehicles and their irregular plying. It has been felt necessary to have some garages at important places to detain the seized vehicles and to keep them under safe custody till the disposal of the cases initiated against the vehicle owners. This will be a permanent feature to guard against leakage of revenue. Hence it is proposed to construct 50 garages at a cost of Rs. 25,000 each, near the offices of the R. T. Os. and at other 35 important places including some Subdivisional Headquarters. A sum of Rs. 12.50 lakhs will be required for the purpose during the [next five years.

26.10. It has also been considered necessary to create five posts of Assistant Regional Transport Officers permanently to be posted at different important check-gates. These check-gates are Jamsella, Sohella, Birmitrapur, Girisolla and Laxmannath. Since a large number of temporary permits are issued by these check-gates on behalf of the S. T. A. and huge amount of passenger Tax is assessed and collected from the vehicles coming from outside, it is very necessary to post an Assistant R. T. O. at each of the check-gates for proper and efficient enforcement of the M. V. Laws.

Share Capital Investment in the O. R. T. Co. Ltd.

26.11. The operation of O. R. T. Company limited is restricted to the districts of Ganjam, Phulbani, Puri and a part of Cuttack district. The present fleet strength of the Company is 302 of which 92 are superannuated. By the end of the current year, 26 more vehicles will also superannuate. Vehicles which have completed their life span are required to be replaced.

26.12. Besides, the Company has also to expand its services on some of the existing routes, so as to keep pace with the increasing traffic potential. Steps are being taken for nationalising 9 routes to the complete exclusion of private operators. During the Sixth plan period the programme of nationalisation is expected to be further expanded, and some more routes are expected to be nationalised. Consequently, a large number of new vehicles will have to be acquired by the O. R. T. Company for intensification of services on the existing routes as well as for meeting the demands of nationalisation.

26.13. The Company has drawn up a programme of acquisition of vehicles under its replacement and expansion programmes during the Sixth Plan period, as indicated below:—

Year	Replacement	Expansion	Total	Cost
				(Rs. in lakhs)
1978-79	50	42	92	144.44
1979-80	50	39	89	146.85
1980-81	50	37	87	150.51
1981-82	50	35	85	153.85
1982-83	50	33	83	157.70
			Total	753.35

26.14. Apart from the acquisition of vehicles the Company has also to provide for adequate maintenance facilities for its vehicles. This will involve the construction of garages and provision of workshop facilities at several important places within its operational area. On an extremely conservative estimate the minimum requirement of funds for such facilities will be at least to Rs. 85.00 lakhs over the Five Year period from 1978-79 to 1982-83.

26.15. The Company's Capital requirement during the Sixth Plan period thus works out to Rs. 838.35 lakhs. The total internal resources likely to be generated during this period, consisting of its retained profit and the amounts transferred to its depreciation reserve fund are indicated below:—

Year	Rs. in lakhs
1978-79	77.98
1979-80	98.48
1980-81	110.13
1981-82	130.65
1982-83	162.56
Total	579.80

26.16. Thus, a total internal surplus of Rs. 579.80 lakhs is expected, as against a capital expenditure programme of Rs. 838.35 lakhs. A deficit of Rs. 258.55 lakhs is noticed. The undertaking is now unable to finance its capital expenditure programme from its own income. Consequently, it has been borrowing funds from different Commercial Banks. As on the 1st April 1978 a loan amount of Rs. 75.80 lakhs will remain outstanding for recovery. Judged against the existing authorised share capital base of Rs. 50 lakhs the debt-equity ratio would work out to 1.5: 1. If the undertaking is required to borrow the entire deficit of Rs. 258.55 lakhs from Commercial Banks over the Sixth Plan period, the debt-equity ratio will go up to 5:1 and the undertaking may not, with such a low equity base, be able to persuade Commercial Banks to advance any further loans to it. Visualising this difficulty, the company has increased the authorised share capital base from Rs. 50 lakhs to Rs. 150 lakhs. As per the present ratio of shares held by the State Government in this undertaking, 78.5 per cent of the additional share capital i. e. Rs. 78.50 lakhs, is to be contributed by the State Government. In view of the large gap between the funds requirement and the internal resources generated, it is felt that the Company will still find it difficult to arrange institutional finance with a share capital base of Rs. 150.00 lakhs only. The undertaking may, therefore, have to expand its share capital base still further. In view of these factors it is considered desirable to recommend additional share capital contribution by the State Government to the extent of Rs. 124 lakhs during the Sixth Plan period so as to enable the O. R. T. Co. to retain a debt-equity ratio for the purpose of obtaining institutional finance. If additional share capital to the extent of Rs. 124 lakhs is provided by the State Government the remaining deficit of Rs. 134.55 lakhs can be met by the undertaking with borrowings from Commercial Bank. The break-up of the proposed share capital investment during the different years of Sixth Plan period is indicated below:—

Year	Rs. in lakhs
(1)	(2)
1978-79	Nil
1979-80	38.00
1980-81	38.00
1981-82	24.00
1982-83	24.00
Total	124.00

Orissa Road Transport Corporation

26.17. The effective fleet strength of the Corporation as on the 31st March, 1978 will stand at 547. A large number of these vehicles are old and will require replacement. As many as 245 vehicles will superannuate during the period 1978-79 to 1982-83. Adequate provision for replacing these vehicles has therefore to be made unless these vehicles are replaced in time, the viability of the undertaking may be affected through disruption of schedule services and increased maintenance expenditure. Besides the Corporation is also required to intensify its services on existing routes and to expand to new areas so as to keep pace with the increasing demands of the travelling public. There is a proposal to nationalise all the routes in Koraput district and two important routes of Cuttack district i. e. Cuttack-Machhagaon and Cuttack-Paradeep along with all its feeder routes. The requirement of new vehicles taking all these factors into consideration during the period 1978-79 to 1982-83 has been estimated at 330. Besides some infrastructural facilities like setting up of new workshops will also have to be provided for so as to meet the maintenance needs of the Corporation vehicles. Taking all these factors into consideration, the Capital requirement of the Corporation over the Sixth Plan period has been worked out at Rs. 1023.35 lakhs.

26.18. The details of such investment and yearwise break-up are indicated below :—

	(Rs. in lakhs)					
	1978-79	1979-80	1980-81	1981-82	1982-83	Total
(a) Cost of buses ..	247.50	165.00	175.35	185.90	188.10	961.85
(b) Lands & buildings	4.00	6.00	8.00	8.00	10.00	36.00
(c) Tools & plants ..	3.50	4.50	5.50	5.50	6.50	25.50
Total ..	255.00	173.50	188.85	199.40	204.60	1023.35

26.19. As per the financial arrangements contemplated in the Road Transport Corporation Act, both the Central and the State Governments are to provide capital to the Corporation. Because of constraints of resources the total capital needs of the Corporation are not being met from Government contribution in equity or loan only. Consequently, the Corporation has been borrowing funds for its capital expenditure programme from Commercial banks. The Corporation also proposes to go in for bank borrowings during the Sixth Plan period. The level of capital contribution expected from the Central Government and the bank borrowings during the said years of the Sixth Plan are indicated below.

	(Rs. in lakhs)				
	1978-79	1979-80	1980-81	1981-82	Total
1. Central Government contribution.	33.33	33.33	33.34	..	100.00
2. Borrowings from Commercial Bank.	60.00	40.00	50.00	40.00	190.00
Total ..	93.33	73.33	83.34	40.00	290.00

26.20 As may be seen above, from these sources the corporation will get a sum of Rs. 290.00 lakhs. The balance expenditure will have to be met from the internal resources of the Corporation. During the above period, the Corporation expects to generate internal resources surplus of Rs. 950.00 lakhs.

26.21 The loan repayments of this Corporation have also to be provided for in the Capital account. During the year 1978-79 to 1982-83 a total loan of Rs. 228.46 lakhs will have to be repaid by the Corporation to the Commercial Banks. This amount is therefore treated as an inevitable capital expenditure of the Corporation and has to be set off against the Total Capital, receipts of the Corporation. The capital requirement of the Corporation including the cost of assets and the proposed loan repayments come to Rs. 1,251.81 lakhs. The capital Receipts expected from the Central Government and Bank borrowings comes to Rs. 1240.00 lakhs. The Corporation is having sufficient opening cash balance in the capital account to meet the deficit of Rs. 11.81 lakhs. The plan size of the corporation for 1978-79 to 1982-83 has therefore been fixed at the following level for the different years of the sixth plan period.

Year	Rs. in lakhs
1978-79	287.12
1979-80	223.72
1980-81	249.77
1981-82	239.00
1982-83	252.20
Total	1251.81

26.22 The tentative outlay for the Road Transport Sector for the next Plan period, 1978-83 stands at Rs. 1600.00 lakhs. Of these, a major portion i. e., Rs 1295.96 lakhs has been earmarked for acquisition of vehicles in the O. S. R. T. C. The balance amount is proposed to be utilised as share capital investment in the O. R. T. Co., Ltd., and on a few schemes, which have been aimed at increasing the functional efficiency of the existing Tax Collecting machinery. The bulk of the provision is, thus, proposed to be utilised on acquisition of capital assets like vehicles. Still then within the next Plan period 1723 of persons of different categories are likely to get direct appointment as a result of the proposed investment of Rs. 1600.00 lakhs in the Road Transport sector. Of these, 563 will be un-skilled or un-educated workers while the rest will be from the educated category. The educated category can again be divided into two sub-groups, i. e., technical and non-technical. Employment potential for 346 technical and 814 non-technical persons will be generated during the next Five Year Plan period.

FIVE-YEAR PLAN, 1978-83

Road Transport Undertakings—Outlays and Expenditure

Statement TR.-5

(Rs. in lakhs)

1978-83 Schemes	Total cost	Fifth Plan out-lay	Expendi- ture up-to 1977-78 in the case of spill-over schemes	Proposed outlay 1978-83	Outlay					Employment potential in mandays		
					1978-79	1979-80	1980-81	1981-82	1982-83	Unskilled	Skilled	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	Technical (12)	Non- Technical (13)
1. Purchase of buses												
(a) For existing routes—												
(i) Number	} 253.11	160	40	30	30	30	30	69,632	43,520	1,04,448
(ii) Cost		267.60	66.00	49.50	50.10	50.70	51.30	..	..	..
(b) For new routes—												
(i) Number	170	50	30	30	30	30	75,072	46,240	1,09,888
(ii) Cost	284.10	82.50	49.50	50.10	50.70	51.30	..	..	..
(c) Buses for replacement—												
(i) Number	245	60	40	45	50	50	..	..	..
(ii) Cost	350 for Road Transport Sector	410.15	99.00	66.00	75.15	84.50	85.50	..	..	..

(d) Total—												
(i) Number	..	..	..	575	200	100	105	110	110	..	..	..
(ii) Cost	..	..	..	961·85	247·50	165·00	175·35	185·90	188·10	..	..	..
2. Purchase of trucks if any—												
(i) Number	..	..	..	..	..	..	..	..	..	..	..	..
(ii) Cost	..	..	..	..	..	..	..	..	..	..	..	..
3. Workshop including works building.												
				5·13	27·00	3·00	4·50	6·00	6·00	7·50	..	..
4. Staff quarters.												
				—	9·00	1·00	1·50	2·00	2·00	2·50	—	..
5. Other expenditure including purchase of auxiliary vehicles.												
(a) Tools and equipment				4·12	25·50	3·50	4·50	5·50	5·50	6·50		
(b) Repayment of loan					228·46	32·12	48·22	60·92	39·60	47·60		
Grand Total				262·36	1,251·81	287·12	223·72	249·77	239·00	252·20		
6. Fleet at the end of year..												
(i) Buses (Numbers)..	(Running)			547	..	637	697	757	817	877		
	(Total)			609		699	759	819	879	939		

(ii) INLAND WATER TRANSPORT

Inland Water Transport Directorate

26.23. This is a staff scheme and intended to strengthen the Inland Water Directorate which will survey the water-locked areas of the State for the purpose of harnessing and training the numerous water-routes with a view to providing transport facilities to the inhabitants thereof. This organisation will also draw up detailed project reports in respect of various schemes proposed for the development of inland water transport facilities in such areas where no overland communication either railways or road is possible. During the Sixth plan period an outlay of Rs. 12 lakhs will be necessary for this purpose.

Lunch Service

26.24. The scheme envisages provision of lunch services for carrying passengers and goods in three important sectors viz. Chilika lake, Dhamra-Chandbali area and Hirakud Reservoir. The scheme provides for capital works like procurement of launches and provision of shore and navigational facilities.

26.25. Detailed project reports and estimates have been prepared. These have also been scrutinised by the Government of India, Ministry of Shipping and Transport. The estimated outlay which originally stood at Rs. 75.36 lakhs has since been reduced to Rs. 72.66 lakhs.

26.26. The scheme was included in the Fifth Plan in the Central Sector but before the investment decision of the Government of India could be taken, the criteria for Centrally sponsored schemes changed and the scheme was not included in the Central Sector. In anticipation of the sanction of the scheme, a few launches have been procured and put into service in Chilika and Hirakud sector by carving out some funds from the meagre resources of the State. Benefits derived from this limited service has incited increasing demands from the public for more such services and those demands are difficult to resist.

26.27. The scheme envisages construction of 27 nos. of launches to ply in the selected water-routes. Each launch will employ ten crew members, both skilled and semi-skilled. Besides, shore facilities will provide employment to fifty persons. The employment potential involved in the operational as well as the construction stages, would amount to 10,000 mandays.

Survey and Training

26.28. This is a new scheme suggested for inclusion in the State Plan as this could not be covered in the central sector in view of the new changed criteria for centrally sponsored schemes. This scheme aims at providing facilities in a systematic manner for the training of personnel who will man the mechanised crafts including sea-going ones now coming in ever increasing number for inland water transport and offshore fishing activities. The State Government has statutory obligations in this regard in view of the Inland Steam Vessels Acts and Rules. To start with, a batch of twenty trainees are proposed to be trained under a one-year course.

26.29. The Department, at present, is conducting some casual examinations of Drivers and Serang and that too without any systematic arrangement for training. The result has been that quite a large number of untrained hands have got into the job of manning the mechanised crafts, thereby increasing great risks to life and property. It is, therefore, proposed to provide training facilities for both the engine and deck-hands under the scheme. The estimated outlay of this scheme is Rs. 25 lakhs as detailed below.

(a) Staff	Rs. 12.50 lakhs
(b) Procurement of four survey-cum-Training Launch.	Rs. 10.00 lakhs
(c) Field expenses	Rs. 2.00 lakhs
(d) Contingencies	Rs. 0.50 lakhs
Total	Rs. 25.00 lakhs

Improvement and Training of Water in Paradeep—Chandball Sector—

26.30. The area broadly bounded by river Brahmani on the north and Mahanadi on the South, is intercepted by numerous rivers, creeks and channels. The area is not only thickly populated excepting the water expenses but also is rich in agricultural potential. Land patches are almost isolated from one another and have no internal communication link between them selves except for the traditional ferries by means of country boats. In view of the richness of the soil which is formed by river silts, a number of resettlement colonies have come up in this area. People inhabiting it have no communication link with the main land. They are virtually cut off from the outside world.

26.31. Due to the erratic character of the water routes, the people have to cover devious routes either for the sake of safety or for want of short-cuts. They and the country boats are very often exposed to risks and accidents, involving loss of life and Property.

26.32. Because of want of any worthwhile communication system it is difficult to export the produce of the area and import the goods required by the inhabitants. This results in a situation in which the people pay more for their needs and get less for their labour.

26.33. The schemes, therefore, aim at providing short-cut-routes by joining different rivers, channels and creeks, providing lock arrangements and outfalls for maintaining the required water level for making the ferry all throughout possible, whether in high tide or in low tide and last but not the least, reducing the distance to a more 15 miles by water between Paradeep and Chandballi, the two ports of the State.

26.34. The scheme has different components, which are shown below alongwith their estimates and according to priority.

(Rupees in lakhs)

(i) Improvement of navigation in Guptinala joining river Brahmani with Aipara by constructing 2 nos. of terminal locks one at Dakhinabeda and another at Gupti including renovation of Guptinala.		
(a) Cost of Locks	50.00	} 80.00
(b) Cost of renovation	30.00	
(ii) Improvement of navigation facility for Ujang Mahara (existing creek) connecting river Kharasrota and river Baitarani.		
(a) Cost of renovation of creek 12 K. M.	30.00	} 80.00
(b) Cost of lock at Deltara and lock at Manpur	50.00	
(iii) (a) Provision of a lock near Mahakalpara on Jamboo canal 20.00		
(b) Making a cut to link Jamboo canal and river Gobari with regulator		
Cost of Regulator and lock	30.00	} 36.00
Cost of link channel	6.00	
(iv) Linking Gobri to Gobri Canal by means of a cut and providing a regulator on river Gobri and 2 nos. of locks, one at Endar and another at Kansar.		
(a) Cost of regulator and lock	24.00	} 29.00
(b) Cost of link channel 3 K. Ms.	5.00	
(v) Providing nagivation facility in Bhitarkanika creek joining Brahmani river by construction of one terminal lock at Righagar (covering the area where crocodile sanctuary is being developed under U. N. programme). 25.00		
(vi) Improvement of navigation facility by construction of 2nos. terminal locks one at Babur and another at Tantiapala joined by Tearkot. 50.00		

26.35. The total estimated cost of all the components of the scheme is Rs. 320.00 lakhs.

Improvement to High Level Canal Range-I

26.36. This is an irrigation-cum-navigation canal and plays an important role in water transport between Cuttack city and northern side of Cuttack district. This canal was also used heavily in the transport of ores to Paradeep Port viz., Taladanda and Kendrapara canals. The canal has a designed depth of 6'-0" but at certain stages, it has silted up. It is now proposed to deepen this canal, remodel its locks and protect its banks by means of stone-pitching of sandy reaches. The total estimated cost of the schemes is Rs. 70.00 lakhs.

Hydrographic Survey

26.37. The minor port survey organisation of the Government of India conducted hydrographic survey in respect of Charabali port during 1967-68, 1968-69 and 1969-70. The cost of this survey as charged by the Minor Port Survey Organisation is Rs. 7,75,800. It has not been possible to pay this claim so far. This amount will be cleared out of State plan provision.

Paradeep Area Development

26.38. It is urgently necessary to provide official and residential accommodation for various essential offices/organisations functioning at Paradeep in connection with the operation and development of the Port. An area of 40 acres of land reserved in the port town for the State Government needs to be developed for providing official and residential accommodation. The matter was considered in the 10th meeting of the Paradeep Area Development Advisory Committee and it was decided that immediate steps should be taken to develop the land and provide accommodation for the essential State Government offices/organisations. It was further decided that there should be a field organisation to take charge of the development work and also to maintain liaison with the port Trust. Therefore, it is proposed to include provisions both for the staff of the organisation and the works entrusted to it viz. for land development and construction, of buildings and other civic amenities. The total outlay is estimated at Rs. 200 lakhs.

Central Sector Minor Port Development

1. Gopalpur Port

26.39. During the Fourth Plan period, the Government of India had decided to provide full loan assistance for the development of one minor port in each maritime State. A Central Committee appointed by the Government of India under the Chairmanship of Shri R. R. Sukhrani, the then Development Adviser, Ministry of Shipping and Transport recommended that Gopalpur in the district of Ganjam of the State should be developed as a commercial-cum-fishing harbour at an estimated cost of Rs. 2.75 crores due to traffic advantage there. Necessary preliminary investigations and model studies were carried out. While these investigations were in progress, M/s. Indian Rare Earths Ltd., a public sector undertaking of the Department of Atomic Energy decided to set up a mineral sand separation plant near the port site which would need additional port facilities for handling their exports. Since the existing site at Gopalpur did not provide sufficient scope either for setting up proposed industrial complex of I. R. E. Ltd. or for providing the additional facilities, the question of shifting port site was considered. Various technical problems connected with designing of the port were examined in the Ministry of Shipping and Transport and finally in December, 1973 after discussions at New Delhi a new site, 5 miles north of Gopalpur town, was fixed up where necessary infrastructural facilities like road, water-supply etc. are available. In January 1974 the Government of India, Ministry of Shipping and Transport accorded technical approval in respect of Commercial-cum-Fishing harbour at Gopalpur for which a Techno-Economic Feasibility Report was submitted at an estimated cost of Rs. 5.90 crores i. e. Rs. 5.26 crores for the components of the commercial harbour and Rs. 0.64 crores for those of the Fishing Harbour. The scheme which was technically cleared by the Ministry of Shipping & Transport has the following features:—

1. Gopalpur port will be a fair weather lighterage port remaining open for about seven months a year from mid-September to mid-April. It will be closed during south-west monsoon for allowing natural by-passing of the littoral drift.
2. Vessels with a maximum loaded draft of 2.5m. will be able to operate from the port during the period the port is open.
3. The scheme will cost Rs. 590 lakhs and will take about 3 years for completion from the date of approval.

26.40. The State Government had urged the Central Government that this project should be treated as a spillover project of the Fourth Plan and full central assistance should be given by the Government of India during the Fifth Plan. The Government of India has informed the State Government that as the scheme relating to development of Gopalpur was not included in the Fifth Five-Year Plan it would not be possible to make any provision for the scheme.

26.41. However, the Government of India has so far released central assistance to the tune of Rs. 17.72 lakhs including Rs. 12.5 lakhs during the Fifth Plan period. The expenditure incurred so far in respect of this project amounts to Rs. 18.27 lakhs.

26.42. Recently, the State Government have submitted a proposal for inclusion of the scheme in the next Five-Year Plan with an updated cost estimate of Rs. 9.10 crores (Rs. 8.25 crores for Commercial harbour and Rs. 0.82 crores for fishing harbour). In the discussions of the Working Group held at New Delhi, this has been tentatively included as a new scheme in the Plan.

26.43. The Government of India has, however, taken no decision regarding the pattern of financing of the project. Early clearance of Government of India is necessary to execute the scheme as a centrally sponsored scheme outside the State Plan by means of 100 per cent Central loan assistance as is the practice at present.

26.44. It may be mentioned in this connection that for a longtime, minor port development used to be financed as Centrally sponsored scheme but in the two annual plans, that followed the Third Plan, the Government of India changed this pattern and decided that the minor port development should instead be taken up as a part of the State Plan. The result was that there was absolutely no development of minor ports during this period as the State Government could not accommodate the relatively heavier outlays involved in such projects. In consideration of this position, the old practice of treating minor port development schemes as Centrally sponsored schemes was revived under the Fourth Plan in consultation with all the maritime states. In case, it is once again decided that the minor port development would form a part of the State Plan, the same difficulty of finding finance for it in the State Plan is likely to recur inhibiting thereby the development of minor ports.

2. Inland Water Transport Navigation in river Mahanadi

26.45. This is an approved spillover scheme of the fifth plan. The work on this scheme was held up due to technical problems relating to the design of the down-chamber lock-gate. The problem has since been resolved and the work is being entrusted to the Orissa Construction Corporation, a State Government Undertaking. The scheme is also expected to spillover to the next plan 1978-89. The scheme has been tentatively included in the next plan as a Centrally sponsored scheme by the working Group with an updated estimate of Rs. 98.38 lakhs.

26.46. The break-up of this amount are as follows —

Up to	1974-75	Rs. 22.00 lakhs
	1975-76	Nil
	1976-77	Nil
	1977-78	Nil
	1978-79	Rs. 34.38 lakhs
	1979-80	Rs. 42.00 lakhs
		<hr/>
	Total	Rs. 98.38 lakhs
		<hr/>

26-47. The physical progress so far made and projections for future in respect of the scheme is as follows: —

Up to end of 1976-77	Upper stream navigational channel has been provided and the upper stream lock chamber fixed.
1978-79	(i) Purchase of materials for fabrication of two down-chamber lock-gate. (ii) Bridge over down-stream lock-chamber (iii) Landing Ghat at Barang (iv) Street lighting (v) Approach road (vi) Civil works
1979-80	Balance Civil work

3. Revival of Orissa coast Canal

26-48. This is an inter-state water way joining river Hoogly in West Bengal with river Matah in the district of Balasore in Orissa. Out of the total length of 132 miles, about 76 miles lie in Orissa and 56 miles in West Bengal. Although a portion of the canal has been abandoned, still a good part of it is navigable both in West Bengal and Orissa. The revival of the canal was first proposed by the Government of India, Ministry of Shipping and Transport on the basis of a report prepared by the Central Water and Power Commission. The revival was also recommended by the Bhagavati Committee which went into the problem of inland water transport in the country and recommended suitable schemes. The scheme was also repeatedly recommended by the Estimates Committee of the Lok Sabha as well as the then Director, I.W.T., Government of India (Shri H.S. Banerjee).

26-49. The present proposal is for reviving about 32 miles of the canal from the West Bengal border including remodelling of locks and provision of other appurtenant works.

4. Extension of Taldanda Canal to the Lagoon of the Paradeep Major Port

26-50. The Taldanda canal which is a navigable canal was extended to Atharbanki creek near Paradeep Port as a part of the I.W.T. programme under the Third Plan. A sum of Rs. 71.73 lakhs was spent on this extension which is also navigable. It is proposed to join this extended part with Paradeep dock covering a distance of only 5 kms. This will enable uninterrupted water route to the Port. The proposal has been recommended by the Bhagavati Committee in view of its importance in the context of the development of Paradeep Port.

5. Commercial Ferry Services

26-51. The scheme aims at providing water transport facilities in certain areas of the state where no other mode of transport, either road or rail communication, is possible due to intervention of numerous rivers, creeks, lakes and water channels.

26-52. The scheme was scrutinised by the Government of India, Ministry of Shipping and Transport and was recast at their instance. The revised scheme envisages a capital outlay of Rs. 72.66 lakhs and includes provision of passenger launch service in ten selected water routes of the State which connect the major port of Paradeep and three tourist sectors.

26-53. The scheme was first recommended by the Bhagavati Committee, pending provision of funds for the scheme in the Plan, the State Government introduced launch service in Chilka lake and Hirakud reservoir in a moderate scale by arranging funds from its limited resources.

FIVE YEAR PLAN, 1978-83

Minor Ports—Outlays & Expenditure

Statement—TR.—6

(Rs. in lakhs)

Scheme	Total cost	Fifth Plan outlay	Expendr. up to 1977-78 in the case of spillover scheme	Proposed outlay 1978-83	Outlay					Employment potential in mandays		
					1978-79	1979-80	1980-81	1981-82	1982-83	Un-skilled	Skilled	
					(6)	(7)	(8)	(9)	(10)		Technical	Non-Technical
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Payment of dues to Minor Port Survey Organisation of Government of India, Ministry of Shipping and Transport.	7.76	Nil	Nil	7.76	7.76	..	..	..	..	..	..	..

FIVE YEAR PLAN, 1978-83

Inland Water Transport—Outlay & Expenditure

Statement TR.—7

(Rs. in lakhs)

Scheme	Total cost	Fifth Plan outlay	Expenditure upto 1977-78 in the case of spillover scheme	Proposed outlay 1978-83	Outlay					Employment potential in Mandays		
					1978-79	1979-80	1980-81	1981-82	1982-83	Unskilled	Skilled	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	Tech.	Non-Tech.
Continuing Scheme												
1. I. W. T.												
Directorate New Schemes	..	6.00	5.72	12.00	2.00	3.00	3.00	2.00	2.00	28,000	60,000	1,50,000
2. Launch service	72.66	..	..	73.00	6.00	46.70	13.20	4.40	2.70	29,000	85,000	8,00,000
3. Survey & Training	25.00	..	..	25.00	8.00	8.00	3.00	3.00	3.00	45,000	15,000	5,00,000
4. Improvement of Training of water routes in Paradeep-Chandbali Sector.	320.00	..	..	320.00	13.20	24.30	90.87	120.68	70.95	3,50,000	4,50,000	7,00,000
5. Improvement to High Level Canal Range I.	70.00	..	..	70.00	2.80	5.70	18.52	27.43	15.55	30,000	90,500	8,50,400

CHAPTER 27

TOURISM

27.1 Orissa have vast tourist potentials of different categories. The rich flora, and fauna glorious cultur heritage, magnificent monuments and the bewitching beaches all blend together cater to the varieties of tastes of the tourists. It is the prime objective of the State Government to harness these tourism potentials for promotion and development of tourism in the State. For this purpose a two pronged strategy has been launched. On the one hand we intend to aim at giving exposure to the vast tourist potentials of the State and on the other we aim at building up adequate infrastructural facilities to motivate the intending tourists to visit the state.

Tourist Information and Publicity

27.2 The exposure to the vast tourism potentials of the state is sought to be made through catering information and production of literature and films. The machinery for catering information is the Tourist Office. As each district of the state is endowed with places of tourist attraction, the need for opening of Tourist Offices in each district has been felt since long. Similarly, it has been realised that there should be a machinery to cater information about the places of tourist interest in the state before the international tourists on their arrival in India. As the popular mode of travel among the international tourists is by Air, the tourist offices of the state should be opened in different disembarkation points of tourists travelling by Air. Such places are viz Delhi, Calcutta, Bombay and Madras. Incidentally these four places also provide the meeting ground for different cross-sections of Indian societies. So besides catering to the need of international tourists these Tourist Offices can also serve the cause of promotion of domestic tourism. There are yet some places of special interest in the state which deserve our primary attention because of their inherent importance such as Bhubaneswar, Konark and Chilka. These places are also required to be served by independent Tourist Offices. So the total number of Tourist Offices required to be opened both inside and outside the state is 20 to begin with.

27.3 By the end of the year 1977-78 the state Government had already established Tourist Offices in six districts and three aforesaid places of special interest in the state. Besides, Tourist Offices were also opened in two out of four places of disembarkation outside the state. During the year 1978-79 four offices will be opened, three for the districts and one for another disembarkation point outside the state. So by the end of 1978-79 altogether 15 Tourist Offices will have been established. This will leave only five Tourist Offices to be opened during the remaining years of the mid-term plan 1978-83 to complete the first phase programme of spreading the net-work of tourist information and assistance both within and outside the state.

27.4 Simultaneously with the opening of Tourist Offices, efforts are to be mad to produce suitable literature to give exposure to the places of tourist interest in the State and the existing facilities there. Since our objective is to open Tourist Offices in each district it is desirable also to bring out a brochures on each district. A beginning is going to be made during the year 1978-79 by bringing out brochures on six districts of the State. The brochures on remaining seven districts will be brought out during the year 1979-80. District-wise brochures apart, there is also a need for bringing out hand-outs and folders on particular aspects of tourism in the State such as attractions of the sea and other places of natural beauty Art and Sculpture, Wildlife, tribal culture etc. So the folders and hand-outs on particular aspects of tourism will go a long way to educate the tourists in the field of his own liking. There are yet some tourists who pin point their choice on a particular place because of its specific interest. In this connetiion mention may be made of the places of special interest like Puri, Bhubaneswar, Konark, Chilka and Similipal. Colourful folders on such places of special interest are being brought out to cater to the needs of the tourists. In addition to these, a booklet is required to be brought out to project overall picture of Orissa as a tourist destination. Steps are a foot to bring out such a booklet under the title "visit Orissa".

27.5. Like publication of literature, production of films also plays an important role in projecting the tourist image of the State. Films are required to be produced not only on different aspects of tourism in the State but also on its overall tourist image. In view of the importance of the film, it is necessary to produce atleast one film a year. Necessary liaison will be established with the State Film Development Corporation.

27.6. The total financial implication for opening of Tourist Offices, publication of literature and production of films may be of the order of Rs. 55.85 lakhs during the Sixth Plan period

Tourist Centre

27.7. Tourist information and publicity is the scheme which aims at implementing the first prong of the strategy evolved for promotion and development of tourism in the State. But the implementation of this will remain incomplete unless assistance is extended to the travelling public at important Railway stations and air port of the State. There is only one Airport in the State where a Tourist counter has been opened long since. By the end of Fifth Five-Year plan two important Railway stations of the State viz., Bhubaneswar and Puri were provided with Tourist counters. In pursuance of the recommendations of the State Tourism Ministers' Conference held in New Delhi on 21-7-1978 it is now proposed to extend the service to other important Railway stations of the State. The Railway stations where the service is proposed to be extended are Cuttack, Berhampur, Bhadrak, Jajpur, Rourkela, and Sambalpur. The expenditure involved in the first phase of the programme is of the order of Rs. 3.40 lakhs.

Tourist Accommodation

27.8. While projecting Tourist image of the State it is absolutely necessary to build up adequate infrastructural facilities to motivate the Tourists to visit the State. While the places of tourist interest are many, only a few of them have been provided with accommodation facilities for the tourists. Since it is not possible to create accommodation facilities in all the places of tourist interest at a time, a phased programme has been launched. In the first phase, Tourist Bungalows are required to be constructed at convenient bases from where tourists can plan their visits to the places of interest around. Such bases in the State are the district headquarters or like important towns which have better communication facilities compared to other places in the State. Because of their convenient location they provide an ideal ground for establishment of Tourist Bungalows. Out of 13 district headquarters of the State only two have so far been provided with Tourist Bungalows. The rest 11 district headquarters are still to be provided with such facilities. Since tourism is a fast growing phenomenon, a time-bound programme is required to be launched for construction of Tourist Bungalows.

27.9. In addition to the establishment of Tourist Bungalows in the district headquarters some Tourist Bungalows are required to be constructed on the places of special interest where inland tourists can come for holidaying and pilgrimage. Such places are many, but it is proposed to limit the number of places to six during the mid-term Five Year Plan. These places are Chandaneswar, Chandbali, Paradeep, Gopalpur, Kantilo and Jashipur. In addition to the establishment of new Tourist Bungalows it is also felt necessary to give attention to the expansion and modernisation of existing ones to meet the requirement of the tourists. Out of ten Tourist Bungalows established so far, four are too small to meet the requirement. These Bungalows are located at Taptapani, Barkul, Balichandrapur and Bangirposi. Unless these Bungalows are expanded the very purpose of having them will be defeated.

27.10. The construction of new Tourist Bungalows at district headquarters and places of tourist interest and expansion and modernisation of existing ones will cost Rs. 389.86 lakhs.

Tourist Transport Service

27.11. Side by side with the creation of accommodation facilities provision is also required to be made for suitable transport facilities for the tourists. The tourists usually need transport facilities from the base they plan their tours. It is under contemplation to establish Tourist Bungalows at such bases. These centres will be equipped with suitable transport units so that the tourists could plan their tours conveniently. Since the present trend is to travel in groups luxury coaches are the best answer to it. So far, four out of thirteen such bases in the State have been provided with coaches, either small or big. The rest nine centres are required to be provided with such service. This will entail an expenditure of Rs. 27.20 lakhs.

Direction and Administration

27.12. To cope with the increased work load in the production wing and increase in the strength of personnel in the field of production the need will arise for appointment of a whole-time supervisory Officer and he is to be provided with usual facilities. In addition, another supervisory officer is also required for overseeing the work of the Research and Statistics Cell which has since been created.

27-13 The Department needs a building of its own for its proper functioning. This building, besides accommodating the Department, should have also provision for opening of show rooms of Orissa Handicrafts and counters for Railways, Airways, Hoteliers and Travel Agents. Besides, it should also have suitable space to be let out to intending State Governments to open their tourist counters in our State. In this building there will be provision of a lounge, a cafeteria and an Auditorium for exhibition of films on tourism potentials, presentation of cultural programmes, and holding of conference, etc. This will entail an expenditure of Rs. 20 lakhs.

Other Expenditure

27-14. The infrastructural facilities proposed to be created will bring the tourism in the State to a meaningful stage. Further development of infrastructural facilities will depend on an intensive study of the requirement in respect of individual places of interest. This is the stage when micro plans for development of individual tourist centres will be required to be prepared. The preparation of such plans will require some investment. It is estimated that the requirement on this score may be of the order of Rs. 3.50 lakhs including the provision already made in the Budget estimate for the year 1978-79.

27-15. The State Government have recently formed a Corporation named Orissa Maritime and Chilka Area Development Corporation. This Corporation proposes to establish a three star hotel with all modern facilities for the tourists in Chilka area.

FIVE-YEAR PLAN, 1978-83
TOURISM—OUTLAYS AND EXPENDITURE

Statement—TR. 3
(Rs. in lakhs)

Scheme	Total cost	Fifth plan outlay	Expenditure upto 1977-78 in the case of spill-over schemes	Proposed outlay 1978-83	O U T L A Y					Employment potential in mandays		
					1978-79	1979-80	1980-81	1981-82	1982-83	Unskilled	Skilled	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	Technical	Non-Technical
											(12)	(13)
Direction & Administration.	34.19	4.00	2.26	30.19	1.69	7.05	7.10	7.15	7.20	12	..	..
Tourist Information and Publicity.	61.85	6.00	6.71	55.85	6.26	8.25	11.00	13.75	16.59	66	..	..
Tourist Transport Service.	35.20	8.00	6.25	27.20	3.05	5.40	5.70	6.25	6.80	18	..	9
Tourist Accommodation.	417.86	38.00	30.37	379.86	14.50	86.94	89.60	92.26	96.56	80	..	..
Tourist Centre ..	..	..	..	3.40	..	0.79	0.82	0.86	0.93	12	..	..
Other Expenses ..	4.90	1.00	0.75	3.50	1.50	0.50	0.50	0.50	0.50	..	..	..
Total ..	554.00	57.00	46.34	500.00	27.00	108.93	114.72	120.77	128.58	188	..	9

CHAPTER 20

GENERAL EDUCATION

A Review of overall Development since 1950-51

28.1. Orissa, from the point of view of educational development was one of the most backward States of the country till the dawn of independence. The period following Independence has witnessed rapid institutional expansion of general education at all levels. In the year 1950-51, there were in all 9,801 primary schools with an enrolment of 3,15,000 children including 64,000 girls and with 16,525 teachers. There were also in that year 501 Middle Schools, 172 High Schools, 14 Arts and Science Colleges and one affiliating University. The total enrolment in the Middle and High Schools was 40,000 and 16,000 with 2,569 and 2,247 teachers respectively. The number of girls in the Middle Schools was 3,000 and in High Schools 1,000. The number of Students in Colleges in 1950-51 was 6,282 out of whom only 389 were girls. Against this backdrop, Orissa inaugurated her First Five Year Plan with an outlay of Rs. 146.88 lakhs on the development schemes of General Education. The expenditure on the Second Plan including the Centrally Sponsored Schemes rose to Rs. 621.34 lakhs. With a view to enabling the State to catch up with the all-India standard, the outlay on the Third Plan was raised to Rs. 1,447.78 lakhs. The development outlay amounting to Rs. 1,527.81 lakhs (including centrally sponsored Schemes) on the Fourth Plan remained almost at the Third Plan level. With these efforts considerable expansion took place in the number of educational institutions at different levels as well as in the enrolment. At the end of the year 1973-74 the number of Primary Schools rose to 31,822 and Middle Schools to 4,642. The percentage of enrolment of Boys and Girls in the age-group 6-11 were 28 and 7 in 1950-51. These figures rose to 93.6 for boys and 56.5 for girls at the end of the year 1973-74. In case of Middle Schools only 7 per cent of the boys and 0.5 per cent of the girls in their respective age-group (11-14) were in Schools during 1950-51. The percentage rose to 31 in case of boys and 11.2 for girls at the end of the Fourth Plan period. Whereas, in 1950-51, there were 165 boys high schools and 7 girls high schools in the State, the figures jumped to 1,654 and 204 respectively in 1973-74 and the percentage of enrolment of boys and girls during the same period had risen from 3.4 and 0.2 to 21.0 and 5.0 respectively of the corresponding age-group population.

28.2. So far as Higher Education is concerned the linear expansion in terms of number of institutions and enrolment has been equally impressive. The number of Universities had risen from one in 1950-51 to three and the number of general colleges from 14 in 1950-51 to 85 in 1973-74 and Teacher Training Colleges from 1 to 5 during the same period. It is noticed that till the year 1955-56, opening of new colleges and expansion of existing colleges had been scrupulously related to the output of matriculates and availability of adequate infrastructural facilities. But rapid expansion had to be allowed under the pressure of local demand. The total enrolment which was only 6,282 in 1950-51 including 389 women had risen to about 62,620 including 8,910 women in 1973-74. As a result of this expansion the percentage of enrolment to the total population in the age-group 17-22 rose to 2.0 in 1973-74 from the dismal figure of 0.4% in 1950-51. Along with the rise in the number of colleges and enrolment, financial outlay on higher education had also been considerably stepped up. The development expenditure which was a mere sum of Rs. 5.35 lakhs under the I Plan rose to Rs. 323.13 lakhs under the Fourth Plan and between the years 1950-51 and 1973-74, the annual non-Plan expenditure had risen from Rs. 12.03 lakhs to Rs. 338.56 lakhs. Despite the rising annual outlays deficiencies in physical plants and academic facilities have been accumulating in almost all institutions due to rapid expansion of enrolment facilities.

28.3. There has also been considerable expansion in the number of teachers at all stages. In primary schools, there were in 1950-51, 16,525 teachers of whom 52 per cent were trained. By 1973-74, the number had risen to 68,600 of whom 75 per cent were trained. During the same period the number of middle school teachers rose from 2,569 to 16,972 but the percentage of trained teachers declined to 41 from 42 in 1950-51. At high school stage the number of teachers is found to have grown from 2,247 in 1950-51 to 19,086 in 1973-74, the trained component rising from 33% to nearly 60%. During the same period the number of teachers in higher education rose from 293 to 3,097. With the increase in the number of teachers, there was also considerable improvement in the emolument and conditions of the service of the teachers both in the Government and aided institutions.

28.4. Looking at the progress of the enrollment of girls it is found that at the primary stage the age-group coverage had risen from 7% in 1950-51 to 56.5% in 1973-74 and at the stage of middle and high schools the coverage had varied from 0.5% and 0.2% in 1950-51 to 11.2% and 5.0% respectively in 1973-74.

28.5. So far as the general level of literacy is concerned, the progress during the period was not unsatisfactory. The general percentage of literacy in the State which was 15.80 in 1951 rose to 21.7 in 1961 and subsequently to 26.2 in 1971. During this period, female literacy recorded a higher rate of growth than the male literacy. The male literacy rose from 27.32 per cent in 1951 to 38.3 per cent in 1971 whereas the female literacy rose from 4.52 per cent to 13.9 per cent.

28.6. Educational development of the Scheduled Castes and Scheduled Tribes was not unsatisfactory during this period. In 1951, their enrolment at the primary stage was 12.4 per cent which rose to nearly 52 per cent in 1973-74. During the same period their enrolment at the middle school stage rose from 1.5 per cent to 9 per cent and at the high school stage from 0.8 per cent to 4.2 per cent. The general literacy of the Scheduled Tribe population which was 7.48 in 1961 rose to 9.5 per cent in 1971 and that of the Scheduled Caste Communities from 9.6 per cent to 15.62 per cent.

28.7. Although rapid linear progress was realised during these two decades in the number of institutions and enrolment at all levels of general education, growth of physical facilities and the supervising and inspecting machinery for the institutions did not receive adequate attention. The emphasis at the elementary stage was more on enrolment than on attendance and this was largely due to lack of inadequate supervision and inspection of institutions and lack of building facilities in the backward areas.

28.8. Development and transformation of the educational system in the State during the Fifth Plan period had been proposed in conformity with the basic principles and objectives of the national plan. The main thrust of the plan was on Universalisation of schooling facilities for elementary education and expansion of enrolment from the pre-Plan achievement of 75 per cent in 1973-74 to 89 per cent (as per pre-revised population projection) at the end of 1978-79 in case of 6-11 age-group and from 22 per cent to 33 per cent (as per pre-revised population projection) in case of 11-14 age-group. The Plan's objectives in the Secondary and Higher Education sectors were selective expansion of facilities keeping in view the needs of the backward districts and the weaker sections, promotion of quality and content of education and consolidation of the existing institutions that had serious physical and academic deficiencies.

28.9. To realise the aforesaid objectives the Fifth Plan had been formulated with a total outlay of Rs. 34.00 crores with the following break-up:

Sub-sector	Outlay Rs. in lakhs
(i) Elementary Education	208.363
(ii) Secondary Education	273.04
(iii) Teacher Education (Elementary and Secondary Education).	179.07
(iv) University Education	725.04
(v) Physical Education	6.79
(vi) Direction, Administration, Planning and Monitoring	13.20
(vii) Other programmes Book Production and Youth Services	119.23
Total	34.0000

The Plan envisaged opening of 5,003 new primary schools in the unsurveyed areas, upgradation of 9,900 three-class incomplete primary schools to five-class ones to serve the 6—11 age-group, upgradation of 2,965 viable primary schools to middle school level, opening of 15 high schools including 5 girls schools in the tribal pockets and establishment of two womens' colleges in the backward areas. In order to encourage enrolment at the elementary stage, a package of incentives like free supply of text books and writing materials, supply of free uniform and award of attendance scholarships to girls, and opening of book banks in middle schools was introduced. In order to expand teacher training facilities the Plan also had envisaged opening of 30 new Secondary Training Schools.

28.10. As the Fifth Plan was terminated at the close of the year 1978, the actual plan expenditure over the 4-year plan period 1974—78 came to nearly Rs. 25.00 crores. During this period of 4-years 20,100 new primary schools were opened against the original target of 5,000 and 5,803 three class primary schools were upgraded to 5-class ones against the original target of 9,900. New middle schools numbering, 11,901 have been opened against the original target of 2,965 schools and 17 high schools including 5 girls high schools were also established in the backward areas. In accordance with the original programme, two new Government Womens' Colleges were also opened during this period. Out of these new institutions, 1,220 new primary schools, 1,807 upgraded upper primary schools, 552 upgraded higher primary or middle schools, 15 high schools and one Womens' College were opened in Sub-Plan areas. As a result of these expansion activities enrolment at the primary stage has risen from 22.69 lakhs in 1973-74 to 26.00 lakhs in 1977-78 and at the middle school stage from 3.60 lakhs to 4.68 lakhs. Thus, the percentage of coverage (including the overaged and underaged children enrolled) rose during this period from 75 to 82.4 (as per the revised population projection, 1978, made by the Registrar-General) at the primary stage and from 22 to 25.8 at the middle school stage. Enrolment at the Secondary and Higher Education stages has also risen substantially. The high school enrolment which was 13 per cent in 1973-74 rose to 14.5 per cent in 1977-78 and at the university stage it rose from 2 per cent to nearly 2.6 per cent.

28.11. The institutional and enrolment expansion that has taken place at all levels has however, not led to the emergence of a sound and balanced educational system. Disparities continue to exist between the attainments in this State and the All-India average achievements and also among the districts within the State, between education of boys and that of the girls and also between the advanced and the underprivileged sections of the population. Because of the concentration of resources and efforts on linear expansion of facilities the position about buildings, libraries, laboratories, equipment and teaching aids have become extremely unsatisfactory and the backlog of building and equipment deficiencies has acquired now critical dimensions at all levels of education in the State. In most of the high schools teachers continue to be under utilised as enrolment cannot be expanded to the optimum level due to want of accommodation in the existing class rooms. At the elementary stage both enrolment and attendance continue to suffer due to want of shelter for a large number of schools. In the tribal areas lack of residential facilities for the outside teachers has led to the serious problems of teacher absenteeism leading to heavy dropout pupils. In almost all colleges in the State year to year enrolment expansion has considerably outstripped the building and equipment facilities and this over crowding has often led to campus unrest and suspension of academic programmes. It is essential that these deficiencies should receive due attention during the Sixth Plan period. Deficiencies in the administrative and supervisory set up have also become overwhelming at the elementary level and call for immediate strengthening. Over-emphasis on expansion has, indeed, tended to relegate the qualitative aspects of education and educational reforms to the background and they now need to be brought to the forefront so that the State may usher in a new era of balanced educational growth.

Objectives, Priorities and Strategies

28.12. Development of general education in the State during the Sixth Plan period has to be attempted on the same broad principles as are applicable to the country as a whole. The principles, objectives, priorities and strategies envisaged in the Draft National Policy on Education, 1978, the Resolutions of the Education Ministers' Conference, 1977, the Interim Report of the working Group on Universalisation of Elementary Education, 1978, Government of India Guidelines for preparation of the Master Plan of Universalisation, the Draft Five-Year Plan, 1978—83 and the Guidelines for Tribal Sub-Plan, 1978—85 issued by the Planning Commission have been broadly followed in preparing the present programme. The present stage of educational development in the State and its special socio-economic conditions have also been kept in view.

28-13. In order to equalise educational opportunities and make education relevant, the main thrust is in the three main areas namely (i) Universalisation of Elementary Education (ii) Adult Education and (iii) Vocationalisation of Education. The other areas like Secondary Education, Higher Education, games, sports, etc. are, no doubt, important, but within the over all national priorities and constraint of resources, normal development, which is consistent with manpower requirements in various sectors of the economy has been provided for.

28-14. In the Elementary Sector the main stress is on enrolling the non-attending children in the educationally backward districts, reduction of wastage and stagnation and raising the attendance rates. The first step is to provide facilities for primary education to all the children in the age-group 6—11 and Middle School Education to 68 per cent of the children in the age-group 11—14 within easy walking distance from the home of every child. By the end of 1980-81, it is proposed to cover 93 per cent of the children in the age-group 6 - 11 and 47 per cent in the age-group 11—14. From this point of view criteria for the location of primary and Middle Schools have been laid down. In view of the adverse natural conditions and settlement patterns in the unserved hilly areas, it is proposed to provide Primary School facilities within a distance of 1 Km. from the home of the child and location of school will be allowed in villages having a population of 300 or more. In case of Middle Schools, villages having a population of 500 or above and not having Middle School facility within a radius of 3 Kms. will be given schools. On the basis of these criteria the block-level plans that have been prepared have to be suitably modified after the findings of the present Fourth Educational Survey are received.

28-15. Universalisation of enrolment and retention will be the next step in the programme. In the matter of enrolment it would be ideal to restrict the enrolment in class I to age six and to carry the child sequentially from class to class without stagnation till he completes his elementary education on age 14. This would ensure homogeneity of age-cohort in each class and eliminate the complications that now arise on account of the over-aged and under-aged children that now form 28 per cent of the enrolment in classes I—V and nearly 40 per cent in classes VI—VIII. However, in this State, 5+ is the age of enrolment in class I. In the absence of pre-primary education it will not be possible now to raise the admission age to 6+. With the opening of pre-primary classes for the under-aged and part-time non-formal classes for the dropouts and the over-aged non-attending ones with facility for multipoint entry in formal schools, it may be found possible to restrict the enrolment age in class I to age 6+. Emphasis initially will be on output targets like the reduction of wastage, increase in the number of girls, scheduled castes and S. T. children attending schools rather than on targets like mere enrolment and appointment of new teachers. Effective incentive programmes for the retention of children at the elementary stage, especially of girls and children belonging to Scheduled Castes, Scheduled Tribes and backward areas have been drawn up. Part-time education of the non-formal type with accent on relevant curriculum will get the highest priority both in terms of financial allocations and of administrative support and the provision of incentives it is proposed to be effectively linked with the promotion of part-time non-formal education programme. Since a substantial number of habitations have been covered with the provision of primary education facilities, one of the main concerns now should be with development of the existing infrastructure through provision of economic and functional school buildings with local materials and with attached teacher quarters wherever needed and other qualitative improvements like improved curricula, science teaching, introduction of creative and joyful activities, improvement of teacher training facilities, strengthening of supervision and administration, formation of elementary school complexes and constitution of effective school committees. In multi-teacher 3 class primary school efforts may be made to use the existing facilities more economically through the introduction of double shifts on experimental basis. In the tribal areas the content and method of elementary education would be suitably modified to suit the needs of the community. The quality of the single teacher schools which are mostly found in these areas has to be improved with a view to their becoming academically viable and effective. In these areas school timings and vacations will be altered according to the socio-economic needs of the people.

28-16. Programme of Adult Education which aims at covering 45 lakhs of adults in the age-group 15—35 will be linked effectively with developmental activities in the State. This necessitates the adoption of functional adult education programme for specific target groups. In order to make the programme meaningful efforts will be made to identify all such programmes run by various departments and voluntary organisations at the district and block levels and these will be pooled together and channelised towards a massive literacy drive in the State. From the organisational point of view, it is of utmost importance that elaborate prepara-

tion are made before launching these programmes in selected areas. These preparations will have to be any areas after carrying out detailed demographic and occupational surveys of specific areas, identification and motivation of the instructors, training of field level and key level personnel, preparation of problem-oriented curricula and production of teaching and learning materials, organization of mass media support etc. A satisfactory level of preparedness must be reached before any programme is to be launched. The main problem in the area of adult education is in regard to lack of motivation amongst participants. Special efforts are proposed to be made on several fronts to create a proper atmosphere to ensure maximum participation of the beneficiaries before the programmes are launched. As advised by the Government of India area-specific and group-specific programme will be drawn up for intensive implementation instead of initiating too many general schemes in too many areas with too little results. The programme, therefore, has to be phased in terms of coverage of area rather than coverage of population.

28.17. The main objective of vocationalisation is on preparation of the post-middle and post-high school leavers for employment in different occupation and sectors of the economy. For this purpose a selected variety of non-academic courses of education and training are proposed to be made available. Vocational courses would be made flexible in terms of duration, subject, content and organization. These need not necessarily lead to an academic award of a degree or a diploma. There are already several agencies and departments offering such courses as industrial training institutions, poly-technics, para-medical training schools, teacher training institutions, as well as apprenticeship training in industry. The resources and facilities of all the sources should be co-ordinated. Since vocationalisation is essentially a major to improve employability of the students and to help meet the society's needs for goods and services, is proposed to be based on detailed surveys of the local and regional work opportunities. Before designing the vocational courses for the + 2 stage, the experience gained by the early starters like Delhi, Karnataka and West Bengal will be taken into consideration.

28.18. The emphasis in the Secondary and Higher Education Sectors will be on normal development and consolidation of facilities, diversification of courses and qualitative improvement rather than on quantitative expansion. In particular, the opening of non-viable private institutions with inadequate infrastructural facilities and resources is proposed to be avoided.

Priority is given to programmes of development and consolidation of colleges with a view to raising quality of higher education. Admission to institutions of higher education is to be selective and has to be regulated in relation to manpower requirements and work opportunities in the economy. The present high magnitude of the accumulated deficiencies in physical and academic facilities in high school and colleges has to be considerably reduced.

28.19. Development in other sectors of education like games, sports and youth programmes would strictly be limited to the availability of resources.

28.20. While planning for further development of education on the aforesaid lines due care has also been taken to eliminate the regional short-falls in order to catch up as quickly as possible with the level of educational development in the advanced States of the country. Although, since the commencement of planning in 1951, there has been considerable expansion almost at all stages of education, the State, compared to the national norms, continues to be educationally backward. According to 1971 figures, while the All-India percentage of literacy was 29.4, in Orissa it was 26.12. Coming to male and female literacy it is revealed that while the male literacy has come closer to the All-India average, female literacy has lagged behind. Against the All-India averages of 39.5 for males and 18.72 for females, the State percentages are 38.3 and 13.9 respectively. The backwardness becomes glaring when one analyses the percentages of enrolment to the total population of the corresponding age-groups. In this matter, while the All-India percentage in 1977 were 81 for the age-group 6-11 (primary), 38 for the age-group 11-14 (Middle), 22 for 14-17 (High Schools) and about 4.3 at the higher Education stage, the enrolment percentages in Orissa were 50, 24, 13 and 2.6 respectively. While aiming at this goal due care has also been taken to remove inter-district imbalances within the State.

28.21. On account of certain socio-economic factors, wide variations have occurred among the 13 districts of the State, in the child population served per school, percentages of enrolment of boys and girls in the different age-groups, teacher-pupil ratio number of institutions at different stages, level of literacy, institutional mix and drop-out rates. Certain districts like Koraput, Phulbani, Kalahandi, Mayurbhanj and Keonjhar are found to have conspicuously lagged behind

the State averages. It is necessary that the backward areas should at least be brought up to the average level of growth in the State. This objective is proposed to be attained by area-level or spatial planning treating the Community Development Blocks as the micro units. By this approach not only the inter-district disparities can be effectively tackled but also the interdistrict and inter-block imbalances and disequilibria that have become manifest can be corrected. In the interiors of the tribal areas the strategies and the logistics of the programmes are proposed to be suitably altered in order to make them community-specific.

Programmes and Schemes

28.22. Consistent with the objectives and priorities indicated above it is proposed to implement the following programmes of development. In the tribal blocks, these general programmes will be supplemented by special sub-Plan schemes which have been prepared separately and these supplemental schemes will be implemented with Special Central Assistance. The total Plan outlay on the development programmes of Central Education presented in this document would come to Rs. 115 Crores with the following sub-sector-wise break-up :

	(Rs. in Crores)
(i) Elementary Education (with Teachers Training and Administration) . .	58.00
(ii) Adult Education	14.00
(iii) Secondary Education (with Secondary Teacher Training)	21.00
(iv) University Education	20.00
(v) Other Educational Programmes including Physical Education, Youth Services and Language and Text Book Development.	2.00
Total—VI Plan Outlay	115.00

Elementary Education

28.23. The programme in this sector aims at creating enrolment facilities for all the children in the age-group 6—11 and for 68% of the children in the age-group 11—14. The targets in regard to opening of new schools, upgradation of existing schools, opening of additional sections and appointment of teachers have been fixed on the basis of the findings of the Third Educational Survey and the latest blocklevel and townwise data.

Primary Education (Classes I—V)

28.24. The likely total enrolment in the primary classes in 1977-78 is 26 lakhs. Since the projected population in the age-group 6—11 in 1982-83 (as on first March 1982) is 33.41 lakhs schooling facilities have to be created for this entire child population during the Sixth Plan period in order to realise the goal of universalisation. Since 26 lakhs of children are already enrolled, the rest 7.41 lakhs should have to be enrolled by optimal use of the existing schools, by opening new schools in unserved areas and by appointing additional teachers in some of the existing schools where the available space is under utilised. Out of the un-enrolled population of 7.41 lakhs, nearly 1.33 lakhs children can be absorbed in the existing schools by raising the average teacher-pupil ratio in relatively advanced areas. The present programme, therefore, has to create additional facilities for a child population numbering 6.08 lakhs.

28.25. Now there are in the State nearly 730 habitations in the State having population 300 or more which have no schools in them nor are they served conveniently by the nearest schools. The present number of rural primary schools in the State is 29,610 and when 730 new rural primary schools are opened in school-less habitation during the Sixth Plan period, the total number would come to 30,340. The existing 29,610 schools are providing schooling facilities to about 50,000 rural habitations and the new 730 schools proposed to be opened would serve nearly 850 habitations bringing the total coverage of 50,850 habitations. Thus, out of the total number of 64,194 rural habitations there would remain in the State 13,344 habitations without schooling facilities. Out of this number, about 8,000 can be conveniently grouped into 3,960 clusters for location of schools in order to provide schooling facilities within walking distance. Out of these clusters, 1,500 have been covered by schooling facilities by 1977-78 and the rest 2,460 have to be given new schools. The rest of the uncovered habitations numbering 5,344 which are dispersed in the sparsely populated areas can be partly served by residential Sevashrams and partly by single-teacher ungraded schools or Chatsalis. The newly grown urban slums which deserve schooling facilities come to 130. Thus during the Sixth Plan period, the

number of formal primary schools which have to be opened in the State in accordance with the Planning Commission's criteria would come to 3320 (3190 rural + 130 urban) requiring appointment of 4,720 teachers including 1,400 second teachers to be appointed on opening of Class IV in 1,400 new schools proposed to be opened during the first two years. Apart from opening of new Primary Schools, sixty-five per cent of the existing 16,000 one-teacher three-class primary schools and numbering 10,400 are proposed to be upgraded to five-class ones to prevent drop-out and this upgradation will require appointment of 10,400 teachers. Again, there is the necessity of opening of 2,600 additional sections in some of the existing primary schools with appointment of 2,600 additional teachers. This will result in higher enrolment by optimal use of the teaching space now under-utilised. Thus, altogether the expansion programme on primary education would entail appointment of 17,720 new teachers in a phased manner as shown below :—

Year	In new School	In upgraded School	In additional Sections	Total
(1)	(2)	(3)	(4)	(5)
1978-79	400	300	..	700
1979-80	1,000	2,500	800	4,300
1980-81	1,000	3,500	800	5,300
1981-82	1,320	3,500	500	5,320
1982-83	1,000	600	500	2,100
	4,720	10,400	2,600	17,720

The total cost at the current rates of pay and D. A. including 10 per cent of the salary cost as teacher contingencies would come to Rs. 22,83.94 lakhs.

Non-Formal Ungraded Schools or Chatasalies for 6—11 age-Group and Sevashrams :—

28.26. No viable formal primary schools can be opened in the most sparsely populated areas. In these areas 500 upgraded schools or Chatasalies are proposed to be opened with appointment of stipendiary teachers with a monthly stipend of Rs. 150 each and annual teaching contingencies of Rs. 100. The total cost during the Plan period would come to Rs. 27.40 lakhs. In the sparsely populated tribal areas, residential Sevashrams have to be set up under the special tribal areas programme to be financed under the Special Central Assistance. The cost of sevashrams is not included here.

Middle School Education

Opening of formal and non-formal schools :—

28.27. The projected population in the age-group of 11—14 in Orissa in the year 1982-83 (as on first March, 1982) is 18.94 lakhs. In accordance with the Government of India's guidelines programme has to be prepared to enrol at least 68 per cent of this population numbering 12.88 lakhs. The enrolment of this age-group during 1977-78 is estimated to be 4.68 lakhs. So the balance number for whom formal and non-formal schooling facilities have to be created would come to 8.20 lakhs. According to the criteria recommended by Government of India middle schools can be opened in habitations having a population of 500 or above and not having middle school facility within a radius of 3 Kms. The Third Educational Survey had revealed that there were 3,340 such habitations in Orissa at the end of the year 1973 and from the current field data it appears that 902 of them have received schooling facilities up to the end of Fifth Plan period. So the remaining 2438 should have to be given schooling facilities. These schools when opened can

serve about 6,500 habitations. There are again clusters of unserved smaller habitations which should have to be given formal schooling facilities. From the block level data available it appears that nearly 2695 clusters can maintain viable schools and therefore, it is proposed to open schools at the convenient centres of such clusters. Thus, altogether 5,133 formal schools can be opened during the Plan period and this number seems to be adequate to cover the anticipated out-put of class V. In order to avoid infrastructural difficulties and to make full use of the existing teachers of primary classes the present strategy of opening middle schools by upgrading the existing viable five-class-primary schools with appointment of one trained graduate headmaster and one trained matriculate Assistant teacher is proposed to be continued during the Sixth Plan period. With two teachers in each of the 5133 new schools, the total number of teachers required would come to 10,266. The total teacher cost and teaching contingencies at 15 per cent of the teaching cost together would come to Rs. 1451.57 lakhs.

Number of teachers and enrolment coverage: --

28-28. At the end of 1977-78, there would be 21,408 teachers in the existing middle schools and the aggregate number with the addition of 10,266 would come to 31,674. On account of low enrolment in the 9 backward districts, the average pupil-teacher ratio in the State has always been low and at the end of the year 1976-77, the ratio was 20:1. During the first 5 to 6 years the ratio in the new schools is not likely to go beyond 25:1. At this pupil-teacher ratio of 25:1, the existing and the additional teachers together numbering 31,674 can absorb 7.92 lakh children constituting 41.8% of the total age-group population of 18.94 lakhs. This would mean that 3.24 lakhs of additional children can be enrolled in the existing and proposed formal schools over and above the existing 4.68 lakhs and therefore, the remaining 4.96 lakhs out of the total target of 12.88 lakhs shall have to be covered by non-formal facilities.

Non-formal facilities

28-29. The Sixth Plan Working Group on universalisation of Elementary Education (Ministry of Education & Social Welfare) in its Interim Report has recommended that the children who have never gone to school or have dropped out from schools should be offered a Special programme of education in the form of part-time classes of non-formal education and should be helped to become at least functionally literate or even to reach the level of class V. Many of them also can be prepared for multiple entry in formal schools. To this suggestion another dimension is required to be added and it relates to the out-put of class V of the smaller habitations who can not find schooling facilities within a radius of 3 to 4 Kms., especially girls of the villages in which viable middle schools cannot be opened. This special group is proposed to be covered by non-formal continuation classes. In accordance with the suggestions of the Working Group of the Ministry of Education only children of 9-14 age-group will be admitted in the non-formal classes since the children of the lower age-group i. e., 6-8 would not be matured enough to benefit through this mode of education. This principal features of these two varieties and the outlay required for their implementation are indicated below.

Non formal continuation classes

28-30. 1,000 continuation classes are proposed to be opened in the existing primary schools to prepare boys and girls for regular middle school examination. These classes are to be opened only in such habitations which are not adequately served by the formal schools and where viable formal schools cannot be opened. These classes will admit up to 20 pupils especially girls who will get part-time lessons in the formal courses outside the primary school hours for a period of 12 to 18 months and can take the final middle school examination as external candidates. The cost of operating this scheme will include a monthly honorarium Rs. 100.00 to the teachers of the primary school or the retired teachers, annual teaching contingencies of Rs. 500.00 per centre and Rs. 200.00 towards free supply of text books to 10 students at each centre. It is proposed to cover 20,000 post-primary drop-outs in these classes. The total cost of this project would come to Rs. 39.80 lakhs.

Non-formal part-time classes :

28-31. Non-formal part-time classes have to be opened for 476,000 children who can neither be covered by the formal schools nor by the continuation classes. Each class with a roll of 15 to 25 pupils should better run in the primary schools or at any convenient place of the village with the help of primary school teachers, retired teachers and educated unemployed girls and under the

day to day supervision of the specially constituted effective school committees. The teacher will be given monthly remuneration of Rs. 75-00 per month. Annual teaching contingencies amounting to Rs. 300-00 and reading-writing materials at the rate of Rs. 10-00 per pupil have also to be provided. It would be necessary to prepare special reading materials with a view to making the learner functionally literate. A part of this group, especially the drop-outs can also be prepared for multiple entry in the formal schools. This programme will start functioning from the year 1979-80 and during the first 2 years it will be taken up as a pilot or experimental scheme to gain experience. It has been said earlier that the formal schools, old and new, together would cover 7.92 lakhs and the continuation classes can enrol 0.20 lakhs. Thus, out of the target-coverage of 12.88 lakhs, the remaining 4.76 lakhs of children will have to be covered by these part-time class. The total cost of the programme including teacher's remuneration, teaching contingencies and free reading and writing materials would come to Rs. 438.85 lakhs.

Incentives

28.32. Under the incentive programme, the three incentive schemes, namely supply of free text-books and writing materials to the children of under privileged families, free school uniform to girls of weaker sections in both primary and middle schools and award of Attendance Scholarship to middle school girls which were implemented during the V Plan period, are proposed to be continued with wider coverage. In the newly opened lower and upper primary schools it is proposed to supply free text-books to 1.00 lakh children and free school uniform to 40,000 girls of weaker sections every year. The cost of text-books per set for class I will come to Rs. 5.00 and for Class V Rs. 13.00. A set of school uniform will cost Rs. 15.00. Similarly, in new middle schools free text-books will be supplied to 30,000 children and free uniform to 10,000 girls every year, at the rate of Rs. 20.00 per girl. Attendance Scholarship at the rate of Rs. 30.00 per year which is being awarded during the V Plan period will also continue for 6,000 girls of the backward areas. The total cost of the incentives will come to Rs. 354.00 lakhs. Supply of MID-DAY MEALS to the primary school children in the tribal areas is an essential incentive for enrolment and retention. This programme is required to be implemented as a part of the general Nutrition Programme. Similarly, to attract teachers from the relatively advanced areas to the tribal areas, incentives like special allowance to women teachers and quarters for the teachers, particularly for husband-wife, teams, will be provided under the Sub-Plan Programme with Special Central Assistance. The cost of these two schemes is not included here.

School buildings and Additional Class rooms

28.33. Most of the proposed schools would have to be opened in the backward areas where the community cannot be expected to make any contribution except physical labour. It is therefore, proposed to pay building grant on matching share basis at the rate of Rs. 7,500.00 to 75 P. C. of the new primary schools and at the rate of Rs. 4,000.00 for construction of additional class rooms to 50 P. C. of the new middle schools. Payment of grant to the rest of the schools is not envisaged as they are proposed to be established in relatively advanced areas where the community is expected to provide the school space. The cost of this scheme in case of primary schools will come to Rs. 156.75 lakhs and in case of middle schools to Rs. 102.64 lakhs. Now, nearly 3 per cent of the existing primary schools numbering 1,600 and all located in the backward areas have no shelter and consequently enrolment is very poor. It is essential that they should be provided with the minimum covered shelter at an average cost of Rs. 7,500 and the total cost would come to Rs. 120.00 lakhs.

Supply of furniture and equipment

28.34. It is proposed to supply furniture and equipment to all the new primary schools at the rate of Rs. 200.00 per school and to the new middle schools at the rate of Rs. 300.00 per school. The total cost for 3,320 primary schools will come to Rs. 6.64 lakhs and for 5,133 middle schools, to Rs. 15.40 lakhs. The total cost would be Rs. 22.04 lakhs.

Work-experience

28.35. In accordance with the guidelines of Government of India work-experience shall be opened in all primary and middle schools. Expenditure in case of a primary school on simple work-experience with local materials and equipment would come to Rs. 60.00 per year and in case of a middle school to Rs. 100 per year. The total cost on this scheme including the cost in the new schools will be Rs. 120.00 lakhs.

Supply of Science Kits

28-36. Since Science teaching has to be taken up in all primary and middle schools under the new enriched curriculum, it is proposed to supply the required Kits to all primary schools and middle schools to be opened during the VI Plan period. The cost per primary kit is estimated to Rs. 300-00 and per middle school Kit, Rs. 1,000-00. The total cost for 3,320 primary kits would come to Rs. 9-96 lakhs and for 5,133 middle schools, to Rs. 51-33 lakhs. The total outlay on the scheme, therefore, will come to Rs. 61-29 lakhs.

Construction of Women Teacher Quarters

28-37. It has always been felt necessary to construct Women teacher's quarters in the tribal areas to attract Women teachers and husband-wife teams in order to encourage enrolment of girls. During the 5th Plan period, the Scheme had to be abandoned due to reduction of the Plan outlay, after construction of only 47 sets of quarters against the original target of 2,340 sets. It is now proposed to construct 1,291 sets of quarters (691 for primary and 600 for middle school teacher) in the selected tribal areas at the rate of Rs. 10,000 per set. The total cost of this scheme would come to Rs. 129-10 lakhs.

Taking over non-Government Middle Schools for Recurring Grant

28-38 Non-Government middle schools opened earlier which mature for Government recurring grant under the existing grants-in-aid rules are being paid grant. In 1978-79 there is already a provision of Rs. 20-11 lakhs and the 20 schools recognised in 1976-77 will mature for grant in 1982-83 for which a provision has to be made. The total outlay required is Rs. 30-00 lakhs.

Administration, Inspection and Supervision

28-39. Although there has been vast expansion of enrolment at all levels of education, administration has been adequately strengthened to cope with this expansion with the resultant adverse effects on the quality of education. There is an immediate need for strengthening the administrative apparatus at all levels, especially in view of the fact that a major programme of universal elementary and adult education with simultaneous improvements in the standards at all levels is proposed to be taken up. The need to strengthen the administrative machinery at the State level is still greater because the main burden of educational development has to fall on it and very little has been done so far to upgrade it. Even more important is the need to develop effective machinery at the district and block levels with adequate delegation of authority that implementation of programme is effective; wastage is avoided and optimal use of resources assured. The main features of this programme would be to strengthen the Directorate by appointing additional senior level and middle level officers, to create three posts of Zonal Joint Directors in the three Revenue Divisions with a view to decentralising the administrative powers and functions and also to strengthen the supervision and inspection machinery at the district, subdivision and block levels. It is also proposed to constitute School Complexes atleast one in each block in accordance with the recommendations of the study group on supervision and inspection (1969) constituted by the NCERT and the subsequent suggestions of Government of India. Detailed projects under each of these schemes have been prepared with estimates of cost and the total outlay on this programme would come to Rs. 287-87 lakhs including Rs. 88-00 lakhs as building cost.

Teachers Training

28-40. In order to prevent the dilution of the poor quality of instruction in the Elementary schools, it is proposed that teacher training facilities both preservice and in service should be expanded simultaneously with the expansion of schooling facilities. The existing Training Schools have to be strengthened with well equipped library, teaching aids and slide projectors so that they can be vested with responsibility of both pre-service and inservice training programmes. In order to equip the teachers to handle the enriched curriculum prepared for the new ten year school system summer Institutes and Refresher courses have to be organised. In order to clear the backlog of 30,000 untrained teachers a crash programme of condensed training courses has also to be organised. Under this programme it is proposed to upgrade the State Institute of Education to the status of State Council of Educational Research and Training (S. C. E. R. T.) bringing under its umbrella, among other relevant units, the State Educational Resource Centres which are proposed to be set up to deal with the non-formal education programme for 6-14 and 15-35 age group and also for education of tribal children. The total cost of the programme has been estimated to be of the order of Rs. 150-00 lakhs.

Common Examinations

28.41. With a view to ensuring maintenance of standards among the institutions the all-India Education Ministers Conference, 1977 had recommended introduction of common examinations at the end of primary and middle school courses. These examinations are intended for improving teaching and learning efficiency. The total cost of this scheme would come to Rs. 24.75 lakhs.

28.42. The total State Plan outlay on Elementary Education will come to Rs. 5,800.00 lakhs out of which Rs. 2,260.00 lakhs will be spent in Sub-Plan areas.

Abstract Statement of cost

Schemes (1)	Outlay (Rs. in lakhs) (2)
1. Opening, upgradation and expansion of primary schools ..	22,83.94
2. Opening of 500 Chatsalies ..	27.40
3. Incentives—Free textbooks, free uniform and Attendance Scholarship ..	3,54.00
4. Buildings and Additional class rooms ..	3,79.39
5. Science Kits ..	61.29
6. Construction of Women Teachers Quarters ..	1,29.10
7. Opening of Middle Schools ..	4,51.57
8. Non-formal continuation classes ..	39.80
9. Non-fomal Part-time classes ..	4.38.85
10. Recourring Grant to non-Governments Middle Schools ..	30.00
11. Work-experience furniture and equipment ..	1,42.04
12. Administration, supervision and Inspection including School complex ..	2,87.87
13. Teacher Training ..	1,50.00
14. Common Examination at the end of Primary and Middle School courses.	24.75
Total—Outlay Elementary Education ..	58,00.00

Secondary Education

28.43. In the overall national priorities secondary education has a low place. Keeping in view constraints of resources and the more urgent need for universalisation of elementary education and promotion of adult literacy, emphasis in this sector is on normal development and consolidation of facilities rather than on expansion. Consistent with this approach the following objectives have been given priority in the VI Plan.

Expansion and Equalisation of opportunities

28.44. The percentage of enrolment at the higher demand for secondary education is bound to grow with the current expansion at the middle school stage and therefore, facilities are proposed to be provided at a basic minimum level of efficiency. In expanding facilities in terms of opening new schools and expanding the existing schools special attention will be given to the needs of the backward districts, under privileged sections of the population

and of girls. While every encouragement will be given to the opening of new schools in the backward areas already identified in other areas. Government permission for opening new schools should be subject to a strict scrutiny of each proposal in the light of objective criteria to be laid down by Government. In order to equalise educational opportunities not only new schools should be opened in the backward areas but also special measures for encouragement of girls enrolment will have to be introduced. This will include provision of adequate hostel facilities and State subsidy for free textbooks to the girls of indigent families. The same facilities should also be provided to the boys of the weaker communities. Restriction on expansion will be compensated by non-institutional facilities by strengthening the existing Correspondence Course of the Board of Secondary Education. The total cost of institutional and non-institutional expansion would come to Rs. 332.29 lakhs

The new Structural Pattern

28.45. The second priority in this sector is the implementation of the new structural pattern of education. The ten-year school system has already been introduced in the State at the close of the Fifth Plan period and the entire cost of strengthening it will spillover to the Sixth Plan. The strengthening will involve appointment of additional teachers, promotion of in service and preservice training facilities for teachers by strengthening the existing training colleges. Provision of equipment and teaching aids, curricular reform with a view to updating them and production of enriched text books. The +2 stage has also to be introduced which would involve a large outlay of funds on creation of additional physical and academic facilities. The cost of this programme has been estimated at Rs. 627.10 lakhs.

Work Experience

28.46. The third priority is given to introduction of work-experience that has been neglected so far. The community's growing lack of faith in the existing content of high school education needs no emphasis. There is now a tremendous social urge that the current curricular inertia must be broken and that work-experience must be made an integral part of the school curriculum. Every pupil at the high school stage must participate in one of the two broad types of practical activities one related to agriculture and the other to local trades and vocations. The schools, therefore, will have to be provided with basic wherewithals to be able to organise an effective work-experience programme. At the initial stage they should rely on the resources available in the neighbourhood, such as the demonstration and seed farms of the Government, the farms and workshops of the local farmers and artisans. Emphasis should be given on supervised simple home projects as is being worked out in the Regional Colleges of Education. The programme at this stage will, however, require preparation of a teacher's guidebook for wide circulation. The cost of this programme has been included in the cost on Qualitative Improvement.

Improvement of the existing schools

28.47. Another priority areas in this sector is the need for qualitative improvement of the existing schools. Resources available for the Plan can hardly permit removal of the serious deficiencies of all the existing schools and bring them to a tolerable standard. About 25 per cent of the Government High Schools in the State numbering more than 100 have very poor class room and hostel accommodation and seriously lack in equipment, teaching aids, games and sports facilities. Nearly 65 per cent of the non-Government high schools which had been opened either in temporary Kutcha sheds or in primary and middle school buildings are now in the most deplorable condition and hardly attract students. Nevertheless all of them have appointed standard teaching staff of Government cost and this investment has been mostly rendered infructuous. Before allowing further financial outlay on opening of new schools it would be most rational to earmark funds to bring the deficient Government schools and at least 10 non-Government schools per district to standard working conditions. The cost of this programme would come to Rs. 326.41 lakhs

Vocationalisation of +2 stage

28.48. Consistent with national goal preparatory steps have to be taken from now to introduce suitable Vocational courses at the +2 stage. The steps that should be taken now should aim at completion of District Vocational surveys, provision of the necessary infrastructural facilities in the institutions, teacher orientation and preparation of syllabus. A total outlay of Rs. 119.90 lakhs will be required for this scheme.

Incentives

28-49. Under this scheme the book banks already opened in the high schools for the benefit of the poorer students will be strengthened and 500 new merit scholarships will be introduced to encourage talent. The total cost on the Book Banks would come to Rs. 12.33 lakhs and that on scholarships, to Rs. 18.67 lakhs.

Construction of buildings

28-50. Serious shortage of class room and laboratory accommodation, teacher quarters and hostels in backward areas, has been one of the principal shortcomings of the high schools in the State. In order to prevent further deterioration of the system completion of the 32 buildings now under construction, construction of additional class rooms laboratories, teacher quarters and hostels should have to be taken up on priority basis. The additional infrastructure required for the I-2 stage has also to be provided.

Teacher Education

28-51. Commensurate with the requirement of the new structural pattern the six existing training colleges have to be strengthened to provide both in service and pre-service training. A sum of Rs. 38.00 lakhs is proposed to be spent on this scheme.

28-52. The total outlay on the development of this sector during the plan period would come to Rs. 2,100.00 lakhs and out of this, a sum of Rs. 615.50 lakhs is proposed to be spent exclusively in the Tribal Sub-Plan Area of the State.

ABSTRACT STATEMENT OF COST

Schemes	Outlay (Rs. in lakhs)
1. Expansion Facilities--	
(a) Formal ..	2,26.56
(b) Correspondence Course ..	65.00
2. Recurring Grant to non-Government Schools. ..	1,60.73
3. 10+2+3 Structural Pattern ..	6,27.10
4. Vocationalisation ..	1,19.20
5. Incentives--	
Book Banks and Scholarships ..	31.00
6. Construction of Buildings ..	5,06.00
7. Qualitative Improvement, Work-experience, Model Schools improvement of selected schools and administration. ..	3,26.41
8. Teacher Education ..	38.00
Total ..	21,00.00 lakhs

Higher Education--

28-53. The national approach lays emphasis on normal development and consolidation of facilities in higher education, diversification of courses and qualitative development rather than on quantitative expansion. Although there has been progressive increase in the number of colleges as well as in the average annual rate of expansion of enrolment in Arts, Science and Commerce courses over the years, the State continues to be relatively backward in higher education. Qualitative the system also has been suffering from serious shortcomings and multiplicity of sub-optimal colleges with serious deficiencies in academic and

physical facilities now pose a formidable problem for the State. Most of the resources of the earlier plans are found to have been absorbed in year to year quantitative expansion of facilities. In this context, therefore, the most important question that has to be tackled at the higher education stage is the manner in which the claims of expansion and qualitative improvement involving consolidation has to be reconciled.

Expansion —

28-54 The current national policy envisages that the process of expansion at the higher education state should be tightened by prescribing and strictly enforcing rigorous conditions of affiliation of new colleges so that they may become really need-based, large, viable, economic and efficient units. It is also envisaged that admission in colleges must be selective and the present 'open-door' policy should be replaced by planned development of enrolment and that restriction on facilities in full-time institutions should be compensated by a very large expansion of facilities for part-time education, correspondence courses or self-study for taking all university examinations as private candidates.

28-55. But the difficulties of restriction admission are quite formidable. Apart from the inherent inadequacy of the available tools of evaluation to grade the students on a scientific basis, the fact that most of the students coming out of secondary schools have no proper avenues of employment and, therefore, access to higher education is looked upon almost as a fundamental right, is to be reckoned with. Higher education also provides a very strong motivation for securing better employment and unless the rule of recruitment are modified, the rush to the colleges is unlikely to be reduced. Further, higher education is considered as a means of upward social mobility and as such it is difficult to deny the urges of a vast majority of the population to secure higher education, particularly at a time, when the underprivileged sections of the society have begun to assert their rights to education facilities at the highest level. In fact, the socio-political pressures favouring the open-door policy of admission are not likely to be effectively countered.

28-56. For the Sixth Plan, therefore, the basic consideration in regard to college admission should be that while admission facilities are made available to all the aspirants it should not place an undue strain on the regular institutions and not be instrumental in further diluting the standard of higher education. Admission facilities in the regular colleges should be provided to all persons of adjudged merit. Those who are not able to make the grade for admission, might be admitted to correspondence courses and may also appear as external candidates now that the universities in the State have liberalised their rules. Although opening of sub-standard private colleges should be restricted a few Government Colleges should have to be established in the backward districts, where facilities for higher education are extremely limited. To accommodate the meritorious aspirants in the rest of the areas, the intake capacity of the existing colleges should have to be expanded and courses now available should be diversified.

28-57. The areas of qualitative improvement that should be kept in view during the Sixth Plan period are removal of the accumulated physical and academic deficiencies in the existing institutions, improvement of teacher competencies, diversification and vocationalisation of course, improvement of science teaching, promotion of research facilities, examination reforms and upgradation of the three post-graduate colleges of the State to the status of Autonomous colleges.

28-58. It is equally important to provide for adequate improvement of student amenities in view of the persistent outbursts of student unrest in the State leading to frequent dislocation of academic programmes, emphasis has to be laid on the provision of basic academic, co-curricular and recreational facilities. This would mean providing hostels, day students' homes, library and common room facilities, playgrounds and a number of other services. In this programme, the assistance offered by the University Grants Commission should be taken advantage of by providing adequate matching grant to nearly 100 colleges and the three universities.

28-59. Keeping in view the priorities indicated in the foregoing paragraphs, the following schemes are proposed to be implemented.

ASSISTANCE TO THE UNIVERSITIES

(i) Programme oriented assistance Rs. 150.00 lakhs will be paid to the 3 Universities for correspondence course, vocational Diploma Courses, syllabi and examination reforms, matching assistance towards U. G. C. approved projects and completion of incomplete buildings.

(ii) Expansion and Improvement of Government Colleges—

(a) Four Government Colleges including two Women's Colleges will be opened in the backward districts and the three post-graduate colleges of the State will be upgraded to the status of Autonomous colleges with a total outlay of Rs. 275.00 lakhs.

(b) In the existing colleges, in order to absorb the normal growth of enrolment seats have to be increased and Honours courses and additional classes have also to be introduced calling for appointment of additional staff and provision of additional equipment with a total outlay of Rs. 150.00 lakhs.

(c) A sum of Rs. 150.00 lakhs will also be required for payment of matching grant towards the U. G. C. approved projects of Government Colleges.

(d) For completing the incomplete buildings and for removing the various class room and laboratory deficiencies a total sum of Rs. 363.00 lakhs will have to be spent.

(e) A sum of Rs. 100.00 lakhs has also to be earmarked for faculty improvement and improvement of science teaching.

(iii) Assistance to non-Government Colleges for Development—

A sum of Rs. 500.00 lakhs is proposed to be earmarked for payment of grant to 50 non-Government Colleges to meet their matching share liability towards the U. G. C. approved development projects and for removing their present physical and academic deficiencies.

(iv) Students' Welfare

A sum of Rs. 120.00 lakhs is required to be earmarked for providing student amenities like hostels, common rooms and reading rooms and a sum of Rs. 17.00 lakhs will be required for award of 350 fresh scholarships.

(v) Development Grant to Institutes of Higher Learning—

The Institute of Physics, a centre of post-graduate studies and research which gets its maintenance and development grant from the State Government and the proposed Institute of Social Science Research will together require an outlay of Rs. 175.00 lakhs.

28.60. The total outlay on Higher Education during the Plan period 1978—83 would come to Rs. 2000.00 lakhs and out of this, a sum of Rs. 550.00 lakhs is proposed to be exclusively spent in the Sub-Plan area of the State.

ABSTRACT STATEMENT OF COST**SCHEME**

Government Colleges	Outlay (Rs. in lakhs)
(1)	(2)
(i) Expansion and Development ..	425.00
(ii) Matching Share towards UGC Development Projects ..	150.00
(iii) Buildings ..	363.00
(iv) Improvement of Science Teaching ..	50.00
(v) Faculty Improvement ..	50.00

1,038.00

Non-Government Colleges

(vi) Matching grant for UGC Projects	..	170.00
(vii) Grant towards deficiencies	.	250.00
(viii) Science teaching and Faculty Improvement	..	80.00
		500.00
(ix) Grant to 3 Universities	..	150.00
(x) Grant to Institutes of Higher learning—Institutes of Physics and Social Science Research.		175.00
(xi) Students Welfare—Amenities and Scholarships	..	137.00
		2,000.00 lakhs
	Total ..	

✓ Adult education

28.61. In accordance with the National policy-objective a high priority has been given to the spread of adult literacy. There are now in the State 55 lakh illiterate persons in the age-group 15—35 who are intended to be fully covered by 1983-84. The National Board of Adult Education recommends that the literacy programme should have to be operated with an outlay of Rs. 70 per illiterate adult. At this rate, an outlay of Rs. 38.00 crores will be required to make literate 55 lakhs of illiterate persons. The present programme, however aims at covering 45 lakhs adults by 1982-83 and it is proposed to attain at least 45 p. c. of this target by the end of 1980-81. With an outlay of Rs. 28 crores out of which Rs. 14 crores is expected to be available from Government of India as matching share. The important components of this programme would be strengthening of the existing adult literacy organisation, expansion of Farmers' Functional Literacy scheme, increasing the number of Non-Formal Literacy centres and paying grant to the voluntary organisations engaged in adult literacy activities. In this venture, volunteers of National Service scheme, National Cadet Corps, Nehru Yuvak Kendras and planning Forums will be engaged. The State Plan outlay would come to Rs. 1400.00 lakhs.

Physical Education Games & Sports and Youth Services

28.62. The programme for development of Physical Education and Youth Welfare activities in the State has been prepared with a view to halting the decline that has taken place in course of the last 10 years, mainly due to lack of funds. During the fourth Plan period, there were no serious efforts for promotion of physical culture in the educational institutions. Provision of funds made during the Fifth Five Year Plan was so meagre that it has not been found possible to effect any improvement whatsoever in Physical Education Sports, Games and Youth Welfare was Rs 8.66 lakhs only and after accounting for Rs. 6.00 lakhs towards expenditure on NSS activities, expenditure on physical education came to Rs. 2.66 lakhs only. The development schemes which are proposed to be implemented during the sixth Plan period are indicated below :—

Schemes	Outlay (Rs. in lakhs)
(i) Introduction of Yogic Exercises in Colleges and High Schools. Inservice training of Physical Education Teachers.	7.65
(ii) Refresher Course for the Instructors	1.40
(iii) Expansion of the Government College of physical Education	20.00
(iv) Participation in National Championship	1.60
(v) National Physical Efficiency Drive	1.60

(vii) Seasonal Coaching programme	..	2.30
(viii) Youth Services-N. S. S. State Matching share	..	41.25
(ix) Youth Leadership Training-Grant to Youth Welfare Board.	..	2.30
Total	..	<u>80.00</u>

(out of this, Rs. 28.30 lakhs will be spent in Sub-plan area)

Other Programmes

28.63 Four schemes which come under this group are (i) Expansion of the State Textbook Press to cater to the expanding enrolment at the elementary stage, (ii) Expansion and strengthening of the State Bureau of preparation and production of Oriya Textbooks for use at University level.

(iii) Promotion of Oriya Encyclopaedia "Gyanamandal" and (iv) Strengthening of Planning, Statistics and Monitoring Organisation at the Headquarters. The total outlay on these four schemes would come to Rs. 119.20 lakhs as indicated below :-

Scheme	Outlay (Rs. in lakhs)
(i) Expansion and Strengthening of Text-book Press	.. 82.00
(ii) Strengthening of Text-book Bureau	.. 12.50
(iii) Book Promotion	.. 15.50
(iv) Strengthening of Planning, Statistics and Monitoring	.. 9.20
Total	.. <u>119.20</u>

Sub-Plan For Tribal Areas

28.64. A recent appraisal of the current educational scene obtaining in the tribal areas and analysis of the educational topography of the major tribal districts of the State clearly revealed that there has been considerable progress in the educational expansion activities in course of the last decade, especially during the sub-plan period. During the period 1974-78, the number of institutions in the sub-plan Blocks has risen from 9,933 to 10,794 at the primary stage, from 975 to 1519 at the middle school stage and from 390 to 443 at the secondary stage. As a result of this expansion the serious structural imbalances that were there in the School-mix has been largely removed and the large-scale dropout that had been forced upon the pupils at the end of class V due to lack of middle School facilities, has now been largely reduced as a result of the opening of large number of a new middle Schools. Similar expansion has also taken place in the enrolment of children at the different stages of education. In the year 1973-74 the number of tribal children (including 28 P. C. overaged and under aged) enrolled in the Primary Schools had constituted 56 p. c. of the total number of tribal children in the age group 6-11. Now the percentage of enrolment in 1977-78 has risen to nearly 62. At the middle school stage the percentage of enrolment has risen, during the same period, from 6.5 to nearly 9. It is, however, revealed that the weightages given so far to the sub-plan area in the sharing of divisible targets and inputs have not evoked adequate response from the primitive communities amongst the tribals. The goal of universalisation of elementary education has led to spread of facilities over places nearest to the homes of the children, but this general strategy of expansion has not yielded the desired enrolment and attendance targets in the remote tribal pockets inhabited by the primitive communities. They infact, continue to remain unaffected by the general literacy programme which in their setting appears mostly irrelevant. It is, therefore necessary that an alternative approach has to be adopted for these special problem areas. Under this approach priorities and strategies specially tailored to the attitudes and the felt needs of these communities have been formulated on the basis of a minute micro-level socio-economic diagnosis and the schemes and the detailed projects thereunder, are being made area-cum-problem specific so that developmental efforts and expenditure may not be rendered infructuous. Now that the primitive Communities, the area they live in and their problems have been identified, it is possible to design special schemes and orient the general programmes suitably so as to help them attain a reasonable level of educational development.

28'65 In alternating the approach the level of development already attained by the ethnic and economic groups composing the population of each micro region or Block is being taken care of. There are not only the non tribal groups but also groups amongst the tribals who, for obvious reasons, would prefer the conventional educational facilities. Again, it is this conventional model that produces at least very small groups of educated persons among the tribals who constitute the much needed catalytic force for generating the tempo of educational development. What is therefore, essential is that in the micro regions which have already caught up with the conventional system, the general programme of development should be carried through. In the rest of the regions suitably designed packages consisting of general and special schemes would be appropriate.

28'66 The ministry of Home Affairs, Government of India, in their Guidelines relating to prepartations of Tribal Sub-Plan, 1978-83, have emphasised certain objectives and strategies in regard to educational development. In accordance with their prescription, location of new schools in relation to the settlement patterns, devising new institutional structures appropriate for the micro-region, school, timings, suitable modifications of the vacation periods, the need for lowering the educational qualifications for local teachers are being examined for reorientation so as to enable the tribals to participate in the expansion efforts more effectively. Where the general curriculum carries no relevance, it has to be revised in the light of the community's requirements and its real-life conditions. Accordingly the reading materials have to be redesigned. The low literacy pockets of primitive communities which have already been identified in this State will be given the highest priority. In the hinterlands of the mining and industrial complexes and the growing urban centres of the tribal districts, special types of general-cum-technical schools of the type now running under the Industries Department at Chowdwar and Aska are proposed to be established to improve the employability of the tribal youth in their own neighbourhood. The structural imbalances in the school-mix that are still their, are proposed to be removed immediately in order to prevent dropout occasioned by lack of schools at the next higher levels.

28'67 Keeping in view the aforesaid objectives composite programme has been prepared for the Sub-Plan region with outlays drawn from the State Plan outlay on General Education, outlays on centrally sponsored schemes and special central assistance. The total outlay on the Sub Plan is projected at Rs. 547.80 lakhs including Rs. 4106.80 lakhs quantified from the State Plan outlay as shown below.

(Rs. in lakhs)

Sub-Sectors	Total State Plan outlay	Outlay quantified from State Plan outlay for Sub-Plan	Outlay quantified from centrally sponsored scheme	Outly from special central assistance	Total
(1)	(2)	(3)	(4)	(5)	(6)
1. Elementary Education (Excluding Teacher Education).	5650.00	2260.00	120.00	456.00	2836.00
2. Secondary Education (Excluding Teacher Education).	2062.00	615.50	40.00	144.00	799.50
3. Teacher Education ..	188.00	38.00	..	..	38.00
4. University Education ..	2000.00	550.00	4.00	..	554.00

5. Adult Education	1400.00	600.00	600.00	..	1200.00
6. Planning and monitoring	9.20		4.00	.	4.00
7. Other Programmes	110.00	15.00	..	..	15.00
Total	11500.00	4106.80	600.00	600.00	5474.80

Employment Generation

28.68. Out of the aggregate plan outlay of Rs. 11,500.00 lakhs on General Education a sum of nearly Rs. 48,00.00 lakhs has been proposed to be spent on creation of posts for educated persons, both technical and non-technical. Besides, the Draft Plan earmarks Rs. 19,92.49 lakhs towards capital outlay on construction of residential and non-residential educational buildings. It is estimated that during the period 1978—83 the development programmes of this sector will create regular and full time employment for 30,970 educated technical persons, 3,595 educated non-technical persons and 400 uneducated persons. On the constructional side, assuming that 25 P. C. of the total capital outlay on buildings will be spent on casual labour total employment for 22,812 man-years will be created during the period.

Centrally Sponsored Schemes

28.69. In this draft document, provision has been made for implementation of 14 Centrally sponsored Schemes. The principal schemes are continuance of the N. S. S. Programme, National Scholarships, production of Literature in the Regional language at the University level, continuance and expansion of the Educational Technology Cell, Appointment of Hindi and Sanskrit teachers in Schools, opening of a State Resource Centre for Non-formal part-time education of the age group 6—14, establishment of Planning and Statistics Cells at the district level, Adult Education Drive and Appointment of Block level Attendance Reporters. The total outlay on the Centrally sponsored schemes is estimated at Rs. 21,11.00 lakhs including Rs. 1400.00 lakhs on National Adult Education programme. Out of this outlay, a sum for Rs. 768.00 lakhs is proposed to be spent in the tribal Sub-Plan area.

APPENDIX I

SELECTED TARGETS AND ACHIEVEMENTS—GENERAL EDUCATION

Cumulative totals for each year as on September—figures have been calculated on the basis of revised projection of population made by the Registrar-General in 1978).

Serial No.	Item	Unit	Position 1977-78 (provisional)	1978-79 Approved targets	Phasing of targets				
					1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
A. ELEMENTARY EDUCATION									
1. Classes I—V (age-group, 6—10) (including overaged and under-aged).									
I. Enrolment		..	(000)						
	(a) Boys	..	1,655	1,702	1,761	1,885	1,957	2,023	
	(b) Girls	..	945	968	1,069	1,146	1,273	1,318	
	Total	..	2,600	2,670	2,830	3,031	3,230	3,341	
II. Percentage to age-group (As per the latest projected population).									
	(a) Boys	..	Per cent	1.03.0	1.04.0	1.06.2	1.12.2	1.15.0	1.17.3
	(b) Girls	..		61.0	61.8	67.7	72.0	79.4	81.5
	Total	..		82.4	83.4	87.4	92.6	97.7	100.0

III. Enrolment of Scheduled Castes (including over-aged and under aged).

(a) Boys	..	(000)	246	251	254	259	263	267
(b) Girls	..		127	129	131	136	139	143
Total	..		373	380	385	395	402	410

IV. Percentage to age-group

(a) Boys	..	Per cent	101·6	102·0	102·0	102·4	102·7	103·1
(b) Girls	..		54·3	54·4	54·8	56·4	57·2	58·4
Total	..		78·4	78·7	78·9	80·0	80·6	81·3

V. Enrolment of Scheduled Tribes (including over-age and under aged).

(a) Boys	..	(000)	315	323	327	333	339	348
(b) Girls	..		139	141	144	148	151	155
Total	..		454	464	471	481	490	503

VI. Percentage to age-group

(a) Boys	..	Per cent	85·6	86·1	86·3	86·7	86·9	88·1
(b) Girls	..		38·4	38·6	39·0	39·8	40·4	41·1
Total	..		62·2	62·7	63·0	63·6	64·1	65·1

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
VII. Average attendance (Classes I—V).								
(a) Boys		(000)	1,258	1,293	1,348	1,461	1,526	1,668
(b) Girls			699	721	818	888	995	1,094
Total			1,957	2,014	2,166	2,349	2,549	2,762
VIII. Enrolment in Class I								
(a) Boys		(000)	622	639	670	748	792	886
(b) Girls			389	396	416	441	465	558
Total			1,011	1,035	1,086	1,189	1,257	1,444
IX. Enrolment in Class V								
(a) Boys		(000)	172	180	189	212	225	253
(b) Girls			82	85	89	95	100	120
Total			254	265	278	307	325	373

2 Classes VI—VIII (age-group 11—14) (including over-aged and under-aged).

I. Enrolment

(a) Boys	..	(000)	325	350	436	528	640	718
(b) Girls	..	..	143	153	243	340	453	570
Total	—	..	468	503	679	868	1,093	1,288

II. Percentage to age-group (As per the latest projected population).

(a) Boys	..	Per cent	35.2	37.7	46.5	55.6	66.7	74.0
(b) Girls	..	..	16.1	17.1	27.0	37.4	49.5	61.7
Total	..	..	25.8	27.6	36.9	46.7	58.3	68.0

III. Enrolment of Scheduled Caste.

(a) Boys	..	(000)	31	32	34	38	44	50
(b) Girls	..	—	8	9	11	14	18	23
Total	..	..	39	41	45	52	62	73

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
IV. Percentage to age-group ..								
(a) Boys	..	Per cent	22.3	22.9	24.1	26.6	30.5	34.2
(b) Girls	6.0	6.7	8.1	10.2	12.9	16.4
Total	14.3	14.9	16.2	18.6	21.9	25.5
V. Enrolment of Scheduled Tribes.								
(a) Boys	..	(000)	30	34	39	44	50	60
(b) Girls	7	8	10	13	18	28
Total	37	42	49	57	68	88
VI. Percentage to age-group								
(a) Boys	..	Per cent	14.2	16.0	18.1	20.3	22.8	27.0
(b) Girls	3.4	3.8	4.8	6.1	8.4	13.0
Total	8.8	10.0	11.5	13.3	15.7	20.1
VII. Average attendance (Classes VI—VIII)								
(a) Boys	281	309	375	450	544	616
(b) Girls	116	129	203	284	382	479
Total	397	438	578	734	926	1,095

VIII. Enrolment in
Class VI.

(a) Boys	..	(000)	135	138	175	225	280	350
(b) Girls	..		58	59	75	97	120	150
Total			193	197	250	322	400	500

IX. Enrolment in
Class VIII.

(a) Boys	..	(000)	86	100	135	171	214	253
(b) Girls	..		29	34	36	59	74	87
Total			115	134	181	230	288	340

B. SECONDARY EDUCA-
TION.

1. Classes IX—XI (Age-group
14—17).

(i) Enrolment

(a) Boys	..	(000)	188	211	242	282	324	369
(b) Girls	..		56	60	73	87	102	116
Total			244	271	315	369	426	485

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
<i>(ii)</i> Per cent to age-group.									
	<i>(a)</i> Boys	..	..	21.5	23.8	26.9	30.9	35.1	39.5
	<i>(b)</i> Girls	..	..	6.9	7.1	8.5	10.0	11.6	13.0
	Total	..	..	14.5	15.6	17.9	20.7	23.6	26.6

2 Class XI-XII (Age-group 16-17).

i. Enrolment in General Education.

<i>(a)</i> Boys	..	(000)
<i>(b)</i> Girls	..	
<i>(c)</i> Total	..	

} Higher Secondary pattern with classes XI & XII has not come in to existence.

C. ENROLMENT IN VOCATIONAL COURSES.

<i>(a)</i> Post-elementary stage	Nos.
<i>(b)</i> Post-high School stage	..

} Vocational courses have not been introduced in the State as yet.

**D. ENROLMENT IN
PART TIME/
CONTINUATION
COURSES.**

(i) Age-group 6—10	..	Nos.	Nil	4,000	10,000	50,000	2,50,000	4,68,000
(ii) Age-group 11—13	..	..	} No Provision					
(iii) Age group 14—15	..	..				
(iv) Age group 16—17	..	..				
(v) Total	..	..				

E. TEACHERS

A. Primary Schools	..	Nos.	75,900	76,600	81,100	86,600	92,020	94,120
B. Middle Schools	..	..	21,408	21,808	23,808	25,808	28,808	31,674
C. High/Higher Sec. Schools.	..	..	20,670	21,680	23,333	25,448	27,400	30,333

F. ADULT EDUCATION Nos.

(a) Number of participants (15—35 Yrs)	..	..	22,985	1,00,000	3,00,000	6,00,000	12,00,000	15,00,000
(b) Number of centres	..	..	836	3,330	10,000	20,000	40,000	50,000
(i) Central	..	..	480	1,920	5,700	11,400	24,000	30,000
(ii) State	..	..	356	1,410	4,300	8,600	16,000	20,000

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
G. UNIVERSITY EDUCATION.									
(Excluding correspondence Courses).									
(i) Enrolment .. (000) ..									
(a)	Pre-degree level	..	..	46.4	47.5	49.8	52.3	55.0	58.0
(b)	First degree level	..	..	30.5	32.1	34.0	35.9	37.9	40.0
(c)	Post-graduate level	..	..	4.4	4.5	5.0	5.5	6.2	7.0
(ii) Enrolment in correspondence course. (000)									
(a)	Pre-degree level	..	..	1.8	2.0	2.2	2.5	2.8	3.0
(b)	First-degree level	..	..	1.7	1.8	2.0	2.2	2.5	2.8
(c)	Post-graduate level (External system).	..	..	0.3	0.4	0.4	0.5	0.5	0.6

CHAPTER 19

ART AND CULTURE

29.1. The Fifth Plan outlay for Art and Culture and other programmes like libraries, development of M. I. L., Physical Education, sports and games executed by the State Cultural Affairs Department was Rs. 119 lakhs. During the four years 1974—78 the expenditure on these programmes was Rs. 72.86 lakhs. For the year 1978-79 the outlay for this programme has been fixed at Rs. 40 lakhs. For the Five-Year Plan 1978—83, a tentative outlay of Rs. 760 lakhs has been suggested as below—

Art & Culture	..	Rs. 260 lakhs
Libraries	..	Rs. 110 lakhs
M. I. L.	..	Rs. 50 lakhs
Physical Education, sports and games	..	Rs. 340 lakhs
Total		Rs. 760 lakhs

29.2. The progress achieved so far and the programme for the five years 1978—83 under different schemes are mentioned in the following paragraphs.

ART & CULTURE

Direction and Administration

29.3. Publication of rare and valuable manuscripts is undertaken by the publication wing of the Cultural Affairs Directorate. So far 31 manuscripts in Oriya and Sanskrit have been edited and published. During the Sixth Plan period, it is proposed to bring out 48 such publications. It is also proposed to include books on Jyotish, Ayurveda in Sanskrit besides standard edition of Puranas, Music, Dharmashastra, Hindu law etc. To cope up with the increased volume of work it is proposed to strengthen the staff of the publication wing during the Sixth Plan period.

29.4. Rabindra Mandap or Kalamandap are the two auditoriums where cultural functions and other meetings are held in the State Capital, Bhubaneswar. It is proposed to make improvement to these halls. For all these programmes and for strengthening the Directorate of Cultural affairs and Department a total outlay of Rs. 26 lakhs has been proposed during the Sixth Plan period.

Fine Arts Education

29.5. Development of Fine Arts Education is carried out mainly through organisations like Orissa Sangeet Natak Akademy, Orissa Lalit Kala Academy and Utkal Sangeet Mahavidyalaya. These institutions are being given regular grants for their promotional works. It is proposed to continue the grants during the plan period 1978—83.

Promotion of Art and Culture

29.6. Chhau dance of Mayurbhanj is one of the famous folk dance of Orissa with rich cultural heritage. For want of proper patronage it is now dying out. It is proposed to codify this dance from depicting its technique, style, training presentation, costume, music and rhythm. It is also necessary to train up youngsters in the Chhau dance to enrich this traditional dance of Mayurbhanj district. Both the trainees and the trainers will be paid suitable stipend and remuneration.

29.7. Utkal Sangeet Mahavidyalaya has stabilised its position and trained candidates in music, dance and drama for degree courses. During the Sixth Plan, it is proposed to start feeder schools for this college in different parts of the State. To start with four schools will be opened at Berhampur, Baripada, Cuttack and Sambalpur.

29.8. The Academy is bringing out two monographs on Chhau of Dhenkanal and Danda Nata. During the Sixth Plan period it is proposed to bring out monographs on (a) Puppetry, (b) Desianata, (c) Pala, (d) Daskathia, (e) Subdanrutya. The Academy also arranges training in folk dances and music in rural areas and award scholarships. Identified groups will be given scholarships and the teachers will get remuneration for training at their own places. The selected folk dances are Ghumuranach, Paika dance, Dalkhal, Gotipua, Prahallad Natak, etc.

29.9. Symposia, seminar, festivals and exhibitions will be arranged for projecting the rich cultural heritage of the State. The Sangeet Natak Akademi conducted a symposium on Odissi dance, Pala Jatra, etc., in the past. During the next plan period it is proposed to conduct symposia on other types of folk dances and music.

29.10. Research on Folk Art, Tribal Art and Traditional Art of Orissa will be intensified to study the problems of artists and traditional architects in the State to suggest improvement in the quality of art work and for the economic uplift of the artists, artisans and craftsmen. The survey will also help in the direction of identifying the rare specimen of folk arts and tribal arts. Art Education has not made much headway in the State. Arts and Crafts Schools at Khallikote and Jeypore are providing diploma courses and certificate courses respectively in the State. It is proposed to open one more Arts School in the State. This Art School will be established at Bhubaneswar and Orissa Lalit Kala Akademi will arrange for the necessary teaching and training courses for this School.

29.11. The School building of Art and Craft School at Khallikote requires immediate re-modelling and some reconstruction. It is estimated that a sum of Rs. 10 lakhs would be necessary for the construction of the buildings. Similarly, the Art & Craft School at Jeypore requires remodelling and also a separate building for hostel facilities.

Archaeology

29.12. During the Fifth Five-year Plan survey and exploration of historical sites three river valleys namely, Prachi, Kushabhadra and Bhargabi, have been completed. During the next plan period, it is proposed to take up survey and exploration work in five other river valleys. So also excavation of four projects namely Sankarjanga near Angul, Maragoda in Kalahandi district, Ranipur Jharial in Balangir district and Kurume near Konark in Puri district have been excavated. During the next plan period it is proposed to take up excavation of ancient sites in 10 places.

29.13. So far 315 monuments and ancient sites have been explored and surveyed in the State. Out of these, 82 ancient monuments have been declared as State protected. The conservation and renovation of 32 monuments have so far been completed. An allocation of Rs. 59 lakhs is proposed during the Sixth Five-Year Plan to undertake conservation measures of 120 monuments. Out of the 22 conserved monuments, beautification of the surrounding areas have been done in respect of four conserved monuments. A provision of Rs. 1 lakh is proposed for beautification of five more monuments during the Five Year Plan ending 1978-83.

Archives

29.14. As per the recommendations of the Historical Records Commission creation of regional archives to preserve valuable records of the District and Divisional levels would be established. It is proposed to open regional archives at Sambalpur and Cuttack with the required staff under an archivist. A sum of Rs. 4.25 lakhs will be required for this purpose during the Sixth Plan Period. The State Archives have already acquired a huge number of records from the Board of Revenue, Revenue Divisional Commissioner's Offices, Sambalpur and District Collectors. It is necessary to prepare a guide to these records to be kept in the State Archives. This will be undertaken during the Sixth Plan Period.

29.15. The State Archives will be strengthened suitably in order to undertake different activities in the direction of acquiring and preserving valuable records and for research purposes.

Museum

29.16. Orissa State Museum is a multi-purpose museum having different sections like Archaeology, Art and Craft, Armoury, Epigraphy, Numismatics, Sanskrit Studies, Anthropology, Natural History, etc. Steps have been taken to develop all these sections by proper and scientific display of antiquities and specimens. Survey and collection of antiquities and specimens for the museum is an important aspect. It is proposed to collect the antiquities and other rare specimen from the ex-rulers and Zamindars of Orissa for their historical and art value. Historical specimen like copper plates, stone inscriptions, coins and filigree works will be some of the important specimens to be collected. Some of these articles are to be acquired on payment. Hence, it is proposed to allocate a sum of Rs 4 lakhs for this purpose during the Sixth Plan Period.

29.17. Research and Publication work is an important part of the activities of the Orissa State Museum. It is proposed to take up studies on forts, temples, mathas and tribal art and culture.

29-18. Ten branch museums have so far been opened in the State. It is proposed to open 12 more museums during the Sixth Plan Period at the district headquarters and at some place of historical importance.

Library Services

29-19. The State library will be expanded by additional of valuable books and also the duration of opening hours for the library will be increased to 12 hours per day by providing shift system. It is also proposed to add a children library to it. It is also proposed to provide branch libraries for the State library in different parts of Bhubaneswar town. These libraries will be provided with periodicals, news papers and books. The branch libraries will cover wider area and attract more number of people.

29-20. During the last three years 13 district libraries were opened in the District headquarters. These will be strengthened by adding more books, furnitures and required number of staff for running them. The district libraries are functioning in rented buildings. It is also proposed to provide buildings for them in a phased manner.

29-21. Opening of libraries in rural areas is felt necessary in view of the importance attached to adult literacy and functional literacy programmes. For this purpose, under different district libraries, block libraries will be organised in a phased manner. During the next five-year plan 100 block libraries will be opened in selected block headquarters. Besides, grants will be given to the rural libraries managed by the voluntary organizations.

Promotion of M. I. I.

29-22. It is proposed to establish Orissa Institute of Language and Literature for the development of Orissa literature and language and for undertaking studies with regard to Oriya script, grammatical structures lexical aspects and linguistics. Studies will also be taken up for comparative study of Oriya and tribal languages on modern lines. This institute will work under a Director having Deputy Directors under different disciplines like manuscript, production and other programmes. A sum of Rs. 50 lakhs is proposed to be spent for the establishment of the institution in the Sixth Plan period.

Sports and Games.

29-23. To provide incentives to sportsman scholarships will be awarded to talented sportsmen.

29-24. Till the end of the Fifth Plan 64 rural sports centres have been opened in the State to provide facilities to both students and non-students and encourage them to participate in sports and games. It is proposed to open one hundred rural sports centres in different Tahasils of the State.

29-25. A fully equipped sports school with modern amenities and appliances is proposed to be established in the State at an estimated cost of Rs. 3 lakhs.

29-26. During the Fifth Plan period coaching centres were opened at Berhampur, Sambalpur, Baripada, Bhawanipatna and Balasore. During the Sixth Plan period, 4 more district coaching centres will be established with an outlay of Rs. 3 lakhs.

29-27. Competitions will be organised to popularise sports in rural areas, and also for participation of talents in the All-India level and State level competitions. Annual residential coaching class both for junior and seniors will be organised on zonal basis, in 3 different zones of the State. The Central Government will bear 50 per cent of the cost. Similarly, preparatory coaching camps will be organised for participation in the National Athletic Meets.

29-28. It is proposed to construct a composite stadium consisting of gymnasium, swimming pool, players' dormitory etc. To encourage participation of women in sports, women's sports festival will be organised in the district headquarters and the State capital. Selected contingent will represent the State in national festival. This scheme will be assisted by the Government of India through N. S. N. I. S.

DRAFT PLAN 1978-83

Selected Targets and Achievements (Please Indicate Cumulative Totals for each year as on September)

Serial No.	Item	Unit	Position 1977-78	1978-79 Approved target	Phasing of targets			
					1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
G. LIBRARIES								
1	District Library	Nos.	13	..	..	..	..	..
2	Block Libraries	Ditto	Nil	..	25	25	25	25
3	Mobile Libraries	Ditto	Nil	..	..	1	..	..
4	Zonal Library	Ditto	..	..	1	1	1	1
5	Children's Library	Ditto	..	..	1	..	..	..

CHAPTER 30

TECHNICAL EDUCATION

30.1. Orissa has got two Engineering Colleges and six Polytechnics. The two Engineering Colleges provide degree courses in 6 faculties and the Polytechnics have diploma courses in 14 branches of study. The intake capacity of the Engineering Colleges is 380 and that of the Polytechnics is 620 per year. Since 50% of the intake in respect of the Regional Engg. College, Rourkela is filled up by students of Universities from outside the State, 200 seats in degree courses are available for the students passing out from the Universities of Orissa. The annual average outturn from these Colleges and Polytechnics are 304 and 440 respectively. All these Institutions were established before the Fourth Plan Period.

30.2. The All India Council of Technical Education have recommended that physical expansion of Technical Education during the 6th Plan Period should not normally be taken up since funds available in the 6th Plan period would be hardly adequate for improvement of quality and standard of technical education and for the consolidation of the facilities already created; but where it may be absolutely essential in the interest of development of specific sectors in the State, new courses and institutions might be introduced. Introductions of the new courses in the diversified fields where necessary to meet the industrial requirement of the State should be decided only after the manpower needs in these areas have been duly established.

Consolidation of facilities already created**30.3. (a) Replacement of obsolete machinery and modernisation of equipments in the Institutions.****(i) Polytechnics**

The total requirements towards modernisation of Workshop, replacement of outdated obsolete machineries and equipments, provision of adequate institutional and hostel facilities, tools and equipments and introduction of the new system of sandwich pattern of courses in the Polytechnics is Rs. 170.00 lakhs. A sum of Rs. 146.85 lakhs has been provided in the Sixth plan for consolidation and development of existing courses.

(ii) Engineering Colleges

30.4. The assessment committee appointed by the University Grants Commission recommended grants for construction of buildings and purchase of equipments for the University College of Engineering, Burla during the Fifth Plan period. According to the pattern of assessment, out of the expenditure incurred on supply of equipment and construction of buildings in respect of this College, the State Government will bear 50% of the total estimated cost. During the Fifth Plan period matching contribution was provided to the U. C. E., Burla, for purchase of equipment. Such contribution for construction of buildings and staff quarters could not be provided due to paucity of funds in the preceding plan. The U. G. C. have already released funds for construction of building and staff quarters of the Institution. A provision of Rs. 12.22 lakhs has been made in the Sixth plan to provide a matching contribution with a view to complete the buildings.

(iii) College of Management and Accountancy

30.5. The College of Accountancy and Management Studies, Cuttack is now functioning in a temporary shed in the premises of the Engineering School, Cuttack. The institution has no permanent building. A sum of Rs. 8 lakhs has been provided in the Sixth Plan for construction of a new building and hostel for the institution and Rs. 4.82 lakhs has been provided for consolidation of existing courses by strengthening the faculty.

A total amount of Rs. 167.07 lakhs have, therefore been provided for consolidation and development of existing courses in the Engineering Colleges and Polytechnics in the State.

(b) Remedial courses to help weak students to eliminate wastage in technical education

30.6. Provision has been made to organise remedial measures to help weaker students in order to reduce drop outs and other forms of wastage in technical education. The measures include running of coaching classes for the weaker students in all the Institutions of the State by payment of remuneration to the institutional staff. The State Government have also enhanced the stipend of the students to reduce drop outs on the ground of financial constraint which is being met out of non-plan provision.

(c) Strengthening of existing evaluation agencies for Technical Education

30.7. At present there is no evaluation agency under the Directorate of Technical Education. With a view to enabling identification of institutions with professional competency and capability to launch new programmes and projects and consolidate the existing programmes, it is proposed to establish one Inspection and Evaluation Cell in the Directorate of Technical Education and Training. Provision has been made for appointment of two Inspecting Officers of the rank of Deputy Directors and necessary supporting staff for the aforesaid purpose.

(d) Directorate of Technical Education and Training

30.8. The Directorate of Technical Education and Training was separated from the Directorate of Industries in the year 1977. With a view to recognising the Directorate on the recommendation of the Ministry of Education, the following programmes have been included in the Sixth Five-Year Plan.

(i) Strengthening of the Directorate

30.9. With a view to examining the reports of the Inspection and Evaluation Cell one post of Technical Officer and necessary supporting staff would be provided for the Directorate.

(ii) Manpower Development Cell

30.10. Government of India have indicated that the National Manpower Information System should be established for updating the manpower information to assist Technical Education Planning. At present there is no such Manpower Development Cell in the Directorate. Since Technical Education Planning is primarily dependent on manpower information, provision of Rs. 1.07 lakhs has been suggested to create such a cell in the Directorate with one Manpower Development Officer, two Investigators and other supporting staff.

(iii) Curriculum Development Cell

30.11. Presently, the Curriculum Development Cell in the Directorate has one Deputy Director and one Stenographer. The programme includes providing assistance of a Research Officer and other minimum supporting staff to strengthen the Curriculum Development Cell for which a provision of Rs. 1.32 lakhs has been suggested. Funds have also been provided for continuing the present sandwich system of training for the students of 5th and 8th Semesters of Polytechnics and for award of stipends for students studying outside the State in diploma and degree courses for which there is no facility in the State.

30.12. For strengthening of the Book Banks in Polytechnics which were opened as a Fifth Plan Scheme for supply of costly Text Book to the students, a sum of Rs. 1.30 lakhs is proposed in the plan.

30.13. For continuance of the Faculty Development Programme under which teachers of polytechnics are deputed to T. T. T. I., Calcutta for training in order to learn modern technics and teaching methods and 4 posts of LR & TR are created in Government, a sum of Rs. 0.35 lakhs has been provided for continuance of the scheme up to 1978-79 after which these posts will come under comitted side.

30.14. Similarly, a sum of Rs. 30.00 lakhs has been provided for 1978-79 for the Industrial Counselling Cell in the Orissa School of Engineering, Cuttack established to provide procedural know-how to the diploma holders for establishment of industries under self-employment scheme.

New Courses

30.15. As per a recent survey, the State will need about 2,500 graduate engineers in conventional Engineering and nearly 800 Engineers in specialised field. Requirement of Diploma holders has been assessed at 4,000 under conventional Engineering and 2,200 under specialised Branches. It is proposed to introduce Food Technology, Stenography and Secretarial Practice, Archltectural assistanceship and Catering Technology and Applied Nutrition Courses for ladies in a Polytechnic at Bhubaneswar and Paper Tech., Leather Technology and Ceramic Technology for tribal boys in Polytechnic at Rayagada.

30.16. The Polytechnic at Rayagada will have an initial intake capacity of 45 and will be expanded in future to provide technological courses in other conventional subjects to tribal boys. The sixth plan programme also envisages increase in intake in some disciplines in the existing institutions to meet the requirement of manpower in conventional courses. Rs. 96.82 lakhs has been provided for establishment of two new Polytechnics at Bhubaneswar and Rayagada.

30.17. In accordance with the recommendations of the All-India council of Technical Education, approved by the Planning Commission a production unit is proposed to the established in Berhampur Engineering School during the Sixth Plan to impart practical training for production of commercial goods. It is proposed to convert the Jharuguda Engineering School into a Community Poly-technic in accordance with the recommendations of the Working Group set up by Government of India. Under the scheme, a mobile unit will be established to extend the technical know-how to the rural areas under the scheme 'problem oriented' and 'application oriented' programmes shall be undertaken to benefit the rural industrial labourers. Rs. 20 lakhs has been provided for the purpose during the Sixth Plan.

30.18. Similarly at the degree level, it is proposed to start new specialised courses in Civil Engineering with specialisation in structural Engineering, in Mechanical Engineering, with specialisation of production Engineering, in Electrical Engineering with specialisation in High voltage transmission and a course in Marine Engineering. At present there are two Engineering Colleges in the Western Region of the State. It is, proposed to establish one Engineering College at Paradeep with the aforesaid courses during the sixth plan period. Establishment of one additional Engineering College in the State is justified on the basis of the manpower requirement during the sixth plan. Rs. 253.78 lakhs has been provided for establishment of one Engineering College at Paradeep. It is expected that matching financial assistance would be available from the University Grants Commission.

30.19. There is a proposal for introduction of undergraduate courses in production engineering and Mining Engineering with an estimated cost of about Rs. 20.00 lakhs. For consolidation of undergraduate courses and interduction of Electronics & Telecommunication Engineering in the U. C. E., Burla the U. G. C. have recommended to provide Rs. 22.23 lakhs for staff quarters and Rs. 2.20 lakhs for students amenities. Fifty per cent of this will have to be met by the State Government for which, a sum of Rs. 12.22 lakhs is provided in the sixth plan.

EMPLOYMENT

30.20. With the investment of Rs. 6.00 Crores during the Sixth Plan, it is estimated that the employment potential will be created for 94 persons. Out of 94 persons, 53 would be technical, 25 educated non-technical and 16 unskilled and uneducated.

TECHNICAL EDUCATION

Serial No.	Item	Unit	Selected Target and achievements for each year as on September					
			Position 1977-78	1978-79 approved target	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Annual intake—

1	Diploma course	..	No	473	678	677	677	677	677
2	Degree course	..	No	302	606	606	606	606	606

CHAPTER 31

HEALTH & FAMILY WELFARE

31.1. The main objectives of Health Programme during the first four Five-Year Plans were— (i) control/eradication of major communicable diseases, (ii) provision of curative, preventive and promotional health services, (iii) augmentation training programmes of Medical and Para-Medical personnel and (iv) strengthening the Primary Health Centre complex for undertaking preventive and curative health services in rural areas.

31.2. During the 5th Five-Year Plan attempts were made to provide minimum public health facilities integrated with family welfare and nutrition for vulnerable groups, children, pregnant women and nursing mothers. Even though there has been the accent during the Fifth Plan on increasing the accessibilities of health services to rural areas and attempts were made to develop referral services by providing specialist's attention to common diseases in rural areas, it is a fact that mainly the well-to-do classes have taken benefit of the existing model of medical and health care services with its emphasis on hospitals, specialised, super-specialised and highly trained doctors. It has been realised now that the rural areas and the poor people have been deprived of the benefits of good health and medical services by adoption of this western model and medical services and health care whose costs go far beyond our resources. During the Sixth Plan period it is proposed to give considerable attention to the development and alternative model of health care service which will emphasize preventive and promotive aspects and will be fully geared to serve the rural areas and the poor people.

31.3. Orissa is the least urbanised State in the Indian Union, next only to Arunachal and Himachal Pradesh with 91.59 per cent population living in rural areas. More than 80 per cent of the population of the State live below the poverty line. Not only that wide disparities exist in the provision of medical and health services between urban and rural areas in the State but also the tribal belts are particularly backward in this respect.

31.4. The annual birth rate is 33.6 per thousand as per sample survey against the all-India average of 35.2 per thousand, the death rate being 17.7 per thousand against the all-India figure of 15.9 per thousand. Thus, while the birth rate of the State is lower, the death rate is higher than the all-India average. The common causes of mortality and morbidity are mal-nutrition, malaria, T. B., Gastroenterites and parasitic infestations. Infant mortality in the State is higher in comparison to the corresponding all-India average. Children, expectant and nursing mothers are the vulnerable group of population on account of low general standard of living inadequate health care provided.

31.5. The available health services in the State are not adequate to meet the total health requirement of the people. Investment of resources in the Health Sector on a scale considerably larger than what was proposed in the earlier Plan periods is inescapable, given the objective of achieving significant reduction in the present disparities in regard to provision of medical and health facilities between the urban and rural areas and reduce the incidence of major communicable diseases in the State.

Review of progress during the Fifth Plan period (1974—78)

31.6. During the Fifth Plan period priority has been attached to the extension of medical and health services in the State particularly to the rural areas, through the implementation of the Minimum Needs Programme. This involved strengthening the role of the Primary Health Centre as the main instrument for delivery of health care in rural areas, introduction of Multipurpose Workers Scheme in four districts of the State, training of more than 5,000 indigenous Dais in modern methods of maternity and child care and introduction of the Community Health Workers Scheme one P. H. C. in each district with effect from the 2nd October 1977.

31.7. In the field of communicable diseases, Smallpox has been successfully eradicated and the modified plan of operation has been introduced for control of Malaria. By the end of March, 1978, achievement under the Family Planning Programme resulted in a coverage of 26.5 per cent of the 4.5 million eligible couples who were protected under different methods. Surgical facilities in Family Welfare Services have been extended under the British-Aid Scheme to 50 selected P. H. Cs. and 25 Subdivisional Hospitals and Maternity & Child Health Services have been intensified.

Objectives, Targets & Strategies

31.8. While continuing to maintain the progress under all these programmes, the major thrust of activities during the Sixth Plan will be towards planned provision of better health care and medical services in the rural and tribal areas of the State so as to correct the existing imbalance, control of major communicable diseases like Leprosy, T. B., Malaria and Filariasis, strengthening of the infrastructure for delivery of health care, improvement of the quality of services at the District, Sub-division and Taluk levels and qualitative improvements in under-graduate and post-graduate medical education. Broad details under each programme are indicated below:

PROGRAMMES DURING THE PLAN PERIOD (1978--83)

(i) Minimum Needs Programme

31.9. Recognising the crucial role of the Primary Health Centre as the focal point for delivery of the health care in rural areas, the State's Sixth Plan proposals seek to achieve the following objectives :

- (a) Strengthening the P. H. C. complex by bringing within its fold all curative institution like dispensaries and Medical-Aid Centres which hitherto were not under the command of the P. H. C.; and
- (b) Establishment of additional Sub-Centres in a phased manner so as to achieve a norm of one Sub-Centre for approximately 8,000 population by 1983 and 5,000 by 1987-88.

31.10. The average territorial jurisdiction of a Sub-Centre (10,000 population) in the State varies between an area of approximately to 35 sq. kilometres in coastal districts, 90 sq. kilometres in tribal districts of Koraput and Phulbani, and 115 sq. kilometres in the sparsely populated areas of Sambalpur and Sundargarh districts. Keeping these factors in view, it is proposed, during the Sixth Plan, to phase the establishment of additional Sub-Centres particularly in the sparsely populated areas and tribal areas of the State not merely on the basis of population but also on the basis of a more homogenous geographical unit of about 30 to 40 sq. kilometres. Out of the 314 P. H. Cs. in Orissa, 118 are in the Tribal Sub-Plan area and 196 in other areas. It is proposed to establish 196 Subsidiary Health Centres by upgrading one Sub-Centre in each of these 196 P. H. Cs. Where a Medical Officer will be posted in addition to the existing A. N. M. and stocks of medicine worth Rs. 3,000 per annum will be provided. In respect of the 118 tribal Blocks of the State, it is proposed to upgrade one of the Sub-Centre in each P. H. C. to the status of a Mini Health Centre where similar provision for posting of a doctor will be made and the grants of medicines augmented. In addition to the upgradation of one Sub-Centre in each P.H.C. to that of a Subsidiary Health Centre of Mini Health Centre, reorganisation of existing curative institutions within the jurisdiction of each P. H. C. will be accorded highest priority so as to achieve the norm of one Health Centre with a doctor for 30,000 population by 1983.

31.11. It has also been proposed to provide medicines and construction of buildings in respect of 300 Sub-Centres (out of 502 proposed to be established according to the norm of one Sub-Centre for 8,000 population). A sum of Rs. 164.00 lakhs has been provided as the capital outlay during the Plan period 1978-83 for completion of incomplete P. H. C. buildings, construction of 202 staff quarters, provision of water-supply to the existing P. H. Cs and electrification of the remaining 33 P. H. Cs. The overall provision includes an amount of Rs. 29.00 lakhs provided for the year 1978-79. Similar provision for construction of 277 staff quarters for laboratory technicians at a capital cost of Rs. 69.15 lakhs has been made during Sixth Plan period.

31.12. With a view to providing better referral facilities in rural areas it was proposed to upgrade 77 P. H. Cs. to 30 bedded hospitals during the Sixth Plan period. Out of which work relating to 17 P. H. Cs. has been taken up in the Fifth Plan. 7 P. H. Cs. have been completed and work is in progress in the remaining P. H. Cs. An investment of Rs. 1,171.33 lakhs have been proposed during the Sixth Plan period to complete the incomplete buildings and to take up construction of new buildings and to provide necessary staff. Out of this Rs. 861.00 lakhs will be for buildings.

31.13. It is proposed to enhance the existing grant of medicine to P. H. Cs. and Sub-Centres i. e., from Rs. 12,000 to Rs.15,000 in respect of P. H. C. and from Rs. 2,000 to Rs. 3,000 for each

Sub-Centre. An outlay of Rs. 460.90 lakhs has been suggested to provide enhanced medicine grant to 314 P. H. Cs. and 942 Sub-Centres under Medical and 1,096 Sub-Centres under F. W. The total outlay under the Minimum Needs Programme is, therefore, of the order of Rs. 2,242.00 lakhs with building component of Rs. 1,285.18 lakhs.

(ii) Control/Eradication of Communicable Diseases

31.14. Among major communicable diseases are Cholera and Gastroenteritis and other water-borne diseases, the incidence of which is higher in coastal tracts which are also Cholera endemic areas. Although Smallpox has been successfully eradicated, of late there has been recurrence of Malaria in the State with high incidence of plasmodium falciparum cases in as many as 9 districts out of 13 districts in State. Orissa is among the high endemic States so far as Leprosy is concerned, the estimated average prevailing rate being approximately 12 to 15 per thousand, with nearly 2.4 lakhs of Leprosy cases of which 52,000 are infective. The districts of Cuttack, Puri, Ganjam, Balasore and Sambalpur comprise the hyper-endemic zone where more than one per cent of the population is afflicted with Leprosy. The population in the coastal districts are exposed to high risk of filariasis with endemicity rate of 15 per cent. Tuberculosis which is a major killer affects nearly 2 per cent of the population.

31.15. During the Fifth Plan period a sum of Rs. 5.81 lakhs was earmarked for control of communicable diseases. A sum of Rs. 5.01 lakhs has been spent up to 1977-78. In the Sixth Plan, an outlay of Rs. 195.00 lakhs is proposed to be made under this programme. It is proposed to establish 3 more Cholera Combat Teams in the coastal districts in addition to the existing 2 units. Two more Filaria Units and one Survey Unit area proposed to be established in addition to the 10 Filaria Control Units functioning in the State up to the end of 1977-78. An enhanced provision of Rs. 71.00 lakhs has been made to provide better treatment facilities for T. B., intensification of T. B. control in rural areas, provision of additional beds in District Headquarters and subdivisional level hospitals within the jurisdiction of each I. T. D. P. in the State. It has also been planned to establish 20 bedded Paediatric Wards in each of the existing T.B. Hospitals of the State for which a sum of Rs. 18.67 lakhs has been proposed as the capital outlay.

31.16. Considering the high incidence of sexually transmitted diseases in the tribal areas, a sum of Rs. 3.30 lakhs has been proposed to establish 5 V. D. Control Centres in tribal areas during the Sixth Plan period.

31.17. Under the National Programme for prevention of visual impairment and Control of Blindness and Trachoma an amount of Rs. 1.20 lakhs has been spent during the year 1977-78. Two mobile units are functioning at present in the Medical Colleges at Burla and Cuttack. An outlay of Rs. 4.00 lakhs has been provided during the year 1978-79 under this programme. It has been proposed to extend the coverage all the District Headquarter Hospitals and the P. H. Cs. of the State during the Sixth Plan for which a sum of Rs. 43.22 lakhs has been suggested. It is also proposed to upgrade the Department of Ophthalmology of the M. K. C. G. Medical College, Berhampur to 75 beds and to establish an Ophthalmology Institute in the State for providing better ophthalmic treatment in the 5 southern districts which at present do not come within the purview of the 2 Mobile Units provided to the State. A sum of Rs. 34.00 lakhs has been suggested for the purpose which has a building component of Rs. 10 lakhs. The total outlay proposed under Communicable Diseases in the Sixth Plan is of the order of Rs. 195.00 lakhs with a building component of Rs. 28.67 lakhs.

(iii) Hospitals and Dispensaries

31.18. While no linear expansion of curative services has been suggested in urban areas emphasis has been attached to equip the District and Subdivisional Hospitals adequately with proper diagnostic and treatment facilities. It is proposed to strengthen the District Headquarter Hospitals by providing specialised equipment, Ambulance Van, proper Radiological Services, facilities for Cancer detection, and casualty units. It is also considered necessary to provide additional 404 beds in the District Headquarters Hospitals situated in the tribal areas of the State. A sum of Rs. 222.45 lakhs has been proposed in the Sixth Plan period for provision of these facilities which includes a building component of Rs. 110.71 lakhs.

31.19. An expenditure of Rs. 39.40 lakhs was incurred for provision of specialist services at the District Headquarters Hospitals during the period 1974-78. A sum of Rs. 16.22 lakhs has been provided for continuance of the existing 88 posts of Specialists in different subjects in the District

Headquarters Hospitals during the year 1978-79. For continuance of existing specialist posts and creation of additional 53 specialists posts in the remaining districts and selected Subdivisional level hospitals an outlay of Rs. 50 lakhs has been suggested during the Sixth Plan period. The local people do not receive medical benefits from the hospitals maintained by the H. S. L. at Rourkela and the Port Trust at Paradeep considering the growing demand of these people it has been proposed to establish 50 bedded hospitals at Rourkela and Paradeep during the Sixth Plan period for which a provision of Rs. 22.50 lakhs has been made with a capital outlay of Rs. 12.00 lakhs. Similarly, establishment of another 25 bedded hospital in Bhubaneswar has been considered essential to meet the growing demands of the residents of the City. A provision of Rs. 12.10 lakhs has been made during the Sixth Plan with a capital outlay of Rs. 4 lakhs.

31.20. An expenditure of Rs. 8.95 lakhs has been incurred during the Fifth Plan period, 1974-78 for provision of nursing service. A sum of Rs. 5.30 lakhs has been provided in the budget, 1978-79 for continuance of 101 posts of nursing personnel in different hospitals of the State. An amount of Rs. 59.15 lakhs has been proposed during the Sixth Plan period taking into consideration the need for creation of 373 additional posts of nursing staff.

31.21. A sum of Rs. 12.78 lakhs has been spent during the years 1974-78 to meet the minimum requirements of the hospitals at the Tahasil level. An amount of Rs. 8.66 lakhs has been provided during 1978-79 for improving medical care in hospitals particularly rural subdivisions and at Tahasil level. It is proposed to extend specialist services to selected rural subdivisions during the Sixth Plan for which it will be necessary to provide 87 posts of specialists in different subjects and 13 Lady Assistant Surgeons in some of these rural subdivisions. A total outlay of Rs. 405.26 lakhs during the Sixth Plan with a capital outlay of Rs. 191.33 lakhs has been proposed for strengthening of rural hospitals at the subdivisions and Tahasils levels, which also include augmentation of bed strength by 804 additional beds. A provision of Rs. 12.40 lakhs was suggested in the Fifth Plan for provision of laboratory Services in P. H. Cs. against which an amount of Rs. 7.09 lakhs has been spent during the period 1974-78. An amount of Rs. 3.19 lakhs has been provided during 1978-79 for continuance of laboratory services in 60 P. H. Cs. It is proposed to extend such facilities to other referral hospitals at the subdivisions and Tahasil level during the Sixth Plan for which an amount of Rs. 60.37 lakhs has been provided.

31.22. It is proposed to convert 35 rural dispensaries into 6 bedded rural hospitals with a view to providing better medical care to people living in the interior areas of the State. An amount of Rs. 32.32 lakhs has been proposed in the Sixth Plan for the above purpose which includes a provision of Rs. 6.32 lakhs during 1978-79. An amount of Rs. 35.00 lakhs has been suggested during the Sixth Plan for the purpose, which also include improvement of sanitation in the existing hospitals and conversion of existing dry latrines into sanitary latrines.

(iv) Medical Education and Training

31.23. While it is not proposed to increase the existing intake capacity of the three Medical Colleges which provide for 100 admissions each, emphasis has been attached to improvement of the quality of medical education and rural orientation of medical education, equipping each of the Departments with staff and facilities as per the recommendations of the Medical Council of India and development of the various specialities and allied specialities in the Medical Colleges. An amount of Rs. 255.90 lakhs was provided during the Fifth Plan for continuance and creations of additional staff as per the pattern laid down by the I. M. C. and completion of incomplete buildings. A sum of Rs. 233.86 lakhs has been spent during 1974-78. An amount of Rs. 71.82 lakhs has been proposed for continuance and creation of additional staff in the existing Medical College Hospitals during the year 1978-79.

31.24. The new starts proposed during the Sixth Plan include establishment of a T. B. and Chest Diseases Institute in the S. C. B. Medical College, Cuttack with six Rural Chest Centres. Mental Health Institute, upgradation of the Cancer Institute, establishment of a Paediatric Institute, upgradation of the Department of Cardiology and Cardio Thoracic Surgery at the S. C. B. Medical College with provision for Rural Cardiology Services at Jagatsinghpur Rural Health Centre attached to the S. C. B. Medical College and provision of 30 beds to each of the Higher Specialised Units already opened. During the Sixth Plan an amount of Rs. 695.02 lakhs has been proposed for all the three Medical College Hospitals which include the building component of Rs. 280.00 lakhs. It is also proposed to strengthen the out-patient Departments and casualty services, establish Central Sterilisation Units, Central Pathological Laboratory and Emergency Pathological Services in each of the three Medical College Hospitals.

(v) Training Programme

31-25. An amount of Rs. 12.90 lakhs was provided during the Fifth Plan for training of nurses, laboratory technicians and Radiographers. During the year 1978-79 a provision of Rs. 3.98 lakhs has been made for training of laboratory technicians and nurses. It is proposed to introduce new training programmes for training of Optometrists, Ophthalmic Assistants and Dental Technicians during the Sixth Plan period since no qualified hands are available in these areas to provide necessary technical support.

31-26. Similar difficulties are being experienced to meet the requirements of qualified technical personnel under various Pharmaceutical Units of the State, Hospital Pharmacies and the Drugs Testing Organisation of the State. It is, therefore, proposed to establish a College of Pharmacy during the Sixth Plan period for providing training in B. Pharma Course. A provision of Rs. 51.68 lakhs has been suggested during the Sixth Plan period under the training programme with a building component of Rs. 7 lakhs.

(vi) Indigenes system of medicines and Homeopathy

31-27. Sixth Plan proposals envisage removal of existing deficiencies in the provision of facilities under Indian system of medicine and Homeopathy in rural and tribal areas, improvement in the quality of under-graduate and post-graduate education in Ayurveda and Homeopathy and reorientation of existing in-service Medical Officers, Ayurvedic and Homeopathic Assistants with a view to upgrading their professional knowledge and expertise. Programmes of qualitative improvement of services include augmentation of medicine grants to hospitals and dispensaries. New starts proposed in the Plan include establishment of one Ayurvedic Hospital and one Homeopathic Hospital in the State with 50 beds each, establishment of Ayurvedic and Homeopathic Pharmacies and development of the Herbal Garden at Harishankar in Balangir district. It is also proposed to introduce courses for re orientation of Homeopathic and Ayurvedic Medical Officers in Public Health and preventive medicine. The existing curriculum in the Government Homeopathic College, Bhubaneswar and Gopabandhu Ayurvedic Mahavidyalaya, Puri is being revised to include training of health education, social hygiene, morbidity surveys and orientation in Public Health programmes. A total outlay of Rs. 350.00 lakhs is proposed for Ayurveda and Homeopathy systems.

(vii) Other programmes

31-28. In recognition of the recommendation of the Government of India, Ministry of Health & Family Welfare in the Fourth Joint Conference held in January, 1978 it has been proposed to strengthen the State Drugs Testing Laboratory where necessary facilities will be provided for testing of samples in respect of all categories of drugs. The Drugs Control Organisation both under the testing laboratory and the field will be strengthened for enforcement of the statutory provisions. A sum of Rs. 14 lakhs has been suggested for the purpose.

31-29. An intelligence-*cum*-legal cell is proposed to be established to collect intelligence about spurious drugs and cosmetic, detail activities of suspects, conduct immediate raids and seizures and to render legal assistance both to the headquarters organisation and periphery establishment in the matter of prosecution and further follow-up action. An amount of Rs. 5 lakhs has been proposed for the purpose.

For strengthening of the peripheral establishment of Drugs Control Organisation, a sum of Rs. 10 lakhs has been suggested.

31-30. The need for improvement in the State Public Health Laboratory at Bhubaneswar can hardly be over emphasised. A sum of Rs. 7.80 lakhs has been proposed for strengthening of the State Public Health Analytical Laboratory and Rs. 10.20 lakhs for establishment of three Regional Public Health Analytical Laboratories has been proposed. It will also be necessary to sufficiently strengthen the organisation for bringing to book offences under the Prevention of Food Adulteration Act.

31-31. Considerable difficulties are being experienced in regard to supply of anti-rabic vaccines, as there is no facility for manufacture of these vaccines in the State. There is ample justification for a Vaccine Institute in the State in view of the large number of cases of rabies which is increasing every year. An amount of Rs. 30 lakhs has been proposed for establishment of a vaccine institute which has a capital outlay of Rs. 15 lakhs. For strengthening of the School Health services during the Sixth Plan, an amount of Rs. 12 lakhs has been proposed. An amount of Rs. 14.70 lakhs has been suggested for strengthening of the Regional Workshop attached to the S. C. B. Medical College, Cuttack during the Sixth Plan.

E. S. I. Scheme

31-32. The objective of the E. S. I. Scheme is to provide medical facilities to the insured person employed in factories and their family members as per the provisions 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.

The number of employees brought into the fold of the scheme up to 31st March 1978 is about 83,700 workers. To cater to the needs of the above number of workers and their families, 21 dispensaries and 3 hospitals have been set up. Facilities of full medical care for all the insured industrial workers are being extended since September 1976.

31-33. The Fifth Plan provision for the Scheme was Rs. 48 lakhs, out of which Rs. 6 lakhs was State Government's share. Up to 1977-78 the expenditure has been to the extent of Rs. 34.04 lakhs, the State Government share being Rs. 4.19 lakhs.

The E. S. I. Scheme is essentially a social welfare scheme for industrial workers and its extension to all industrial areas would not only provide medical relief to the workers but also other social benefits such as sickness benefit, maternity benefits, compensation for personal injuries, etc.

31-34. During the Sixth Plan, the scheme will be extended to new industrial complexes at Sambalpur, Balasore, Talcher, Paradeep, Jagatpur, Machhkund and Joda. The additional number of insured persons to be covered is 28,000. It may be stated that some of the bigger industrial units like Hindustan Aeronautics Limited and Hindustan Steel Limited which provide employment to about 40,000 workers have not been brought under the purview of the Employees State Insurance Act since the medical and other social benefits aimed to be provided under the Act are being made available to their workers more or less in the same ratio as under the scheme. The total coverage of employees by the end of the Sixth Plan would be about 1.11 lakhs.

31-35. With the increase in the number of workers, the hospitalisation facilities are also proposed to be augmented. According to the standard envisaged under the Employees State Insurance Scheme, there would be 4 beds for each 1,000 workers covered under the scheme. The present availability of 137 beds (62 in Choudwar, 50 in Kansabahal and 25 in Brajarajnagar) will be increased to 241 beds in 1978-79 and hospitals with 125 more beds are proposed to be set up during the Plan period. One T. B. ward consisting of 50 beds at Rajagangpur would start functioning in 1979-80. The facilities available in hospitals are also proposed to be improved by providing more 'X'-ray units, increase in the number of beds, more specialised treatment by appointing Specialist in Medicine, Gynaecology and Surgery in all the hospitals during 1978-79.

31-36. The total Plan Outlay for the Sixth Plan under Employees State Insurance Scheme has been proposed at Rs. 22 lakhs. This amount relates to the State Government share and will be spent for continuance of (1) hospitals at Kansabahal and Brajarajnagar, (2) dispensaries at Cuttack, Jajpur Road and Rourkela, (3) Upgradation of four dispensaries at Berhampur, Bardol, Bhubaneswar and Chandili Rayagada, and (4) opening of hospitals at Chandili, Rayagada, Rajgangpur, Bhubaneswar, (5) augmentation of bed strength of Employees State Insurance Hospitals at Choudwar, Brajarajnagar and Chandili Rayagada, (6) opening of 8 bedded wards at Barang and Barbil, and (7) purchase of two X-ray Plants.

31-37. Out of the total outlay of Rs. 22 lakhs, a sum of Rs. 7.50 lakhs is earmarked for Sub-Plan areas for opening of hospitals and continuing of one dispensary and one hospital

Centrally Sponsored Schemes

31-38. A substantial increase in the outlay under the Central Plan is envisaged, the proposed outlay during the Sixth Plan being of the order of Rs. 7,292.85 lakhs as against Rs. 3,509.31 lakhs during the Fifth Plan period. Out of this provision, the Family Welfare Programme has the largest share of Rs. 31,39.84 lakhs as against the Fifth Plan outlay of Rs.22,52.50 lakhs. Keeping the objective of bringing down the birth rate to 30 per thousand by the end of 1983, it would be necessary to protect approximately 36% of the eligible couples in the State by the end of the Sixth Plan period as against 26.5% achieved by the end of 1977-78. The basic strategy will be to step up efforts by all accepted methods of contraception with special emphasis on Voluntary Sterilisation Programme with a view to protecting approximately 17.52 lakhs couples by the end of 1983.

31-39. With the eradication of small-pox from the State, the erstwhile N. S. E. P. staff will be deployed under the Expanded Programme of Immunisation which will concentrate on immunisation of infants, Pre-school children, expectant mothers with D. P. T., D. T. respectively. In addition to this they will also provide prophylaxis against nutritional anaemia among mothers and children and prophylaxis against blindness in children caused by Vitamin 'A' deficiencies. A provision of Rs. 252.95 lakhs has been made under the Expanded Programme of Immunisation.

31-40. An amount of Rs. 16,34.93 lakhs has been proposed for continuance of the Modified Plan of Operation under N. M. E. P. which has been adopted in this State since 1st April 1977. During the Sixth Plan the plasmodium falciparum containment project will be pursued vigorously in selected districts of the State and Urban Anti-larval Programme will be launched in selected towns. Decentralisation of laboratory services at the P. H. C. level and opening of malaria clinics will be taken up. Fever treatment depots and drugs distribution centres will be made more active.

31-41. Considering the high incidence of Leprosy in the State, main efforts in the Sixth Plan will be directed towards containment of the disease during the coming five years and its ultimate eradication from the State within a reasonable period of time. An outlay of Rs. 2,12.34 lakhs has been proposed in the Sixth Plan. The proposed outlay in addition to providing for continuance of programmes during the Fifth Plan will also go towards opening of five new Leprosy Control Units in the State, upgradation of 12 Leprosy Control Units, establishment of 6 temporary hospitalisation wards, 100 Survey Education and Treatment Centres and 20 Urban Leprosy Centres. The State Government have already accepted implementation of the Central Scheme for Re-orientation of Medical Education and Training an amount of Rs. 67.50 lakhs has been proposed for implementation of the above during the Sixth Plan.

31-42. The Community Health Workers Scheme which was implemented in the State with effect from the 2nd October 1977 in selected P. H. Cs. will be continued and extended to all P. H. Cs. in the State during the Sixth Plan period. A sum of Rs. 1,317.98 lakhs has been proposed to be spent during the Sixth Plan period. The Multipurpose workers scheme will be extended to the remaining districts in the State, during the Sixth Plan for which a sum of Rs. 171.80 lakhs has been proposed and an amount of Rs. 50.00 lakhs has been proposed for intensification of School Health Services.

TRIBAL SUB-PLAN

(i) State Plan

31-43. In the past there has not been any appreciable investment for the health care of the tribal people. The main emphasis in this Sector, therefore has been to provide for special programme for improvement in the health status of the tribal population which is awfully inadequate now. The tribals constitute about 24% of the total population. The total outlay on divisible items included under the State Plan proposed for the Sixth Plan period amounts to Rs. 3,387.91 lakhs, out of which an amount of Rs. 986.13 lakhs has been quantified under the Tribal Sub-Plan. The following special schemes are contemplated to be undertaken in tribal sub-plan areas, during the Sixth Plan period.

31-44. Provision under the Minimum Needs Programme include an amount of Rs. 50 lakhs for completion of P. H. C. buildings and staff quarters in tribal sub-plan areas. It has also been suggested to convert 20 P. H. Cs. in the tribal sub-plan areas to 30 bedded rural hospitals with provision of adequate number of staff, X-ray and ambulance services and laboratory facilities for which provision of Rs. 350.00 lakhs has been made. By the end of the year 1978-79, 6 upgraded P. H. C. buildings are likely to be completed in Sub-Plan areas. It has been proposed to augment the existing medicine grant of Rs. 12,000 per P. H. C. to Rs. 15,000. Provision in respect of Sub-Centres is proposed to be increased from Rs. 2,000 to Rs. 3,000. A sum of Rs. 140.74 lakhs has been proposed for augmentation of medicine grants to 118 P. H. Cs. and 567 Sub-Centres in Tribal Sub-Plan areas.

31-45. Control of communicable diseases, in tribal sub-plan areas and special health hazards like T. B. Leprosy and sexually transmitted diseases have been given special emphasis. It is proposed to provide 24 additional T. B. beds in the District Headquarters Hospitals at Phulbani and Koraput, establish 3 V. D. Clinics at Rairangpur, Rayagada and Panposh for which an outlay of Rs. 17.30 lakhs has been suggested.

An amount of Rs. 320.95 lakhs has been proposed for improvement to hospitals and dispensaries in tribal areas. Facilities proposed include 200 additional beds in selected hospitals in tribal sub-plan areas, provision of specialist services, improvement of hospitals at the Tahasil level and extension of laboratory services to all P. H. Cs. in Tribal Sub-Plan areas.

(ii) Centrally sponsored schemes—

31-46. A total amount of Rs. 1,327.45 lakhs has been earmarked to be spent in the tribal Sub-Plan areas under the different Centrally sponsored schemes for which there is a total provision of Rs. 5,601.83 lakhs. An amount of Rs. 552.55 lakhs has been reserved for Family Welfare and Maternity and Child Health services, in tribal sub-Plan areas. New starts proposed include establishment of 6 urban F. W. Centres, 2 additional A. N. M. Training Centres, intensification of Immunisation programme, and training of Dais. An amount of Rs. 462.00 lakhs has been suggested for control/eradication of Malaria, Leprosy and the other communicable diseases.

(iii) Special Central Assistance

31-47. A tentative outlay of Rs. 40 lakhs has been earmarked out of special Central assistance scheme during 1978-79 for implementation schemes like Survey on Nutritional and health standards in tribal areas, establishment of 38 Mini Health Centres, establishment of 10 bedded T. B. wards in 7 hospitals at Subdivisional level in Tribal Sub-Plan areas and construction of building for dispensaries and Mobile Health Units in the sub-plan area.

31-48. A total amount of Rs. 508.24 lakhs is required under the schemes to be funded from special Central assistance, which includes an amount of Rs. 40 lakhs required during the current financial year. Out of this provision, an amount of Rs. 244.50 lakhs has been reserved for up gradation of one sub-Centre in each of the 118 P.H. Cs. in the tribal areas to the status of a Mini Health Centres. construction of quarters for Medical officers and augmentation of medicines grants. An amount of Rs. 89.25 lakhs has been proposed for extension of the buildings and construction of staff quarters for 10 bedded T. B. wards to be attached to the 19 Subdivisional level hospitals in Tribal Sub-Plan areas. An amount of Rs. 51 lakhs has been proposed for upgradation of Health administration in tribal areas with provision of additional supervisory staff at the level of C. D. M. Os, S. D. M. Os. and necessary Para Medical Nursing and supporting staff.

31-49. Upgradation of dietary standards and nutrition has been given special emphasis. An amount of Rs. 53.01 lakhs has been proposed for health coverage of beneficiaries under Nutrition programme, Nutrition and Health Survey in four districts, establishment of Nutrition Therapy Centres at 5 subdivisional level hospitals, provision of Nutritionists/Public Health Nurses in 118 P. H. Cs. in the tribal sub-plan area. An amount of Rs. 24.20 lakhs has been suggested to undertake disability survey among tribals and provision of facilities for treatment in selected tribal districts. A small amount of Rs. 6.27 lakhs has been proposed to provide special health coverage to the Lodhas tribes in Mayurbhanj district.

Employment Potential

31.50. The schemes proposed under the State Plan Centrally Sponsored and Special Central Assistance scheme in the Sixth Plan period will have the potential of offering employment to the following categories of personnel in the branches of Health Care services.

(i) Medical officers	..	1,817
(ii) Para-Medical Personnel	..	2,834
(iii) Other supporting staff	..	2,377
(iv) Class IV	..	3,102

FIVE-YEAR PLAN (1978-83) FINANCIAL OUTLAYS—

Sl. No.	Programme	Plan period 1974-78		1978-83		
		Approved outlay	Expenditure	Spill over	New	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Rural Health Programme (MNP)	378.76	367.66	466.18	1,775.82	2,242.00
2	Control of Communicable diseases	8.98	5.01	10.81	184.19	195.00
3	(a) Hospital and dispensaries—Urban	97.24	93.91	68.53	343.99	418.52
	(b) Hospital and dispensaries—Rural	42.70	40.70	18.17	861.10	879.27
4	Medical Education & Research	234.97	233.86	138.12	556.90	695.02
5	Training Programme	9.86	9.81	3.98	47.70	51.68
6	Indigenous Systems of Medicines & Homoeopathy	59.82	48.81	252.32	97.68	350.00
7	Other Programme P.H.	25.00	22.77	3.58	123.00	126.58
8	Miscellaneous Schemes	18.56	18.56	9.46	..	9.46
9	Other Programmes of Medical	6.90	5.80	1.82	30.65	32.47
	Total	882.79	846.89	972.97	4,027.03	5,000.00

HEALTH PROGRAMME OUTLAY HEALTH PROGRAMME

APPENDIX-I (H)

(Rs. in lakhs)

Capital			Revenue				Phasing of outlays for—				
New work	Continuing works	Total	Staff	Equipment	Contingencies	Total	1978-79 approved outlays	1979-80	1980-81	1981-82	1982-83
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
911.00	374.18	1,285.18	229.04	98.80	628.98	956.82	170.00	528.43	564.60	584.58	394.39
28.67		28.67	83.01	16.00	67.32	166.33	10.81	40.75	44.30	47.85	51.29
126.40	21.29	147.69	153.37	37.80	79.66	270.83	45.73	79.05	95.20	101.50	97.04
424.00	2.33	426.33	184.58	190.19	78.17	452.94	21.95	190.39	212.37	228.90	225.66
172.70	107.30	280.00	215.34	82.20	117.48	415.02	71.82	149.90	154.65	160.30	158.35
7.00		7.00	10.06	5.00	29.62	44.68	3.98	9.10	10.80	14.10	13.70
67.93	70.84	138.77	170.00	20.00	21.23	211.23	28.85	75.32	76.39	81.01	88.43
26.00		26.00	72.34	14.50	13.74	100.58	3.58	25.60	33.87	28.80	34.73
10.00		10.00	7.05		2.41	9.46	9.46				
			12.87		9.60	22.47	1.82	6.25	9.05	9.40	5.95
1,773.70	576.04	2,349.64	1,137.66	464.49	1,084.21	2,650.36	368.00	1,104.79	1,201.23	1,256.44	1,069.54

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FINANCIAL OUTLAYS—HEALTH PROGRAMME

APPENDIX—II (H)

(Rs. in lakhs)

Sl. No.	Programme	Plan period 1974-78		1978-83		
		Approved outlay	Expenditure	Spill over	New	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
I. RURAL HEALTH PROGRAMME						
1	Completion of incomplete PHC Staff Qrs. (including water supply & 470 Sub-Centres).	31.60	28.60	164.01	..	164.03
2	Estt. of 196 subsidiary Sub-Centres	..	..	..	261.00	261.00
3	502 Sub-Centres (8,000 population) Medicines & buildings for 300 Sub-Centres in different areas.	..	..	..	96.00	96.00
4	Upgradation of 77 P.H.Cs. into 30 bedded Rural Hospital.	72.03	66.15	148.00	1,024.00	1,172.00
5	Constn. of Addl. Staff Qrs. in P.H.Cs. (for 277 I. T.)	3.70	3.70	69.15	..	69.15
6	Continuance of 396 posts of A. N. Ms.	16.36	16.14	19.12	..	19.12
7	Augmentation of medicine grant to P.H.Cs. & Sub-Centres.	175.83	173.88	43.96	251.00	294.96
8	Augmentation of medicine grant to F. W. Sub-Centres.	79.24	79.24	21.92	143.82	165.74
	Total	378.76	367.66	466.18	1,775.82	2,242.00
II. CONTROL OF COMMUNICABLE DISEASES						
1	Cholera control programme (3 Teams)	2.43	2.43	1.00	6.00	7.00
2	FILARIA CONTROL PROGRAMME (Filaria control unit—3/survey unit—1/Upgradation of Filaria Research Unit at Puri).	0.84	0.83	1.81	6.67	8.48
3	T. B. CONTROL PROGRAMME	..	..	..	71.00	71.00
	(a) Intensification of T. B. control in rural areas					
	(b) Provision of Additional T. B. Isolation beds in District. Headquarters. Hospital.					
	(c) Et. of Padiatric Ward in T. B. Hospitals					
4	S. T. I. (V. D.)	..	..	..	3.30	3.30
5	N. M. E. P. in Maintenance Phase area	4.51	0.95	4.00	20.00	24.00
6	National Programme for Prevention of Visual Impairment and control of Blindness and Trachoma.	1.20	0.80	4.00	43.22	47.22
7	Estt. of Ophthalmology Institute in the State	..	..	..	34.00	34.00
	Total	8.98	5.01	10.81	184.19	195.00

APPENDIX-II (H)

(Rs. in lakhs)

Capital			Revenue				Phasing of out lays for				
New work	Continuing works	Total	Staff	Equip-ment	Continent	Total	1978-79 approved out-lays	1979-80	1980-81	1981-82	1982-83
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
..	164.00	164.00	..	..	..	..	29.00	45.00	45.85	25.60	17.68
131.00	..	131.00	80.47	9.50	40.50	130.47	..	44.00	60.00	76.00	81.47
60.00	..	60.00	..	..	36.00	36.00	..	24.00	24.00	24.00	24.00
720.00	141.00	861.00	132.96	89.30	139.05	361.31	56.00	300.85	321.07	353.30	150.11
..	69.15	69.15	..	..	..	..	..	15.00	15.00	17.00	22.15
..	..	..	15.61	..	3.51	19.12	19.12	..	..	..	..
..	..	..	..	..	244.18	244.18	43.96	62.80	62.80	62.80	63.10
..	..	..	..	..	165.44	165.44	21.92	35.88	35.88	35.88	35.88
911.00	374.18	1,285.18	229.04	98.80	628.98	956.52	170.00	528.43	564.60	594.58	394.39
..	..	..	5.40	..	1.60	7.00	1.00	1.50	1.50	1.50	1.50
..	..	..	6.08	..	2.40	8.48	1.81	1.00	1.50	2.00	2.17
18.67	..	18.67	21.33	8.00	23.00	52.33	..	15.50	16.50	18.50	21.50
..	..	..	3.20	..	0.10	3.30	..	0.75	0.80	0.85	0.90
..	..	..	..	..	24.00	24.00	4.00	5.00	5.00	5.00	5.00
..	..	..	32.00	3.00	12.22	47.22	4.00	8.00	10.00	12.00	14.22
10.00	..	10.00	15.00	5.00	4.00	24.00	..	10.00	9.00	8.00	7.00
28.67	..	28.67	83.01	16.00	67.32	166.33	10.81	40.75	44.30	47.85	51.29

Sl. No.	Programme	Plan period 1974--78			1978--83	
		Approved outlay	Expenditure	Spill over	New	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
OTHER PROGRAMME (PUBLIC HEALTH)						
1	Strengthening of Drug Testing Lab. and Headquarters. Organisations.	17.72	15.49	3.00	11.00	14.00
2	Estt. of Intelligence-cum-legal cell	..	..	..	5.00	5.00
3	Expansion of Drugs periferal Estt.	..	..	..	10.00	10.00
4	Strengthening of H. E. B.	..	..	0.10	7.60	7.60
5	Strengthening of V. H. S.	..	..	0.48	7.52	8.00
6	Strengthening of P. H. Analytical Laboratory	..	..	..	7.80	7.80
7	Strengthening of Food Organisation	..	..	..	18.98	18.98
8	Estt. of Regional 3 P. H. Analytical Laboratory	..	..	..	13.20	13.20
9	Health measure in natural calamities	7.28	..	..	..	..
10	Strengthening the School Health Services in the State	..	..	..	12.00	12.00
11	Estt. of Vaccine Institute	..	..	..	30.00	30.00
Total—Other programme (P. H.)		25.00	22.77	3.58	123.00	126.58
III. HOSPITAL & DISPENSARIES—URBAN						
1	STRENGTHENING OF DISTRICT HEAD-QUARTERS HOSPITAL					
	(a) Continuance of staff	..	..	..	..	..
	(b) Completion of incomplete buildings	..	..	..	..	..
	(c) Purchase of Ambulance van	..	..	..	..	..
	(d) Purchase of X-Ray machine	..	..	..	..	..
	(e) Construction of Additional Staff quarters	..	..	..	..	..
	(f) Provision of water-supply	..	..	..	..	..
	(g) Estt. of Cancer Detection Centre	..	..	..	..	..
	(h) Estt. of Casualty Unit	..	..	..	..	..
	(i) Provision Cardiology services	..	..	..	..	..
	(j) Purchase of specialised equipment	..	..	..	..	..
	(k) Provision of additional beds in tribal areas (404) beds	40.30	38.27	2.48	198.97	222.45
2	SPECIALIST SERVICES IN D. H. H. AND IN 3 T. B. HOSPITAL					
	(a) Continuance of specialist	..	..	..	..	..
	(b) Creation of 44 additional posts of specialist	..	..	..	..	..
	(c) Creation of 9 posts of specialists (Medicine/Surgery/O. & G.).	10.61	9.40	16.22	33.78	50.00

Capital			Revenue				Phasing outlays for				
New work	Continuing works	Total	Staff	Equipment	Contingencies	Total	1978-79 approved outlays	1979-80	1980-81	1981-82	1982-83
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
..	7.00	4.00	3.00	15.00	3.00	2.00	2.50	3.00	3.50
..	4.50	..	0.50	5.00	..	1.00	1.25	1.25	1.50
..	9.00	..	1.00	10.00	..	1.40	1.60	2.45	4.55
..	6.60	..	1.00	7.60	0.10	1.50	1.75	2.00	2.25
..	8.00	..	..	8.00	0.48	1.00	1.52	2.00	3.00
6.00	..	6.00	1.50	..	0.30	1.80	..	3.00	3.50	0.60	0.70
..	18.14	..	0.84	18.98	..	2.50	4.75	5.50	6.23
5.00	..	5.00	2.20	4.50	1.50	8.20	..	4.20	4.00	2.50	2.50
..	9.40	..	2.60	12.00	..	2.00	3.00	3.50	3.50
15.00	..	15.00	6.00	6.00	3.00	15.00	..	7.00	10.00	6.00	7.00
26.00	..	26.00	72.34	14.50	13.74	100.58	3.58	25.60	33.87	28.80	34.73
104.40	7.21	110.61	20.84	30.00	60.00	110.84	23.480	45.00	50.00	55.00	48.97
..	50.00	..	..	50.00	16.22	7.60	8.15	8.70	9.33

Sl. No.	Programme	Plan period 1974-78		1978-83		
		Approved outlay	Expenditure	Spill over	New	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
3	Esstt. of Dental Unit in D. H. S. (Dental/Bhanipatana/City Hospital, Cuttack/Sambalpur).	1.00	0.91	0.73	6.14	6.87
4	Construction of Hospital building for Rourkela	6.38	6.38	22.80	..	22.80
5	Esstt. of 50-bedded Hospital at Paradip	..	..	..	22.50	22.50
6	Esstt. of Paediatrics ward at Sambalpur	..	..	..	14.65	14.65
7	25-bedded Satellite hospital at Capital	..	..	..	12.10	12.10
8	Esstt. of Bacteriological Laboratory Services in D. H. Hs./Capital Hospital.	..	..	..	8.00	8.00
9	Improvement in Nursing Care	8.95	8.95	5.30	53.85	59.15
Total		97.24	93.91	68.53	349.99	418.53

RURAL

1 IMPROVEMENT OF REFERAL SERVICES IN RURAL HOSPITALS

(a) Continuance of Staff	..	..	..	..	..
(b) Completion of incomplete buildings	..	..	..	..	..
(c) Provision of Specialist services in Referral Hospital.	..	..	..	..	..

1 DISPENSARIES (RURAL)

(d) Creation of I. A./2nd M. O.	}	12.78	12.78	8.66	396.60	405.26
(e) Purchase of X-Ray Plant						
(f) Purchase of Ambulance Van & Creation of Staff.						
(g) Provision of Addl. beds						
(h) Constn. of Staff Qrs.						
2 Strengthening of Rural Health Services	..	19.39	17.39	..	334.00	334.00
3 Est. of Six Mobile Dental Units	..	..	..	..	12.32	12.32
4 Provision of Lab. Services in P. H. C. & Referral Hospitals	..	7.09	7.09	3.19	57.18	60.37
5 (a) Conversion of Dispy. into six-bedded hospitals	}	3.44	3.44	6.32	226.00	32.32
(b) Continuance of 8 six-bedded hospital						
6 Improvement of sanitation in existing hospitals	..	..	..	..	358.00	35.00
Total--Rural		12.70	10.70	18.17	861.10	879.27

Capital			Revenue				Phasing of outlays for				
New work	Continuing works	Total	Staff	Equipment	Contingencies	Total	1978-79 approved outlays	1979-80	1980-81	1981-82	1982-83
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
..	..	..	5.43	1.00	0.44	6.87	0.73	1.70	1.40	1.50	1.54
..	14.08	14.08	2.20	1.20	5.32	8.72	..	5.00	5.50	6.00	6.30
12.00	..	12.00	5.30	1.20	4.00	10.50	..	6.00	7.50	5.00	4.00
6.00	..	6.00	3.15	3.00	2.50	8.65	..	4.15	4.50	2.50	3.50
4.00	..	4.00	2.30	1.40	4.40	8.10	..	3.50	4.50	2.00	2.10
..	..	..	5.00	..	3.00	8.00	..	2.00	2.00	2.00	2.00
..	..	..	59.15	..	..	59.15	6.30	4.10	11.65	18.80	19.30
126.40	21.29	147.69	153.37	37.80	79.66	270.83	45.73	79.05	95.20	101.50	97.04
..
..
..
189.00	22.33	191.33	123.03	36.90	54.00	213.93	8.68	79.80	97.95	110.55	108.50
200.00	..	200.00	..	134.00	..	134.00	3.78	81.22	83.00	83.00	83.00
..	..	..	6.12	5.00	1.20	12.32	..	3.32	3.00	3.00	3.00
..	..	..	53.43	6.94	..	60.37	3.19	10.03	12.02	15.73	19.36
..	..	..	2.00	7.35	22.97	32.32	6.32	6.20	6.40	6.60	6.80
35.00	..	35.00	..	..	..	..	..	10.00	10.00	10.00	5.00
424.00	2.33	426.33	84.58	190.19	78.17	452.94	21.95	190.39	212.37	228.90	225.66

Sl. No.	Programme	Plan period 1974-78		1978-83		
		Approved outlay	Expenditure	Spill over	New	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
IV. MEDICAL EDUCATION						
1	Strengthening of S. C. B. M. College Hospital, Cuttack—					
	(a) Continuance of staff					
	(b) Continuing & New buildings					
	(c) Creation of Addl. Staff & Provision of equipment.					
	(d) Estt. of Cost Institute					
	(e) Strengthening of Mental Health institute					
	(f) Strengthening of Paediatric Institute					
	(g) Re-organisation of Anti-T. B. Demonstration Centre, Cuttack.					
	(h) Estt. of Cancer Institute	91.70	90.06	46.44	174.80	222.24
	(i) Estt. of Animal House					
	(j) Provision for 30 beds to each of the higher specialised unit.					
2	Strengthening of V. S. S. Medical College Hospital, Burla—					
	(a) Continuance of staff					
	(b) Continuing and New buildings	84.51	84.51	61.00	187.40	248.40
	(c) Creation of additional post and Provision of equipment.					
	(d) Opening of higher specialised unit					
	(e) Extension of Animal Houses					
3	Strengthening of M. K. C. G. Medical College and Hospital, Berhampur—					
	(a) Continuance of staff					
	(b) Creation of additional staff and Provision for purchase of equipment.	59.29	59.29	30.68	137.80	168.48
	(c) Constitution of Continuing and new building.					
	(d) Establishment of Animal house					
4	Strengthening of O. P. D. Casualty services in 3 Medical Colleges.				7.00	7.00
5	Rural-Cadiology services at R. H. C., Jagatsinghpur and upgradation of Department of cardiology and Cardiothoracic surgery unit at S. C. B. Medical College Hospital, Cuttack.				26.00	26.00
6	Re-orientation of Medical Education in C. D. Blocks				515.00	15.00
7	Estt. of Central Sterilisation Unit at 3 Medical College Hospital.				3.50	3.50
8	Estt. of Central Pathological Laboratory for Emergency Pathological Services in 3 Medical College Hospitals.				5.40	5.40
Total—Medical Education		234.97	233.86	138.12	556.90	695.02

Capital			Revenue				Phasing of outlays for				
New work	Continuing works	Total	Staff	Equip-ment	Contingencies	Total	1978-79 approved outlays	1979-80	1980-81	1981-82	1982-83
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
63.50	31.50	95.00	41.24	40.00	45.00	126.24	21.94	50.00	50.00	50.00	49.30
46.00	54.00	100.00	90.00	21.25	37.15	148.40	31.00	50.00	50.00	60.00	57.40
63.20	21.80	85.00	44.60	12.25	26.63	83.48	18.88	40.00	40.00	35.00	34.60
..	..	..	7.00	..	..	7.00	..	1.00	2.00	2.00	2.00
..	..	..	18.00	5.00	3.00	26.00	..	4.00	7.00	7.00	8.00
..	..	..	9.00	2.00	4.00	15.00	..	3.00	3.50	4.00	4.50
..	..	..	1.50	1.50	0.50	3.50	..	0.80	0.85	0.90	0.95
..	..	..	4.00	0.20	1.20	5.40	..	1.10	1.30	1.40	1.60
172.20	107.30	280.00	215.34	82.20	117.48	415.02	71.82	149.90	154.65	160.30	158.35

Sl. No.	Programme	Plan period 1974--78		1978--83		
		Approved outlay	Expenditure	Spill over	New	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
V. TRAINING PROGRAMME						
1	Training of Nurses--Addl. admission of 300 candidates & continuance of staff for Nursing Training.	8.85	8.85	3.78	24.20	27.98
2	Training of Lab. Technicians (240 candidates)	0.65	0.65	0.20	1.00	1.20
3	Training of optometrist & ophthalmic Asst.	..	..	..	2.50	2.50
4	Training of Dental Technician	..	..	..	1.00	1.00
5	Estt. of College of Pharmacy	..	..	..	19.00	19.00
6	Training of Radiographer	0.36	0.31	..	..	..
Total--Training Programme		9.86	9.81	3.98	47.70	51.68
VI. INDIGENEOUS SYSTEMS OF MEDICINES AND HOMEOPATHY						
	Medical College	11.21	9.58	50.94	10.30	61.24
	Post-Graduate Department	..	..	..	..	..
	Hospitals	8.95	8.90	31.51	72.12	103.63
	Dispensaries	31.57	27.12	138.27	8.23	146.50
	Others (Directorate & Subordinate Offices)	8.09	3.21	31.60	7.03	38.63
Total		59.32	48.81	252.33	97.68	350.00

Capital			Revenue				Phasing of outlays for				
New work	Continuing works	Total	Staff	Equip-ment	Contin-gencies	Total	1978-79 approved out-lays	1979-80	1980-81	1981-82	1982-83
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
			5.06		22.92	27.98	3.78	3.00	5.20	8.50	7.50
					0.20	1.20	0.20	0.25	0.25	0.25	0.25
					2.50	2.50		0.60	0.60	0.60	0.70
					1.00	1.00		0.25	0.25	0.25	0.25
7.00		7.00	5.00	5.00	2.00	12.00		5.00	4.50	4.50	5.00
7.00		7.00	10.06	5.00	29.62	44.68	3.98	9.10	10.80	14.10	13.70
30.83	5.00	35.83	17.00	5.00	3.41	25.41	3.40	13.49	15.33	14.98	14.04
37.10	0.10	37.20	55.00	6.00	5.43	66.43	2.97	27.72	24.04	25.47	23.43
	65.74	65.74	66.00	5.00	9.76	80.76	18.38	24.46	29.23	32.40	42.03
			32.00	4.00	2.63	38.63	4.10	9.65	7.79	8.16	8.93
67.93	70.84	138.77	170.00	20.00	21.23	211.23	28.85	75.32	76.39	81.01	88.43

Sl. No.	Programme	Plan period, 1974—78		1978—83		
		Approved outlay	Expenditure	Spill over	New	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
VII. OTHER HEALTH PROGRAMME						
Medical						
1	Strengthening of Directorate of Medical Education & Training.	1.76	1.10	0.32	6.10	6.42
2	Establishment of Planning & Evaluation Cell in Health Directorate.	..	..	..	3.05	3.05
3	Grant-in-aid to Hospitals/ Institutions/Voluntary Organisation.	1.80	1.70	0.30	8.00	8.30
4	Strengthening of Regional Workshop (Creation of Addl. staff & constn. of building).	3.34	3.00	1.20	13.50	14.70
Total—Other Programme		6.90	5.80	1.82	30.65	32.47
Miscellaneous						
1	Implementation of M. T. P. Act	..	2.50	2.50	1.50	1.50
2	Continuance of M. Cs.	..	14.54	14.54	7.71	7.71
3	Creation of 9 posts of Pharmacists	..	..	..	0.25	0.25
4	Completion of incomplete Buildings	..	1.52	1.52	..	..
Total—Miscellaneous		..	18.56	18.56	9.46	9.46

Capital			Revenue				Phasing of outlays for				
New work	Conting- ing works	Total	Staff	Equip- ment	Conti- gen- ces	Total	1978-79 Appro- ved out- lays	1979-80	1980-81	1981-82	1982-83
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
..	5.79	..	0.63	6.42	0.32	1.25	1.50	1.60	1.75
..	3.00	..	0.05	3.05	..	0.50	0.75	0.80	1.00
..	8.30	8.30	0.30	2.00	2.00	2.00	2.00
10.00	..	10.00	4.08	..	0.62	4.70	1.20	2.50	4.80	5.00	1.20
10.00	..	10.00	12.87	..	9.60	22.47	1.82	6.25	9.05	9.40	5.95
..
..	1.50	1.50	1.50	..	..	..	..
..	6.80	..	0.91	7.71	7.71	..	..	..	..
..	0.25	..	..	0.25	0.25	..	..	..	..
..	7.05	..	2.41	9.46	9.46	..	..	..	..

APPENDIX III (H)

Statement showing estimated non-plan component of expenditure towards schemes of 1974-78

(Rupees in lakhs)

Programme	Estimated committed level of expenditure (Non-Plan expenditure) for 1974-78 Plan Schemes as on	
	1-4-1978	1-4-1979
	(2)	(3)
1. Rural Health Programme	82.02	85.00
2. Communicable Diseases	5.93	9.61
3. Hospitals and Dispensaries	39.50	44.96
4. Medical Education and Research	12.28	15.37
5. Training Programme	3.35	3.98
6. Other Programmes	5.82	6.00
7. I. S. M. and Homeopathy	48.36	76.10
Total	197.26	241.02

HEALTH PROGRAMMES—TARGETS AND ACHIEVEMENT FOR STATES TRIBAL.

Programme	Units	Achievements of physical targets cumulative as on 1973-74	Position at the end of Fifth Plan, i. e., position obtaining in 1977-78	Target fixed for the Plan 1978-83
(1)	(2)	(3)	(4)	(5)
I. Minimum Needs Programme				
1. Primary Health Centre	Nos.	314	314	..
2. Subsidiary Health Centre	Nos.	..	..	196
3. Sub-Centres	Nos.	2,038	2,038	300
Rural Hospitals	Nos.	..	17	63
5. No. of Primary Health Centres covered under Workers Programme.	..	..	13	601
i. P. H. C.s.				
(a) Main Buildings	Nos.	210	298	..
(b) Staff Quarters	Nos.	988	1,054	202
I. Sub-Centres Building	Nos.	402	472	470
Hospitals and Dispensaries				
1. District Hospitals	Nos.	14	14	..
2. Subdivisional/Taluk Hospital	Nos.	42	42	..
3. Dispensaries				
i. Rural	Nos.	235	235	..
ii. Urban	Nos.	15	15	..
III. Medical Education				
1. Medical Colleges	Nos.	3	3	..
2. Annual Admission	Nos.	300	300	..
3. Annual outturn	Nos.	270	270	..
4. No. of post-graduate departments	Nos.	19	19	..
5. No. of annual admission in P.-G. Department	Nos.	..	147	..
6. Annual outturn of P.-G. Department	..	..	108	..
IV. Training Programme				
i. Nurses				
(a) Number of institutions	Nos.	3	3	..
(b) Annual admission	Nos.	325	325	..
(c) Annual outturn	..	260	260	..

Programme	Units	Achievements of physical targets cumulative as on 1973-74	Position at the end of Fifth Plan, i. e., position obtaining in 1977-78	Target fixed for the Plan 1978-83
(1)	(2)	(3)	(4)	(5)
2. A. N. Ms.				
(a) Number of Institutions	10	10	10	..
(b) Annual admission	240	240	240	..
(c) Annual outturn	240	200	200	..
3. M. P. Health Workers	..	..	..	6
4. C. H. Workers	..	..	1,000	11,000
V. Manpower position				
1. Doctors	Nos.	2,276	2,472	..
2. Dentists	Nos.	12	17	..
3. Nurses	Nos.	791	933	9
4. A. N. Ms.	Nos.	1,800	2,000	..
5. Lady Health Visitors	Nos.	300	300	..
VI. Indegenous Systems of Medicine				
1. Number of Colleges/Institutions	Nos.	1	1	..
2. Hospitals	Nos.	3	3	1
3. Dispensaries				
(a) Non-Tribal	Nos.	151	184	84
(b) Tribal Sub-Plan	Nos.	42	49	56
4. No. of Doctors				
<i>i. I. S. M.</i>				
(a) Non-Tribal	Nos.	214	248	114
(b) Tribal Sub-Plan	Nos.	42	49	56
<i>ii. Homeopathy</i>				
(a) Non-Tribal	Nos.	96	127	99
(b) Tribal	Nos.	22	32	56
<i>(b) Homeopathy</i>				
1. Colleges/Institutions	Nos.	1	1	..
2. Hospitals	Nos.	1	1	1
3. Dispensaries				
(a) Non-Tribal	Nos.	96	126	84
(b) Tribal	Nos.	22	32	56
VII. Other Programme				
1. Number of Drugs and Food Analytical Labs.	Nos.	1	1	..
2. Number of Psychiatric Clinics	Nos.	1	3	..
3. Number of Health Education Bureau	Nos.	1	1	..
4. Number of statistical Units	Nos.	1	1	..
Tribal Area Sub-Plan				
<i>A. N. Ms.</i>				
M. P. Health Workers	..	..	..	7
C. H. Workers	..	..	..	9,000

1978-79		Phasing for 1979-83				Remarks
Target fixed	Likely achievement	1979-80	1980-81	1981-82	1982-83	
(6)	(7)	(8)	(9)	(10)	(11)	(12)
..
..
..
2	2	2	2	..	..	..
4,000	4,000	5,000	2,000	..	..	..
67	67	..	..	..	..	..
..	10	..	..	..	..	..
..
..
..
..	..	1	..	..	..	..
12	12	18	18	18	18	..
8	8	12	12	12	12	..
29	29	31	18	18	18	..
8	8	12	12	12	12	..
14	14	31	18	18	18	..
8	8	12	12	12	12	..
..
..	..	1	..	..	..	..
12	12	18	18	18	18	..
8	8	12	12	12	12	..
..
..
..
..
2	2	2	3	..	..	..
1,000	1,000	5,000	2,000	..	..	..

HEALTH PROGRAMMES—TARGET AND ACHIEVEMENTS FOR STATES/TRIBAL AREAS

Programme	Units	Position at the end of fifth Plan i. e. position obtaining in 1977-78	Targets fixed for the Plan 1978-79
(1)	(2)	(3)	(4)
1. National Malaria Eradication Programme			
(a) Rural Units as per modified Plan of action	Nos.	13 Units	13 Units
(b) Urban Town covered	Nos.	..	8 Towns
2. Leprosy Control Programme			
(i) Central Units	Nos.	40	9
(ii) S. E. T. Centres	Nos.	232	100
(iii) Urban Leprosy Centres	Nos.	..	..
(iv) Re-constructive Surgery Units	Nos.	4	2
(v) (a) Training Centres for Medical Officers	Nos.	..	..
(b) No trained	Nos.	11	12
(vi) Temporary Hospitalisation wards	Nos.	19	..
(vii) No. of control Units upgraded	Nos.	13	10
3. Smallpox and Expanded programme of immunisation			
(i) Primary vaccination million	Nos.	11'19	..
(ii) Revaccination	Nos.	67'05	..
4. Tuberculosis			
(i) District T. B. Centres	Nos.	13	..
(ii) T. B. Isolation beds	Nos.	165	127
(iii) B. C. G. Vaccine supplied quantity	Nos.	..	..
5. Cholera Combat Teams			
	Nos.	2	3
6. V. D.			
(i) V. D. Clinics	Nos.	13	3
(ii) V. D. reference laboratories	Nos.	..	..
(iii) Survey teams	Nos.	..	..
7. Filaria			
(i) Control Units	Nos.	..	2
(ii) Survey Units Programme	Nos.	..	..
8. P. G. Departments in I. S. M.			
(i) No. of existing P. G. Departments assisted	Nos.	..	3
(ii) No. of P. T. S. upgraded	Nos.	..	..

V (H)

SEPARATELY WHERE SUB-PLAN EXIST AND UNION TERRITORIES

1978-79		Phasing for 1979-83				Remarks
target fixed	likely achievements	1979-80	1980-81	1981-82	1982-83	
(5)	(6)	(7)	(8)	(9)	(10)	
13 Units	13 Units	13	13	13	13	13 Units and containing.
3 towns	3	2	2	1	..	..
1	1	2	2	2	2	..
..	..	50	50	..	..	..
..
2	2	2	1	1	..	..
..
..	..	3	3	3	3	..
..
2	2	2	2	2	2	..
12:35	12:35	..	..	..	..	..
..
..
..	..	..	40	40	47	..
..
..	..	1	1	1	..	..
..	..	1	1	1	..	..
..
..
1	1	1	..	..	..	..
1	1	..	..	..	..	..
1	1	..	3	..	..	..
..

Programme	Units	Position at the end of fifth Plan i. e. position obtaining in 1977-78	Targets fixed for the Plan 1978-79
(1)	(2)	(3)	(4)
9. I. S. M. Pharmacies			
No. of Pharmacies-cum-Drug Testing Laboratories assisted.	Nos.	1	..
10. Combined food and drugs testing laboratories and Regional Food Laboratories.			
(i) No. of Food and Drug Testing laboratories set up	Nos.	1	..
11. Establishment of Psychiatric Clinics			
No. of clinics already existing	Nos.	3	..
12. Prevention of Blindness Including Trachoma Control Programme.			
(i) Mobile Units set up-	Nos.	2	1
(ii) P. H. Cs. assisted	Nos.	..	60
(iii) Patients treated at District Hospitals Ophthalmic	Nos.	..	10
(iv) Department in Medical Colleges upgraded	Nos.	1	..
13. Training and Employment of M. P. W.			
(i) No. of Districts covered	Nos.	..	13
(ii) No. of Workers Trained at low level	Nos.	2951	8040
(iii) No. of A. N. Ms. employed	Nos.	218	502
Tribal area Sub-Plan			
Training and employment of M. P. W.			
1. No. of districts covered	Nos.	..	..
2. No. of Trainees trained	Nos.	..	..
3. No. of A. N. Ms. employed	Nos.	..	..

1978-79		Phasing for 1979--83				Remarks
target \$gd	likely achievements	1979-80	1980-81	1981-82	1982-83	
(5)	(6)	(7)	(8)	(9)	(10)	
..
..	..	1	1	1
..
..
..	..	1
..	15	15	15	15
..	5	3	2	..	..	..
..
2	2	2	2	..	..	..
1100	1100	1000	500	..	..	..
71	71	29	..	..	..	..
2	2	2	3	..	..	..
1000	1000	1000	449	..	..	..
62	62	122	..	..	..	..

APPENDIX-
DETAILS RELATING TO

Agency/Nature of Beds	General Beds		T. B. Beds		Leprosy Beds	
	Urban	Rural	Urban	Rural	Urban	Rural
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. At State Headquarters	122	..	13	..	..	..
2. District Level	1360	..	211	..	120	..
3. Taluka Level (S. D) Hospital & other Government Hospitals & Dispensaries,	1892	920	62	308	50	..
4. Others (those run by Municipal Corporations & Corporate Bodies)	103	..	..	..	..	..
5. Private agencies	1045	834	30	24	..	..
Total	4522	1754	316	332	170	..
General Beds						
1. At State Head-quarters	54	..	..	..	..	..
2. District Level	110	..	..	..	..	..
Total :-	164	..	..	..	..	..

VI (H)

HOSPITAL BEDS

Others		Total nos. of all beds	Patient days (in 1000)		No. of deaths among in Patients	Beds position Ratio		Remarks
Urban	Rural		In patients	Out Patient		As on 1977-78	Target 1982-83	
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
..	..	135	61	241	492	..	..	Surgical Bed 619 Medical Bed 596
33	..	1,721	608	1,652	2,739	..	..
..	..	3,232	674	5,623	3,050	..	..
..	..	103	23	142	43	..	..
..	..	1,933	173	2,355	1,260	..	..
33	..	7,127	1,539	10,013	7,584	..	..
..	..	54	900	800	..	54	66	
..	..	110	800	2,900	..	110	60	
..	..	164	1,700	3,700	..	164	126	

APPENDIX-VI(H)

Statement showing extent of estimated employment generation and flow of benefits to weaker sections of the population

Sl. No.	Scheme	Estimated employment generation						Flow of benefits to—		
		1974-75	1976-78	1979-80	1979-81	1981-82	1982-83	Scheduled Caste	Scheduled Tribe	Other Backward Classes
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
I. Minimum Needs Programme										
1	Establishment of Subsidiary Health Centres.	..	..	50	50	50	96	31	47	..
2	Upgradation of 77 P. H. C's. into 30 bedded Hospitals.	..	..	133	332	332	332	151	302	..
II Control of Communicable Diseases										
1	Cholera Control Programme	..	..	11	11	11	..	4	7	..
2	T. B. Control Programme	..	..	15	15	15	11	7	14	..
3	Establishment of Ophthalmology Institute in the State.	..	..	15	13	..	..	4	6	..
4	V. D. Control Programme	..	..	6	6	3	..	2	4	..
5	Filaria Control Programme	..	..	8	8	..	..	2	4	..
6	Prevention and Control of Blindness and Tracoma.	..	..	5	5	6	..	2	4	..
Other Programme (P. H.)										
1	Strengthening of Drugs Testing Laboratory and Headquarters Organisation.	..	..	6	6	..	..	2	3	..

2	Establishment of Intelligence-cum-Legal Cell.	..	..	9	..	..	..	1	2	..
3	Expansion of Drugs peripheral Establishment.	..	..	12	14	..	..	4	6	..
4	Strengthening of H. F. B.	..	..	12	14	14	..	5	10	..
5	Strengthening of V. H. S.	..	..	16	16	8	..	5	10	..
6	Strengthening of P. H. Analytical Laboratory.	..	..	8	8	..	..	2	4	..
7	Establishment of Regional Analytical Laboratory.	..	..	11	11	11	..	4	6	..
8	Strengthening of Food Organisation	..	..	30	30	31	..	12	24	..
9	Establishment of Vaccine Institute	..	..	18	12	..	..	6	12	..
10	Strengthening of School Health Services	..	..	12	14	..	..	3	6	..
Hospital and Dispensaries										
1	Strengthening of District Headquarters Hospitals.	..	..	40	40	40	40	21	42	..
2	Specialist Services in D. H. H. & T. B. Hospitals.	..	..	39	16	..	..	7	14	..
3	Establishment of Dental Units in District Headquarters Hospitals.	..	..	12	..	..	..	2	3	..
4	Rourkela Hospital	..	..	18	3	..	..	4	6	..
5	Establishment of 50 bedded Hospital at Paradip.	..	..	20	..	..	..	4	6	..
6	Establishment of Paediatric Ward at Sambalpur.	..	..	15	..	..	..	2	4	..
7	Establishment of 25 bedded Satellite at Capital.	..	..	10	..	..	..	2	2	..

Sl. No.	Scheme	Estimated employment generation						Flow of benefits to—		
		1974—78	1976—78	1979—80	1979—81	1981—82	1982—83	Scheduled Caste	Scheduled Tribe	Other Backward Classes
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
8	Establishment of Bacteriological Laboratory Services in D. H. H./Capital Hospital.	..	..	12	14	..	..	4	6	..
9	Improvement of Nursing Care ..	..	..	100	100	100	73	50	100	..
10	Improvement of Referral Hospitals ..	..	..	50	100	100	62	48	96	..
11	Establishment of six Mobile Dental Units.	..	..	12	12	..	..	4	6	..
12	Provision of Laboratory Services in P. H. C's. and Referral Hospitals.	..	..	50	66	100	100	45	81	..
13	Conversion of Dispensaries in to six bedded Hospitals.	..	..	20	20	..	..	5	10	..
Medical Education										
1	Strengthening of S. C. B. Medical College & Hospital, Cuttack.	..	..	100	120	110	100	60	112	..
2	Strengthening of V. S. S. Medical College & Hospital, Buria.	..	..	60	80	80	..	50	100	..
3	Strengthening of M. K. C. G. Medical College & Hospital, Berhampur.	..	..	50	85	..	..	18	..	..
4	Strengthening of O. P. D. Casualty Services in 3 M. C. H's.	..	..	15	15	15	..	6	..	..

5	Upgradation of Department of Cardiology and Cardio-therasic Unit at S. C. B. M. C. & H., Cuttack.	..	..	1	11	..	..	3	..
6	Reorientation of Medical Education of C. D. Block.	..	..	10	10	10	..	4	8
7	Establishment of Central Sterilisation Units at 3 Medical College Hospitals.	..	..	15	15	..	..	4	8
8	Establishment of Central Pathological Laboratory for Emergency Pathological services in 3 M. C. H's.	5	5	5	..	2	4

Training Programme

1	Establishment of College of Pharmacy	20	5	4	6
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II. Other Programme (M. C.)

1	Strengthening of the Directorate of Medical Education and Training.	20	30	6	10
2	Establishment of Planning and Evaluation Cell in Health Directorate.	..	..	10	..	..	..	2	2

APPENDIX-VB (B)

Statement showing extent of estimated employment generation and plan of benefits to weaker sections of the population

Sl. No	Scheme	Estimated employment generation											
		1974-78				1978-79				1979-80			
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(3)				(4)				(5)			
<i>Health</i>													
I. S. M. and Homoeopathy													
1	Improvement of existing Ay. Hospitals in the State including Estt. of Herbal Garden attached to the G. A. H., Bhubaneswar.	3	2	..	9	2	2	..	14	2	3	..	6
2	Improvement of existing Ay. Dispensaries in the State including new Estt.	40	..	..	40	20	..	..	20	30	..	..	30
3	Improvement of existing Ay. Pharmacy attached to the G. A. M., Puri	..	..	..	..	..	..	..	..	..	..	..	..
4	Estt. of an Ay. Hospital at Bernampur.	..	..	..	..	..	..	..	..	4	8	..	20
5	Morbidity survey on "Yaws & Fleria" under I. S. M.	..	..	..	..	2	2	..	2	..	..	..	..
6	Introduction of Family Welfare Scheme under I. S. M	..	..	..	..	2	2	..	5	..	..	..	..
7	Re-orientation training for Kavi-rajs in P. H. and Preventive Programmes.	..	..	..	..	..	..	..	..	..	..	..	4

		Estimated employment generation											
		1980-81				1981-82				1982-83			
Sl. No.	Scheme	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(6)				(7)				(8)			
<i>Health</i>													
I. S. M. and Homoeopathy													
1	Improvement of existing Ay. Hospitals in the State including Estt. of Harbal Garden attached to the G. A. H., Bhubaneswar.	2	3	..	5	..	..	..	..	..	..	..	..
2	Improvement of existing Ay. Dispensaries in the State including new Estt.	30	..	..	30	30	..	..	30	30	..	..	30
3	Improvement of existing Ay. Pharmacy attached to the G. A. M., Puri.	..	..	..	..	..	..	..	..	..	..	..	..
4	Estt. of an Ay. Hospital at Berhampur.	..	..	..	..	..	..	..	..	..	..	..	..
5	Morbidity survey on "Yaws & Fileria" under I. S. M.	..	..	..	..	..	..	..	..	..	..	..	..
6	Introduction of Family Welfare Scheme under I. S. M.	..	..	..	..	..	..	..	..	..	..	..	..
7	Re-orientation training for Kavi- rajs in P. H. and preventive Programmes.	..	..	..	..	..	..	..	..	..	..	..	..

Estimated employment Generation

Sl. No.	Scheme	Scheduled Castes				Scheduled Tribes				Other backward classes			
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(9)				(10)				(11)			
<i>Health</i>													
I. S. M. and Homoeopathy													
1	Improvement of existing Ay. Hospitals in the State including Estt. of Herbal Garden attached to the G. A. H., Bhubaneswar.	1	1	..	4	2	1	..	7	6	8	..	23
2	Improvement of existing-Ay. Dispensaries in the State including new Estt.	28	..	..	28	43	..	..	43	109	..	..	109
3	Improvement of existing Ay. Pharmacy attached to the G. A. M., Puri.	..	..	..	..	..	..	..	1	..	..	..	1
4	Estt. of an Ay. Hospital at Bernampur.	1	1	..	2	1	2	..	4	2	5	..	14
5	Morbidity survey on "Yaws" & "Filaria" under I. S. M.	..	..	..	..	1	1	..	1	1	1	..	1
6	Introduction of family welfare scheme under I. S. M.	..	..	..	1	1	1	..	1	1	1	..	3
7	Re-orientation training for Kavi-rajs in P. H. and preventive programmes.	..	..	..	1	..	..	..	1	..	..	..	2

		Estimated employment Generation											
Sl. No.	Scheme	1974-78				1978-79				1979-80			
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(3)				(4)				(5)			
8	Introduction of specialist service in every P. H. Cs of the State under I. S. M.	..	..	..	..	..	..	..	..	13	26	..	26
9	Introduction of refresher course for inservice Ay. Kavirajs with the qualification of Ayurvedacharya.	..	..	..	..	..	..	..	..	..	..	..	3
10	Improvement of G. A. M., Puri	10	..	..	4	..	..	..	4	..	..	..	..
11	Improvement of existing Homoeo Hospitals at Bhubaneswar.	3	4	..	12	2	2	..	5	..	..	..	..
12	Improvement of existing Government. Ay. Pharmacy, Balangir and Herbal Garden at Harishankar.	..	..	1	2	..	..	..	..	..	..	..	..
13	Improvement of existing Homoeopathic Dispensaries in the State including new Establishment.	40	..	..	40	20	..	..	20	30	..	..	30
14	Estt. of a Homoeopathy Pharmacy attached to the G. H., Bhubaneswar.	..	..	..	..	..	..	..	..	..	..	..	..
15	Establishment of a Homoeo Hospital at Sambalpur.	..	..	..	..	..	..	..	..	4	8	..	20

Sl No.	Scheme	Estimated employment Generation											
		1980-81				1981-82				1982-83			
		Medical	Para- medical	Other Tech,	Non- Tech.	Medical	Para- medical	Other Tech.	Non Tech.	Medical	Para- medical	Other Tech.	Non- Tech.
(1)	(2)	(6)				(7)				(8)			
8	Introduction of specialist service in every P. H. C. of the State under I. S. M.	..	..	..	..	..	..	..	..	..	..	..	..
9	Introduction of refresher course for inservice Ay. Kavirajs with the qualification of Ayurvedacharya.	..	..	..	..	..	..	..	..	..	..	..	..
10	Improvement of G. A. M., Puri ..	..	..	..	..	..	..	..	..	..	..	..	..
11	Improvement of existing Homoeopathic Hospital, Bhubaneswar.	..	..	..	..	..	..	..	..	..	..	..	..
12	Improvement of existing Government. Ay Pharmacy, Balangir and Herbal Gauden at Harishankar.	..	..	..	..	..	..	..	..	..	..	..	..
13	Improvement of existing Homoeopathic Dispensaries in the State including new Establishment.	30	..	..	30	30	..	..	30	30	..	..	30
14	Establishment of a Homoeo. Pharmacy attached to the G. H., Bhubaneswar.	3	2	..	12	..	..	..	..	..	..	..	..
15	Establishment of a Homoeo Hospital at Sambalpur.	..	..	..	..	..	..	..	..	..	..	..	..

Estimated employment Generation

Sl. No.	Scheme	Scheduled Castes				Scheduled Tribes				Other backward classes			
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(9)				(10)				(11)			
8	Introduction of specialist service in every P. H. C. of the State under I. S. M.	1	3	..	3	2	5	..	5	10	18	..	18
9	Introduction of refresher course for inservice Ay, Kavirajs with the qualification of Ayurvedacharya.	..	..	..	..	..	..	..	1	..	..	..	2
10	Improvement of G. A. M., Puri	1	..	..	1	2	..	..	2	7	..	..	5
11	Improvement of existing Homoeopathic Hospital at Bhubaneswar.	1	1	..	2	1	..	..	3	3	4	..	12
12	Improvement of existing Government. Ay. Pharmacy, Balangir and Herbal Garden at Harishankar.	..	..	..	..	..	..	..	1	..	..	1	1
13	Improvement of existing Homeopathic Dispensaries in the State including new establishment.	28	..	..	28	43	..	..	53	109	..	..	109
14	Establishment of a Homoeo Pharmacy attached of the G.H., Bhubaneswar.	1	..	..	1	1	1	..	2	1	1	..	9
15	Establishment of a Homoeo Hospital at Sambalpur.	1	1	..	2	1	2	..	4	2	5	..	14

Estimated employment Generation

Sl. No.	Scheme	1974-78				1978-79				1979-80			
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(3)				(4)				(5)			
16	Morbidity survey on "Yaws" & "Filaria" under Homoeopathy.	..	..	..	..	2	2	..	2	..	..	..	..
17	Introduction of P. H. scheme for treatment of "Chicken-pox" under Homoeopathy.	..	..	..	..	2	..	..	4	..	..	..	..
18	Re-orientation training for Homoeopathy Doctor on P. H. and preventive programmes.	..	..	..	..	..	..	..	4	..	..	..	..
19	Introduction of specialist Service in every P. H. C. of the State under Homoeopathy.	..	..	..	..	..	..	..	..	13	26	..	26
20	Improvement of G. H. M. C., Bhubaneswar. Introduction of degree course.	8	..	..	6	5	..	..	5	..	..	..	..
21	Introduction of degree course for Homoeopathic Diploma holder.	..	..	..	..	..	..	..	..	..	..	..	3
22	Improvement of curriculum for Housemanship training and holding of seminars under Homoeopathy.	..	..	..	..	..	..	..	..	..	..	..	4
23	Strengthening administrative machinery of the newly created Directorate.	..	..	2	28	..	..	..	19	..	..	..	..

Estimated employment Generation

Sl. Sl.	Scheme	1980-81				1981-82				1982-83			
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(6)				(7)				(8)			
16	Morbidity survey on "Yaws" and "Filaria" under Homoeopathy.	..	..	..	..	..	..	..	..	..	..	..	..
17	Introduction of P. H. scheme for treatment of "Chicken-pox" under Homoeopathy.	..	..	..	..	..	..	..	..	..	..	..	..
18	Re-orientation training for Homoeopathy Doctors on P. H. and preventive programmes.	..	..	..	..	..	..	..	..	..	..	..	..
19	Introduction of specialist Service in every P. H. C. of the State under Homoeopathy.	..	..	..	..	..	..	..	..	..	..	..	..
20	Improvement of G. H. M. C., Bhubaneswar. Introduction of degree course.	..	..	..	..	..	..	..	..	..	..	..	..
21	Introduction of degree course for Homoeopathic Diploma holder.	..	..	..	..	..	..	..	..	..	..	..	..
22	Improvement of curriculum for Housemanship training and holding of seminars under Homoeopathy.	..	..	..	..	..	..	..	..	..	..	..	..
23	Strengthening administrative machinery of the newly created Directorate.	..	..	..	..	..	..	..	..	..	..	..	..

Estimated employment Generation

Sl. No.	Scheme	Scheduled Castes				Scheduled Tribes				Other backward classes			
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(9)				(10)				(11)			
16	Morbidity survey on "Yaws" and "Filaria" under Homoeopathy.	1	..	..	..	1	1	..	1	1	1	..	1
17	Introduction of P. H. scheme for treatment of "Chicken-pox" under Homoeopathy.	..	..	..	1	1	..	..	1	1	..	..	2
18	Re-orientation training for Homoeopathy Doctors on P. H. and preventive programmes.	..	..	..	1	..	..	..	1	..	..	..	2
19	Introduction of specialist Service in every P. H. C. of the State under Homoeopathy.	1	3	..	3	2	5	..	5	10	18	..	18
20	Improvement of G. H. M. C., Bhubaneswar. Introduction of degree course	1	..	..	1	2	..	..	2	10	..	..	9
21	Introduction of degree course for Homoeopathic Diploma holder.	..	..	..	1	..	..	..	1	..	..	..	1
22	Improvement of curriculum for Housemanship training and holding of seminars under Homoeopathy.	..	..	..	1	..	..	..	1	..	..	..	2
23	Strengthening administrative machinery of the newly created Directorate.	..	..	..	5	..	..	..	12	..	..	..	2
													30

Estimated employment Generation													
Sl. No.	Scheme	1974-78				1978-79				1979-80			
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(3)				(4)				(5)			
24	Reorganisation of subordinate Offices under I. S. M. Homoeopathy.	2	..	..	28	10	..	..	90	..	..	..	..
25	Introduction of Health Education cell in the D. I. M. & H., Orissa.	..	..	..	..	..	..	..	..	..	..	..	8
26	Introduction of Health Intelligence (Statistical) Cell in the D. I. M. & H., Orissa.	..	..	..	..	..	..	..	..	..	..	..	3
	Grand Total	106	6	3	169	67	10	..	194	96	71	..	183
Centrally Sponsored Scheme													
1	Development of I. S. M. Pharmacy at Balangir including herbal garden.	..	..	..	..	4	..	2	7	..	..	..	..
2	Post-graduate Training and Research in Av. at G. A. M., Puri.	..	..	..	..	6	..	2	4	..	..	..	..
3	Appointment of 3rd Doctors in every P. H. C. of the State from the I. S. M. and Homoeopathy Doctors.	..	..	..	..	..	..	..	..	314	..	..	314
	Total	..	..	..	..	10	..	4	11	314	..	..	314

		Estimated employment Generation											
		1980-81				1981-82				1982-83			
Sl. No.	Scheme	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.
(1)	(2)	(6)				(7)				(8)			
24	Reorganisation of subordinate Offices under I. S. M. and Homoeopathy.	..	..	..	..	..	..	..	..	..	..	..	..
25	Introduction of Health Education Cell in the D. I. M. & H., Orissa.	..	..	..	..	..	..	..	..	..	..	..	..
26	Introduction of Health Intelligence (Statistical) Cell in the D. I. M. & H., Orissa.	..	..	..	..	..	..	..	..	..	..	..	..
	Grand Total	65	5	..	77	60	..	..	60	60	..	..	60
Centrally Sponsored Schemes													
1	Development of I. S. M. Pharmacy at Balangir including herbal garden.	..	..	..	..	..	..	..	..	..	..	..	..
2	Post-graduate Training and Research in Av. at G. A. M., Puri.	18	..	6	12	..	..	..	..	..	..	..	..
3	Appointment of 3rd Doctors in every P. M. C. of the State from the I. S. M. & Homoeopathy Doctors.	..	..	..	..	..	..	..	..	..	..	..	..
	Total	18	..	6	12	..	..	..	..	..	..	..	..

Estimated employment Generation

Sl. No.	Scheme	Scheduled Castes				Scheduled Tribes				Other Backward Classes				
		Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	Medical	Para-medical	Other Tech.	Non-Tech.	
(1)	(2)	(9)				(10)				(11)				
24	Reorganisation of subordinate Offices under I. S. M. and Homocopathy.	1	..	..	17	2	..	..	26	9	..	..	75
25	Introduction of Health Education Cell in the D. I. M. & H., Orissa.	..	..	..	1	..	..	..	1	..	..	..	6
26	Introduction of Health Intelligence (Statistical) Cell in the D. I. M. & H., Orissa.	..	..	..	1	..	..	..	1	..	..	..	1
	Grand Total	66	10		105	106	20		181	282	62	3	476	
	Centrally Sponsored Schemes													
1	Development of L. S. M. Pharmacy at Balangir including herbal garden.	1	1	1	1	2	2	..	1	4
2	Post-graduate Training and Research in Av. at G. A. M., Pari.	2	..	1	1	5	1	3	17	..	6	12
3	Appointment of 3rd Doctors in every P. H. C. of the State from the I. S. M. & Homocopathy Doctors.	49	..	..	..	75	..	..	..	190	..	..	..
	Total	52	..	1	2	81	2	5	209	..	7	16

APPENDIX I (F. W.)
BASIC STATISTICS
Population (1971) Census

Rural	..	20,099,220
Urban	..	1,845,395
Total	..	21,944,615

2. Area (Square Kelometeres) 155844.9 Sq. Kms.
3. Density of population (1971 Census)—141 Persons for Sq. Kms.
4. No. of Districts—13
5. Estimated Births, deaths and growth rates (S. R. E. Estimates)

Year		Birth Rate	Death Rate	Growth Rate
1974	..	33.6	15.8	
1975	..	33.5	17.9	
1976	..	34.9	16.0	

6. No. of couples on the reproductive age group (Wife age 15—44) in December, 1977—4,391,000
7. No. of couples effectively protected at present—1,114,996
8. No. of couples likely to be protected at the end of Fifth Plan (1977-78)—1,114,996

ALLOCATION AND EXPENDITURE DURING THE FIFTH PLAN FOR FAMILY WELFARE, PROGRAMME

(Rs. in lakhs)

		1974-75	1975-76	1976-77	1977-78
1. Allocation	..	210.48	260.98	560.10	393.69
2. Provisional Payment	..	210.48	260.98	560.10	393.69
3. Actual Expenditure	..	196.84	289.45	694.58	545.79

Proposed outlay for the Plan 1978—83 and annual breakup (includes Building Expenditure)

Proposed Outlay		Annual Break-up		
		Revenue	Expenditure	Capital (Building)
1978-79	704.51	78.61
1979-80	607.30	100.00
1980-81	625.56	100.00
1981-82	675.94	100.00
1982-83	696.63	60.00
Total	..		3301.14	438.61

Note—Details under the above columns have been furnished scheme-wise (Statement enclosed)

APPENDIX II (F.W.)

ENCLOSURES

Name of the Scheme	1978-79	1979-80	1980-81	1981-82	1982-83	Total 1978—83
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. State F. W. Bureau ..	8.40	8.80	9.20	9.60	10.10	48.10
2. District F. W. Bureau ..	16.44	17.20	18.10	19.00	19.96	98.70
3. Rural F. W. Centre ..	147.18	154.50	162.20	160.30	178.82	813.00
4. Training and Employment of M. P. W.	24.65	25.90	25.90	15.00	15.05	106.50
5. U. F. W. Services ..	5.45	5.70	5.90	6.10	6.40	29.55
6. Transport ..	19.91	20.90	21.90	22.89	24.00	109.60
7. Compensation ..	321.21	200.00	200.00	250.00	250.00	2,121.21
8. O. S. & Supplies ..	22.08	23.20	24.80	26.00	27.30	123.38
9. Mass Education ..	3.00	10.00	10.00	11.00	12.00	45.00
10. R. F. W. Training Centres ..	3.00	4.20	4.40	4.60	4.81	22.10
11. Training of Nurses, Midwives and L. H. Vs.	7.28	7.60	8.00	8.40	8.82	48.10
12. Other Training Scheme Indegenous Dhaies.	8.75	8.75	8.75	9.75	8.75	43.75
Total—Non-Tribal ..	587.35	486.75	499.15	551.64	566.01	3,688.99
1. Other Training Scheme ..	8.75	8.75	8.75	8.75	8.75	43.75
2. F. W. Centres ..	75.05	78.80	82.70	86.80	91.15	414.50
3. Training of Nurses and Midwives ..	4.18	4.40	4.60	4.82	5.00	23.00
4. Other Services and Supplies ..	4.72	5.00	5.20	5.43	5.65	26.00
5. District F. W. Bureau ..	7.19	7.50	7.80	8.20	8.61	39.30
6. Training and Employment of M. P. Workers.	15.04	15.10	15.10	10.00	10.06	85.30
7. U. F. W. Services ..	1.14	1.20	1.26	1.30	1.40	6.30
Total—Tribal ..	116.07	120.75	125.41	125.30	130.62	618.15
Total—Centrally Sponsored Plan ..	703.51	507.50	524.56	676.94	696.63	4,247.14
C. H. W ..	188.15	269.49	327.52	216.26	316.56	1,317.98

APPENDIX III (F. W.)

PHYSICAL ACHIEVEMENTS—FIFTH PLAN

Year	Voluntary Sterilisations		I. U. D. S.		Conventional Contraceptives and oral pills	
	Expectation of Performance	Achievement	Expectation of performance	Achievement	Expectation of performance	Achievements
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1974-75	95,000	68,971	39,600	20,176	1,12,400	33,278
1975-76	1,09,200	1,25,040	32,300	23,976	49,800	43,558
1976-77	1,95,500	32,284	32,500	19,066	41,100	42,149
1977-78	1,75,000	80,655	36,000	10,236	1,12,300	35,534

EXPECTATION OF PERFORMANCE PLAN (1978-83)

Year	Voluntary sterilisations	J. U. D. S.	Conventional and oral pill users
(1)	(2)	(3)	(4)
1978-79	.. 1,35,000	10,000	45,000
1979-80	.. 1,60,000	11,000	45,000
1980-81	.. 1,90,000	12,000	52,000
1981-82	.. 2,20,000	12,500	56,000
1982-83	.. 2,50,000	13,000	60,000

APPENDIX IV (F. W.)

MATERNAL AND CHILD HEALTH SCHEME

Scheme	1974—78	1978—83
	Targets (No. of Beneficiaries)	Targets (No. of Beneficiaries)
(1)	(2)	(3)
1. Immunisation of—		
(a) Expectant mothers with tetanus toxoid ..	7,60,000	2,84,477
(b) Children with D. P. T. Vaccine (0—2 Years)	9,50,000	5,11,649
(c) Children with D. T. Vaccine (3—6 Years)	..	..
(d) Children in Primary School—		
(i) Diphtheria-Tetanus Vaccine ..	9,00,000	5,92,063
(ii) Typhoid Vaccine ..	Nil	Nil
(e) Children (0—6 Years) with Polio Vaccine	Nil	Nil
(f) Children with measles Vaccine ..	Not being given	
2. Prophylaxis against—		
(a) Nutritional Anaemia—		
(i) Mothers ..	6,00,000	5,97,039
(ii) Children ..	6,50,000	7,12,033
(b) Prophylaxis against blindness among children caused by vitamin "A" deficiency.	29,00,000	14,64,683

APPENDIX IV-A (F. W.)
 MATERNAL AND CHILD HEALTH SCHEME
 (Coverage of Beneficiaries)

Scheme	1974-75		1975-76		1976-77		1977-78		
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Mother with T. T.	..	1,30,000	5,263	1,30,000	31,524	2,00,000	99,456	3,00,000	1,48,234
Children with D. P. T. (6-11 Years).		1,75,000	8,663	1,75,000	38,211	3,00,000	1,65,900	3,00,000	2,99,275
Prophylaxis against Nutritional Anaemia.
Mother	..	1,25,000	1,62,910	1,00,000	1,46,845	1,50,000	1,09,748	2,25,000	1,77,536
Children	..	1,25,000	1,88,709	1,00,000	1,19,876	1,50,000	1,64,231	2,75,000	2,39,217
Prophylaxis against blindness due to defi- ciency of Vit. A.									
Children	..	4,00,000	1,41,992	40,000	2,77,119	7,00,000	4,34,031	14,00,000	6,11,541

APPENDIX V (F. W.)

BUILDING PLAN (1978—83)

(Rs. in lakhs)					
Item.	Achievement as on 1-4-1978	In progress on 1-4-1978	Target for 1978—83	Outlay proposed for 1978—83	
(1)	(2)	(3)	(4)	(5)	
1. Rural Family Welfare Centres—					
(i) Main Centres } (ii) Staff Quarters }	178	87	49	110.25	
2. Rural Sub-Centres—					
(i) Health } (ii) Family Welfare } Out of 553 Sub-Centres constructed, 81 places did not qualify on population criteria. }	553	39	585	175.50	
(iii) Minimum Needs Programme	..	..	..	..
3. Training Schools (Multipurpose Workers).					
(A. N. M. Training Schools)	..	7	..	3	16.50
4. Training Schools (Supervisors, Promotional training.					
..	
5. Regional Health and Family Welfare Training Centres.					
2	..	..	..	4.00 for Construction of Staff quarters of the R. H. & F. W. Training Centre, Cuttack.
6. Provision of E. I. and S. I. to 179 (265—86) F. W. Wing and Staff quarters at the rate of Rs.20,000 each (20,000×179)					
..	..	..	..	35.80
7. Construction of Operation Theatre and 6 bedded Ward in 23 Subdivisional Hospital (83,000×23)					
..	..	..	..	19.09
8. Conversion of labour room into Operation Theatre in 264 P. H. C. (264×10,000)					
..	..	..	..	26.40

(1)	(2)	(3)	(4)	(5)
9. Construction of 10 bedded Ward and O. T. in P. P. Centre—4 districts. Hospitals, District Hospitals (1.25×4) and conversions of one O. T. in 4 District Headquarters Hospitals (50-4)	8.00
10. Construction of addl. room in P. P. Centre (15,000×16)	2.40
11. Provision of External P.H. in 314 P.H.Cs. (314×10,000)	31.40
12. Provision for Sanitary Installation for 48 Sterilisation in six bedded Ward.	7.00
13. Provision of Sanitary and Installation to the 10 bedded Wards and Operation Theatre under P. P. P.
14. Provision of Sanitary Installation to the additional room for the P. P. P. Centre (16 Nos.).	0.32
Total				438.61 lakhs

APPENDIX VI (F. W.)

Scheme/Category staff	No. of posts as per pattern	No. of posts likely to be sanctioned on 1-4-1978	Posts likely to be filled as on 1-4-1978
(1)	(2)	(3)	(4)
I (a) Rural F. W. Centres			
1. Medical Officers	314	314	272
2. Extension Educator	314	274	267
3. A. N. Ms.	314	310	314
4. L. H. Vs.	314	194	171
5. Computers	314	285	277
6. F. P. Health Assistant	632	632	615
7. Store-Keeper-cum-Clerk	314	310	273
8. Drivers	314	147	113
9. Vol. Workers	..	..	..
(b) Rural Sub-Centres			
1. A. N. Ms.	703	703	703
2. Vol. Workers	703	..	703
II Urban F. W. Centres (Run by State Government)			
(A) Type-I			
1. A. N. M.	16	16	11
2. F. W. Field Worker (Male)	16	16	11
(B) Type II			
1. F. W. Extension Educator	4	4	4
2. A. N. M.	4	4	4
3. F. W. Field Worker (Male)	4	4	4
(C) Type III			
1. Medical Officer	3	3	3
2. L. H. V.	3	3	3
3. Extension Educator	3	3	3
4. A. N. M.	34	3	3
5. F. W. Field Worker (Male)	3	3	3
6. Store-Keeper-cum-Clerk	3	3	3

	(1)	(2)	(3)	(4)
III Post Partum (Run by State Government)				
Post Partum Centres in Teaching Hospital				
1. Assistant Professor ..		3	3	3
2. Lecturer in Health Education and F. W. (Non-Medical) ..		3	..	..
3. Lecturer in Paediatric ..		3	..	..
4. Lecturer in Statistic and Demography ..		3	..	..
5. Anaesthetist/Registrar ..		3	3	3
6. Projectionist ..		3	3	3
7. M. O. ..		6	6	6
8. Extension Educator ..		3	3	3
9. L. H. V. ..		3	3	3
10. A. N. M. ..		3	3	3
11. F. W. Field Worker (Male) ..		3	3	3
12. Steno. Typist	3	..
13. L. D. C. ..		3	3	3
14. Driver ..		3	3	3
15. Peon ..		3	3	3
16. Store-Keeper-cum-Clerk ..		3	3	3
Post Partum Centres in non-Teaching Hospital				
1. Senior M. O. ..		7	7	7
2. Anaesthetist ..		7	7	7
3. Projectionist ..		7	7	7
4. Medical Officer ..		14	14	14
5. Extension Educator ..		7	7	7
6. L. H. V. / P H. N. ..		7	7	7
7. A. N. Ms. ..		7	7	7
8. F. W. Field Worker (Male) ..		7	7	7

	(1)	(2)	(3)	(4)
9. Steno Typist	..	7	7	7
10. L. D. C.	..	1	..	..
11. Store Keeper-cum-Clerk	..	7	7	7
12. Driver	..	7	7	..
13. Peon
Type (B)				
1. Medical Officer
2. Extension Educator
3. L. H. V.
4. A. N. M.
5. F. W. Field Worker (Male)
6. Store Keeper-cum-Clerk
Type (C)				
1. Medical Officer	..	4	..	..
2. Extension Educator
3. L. H. V.	..	4	..	2
4. A. N. M.	..	4	..	4
5. Store Keeper-cum-Clerk	..	4	..	..
6. F. W. Field Worker (Male)	..	4	..	4
Regional Health and F. W. Training Centres				
1. Principal	..	2	2	2
2. Medical Lecturer-cum-Demonstrator	..	2	2	2
3. Health Extension Educator	..	2	2	2
4. Social Science Instructor
5. P. H. Nurse Instructor
6. Health Education Extension Officer	..	8	..	6
7. Statistician	..	2	..	1

	(1)	(2)	(3)	(4)
8 Office Superintendent	1
9 Projectionist	..	2	..	2
10 Computer	..	2	..	2
11 Artist-cum-Draftsman	..	2	..	2
12 Clerk-cum-Typist	..	2	..	2
13 Steno Typist	..	2	..	2
14 Clerk-cum-Accountant-cum-Store Keeper	..	2	..	2
15 Driver-cum-Mechanic	..	6	..	2
16 Cleaners / Sweeper / Choukidar/ Male/Peon
V. District Family Welfare Bureau (13)				
1 District Family Welfare Officer	..	13	13	13
2 Administration Officer	..	13	..	..
3 U. D. Clerk	..	13	13	13
4 Assistant Accountant	..	13	13	13
5 Cashier	..	13	13	13
6 Steno Typist	..	13	13	13
7 L. D. Clerk-cum-Typist	..	13	13	13
8 U. D. Clerk (Stores)	..	13	13	13
9 Mass Education & Information Officer	..	13	13	4
10 District Extension Educator	..	26	26	18
11 Artist-cum-Photographer	..	13	13	13
12 Projectionist	..	13	13	13
13 Statistical Investigator	..	13	13	13
14 F. W. Field and Evaluation Worker (Computers)
15 Driver-cum-Mechanic	..	39	39	39
16 Cleaner	..	13	13	13
17 Peon / Choukidar	..	26	26	26

	(1)	(2)	(3)	(4)
Mobile Service Units				
18 Medical Officers	..	13	..	13
19 A. N. M. S.	..	13	..	13
20 O. T. Attendant	..	26	..	26
VI. State F. W. Bureau				
1 Director	..	1	1	1
2 Assistant Director	..	2	2	2
3 Deputy assistant Director (M. E. I. O.)	..	1	1	1
4 Health Education Officer	..	1	1	1
5 Administration Officer	..	1	1	1
6 Store Officer	..	1	1	1
7 Office Superintendent
8 Inspecting officer (Stores)
9 Steno grapher
10 U. D. assistant	..	3	3	3
11 Accounts officer Senior Accountant	..	1	1	1
12 Accountant
13 A. V. Officer
14 Exhibition/out-door Publicity Officer
15 Editor
16 Assistant Editor	..	1	1	1
17 Senior Artist / Technical Assistant
18 Artist-cum-Photographer	..	1	1	1
19 Steno Typist
20 Sr. Accountant
21 L. D. Clerk	..	4	4	4
22 Demographer	..	1	1	1
23 Social Scientist	..	1	1	1
24 Statistician	..	2	1	2
25 Investigator	2	..
26 Statistical assistant	..	1	1	1
27 Driver	..	3	1	3
28 Packers	..	2	3	1
29 Peon / Cleaner / Night Guard	..	1	2	1

APPENDIX VII (F. W.)

A. Rural Family Welfare Centres and Sub-centres

1. No. of C. D. Blocks	..	314
2. No. of P. H. C. Functioning as on 1st April 1978	..	314
3. No. of Rural Family Welfare Centres functioning as on 1st April 1978	..	314
4. No. of Rural Family Welfare Centres located in their own building as on 1st April 1978.		178
5. Target for new Rural Family Welfare Centres in Plan, 1978-83	..	Nil
6. No. of Sub-centres functioning as on 1st April 1978		
(i) Under Health	..	942
(ii) Under Family Welfare	..	700
(iii) Under Minimum Needs Programme	..	396

B. Under Family Welfare Centres

Urban Centres	Functioning as on 1st April 1978		
	Government	Vo. Orga- nisation	Target for 1978-83
(1)	(2)	(3)	(4)
Type-I	11	Nil	Nil
Type-II	4	Nil	Nil
Type-III	3	6	23

C. District Family Welfare Bureau

1. No. of Functioning as on 1st April 1978	..	13
2. Target for Plan (1978-83)	..	Nil

APPENDIX VIII (F. W.)

Position of Sterilisation beds (under Sterilisation beds, Post-Partum and Voluntary Sterilisation Facilities in Rural and Semi-Urban Areas)

Scheme	No. of Sterilisation beds	
	Position as on 1-4-1978	Target for Addl. beds
(1)	(2)	(3)
1. Sterilisation bed Scheme	5	..
2. Post-Partum	68	40
3. Provision of Sterilisation Facilities in Rural and Semi-Urban areas.	150	138
Total	223	178

APPENDIX IX (F. W.)

Training Facilities	Position as on 1-4-1978	Additional Targets 1978-83
(1)	(2)	(3)
1. Multipurpose Workers Training Schools (ANM Training School)-		
(i) No. of Schools	10	..
(ii) No. of Seats	240	..
2. Multipurpose Workers' Supervisors Promotional Training Schools-		
(i) No. of Schools	..	1
(ii) No. of Seats	..	30
3. Regional Health and Family Welfare Training Centres		
(i) No. of Sub-centres	2	..
(ii) No. of Seats	60	..

CHAPTER 32

SANITATION AND DRINKING WATER-SUPPLY

32.1. Under Water Supply Programme, the main thrust in the Five-Year Plan 1978—83 would be towards providing sources of safe drinking water-supply to all the identified problem and difficult villages in the State. Adequate provision has also to be made to meet the requirements of water-supply and sanitation in the medium and small towns and for completing the committed and on going schemes in the larger towns.

Urban Water-Supply Scheme

32.2. During the Fifth Five-Year Plan, allocation under Urban Water-Supply Schemes in the State was Rs. 3.95 crores. Out of 23 Urban Water-Supply Schemes, which were being executed during the Fifth Plan, 4 schemes viz Kendrapara, Jajpur Road, Jajpur Town and Nayagarh have been completed. Of the balance 19 schemes, the financial requirement of 11 schemes (both Government grant and contribution of Urban Local Bodies), was fully provided during the Fifth Plan. These 11 schemes are expected to be completed during 1978-79. Therefore, financial outlay has to be made during the plan 1978—83, for 8 on going water-supply schemes including the New Capital Water-Supply Scheme (Annexure VII) for which an amount of Rs. 508.00 lakhs has been provided. The above amount includes share of the concerned Urban Local Bodies of Rs. 209.62 lakhs for which the Urban Local Bodies would avail of L. I. C. loan assistance.

32.3. Twenty-eight new viable water-supply schemes in the State have been selected at an estimated outlay of Rs. 17.50 crores for execution during the plan period, 1978—83 (Annexure VII). The component of Government grant in the above 28 schemes will be Rs. 5.83 crores and Rs. 11.67 crores will be the contribution of the Urban Local Bodies, where the schemes would be executed. The current years programme however, will include only the 8 on going schemes of which 6 would be completed this year. In the subsequent years, the programme will include two on going projects namely, New Capital Water-Supply Scheme, Joint Water-Supply Scheme, Berhampur and 28 new water-supply schemes.

Sewerage Schemes*(i) Cuttack Sewerage Scheme*

32.4. In 1974-75, a scheme was prepared for sewerage of Cuttack City at an estimated outlay of Rs. 9.93 crores. As the city of Cuttack, which is the most ancient and the most populous city of Orissa, is bounded on two sides by the two major rivers of the State, Mahanadi and Kathajodi, its sub-soil water table is very high. It would not be possible to have soaking pits/septic tanks in Cuttack except in certain pockets of the city, which are high lands. Therefore, for disposal of human waste, a comprehensive sewerage scheme is necessary for Cuttack with house sewers, branch sewers, interception sewers, trunk sewers and a sewerage treatment plant. In view of the magnitude of the scheme, it is proposed to be executed in two phases, first phase being executed during the plan period 1978—83 at an estimated outlay of Rs. 4 crores.

(ii) Capital Sewerage Scheme

32.5. In 1974-75, a scheme for sewerage of New Capital, Bhubaneswar, has been prepared at an estimated cost of Rs. 8.63 crores. A viable portion of the comprehensive scheme of Capital sewerage could be taken up with an outlay of Rs. 2.5 crores.

(iii) Rourkela Sewerage Scheme

32.6. With a very fast rate of population growth and urbanisation in Rourkela and with the growing importance of the Rourkela Civil Township because of its proximity to the Steel Plant in the Public Sector, it is proposed to take up the Rourkela Sewerage Scheme for which Rs. 50 lakhs has been provided during the Plan Period, 1978—83.

Drainage Scheme*(i) Cuttack Drainage Scheme*

32.7. Apart from provision of adequate water-supply and sewerage facilities, the drainage of the city, because of its saucer shape and two big rivers on both sides, poses a problem during the monsoons. It is proposed to take up a Drainage Scheme of Cuttack during the Plan period 1978—83 at an estimated outlay of Rs. 1 crore.

(ii) Bhubaneswar (Old Town) Drainage Scheme

32.8. In order to clear up the liability of the completed Fifth Five-Year Plan Scheme, a sum of Rs. 1.02 lakhs is provided in the Plan period 1978—83.

Survey and Investigation

32.9. The Public Health Engineering Department will be strengthened for taking up detailed survey and investigation of various water-supply sewerage and drainage schemes for which Rs. 63.98 lakhs has been provided during the plan period, 1978—83.

Conversion of Dry latrine to Sanitary Latrine**Under State Plan**

32.10. As a part of the programme of scientific disposal of human waste and elimination of human labour for such disposal it is proposed to take up a conversion programme of existing bucket type latrines in 14 district headquarters towns/urban growth centres in the State covering a population of about 6 lakhs at an estimated outlay of Rs. 10 crores during the plan period 1978—83.

32.11. It is proposed to implement the programme of conversion of dry latrines to sanitary latrines with 75% grants-in-aid and 25% loan to the beneficiaries. Government of India may give grants-in-aid assistance of Rs. 7.5 crores to meet the grants-in-aid component of the programme and the balance amount of Rs. 2.5 crores, which is the loan component, may be provided for under the State Plan.

Rural Water-Supply Scheme (Minimum Needs Programme)

32.12. Out of 50,924 villages in the State, 19,284 revenue villages have so far been identified as problem villages for supply of safe drinking water. These problem villages have been classified under the following categories—

(i) Villages either suffering from cholera endemic or guinea worms and containing excess of fluoride/iron/chloride.	8,634
(ii) Water scarcity villages geophysically unsuitable for digging sanitary wells	3,507
(iii) Other water scarcity villages	.. 7,143
Total	.. 19,284

32.13. Further survey for identification of problem villages has been undertaken and it is expected that the number of such villages would increase. In 12,141 villages coming under category (i) and (ii) tube-wells are being constructed at the rate of one in each village and in 7,143 water scarcity villages sanitary wells are being constructed at the rate of one in each village under the Minimum Needs Programme.

32.14. Under the tube-wells programme, 4,658 villages have been covered by the 31st March, 1978 under the Minimum Needs Programme in the State Plan and under the Centrally Sponsored Accelerated Rural Water-Supply Programme by 1977-78. During the current financial year (1978-79) it has been programmed to cover 1,272 villages by tube-wells under the Minimum Needs Programme of the State Plan. Besides, there is also a programme to cover 2,011 villages under the Accelerated Rural Water-Supply Programme. Thus, out of 12,141 villages where the tube-wells were to be constructed 7,941 villages have been covered and 4,200 villages are expected to be covered in 1979-80 with the efforts under the State Plan Minimum Needs Programme and the Accelerated Rural Water-Supply Programme.

32.15. As mentioned above, sanitary wells are to be constructed in 7,143 villages where water sources are scarce or non-existent. By the 31st March 1978, 2,691 villages have been covered with sanitary wells and 261 villages with tube-wells at the rate of one sanitary well/tube-well in each villages. Besides, funds for covering a further number of 2,030 villages have already been allotted but the work is at different stages of execution. In 1978-79 there is a programme to cover 1,988 additional villages under the Minimum Needs Programme. Thus, by the end of the 31st March, 1979, 6,370 villages will be covered under the sanitary wells programme leaving a balance of 773 villages to be covered during 1979-80. But in most cases sanitary fittings are yet to be provided.

32-16. In view of the achievements made, the provision of Rs. 26 crores under the tube-wells programme and Rs. 14 crores under the sanitary wells programme for the Sixth Plan period will be utilised to complete all incomplete wells, to cover all the problem villages either by a tube-well, or by a sanitary well and also to take up new tube-wells and sanitary wells in the problem villages on population basis at the rate of one per 200 population or part thereof. The detail programme has been indicated in Annexures 'B' and 'C.'

32-17. In 1977, the State Government have submitted an Accelerated Water-Supply Programme to Government of India with a total financial outlay of Rs. 51 crores proposing to cover all the identified villages in the State with tube-wells at the rate of one tube-well per 200 population or part thereof. The total programme envisages covering 42,402 tube-wells in 18,266 villages and 1,813 cistern units fitted with taps in 1,011 villages in the State. The cisterns are to be provided in the selected villages having a population of 1,000 or more where facilities for energisation of these wells are available. In other villages tube-wells will be provided on the approved population norm, i.e., at the rate of one tube-well per 200 population or part thereof. Out of this provision, the State Government have already received Rs. 3.60 crores by the end of 1978-79 leaving a balance of Rs. 47.40 crores expected to be allotted further.

32-18. The State Government have carefully analysed the problem and feel that a portion of the balance provision under the Accelerated Water-Supply Programme may be utilised for installation of sanitary wells out of the balance amount of Rs. 47.486 crores (Rs. 51.085—Rs. 3.60 crores) which is expected to be allotted by Government of India under the Accelerated Water-Supply Programme. The cost of 1,813 cisterns estimated at Rs. 9.938 crores may be deducted. The balance amount of Rs. 37.548 crores will be available for tube-wells and sanitary wells. 60 per cent of the amount, which is roughly Rs. 22.524 crores, may be utilised for tube-wells and 40 per cent i.e., Rs. 15.024 crores for sanitary wells. With the investment of Rs. 22.524 crores, it is expected to construct nearly 23,221 tube-wells and with the investment of Rs. 15.024 crores, nearly 18,780 sanitary wells may be constructed. This assistance will supplement the provision that would be made under the State Plan for construction of tube-wells and sanitary wells under Minimum Needs Programme.

32-19. It may be mentioned in this connection that 3 Investigation Units are undertaking the survey of the Rural Water-Supply Programme and they are in a position to find out the other villages that should be included in the identified villages. After their findings, there will be scope for utilisation of funds under the State Plan and the Accelerated Water-Supply Programme to cover the new identified villages with the number of tube-wells/cisterns/sanitary wells on population basis.

Centrally Sponsored Schemes

Execution of Sewerage Scheme at Bhawanipatna Town in the district of Kalahandi under conversion of dry latrines into sanitary latrine programme.

32-20. This is a pilot scheme under Central Sector for conversion of dry latrine into sanitary latrines. According to the programme of Government of India, the scheme is to be taken up in 30 selected towns in the country with a population range of 20,000 to 50,000 having a minimum Water-Supply of 25 G. P. C. D. The sewerage scheme of Bhawanipatna Town in the district of Kalahandi at an estimated cost of Rs. 19.25 lakhs has been approved by Government of India. The entire cost of the scheme will be provided by Government of India as grant. For execution of the scheme an amount of Rs. 9.62 lakhs and Rs. 6.00 lakhs has been sanctioned by Government of India during the years 1976-77 and 1977-78 respectively. The balance amount of Rs. 3.62 lakhs has been proposed as the outlay for the on-going scheme for the year 1978-79 with timely allotment of funds, the scheme will be completed by March, 1979.

Central Plan Schemes

(a) Accelerated Rural Water-Supply Programme

(i) Monitoring Cell

32-21. A Monitoring Cell has been created in the office of the Chief Engineer, Public Health, Orissa during 1977-78. The function of the Cell is to monitor the progress of implementation of the projects, collection and reporting the information collected to the Central and State authorities

to ensure that the schemes are implemented expeditiously. During the year 1977-78, a sum of Rs. 80,000-00 was sanctioned by Government of India as 100% grant, which has been fully spent. During 1978-79 there is a budget provision of Rs. 2-00 lakhs for this scheme and the full reimbursement of the expenditure as grant has been assured by Government of India. During the Plan period 1978-83 the total financial outlay under the scheme would be Rs. 10 lakhs.

(ii) Investigation Units

32-22. In 1977-78 three Public Health Investigation Units were created in the State for examining and clearing the water-supply schemes. Like the monitoring cell, the Investigation Units are being financed by Government of India with 100 per cent Central assistance. During the year 1977-78 Central assistance of Rs. 2-00 lakhs was received and utilised by the State Government. For the current year (1978-79) there is a budget provision of Rs. 5-00 lakhs for the purpose and Government of India have also assured full reimbursement by Central assistance. During the Plan period 1978-83, the total financial outlay under the scheme would be Rs. 25 lakhs.

(b) Conversion of dry latrines into flush latrines

32-23. This scheme will not only help to eliminate the existing problem of Urban Local Bodies in maintaining scavenging services for dry latrines, but will also provide opportunities to large number of households in the State, which are presently without latrines, to have their own private water sealed latrines. During the Plan period 1978-83 it is proposed to implement the scheme in 14 District Headquarters towns/Urban growth centres of the State. Under this programme permanent water sealed latrines will be constructed, whose disposal units initially would consist of litching pits. Later on, when sewerage schemes will be executed in those towns, the same latrine can be utilised without any alteration, by extending sewerage line connection to street manholes. In the 14 District Headquarters towns/Urban growth Centres in the State, 6-23 per cent households are provided with sanitary latrines and 28-10 per cent households are having dry latrines leaving a balance of 65-67 per cent households, which are going without any latrine. Unless adequate grant-in-aid is given alongwith loan, the programme of conversion of dry latrines into water sealed latrines cannot be successfully implemented. It is recommended to give 75 per cent cost of conversion as grant-in-aid and balance 25 per cent as loan to individual beneficiaries. The loan part alongwith interest will be released in suitable annual instalments. During the plan period 1978-83, it is estimated to spend Rs. 10 crores on this conversion scheme. The detailed programme of execution of the scheme is given in Annexure-A.

Employment

32-24. The sewerage schemes, urban water-supply schemes and tube wells schemes during the Sixth Plan period are likely to generate employment potential to about 69,432 persons of which 3,780 will be technical, 944 will be educated non-technical and 64,708 will be unskilled and uneducated. The corresponding employment during 1974-78 was 852 skilled and 11,374 unskilled persons only. Besides "Sanitary Wells" scheme will have the labour component of investment of Rs. 817-84 lakhs out of the total outlay of Rs. 1400-00 lakhs. This investment will generate employment for 29,958 unskilled and semiskilled labourers.

32-25. Under the scheme conversion of any latrines into sanitary latrines the employment potential is likely to be for 2934 persons out of which 157 will be technical, 39 will be educated non-technical and 2738 will be unskilled and uneducated labourers.

ANNEXURE-A
CONVERSION OF DRY LATRINE TO SANITARY LATRINE—PROGRAMME 1978—83

Sl. No.	Name of Towns	Population as per 1971 census	Total Nos. of latrine required for conversion	Total Nos. of latrine proposed to be converted 1978—83	Estimated cost of programme	Under State Plan	Central Assistance	Population will be covered under State Plan
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
					(Lakhs of Rupees)			
1.	Cuttack (M)	.. 2,05,759	31,451	26,922	302.75	75.68	227.07	44,009
2.	Sambalpur (M)	.. 74,458	12,892	11,035	124.14	31.03	93.11	15,930
3.	Puri (M)	.. 72,674	13,607	11,605	130.55	32.63	97.92	15,548
4.	Balasore (M)	.. 46,239	7,572	6,471	72.80	18.20	54.60	9,829
5.	Balangir (M)	.. 35,748	6,775	5,799	65.23	16.30	48.93	7,645
6.	Baripada (M)	.. 28,725	5,028	4,304	48.42	12.10	36.32	6,145
7.	Bhawanipatna (M)	.. 23,264	4,503	3,855	43.66	10.92	32.74	5,015
8.	Koraput (N)	.. 21,505	4,700	4,023	45.25	11.31	31.94	4,600
9.	Dhenkanal (M)	.. 19,615	3,106	2,659	29.91	7.47	22.44	4,192
10.	Keonjhar (M)	.. 19,340	3,354	2,871	32.29	8.07	24.22	4,136
11.	Sundargarh (M)	.. 17,244	3,433	2,939	33.06	8.27	24.79	3,692
12.	Bhubaneswar old Town (N)	.. 17,100	3,420	2,927	32.92	8.23	24.69	3,658
13.	Chhatrapur (N)	.. 10,835	1,958	1,676	18.85	4.71	14.14	2,317
14.	Phulbani (N)	.. 10,677	2,095	1,793	20.17	5.04	15.13	2,283
	Total	.. 6,03,183	1,03,844	88,888	1,000.00	250.00	750.00	..

ANNEXURE-B

Total No. of identified villages	..	19,284		
Total population in identified villages	..	1,01,05,934		
Scarcity villages	..	7,143		
Scarcity population (Approx)	..	31,00,000		
Health hazard & other problem villages	..	12,141		
Health hazard population (Approx)	..	70,05,934		
	(i)	No. of Tube wells required @ one Tubewell per village—12,141.		
	(ii)	No. of Tube wells required on population basis @ one Tubewell for 200 population or part thereof—35,030.		
		No. of Tubewells provided		
(i) Total villages	..	12,141	(i) Total No. of Tubewells required on population basis.	35,030
(ii) Covered upto 1977-78.	.. (—)	4,658	(ii) No. already provided upto 1977-78 (—)	4,658
		7,483		30,372
(iii) To be covered during 1978-79 (—)	3,283		(iii) Programme for 1978-79 under MNP & ARWS.	3,283
Balance	4,203		Balance	27,089

Tubewells required at the rate of one per village=4,200
Plan Programme under M. N. P.

Year	Phase of work		Total	Amount proposed (Rs. in lakhs)
	First phase @ one tubewell per village	2nd phase on population basis		
(1)	(2)	(3)	(4)	(5)
1978-79	1,272	..	1,272	201.00
1979-80	4,200	1,650	5,850	599.70
1980-81	..	5,850	5,850	599.70
1981-82	..	5,850	5,850	599.70
1982-83	..	5,850	5,850	599.70
Total	5,472	19,200	24,672	2,599.80 or say 26.00 crores

ANNEXURE-C

Programme for sanitary wells

Year	Item of works	Amount
(1)	(2)	(3)
		(Rs. in lakhs)
1978-79	(i) Construction of new sanitary wells in 1988 villages.	79.52
	(ii) For completion of 6,044 sanitary wells upto ground level.	80.48
1979-80 to 1982-83	(i) Sanitary fittings for 6,044 sanitary wells. ..	120.88
	(ii) For completion of 4,108 wells to be constructed during 1978-79 including sanitary fittings.	160.72
	(iii) For execution of 12,478 sanitary wells at the rate of Rs. 8,000 each including sanitary fittings on the basis of population to cover all identified scarcity villages (773 villages will be covered in the first instance at the rate of one well for each village).	994.24
	Total	1,435.84 lakhs or say 14.00 crores

Provision and expenditure in the Fifth Five-Year Plan and outlay for the Five-Year Plan

Scheme	Fifth Five-Year Plan 1974—79 Provision	1974—78					Total
		Appr. outlay	Expr.	Outlay		Total	
				Spill over commit- ment	New outlay		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Urban Water-Supply Schemes							
(a) Continuing Schemes							
1. Berhampur (Reorgn.) ..	12.09	5.00	5.00	8.09	..	8.09	
2. Berhampur (Jt. W/S. Project).	73.55	30.60	30.60	239.33	..	239.33	
3. Bhanjanagar ..	24.96	3.21	3.21	21.75	..	21.75	
4. Rourkella (C. T.) ..	55.37	48.56	48.56	7.81	..	7.81	
5. Puri ..	38.31	14.96	14.96	3.03	..	3.03	
6. Koraput ..	1.54	1.54	1.54	6.76	..	6.76	
7. Patnagarh ..	5.02	5.02	5.02	6.17	..	6.17	
8. New Capital ..	74.91	64.91	64.91	215.06	..	215.06	
9. Other W/S. Schemes ..	109.25	117.22	75.80	..	..	..
Sub-Total ..	395.00	291.02	249.60	508.00	..	508.00	
(b) New Schemes							
1. Cuttack City ..	..	..	..	..	500.00	500.00
2. Sambalpur Town ..	..	..	..	..	373.20	373.20
3. Keonjhar Town ..	..	..	..	..	38.63	38.63
4. Phulbani Town ..	..	..	..	..	35.91	35.91

VII

1978—83—Water-Supply and Sewerage

(Rs. in lakhs)

Five-Year Plan 1978—83					
Phasing of outlay					
1978-79		1979-80	1980-81	1981-82	1982-83
Appr. outlay	Anticipated Expr.				
(8)	(9)	(10)	(11)	(12)	(13)
8.09	8.09	..	..	..	..
92.74	92.74	44.92	33.89	33.89	33.89
5.11	5.11	16.64	..	..	..
7.81	7.81	..	..	..	..
0.35	0.35	2.68	..	..	..
..	..	6.76	..	..	..
..	..	6.17	..	..	..
10.00	10.00	55.00	50.00	50.00	50.00
..
124.10	124.10	132.17	83.89	83.89	83.93
..	..	125.00	125.00	125.00	125.00
..	..	96.91	25.63	182.10	68.56
12.88	12.88	9.00	12.00	4.75	..
..	..	6.00	12.45	12.40	5.06

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
5. Rayagada Town	75.00	75.00
6. Sonapur Town	20.65	20.65
7. Jagatsinghpur Town	40.00	40.00
8. Titilagarh Town	36.00	36.00
9. Athagarh Town	24.90	24.90
10. Gunupur Town	45.73	45.73
11. Baliguda Town	15.00	15.00
12. Choudwar Town	42.25	42.25
13. Brajaraj Nagar Town	57.81	57.81
14. Joda Town	62.47	62.47
15. Jatni Town	70.97	70.97
16. Basudevpur Town	11.36	11.36
17. Aska Town	28.32	28.32
18. Khalikote Town	24.80	24.80
19. Biramitrapur Town	39.08	39.08
20. Umerkote Town	35.37	35.37
21. Kantabanji Town	15.62	15.62
22. Purusottampur Town	17.00	17.00
23. Khariar Town	23.51	23.51
24. Kotapad Town	35.48	35.48
25. Pipili Town	25.20	25.20
26. Kesinga Town	17.07	17.07
27. Kavisuryanagar Town	19.00	19.00
28. Suruda Town	19.67	19.67
Sub-Total	1,750.00	1,750.00
Total—Urban Supply (a + b)	Water-	395.00	291.02	249.60	508.00	1,750.00	2,258.00

(8)	(9)	(10)	(11)	(12)	(13)
..	..	13.25	25.00	26.50	10.25
..	..	3.44	6.25	6.75	4.21
..	..	6.65	13.25	12.80	7.30
..	..	6.00	13.00	12.75	4.25
..	..	4.15	8.50	9.00	3.25
..	..	7.60	14.25	15.75	8.13
..	--	..	3.00	6.00	6.00
..	..	5.00	15.00	16.00	6.25
..	..	12.00	18.00	15.00	12.81
..	..	--	15.00	25.00	22.47
..	..	15.00	25.00	20.00	10.97
..	4.00	5.00	2.36
..	..	5.00	10.00	10.00	3.32
..	8.00	12.00	4.80
..	..	10.00	15.00	12.00	2.08
..	12.00	18.00	5.37
..	5.00	6.00	4.62
..	6.00	8.00	3.00
..	8.00	10.00	5.51
..	7.00	18.00	10.48
..	5.00	10.20	10.00
..	4.00	6.00	7.07
..	--	..	4.00	10.00	5.00
..	--	..	5.67	8.00	6.00
12.88	12.88	325.00	425.00	623.00	364.12
136.98	136.98	457.17	508.89	706.89	448.07

(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Sewerage Scheme to Cuttack Town.	77.00	40.00	40.00	..	400.00	400.00
2. Sewerage Scheme to New Capital.	80.00	34.48	34.48	..	250.00	250.00
Sub-Total	157.00	74.48	74.48	..	650.00	650.00
Sewerage Scheme (New)						
Sewerage Scheme to Rourkela (C. T.)	..	..	..	..	50.00	50.00
Survey Scheme—						
1 Urban and Rural W/S Survey Scheme Grant.	9.00	7.50	5.70	..	63.98	63.98
Sub-Total	9.00	7.50	5.70	..	63.98	63.98
Drainage Scheme—						
1 Bhubaneswar (Old Town).	..	..	..	..	1.02	1.02
2 Cuttack	..	..	..	..	100.00	100.00
Sub-Total	..	..	..	..	101.02	101.02
Total	561.00	373.00	329.78	508.00	2,615.00	3,123.00
II—A—Rural M. N. P.—						
(a) Piped W/S.	400.00	458.74	473.24	..	2,600.00	2,600.00
(b) Hand pumps						
(c) Sanitary wells	440.00	519.61	517.75	281.60	1,118.40	1,400.00
Sub-Total	840.00	978.35	990.99	281.60	3,718.40	4,000.00
Grand Total	1,401.00	1,351.35	1,320.77	789.60	6,333.40	7,123.00

(8)	(9)	(10)	(11)	(12)	(13)
10:00	10:00	90:00	100:00	100:00	100:00
10:00	10:00	60:00	60:00	60:00	60:00
20:00	20:00	150:00	160:00	160:00	160:00
..	..	10:00	15:00	15:00	10:00
2:00	2:00	15:50	15:50	15:50	15:48
2:00	2:00	15:50	15:50	15:50	15:48
1:02	1:02	..	..	..	..
..	..	25:00	25:00	25:00	25:00
1:02	1:02	25:00	25:00	25:00	25:00
160:00	160:00	657:67	724:39	922:39	658:55
201:00	201:00	599:70	599:70	599:70	599:70
160:00	160:00	310:00	310:00	310:00	310:00
361:00	361:00	909:70	909:70	909:70	909:70
521:00	521:00	1,567:37	1,634:09	1,832:09	1,568:23

ANNEXURE VIII—HWS-18

**PHYSICAL TARGETS AND ACHIEVEMENTS IN THE FIFTH FIVE-YEAR PLAN AND TARGETS FOR THE FIVE-YEAR PLAN
1978—83—WATER SUPPLY & SEWERAGE**

Programme	Unit	Cummulative achieve- ment up to 31-3-1974	1974-78		Target 1978—83	Phasing of Target					
			Target	Achieve- ment _i		1978-79		1979-80	1980-81	1981-82	1982-83
						Target	Likely achieve- ment				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
I. Urban											
(a) Water Supply	Nos.	14	24	4	48	12	12	6	1	1	28
(b) Sewerage & Drainage.	Nos.	1	..	..	4	..	..	..	..	..	..
II. Rural M. N. P.											
(a) Piped W/S ..	Nos.	..	39	39	..	..	..	..	..	..	..
(b) Hand pumps (Tube-well).	Nos.	..	3,625	3,467	25,845	1,697 + 158 Spilled over.	1,855	5,997	5,997	5,997	5,999
(c) Sanitary wells.	Nos.	..	8,074	6,044	16,446	1,988	1,988	3,614	3,614	3,615	3,615

ANNEXURE IX

Estimate of employment generated in the Five-Year Plan and estimated employment potential during Five-Year Plan 1978-79 water-supply & sewerage

Programme	Unit	Estimated employment generation 1974-78		Estimated employment potential during Five-Year Plan 1978-83									
		Skilled	Unskilled	1978-79		1979-80		1980-81		1981-82		1982-83	
				Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
I. Urban													
(a) W/S	Nos.	355	4414	85	1200	286	4001	319	4462	443	5198	281	3928
(b) Sewerage & Drainage.	Nos.	101	1184	16	219	145	2027	157	2192	157	2192	153	2137
(c) Others	Nos.	20	226	8	61	58	476	58	476	58	476	58	426
Total—Urban	..	476	5824	109	1480	489	6504	534	7130	658	8866	492	6541
II. A—Rural M. N. P.													
(a) Piped W/S	..	..	..	..	..	..	..	..	..	..	..	..	..
(b) Wells	..	..	..	..	..	..	..	..	..	..	..	..	..
(c) Hand Pumps	Nos.	382	5550	190	2643	563	7886	563	7886	563	7886	563	7886
(d) Drilled Wells.	..	..	..	..	..	..	..	..	..	..	..	..	..
Total—Rural M. N. P.	..	382	5550	190	2643	563	7886	563	7886	563	7886	563	7886

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
B. Rural other than M. N. P.														
(a) Piped W/S	-
(b) Wells	-
(c) Drilled Wells	-	-
Total—Rural other than M. N. P.
Total other than Conversion of Dry latrines to flush/Wet latrines.	299	4123	1052	14390	1097	15016	1221	16752	1055	14427	
III. Others														
Conversion of dry latrines to flush/Wet latrines	-	4	56	51	712	47	657	47	657	47	657	

CHAPTER 33

URBAN DEVELOPMENT

33.1. Planned urbanisation is a necessary component of the infrastructure of economic development as towns provide, *inter alia*, a variety of centralised services for the surrounding rural areas such as marketing of agricultural surplus and products of village and cottage industries and supply to the rural areas a variety of goods, fertilisers, engineering products, pumps, credit manufactured essential commodities, building materials and other services besides specialised skills required for the rural development.

33.2. It is proposed to provide infrastructural and other facilities to small towns to act as growth and service centres for the rural hinter land so that dependence on bigger cities is reduced. For uplift of the urban poor substantial investment has been proposed for the programme of slum improvement during the Five-Year Plan, 1978—83. For improving the smaller towns, provision has been made for roads, bus stands, market sheds and such other social amenities. The programme will be drawn up in such a way as to increase the growth around the smaller towns and to act as disincentive for increasing the growth of population in bigger cities.

33.3. Schemes executed under "Urban Development" (i) Financial assistance to Local Bodies, (ii) Town and Regional Planning, and (iii) Environmental improvement of slums at Cuttack Town under the Minimum Needs Programme. During the Five-Year Plan, 1978—83 a new scheme of improvement of slums of urban agglomeration of Rourkela, Sambalpur, Berhampur, Puri and Bhubaneswar is proposed to be implemented.

(i) FINANCIAL ASSISTANCE TO LOCAL BODIES

(a) Grants for Non-Remunerative Scheme

33.4. The Scheme envisages sanction of grant to Urban Local Bodies for various projects like construction of town hall, office building, drains, wells, library-cum-reading rooms, parks, burial grounds, slaughter houses, etc. As the Urban Local Bodies are not financially sound to meet the full expenditure from their own resources, grant is given to them with the condition that an amount equal to the amount sanctioned by Government as grant, will be spent by the concerned Urban Local Bodies from their own resources for the aforesaid projects. There were 84 Urban Local Bodies in the year 1974-75, i.e., first year of the Fifth Five-Year Plan. At present, the number of Urban Local Bodies in the State has increased to 92. During the Fifth Five-Year Plan period, 1974—78, the expenditure under the scheme has been of the order of Rs. 8.83 lakhs as grant for Urban Local Bodies. The plan allocation for 1978-79 is Rs. 2 lakhs only.

33.5. It has been estimated that under this scheme, the requirement of Urban Local Bodies in the State is 230 lakhs. It is not possible to meet the full requirement of the Urban Local Bodies during the plan period 1978—83. Hence, an outlay of Rs. 70 lakhs only has been suggested under the scheme for the plan, 1978—83.

(b) Loans for Remunerative Schemes

33.6. Loan is sanctioned by Government to Urban Local Bodies for various remunerative Projects, which would enable them to improve their financial resources. The items covered under this scheme are market buildings, shops, sheds, bus stands, pisciculture, street lighting, etc., For the Fifth Five-Year Plan period, 1974—78 a sum of Rs. 2.75 lakhs has been spent for the purpose. For the year 1978-79, there is a plan allocation of Rs. 0.50 lakh.

33.7. Under this scheme, the average annual requirement of the Urban Local Bodies in the State is Rs. 18 lakhs. Although there is scope for the Urban Local Bodies to raise loans from Banking Financial Institutions, the less affluent Urban Local Bodies in the State are not able to avail of this facility because of lack of mortgageable assets and the high rate of interest charged by financial institutions coupled with short period of recovery of loans. Though there is provision for Government guarantee in case of loan by Banking Financial institutions to Urban Local Bodies, it is not possible for Government to stand guarantee for all the Urban Local Bodies. Government should come to the aid of small and less affluent Urban Local Bodies in the State by way of sanction of loan for their remunerative scheme, which will carry low rates of interest and would be repaid in suitable instalment over a long period. A minimum Plan outlay of Rs. 50 lakhs is proposed for the Five Year plan, 1978—83 period under the scheme.

(ii) ENVIRONMENTAL IMPROVEMENT OF SLUMS

(a) Environmental Improvement of slums in the City of Cuttack

33.8. The grant is given to Cuttack Municipality under the Minimum Needs Programme for improvement of slums. The Scheme was started in 1973-74 with Central assistance of Rs. 7.88 lakhs and from the year 1974-75, the State Government are implementing the scheme in the State Plan sector under Minimum Needs Programme. An amount of Rs. 30 lakhs was spent in the first four years of the Five-Year Plan. For the year 1978-79, there is a plan allocation of Rs. 10 lakhs.

33.9. The slum dwellers, who stay in about 38 identified slum pockets in the City, are mostly daily wage earners engaged in different occupations such as rickshaw pullers, domestic servants, petty vendors, etc. Keeping the magnitude of the problem in view, this scheme envisages improvement of slum areas in Cuttack by two-fold measures as (a) Improving existing slums by providing essential civic amenities as water, sanitation, electric light paved roads, street light, etc., (b) Establishment of improved sanitised colonies in close proximity to the existing hutments. To execute this scheme in Cuttack city an amount of Rs. 150 lakhs would be required during the plan period 1978—83.

(b) Environmental Improvement of slums of other Urban Agglomerations in Orissa

33.10. During plan period 1978—83, high priority has been given to execution of Scheme for the slum dwellers in various urban areas. Under the Scheme, existing slum could be improved with provision of basic civic amenities such as water, sanitation, street lights, paved roads, etc. In the process of giving facilities to slum dwellers, it may be necessary to remove them from areas where they are encroachers and shift them to new areas with provision for sites and services. There are about 100 recognised and identified slum pockets in the urban agglomeration of Rourkela, Sambalpur, Berhampur, Puri and Bhubaneswar. In order to provide basic amenities to about 100 slum pockets with about two lakhs population, the total financial outlay would be Rs. 3 crores.

(iii) TOWN AND REGIONAL PLANNING

33.11. During the decade 1961—71, the urban population of Orissa increased by 63.52%. Even though the urban population is only 8.27% of the total population in the decade 1971—81 and thereafter, the urban population in the State is expected to increase at a very fast rate with the establishment of number of large, medium and small scale industries in the State. Incidentally, it may be mentioned that the growth-rate of Class I cities in Orissa is 300 per cent in the decade between 1961—71, which is far in excess of the 49.35 per cent increase for the Class I cities in rest of the country during the above period.

33.12. The increased urbanisation in the State should be within the established norms of planned development approved by experts in Urban Planning. Instead of chaotic all ill-planned urban growth centres, the State should have a hierarchy of planned urban settlements. Urban growth centres cannot be planned in isolation. They should have proper linkage with their respective geographical regions. Therefore, urban planning necessitates regional planning and planning of surrounding rural areas.

(a) Preparation of Master Plan

33.13. During the Fifth Plan period, the Master Plans for 35 towns were prepared and the draft plans were published. So far Master Plans of four cities/towns, i. e., Cuttack, Berhampur, Rourkela and Balasore have been finalised. Shortly, steps would be taken to finalise the Master Plans of other towns in the State. During the plan period, 1978—83, the Master Plan of the following towns in the State would be taken up :—

Name of the Town (1)	Justification for selection (2)
1. Talcher	Industrially growing due to establishment of Thermal Station, Fertiliser Plant, Coal Mines and other ancillary industries. It is a project which was started during the Fifth Five-Year Plan and has spilled over to the Sixth Five-Year Plan.
2. Angul	The town is located on the State Highway from Cuttack to Sambalpur and is situated in close proximity of the Industrial Complex at Talcher and Rengali Dam Project.

- | (1) | (2) |
|--------------------|--|
| 3. Raingarapur .. | It is located by the side of the broad gauge Railway line leading to Jamshedpur and is in the vicinity of N. H. No. 6. It is going to be developed as a Industrial town with the location of the proposed Ferro-Vanadium Factory. Sal-seed Oil Factory etc., it has also got potentiality for the location of forest based and mineral based industries. |
| 4. Titilagarh .. | It is a Railway Junction on the Vizianagaram-Rampur line and the Sambalpur-Titilagarh line. The town is commercially growing with the location of textile industries, saw mills, tannery, etc. The town has got growth potentiality due to its advantageous location having direct access to steel towns of Bhilai in Madhya Pradesh and Rourkela in Orissa. |
| 5. Phulbani .. | It is a district Headquarters town having growth potentiality for forest based industries and marketing centre for tribal products. A survey for a railway connection is under contemplation. |
| 6. Keonjhar ... | It is district Headquarters town having growth potentiality for mineral based industries and their by-products. |
| 7. Gunupur .. | It is a growing town linked by a metre-gauge Railway line having location of Agro based, small scale and forest based industries. The town has got commercial importance and tribal development activities are in full swing. |
| 8. Khariar Road .. | The town is linked with a broad gauge Railway line. It has got commercial importance. The location of large number of saw mills and rice mills will give an impetus for the growth of industries due to rich agriculture and forest resources in the area. |

33-14. At present under the Directorate of Town Planning, 7 Town Planning Units have been functioning at Bhubaneswar and in different towns for preparation of Master Plans. It is proposed to immediately establish 2 more field units located at Balangir and Rourkela during 1978-79. Some more town planning units, say four in number would be opened in different towns during the Plan period, 1978-83.

33-15. At present, there are 5 Improvement Trusts having jurisdiction over 22 towns in the State. These Improvement Trusts are operating with headquarters at Bhubaneswar, Cuttack, Rourkela, Berhampur and Sambalpur. There is a proposal to constitute an Improvement Trust at Jeypore in the district of Koraput having jurisdiction over Rayagada, Koraput and Jeypore and another Improvement Trust at Paradeep, which is a major port in the eastern coast.

Keeping in view the provision of the staff and the cost of preparation and publication of Master Plans a sum of Rs. 29.00 lakhs may be provided during the plan period, 1978-83.

(b) Regional Planning

33-16. As per the guidelines of the Planning Commission the growth of the Metropolitan Towns should be slowed down, and the growth of small and medium towns should be encouraged. This can be possible by an integrated approach to an area, encompassing the urban and rural settlements having functional linkages and interdependency. This task can be undertaken by the Regional Planning approach. The broad objective of Regional Planning is to identify the growth needs and resource potentiality for removing regional disparities. Pending enactment of the New Town and Regional Planning Bill which is under the active consideration of the State Government, it is felt necessary to take up such planning exercises. The urban problem can not be tackled in isolation. Hence, it is proposed to take up regional planning exercises for the following areas:—

A. Cuttack Complex

B. Rourkela Complex

33-17. These planning exercises have to be based on various studies, like hierarchy of settlements, identification of resources, their development and management, transportation problem, etc. For such planning exercise in respect of the above areas, a sum of Rs. 5 lakhs will be required during the Plan, 1978-83.

(c) Traffic and transportation

33-18. A net work of major roads is the main artery of urban activities of a city. It is seen that in almost all our cities and towns, a net work of major roads is not properly planned. Alignment and width of existing roads are not adequate for smooth flow of traffic. In most of the towns/cities in the State traffic congestion has caused a slackness of the tempo of economic activities and has affected the quality of urban life. Traffic and transportation problems are noticed in growing cities as Cuttack, Bhubaneswar, Rourkela, Sambalpur and Berhampur and requires immediate remedial measures.

33-19. To prepare an effective traffic and transportation plan, origin and destination survey of traffic has to be undertaken alongwith traffic volume survey during peak hours. This survey which is of a specialised nature, will reveal, the necessity of widening the major/arterial roads and construction of Traffic Islands, etc. In order to conduct such survey for identifying the traffic problems of major towns/cities, a sum of Rs. 1.00 lakhs will be required.

33-20. The major arterial roads, which are extremely narrow, have to be widened in the above towns/cities. Widening of existing roads and laying of new roads would involve acquisition of private land wherever necessary, road formation, drainage, culvert, road metalling, road signboards/traffic graphics, etc., for which a sum of Rs. 400 lakhs including Rs. 2.00 lakhs for traffic survey will be required during the Five-Year Plan, 1978-83. Out of Rs. 400.00 lakhs, Rs. 200 lakhs is provided in the State Plan and the balance Rs. 200.00 lakhs is proposed to be met from the Central Sector.

(d) Development of Green Belt and Environment Engineering Pollution Control

33-21. Urbanisation and industrialisation of vast areas have resulted in upsetting the balance of nature and environmental degradation in such areas. This phenomenon is most pronounced in urban agglomerations of Cuttack, Bhubaneswar, Choudwar, Talcher, Puri, Berhampur, Rourkela, Sambalpur and Hirakud. For development of bio-aesthetic plantation, pollution control and development of open space and green belt in these areas, an outlay of Rs. 40 lakhs is proposed during the Five-Year Plan, 1978-83.

(e) Revolving Fund for different Improvement Trusts

33-22. The Five Improvement Trusts functioning in the State, namely, (i) Bhubaneswar Regional Improvement Trust, (ii) Berhampur Regional Improvement Trust, (iii) Greater Cuttack Improvement Trust, (iv) Sambalpur Regional Improvement Trust, (v) Rourkela Regional Improvement Trust are handicapped due to lack of margin money/ seed capital and are not able to take up various development schemes relating to Urban problems in their respective areas. Provision for a revolving fund for each of the Improvement Trust is necessary during the Five-Year Plan to enable them to obtain institutional finance. All the existing Improvement Trusts are mostly depending on State Government Grants, which is not even, sufficient to met their Revenue expenditure. Hence, an outlay of Rs. 175 lakhs has been proposed for the 5 Improvement Trusts under "Revolving Fund."

CENTRAL PLAN SCHEME**Traffic and transportation**

33-23. A net work of major roads transportation is the main artery of urban activities of a city. It is seen that in almost all our cities and towns, a net work of major roads is not properly planned. Alignment and width of existing roads are not adequate for smooth flow of traffic. In most of the cities/towns traffic congestion has caused a slackness of the tempo of economic activities and has affected the quality of Urban life. Traffic and transportation problems are noticed in our growing cities as Rourkela, Sambalpur and Berhampur and requires immediate remedial measures.

33-24. To prepare an effective traffic and transportation plan, origin and destination survey of traffic has to be undertaken alongwith traffic volume survey during peak hours. This survey which is of a specialised nature, will reveal the necessity of widening the major/arterial roads and construction of Traffic Islands, etc.. In order to conduct such survey for identifying the traffic problems of major cities/towns, a sum of Rs. 1.00 lakh will be required.

33.25. The major arterial roads, which are extremely narrow have to be widened in the above cities/towns. Widening of existing roads and laying of new roads would involve acquisition of private land wherever necessary, road formation, drainage culvert, road metalling, etc., road signboards, traffic graphics for which a sum of Rs. 200 lakhs including Rs. 1.00 lakh for traffic survey will be required during the Five-Year Plan, 1978-83 under Central sector.

CENTRAL PLAN SCHEME

33.26. Loans for social security and welfare

(a) Rehabilitation Schemes

A. Loans to Repatriates from Burma

Long-term rehabilitation loans for carrying on petty trade/business and for construction of houses and business premises are given to the Burma repatriates for their resettlement in non-agricultural occupations in the State in accordance with the schematic patterns of the Government of India.

33.27. Loans are sanctioned by the Government of India in favour of the State Government for relending to the repatriates from Burma. The expenditure is initially incurred by the State Government from their own resources and subsequently reimbursed by the Government of India.

33.28. During the next Five-Year Plan, 1978-83 it is estimated that a sum of Rs. 25.20 lakhs will be required for sanction of business loans and housing loans to the Burma repatriates under the Scheme against the total expenditure of Rs. 16.48 lakhs already incurred during the last four years (1974-75 to 1977-78).

EMPLOYMENT

33.29. In the Urban Development Sector, the expenditure of Rs. 49.22 lakhs during 1974-78 had created employment opportunity for 104 skilled persons and 24 unskilled and uneducated persons. It is estimated that there would be substantial addition to the employment potential with the proposed expenditure of Rs. 448.50 lakhs under Urban Development during the Sixth Plan period. Employment opportunity would be created for 431 technical persons, 358 non-technical educated persons and 2,417 unskilled persons.

ANNEXURE I

**PROVISION AND EXPENDITURE IN THE FIFTH FIVE-YEAR PLAN AND OUTLAYS FOR THE FIVE-YEAR PLAN 1978-83
URBAN DEVELOPMENT**

Rs. in lakhs

Scheme	Fifth Five-Year Plan 1974-79 provision.	1974-78		Five-Year Outlay			Plan 1978-83					
		Approved outlay	Expenditure	Spillover commitment.	New outlay	Total	Phasing of outlay 1978-79					
							Approved outlay	Anticipated expenditure	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. ENVIRONMENTAL IMPROVEMENT OF SLUMS.												
(a) M. N. P. ..	36.00	30.00	30.00	..	450.00	450.00	10.00	10.00	100.00	110.00	115.00	115.00
(b) Other than M. N. P. ..	..	..	..	..	..	..	..	..	..	..	..	..
2. Urban Development ..	..	..	..	..	..	..	..	..	..	..	-	..
3. LOANS AND GRANTS TO LOCAL BODIES.												
(a) For Remunerative Schemes.	4.00	3.00	2.75	..	50.00	50.00	0.50	0.50	12.00	12.50	12.50	12.50
(b) For Non-Remunerative Schemes.	12.00	8.00	8.83	..	70.00	70.00	2.00	2.00	17.00	17.00	17.00	17.00

**4. INTEGRATED
URBAN DEVELOP-
MENT PROGRAMME**

(a) Traffic and Transportation.	..	..	..	..	2,000-00	200-00	...	..	50-00	50-00	50-00	50-00
(b) Development of Green Belt etc.	..	--	..	..	40-00	40-00	..	..	10-00	10-00	10-00	10-00
5. Research and Development.	..	..	..	..	--	..	..	..	..	..	--	..

**6. PREPARATION OF
MASTER PLAN
REGIONAL PLANS**

a) Master Plans	..	11-00	8-50	7-64	..	29-00	29-00	2-50	2-50	6-50	6-50	6-50	7-00
(b) Regional Plans	..	..	..	..	..	5-00	..	..	..	1-00	1-00	1-00	2-00

7. OTHER SCHEMES

(a) Revolving Funds for Improvement Trusts.	175-00	175-00	40-00	40-00	45-00	50-00
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Total	..	63-00	50-00	49-22	..	1,019-00	1,019-00	15-00	15-00	236-50	247-00	257-00	263-50
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ANNEXURE II
PHYSICAL TARGETS AND ACHIEVEMENTS IN THE FIFTH FIVE-YEAR PLAN AND TARGETS
FOR THE FIVE-YEAR PLAN 1978-83 URBAN DEVELOPMENT

Programme	Unit	Cumulative achievement up to 31-3-1974	1974-78		Target 1978-83	Phasing of Target					
			Target	Achievement		1978-79		1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	Target	Likely achievement	(9)	(10)	(11)	(12)
(1) Environmental Imp. of slums											
(a) M. N. P.	No. of persons benefited.	..	..	51,262	2,50,000	15,000	15,000	58,000	58,000	59,000	60,000
(b) Other than M. N. P.	No. of persons benefited.	..	..	..	..	..	..	..	..	..	..
(2) Urban Development											
(3) Loans and grants to local bodies—											
(a) For Remunerative schemes	No. of U. L. Bs. covered.	..	19	19	50	3	3	11	12	12	12
(b) For non-remunerative scheme.	No. of U. L. Bs. covered.	..	25	25	91	11	11	20	20	20	20
(4) Integrated Urban Development Programme—											
(a) Traffic and transportation	Nos.	..	..	..	2	..	..	..	..	..	2
(b) Development of green belt, etc.	Nos.	..	..	..	9	..	..	..	..	4	5

5) Research and Development..	..	..	...	...	...	..	..	..	..	..	..	..
(6) Preparation of Master Plans and Regional Plans—													
(a) Master Plans	..	Nos.	..	30	13	7	14	6	6	1	1	2	4
(b) Regional Plans	..	Nos.	..	--	--	..	1	..	..	..	--	..	1

(7) Other Schemes—

Revolving funds for Imp. Trusts.

Funds will be released to different Imp. Trusts to form seed Capital

ANNEXURE III

ESTIMATE OF EMPLOYMENT GENERATED IN THE FIFTH FIVE-YEAR PLAN AND ESTIMATED EMPLOYMENT POTENTIAL DURING FIVE-YEAR PLAN, 1978—83 URBAN DEVELOPMENT

Programme	Unit	Estimated employment generation 1974—78		Estimated employment potential during Five-Year Plan, 1978—83										
				1978-79		1979-80		1980-81		1981-82		1982-83		
		Skilled	Un-skilled	Skilled	Un-skilled	Skilled	Un-skilled	Skilled	Un-skilled	Skilled	Un-skilled	Skilled	Un-skilled	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1. Integrated Urban Development Programme.														
(a) Traffic and Transport...	118	500	118	500	118	500	118	500	
(b) Green belt, etc.	20	111	21	111	21	111	21	111	
2. Preparation of Master Plan and Regional Plans.														
(a) Master Plan	104	24	17	5	43	14	43	14	43	14	43	14
(b) Regional Planning	11	3	11	3	11	3	11	3

CHAPTER 34
I. HOUSING

34.1. As in the national sphere, housing inadequacies in the State have both quantitative and qualitative dimensions through reliable statistics are not available regarding the magnitude of the problem. Housing shortages in the State have not been tackled with systematic and adequate investments in the past. Conditions in terms of essential facilities like water supply, drainage and environmental hygiene are not satisfactory. About 91 per cent of the population in Orissa live in rural areas and most of their dwelling abodes are kucha houses of mud walls with thatched roof which are prone to fire hazards. It is estimated that roughly Rs. 3 to 4 crores worth of property is destroyed by fire each year. The incidence of fire hazard in the districts of Cuttack, Puri and Ganjam is generally high and nearly 20,000 houses on an average are damaged by fire accident in the State annually. In this context, it is essential to provide fire proof roofing to these rural houses. For conversion of 20,000 houses, a sum of Rs. 10 crores would be required at the rate of Rs. 5,000 per house. Even if it is phased over a period of 10 years, the annual requirement would be Rs. 1 crore. Due to paucity of resources, it has been possible to tackle this problem only on a limited scale providing funds ranging between Rs. 25 to 35 lakhs annually under the Village Housing Project Scheme.

34.2. A long range programme has to be drawn up for a period of 20 years in order to tackle the housing problem. House construction is an economic activity, which fits in well with the pattern of activities to which priorities will be given in the next two decades, not only because it meets a basic need, but given the application of appropriate technology also creates employment in a massive and decentralised scale and increases the much needed purchasing power in the hands of lower income groups, the landless labourers.

34.3. Till the end of the Fourth Plan exclusive attention was focussed on housing in the urban areas. However, during the last four years, attempts have been made to deal with the rural housing problem mainly by providing house-sites and houses to landless labourers under the Integrated Housing Scheme.

34.4. Within the limited resources it has not been possible on the part of the State Government to take up housing projects on a larger scale. Institutional finance from HUDCO and L. I. C. has not been substantial. During the Sixth Plan period, it would be necessary to step up the investment through institutional finance in this sector. Hence the objectives for the Five-year Plan 1978—83 would be as follows—

- (1) Promotion and encouragement of self-help housing ;
- (2) Provision of house sites and assistance for housing to rural landless labourers ;
- (3) Formulation of public sector social housing schemes in such a manner as to cater to the needs of economically weaker sections of the community ; and
- (4) Augmentation of resources of institutional agencies like the State Housing Board to enable it to provide infrastructural facilities as a means of giving impetus for housing by private agencies ;

34.5. So far Orissa has not been able to avail of the loan assistance from Housing and Urban Development Corporation to any substantial extent for the housing schemes. The following programmes have been chalked out for availing loan assistance from HUDCO during the Sixth Plan.

**Requirement of loan assistance from the HUDCO for new housing schemes
by various agencies**

Sl. No.	Name of the agency	Name of the project	Loan component (Rs. in lakhs)	No. of houses
(1)	(2)	(3)	(4)	(5)
1	Orissa State Housing Board, Bhubaneswar.	(1) Composite Housing Scheme, Baramunda.	109.37	EWS—196 LIG—438 MIG—168
		(2) New Schemes	837.00	6008
		(3) Sixth Plan Scheme	1200.00	9691
			2146.37	165.01

(1)	(2)	(3)	(4)	(5)
2	Industrial Development Corporation.	(i) Quarters for employees at Bhubaneswar.	6.24	20
		(ii) H. I. W., Hirakud ..	33.73	148
		(iii) Ferrochrome Plant, Jajpur Road.	8.79	24
			48.76	192
3	IPICOL	(1) Sunabeda ..	20.00	100
		(2) Dhenkannal ..	100.00	500
		(3) Rairangpur ..	60.00	300
		(4) Zoda Barbil ..	20.00	100
		(5) Talcher ..	40.00	200
		(6) Paradeep ..	40.00	200
		(7) Jagatpur ..	20.00	100
		(8) Jajpur Road ..	20.00	100
			320.00	1600
4	Utkal Chamber of Commerce & Industry, Cuttack.	.. ..	500.00	..
5	Bhubaneswar Regional Improvement Trust.	(1) Composite Housing Scheme, Nuapali.	50.00	LIG 200 MIG 74
		(2) Shop-cum-Office complex, Station Square.	20.00	134
		(3) Kapilprasad ..	120.00	1460
		(4) Baramunda ..	320.00	3000
		(5) Baragarh ..	135.00	1510
6	Greater Cuttack Improvement Trust.	(1) Tulsipur ..	20.35	EWS 90 LIG 32
		(2) Buxibazar, Marketing Scheme.	16.75	35
7	Sambalpur Regional Improvement Trust.	.. ..	10.39	EWS 63 LIG 54
8	Rourkela Regional Improvement Trust.	.. ..	22.30	EWS 92 LIG 138
		Total ..	3,730.74	

34.6. The above schemes will not make any appreciable dent in solving the housing problems of the State as they are confined to selected urban areas. Hence there is a need for augmentation of funds under housing for taking up social schemes like Village Housing Project Scheme, Rental Housing Scheme, Low Income Group Housing Scheme and Middle Income Group Housing Scheme and Land Acquisition and Development Scheme.

34.7. During the last four years ending 31st March 1978 the Life Insurance Corporation of India has advanced loans amounting to Rs. 4.99 crores out of which Rs. 3.83 crores was utilised by the Labour, Employment & Housing Department for Social Housing Schemes and the balance amount by the Political & Services Department for construction of houses in State Capital.

34.8. During the Sixth Plan Period, a sum of Rs. 15.26 crores (excluding the requirement of Capital Project) has been proposed to be loan component from the Life Insurance Corporation relating to the various Social Housing Schemes. Besides a sum of Rs. 15.78 crores would be needed as Life Insurance Corporation assistance to meet the requirement of houses in the State Capital.

34.9. Social Housing Schemes administered by the Labour, Employment & Housing Department are the following:—

- (1) V. H. P. Scheme
- (2) L. I. G. H. Scheme
- (3) M. I. G. H. Scheme
- (4) Rental Housing Scheme for State Government employees
- (5) S. I. H. Scheme
- (6) Land Acquisition and Development Scheme.

34.10. Besides, grant is given every year to the Orissa State Housing Board to meet its administrative expenses.

34.11. The Middle Income Group Housing Scheme, Rental Housing Scheme and Land Acquisition and Development Scheme were Non-Plan Schemes till 1968-69. From the beginning of the Fourth Five-Year Plan, these Schemes have been included in the State Plan. The S. I. H. Scheme, Continuance of Rural Housing Cell under V. H. P. Schemes and grant to Orissa State Housing Board are exclusively financed from out of the State resources. But other Schemes are financed from out of the loan obtained from the Life Insurance Corporation of India. None of these Housing Schemes provides direct employment opportunities but there is scope of indirect employment under these Schemes as during the construction, large number of labourers are employed.

34.12. From the inception of the above Schemes till end of Fifth Plan, a sum of Rs. 19,89.65 lakhs has been spent under various Housing Schemes for construction of 19,878 houses of various types as well as acquisition of land and its development.

34.13. During Five-Year Plan 1978—83, a sum of Rs. 1700.00 lakhs has been proposed to be spent on construction of 14,656 houses under various Housing Schemes and also acquisition of land and its development. A brief note on each Scheme is given below.

Village Housing Project Scheme

34.14. Under this Scheme, maximum loan assistance up to Rs. 5000 is given for construction or reconstruction of houses with fire-proof roof. This Scheme, has gone a long way in assisting the people against calamities like cyclone, flood and fire-hazards. This Scheme is in operation from the year 1958-59. Up to end of 1977-78 a sum of Rs. 359.72 lakhs has been spent for construction of 8,036 houses. A sum of Rs. 448.50 lakhs has been proposed to be utilised for construction of 8,419 houses during the sixth Plan period 1978—83 under the Scheme, out of which a sum of Rs. 139.84 lakhs is proposed to be spent for construction of 3,067 houses in Tribal Sub-Plan areas. During 1978-79 a sum of Rs. 36.00 lakhs has been allocated for construction of 459 houses which includes 129 houses in Sub-Plan Areas.

Low Income Group Housing Scheme

34.15. The scheme provides for loan assistance to persons whose annual income from all sources does not exceed Rs. 7,200. The scheme is implemented in all urban areas and also in villages having population of 1,000 or more. The scheme has been implemented in the State from 1955-56. Up to end of 1977-78, a sum of Rs. 228.12 lakhs has been spent for construction of 2,460 houses. A sum of Rs. 210.00 lakhs has been proposed to be utilised for construction of 1,448 houses during Sixth Plan period 1978-83 under the scheme, out of which a sum of Rs. 77.70 lakhs is proposed to be spent for construction of 522 houses in Tribal Sub-Plan Areas. During 1978-79, a sum of Rs. 15.00 lakhs has been allocated for construction of 137 houses which includes 37 houses in Sub-Plan Areas.

Middle Income Group Housing Scheme

34.16. It provides for giving loan assistance to persons whose annual income exceeds Rs. 7,200, but not Rs. 18,000. The scheme is operating in Urban areas and villages having population of 2,000 or more. The scheme is in operation from the Second Plan period. Up to end of 1977-78, a sum of Rs. 268.55 lakhs has been spent for construction of 1,123 houses. A sum of Rs. 180.00 lakhs has been proposed to be spent for construction of 656 houses during the Sixth Plan 1978-83 under the scheme, out of which a sum of Rs. 66.00 lakhs is proposed to be spent for construction of 242 houses in Tribal Sub-Plan Areas. During 1978-79, a sum of Rs. 15.00 lakhs has been allocated for construction of 56 houses which includes 20 houses in Sub-Plan Areas.

Rental Housing Scheme

34.17. The Scheme envisages construction of houses for allotment on rental basis to State Government employees. This scheme started operating from the Second Plan period. Residential quarters at all district headquarters and in some subdivisional and Tahasil headquarters have been constructed under this scheme. Up to end of 1977-78, a sum of Rs. 724.58 lakhs has been spent for construction of 4,928 houses. A sum of Rs. 350.00 lakhs is proposed to be spent for construction of 1,365 houses during 1978-83. A sum of Rs. 22.60 lakhs has been allocated for construction of 53 houses during 1978-79.

Subsidised Industrial Housing Scheme

34.18. The scheme is intended to provide housing facilities to workers employed in Factories and Mines (other than Coal and Mica Mines) whose wages do not exceed Rs. 500 per month. This scheme has started operating from the First Plan period. Up to end of 1977-78, a sum of Rs. 143.56 lakhs has been spent for construction of 2929 industrial tenements. A sum of Rs. 120.00 lakhs is proposed to be utilised for construction of 1,613 houses during Sixth Plan period 1978-83. During this period, a sum of Rs. 42.55 lakhs is proposed to be spent for construction of 567 tenements in Tribal Sub-Plan Areas. A sum of Rs. 5.00 lakhs has been allocated for construction of 80 houses during 1978-79.

Land Acquisition and Development Scheme

34.19. This scheme provides for acquisition and development of land for utilisation under various housing schemes, viz. S. I. H., L. I. G. H., M. I. G. H., and Rental Housing Scheme. This Scheme is in operation from Second Plan Period. Up to end of 1977-78, Rs. 93.21 lakhs (excluding Orissa State Housing Board) has been spent under the Scheme and 29,861 acres of land at various places of the State have been acquired and 3901 acres of land have been developed. A sum of Rs. 24.00 lakhs is proposed to be utilised under the scheme for Acquisition and Development of lands in various places during the Sixth Plan Period. A sum of Rs. 1.00 lakh has been proposed to be spent for development of land under the Rental Housing Scheme during 1978-79.

Orissa State Housing Board

34.20. The Orissa State Housing Board was established in July, 1968. It has been entrusted with construction programmes under the L. I. G. H., M. I. G. H., and E. W. S. Schemes. The administrative expenses of the Housing Board are at present being met to the tune of Rs. 3 lakhs per year by the State Government. A sum of Rs. 37.50 lakhs has been proposed to be sanctioned as administrative expenses to Orissa State Housing Board during the Sixth Plan period. Up to 1977-78, a sum of Rs. 15.41 lakhs has been sanctioned towards administrative expenses of the Board. During 1978-79, an amount of Rs. 3.00 lakhs has been provided towards administrative grant to the Board. In view of the larger programme to be undertaken by the Housing Board, it is necessary to increase the grant to the Board on account of administrative expenses.

34-21. Up to the end of 1977-78, the Housing Board has spent Rs. 156.50 lakhs on construction of 222 houses under L. I. G. H. Scheme, 315 houses under M. I. G. H. Scheme and on acquisition and development of 166.8 acres of land.

34-22. A sum of Rs. 330.00 lakhs is proposed to be provided for construction of 1,155 houses under L. I. G. H. and M. I. G. H. Schemes and acquisition and development of land by the Housing Board during the Sixth Plan. Out of the above amount, a sum of Rs. 74.00 lakhs is proposed to be spent by the Board during the Sixth Plan in Tribal Sub-Plan areas under L. I. G. H. and M. I. G. H. Schemes for construction of 410 houses.

34-23. The Board propose to take up construction of 16,501 houses at an estimated cost of Rs. 2146.37 lakhs to be financed by the H. U. D. C. O. during the Sixth Plan under E. W. S., L. I. G. and M. I. G. programmes. Out of the above amount, a sum of Rs. 242.73 lakhs is proposed to be spent by the Board during Sixth Plan period in Tribal Sub-Plan areas for completion of 1467 houses and acquisition and development of 120 acres of land.

II. STATE CAPITAL PROJECT

34-24. The present strength of Government employees is 20,000 and the number is likely to go up to 25,000 by the end of the Sixth Plan period. There are at present about 6,700 Government accommodation in the Capital. In view of the extreme paucity of accommodation in the Capital, congestion has been mounting. Government have a plan to allot land in the Capital where accommodation could be built by the private sector. This will ease the congestion of accommodation to some extent. Keeping these in view, it is proposed to provide 6,000 quarters during the Sixth Plan period. This would call for an outlay of Rs. 15.33 crores, as given below—

Sl. No.	Type of quarters	No. of quarters to be constructed	Cost per unit	Total
1)	(2)	(3)	(4)	(5)
			Rs.	Rs.
1	'C' Type	100	76,950	7,69,500.00
2	'D' Type	400	43,293	1,73,17,200.00
3	'E' Type	2,000	30,000	6,00,00,000.00
4	'F' Type	3,500	21,500	7,52,50,000.00
			Total ..	Rs. 15,33,36,700.00

Office Accommodation

34-25. Secretariat is the principal office building for the State Government which was built in the year 1959 for accommodating 2,000 employees. The number of employees in the Secretariat has since been doubled. A nine storied building has been completed and it accommodates offices of twelve Heads of Department. A number of Heads of Department are still left out without accommodation and presently housed in temporary barracks and private accommodation. The minimum requirement, therefore, would be to take up construction of additional floor space for the Secretariat and Heads of Department. This would call for an expenditure of Rs. 1 crore during the Sixth Plan period.

Communications

34.26. In view of the growing congestion within the existing capital limits, it is imperative that the roads are to be strengthened and widened. New roads will have to be built in the new areas that will be developed under the Greater Bhubaneswar Plan. A few roads will require double laning. Other roads will require strengthening and widening. Total requirement under improvement to existing roads and construction of new would be of the order of Rs. 1.25 crores.

Land Shaping and Development

34.27. In order to tackle the housing problem, it is contemplated to allot Government lands for residential and commercial purposes liberally. So far 983 acres of house sites including shop-cum-residential plots have been allotted by the Government for residential purpose in the private sector. In the Sixth Plan period, it is proposed to lease out about 12,000 plots of different sizes to 12,000 families covering approximately 1,500 acres of land. The land is undulated and, therefore, would need reshaping. It is proposed to take up levelling, clearance of forest growth, etc., over 1,500 acres so as to make them suitable for house sites.

Water-Supply and Sewerage

34.28. Capital gets its water supply from the following points

(i) River Kuakhai	..	10.5 M. G. D.
(ii) River Daya	..	1.5 M. G. D.

Total	..	12.00 M. G. D.

The present capacity of 12 M. G. D. is just adequate for a population of 1.50 lakhs. Certain areas of the Capital feel the scarcity of water supply particularly during summer. Water supply Capacity in the capital will have to cater to the need of an additional population of 80,000 by the end of Sixth Plan. Additional capacity to reserve 42 million gallons is proposed to be built up in a phased manner. This will cost about Rs. 1.11 crores. For the Sixth Plan period Rs. 66 lakhs has been suggested.

34.29. In addition to the above expenditure, a sum of Rs. 50.00 lakhs will be required for water supply and sewerage in the additional developed area.

Essential Amenities

34.30. *Market*—At present there are two daily markets and few shopping centres. It is proposed to put up a central daily market and also to put up 3 additional markets in the new areas. The central market is expected to cost about Rs. 0.50 crores, whereas the additional markets will cost about Rs. 30 lakhs.

34.31. With the development of the Capital and spurt of small-scale industries all round a wholesale market to feed the markets in the Capital is essential. Warehousing facilities will be provided in the wholesale market with arrangements of cold storage. An outlay of Rs. 25 lakhs has been proposed for this. Thus the requirement for markets in the Capital will be Rs. 1.05 crores.

34.32. It is proposed to establish four new parks covering an area of 50 acres in Nayapalli, Vani Vihar, Sahidnagar and Unit-VIII. Besides, the land already acquired for the proposed lake will be developed with provision of modern amenities. An outlay of Rs. 50 lakhs is proposed for this purpose during the Sixth Plan period.

III. HOUSE BUILDING ADVANCE TO GOVERNMENT SERVANTS

34.33. Under the scheme of House Building Advance to Government Servants, long term loans are sanctioned to enable State Government employees and also All-India Service Officers of the State cadre to own residential houses. Under this scheme, loan equivalent to 75 months' pay of the Government servant subject to a maximum of Rs. 70,000.00 is sanctioned in accordance with the rules framed by the State Government. The loan is recoverable in monthly instalments within a maximum period of 20 years.

34.34. Owing to limited provision of funds, an employee has to wait his turn for years to secure the loan for construction purpose. During the last 4 years between 1974-75 to 1977-78, housing loan of Rs. 236.01 lakhs sanctioned to 944 employees. For the current year a sum of Rs. 70 lakhs only has been provided. With adequate provision, justice can be meted out to the cases of employees who have been waiting for years for sanction of loan. The present requirement on the basis of applications pending stands at Rs. 4 crores. Besides, large number of fresh cases to be received in ensuing years, would also need to be disposed of within a reasonable period.

34.35. The plan out-lay for the Sixth Five Year plan (1978-79) to (1982-83) is proposed at Rs. 1000 crores in respect of this scheme. The year-wise phasing of the Sixth plan outlay of Rs. 1000 lakhs is as follows:—

	(Rs. in lakhs)
1978-79	100
	70 provision already taken
1979-80	150
1980-81	200
1981-82	250
1982-83	300
Total	1,000

IV. HOUSE-SITES AND HOUSING ASSISTANCE TO THE RURAL LAND LESS

34.36. *Integrated Housing Scheme*—During the year 1974-75, the State Government launched a scheme under the minimum needs programme for developing house sites allotted to homestead less rural people. Under the scheme, Rs. 150.00 was to be provided for the improvement of each house site. The scheme for development of house sites has been converted into Integrated Housing Scheme since 1975-76 with the object of providing low-cost built-up houses to all house-less persons of the State on the house sites allotted to them. Since 1975-76 funds available under the minimum needs programme are being utilised for construction of houses under the scheme.

34.37. To start with the scheme was implemented in the districts of Dhenkanal, Mayurbhanj, Kalahandi and Koraput in consideration of the fact that a sizeable portion of the population in these districts consists of Scheduled Castes and Scheduled Tribes. The estimated cost of each house under the scheme was kept at Rs. 1,800.00. The house was to have a plinth area of 350 sq. feet. As against the estimated cost of Rs. 1,800.00, Government grant was to be of the order of Rs. 1,000.00, the rest represented free supply of forest materials and contribution of unskilled labour by the beneficiaries themselves. No type plan or design was prescribed for the house construction and Collectors were authorised to adopt a suitable type plan according to local conditions and availability of housing materials obtaining in each district. The work was executed through the agency of the Panchayat Samitis and the Block Development Officer was in direct charge of executing the work involving the participation of beneficiaries.

34.38. In 1976-77 the scheme was extended to all the 13 districts of the State with a revised pattern under which Government grant for each house was reduced to Rs. 700.00. The plinth area of the house was also reduced to 182 sq. ft. The purpose behind this slashing in the Government grant and the plinth area was to increase the coverage while keeping the total financial commitments unchanged. Free supply of forest materials and involvement of the beneficiaries through contribution of unskilled labour however, continued to be part of the estimated cost.

34.39. After the reduction of Government grant and extension of this scheme to all the districts the progress under this scheme has not been very satisfactory.

34.40. It is proposed to raise the limit of the Government grant to Rs. 2000.00 per unit of house so as to bring it on par with the village Reconstruction Programme.

34.41. On the basis of the revised pattern as indicated above, the programme for Sixth Five Year Plan 1978-83 has been drawn up. An amount of Rs. 45.00 lakhs has been provided in the Budget Estimate for 1978-79 under this scheme. A sum of Rs. 12.00 lakhs out of this amount has been earmarked for utilisation in the construction of 120 houses in the tornado-affected village Purunabandhgoda in Keonjhar district. The quantum of the financial outlay and the number of houses to be constructed in the each year of the Sixth Five-Year Plan period are indicated in the Table below. It is estimated that 37% of the total out-lay available in each year under the scheme is likely to flow into the Tribal Sub-Plan areas.

34.42. The financial outlay under the scheme for the Sixth Plan is proposed to be Rs. 2120.00 lakhs. The following statement would show the amount to be spent and the number of houses to be constructed during each year of the Sixth Plan period. In the computation of the outlay the Government grant for each unit of house has been taken as Rs. 2,000.00

TABLE

Sixth Five-Year Plan for intergrated housing scheme, 1978—83

Year	Total outlay (Rs. in lakhs)	Number of houses to be constructed	Amount flow to Tribal Sub- Plan	Number of houses to be constructed in Tribal Sub- Plan areas
(1)	(2)	(3)	(4)	(5)
			Rs. P.	
1978-79	.. 45.00	1650	16.65	651
1979-80	.. 500.00	25000	185.00	9250
1980-81	.. 500.00	25000	185.00	9250
1981-82	.. 500.00	25000	185.00	9250
1982-83	.. 575.00	28750	212.75	10637
Total	.. 2120.00	105400	784.40	39038

ANNEXURE IV

Provision and Expenditure in the Fifth Five-Year Plan and outlays for the Five Year Plan, 1978—83—Housing

(Rs. in lakhs)

Scheme	Fifth Five Year Plan 1974—79 Provision	1974—78		Five-Year Plan, 1978—83								
		Approved outlay	Expenditure	Outlay			Phasing of outlay					
				Sp ll over commitment	New outlay	Total	Approved outlay for 1978-79	Anticipated Expr.	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
HOUSING												
1. V. H. P. scheme												
(a) Loan	124.46		108.92	25.50	406.50	432.00	34.00	34.00	98.00	100.00	100.00	100.00
(b) Rural Housing Cell	8.54		6.15	..	16.50	16.50	2.00	2.00	3.25	3.50	3.75	4.00
2. L. I. G. H. Scheme	52.00		42.90	11.25	198.75	210.00	15.00	15.00	48.00	49.00	49.00	49.00
3. M. I. G. H. Scheme	55.00	349.00	42.80	11.25	168.75	180.00	15.00	15.00	40.00	42.00	42.00	41.00
4. R. H. Scheme	1.62.00		100.15	16.50	333.50	350.00	22.00	22.00	70.00	85.00	85.00	88.00
5. S. I. H. Scheme	30.00		17.48	2.50	117.50	120.00	5.00	5.00	25.00	30.00	30.00	30.00
6. L. A. Development Scheme	5.00		2.47	1.00	23.00	24.00	1.00	1.00	5.00	6.00	6.00	6.00
7. Grant to O. S. H. B.	12.40		9.40	..	37.50	37.50	3.00	3.00	8.00	8.50	9.00	9.00
Sub-Total	450.00	349.00	330.27	68.00	1320.00	1370.00	97.00	97.00	297.25	324.00	324.75	327.00
8. Loan to O. S. H. B.—												
(a) L. I. G. H. Scheme	30.00		20.00	2.50	117.50	120.00	5.00	5.00	25.00	30.00	30.00	30.00
(b) M. I. G. H. Scheme	25.00	69.00	20.00	2.50	87.50	90.00	5.00	5.00	20.00	22.00	22.00	21.00
(c) L. A. Development Scheme.	30.00		29.00	1.50	118.50	120.00	3.00	3.00	27.00	30.00	30.00	30.00
Sub-Total	85.00	69.00	69.00	6.50	323.50	330.00	13.00	13.00	72.00	82.00	82.00	81.00
Total—Housing	535.00	418.00	399.27	74.50	1625.50	1700.00	110.00	110.00	369.25	406.00	406.75	408.00
New Capital Project	290.00	431.07	..	..	..	..	140.00	140.00	600.00	600.00	600.00	600.00

Physical Targets and Achievements in the Fifth Five-Year Plan and

Programme	Unit	Cumulative achievement up to 31-3-1974	1974-78		Targets 1978-83
			Target	Achievement	
(1)	(2)	(3)	(4)	(5)	(6)
HOUS					
(1) Village Housing Projects Scheme.					
(a) Loan ..	House	5,914	1,508	Construction of 1,527 houses and completion of 595 houses of the previous plan.	8,419
(b) Rural Housing Cell.				Staff	
(2) Low Income Group Housing Scheme.	House	2,178	121	Construction of 91 houses and completion of 191 houses of previous plan.	1,448
(3) Middle Income Group Housing Scheme.	House	689	75	Construction of 132 houses and completion of 302 houses of previous plan.	656
(4) Rental Housing Scheme.	House	4,052	81	Construction of 45 houses and completion of 831 houses of previous plan.	1,365
(5) Subsidised Industrial Housing Scheme.	House	2774	130	Construction of 155 houses and completion of incomplete houses.	1613
(6) Land Acquisition and Development Scheme.	Land in Acres.	29,861 acres acquired and 3,901 acres developed.	Completion of incomplete project.	Completion of continuing project.	Not finalised
(7) Grants to Orissa State Housing Board.			Staff.....		
(8) Loans to Orissa State Housing Board.					
(a) L. I. G. H. Scheme.	House	110	124	Construction of 112 houses and completion of houses.	828
(b) M. I. G. H. Scheme.	House	135	167	Construction of 180 houses and completion of houses.	327
(c) Land Acquisition and Development Scheme	Land in Acres.	Development of 150 acres of land.	Completion of continuing project.	157,092 acres developed.	Not finalised
Total (HOUSING)		15852	806	Construction of 2242 houses and completion of 1919 houses 157,092 acres developed.	14656

V

Targets for the Five-Year Plan 1978-83—Housing

Phasing of targets						
1978-79		1979-80	1980-81	1981-82	1982-83	
Targets (7)	Likely achievement (8)	(9)	(10)	(11)	(12)	
INGI						
459	459	1,960	2,000	2,000	2,000	
..... Scheme						
137	137	297	338	338	338	
56	56	145	153	153	149	
53	53	280	340	340	352	
80	80	333	400	400	400	
Not finalised	Not finalised	Not finalised	Not finalised	Not finalised	Not finalised	
..... Scheme						
35	35	172	207	207	207	
18	18	73	80	80	76	
Not finalised.	Not finalised	Not finalised	Not finalised	Not finalised	Not finalised	
838	838	3260	3518	3518	3522	

(1)	(2)	(3)	(4)	(5)	(6)
State Capital Project.	1. Construction of 598 Nos. of various type of quarters.	..	1. Construction of 6,000 Nos. of various types of quarters.
			2. Development of Nayapali --	..	2. Land Acquisition for public purpose.
			(a) Jungle clearance.		
			(b) Peg marking, etc.		
			3. Infrastructure Development to Laxmisagar and Sainik School area.	..	3. Improvement to market and parks.
			4. Development of Jayadev Nagar.	..	4. Infrastructure Development to area leased out to BRIT and OSHBS.
			5. Water supply and sworage scheme to Laxmisagar and Sainik School area (Sl. I & II completed).	..	5. To augment water-supply schemes in capital.
					6. Development of Nayapalli in all respects to make it habitable.
					7. Construction of double road in capital to avoid congestion.
					8. Expansion to Secretariat Buildings.
					9. Development of sewerage scheme at Capital.
					10. Construction of Hospital Buildings and Jona Dispensary.
					11. Construction of Colleges and Schools.
					12. Recreational facilities.

(7)	(8)	(9)	(10)	(11)	(12)
1. Completion of 67 Nos. 'C' type and 81 Nos. of D. E. F. type quarters and 5 nos. 'C' and 5 Nos. 'D' type quarters at Cuttack.	1. Completion of 133 Nos. of quarters and construction of 2,000 Nos. of various types quarters at Capital.	1. Completion of 2,000 Nos. various types of quarters.	1. Construction of 1,867 Nos. of various types of quarters at Capital and Cuttack.	1. Completion of 6,000 Nos. residential buildings at Capital and Cuttack.	
2. Construction of 133 Nos. of various types quarters at Bhubaneswar.	2. Completion of communication programme at Nayapalli.	2. Completion of water supply and sewerage in Nayapalli area.	2. Establishment of market and shopping centre at Nayapalli.	2. New avenue plantation and ornamental planting.	
3. Acquisition of private land at— (a) Mancheswar for S. E. Rly.	3. Development of shopping centre and parks.	3. Completion of stage III and IV of Laxmi sagar and Sainik School area.	3. Construction of double roads.	3. Augmentation of Capital water supply.	
4. Improvement to Market in Unit I, VIII and Siripur Market.	4. Expansion to Secretariat Buildings.	4. Expansion to Secretariate Buildings.	4. New avenue plantation and ornamental planting.	4. Completion of stadium and swimming pool.	
5. Expansion to Secretariat Building.	5. Infrastructure Development of stage III and IV of Laxmisagar and Sainik School area.	5. Development of market and shopping centre at Capital.	5. Augmentation of Capital water supply scheme.	5. Completion of Hospital Buildings.	
6. Infrastructure Development of Nayapalli and Sainik School area.	6. Construction of Zonal Dispensary.	6. Development of Parks at Capital.	6. Construction of stadium and swimming pool.	6. Completion of College and School Buildings.	
		7. Provision of W/S and communication programme to the area where new quarters are constructed.	7. Completion of 4,000 Nos. quarters at New Capital.		
		8. Construction of 2,000 Nos. of quarters at New Capital.	8. Completion of 5 zonal dispensaries.		
		9. Construction of Hospital at Nayapalli area.	9. Construction of college building near Nayapalli.		

ANNEXURE-VI

Estimate of employment Generated in the Fifth Five-Year Plan and Estimated Employment potential during Five-Year Plan 1978-83

Programme	Unit	Estimated Employment generation 1974-78		Estimated 1978-79		Employment potential during Five-Year Plan 1978-83							
						1979-80		1980-81		1981-82		1982-83	
		Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled	Skilled	Unskilled
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Rural Housing Cell (Cumulative)		10	7	10	7	10	7	10	7	10	7	10	7
V. H. P. Scheme L. I. G. H. Scheme M. I. G. H. Scheme S. I. H. Scheme Rental Housing Scheme.		These housing schemes are the loan scheme and are being implemented through the executing agencies with their existing staff.											
1. State Capital Project.		1,106	4,170	700	2,100	3,000	9,000	3,000	9,000	3,000	9,000	4,000	12,000

ANNEXURE VII

Provision and expenditure in the Fifth Five-Year Plan and outlay for the Five-Year Plan, 1978—83 water-supply and sewerage

Rs. in lakhs

(TB-173)

Scheme	Five-Year Plan, 1978—83											
	Fifth Five-Year Plan, 1974—79 provision	1974—78		Outlay			Phasing of outlays					
		Approximate outlay	Expenditure	Spill over commitment	New outlay	Total	1978-79		1979-80	1980-81	1981-82	1982-83
							Approved outlay	Anticipated expenditure				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
New Capital Project.	290.00	431.07	431.07	..	..	..	140.00	140.00	600.00	600.00	600.00	660.00

CHAPTER—35

INFORMATION AND PUBLICITY

35.1. Information services play a vital role in moulding and educating the public opinion. To ensure participation of the masses in effective implementation of development activities at the grass root level, it is necessary to adequately project before the common man, the policies, programmes and activities of Government with a concrete record of work that has been completed or going to be achieved. This process helps developing wider understanding of Government efforts and generates popular interest. The role of Information Service assumes greater significance in view of increasing emphasis on people's active participation in implementation of various programmes. In view of this, efforts at all levels have to be made to fully project the changes taking place from time to time and to awaken the public awareness.

35.2. The main strategy during the Five-Year Plan 1978—83 will be first of all to strengthen the base of the Publicity Units and to make the Publicity Unit more rural oriented.

35.3. The details of the schemes proposed for the Sixth Plan Period are explained below.

1. Mobile Units for Audiovisual Publicity

35.4. The main object of this scheme, is to expand and strengthen the Audiovisual Units of the Public Relations Department, which are mostly concerned with rural publicity. Two publicity vehicles were provided to each district. In most of the districts only one vehicle is in running order and the other requires replacement. Audiovisual equipment consisting of ten 16 mm. Projector, Electric Generator and Speech equipments have been provided to each Subdivisional Headquarters including the district headquarters. As no vehicle has been provided to Subdivisional Headquarters it has not been possible to make intensive use of the audiovisual equipments at the Subdivisional level. In order to make the Subdivisional units mobile, it is necessary to provide vehicles to 42 Subdivisional Headquarters (Leaving out the 13 Subdivisional headquarters located in district headquarters and Rourkela where vehicles are already available). For 42 vehicles, an amount of Rs. 25,20,000 will be required. These will be purchased in a phased manner. The audiovisual equipments also require replacement from year to year as a number of them are pretty old, and the equipments will gradually become unserviceable.

35.5. A sum of Rs. 26.94 lakhs has been proposed for the Five-Year Plan 1978—83 under the scheme.

2. Display Advertisement on Plan and Development Activities

35.6. Advertisement through Press has proved to be an effective publicity media. Due to increase in the rate of advertisement charges the expenditure on display advertisement has gone high. It is necessary to project Orissa outside the state through the press media by bringing out supplements in the selected national dailies, for which it will be necessary to provide advertisement support of about 50 per cent for publishing articles on the progress of the State on different fronts. Besides, display advertisements are to be given to local daily newspapers on special occasions like Independence Day, Republic Day, Orissa Day etc. Along with advertisements, suitable articles are also to be provided for which honoraria have to be paid to renowned writers.

3. Publicity through Song, Drama and Seminars

35.7. The object of this scheme is to apprise the rural people about different developmental programmes of the State Government by direct group contact. This scheme also provides encouragements to the local artist who conduct traditional folk programmes like 'Palla', 'Daskathia', 'Dance-Drama etc. In order to make the scheme a success, it is required to have regular programmes like Seminars, group talks, Song and Drama performances in each Block of the State. Scripts on themes like family welfare, prohibition, untouchability etc. will be invited and the selected scripts will be provided to the Song and Drama troupes to give their performance according to the programme to be chalked out for the year. The scheme will encourage the local talents. Four to six troupes will be selected for each district.

4. Reorganisation of Exhibition Unit

35.8. The exhibition materials of the Public Relations Department have become very old and out-dated. The existing old exhibits are to be repainted and some new exhibits are to be prepared emphasizing integrated rural development and self-employment. A set of exhibits will have to be

built up in each district, for holding rural exhibitions. Exhibits at the State headquarters, will also be remodelled. In order to conduct exhibitions in a planned manner, in different places of the State, specially in rural areas, it is also proposed to purchase an exhibition van.

5. Extension and Improvement of Photo Publicity

35.9. The photographic unit of the Public Relations Department is not sufficiently provided with materials and equipment so as to cope up with the demands of the public and the press. In order to strengthen this unit, it is very necessary to have certain photographic equipment alongwith usual photo papers, Photo films, Chemicals and other accessories.

35.10. Sometimes it becomes difficult to release photos to the Press in time due to the fact that, negatives of photo coverage done at different distant places of the State take more time to come to headquarters for release and thereby there is loss of news value. In order to overcome this difficulty it is necessary, to have a mobile dark room van fitted with photo accessories for release of news photos on the spot. The total requirement for this scheme during 1978-83 is Rs. 7.08 lakhs.

6. Production and Purchase of Films

35.11. The film Unit of the Public Relations Department has proved to be an important media of audiovisual publicity. Under this scheme news reels and documentary films on important activities of the State Government are produced. Full length feature films are also purchased for mass publicity. Every year, four news reel films will be produced at a cost of Rs. 80,000 and four full length films will be purchased. Documentary films will be produced covering different themes like folk dances of Orissa, Odissi dance, Chhau dance, temples of Orissa, Archaeological sites and antiquities of Orissa, Forests of Orissa, Industries, agricultural activities, Hirakud Dam Project etc.

7. Strengthening of Information Centres and Opening of New Information Centres

35.12. There are 22 Information Centres under the administrative control of the Public Relations Department. The number of Information Centres is considered inadequate in comparison with the need and demand of the public. Information Centres have been located at the State headquarters each of the district headquarters and at Deogarh, Jharsuguda, Rourkela, Jeypore, Sunabeda, Rayagada, Berhampur and Angul. To cover all the Subdivisional headquarters 37 more Information Centres are to be opened to provide facilities for reading various news papers and periodicals and also books. Besides, a radio set is also provided through which the all India and regional news bulletins are relayed. For strengthening the existing Information Centres, the required fund is to be provided to supplement the stock of books, periodicals and furnishing the Centres with informative materials. Keeping in view the available resources, the programme of strengthening the existing centres and setting up of new centres will be taken up in a phased manner.

8. Revival of Community Listening Scheme

35.13. Community Listening Scheme was introduced in the country during 1955-56 as a Centrally subsidised scheme. State Government participated in the scheme from the year 1956-57 to 1968-69 and 11,470 Community Listening Sets were procured and installed. Pattern of subsidy was 50 per cent of the capital cost or Rs. 125 per set whichever was less. The scheme was transferred to State Sector with effect from 1969-70. Since then, only maintenance is being taken care of. Since the number of audio sets per 100 persons did not reach the UNICEF yardstick, the 5th Conference of State Ministers and State Directors of Information have recommended revival of Community Listening Scheme by State Government. It has not been possible for the State Government to revive the scheme because of constraints on resources.

35.14. In Orissa there are at present 0.9 radio sets per 100 persons. The number is much lower in backward districts of Phulbani, Koraput, Kalahandi, Keonjhar and Mayurbhanj. Percentage of illiteracy in these areas is very high (89 per cent in Koraput and 86 per cent in Kalahandi) for which communication through printed materials does not meet the requirement of mass communication. State Government would, therefore, like to revive the Community Listening Scheme.

35.15. Besides, it is proposed to substitute 500 battery sets by electrical sets during 1978-79 and 1,000 sets each during subsequent four years in villages electrified under the Rural Electrification programme. As per field tests, battery operated sets modified to electrical sets are giving guaranteed service for more than 10 years.

9. Research and Reference Division

35.16. The basic concept behind this scheme is to make varieties of information available within early reach of the officials attached to different media units. The scheme seeks to store a set of informative materials pertaining to different subjects involved in the developmental process and to prepare suitable write-ups or notes of points for use by the field publicity wing and the production wing for projecting the Government policy and activities in a befitting manner. Another important aspect of the scheme is to undertake evaluation studies of functioning of the Mass Communication media and suggest suitable modification in the manner of media handling. Besides being a nucleus of information, the wing is also supposed to bring out important informative publications pertaining to the State. It is proposed to provide Rs. 1.75 lakhs during 1978-83 for this.

35.17. The work of the Research and Analysis branch will be :—

- (i) to maintain continuous dialogue with the personnel connected with field publicity activities and meet their queries in respect of public relations measures in situations involving problems. It is to receive materials pertaining to difficulties in regard to Public Relations approach and feed back with sufficient materials for use by the field personnel.
- (ii) to study the reports sent by field personnel on mass behaviour and analyse these reports and prepare suitable media topics for counter-acting the reaction. These media topics will go to field personnel and the concerned supervising officers.

10. Construction of Building for Office, Information Centres and Reading Rooms

35.18. The District Public Relations Offices and Information Centres and reading Rooms of the Public Relations Department are mostly functioning in rented buildings. An expenditure of about Rs. 1.50 lakhs is being incurred every year towards payment of rent. Suitable accommodation is not available in all the places. In view of these difficulties, it is proposed to construct building for the Offices and Information Centres in a phased manner. The amount proposed for this scheme during Sixth Plan is Rs. 59.10 lakhs.

11. Community Viewing Scheme

35.19. Government of India have decided to provide Site Continuity in 40 per cent villages of the radial area to be served by the T. V. Transmitter which will be installed at Sambalpur. The terrestrial transmitter which will be put up by Door Darshan at Sambalpur will cover 5,000 Sq. Kilo Meters area around the transmitter. There are 650 villages in the proposed coverage area and Door Darshan will instal and maintain television sets in 260 villages up to 1978-79. This will be a liability of the State Government from 1979-80 onwards. Besides, State Government will have to cover remaining 390 villages. Big villages may require more than one T. V. set. State Government will have to run the Community Viewing Scheme as Sixth Five-Year Plan Scheme. Public Relations Department will instal and maintain the television sets whereas the expenditure on electrification of School buildings, payment of energy charges and remuneration to custodians will be borne by the Education Department. A number of Government institutions in Urban areas and other institutions in villages will go in for television sets and maintenance facilities will have to be extended to them by P. R. Department for which annual fees will have to be charged.

35.20. It is proposed to instal television sets at the rate of 100 per year. The existing Community Listening Maintenance Organisation will be suitably reorganised by augmenting staff, and it will take care of television sets taken over from Door Darshan, T. V. Sets installed by the State Government under Community Viewing Scheme and those installed by State Government in Urban areas.

35.21. Rs. 31.75 lakhs will be required during Sixth Plan period. The question of Central Assistance on Capital expenditure was discussed in the 14th Conference of Information Ministers held at New Delhi on the 4th November 1977 and it was the broad consensus that the expenses on purchase of T. V. sets should be shared equally by the three agencies, viz., the Centre, the State Government and the Community, i. e., Grama Panchayats and other institutions to share 1/3rd cost of the T. V. set due to their monetary constraint in an undeveloped State, the Centre and the State Government will have to bear expenditure on purchase of T. V. sets at 50% cost.

35.22. The requirement of funds from 1978-79 to 1982-83 under this scheme is Rs. 8.85 lakhs.

35.23. The provision proposed under the scheme does not include the provision made in the Education Department towards the cost for (a) Internal wiring of school buildings in which T. V. sets will be installed, (b) Energy consumption charges and (c) payment or remuneration to the custodians of T. V. sets.

CHAPTER 36

LABOUR WELFARE AND CRAFTSMAN TRAINING

36.1. The successive Five-year Plans have brought into being many large, medium and small industries in the State, bringing in its wake concentration of labour force in industrial growth centres with concomitant problems like housing, health and hygiene, education and other Socio-Economic problems. The welfare of the labour force is vital for maintaining production and sustained economic growth. There should be healthy participation of workers in decision making at different levels viz. shop level, plant level and corporate level to ensure industrial harmony.

36.2. Agricultural labour, which forms bulk of the labour force and other workers engaged in small trades and allied avocations are generally unorganised. Agricultural labour, so far, has not received the same level of attention as has industrial labour. Therefore, ameliorative measures for the rural labour will be undertaken on a priority basis in the Sixth Plan period. An effective strategy for development would require adequate appreciation of the problems which have hindered the progress of the rural poor. The quantitative estimate of the back log of unemployment in rural areas is also necessary so that the targets fixed are realistic and related to facts.

36.3. The Bonded Labour System, which has been made illegal by an act of the legislature needs systematic eradication and the freed bonded labour has to be fully rehabilitated. The scheme for identification, emancipation and rehabilitation of bonded labour is in operation in the State since 1976-77 in the non-plan side as per the pattern of rehabilitation assistance approved by Central Government. The scheme has to be expanded to meet the increasing obligation in the next few years with Central assistance. The Labour Directorate are registering the agents for drafting of Dadan Labourers to place out side the State of Orissa. The Dadan Labour (Control and Regulation) Act 1975 is being enforced by the Directorate who go in to the complaints, received against the Dadan Labour Contractors alleging in human harrasment, torture, non-payment of wages and Compensation, etc.

36.4. Special attention would be given to programmes for women in the work force as regards their earning capacities. Implementation of the Equal Remuneration Act will pave the way to eliminate any discrimination in the matter of wage payments for work of same or similar nature. Equal attention would also be devoted to problems of children including prevention of exploitation of child labour.

36.5. Organised Industrial labour is more or less capable of looking after itself. But, social security measures, so far, have been confined to this sector of employees leaving aside the workers in the unorganised sector constituting over 80 per-cent of the work force who are already in a 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 and steps will be initiated in this direction during this Plan period. The Inspectorate of Factories and Boilers and labour machinery would be suitably expanded/strengthened for ensuring safety, health and welfare of workman, besides promoting industrial peace and harmony.

36.6. Unemployment figure in the State in 1982 would be in the neighbourhood of 3.3 millions. As the Government is committed to provide full employment during a period of 10 years, the task before us is gigantic and exacting. In the context of the new employment strategy and the plan objective, the employment service in the State needs to be expanded and the employment exchange machinery strengthened towards the above end for compiling employment information and other necessary data and undertaking surveys and studies in the field of employment and for monitoring and evaluating the progress that would be achieved. Hither to the activities of the employment service have mainly been directed towards registration and submission of job seekers mostly in urban areas. With the strengthening of employment machinery, the employment service would be geared to catering to the needs of semi-urban and rural areas and backward regions also. Accordingly, different schemes under employment service have been proposed for implementation during the Sixth Plan period.

36.7. Achievement during the Fifth Plan period and objectives and targets for the Sixth Plan and outlays proposed under each scheme under Labour Administration and Employment service are furnished in the following paragraphs.

(A) LABOUR ADMINISTRATION

Review of Progress

36.8. In the Fifth Plan the achievement has been as follows :—

- (i) 13 number of Rural Labour Cells have been opened in various districts of the State for effective enforcement of the Labour Laws relating to (1) Agricultural Labour and Rural Labour, (2) Contractors' Labour, (3) Dadan Labour, (4) Minimum Wages Act.
- (ii) A safety Cell was created to advise the workers and the management who were quite unfamiliar with the techniques of modern machineries so as to take adequate measures to avoid accidents.
- (iii) Cash award for best safety measures and best research papers on industrial relation have been given.
- (iv) *Labour Seminars and refresher course* of Labour Officers, Factory Manager have been conducted.
- (v) For Collection and compilation of Labour statistics a limited number of posts were created.
- (vi) 4 Multipurpose Labour Welfare Centres and 2 Reading Room-cum-Recreational Centres have been opened to promote educational, recreational and cultural activities of the working class.
- (vii) A building has been constructed for the Labour Directorate.

Targets for the Sixth Plan

36.9. The State Labour Directorate has been assigned with the dual responsibility of enforcing and administering 46 labour legislations on the one hand and maintenance of industrial harmony on the other hand. The task of ameliorating the lot of industrial labour working both in the organised and unorganised sectors of economic activity has assumed much importance. The role of the Directorate and the resultant work-load in implementation of fixation and revision of minimum wages in respect of scheduled employments and ensuring payment of minimum wages fixed by Government and workers participation in the management of industries have increased manifold. The Directorate and the field set up under it will be suitably strengthened to implement the following :—

- (i) 4 Multipurpose Labour Welfare Centres and 2 Reading Room-cum-Recreation Centre will be continued.
- (ii) Seminar and refresher course for Labour Offices, Factory Managers and Trade Union Workers will be organised.
- (iii) Cash awards for best safety measures and best research paper on Industrial relations will be paid.
- (iv) A building for the Labour Directorate will be completed, and 5 office buildings and 14 staff quarters will be constructed.
- (v) 19 unit offices will be opened in the State for effective enforcement of Labour Laws relating to (1) Minimum Wages, (2) Beedi Cigar workers, (3) Contractors' Labour and (4) Motor Transport Workers; which covers unorganised 12½ lakhs of rural Labourers.
- (vi) An Implementation and Evaluation wing will be created in the Labour Directorate for implementation of the Code of Discipline, Code of conduct, Labour Enactments, Awards Agreements etc. and for arranging meetings of Implementation Committee at regular intervals. Prompt preventive action to avert strikes and lock outs etc.

- (vii) A publicity and propaganda wing will be created in the Labour Directorate to educate and enlighten the sweated labourer about their privileges ensured under various Labour Laws.
- (viii) A Legal Cell will be created to give Legal Guidance to the field officers and to process draft prosecutions, to render legal aid assistance with free of cost to the workmen.
- (ix) A short term training course will be conducted by the Factory Inspectorate for the factory workers and Supervisors. Such training can be imparted through seminars, Symposia, Safety exhibitions, audio-visual demonstration and organised competitions.
- (x) A Permanent Safety Museum will be opened under the administrative control of the Inspectorate of Factories.
- (xi) 4 vehicles will be purchased for effective functioning of Factory Inspectorate.
- (xii) A limited number of additional staff will be created for effective implementation of Factory and Boilers Act and for the Statistical Cell of the Labourer Directorate.
- (xiii) 8 shops and commercial unit offices are proposed to be opened to regulate the employment and service condition of the employees engaged in shops and commercial establishments.

The outlay proposed for the Sixth Plan is estimated to be Rs. 108.87 lakhs.

(B) EMPLOYMENT SERVICE

36.10. Employment service in the State requires to be intensified in the direction of achieving the national policy of employment during the Sixth Plan. Progress achieved during the Fifth Plan period and the targets for the Sixth Plan are indicated below.

Review of progress in Fifth Plan

- (i) 7 Employment Sub-offices have been opened at the sub-divisional headquarters in the State by the end of Fifth Plan, i. e., till 1977-78.
- (ii) One University Employment Information and Guidance Bureau has been opened at Vani Vihar, Bhubaneswar.
- (iii) Two Employment Exchanges at Rourkela and Cuttack have been functionally decentralised for dealing purely with the educated and skilled categories workers.
- (iv) A State Employment Exchange has been opened for the candidates of professional and executive categories.
- (v) Preliminary works for the office buildings at Balangir, Koraput and Phulbani have been taken up.

36.11. Target for the Sixth Plan

- (i) 3 Employment Sub-offices and 4 Rural Employment Bureaus will be opened along with continuance of 7 Sub-offices and 6 Bureaus opened during the Fifth Plan period.
- (ii) One Employment Exchange at Bhubaneswar will be functionally decentralised along with continuance of previous programme.
- (iii) The State Employment Exchange and the University Employment Information and Guidance Bureau at Vani Vihar will be continued.
- (iv) A cell for Monitoring the working of labour laws/regulations in respect of Scheduled Castes and Scheduled Tribes will be created.

- (v) 9 Employment Marketing Information Units will be opened in the district level along with strengthening of Employment Marketing Information Unit at headquarters.
- (vi) 6 number of Enforcement machineries in six districts will be created to check up the defects for implementation of the compulsory Notification of Vacancies Act and Rules and complains regarding registration and placement of cases.
- (vii) Four Regional Employment Exchanges will be established at Cuttack, Berhampur, Sambalpur and Balasore for constant attention and supervision of the Employment Offices.
- (viii) One vocational Guidance Unit will be established at Balangir for dissemination of knowledge for career and scope for higher studies in education. The State Vocational Guidance Unit will also be strengthened for the purpose.
- (ix) One career Study Centre will be established for collection, compilation and preparation of career literature of various kinds, *audio visual*., Occupational Information of Career Advisory Programmes.
- (x) Four Cells such as (1) Self Employment Cell, (2) Special Cell for ex-Servicemen, Women, Physically Handicapped persons, etc., (3) Special Cell for Scheduled Cast and Scheduled Tribe persons and (4) Research and Statistical Cell at the headquarter are proposed to be established during Sixth Plan period.
- (xi) One publicity wing proposed to be established in the Employment Directorate to give suitable publicity of Employment avenues.
- (xii) It has been proposed to construct 13 office buildings and 6 staff quarters along with completion of 3 office buildings during Sixth Plan period.

The outlay proposed for Employment Service for the Five-Year Plan is Rs. 69.13 lakhs

Centrally Sponsored Scheme for Physically Handicapped Persons

36.12. A cell under this Centrally sponsored scheme for the Physically Handicapped persons is working in this State from 1976-77. This cell highlights the cases of these persons by contacting the employers and identifying jobsuitable for these persons. The cell takes care by way of submission of these physically handicapped persons and their placement in service. State Government have decided to reserve posts for these handicapped persons and have allowed concessions to them in the Sixth Plan, it is proposed to intensify this service. The annual expenditure for 1978-79 is Rs 0.59 lakh. The expenditure proposed during the remaining period of the Sixth Plan is Rs. 3.65 lakhs

(c) CRAFTSMAN TRAINING

36.13 In the context of the new employment strategy, Integrated Rural Development Programme and the emphasis on Village and Small Industries, Craftsman Training Programme—the training of skilled workers and technicians as well as employment information and placement systems would be restructured and strengthened.

36.14 Efforts have been made in the previous plans to set up a strong infrastructure to train Craftsmen who would be required to man the growing industrial sectors in the State. There are 12 vocational training Institutes (I. T. I. S.) including one exclusively for ladies at Cuttack with a intake capacity of 4132 in 25 Engineering and non-Engineering Trades. All these institutions were set up before the fourth plan and the I. T. I. Ambaguda which was transferred to State Government by the D. D. A. during 1975-76.

36.15 Recently a survey was conducted to assess requirement of Craftsman during the sixth plan in State Government and Public Sector indertakings including prospective projects like the wagon repairing factory Manchewar, Fertiliser Plant, Paradeep, Alumina/Aluminium Plant

Koraput etc. The requirement of Craftsman has been assessed at 8611. The total requirement may be of the order of 10,000 including employment in private Sector undertakings. It is estimated that the existing I. T. Is with one additional Institution at Phulbani proposed to be taken up out of special central assistance would meet the requirement. The out-turn being roughly 2000 per annum. The approach in the sixth Plan is therefore consolidation of existing I. T. Is.

36.16 The total requirement of funds for completion of incomplete Institutional buildings and construction of new residential and nonresidential buildings according to the norms prescribed by D. G. E. & T. has been estimated at Rs. 76.42 lakhs which has been provided in the sixth plan.

36.17 According to the norms prescribed by D. G. E. & T. Rs. 71.39 lakhs would be required to be provided in the sixth plan to meet the deficit in the total requirement of equipments.

36.18 The staffing pattern of I. T. Is. has been prescribed by the D. G. E. & T. On a review of the staff sanctioned so far for the I. T. Is. It is found that number of posts are required to be created for effective supervision of the Craftsman Training Programme. Provision has been made for creation of some posts in the I. T. I. Ambaguda, Bhawanipatna, Cuttack and Hirakud to make good the deficiencies. The estimated expenditure on this account has been assessed Rs. 52.19 lakhs during the sixth plan.

36.19 Government of India in the Ministry of Petroleum and Chemicals have formulated a scheme for conservation and economic utilisation of petroleum products in the country. Under this scheme, intensive training shall be arranged to the passed out trainees of the T. T. Is. above the age of 18 in driving of commercial transport vehicles and its maintenance. The scheme envisages intensive short-term training to be imparted to the passed out I. T. I. trainees initially in two Industrial Training Institutes of the State. It is estimated that a sum of Rs. 21.82 lakhs would be necessary for implementation of the scheme in two I. T. Is. during sixth plan. This scheme shall provide necessary personnel to the ever growing transport industry of the State. In addition to above, many of the I. T. I. trained Craftsmen in Motor Mechanic Trade shall also get gainful employment.

36.20 D. G. E. & T. has recommended the training and retraining of Industrial Training Institute Instructional staff in Central Training Institutes for qualitative improvement in teaching. The newly appointed instructors are required to undergo one year training in the Central Training Institute within two years of their appointment as per service conditions stipulated by the State Government. Intensive efforts have been made in the fifth plan to train all the untrained instructors, yet due to inadequate funds and insufficient number of posts under L. R. and T. R. all the untrained instructors could not be trained. Besides refresher training is also equally important to update the knowledge of teaching staff with the modern techniques of teaching and use of modern sophisticated equipments. Hence a sum of Rs. 1.50 lakhs is provided for training and retraining of I. T. I. Instructors during sixth plan.

36.21 A vocational Training Institute styled as Government Tailoring Institute was established at Cuttack during fourth plan to impart training to ladies, originally in cutting and tailoring trade with intake of 32. During fifth plan the said institute was expanded by introducing stenography and increasing the intake capacity in Cutting and Tailoring. The present intake capacity of the Institute is 80. It is proposed to introduce Draftsman (Civil) and Radio Mechanic trades in this I. T. I. for Women during sixth plan to provide additional vocational training facilities to the ladies in diversified courses. Initially it is programmed to start these new trades with an intake of 32 seats in each trade.

36.22 The Institution has got no permanent buildings of its own. presently it is housed in a barrack constructed during the Second World War for accommodation of war technicians. This is a temporary shed. There is no hostel building or staff quarters of the institution. Trainees coming from outside the city are facing difficulties to get accommodation. Provision has been made to construct a hostel including a few staff quarters for this institution during sixth plan.

36.23 Implementation of National Apprenticeship Training has satisfactorily advanced in the State during last plan period. Against a target of 2800 seats, 3658 seats have been located by the end of 1977-78. By April 1978, 2309 seats have been utilised. The difficulties of utilisation of remaining seats is mainly due to non-availability of basic training facilities in some of the trades like Chemical Group, Agriculture Group of trades etc. It has been assessed that a sum of Rs. 2.00 lakhs would

be necessary for setting up of a basic training centre in Chemical Group of trades at I. T. I. Rourkela Two Apprenticeship hostels have been completed at Rourkela and Brajarajnagar with lodging capacity of 50 each. Moreover the hostel building of Technical School, Choudwar has been converted, as apprenticeship Hostel for accommodation of the apprentices engaged in the area. However the minimum staff required for management of these hostels has not been provided. Provision of Rs. 1.82 lakhs has therefore been made during 1978-79 for smooth running of the Apprenticeship Hostels.

36.24 The Food Craft Institute was started at Bhubaneswar with full financial assistance from Government of India as grant-in-aid during the fourth plan. According to the terms and conditions agreed between State and Central Government the Institution shall be the liability of State Government after the 5th year of its functioning. Accordingly funds for running of this Institution shall have to be provided by the State Government from September 1978.

36.25 The Institution has got no building, hostel and staff quarters. Presently it is housed in a portion of the show house of the Export Promotion and Marketing Directorate. For construction of the hostel and staff quarters a sum of Rs. 13.60 lakhs is proposed during the sixth plan. Besides for continuance of this Scheme under the State Government a sum of Rs. 14.60 lakhs is proposed.

36.26 Under Craftsman training, a sum of Rs.200 lakhs is proposed to be spent during the sixth plan period. Out of the total provision nearly 75 per cent have been ear-marked for consolidation of existing Industrial Training Institute and for expansion of Women I. T. I. at Cuttack. Under consolidation of the Institutions, it has been programmed to create a few additional posts of Instructors and workshop Attendants according to the norms prescribed by D. G. E. & T. Hence, in total 68 persons would get direct employment in the sixth plan Programme under Craftsman training.

36.27 The allocation of funds and the employment to be generated are indicated yearwise in the statements.

PRO FORMA-I

LABOUR WELFARE SCHEMES AND YEARWISE PHASING OF OUTLAYS (FINANCIAL)

(Rupees in lakhs)

Serial No.	Schemes	1974-78				1978-83				(Approved Outlay) 1978-79			
		Anticipated Expenditure			Foreign assistance component in the total	Five-Year Plan			Foreign assistance component in the total	Capital Outlay			
		Total Expenditure	Capital Expenditure			Total Outlay	Capital Outlay			Total Outlay	Buildings	Equipment	Foreign assistance component in the total
			Buildings	Equipments			Buildings	Equipments					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Labour and Labour Welfare													
(A) Labour Administration													
(i) Direction and Administration—													
1	Rural Labour Cell ..	10.27	..	1.39*	..	4.45	..	..	..	4.45	..	..	..
2	Strengthening of Labour Directorate for effective implementation of various labour laws.	..	..	..	..	21.72	..	..	..	..	..	..	..
3	Strengthening of Factory Inspectorate for effective implementation of various factories laws.	..	..	..	..	6.68	..	..	..	..	..	..	..
	Sub-Total ..	10.27	..	1.39	..	32.85	..	..	..	4.45	..	..	..
(ii) Working condition and safety													
1	Safety Cell ..	0.52	..	..	..	0.23	..	..	..	0.23	..	..	..
2	Grant of Safety Awards ..	0.14	..	..	..	0.02	..	..	..	0.02	..	..	..
3	Legal Cell ..	..	..	..	..	2.12	..	..	..	..	..	..	..
4	Strengthening of Safety Cell ..	..	..	..	..	0.67	..	..	..	..	..	..	..
5	Provision for permanent safety museum.	..	..	..	..	5.00	2.00	2.00	..	..	..	..	..
	Sub-Total ..	0.66	..	..	..	8.04	2.00	2.00	..	0.25	..	..	..

Sl. No.	1979-80				1980-81				1981-82				1982-83				If the Scheme is still over from the 5th Plan indicate (s) against such Scheme in this column	Remarks
	Total Outlay	Capital Outlay Buildings	Equipments	Foreign assistance component in the total	Total Outlay	Capital Outlay Buildings	Equipments	Foreign assistance component in the total	Total Outlay	Capital Outlay Buildings	Equipments	Foreign assistance component in the total	Total Outlay	Capital Outlay Buildings	Equipments	Foreign assistance component in the total		
1	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4.45*	Cost of one Jeep & 14 motor cycles.
1	5.02	..	..	..	5.27	..	..	..	5.55	..	..	..	5.88	..	..	..	..	..
3	1.58	..	..	..	1.64	..	..	..	1.70	..	..	..	1.76	..	..	..	..	..
	6.60	..	..	..	6.91	..	..	..	7.25	..	..	..	7.64	..	..	..	4.45	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.23	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.02	..
6	0.50	..	..	..	0.52	..	..	..	0.50	..	..	..	0.56	..	..	..	..	..
7	0.15	..	..	..	0.16	..	..	..	0.17	..	..	..	0.19	..	..	..	..	..
8	4.25	2.00	2.00	..	0.25	..	..	..	0.25	..	..	..	0.25	..	..	..	..	..
	4.90	2.00	2.00	..	0.93	..	..	..	0.96	..	..	..	1.00	..	..	..	0.25	..

1	2	3	4	5	6	7	8	9	10	11	12	13	14
(iii) General Labour Welfare													
1	Labour Seminar ..	0.83	..	..	..	0.07	..	..	..	0.07	..	..	..
2	M. L. W. Centres ..	3.64	..	..	..	0.93	..	..	..	0.93	..	..	..
3	Reading Room-cum-Recreation Centre.	0.57	..	..	..	0.14	..	..	..	0.14	..	..	..
4	Creation of publicity and propaganda wing for the Labour Directorate.	..	..	..	..	2.88	..	0.70(A)	..	..	..	..	..
5	Promoting Schemes for the organisations of the unorganised labour.	..	..	..	..	2.85	..	..	..	..	..	..	..
6	Scheme for creation of posts for implementation of the schemes workers participation in management.	..	..	..	..	7.70	..	0.55(B)	..	..	..	..	..
7	Schemes on the effective enforcement of the Orissa Shops & Commercial Estt. Act, 1956.	..	..	..	..	10.00	..	4.40	..	..	..	..	..
Sub-Total ..		5.04	..	..	..	24.57	..	5.65	..	1.14	..	..	..
(iv) Education and Training													
1	Refresher course of Labour Officers Welfare Officer, Factory Manager and Trade Union Leaders.	0.56	..	..	..	0.25	..	..	..	0.25	..	..	..
2	Training of powers and Supervisors in accident prevention.	..	..	..	..	3.81	..	0.97	..	..	..	..	..
Sub-Total ..		0.56	..	..	..	4.06	..	0.97	..	0.25	..	..	..
(v) Research and Statistics													
1	Research & Statistics ..	0.91	..	..	..	0.45	..	..	..	0.45	..	..	..
2	Strengthening of statistical wing of the Labour Directorate and improvement in collection of Labour Statistics.	..	..	..	..	6.66	..	..	..	..	..	..	..
Sub-Total ..		0.91	..	..	..	7.11	..	..	..	0.45	..	..	..

	1	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
<i>(iii)</i>																			
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.07(A) Cost of one Projector.
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.93
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.14
4	1.23	..	0.70(A)	..	0.53	..	..	..	0.55	..	..	..	0.57	..	..	..	..	..	(B) Cost of one Jeep.
5	0.65	..	..	..	0.68	..	..	..	0.72	..	..	..	0.80	..	..	..	..	..
6	2.39	..	0.55(B)	..	1.72	..	..	..	1.77	..	..	..	1.82	..	..	..	..	..	(C) Cost of two Jeeps.
7	2.77	..	1.10 (C)	..	2.77	..	1.10 (C)	..	2.23	..	1.10 (C)	..	2.23	..	1.10 (C)	..	..	..
	7.04	..	2.35	..	5.70	..	1.10 (C)	..	5.27	..	1.10 (C)	..	5.42	..	1.10 (C)	..	..	1.14	..
<i>(iv)</i>																			
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.25
2	1.69	..	0.97	..	0.70	..	..	..	0.71	..	..	..	0.71	..	..	..	..	..
Total	1.69	..	0.97	..	0.70	..	..	..	0.71	..	..	..	0.71	..	..	..	..	..	0.25
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0.45
2	1.56	..	..	..	1.63	..	..	..	1.70	..	..	..	1.77	..	..	..	..	..
Total	1.56	..	..	..	1.63	..	..	..	1.70	..	..	..	1.77	..	..	..	..	..	0.45

(Rupees in lakhs)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
vi. Other Promotional activities													
1	Case study of Industrial Relation	0.43				0.16				0.16			
2	Creation of posts in connection with implementation & evaluation work.					7.70							
3	Scheme for strengthening the Registration of Trade Unions & Workmen's Compensation Wing.					5.70							
4	Purchase of vehicles for more efficient functioning of the Factories Inspectorate.					3.82		1.90(D)					
5	Construction of Departmental office buildings and staff quarters under the Labour Directorate (including Labour Directorate building).	6.69	6.69			4.02	4.02			2.02	2.02		
6	Construction of Departmental buildings and staff quarters under Factories Inspectorate.					10.84	10.84						
Sub-Total		7.12				32.24	10.84	1.90		2.18			
Total—Labour Administration		24.56	6.69	1.39		108.87	16.86	10.52		8.72	2.02		

1	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
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(iv)

1																		0.16	
2	2.75				1.60				1.65				1.70						
3	1.40				1.40				1.45				1.45						
4	2.38		1.90(D)		0.48				0.48				0.48						(D) Cost of four Jeeps.
5	0.50	0.50			0.75	0.75			0.75	0.75									2.02
6	2.00	2.00			3.00	3.00			3.00	3.00			2.84	2.84					
<hr/>																			
	9.03		1.90		7.23				7.33				6.47	2.84					2.18
<hr/>																			
	30.82	4.50	7.22		23.10	3.75	1.10		23.22	3.75	1.10		23.01	2.84	1.10				8.72

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1	2	3	4	5	6	7	8	9	10	11	12	13	14
(B) Employment Service													
1	Employment sub-offices	5.68	7.35	2.30
2	Rural Employment Bureaus												
3	Functional decentralisation of Employment Exchange at Cuttack and Rourkela & Bhubaneswar.	1.11	..	..	..	1.35	..	..	..	0.41	..	..	..
4	Expansion of Special Employment Exchange (State Employment Exchange).	0.56	..	..	..	0.21	..	..	..	0.21	..	..	..
5	U. E. I. & G. B. at Vani Vihar. BBSR.	0.53	..	..	..	0.23	..	..	..	0.23	..	..	..
6	Cell for Monitoring the working in respect of scheduled castes and scheduled tribes.	..	..	..	..	0.80	..	..	..	0.14	..	..	..
7	Publicity Wing in the Employment Directorate.	..	..	..	..	2.86	..	0.71(E)	..	..	..	..	..
8	Special Cell for ex-service men & women, etc.	..	..	..	..	1.12	..	..	..	..	..	..	..
9	One Career Study Centre in Employment Directorate.	..	..	..	..	1.23	..	..	..	..	..	..	..
10	Self Employment Cell in Employment Directorate.	..	..	..	..	1.19	..	..	..	..	..	..	..
11	Setting up one Vocational Guidance Unit at District Employment Exchange, Balasore.	..	..	..	..	0.37	..	..	..	..	..	..	..
12	Research & Statistical Cell in Employment Directorate.	..	..	..	..	3.40	..	..	..	..	..	..	..

15 16 17 18 19 20 21 22 23 24 24 26 27 28 29 30 31 32

(B) Employment Service

1	1:22	..	..	..	1:25	..	..	..	1:28	..	..	..	1:30	..	..	..	2:30
2	0:22	..	..	..	0:23	..	..	..	0:24	..	..	..	0:25	..	..	..	0:41
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0:21
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0:23
6	0:15	..	..	..	0:16	..	..	..	0:17	..	..	..	0:18	..	..	..	..
7	..	..	..	..	1:40	..	0:71	..	0:71(E)	..	..	..	0:75	..	..	..	..
8	..	..	..	..	0:35	..	..	..	0:37	..	..	..	0:40	..	..	..	..
9	..	..	..	..	..	..	..	..	0:60	..	..	..	0:63	..	..	..	..
10	..	..	..	..	..	..	..	..	0:58	..	..	..	0:61	..	..	..	..
11	..	..	..	..	..	..	..	..	0:18	..	..	..	0:19	..	..	..	..
12	0:79	..	..	..	0:83	..	..	..	0:87	..	..	..	0:91	..	..	..	..

(E) Cost of one Jeep and V. G. apparatus, etc.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
13	Strengthening of E. M. I. Units	..	..	..	..	5.66	..	..	..	..	..	..	..
14	Strengthening of State V. G. Unit	..	..	..	..	1.06	..	..	..	..	..	..	..
15	Enforcement Cell and Job Development Cell at Employment Directorate and District Employment Exchanges at Rourkela, Sambalpur, Koraput, Cuttack, Berhampur and Balasore.	..	..	..	..	11.58	2.76(F)	..	..	..	..	..	..
16	Regional Employment Exchanges at Cuttack, Berhampur, Sambalpur and Balasore.	..	..	..	..	9.63	..	1.84 (G)	..	..	..	..	..
17	(a) Construction of Departmental buildings under the Employment Directorate.	0.34	0.34	..	..	18.61	18.61	..	..	0.06	0.06	..	..
	(b) Construction of staff quarters	..	..	..	..	2.48	2.48	..	..	..	..	..	..
	Sub-Total	..	8.22	0.34	..	..	69.13	21.09	5.31	..	3.35	0.06	..
	Total—Labour and Labour Welfare		32.78	7.03	1.39	..	178.00	37.95	13.83	..	12.07	2.08	..

	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
13	1.34	..	..	..	1.39	..	..	..	1.44	..	..	..	1.49	..	..	..	..	..
14	0.25	..	..	..	0.26	..	..	..	0.27	..	..	..	0.28	..	..	..	..	..
15	0.50	..	..	..	5.50	..	2.76 (F)	..	2.76	..	..	..	2.82	..	..	..	..	(F) Cost of 6 jeeps.
16	3.71	..	1.84 (G)	..	1.92	..	..	..	1.97	..	..	..	2.03	..	..	..	..	(G) cost of four jeeps.
17	(a) 3.64	3.64	..	..	7.10	7.10	..	..	6.81	6.81	..	..	1.00	1.00	..	..	..	2.66
	(b) 0.80	0.80	..	..	0.89	0.89	..	..	..	..	..	..	0.79	0.79	..	..	..	..
	12.62	4.44	1.84	..	21.28	7.99	3.47	..	18.25	6.81	13.63	1.79	5.81
	43.44	8.94	9.06	..	44.38	11.74	4.57	..	41.47	10.56	1.16	..	36.64	4.63	1.16	14.53

(Rupees in lakhs)

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1	2	3	4	5	6	7	8	9	10	11	12	13	14
Public Health and Sanitation													
Employees State Insurance Scheme													
Headquarters Organisation													
1	Continuance of additional staff for the Headquarters Organisation.	0.89	..	..	..	0.90	..	..	..	0.90	..	..	..
2	Reorganisation of E. S. I. Directorate.	..	..	..	..	3.75	..	..	..	..	..	..	..
Sub-Total		0.89	..	..	..	4.65	..	..	..	0.90	..	..	..
Hospitals													
3	Continuance of 50 bedded Hospital at Kansbahal and Brajrajnagar.	17.85	..	..	..	8.08	..	..	..	8.08	..	..	..
4	Augmentation of Bed strength of E. S. I. Hospitals at Choudwar and Brajrajnagar.	..	..	..	..	37.78	..	..	..	4.89	..	..	..
5	Establishment of 8 bedded annexe ward at Barang and Barbil.	..	..	..	..	5.99	..	..	..	0.63	..	..	..
6	Purchase of X-Ray Plant at E. S. I. Hospital, Brajrajnagar.	..	..	..	..	3.00	..	3.00	..	3.00	..	3.00	..
7	Opening of a 50 bedded Hospital at Bhubaneswar.	..	..	..	..	13.51	..	..	..	..	..	..	..
8	Opening of 50 bedded T. B. Hospital at Rajgangpur.	..	..	..	..	32.00	..	..	..	..	..	..	..
9	Establishment and augmentation of E. S. I. Hospital at J. K. Pur.	..	..	..	..	20.32	..	..	..	3.00	..	..	..
Sub-Total		17.85	..	..	..	120.68	..	3.00	..	19.60	..	3.00	..

709

	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0-90
2	0-55	..	..	..	0-60	..	..	..	1-05	..	..	..	1-55	..	..	..	..	..
	0-55	..	..	..	0-60	..	..	..	1-05	..	..	..	1-55	..	..	..	..	0-90
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8-08
4	8-98	..	..	..	7-92	..	..	..	7-97	..	..	..	8-02	..	..	..	..	4-89
5	1-91	..	..	..	1-10	..	..	..	1-15	..	..	..	1-20	..	..	..	..	0-63
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3-00
7	..	..	..	..	..	..	..	..	6-00	..	..	..	7-51	..	..	..	..	..
8	8-00	..	..	..	8-00	..	..	..	8-00	..	..	..	8-00	..	..	..	..	..
9	2-74	..	..	..	2-79	..	..	..	2-85	..	..	..	8-94	..	..	..	..	3-00
	21-63	..	..	..	19-81	..	..	..	25-97	..	..	..	33-67	..	..	..	..	19-60

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Dispensaries													
10	(a) Continuance of E. S. I. Dispensaries at Rourkela, Jajpur Road and Cuttack.	15.36	..	..	..	7.20	..	..	..	7.20	..	..	..
	(b) Upgradation of E. S. I. Dispensaries at Berhampur, Bhubaneswar, Bardol and I. K. Pur.	..	..	..	..	..	..	..	..	..	..	..	..
11	Opening of seven E. S. I. Dispensaries at Tora, Paradeep, Jagatpur, Machhkund, Joda, Balasore and Talcher.	..	..	..	..	45.37	..	..	..	4.00	..	..	..
	Sub-Total dispensaries	..	15.36	..	..	52.57	..	..	..	11.20	..	..	..
	Total E. S. I. Scheme	..	34.10	..	..	177.90	..	3.00	..	31.70	..	3.00	..
	1/8th State share	..	4.19	..	..	22.00	..	0.38	..	3.93	..	0.38	..
	Grand Total	..	36.97	7.03	1.39	200.00	37.95	16.21	..	16.00	2.08	0.38	..

1	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
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10

(a)	7:20	..
(b)

11	6:00	11:55	11:19	12:63	4:00	..
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6:00	11:55	11:19	12:63	11:20	..
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28:18	31:96	38:21	47:85	31:70	..
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3:44	3:94	4:72	5:97	3:93	..
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46:88	8:94	9:06	..	48:32	11:74	4:57	..	46:19	10:56	1:10	..	42:61	4:63	1:10	18:46	..
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PRO FORMA II

CRAFTSMEN TRAINING AND LABOUR WELFARE—PHYSICAL

Serial No.	Particular	Position as at the end of March 31st 1978	Likely position as at the end of March 31st each year				
			1979	1980	1981	1982	1983
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

Employment Service

	Employment Exchanges	..	..	..	..	..	..
(a) Total 63	..	(i) 13 District Employment Exchanges.	..	..	..	..	..
		(ii) 3 Special Employment Exchanges.	..	..	..	..	..
		(iii) 36 Employment Sub-Offices.	..	7	..	..	..
(b) In Rural Areas	..	6 Rural Employment Information Bureau.	..	..	..	..	..
(c) University Employment Information and Guidance Bureau (Nos.)	..		4	..	..	..	..
(d) For Physically Handicapped.	1 (One) Exchange	..	..	..	..	..	..

Serial No.	Particular	Position as at the end of March 1978	Likely position as at the end of March 31st each year				
			1979	1980	1981	1982	1983
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2 No. of applicants on Live Register of Employment Exchanges.							
(a) Total	--	375,711	418,690	483,692	548,582	618,708	693,683
(b) I. T. I. Trained Craftsmen.	
(i) Total
(ii) Registered for 2 years or more	
(c) Trained apprentices							
(i) Total	
(ii) Registration for two years or more	
(d) Scheduled Castes/ Scheduled Tribes	
(e) Women		19,068	21,022	22,033	24,900	27,027	29,031

Serial No.	Particular	Position as at the end of March 1978	Likely position as at the end of March 31st each year				
			1979	1980	1981	1982	1983
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

3 Labour Welfare

1 Number of Labour—

(a) Welfare Centre	31	..	..	..	..	..
(b) Reading room-cum-Recreation Centre.	13	..	..	..	..	..

2 Bonded Labour—

(a) Located	671 *	..	..	..	..	..
(b) Freed	320	..	..	..	..	..
(c) Rehabilitated	313	..	..	..	..	..

* Out of 671 cases located, 288 cases were dropped and 63 cases are under examination.

STATE AND UNION TERRITORIES CRAFTSMAN TRAINING AND LABOUR

Sl. No.	Schemes	1974—78 anticipated Expenditure			Foreign assistance component in the total	1978—83 Five-Year Plan			
		Total expenditure	Capital expenditure			Total outlay	Capital outlay		
			Building	Equip-ment			Buildings	Equip-ments	
		(1)	(2)	(3)		(4)	(5)	(6)	(7)	(8)	(9)
CRAFTSMAN TRAINING									
1	I. T. I. at Ambaguda ..	7.40	..	..	..	28.16	22.00	3.00	
2	Reorganisation of existing I. T. Is.	14.27	7.17	4.05	..	118.70	33.91	65.91	
3	Training and retraining of I. T. I. Instructors.	0.98	..	..	..	1.50	..	..
4	(a) Strengthening of Headquarters staff (Employment and Training).	0.13	..	..	..	0.13	..	..
	(b) Strengthening of Headquarters staff (L. R. T. R.).	0.19	..	..	..	0.10	..	..
5	Tailoring Institute, Cuttack (I. T. I.) for Women.	1.11	—	..	..	14.29	4.00	2.48	
6	National Apprenticeship Training.	7.26	2.73	..	..	8.92	2.91	..	
7	Food Craft Institute at Bhubaneswar.	..	..	..	..	28.20	13.60	..	
8	Book Bank in I. T. Is.	0.23	..	..	..	..	..	..
9	Co-operative Stores in I. T. Is.	0.47	..	..	..	..	..	..
	Total	32.04	9.90	4.05	..	200.00	76.42	71.39	

I
WELFARE SCHEMewise AND YEARWISE PHASING OF OUTLAYS (FINANCIAL)

(Rs. in lakhs)

Foreign Assistance component in the total	1978-79 approved outlay			Foreign assistance component in the total	1979-80			Foreign assistance component in the total
	Total outlay	Capital outlay			Total outlay	Buildings	Equipments	
		Building	Equip-ment					
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
..	4.16	1.00	..	..	10.00	8.00	2.00	..
..	3.88	1.91	1.43	..	41.58	13.00	27.40	..
..	0.30	..	..	..	0.30	..	..	..
..	0.13	..	..	..	..	..	..	..
..	0.10	..	..	..	..	..	..	..
..	0.80	..	..	..	6.75	3.40	2.10	..
..	2.93	..	..	..	2.68	2.05	..	..
..	1.70	..	..	..	11.00	8.00	..	..
..
..
..	14.00	2.91	1.43	..	72.31	34.45	31.50	..

Sl. No.	Schemes	1980-81			Foreign assistance component in the total	1981-82		
		Total outlay	Capital outlay			Total outlay	Capital outlay	
			Buildings	Equipments			Buildings	Equipments
(1)	(2)	(19)	(20)	(21)	(22)	(23)	(24)	(25)
CRAFTSMAN TRAINING								
1	I. T. I. at Ambaguda	7.00	6.00	1.00	..	4.00	4.00	..
2	Reorganisation of existing I. T. Is.	32.97	8.00	19.58	..	21.76	6.00	10.00
3	Training and retraining of I. T. I. Instructors.	0.30	..	..	..	0.30	..	..
4	(a) Strengthening of Headquarters staff (Employment and Training.)	..	..	..	..	..	..	..
	(b) Strengthening of Headquarters staff (L. R. T.R.)	..	..	..	..	..	..	..
5	Tailoring Institute Cuttack (I. T. I.) for Women.	2.80	0.60	0.38	..	1.92	..	..
6	National Apprenticeship Training.	0.97	0.25	..	..	1.12	0.30	..
7	Food Craft Institute at Bhubaneswar.	8.15	5.00	..	..	3.90	0.60	..
8	Book Bank in I. T. Is	..	..	..	..	..	..	..
9	Co-operative Stores in I. T. Is.	..	..	..	..	..	..	..
	Total	52.19	19.85	20.96	..	33.00	10.90	10.00

Foreign assistance component in the total	1982-83			Foreign assistance component in the total	If the scheme is spillover from Fifth Plan indicate (a) against such scheme in this column	Remarks
	Total outlay	Capital outlay				
		Buildings	Equipments			
(26)	(27)	(28)	(29)	(30)	(31)	(32)
..	3.00	3.00	..	..	S	
..	18.51	5.00	7.50	..	S	
..	0.30	..	..	..	..
..	
..	
..	2.02	..	..	..	..
..	1.22	0.31	..	..	..
..	3.45	..	..	..	..
..	
..	
..	28.50	8.31	7.50	..	..

Craftsman Training and Labour Welfare

PRO FORMA II

Physical

Sl. No.	Particulars	Position as at the end of March		Likely position as at the end of March 31st each year					Remarks
		31st 1978	1979	1980	1981	1982	1983		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
(I) Craftsman Training									
1	Number of Industrial Training Institutes (ITIs).	12 (including GTI Cuttack).	12 (including GTI, Cuttack).	12 (including GTI, Cuttack).	13 (including GTI, Cuttack).	14 (including GTI, Cuttack).	14 (including GTI, Cuttack).		
2	Seating Capacity ..	4,132	4,164	4,260	4,452	4,644	4,644		
3	Number of persons undergoing training—								
	(a) Total	4,217	4,164	4,260	4,452	4,644	4,644		
	(b) Scheduled Caste/S. C. ..	478	624	630	680	700	700		
	(c) Scheduled Tribe/S. T. ..	452	524	540	590	620	620		
	Total ..	930	1,148	1,170	1,270	1,320	1,320		
	(c) Women ..	108	140	172	180	200	200		

(B) Apprenticeship Training

1	Training places located ..	3,098	3,258	3,458	3,660	3,800	4,000
2	Apprentices under going training			..	..	..	..
	(a) Total ..	2,343	2,550	3,000	3,150	3,308	3,473
	(b) Scheduled Castes/S. T. ..	307/230	330/242	350/260	370/276	390/290	400/310
	(c) Women ..	18	22	26	30	34	38
	(d) I. T. I. Trained ..	8,860	2,360	2,560	2,760	2,980	3,200

(7B-181)

CHAPTER 37

DEVELOPMENT OF BACKWARD CLASSES

37.1. The need for special measures to raise the level of development of the backward classes and backward areas has been recognised ever since the inception of planning. The Scheduled Castes and Scheduled Tribes constitute a substantial fraction of the population below the poverty line. They have few assets and are generally dependent on share cropping or agricultural labour. Any policy of redistributive justice to be successful must pay special attention to these backward classes. The approach in the Sixth Five-Year Plan is to integrate provisions for assisting backward classes in the general development programmes. The selection of Blocks for area development and the choice of programmes will be made in such a manner which would favour backward classes. A target orientation of the kind that is found in the SFDA/MFAL schemes will be maintained in the choice of schemes in all Blocks coming under I. R. D. P. A substantial part of the total provision for Area Development Schemes will benefit the backward classes. The programmes of subsidiary occupations and the Rural Credit Programmes will also be oriented to enable them to purchase assets required to improve their economic and social status. A large preparation of the new facilities for primary education will be set up in areas with high concentration of backward classes, which at present, have limited access to education. The backward classes will also benefit from more vigorous implementation of land reforms laws. The principal beneficiary of the provision for Integrated Housing Scheme will be the backward classes. They will benefit not merely from specific ear-marked provisions in general development programmes and from welfare schemes but also from the fact that as labouring classes they will be the principal beneficiaries of the employment orientation of the plan.

37.2. According to 1971 Census, the percentage of population of Scheduled Castes and Scheduled Tribes in Orissa is 15.08 per cent and 23.11 per cent of the total population of the State respectively. The general economic condition of these people is such that most of them live below the poverty line. The magnitude of the problem of raising the gap between the levels of living of this group and rest of the population of the State is considerable. They continue to pursue traditional occupations. In spite of employment opportunities generated through various economic activities they are unable to secure employment due to their low educational level and lack of skill. The problem becomes acute as a large majority of the tribal population inhabit the backward highly areas. Special programmes have been formulated for the socio-economic development in successive plans in the State.

37.3. Out of 314 Community Development Blocks in the State, 118 Blocks having 50 per cent or more tribal population have been covered by four Tribal Development Agencies and nineteen Integrated Tribal Development Projects. These T. D. As. and I. T. D. Ps. aim at the socio-economic development of tribals and scheduled castes and other weaker sections of the people in the State.

37.4. Six tribal groups namely; (i) Bondo Paraja, (ii) Lanjia sora, (iii) Dongria Kondhs (iv) Kutia Kondh, (v) Juang and (vi) Paudi Bhuiyan have been identified as primitive or the most backward tribes of Orissa and for them micro-projects are being organised. The Scheduled Castes belonging to different categories are spread throughout the State in small pockets. Hence, it has not been possible as yet to identify which category of them and in which areas are most backward.

37.5. The percentage of literacy among the Scheduled Castes and Scheduled Tribes according to the 1971 Census is 13.06 and 19.5 respectively against the general literacy percentage of 26.2 of the State. The problems of Scheduled Castes and Scheduled Tribes mainly is their economic backwardness and lack of education. The problems of the Scheduled Tribes are accentuated by their exploitation by non-tribals. Their indebtedness is chronic due to various reasons like uneconomic holdings, poor soils, primitive techniques of cultivation which make agriculture uneconomic. Their habits and customs impel them to go into debts.

Review of the previous plans

37.6. The programmes in the Backward Classes sector of the State Plan are conceived as a supplement to the total developmental effort to be made by the general sectors of development for promoting social and economic well-being of the scheduled communities. Under successive plans a sum of Rs. 12.86 crores have been spent on this sector. In the State's Fifth-Plan an outlay of Rs. 506 lakhs was earmarked to be spent in the Backward Class sector out of which an amount of Rs. 346.44 lakhs has been spent during the four years 1974-78. The major portion of the expenditure has been incurred on educational schemes besides the expenditure has been incurred on educational schemes besides the expenditure on economic health, housing, drinking water supply scheme and grant-in-aid to voluntary organisations working amongst Scheduled Castes and Scheduled Tribes.

37.7. The educational schemes implemented were in the nature of continuance and strengthening of Ashram Schools and Kanyashrams. In addition 5 new High Schools have been opened. 157 Sevashrams have been up-graded to U. P. Sevashrams besides opening 6 residential Sevashrams.

37.8. Prematric scholarships have been awarded to nearly 85,000 students reading in educational institutions established in this sector particularly for Tribals and Scheduled Caste Communities. Nationalised Text Books worth Rs. 40.71 lakhs have been distributed to Scheduled Tribes and Scheduled Castes students reading in educational institutions of the State. In addition 4,100 Scheduled Tribes and 453 Scheduled Castes boys reading in the industrial training institutions of the State have got scholarships.

37.9. Three Area development projects for Scheduled Castes and two for the Scheduled Tribes have been operated outside the Tribal Sub-plan area to implement economic uplift schemes which provide for agricultural inputs and animal husbandry schemes. 2,089 Scheduled Caste people and 623 Scheduled Tribes people have been benefited from the above schemes. These projects have become popular and it is proposed to expand their scope during the Plan period 1978-83.

37.10. A pre-examination training centre has been established to coach candidates appearing in the competitive examination for various jobs. Students reading in Sainik School are being given pre-coaching before they sit for the competitive examination and after they are selected for the course they are given necessary out-fit allowances to enable them to join in the schools.

37.11. In the sub-Plan area efforts have been conspicuous. During the years 1974-75, 1975-76 and 1976-77, Rs. 20.50 crores, Rs. 26.39 crores and Rs. 33.47 crores respectively have been utilised in sub-plan area for implementation of different State Plan programmes. Besides funds from special central assistance, central sector and centrally sponsored schemes including institutional finance have been pooled together for implementation of the various schemes.

37.12. Some of the important achievements as a result of the above investments in the three years in the Sub-Plan areas are as below :—

- (a) For the development of agriculture, 17,010 bullocks have been distributed
- (b) 7,016 sets of agricultural implements have been supplied to the tribal farmers
- (c) Agricultural inputs have been supplied for 29,937.87 acres
- (d) Crop demonstration in 20,168.16 acres have been conducted
- (e) 2,35,010 fruit grafts have been supplied to 23,501 beneficiaries under backyard plantation programme.
- (f) 5,374.21 acres have been brought under horticultural plantation
- (g) 13,692.52 acres of waste land have been reclaimed
- (h) 9,934.02 acres of private holdings belonging to 4,967 families have been developed. i. e. bounded, levelled, etc.
- (i) Over 8,997 dug-wells have been sunk, providing irrigation facility to roughly 14,000 acres of land.
- (j) Additional flow of irrigation facility has been provided to over 55,118 acres of land
- (k) 144 lift irrigation points have been energised
- (l) 2,052 villages have been electrified
- (m) 12,328 goats, 901 bucks, 80 pigs and 6,342 cocks have been distributed under Animal Husbandry programme out of special Central assistance.
- (n) 400 Kms. of new roads have been constructed, 41 Kms. of roads have been blacktopped, 85 Kms. of Kutchha road have been metalled. By construction of 43 culverts and 27 bridges, 222 Kms. of roads have been made all weather.

- (o) 953 new primary schools have been opened. 1667 Primary Schools have been up-graded to upper primary schools, 2,120 teachers have been appointed, 453 middle schools, 5 new girls' High Schools, 2 Non-Government Colleges have been opened, 5 Secondary schools have been started and conversion of 6 residential middle schools to residential high schools has been made. Stipends have been distributed to 28,000 Scheduled Castes and Scheduled Tribes students. Free text books have been distributed to 39,300 scheduled castes and scheduled tribe students. Attendance scholarship have been awarded to 760 girls students, 220 Text Books Bank have been opened. Free uniform have been supplied to 8,000 girl students.
- (p) 1163 rural sanitary wells, 563 tube-wells and 10 piped water projects have been constructed.
- (q) Under integrated housing scheme, over 7,032 house have been constructed and provided to 7032 houseless families.
- (r) Settlement operations in the unsurveyed areas and revision of settlement in areas where settlement has been undertaken in the past have been started and almost nearing completion. Pachtas have been distributed to 55,000 families in 530 villages. Final Pattas have been distributed in 1097 villages.
- (s) 223 Lamps have been organised for integrated credit-cum-marketing facilities to the tribals.

Strategy in development

37-13. Since the main objectives of the Five-Year Plan, 1978-83 are employment-generation, reduction in poverty and provision of basic needs and services, it is imperative that the scheduled castes, scheduled tribes and backward classes, who constitute the poorer and more vulnerable sections of the community, receive maximum benefit from the Plan programmes designated to achieve these over all objectives. The Strategy of development of backward classes will therefore be to lay greater emphasis on identification of schemes under general sectors of development, which would be of particular benefit to them.

37-14. With this objective it is considered that in the selection of blocks under the new integrated rural development programmes, preference will be given to those where the scheduled castes constitute more than 20 per cent of the population. In these blocks, identified scheduled caste families will be assisted through loans and grants with agricultural inputs and for development of horticulture and animal husbandry.

37-15. The substantial expansion of Khadi, Handloom and other small industries projected in the next five years under the village and small industries sector, is expected to generate new employment opportunities for skilled and unskilled rural scheduled caste workers. Emphasis will be placed on construction of sanitary latrines in urban and semi-urban areas so as to eliminate the pernicious habit of carrying night-soil as head-loads. The sweepers and scavengers thereby rendered surplus will be helped with alternate occupations.

37-16. Another objective to be pursued with vigour will be the eradication of untouchability in all forms so that social disabilities no longer inhibit the economic and social development of the scheduled castes. Special cells will set up for proper and speedy investigation of complaints involving offences against members of the scheduled castes. As before, active involvement of voluntary agencies will be secured for ameliorating the conditions of scheduled castes, scheduled tribes and other backward classes.

37-17. The Sub-Plan strategy in regard to tribal area development will continue the programmes will be intensified, with suitable modifications wherever necessary. The objective of narrowing the gap between the level of development of tribal areas and other areas and bringing a qualitative change in the life of the tribal community more rapidly will be achieved through a strategy of consolidating the protective measures and programme of full employment. A comprehensive and systematic effort will also be initiated to improve the conditions of the tribals in the areas outside the Sub-Plan as well as in hinterland of the existing industrial complexes. Besides economic development, greater emphasis will be given to educational and health services in the tribal areas on high priority.

37-18. Integrated forest programmes in the sub-plan areas would be undertaken involving the Tribals horticulture Development would be ensured in an extensive scale. Since credit and marketing have a protective as well as a developmental the primary role co-operative structure will be strengthened.

Education

37-19. In the State Plan Sector an outlay of Rs. 1678.39 has been proposed for the spread of education amongst Scheduled Tribes and Scheduled Castes. Broadly the following Programmes are proposed.

- (1) Up-gradation of 35 Residential Sevashrams to Ashram Schools and 80 Sevashrams to Residential Sevashrams.
- (2) Construction of 39 High School Buildings; 100 hostels, 1260 quarters for teachers, and completion of incomplete buildings.
- (3) Increasing the seats in the existing classes of the existing 30 High School under the T & R. W. Department.
- (4) Introduction of Crafts in T. & R. W High Schools of I. T. I. standard
- (5) Replacement and provision of beds and utensils in the residential schools
- (6) Supply of Reading and writing materials
- (7) Pre-matric scholarships

Economic Schemes

37-20. The outlay proposed for economic schemes for Scheduled castes and Scheduled Tribes is Rs. 200.71 lakhs.

The schemes are briefly indicated below

(1) Area Development approach for the Scheduled Castes

37-21. With a view to improve the socio-economic conditions of the Scheduled Caste people outside the Sub-Plan area, some special Pilot Projects are being implemented in the Community Development Blocks having more than 20% Scheduled Caste concentration since the year 1975-76. Three such projects have so far been grounded in the districts of Cuttack and Balasore covering 17 Blocks. It is proposed to open more such projects. For the Blocks having Scheduled Caste concentration of 15% and above will be selected and the scheme will be operated in contiguous Panchayats having 25% more of Scheduled Caste population. Mainly schemes relating to land development, agriculture input assistance, dug-wells and irrigation and animal husbandry programmes will be implemented.

2) Upgradation of Technology

37-22. This scheme has been introduced in 1978-79 replacing the Craft and Cottage Industries scheme in vogue during previous Plans. The schemes intends to benefit the traditional and potential craftsmen belonging to the Scheduled Castes and Scheduled Tribes who are not able to produce finished product with their traditional and scanty implements to compete in the market. It is proposed to upgrade their skill by providing better equipments with improved technology so that, better quality of goods are produced which will fetch better economic returns to the craftsman. It is proposed to earmark Rs. 60 lakhs in the Sixth Plan period to cover beneficiaries at the rate of 60% for Scheduled Tribes and 40% for Scheduled Castes. The provision will be utilised through co-operative society and to meet managerial subsidy, margin money, etc. This will be an addition to the resources that might be forth-coming from the general sectors.

37-23. It is proposed to provide for rehabilitation of bonded labour from the State Plan funds in T. D. A. areas while in I. T. D. P. areas the scheme will be funded out of special Central assistance and in other areas from Revenue Department funds.

Other Schemes :

37-24. The outlay on other schemes is Rs. 27.90 lakhs. The schemes to be taken up are briefly stated below :—

- (1) Provision has been proposed for drinking water-supply in T. & R. W. institutions.
- (2) (a) The Department used to hold exhibitions every year in the past. The adivasi boys and girls from Ashram Schools and Kanyashrams used to participate in the annual sports, debating and other cultural activities during the exhibition within the limited State Plan outlay in the Welfare of the backward class sector it has not been possible to continue this scheme. It is proposed to revive the same in the Sixth Plan and an outlay of Rs. 50,000 is provided.
- (b) During 1965, the State Government played host for holding of an All-India Seminar on Tribal Welfare at Bhubaneswar. All the State Government and Union Territories participated in the Seminar. The Seminar not only gave an idea about the functioning of tribal welfare work in other States but also helped the State Government to know different special schemes operating in other States. With the establishment of ITDPs/TDAs/Micro Projects for primitive tribes, it is all the more necessary for holding such a Seminar at least once during Sixth Plan period. The cost of Seminar will be Rs. 2 lakhs.
- (3) (a) It is proposed to give some assistance to the local bodies for providing houses to the scavengers and persons engaged in un-clean occupation. Subsidy to the extent of 1/3rd cost of the project has been proposed to be given to N. A. Cs./Municipalities after completion of the buildings. It has been proposed to provide for construction of 400 such Units.
- (b) It is also proposed to provide wheel barrows and other equipments to persons who are engaged in clean profession.
- (4) It is proposed to grant awards to inter-cast married couples one who belongs to Scheduled Caste. Such couples should be given the advantages of reservation of Services and the Children should get the benefits available to Schedule Caste Children.

Administrative Set-up

37-25. The Tribal & Rural Welfare Department is a composite Department discharging the functions of both Secretariate and Heads of Department. The field organisation of the Department presents a three-tier system of administration at the district, Subdivision and Block-levels. District Welfare Officers are posted at the district headquarters, Assistant District Welfare Officers are posted at the Subdivisional headquarters and Welfare Extension Officers are posted at the Block-levels to work under the supervision of the Collectors, Subdivisional Officers and Block Development Officers respectively. In the sub-plan area, 19 Integrated Tribal Development Projects and 4 Tribal Development Agencies are functioning.

37-26. To strengthen the supervising staff at the State divisional-level and district for enforcing the reservation principles, provisions of the "Protection of Civil Rights Act" to effectively control the atrocities on Harijan and Scheduled Tribe people to ensure flow of the benefits intended for the Scheduled Caste and Scheduled Tribe population to their level and to check malpractices etc. it is proposed to appoint officers of suitable grades with nucleus staff to assist the existing machinery in the effective and purposeful implementation of Tribal & Rural Welfare Programmes and co-ordinating the work of Integrated Tribal Development Projects and Tribal Development Agencies and normal welfare programme.

Employment

37-27. In the welfare programmes of the Tribal & Rural Welfare Department, the employment position during 1974—78 was 569 persons both technical and non-technical. There will be further scope of additional employment of 916 persons of which 86 will be technical and the rest non-technical in implementing educational schemes for scheduled caste, scheduled tribe and other backward classes during the sixth five plan period.

Tribal Development Co-operative Corporation

37.28. The Tribal Development Co-operative Corporation of Orissa Ltd. which was set up in 1972 was conceived as an instrument to prevent exploitation of tribals by unscrupulous middlemen and sahukars and to promote tribal development by purchasing surplus agricultural produce and minor forest produce from the tribals at fair price and supplying them their consumer needs through a chain of fair price shops. In the last five years the Corporation has made rapid strides in these directions. The value of agricultural produce handled has increased to Rs. 113 lakhs in 1977-78 from Rs. 44.96 lakhs in 1972-73 and that of minor forest produce has increased to Rs. 42 lakhs in 1977-78 from Rs. 18.97 lakhs in 1972-73. Similarly, the value of consumer goods and essential commodities supplied through fair price shops has gone up to Rs. 210 lakhs in 1977-78 from Rs. 44.60 lakhs in 1972-73.

37.29. However, there is still a long way to go to serve the tribals more effectively. It is estimated that so far the Corporation has been able to handle about 15% of the surplus agricultural produce in the tribal areas. It is at present, not covering all the items of minor forest produce in its area of operation as other co-operatives like F. M. C. Sc. (L. MPS) and some private parties are in the field. It is proposed that the Corporation will henceforward handle all the items of minor forest produce in its area of operation through the LAMPs. The Corporation proposes to handle about 50% of the surplus agricultural produce of the tribals by the end of the plan period i. e. 1983. For this purpose the Corporation requires Rs. 3.00 crores as follows:—

	Rs. lakhs
(1) Forest royalty ..	100
(2) Staff subsidy ..	70
(3) Godowns ..	10
(4) Processing Units ..	20
(5) Plantations ..	100
Total ..	300

DEVELOPMENT OF BACKWARD CLASSES—

Serial No.	Programmes	Fifth Plan (1974—78)		Five-Year Plan (1978-83)			
		Approved outlay	Expenditure	Spill over	New	Total	Capital
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Direction and Administration.	10.35	4.27	0.30	92.70	93.00	..
2 Scheduled Tribes							
	(a) Education	3,52.24	2,43.75	90.33	13,97.36	14,87.69	7,34.87
	(b) Economic Uplift	31.59	21.07	3.09	22.79	25.88	..
	(c) Health, Housing and other schemes.	11.53	7.36	1.10	11.00	12.10	8.00
	Total S. T.	3,95.36	2,72.18	94.52	14,31.15	15,25.67	7,42.87
3 Scheduled Castes							
	(a) Education	84.25	61.10	16.00	1,74.70	1,90.70	49.00
	(b) Economic Uplift	13.93	8.28	22.31	1,52.52	1,74.83	..
	(c) Health, Housing and other schemes.	2.11	0.62	..	7.80	15.80	..
	Total S. C.	1,00.29	70.00	38.31	3,35.02	3,81.33	49.00
	Total—State Plan	5,06.00	3,46.45	1,33.13	18,66.87	20,00.00	7,91.87

DIX I

FIVE-YEAR PLAN (1978-83)—FINANCIAL OUTLAYS

(Rupees in lakhs)

1978-79		Phasing of outlays for			
Approved outlays	Anticipated expenditure	1979-80	1980-81	1981-82	1982-83
(9)	(10)	(11)	(12)	(13)	(14)
0.30	0.30	20.70	22.00	24.00	26.00
84.20	84.20	5,31.45	2,89.05	2,88.87	2,94.12
3.09	3.09	5.70	5.70	5.70	5.69
1.10	1.10	4.25	2.25	2.25	2.25
88.39	88.39	5,41.40	2,97.00	2,96.82	3,02.06
16.00	16.00	40.00	45.00	45.00	44.70
10.31	10.31	21.75	37.25	52.50	53.02
—	—	3.95	3.95	3.95	3.95
26.31	26.31	65.70	86.20	1,01.45	1,01.67
1,15.00	1,15.00	6,27.80	4,05.20	4,22.27	4,29.73

APPEN
DEVELOPMENT OF BACKWARD CLASSES—

Serial No.	Programme	Five-Year Plan (1974—78)		Five-Year Plan (1978—83)		
		Approved outlay	Estimated Expr.	Spill over	New	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Direction and Administration .. Scheduled Tribes	10.35	4.27	0.30	92.70	93.00
2	Education Pre-Matric Scholarship	66.91	49.88	13.15	1,00.00	1,13.15
	Stipend in I. T. Is. and shorthand Institutions.	11.15	7.57	2.35	10.00	12.35
	Construction of Government Hostel.	15.75	8.79	2.00	32.00	34.00
	Ashram Schools ..	1,16.87	76.28	22.97	1,67.30	1,90.27
	Supply of Educational materials	27.00	20.73	5.20	44.00	49.20
	Schools (Sevashrams) ..	72.93	51.57	23.27	4,76.80	5,00.07
3	Excursion, Scouts and Guides ..	0.67	0.67	..	..	..
	Construction of School building..	..	..	..	1,30.50	1,30.50
	Construction of Teachers quarters	..	..	..	2,74.62	2,74.62
	High Schools ..	37.75	26.03	19.49	30.00	49.49
	Training School ..	3.21	2.23	0.90	..	0.90

DIX II

FIVE-YEAR PLAN (1978-83)—FINANCIAL OUTLAYS

(Rs. in lakhs)

Capital	1978-79		Phasing of outlays for			
	Approved outlay	Anticipated Expr.	1979-80	1980-81	1981-82	1982-83
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
..	0.30	0.30	20.70	22.00	24.00	26.00
..	13.15	13.15	25.00	25.00	25.00	25.00
..	2.35	2.35	2.50	2.50	2.50	2.50
..	2.35	2.35	2.50	2.50	2.50	2.50
34.00	2.00	2.00	8.00	8.00	8.00	8.00
69.75	22.97	22.97	70.00	40.60	28.35	28.35
..	5.20	5.20	11.00	11.00	11.00	11.00
2,23.00	23.27	23.27	2,80.00	64.00	66.00	66.80
1,30.50	..	..	30.00	30.00	35.00	35.50
2,74.62	..	..	68.45	68.45	68.46	69.26
3.00	13.36	13.36	4.50	7.50	10.56	13.57
..	0.90	0.90	..	..	..	..

DEVELOPMENT OF BACKWARD CLASSES—

(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	Introduction of Crafts in T. & R. W. Schools.	..	..	1.00	54.00	55.00
	Replacement of beds, utensils and furniture.	..	..	..	78.14	78.14
	Total—2—Education	..	352.24	243.75	90.33	1,397.36	1,487.69
3 Economic Uplift—							
	Aid for Agriculture inputs and Area Development Scheme.	5.58	4.58	1.00	..	1.00	
	Animal Husbandry	..	1.25	1.00	..	..
	Cottage Industries and Upgradation of Technology.	2.06	1.56	2.00	22.00	24.00	
	Rehabilitation of free bonded labour and rescued tribal Girls.	1.20	0.02	0.09	0.79	0.88	
	Soura Development Scheme	..	21.50	13.91	..	..
	Total—3—Economic Uplift	31.59	21.07	3.09	22.79	25.88	
4 Health, Housing and others —							
	Low Cost Dwelling Units (Housing).	2.36	0.86	..	..	..
	Drinking Water Supply in T. & R. W. Institutions	6.97	5.40	1.00	7.00	8.00	

FIVE-YEAR PLAN 1978—83—FINANCIAL OUTLAYS

(8)	(9)	(10)	(11)	(12)	(13)	(14)
..	1.00	1.00	13.00	13.00	14.00	14.00
..	..	..	19.00	19.00	20.00	20.14
734.87	84.20	84.20	531.45	289.05	288.97	294.12
..	1.00	1.00	..	..	-	..
..	2.00	2.00	5.50	5.50	5.50	5.50
..	0.09	0.09	0.20	0.20	0.20	0.19
..	3.39	3.09	5.70	5.70	5.70	5.69
8.00	1.00	1.00	1.75	1.75	1.75	1.75

DEVELOPMENT OF BACKWARD CLASSES—

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Medical (Mobile Health Units) ..	2.20	1.10	..	..	..
	Seminar and Exhibition ..	..	..	0.10	4.00	4.10
	Total—4—Health, Housing and Others.	11.53	7.36	1.10	11.00	12.10
	Total—Scheduled Tribes ..	395.36	272.18	94.52	1431.15	1525.67
SCHEDULED CASTES						
5	Education Pre-matric Scholarship	44.00	32.26	8.50	75.00	83.50
	Supply of Educational Materials..	26.04	19.98	5.00	43.70	48.70
	Construction of Government Hostels.	7.45	4.35	1.00	48.00	49.00
	Stipend in I. T. Is. and Shorthand Institutions.	6.76	4.51	1.50	8.00	9.50
	Total—5—Education ..	84.25	61.10	16.00	174.70	190.70
6	Economic Uplift Aid for Agriculture Inputs and Area Development Schemes.	11.05	6.30	15.25	123.58	138.83
	Cottage Industries and Upgradation of Technology.	2.43	1.78	7.06	28.94	36.00
	Animal Husbandry ..	0.45	0.20	..	..	..
	Total—6—Economic Uplift ..	13.93	8.28	22.31	152.52	174.83
7	Health, Housing and others Supply of Wheel Barrows to S. C. people engaged in uncleaned occupation.	..	..	..	..	8.00
	Low Cost Dwelling Units (Housing).	2.11	0.61	..	7.00	7.00
	Award to inter-caste married couples.	—	..	..	0.80	0.80
	Total—Scheduled Castes ..	100.29	69.99	38.31	335.02	381.33
	Total—State Plan ..	506.00	346.44	133.13	1866.87	2000.00

FIVE-YEAR PLAN (1978--83)—FINANCIAL OUTLAYS

(8)	(9)	(10)	(11)	(12)	(13)	(14)
..
..	0·10	0·10	2·50	0·50	0·50	0·50
8·00	1·10	1·10	4·25	2·25	2·25	2·25
742·87	88·39	88·39	541·40	297·00	296·82	302·06
..	8·50	8·50	15·00	20·00	20·00	20·00
..	5·00	5·00	11·00	11·00	11·00	10·70
49·00	1·00	1·00	12·00	12·00	12·00	12·00
..	1·50	1·50	2·00	2·00	2·00	2·00
49·00	16·00	16·00	40·00	45·00	45·00	44·70
..	3·25	3·25	14·50	30·00	45·25	45·83
..	7·06	7·06	7·25	7·25	7·25	7·19
..
..	10·31	10·31	21·75	37·25	52·50	53·02
..	..	..	2·00	2·00	2·00	2·00
..	..	..	1·75	1·75	1·75	1·75
..	..	..	0·20	0·20	0·20	0·20
49·00	26·31	26·31	65·70	86·20	101·45	101·67
791·87	115·00	115·00	627·80	405·20	422·27	429·73

APPENDIX III

DEVELOPMENT OF BACKWARD CLASSES—ESTIMATED NON-PLAN—COMPONENT
OF EXPENDITURE TOWARDS SCHEMES OF 1974—78

(Rs. in lakhs)

Programme	Estimated committed level of expenditure (Non-Plan) for 1974—79 Plan Scheme as on			
	1-4-1978		1-4-1979	
	Total	Capital	Total	Capital
	(2)	(3)	(4)	(5)
Direction and Administration Scheduled Tribes				
(a) Education ..				
(b) Economic Development ..				
(c) Health, Housing and other programme.	76.83	..	84.22	
Scheduled Castes				
(a) Education ..				
(b) Economic Development ..				
(c) Health, Housing and other programme.				
Total ..	76.83	..	84.22	

APPENDIX IV

DEVELOPMENT OF BACKWARD CLASSES—FIVE YEAR PLAN (1978—83) TARGETS AND ACHIEVEMENT FOR TRIBAL AREAS SEPARATELY WHERE SUB-PLAN EXISTS

Programme	Unit	Position at the end of the 5th Plan that is position obtaining in 1977-78	Target fixed for the plan 1978—83	1978-79		Phasing for 1979—88				Remarks
				Target fixed	Likely Achievement	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Welfare of S. C., S. T. and O. B. Cs.										
Scheduled Tribe										
(1) Pre-matric Scholarship.	No. of Students	8,000	1,60,000	2,000	2,000	30,000	37,000	45,000	46,000	
(2) Hostels	No. of Hostel	2	30	2	2	6	7	7	8	
(3) Schools	Nos.	196	973	103	103	200	220	230	220	
(4) Upgradation of Technology.	No. of Families	31	1,800	700	700	280	270	280	200	
(5) Wells	No. of Wells	10	40	5	5	8	9	9	9	
Scheduled Castes										
(1) Pre-matric Scholarships.	No. of Students	4,000	80,000	1,000	1,000	19,000	20,000	20,000	20,000	
(2) Hostels	No. of Hostel	2	10	2	2	2	2	3	3	
(3) Upgradation of Technology.	No. of Families	12	2,200	1,600	1,600	150	150	150	150	
(4) Wheel Barrow	Nos.	..	200	..	..	50	50	50	50	
(5) Low cost dwelling units (Housing).	No. of Houses	..	500	..	..	125	125	125	125	

APPENDIX V

STATEMENT SHOWING EXTENT OF ESTIMATED EMPLOYMENT GENERATION PLAN OF BENEFITS TO WEAKER SECTIONS OF THE POPULATION

Sl. No.	Scheme	Estimated Employment Generation						Remarks
		1974-78	1978-79	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Direction and Administration	..	3	..	448	..	..	..
2	Ashram Schools	..	192	6	60	45	..	..
3	Schools (Sevashrams)	..	259	16	120	120	..	..
4	High Schools	..	100	5	5	5	..	..
5	Training Schools	..	15	..	..	..	..	..
6	Introduction of Craft in T. & B. W. Schools.	..	..	..	20	22	22	22
7	Economic uplift	..	..	..	..	..	..	..

APPENDIX VI

DEVELOPMENT OF BACKWARD CLASSES

Physical Targets achieved in Fifth Plan (1974—78) and to be achieved in Five-Year Plan, 1978—83

Category	Schemes	Unit	Achievement of physical targets cummulative up to 1973-74	Position at the end of Fifth-Plan (i. e. position obtaining in 1977-78)	Target fixed for the Plan 1978—83 (Addl.)	1978-79		Phasing for 1979—83				
						Targets fixed	Likely achievement	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
1	Direction and Administration.	Creation of post.	..	3	442	Continuance.	Continuance.	442	Continuance.	Continuance.	Continuance.	
2	SCHEDULED TRIBES—											
	Education—											
	Pre-metric Scholarships.	Number of Student.	6,29,405	8,69,405	2,00,000	40,000	40,000	40,000	40,000	40,000	40,000	
	Stipend in I. T. Is. and Shorthand Institutions.	Ditto	..	..	2,350	350	350	500	500	500	500
	Construction of Government Hostel.	Number	..	..	45	5	5	10	10	10	10
	Ashram Schools	Number	..	53	60	35	Continuance.	Continuance.	20	15	Continuance.	Continuance.
	Supply of Educational materials.											

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Schools (Sevashrams)	Number	30	36	80	Continuance.	Continuance.	40	40	Continuance.	Continuance.
	Construction of School building.	Number	..	..	39	..	..	15	15	6	3
	Construction of Teacher Quarters.	Number	..	..	1,260	..	..	315	315	315	315
	High Schools	Number	60	65	Continuance.	Continuance.	Continuance.	Continuance.	Continuance.	Continuance.	Continuance.
	Training School	Number	3	4	..	Continuance.	Continuance.	..	..	..	..
	Introduction of Craft in T. & R. W. Schools.	Number	..	..	43	..	..	10	11	11	11
	Replacement of beds utensils and furnitures.				As per suitability						
	Economic Uplift										
	Aid for Agriculture inputs and Area Development Schemes.	Number of Projects.	..	..	..	3	3	..	..	..	..
	Animal Husbandry	Number of families.	..	1,070	..	..	..	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Cottage Industries and upgradation of Technology.	Number of families.	..	..	2,400	200	200	550	550	550	550
	Rehabilitation of freed bonded labour and Rescued Tribal Girls.										
	Soura Development Scheme.										
	Health, Housing & Others										
	Low cost dwelling units (Housing).										
	Drinking Water Supply in I. & R. W. Institutions.	Number of wells.		71	75	15	15	15	15	15	15
	Medical (Mobile Health Units).										
	Seminar and Exhibition.										

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
SCHEDULED CASTES—											
Education											
Pre-matric Scholarships—Supply of Educational materials.	Number	3,70,206	5,70,162	2,00,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
Construction of Government Hostels.	Number	..	..	60	Completion.	Completion.	15	15	15	15	15
Stipend in I. T. Is. and Short hand Institutions.	Number of students.	..	..	1,900	300	300	400	400	400	400	400
Economic uplift											
Aid for Agriculture inputs and Area Development Schemes.	Number of Projects	..	..	43	3	3	10	15	15	Continuance	
Cottage Industries and Upgradation of Technology.	Number of persons.	..	..	3,600	706	706	725	725	725	719	
Animal Husbandry	..	..	..	..	..	..	..	..	..	..	..
Health Housing and others											
Low cost dwelling units (Housing)	..	..	..	400	..	..	100	100	100	100	100
Award to Inter-Castes married couples.	As per suitability										

CHAPTER 38

NUTRITION

38.1. Supplementary Nutritional Feeding Programme covers broadly three categories of beneficiaries: (i) Pre-school children between 0-6 years, (ii) Expectant and nursing mothers, (iii) Primary School children. These programmes are implemented partly with local food provided by the State Government from the State Plan allocation and partly with food support received from International Agencies like CARE, WFP the cost of administration, transport, etc. being borne entirely by the State Government from out of its non-plan resources. Based on 1971 Census figures the total number of expectant and nursing mothers and the pre-school children in need of nutrition cover is 47 lakhs in a population of 219 lakhs.

(a) Expectant mothers (4.5 per cent of 2.19 crores)	9.90 lakhs
(b) Pre-school children 17 per cent of 2.19 crores (minus) () 37.40 lakhs 1/6 strength of such children between plus to one year who do not come under feeding in reality.	() 6.06 lakhs 31.34 lakhs
	31.34 lakhs 47.49 lakhs or say 47 lakhs

38.2. About forty lakhs (85 per cent) of this are in urgent need of care. Considering the population increase during the last six years by 2 per cent this figure will be 44.74 lakhs.

38.3. Importance has been given to the supplementary nutritional feeding of pre-school children and expectant and nursing mothers. The coverage in the Fifth Plan is of the order of 9.85 lakhs beneficiaries. The details are given below:—

	No. of beneficiaries	No. of days in a year
	Lakhs	Days
1. Pre-school feeding with assistance of CARE ..	1.39	240
2. SNP. (Urban) CARE food ..	0.41	240
3. SNP. (Rural) CARE food ..	3.31	264
4. SNP. with local food ..	2.44	300
5. SNP. with food from W.F.P. ..	2.30	100
Total ..	9.85	

38.4. Thus 2.44 lakhs beneficiaries are maintained with local food and 7.41 lakhs maintained with the food assistance received from international agencies.

38.5. The financial outlay for the Sixth-Plan and the coverage [of beneficiary, etc. are worked out below.

38.6. The cost of expenditure on food to maintain 1.00 lakh beneficiary per year @ 0.20 paise/0.25 paise per child/mother beneficiary per day for 300 days feeding comes to

Rs. 63.75 lakhs ($0.20 \times 75,000 \times 300 + 0.25 \times 25,000 \times 300$). The yearwise break up of coverage of beneficiaries and cost of maintenance is tabulated below:

(Figures in lakhs)

Year	No. of beneficiaries proposed to be covered	Cost of maintenance @ Rs. 63.75 lakhs per year per 1 lakh beneficiaries
(1)	(2)	(3)
1978-79	2.44 (0.48)	155.00
1979-80	7.00 (1.36)	446.50
1980-81	9.91 (1.93)	632.00
1981-82	11.00 (2.14)	701.50
1982-83	12.00 (2.34)	765.00
	Total	2,700.00 lakhs

(Figures in the bracket indicate coverage in areas other than Sub-Plan).

Transport & Administrative Cost

38.7. The Non-Plan Budget provision at present covers the Transport and Administration cost for the existing coverage of 2.44 lakhs beneficiaries under Plan Scheme and other feeding programme taken up with the assistance of CARE and WFP. is 114.00 lakhs. With the increase of beneficiary coverage during the sixth Five-Year Plan, there will also be increase on cost of Transport and Administration.

38.8. The unit cost for 1 lakh beneficiaries is worked out to Rs. 9.60 lakhs

- (a) Transport cost @ 0.02 paise per beneficiaries per day for 300 days feeding year ($0.02 \times 300 \times 1$ lakh). Rs. 6.00 lakhs
- (b) Remuneration charges to the Organiser and helpers @ Rs. 30 per month per centre having a strength of 100 beneficiaries ($30 \times 1000 \times 12$.) Rs. 3.60 lakhs

Total .. Rs. 9.60 lakhs

38.9. The yearwise break-up of the Transport and administration cost is tabulated below: (figures in lakhs)

Year	Increase in beneficiaries coverage than 5th plan coverage	Food cost @ Rs. 63.75 lakhs for 1 lakh beneficiaries	Transport & Administration cost for the existing level of beneficiaries	Additional Transport and administration cost for the increased beneficiary	Total cost
(1)	(2)	(3)	(4)	(5)	(6)
1978-79	..	155.00	114.00	..	269.00
1979-80	..	4.56	446.50	43.77	604.27
1980-81	..	7.47	632.00	71.71	817.71
1981-82	..	8.56	701.50	82.17	897.67
1982-83	..	9.56	765.00	91.77	970.77
Total	..	2,700.00	570.00	289.42	3,559.42

38-10 BREAKUP OF THE PROGRAMME FOR SUB-PLAN AND NORMAL AREAS

(Figures in lakhs)

Year	No. of beneficiaries			Financial outlay		
	Sub-Plan area	Normal area	Total	Sub-Plan area	Normal area	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1978-79	1.96	0.48	2.44	125.00	30.00	155.00
1979-80	5.64	1.36	7.00	359.50	87.00	446.50
1980-81	7.98	1.93	9.91	509.00	123.00	632.00
1981-82	8.86	2.14	11.00	565.00	136.50	701.50
1982-83	9.66	2.34	12.00	616.00	149.00	765.00
Grand Total				2,174.50	525.50	2,700.00

Special Central Assistance

38-11. From the foregoing table it will be evident that during the plan period 1978-1983 on of the total outlay of Rs. 2,700.00 lakhs for SNP for pre-school children, expectant and nursing mothers, Rs. 2,174.52 lakhs would be spent in Sub-Plan areas and Rs. 525.50 lakhs in normal areas. To bear the transport and administrative cost on account of the massive Nutrition Programme entirely from the State's annual resources would be putting a heavy strain on the States resources. The unit cost for 1 lakh beneficiaries only will be of Rs. 9.60 lakhs which is at present being met out of the States non-plan fund. The Commitment on this account during 1979-80 and 1982-83 would be as follows :-

Year	No. of beneficiaries	Transport and Administrative cost
(1)	(2)	(3)
	(in lakhs)	(Rs. in lakhs)
1979-80	7	67.20
1980-81	9.91	95.14
1981-82	11.00	105.60
1982-83	12.00	115.20
		383.14
		Or 400.00

38-12. It will be difficult to meet this additional commitment entirely from the non-plan resources of the State. Since most of this S.N.P. beneficiaries would be located in Sub-plan area and will cater to the benefit of the Tribal children, expectant and nursing mothers special central assistance of Rs. 400.00 lakhs may be provided by the Government of India.

APPENDIX-N I

Statement showing outlay and expenditure in the Fifth Plan and proposed outlay for the next Five-Year Plan (1978—83)—Nutrition Sector

No.	Programme	Fifth Plan		Five Year Plan 1978—83			Phasing of outlay				
		Outlay approved 1974—78	Expr. 1974—78	Spillover	New	Total	1978-79 (approved)	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Mid-day meals programme.	377.77	370.50	114.00	745.42	859.42	114.00	157.77	185.71	196.17	205.77
2	S. N. P.	592.51	561.18	155.00	2,545.00	2,700.00	155.00	446.50	632.00	701.50	765.00
	Total	970.28	931.68	269.00	3,290.42	3,559.42	269.00	604.27	817.71	897.67	970.77

APPENDIX—N II

Statement showing estimated level of non-plan component of expenditure reached at the end of
1977-78 and 1978-79 (Nutrition Sector)

(Rs. in lakhs)

Sl. No.	Programme	Estimated committed level of expenditure (non-plan) for 1974—79 as on	
		1-4-1978	1-4-1979
(1)	(2)	(3)	(4)
1.	Mid-day meals programme		
2.	For Special Nutrition Programme		
	(i) Pre-school children (0-6) years		
	(ii) Pregnant and lactating mother		
		124.27	124.27

APPENDIX—N III

Statement showing achievement and proposed physical target (nutrition sector) (in term of beneficiaries)

(Rs. in lakhs)

Sl. No.	Programme	Cumulative achievement of the end of 4th Plan 1973-74	Additions during 5th Plan 1974-78	Target 1978-83	1978-79		Proposed phasing for 1979-83			
					Target	Achievement	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Mid-day-meals programme.	5.60	22.48	38.00	7.60	7.60	7.60	7.60	7.60	7.60
2	Special Nutrition Programme.	8.46	36.62	58.59	10.31	10.31	12.07	12.07	12.07	12.07
	(i) Pre school children (0-6) years.									
	(ii) Pregnant and nursing mothers.									
	(iii) Pre-school students.									

APPENDIX—N IV

Statement showing the extent of estimated employment generation and flow of benefits of Scheduled Castes, Scheduled Tribes and other backward classes—Nutrition Sector

Sl. No.	Programme	Estimated employment generation				Flow of benefits to		
		1978-79	1979-80	1980-81	1981-82 & 1982-83	S. C.	S. T.	Other backward classes
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Mid-day meals programme	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2	Special nutrition programme	Nil	Nil	Nil	Nil	Nil	Nil	Nil

APPENDIX—N V

Coverage achieved by the end of 1977-78

Sl. No.	Programme/Scheme	Sector	0—6 Years				6—11 Years			
			Urban	Rural	Tribal	Total	Urban	Rural	Tribal	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Special Nutrition Programme	(i) State	Nil	35,700	1,47,300	1,83,000	Nil	Nil	Nil	Nil
		(ii) CARE.	30,750	2,16,000	1,36,500	3,83,250	Nil	Nil	Nil	Nil
		(iii) W. F. P.	Nil	1,61,700	10,800	1,72,500	Nil	Nil	Nil	Nil
		Total	30,750	4,13,400	2,94,600	7,38,750	Nil	Nil	Nil	Nil
2	Mid-day Meals Programme.	(i) State	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
		(ii) CARE.	Nil	Nil	Nil	Nil	Nil	3,53,557	2,06,443	5,60,000
		Total	Nil	Nil	Nil	Nil	Nil	3,53,557	2,06,443	5,60,000

Pregnant and nursing mothers				Number of feeding Centres			
Urban	Rural	Tribal	Total	Urban	Rural	Tribal	Total
(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Nil	11,900	49,100	61,000	Nil	775	2,324	3,099
10,250	72,000	45,500	1,27,750	263	3,166	1,820	5,249
Nil	53,900	3,600	57,500	Nil	1,462	144	1,606
10,250	1,37,800	93,200	2,46,250	263	5,403	4,288	9,954
Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Nil	Nil	Nil	Nil	Nil	8,860	5,161	14,021
Nil	Nil	Nil	Nil	Nil	8,860	5,161	14,021

APPENDIX VI

Statement showing the No. of Blocks covered in tribal & drought prone rural areas

Sl. No.	Name of the area	Total number of Blocks in the states	Number of Blocks covered under feeding programme by the end of 1977-78
(1)	(2)	(3)	(4)
A-1.	Tribal Areas	.. 118	118
2.	Drought Prone Rural Areas	.. 18	18
3.	Blocks where scheduled castes are in sizable numbers	.. 54	54

Sl. No.	Number of cities with 1 lakh & above population	Total number of eligible wards in the selected cities	Number of wards covered
(1)	(2)	(3)	(4)

4 (four)

- B. 1. Cuttack
 2. Bhubaneswar
 3. Rourkela
 4. Berhampur

NOTE :—Total coverage achieved under plans and non-plans by the end of 1977-78 should be given

APPENDIX VII

Proposed coverage in the next Plan (1978—83)

Sl. No.	Programme	Number of beneficiaries proposed to be covered during															
		1978—83						1978-79									
		Urban		Rural		Tribal		Total		Urban		Rural		Tribal		Total	
SC	ST	O	SC	ST	O	SC	ST	O	SC	ST	O	SC	ST	O	SC	ST	O

1 Mid-day Meals Programme (6—11 years)

2 Special Nutrition Programme (with local food)

(i) 0—6 years

9,15,000

1,83,000

(ii) Pregnant and Nursing Mothers.

3,05,000

61,000

} 2.44

} lakhs

Note:—SC .. Scheduled Castes

ST .. Scheduled Tribe

O .. Others

(The item No. 1 is included under 'Non-Plan'. The No. of beneficiaries, being 5.60 lakhs for 1978-79 under this item, has not been shown here, but shown in App. N.-V. As regards item No. 2, only S. N. P. with local food is booked under 'Plan' and therefore figure shown in this statement against item No. 2.

The break-up of 2.44 lakhs beneficiaries to be shown against S. C., S. T. and O. heads are not available.)

CHAPTER 39

SOCIAL WELFARE

39.1. In promoting welfare services for the needy and vulnerable sections of the society, preventive and developmental measures should assume prime importance. It is essential to foster popular initiative and support in extending essential welfare programmes both in urban and rural areas. Greater attention would be paid to the welfare of women belonging to lower socio-economic groups, working women and those in need of care and protection. Establishment of creches and balwadies for the children of working mothers both in rural and urban areas would receive further attention. Various schemes for education, training and employment of the handicapped would be intensified in the coming years. Social defence programmes for the reformation and rehabilitation of social deviants will be extended and strengthened. Personnel dealing with social welfare activities will be given orientation training so that their standard of services can be improved. Voluntary organisations will be given initiatives in undertaking welfare schemes for the handicapped and vulnerable sections of the society.

39.2. No appreciable progress has been made in Orissa on Social Welfare Programmes in the past. This has been mainly due to the fact that the required funds could not be made available on the one hand and on the other hand, popular initiative has not been forthcoming. In order to intensify the social welfare measures in the State it has been proposed to keep an outlay of Rs. 780 lakhs for the Sixth Plan period, 1978—83. The details of the different programmes are discussed below :—

(A) CHILDREN WELFARE

Establishment of Balwadi and Creche-cum-Balwadi

39.3. Balwadi Centres are opened in the rural areas, the Creche-cum-Balwadi Centres are opened in urban areas. Our aim has been to give at least one Balwadi in each of the 314 Blocks and one Creche-cum-Balwadi Centre in each of the municipal areas. So far 123 Balwadi Centres have been opened in 64 Blocks and 13 Creche-cum-Balwadi Centres in 19 Urban areas. It is proposed to set up 250 Balwadi Centres in 250 remaining Blocks and 50 Creche-cum-Balwadi Centres in urban areas in a phased manner. Thus, the total projection for the Sixth Plan period has been put to 300 Balwadi and Creche-cum-Balwadi Centres of which 120 will be located in the tribal sub-plan areas.

Establishment of Balabhawan

39.4. In awareness of the recommendations of the United Nations to observe 1979 as Children's year, and to do something meaningful and permanent for the children in the International year of the child rather than mere ritualistic observance of the year, it is proposed to establish one Balabhawan in each of the 13 districts with the objective of providing educational and recreational facilities for the children. These Balabhawans would be different from Balwadi. There will be provision for a library of children's books, sports facilities, auditorium, an outdoor park and playground. The idea will be to introduce a scientific bias in the education and training of children at an age when they are more receptive to new ideas. It is also proposed to set up one Sishubhar in each of the 314 Blocks preferably attaching them to the existing and proposed Balwadi Centres with extended recreational and educational facilities which are lacking in the existing Balwadi Centres. Five Balabhawan out of 13 and 118 Sishubhars out of 314 shall be located in the tribal sub-plan area.

Integrated Child Development Service

39.5. Integration of child and women development is sought to be partly achieved by the establishment of new I. C. D. S. Projects. In pursuance of the 1974 National Policy for children, Government of India have sanctioned one project during the Fifth Plan period and 4 projects during the first year of the Sixth Plan as a Centrally sponsored scheme. In order to match the efforts of the Central Government, we proposed to set up 8 new I. C. D. S. Projects under the State Plan to cover the remaining 8 districts where at present I. C. D. S. Projects have not been started yet. Although significant achievements have been made in various spheres of development resulting in some benefit to the children, there are various problems concerning the child which are of larger dimensions and possibly cannot be treated to be a part of the general development programmes. Incidence of mortality, morbidity and malnutrition continues to be quite high. Lack of awareness on the part of the parents, unsatisfactory dietary habits, poor knowledge of

nutrition, health and hygiene, etc., have aggravated the problem which children face and special efforts are, therefore, necessary for removal of those various constraints which prevent the growth of children. By setting up I. C. D. S. projects we will have ensured delivery of package of services in systematic manner. Lack of parental awareness is sought to be regressed by functional literacy programme for the adult women in the project area and therefore this particular aspect in the total package will be emphasized. Of the 8 I. C. D. S. Projects, it is proposed to locate 5 in tribal areas and 3 in rural areas. One of the important outcome of the projects will be increased potential for the employment of rural women because these programmes would largely be run by rural women called Anganwadi workers.

(B) WOMEN WELFARE

39.6. It is proposed to organise three sale centres in three divisions by way of providing marketing facilities for the products of Mahila Samitis. Excellent works done by the Mahila Samitis in handicraft, food processing, tailoring and embroidery and allied fields, etc., has remained largely unknown because of poor exploitation of these potential. Lack of adequate marketing infrastructure has also inhibited the growth of these economic activities on the part of the rural women and has prevented them from coming up on their own to the extent desired.

2. Rehabilitation programme for women in distress

39.7. It is necessary to organise these destitute women and equip them with skills in short span of time so that they could rehabilitate themselves.

39.8. The main objective of this programme is to rehabilitate the destitute women through residential care and vocational training so that the woman can become economically self-sustaining. It is envisaged that the time frame for development of skills to be imparted to the woman will not exceed 8 months so that there is regular turn over of all women joining the institute. There would be 40 women in each course and after the training is over each one will take up a trade in which she acquires proficiency during the training period. After completion of the training she will get a grant of Rs. 2,000 to start her own shop or the trade.

39.9. This rehabilitation programme will call for an investment of Rs. 78 lakhs, the break-up, of which is as follows :—

(a) 13 units in each of the 13 districts @ Rs. 1 lakh	..	Rs. 13 lakhs
(b) Recurring expenditure @ Rs. 1 lakh per year for 13 centres for 5 years (5 will be in Sub-Plan area).		Rs. 65 lakhs
	Total ..	Rs. 78 lakhs

39.10. As a follow-up of the rehabilitation programme referred to above measures for self-employment for rural women will be instituted. The important components of this programme will be given to each of the identified women, who have been trained in the rehabilitation centres a seed money of Rs 2,000 maximum as a one-time grant from the Government to start their independent business unit.

Scheme of legal aid of women in need of defence

39.11. It is found that some times women particularly after they become widow are denied the right to their deceased husband's property. In some cases also women are deserted by their husbands and denied their right to maintenance, etc. In order to help such women in need of defence and protection, it is proposed that legal aid will be made available to them in suitable cases so that they can establish their right in competent legal forums.

(C) EDUCATION AND WELFARE OF THE HANDICAPPED

39.12. The State has a population of about 1,50,000 physically handicapped persons. The existing facilities for education, employment and other welfare measures for these handicapped persons is utterly inadequate. There are three institutions for the blind, deaf and dumb with a capacity to provide educational facilities to 300 students only. In order to expand the existing facilities provision has been made in the Sixth Plan as follows:—

39-13. (a) *Deaf, Dumb and Blind School, Burla*—A sum of Rs. 10.32 lakhs has been provided for in the Sixth Plan to be given as grant to the State Council for Child Welfare for improvement of the institution at Burla. The School is now housed temporarily in a building of the Health Department. Provision has been made to help the institution for construction of school hostel buildings and staff quarters during the Sixth Plan period.

39-14. (b) *Red Cross School for the Blind, Berhampur*—This institution has been established since 1974-75 under the auspicious of the District Red Cross Branch, Ganjam and public donations. The Government have also given financial help during 1976-77 to the said institution. This being the only institution to cater to the needs of the blind students in Southern Division, it deserves Government assistance to meet its growing needs and such assistance would be provided.

39-15. (c) *School for the Deaf, Berhampur*—At present there is no school for the deaf in southern region. So, it is proposed to start a new institution for the deaf at Berhampur through voluntary organisation and accordingly a provision of Rs. 2.00 lakhs has been made in the Sixth Plan.

39-16. Besides the existing facilities for education of the physically handicapped, the following programmes are proposed to be launched for the welfare of the handicapped :—

(D) ESTABLISHMENT OF VOCATIONAL TRAINING AND REHABILITATION CENTRES

39-17. According to available statistics about 2/3rd of the total handicapped persons belong to the age-group of 15—50 years. It is proposed to train them in gainful vocations so that they may be able to earn their living. Therefore, four Vocational Training and Rehabilitation Centres have been proposed to be established at Sunabeda, Rourkela, Berhampur and Cuttack to train those handicapped persons in gainful crafts/trades depending on their aptitude and ability. Each Vocational Training and Rehabilitation Centre will have a Rehabilitation Unit or Sheltered Workshop to provide jobs to the trained handicapped, who will not be able to go for self-employment, or employment in the open market facing keen competition with others. Out of four Centres proposed two are proposed to be established in Tribal Sub-Plan Areas.

(E) FINANCIAL ASSISTANCE TO VOLUNTARY ORGANISATIONS DEALING WITH THE WELFARE OF THE HANDICAPPED

39-18. Voluntary Organisations are not coming up with programmes of rehabilitation of handicapped due to financial constraints. So, it is proposed to make some provision in the Sixth Plan to give financial assistance and thus encourage the voluntary organisations who will take up programmes meant for welfare of the handicapped for the initial three years (after which they will be eligible for Government of India grant), to the tune of 90% of their recurring and non-recurring expenditure. A sum of Rs. 6.25 lakhs has been provided for this purposes in the Sixth Plan.

39-19. (F) Provisions have been made for assistance towards self-employment for purchase of special aids, scholarships for academic and industrial training and Rural Schemes for training and rehabilitation of handicapped. A sum of Rs. 32.50 lakhs have been provided for scheme like poultry, dairy, coir work, etc., in the Sixth Plan.

39-20. (G) This State has no child guidance clinic for proper assessment of health, difficulties of handicapped and for giving proper guidance for educational and vocational pursuits. So, a provision of Rs. 30 lakhs has been made to establish three child guidance clinics in three Revenue Divisions of the State. This clinic will have medical experts, psychologists, social workers, etc.

(H) ESTABLISHMENT OF A SCHOOL FOR THE MENTALLY RETARDED

39-21. The State has no school for the mentally retarded children. So, a provision of Rs. 15 lakhs has been made to establish a model school for this purpose during the Sixth Plan period.

GRANTS TO INDIAN COUNCIL OF COMMUNITY HEALTH AND DEVELOPMENT BHUBANESWAR

39-22. This is a voluntary organisation started at Bhubaneswar with the objective to render assistance in improving community health specially those of children. The Association is in need of funds for widening its activities as the public donation is not sufficient for the purpose.

39-23. In order to spread the activities of the Indian Council of Community Health and Development all over the State with 13 district units together with an unit at Bhubaneswar to control and co-ordinate the Statewise activities a provision of Rs. 31.90 lakhs has been made in the

budget. This scheme will be implemented according to the fund available taking into consideration the priority of the scheme. The policy behind provision of this fund is to encourage implementation of community health schemes through voluntary agencies so as to reduce establishment cost and correspondingly increase the number of beneficiaries of the scheme.

39.24. Apart from maintaining and augmenting the facilities in the way narrated above it is proposed to set up "Institution for Care of Handicapped Children." The different establishments facilities under the institutions are proposed to be as follows:

1. A college to train physio-occupational therapists with a capacity of 50 students which will offer diploma course in physio-therapy and occupational therapy.
2. Vocational counselling, medical, Social work, Prosthetic Orthotic Workshop
3. Hospital for corrective treatment for 100 children with wards, operation theatres, X-Ray units, laboratories, etc.
4. Rehabilitation centre with Physio-therapy establishment
5. Occupational therapy-cum-training establishment, carpentry, drawing painting weaving, needle work, typewriting, electronics-radio repairs, mechanical training, toy making, paper-moulding, etc.
6. School from lower primary standard to the High School level implementing the scheme of integrated education for handicapped as well as normal children.
7. Craft show-room and Multipurpose Shop for the Institution
8. Auditorium for social and recreational activities, meeting, etc.
9. Institutional guidance of mentally retarded children
10. Play grounds and gardens.

Social Defence

39.25. There is a gradual increasing awareness in modern civilised societies that crime is better controlled by an efficient correctional system than the traditional system of punishment through imprisonment. It has been roughly calculated that prevention of crime through punishment of the criminals by imprisonment in Jails is five times costlier than what it is if the man committing the crime is put under an efficient probation organisation. In this system the chance of primary offenders turning out to be hardened criminals by association with the veteran criminals is also eliminated. Therefore, the modern trend is to put more and more emphasis on social defence measures.

39.26. In keeping with this modern trend, the State Government have also introduced different correctional services like probation service, after-care service in phases since the beginning of the Second Five-Year Plan.

39.27. (a) Children's Bill—Enactment of Children's Bill is on the legislative anvil and its enactment is contemplated during this year. Orissa is one of the very few States where a comprehensive legislation for children was so far wanting. Under the provisions of this Act Remand Homes, Observation Homes, Children's Homes and Special Schools, Juvenile Courts will be set up.

(B) DEVELOPMENT OF PROBATION SERVICES

39.28. According to the norm laid down by the National Institute of Social Defence there should be a Probation Officer for each court. But since that involves very heavy expenditure it is proposed to achieve that norm in stages. At the first instance, it is proposed to have at least one Probation Officer in each subdivision in addition to the 13 District Probation Officers. The budgetary requirement of the District Probation Officers establishment is being met from Non-Plan. Out of 56 subdivisions at present we have only 3 Subdivisional Probation Officers for 3 Subdivisions and the expenditure met from Plan Provision. The target of appointing remaining 53 Subdivisional Probation Officers has not been possible due to paucity of funds. During the Sixth Plan the remaining Subdivisions would be covered by Probation Services by the appointment of Subdivisional Probation Officers.

(C) FINANCIAL ASSISTANT TO INMATES

39.29. In some cases it is felt necessary to provide financial assistance to the offenders after release from the prison or from after-care institutions or after release on probation in order to enable them to pursue some gainful employment so that they may not revert to Commission of crime. At the rate of provision of Rs. 50,000 for each year of the Sixth Plan period to help 200 inmates released for their smooth rehabilitation in the society, a sum of Rs. 2.50 lakhs will be required for this purpose during the Sixth Plan period.

(D) ASSISTANCE TO ORGANISATION DEALING WITH CORRECTIONAL WORK

39.30. It is proposed to encourage voluntary institutions organising training and rehabilitation of women rescued from immoral traffic. These organisations need assistance for strengthening their activities and such assistance would be provided during the sixth plan.

(E) PROTECTIVE HOMES

39.31. The suppression of Immoral Traffic in Women and Girls Act, 1956 has been enforced in the State since 1958. But institutional Programme for treatment of the victims rescued from immoral traffic has not been adequate in the State.

39.32. It is proposed to establish three Protective Homes with capacity of 25 inmates each in three Revenue Divisions of the State during the Sixth Plan period.

(F) AFTER-CARE SHELTERS

39.33. There are 7 After-care Shelters in 7 districts of the State. In order to strengthen the after-care service, it is proposed to establish After-care Shelters in the remaining six districts of the State.

39.34. It is further proposed to equip these After-care Shelters with training facilities to train the inmates of the shelters in gainful vocations. A sum of Rs. 3 lakhs per year will be required for the purpose for 13 After-care Shelters provision for which would be made in the Plan. Four of these shelters will be located in district headquarters which are in sub-Plan area

training of Supervisory Staff

39.35. Training of the Officers administering Social Defence Schemes is considered imperative to improve the standard of efficiency of those officers. Provision has been made for training of probation officers and correctional officers during the Sixth Plan period and it is proposed to train up 20 to 30 officers.

APPENDIX SW-I

Statement showing outlay and expenditure in the 5th Plan and proposed outlay for the Five-Year Plan, 1978—83—Social Welfare
(Rs. in lakhs)

Sl. No.	Programme	Fifth Plan		Five-Year Plan, 1978—83				Phasing of outlay for				
		Approved outlay, 1974—78	Expenditure, 1974—78	Spill over	New	Total	Capital	1978-79	1979-80	1980-81	1981-82	1982-83
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Direction and administration (including training).											
(i)	Strengthening of Social Welfare Directorate.	..	..	..	21.40	21.40	..	..	5.35	5.35	5.35	5.35
2	Welfare of handicapped	11.12	11.12	77.51	311.61	389.12	145.50	4.00	78.33	89.11	83.99	133.69
I	Deaf, Dumb and Blind School, Burla.	..	..	..	..	..	..	1.20	3.12	2.00	2.00	2.00
II	Red Cross School for the Blind, Berhampur.	..	..	..	..	..	..	0.50	0.50	0.50	0.50	0.50
III	School for the Deaf, Berhampur.	..	..	..	..	..	..	..	..	..	..	..
IV	V. R. I. C. S. at Sunabeda, Rourkela, Berhampur and Cuttack.	..	..	..	..	..	..	..	0.50	0.50	0.50	0.50
V	Financial Assistance to voluntary organisations dealing with handicapped welfare (Education and rehabilitation).	..	..	..	..	..	..	..	13.00	18.40	19.28	15.93

VI	Financial Assistance to handicapped for self-employment.	..	..	..	..	..	0-25	1-25	1-25	1-25	2-25
VII	Financial Assistance to physically handicapped for purchase of special aids.	..	..	..	..	..	..	1-50	1-50	1-50	1-40
VIII	Rural Scheme for training and rehabilitation of handicapped.	.	..	..	..	..	..	3-00	3-00	3-00	6-00
IX	Financial Assistance to physically handicapped for academic education and vocational training child guidance clinic.	..	..	..	..	..	..	0-50	0-50	0-50	0-50
X	Child guidance clinic ..	..	..	..	..	..	..	5-00	6-00	6-00	12-00
XI	Establishment of School for mentally retarded	..	..	..	..	..	..	3-00	3-00	3-00	6-00
XII	Grants to Indian Council of Community Health and Development, Bhubaneswar.	..	..	..	..	..	0-30	6-40	6-40	6-40	12-40
XIII	Institution for care of handicapped children.	..	..	..	..	..	..	6-00	12-00	6-00	6-00
Correctional Services											
I	Remand home and children homes, etc.	..	..	..	..	..	0-50	12-00	12-00	12-00	23-50
II	Development of probation service.	..	..	..	..	..	0-90	4-56	4-56	4-56	7-96

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
III	Financial Assistance to inmates.	..	..	..	..	-	..	0.05	0.50	0.50	0.50	0.95
IV	Assistance to Organisations dealing with correctional work.	..	..	..	..	..	..	0.20	0.20	0.20	0.20	0.20
V	Protection homes	..	..	-	..	..	..	..	9.00	9.50	9.50	19.00
VI	After-care shelters	..	..	..	..	..	..	..	5.70	5.70	5.70	11.40
VII	Training of supervisory staff.	..	..	..	..	..	..	0.10	0.10	0.10	0.10	0.10
3, (a) Family & Child Welfare												
(i)	Three sales centres for marketing products of Mahila Samitis.	..	..	..	6.00	6.00	..	..	2.00	2.00	2.00	..

(ii)	Rehabilitation of women in distress in each district.	..	..	..	78-00	78-00	..	..	39-00	13-00	13-00	13-00
(iii)	Self-employment of rural women.	..	..	..	60-00	60-00	..	..	24-00	12-00	12-00	12-00
(iv)	Legal aid to women in need of defence.	..	..	..	5-00	5-00	..	..	2-00	1-00	1-00	1-00
(b) Child Welfare													
(i)	Organisation of Balwadis and creches. (To observe International year of Child, 1979)	7-21	7-21	..	..	59-70	..	2-00	13-37 } 12-20	13-37	13-37	13-37
(ii)	Bal Bhawan in each district.	..	..	..	19-50	19-50	..	..	19-50	..	..	..
(iii)	Children play ground (Mushkhar).	..	..	..	6-28	6-28	..	..	6-28	..	..	..
(iv)	I. C. D. S.	..	..	..	135-00	135-00	..	..	54-00	27-00	27-00	27-00
Total		..	18-33	18-33	71-51	642-79	780-00	145-50	10-00	331-86	250-44	240-20	334-10

(7B-191)

APPENDIX SW-II

Statement showing estimated level of non-plan component of expenditure reached at the end of 1977-78 and 1978-79—Social Welfare

(Rs. in lakhs)

Sl. No.	Programme	Estimated committed level of expenditure (Non-Plan Expenditure)	
		As on 1-4-1978	As on 1-4-1979
(1)	(2)	(3)	(4)
1	Welfare of Handicapped (Education and rehabilitation) ..	3.91	4.86
2	Correctional services ..	10.15	12.34
3	Family and Child Welfare		
	(b) Child Welfare		
	(i) Maintenance of Family Child Welfare Projects ..	4.50	4.50
4	Welfare of destitute and poor ..	3.98	3.98
	Total ..	22.54	25.68

APPENDIX SW- III

STATEMENT SHOWING ACHIEVEMENT AND PROPOSED PHYSICAL TARGETS—SOCIAL WELFARE SECTOR

Sl. No.	Programme	Units	Cumulative achievement at the end of 4th Plan 1973-74	Addition during 5th Five-Year Plan 1974-78	Proposed target 1978-83	1978-79		Proposed planning for 1979-83				Remarks
						Target fixed	Likely achievement	1979-80	1980-81	1981-82	1982-83	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
I. Direction and Administration (including training.)												
	1. Strengthening of Social Welfare Directorate.	..	Nil (No target fixed)	Nil (No target fixed)	2	..	..	2	..	..	..	One class I One class II
II. (a) Child Welfare												
	(I) Balwadi and Creches.	40	142	300	73	..	300	..	..	..	..
1	Balbhawan in each district.	..	..	13	..	..	13	..	..	..	..
2	Children play-ground Sisu Bihar in each Block.	..	..	314	..	..	314	..	..	..	..
3	I. C. D. S.	..	..	8	8	..	8	..	..	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
II. (b) Women Welfare												
1	3 Sale Centres for marketing products of Mahila Samitis at each R. D. C. Division.	..	..	3	..	..	1	1	..	1	..	-
2	Rehabilitation of women in districts in each district.	..	..	13	..	..	13	..	..	..	..	..
3	Self-employment of women	..	..	300	..	..	120	60	60	60	..	..
4	Legal aid to Women in need of defence.	According to availability of cases										

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
III. Welfare of Handicapped												
1	D. D. B. School, Burla	1	20	20	100	20	20	20	20	20	20	(Admission of deaf blind).
2	Red Cross School for the Blind, Berhampur.	1 (No target fixed).		Nil (No target fixed).	50	10	10	10	10	10	10	(Blind students only).
3	School for the Deaf, Berhampur.	1	Ditto	Ditto	40	..	..	10	10	10	10	(Deaf students only).
4	U. R. T. C. S. at Sumabeda, Rourkela, Berhampur and Cuttack.	4	Ditto	Ditto	640	..	..	160	160	160	160	(Rehabilitation & training).
5	Financial assistance to Voluntary organisations dealing with handicapped welfare (Education and Rehabilitation).	1	Ditto	Ditto	5	1	1	1	1	1	1	(Institution for handicapped).
6	Financial assistance to handicapped for self-employment.	1	Ditto	Ditto	750	..	..	150	150	150	300	(Individual financial aid for self-employment @ Rs. 100 each).
7	Financial assistance to physically handicapped for purchase of special aid.	1	Ditto	Ditto	3,000	..	..	600	600	600	1,200	(Individual financial assistance @ Rs. 200 each).

8	Rural scheme for training and rehabilitation of handicapped.	120	Ditto	Ditto	1,200	..	..	240	240	240	400	(Different handicapped adults to be trained in 120 centres)
9	Financial assistance to physically handicapped for academic education and vocational training.	1	Ditto	Ditto	500	..	..	100	100	100	200	(Average scholarship @ Rs. 50 P. M.
10	Child guidance clinic	3	Ditto	Ditto	43,200	..	..	10,800	10,800	10,800	10,800	(10 clients to be examined a day in each of the three clinics)
11	Establishment of a school for mutually referred.	1	Ditto	Ditto	40	..	..	10	10	10	10	(40 M. R. Children to be admitted) 4 years
12	Grants to Indian Council of Community Health and Development, BBSR.	14	Ditto	Ditto	13	..	..	3	3	3	4	(One Centre in each district)
13	Institution for Care of handicapped children.	1	Ditto	Ditto	200	..	..	50	50	50	50	(D efferent in schemes for Training of Special Treatment and Schools of handicapped to be implemented).

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
IV. Correctional Services												
1	Remand Home & Children Hostel etc.	15	Nil (No target fixed).	Nil	15	3	3	3	3	3	3	(3 Remand homes. 3 children homes. 3 observation Schemes. 3 Special homes 3 Juvenile Homes to be established in divisions.)
2	Development of Probation Service	56	Ditto	3	53	4	4	13	12	12	12	(Probation Officer at each sub division to be appointed).
3	Financial assistance to inmates.	1	Ditto	100	1,000	20	20	200	200	200	380	(Released convicts to be helped @ Rs. 250-00 for gainful employment).
4	Assistance to organisations dealing with correctional work.	1	Ditto	Nil (No target fixed).	4	2	2	1	1	..	..	(4 voluntary organisations to be helped).
5	Protective Homes	3	Ditto	Ditto	3	..	..	1	1	1	1	(Three probation homes to be established in these divisions).
6	Training of Supervisory Staff.	6	7	7	6	..	..	..	2	2	2	(10 After Care Shelter to be established).

APPENDIX SW-IV

Statement showing the extent of estimated employment generation and flow of benefit to Scheduled Castes, Scheduled Tribes and Other Backward Classes—Social Welfare Sector

Sl. No.	Programme	Estimated employment generation					Flow of benefit to		Other backward classes
		1978-79	1979-80	1980-81	1981-82	1982-83	Scheduled Castes	Scheduled Tribes	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Welfare of Handicapped (education and rehabilitation).	204	204	204	204	204	163	245	50
2	Correctional services	23	23	23	23	22	17	29	10

CHAPTER 40

BROAD OUTLINE OF WORLD BANK PROJECTS

ORISSA AGRICULTURAL DEVELOPMENT PROJECT (I. D. A.—ASSISTED)

40.1. Eastern India including Orissa is the country's 'rice bowl' with substantial areas of relatively fertile alluvial soil, moderate to heavy monsoon rains, and considerable, largely, unexploited surface and ground water. Yet foodgrains yields are generally lower than elsewhere in India. Rural institutions are weak and most social and economic indicators are lower than for the rest of India. While farmers elsewhere in India were benefiting from use of high yielding varieties, fertilisers, tube-wells, improved farm methodology, strong extension service and research, agriculture in Orissa is below the national average. In order to achieve early and sustained improvement in agricultural production; particularly of food grains a project report was prepared by the State Government assisted by World Bank staff and consultants. The project report was appraised by the World Bank with whom negotiations were held under the leadership and guidance of the Government of India. An agreement was concluded with the International Development Association, an affiliate of the World Bank, for a loan of U. S. dollars 20 million (about Rs. 18 crores) to be obtained on standard terms through the Government of India.

40.2. *The Project comprises of—*

- (a) Reorganisation and strengthening of agricultural extension and its link with agricultural research ;
- (b) strengthening and reorientation of agricultural research by Orissa University of Agriculture & Technology including adaptive research and field trials ;
- (c) Pre-service training for extension workers ;
- (d) training of co-operative personal ;
- (e) improved and accelerated land surveys and land record systems, to establish land ownership and tenancy more efficiently as a basis for farms credit ;
- (f) support for the design, testing, demonstration and distribution of improved animal drawn farm implements ;
- (g) ground water survey and monitoring ;
- (h) research, design, installation and field testing of alternative types of shallow tube-wells and pumping techniques ;
- (i) support for farm management data collection and evaluation by the Orissa University of Agriculture & Technology; and
- (j) Strengthening of agricultural statistics and data processing by the Orissa Bureau of Statistics and Economics.

40.3. Improved agricultural extension and provision of supportive research are crucial components of the project. It embodies the need and successful approach to extension which was pioneered in India and incorporated into the Chambal Command Area Development Project, Rajasthan Command Area Development Project and West Bengal Agriculture Development Project financed by the World Bank, where successful results have been achieved. Under the Project, the agricultural extension service would be revitalised through reorganisation in a single line of command under the Director of Agriculture and Food Production. This reorganisation of extension set up is based on the comprehensive recommendations of Mr. Benor, a senior Consultant of the World Bank to streamline the extension machinery.

40.4. A production oriented applied and adaptive research in these crops of importance to Orissa, would be set up. It would concentrate on evaluation of improved cultural practices, farming systems and cropping patterns and testing of improved and high yielding varieties resistant/tolerant to the major pests and diseases in the State. The research programme would be carved out by Orissa University of Agriculture & Technology and Director of Agriculture and Food Production.

40.5. Strengthening of training facilities to extension officers, upgrading of training facilities to co-operative personnel, support for land survey, introduction of card index system of maintaining land records, development of improved form of animal drawn farm implements and their distribution among the farmers, ground water survey and shallow Tube-well Technology, farm management data collection to provide statistical information for monitoring agricultural performance together with feed back on costs of production and return from different farm systems, collection of agricultural statistics ; are other components of the project.

40.6. This project was started from July, 1977 and will continue for a period of five years at an estimated cost of Rs. 36 crores. The World Bank assistance would be to the extent of Rs. 18 crores.

ORISSA IRRIGATION PROJECT (I. D. A. ASSISTED)

40.7. Orissa's Irrigation Development has been concentrated in the relatively more prosperous Delta area of rivers like Mahanadi. This has resulted in uneven distribution of irrigation benefits.

40.8. For wider dispersal and early rendering of irrigation benefits, the State Government have launched a programme of medium projects, for which financial assistance is being provided by the World Bank. The project includes—

(a) construction, over a 5 years period, of about 15 Medium Irrigation Projects, covering about 66,000 ha. throughout the State ;

(b) Command Area Development in 3 existing major irrigation systems Hirakud, Salandi and Mahanadi delta, consisting of (i) consolidation of about 20,00,000 ha. of irrigated land and (ii) construction of on farm works such as field channels and drains, access crossings and associated structures on a consolidated area of about 57,000 ha.

40.9. The project is estimated to cost about Rs. 1,044 million or 116 million U. S. dollars. Expenditure envisaged on Medium Irrigation is Rs. 924.7 million and on Land Consolidation and Command Area Development Programme, the expenditure envisaged is Rs. 119.3 million. The World Bank loan is for Rs. 522 million. The project came into operation in October, 1977 and is expected to be completed by September, 1982. It is hoped that a second phase will start thereafter.

SECOND NATIONAL SEED PROJECT (I. D. A. ASSISTED)

40.10. It is of utmost importance from the point of view of increased agricultural production that the farmers should get pure and healthy seeds. Though seed is the cheapest input and forms a small part of his cultivation expenses yet on this depends the return he obtains from his land. Introduction of quality seed is therefore, the cheapest method of agricultural production. It is also necessary to step up technological research to make available new and better varieties of seeds, to ensure seed testing and certification, to provide training to the breeders and farmers engaged in production of foundation seeds and proper distribution of quality seeds to the farmers.

40.11. With this end in view, Government of Orissa participated, along with 4 other states, (Karnataka, Rajasthan, Bihar and Uttar Pradesh), in the Second National Seed Project assisted by the World Bank. The objective of the project is to increase agricultural production by expanding availability of good quality seeds to the farmers. To achieve this, the State Government have set up a State Seeds Corporation constituted under the Indian Company's Act-1956, National Seeds Corporation, Orissa University of Agriculture & Technology and renowned seed growers will be represented in the Seeds Corporation.

40.12. A State Seed Certification Agency has been created to function as an independent unit to inspect and certify the seeds.

40.13. The Orissa University of Agriculture and Technology will be entrusted with the function of conducting research on seed technology and production of breeder and foundation seeds. The OUAT would organise its seed research as an inter-disciplinary programme. The seed research at OUAT would emphasise (i) relative advantage of seed production in rabi versus khariff production, (ii) production of groundnut seed, mechanical damage associated with shelling and its effect of storability and (iii) multiplication and production of potato seed tubers.

40.14. The major benefit of the project would be the incremental crop yields obtained by farmers through use of project produced improved seeds. The use of certified seed produced under the project is estimated to result in annual yield increases averaging 135 Kg/ha for paddy, 105 Kg/ha for groundnut and 800 Kg/ha for potato.

40.15. This is a five year period project commencing from July, 1978 and it is expected to be completed by December, 1984. The total national project costs spread over five years are estimated as U. S. \$ 35 million for all the five States participating in the Second National Seed Project. The World Bank assistance would be available to the extent of U. S. \$ 16 million.

Storage Project

40.16. N. C. D. C. have prepared a project for construction of godowns in the Co-operative Sector for storage of fertilisers, insecticides and agricultural produce. Orissa has also been included in the project, which has been appraised by the World Bank for assistance.

40-17. The project, in so far as it relates to Orissa, envisages construction of godowns and rehabilitation of existing ones, at an investment of about Rs. 8 crores over a period of five years. It has been estimated that the consumption of fertilisers will increase significantly and the present storage capacity of 1.34 lakhs MTS (including 37,500 MT under construction) will not be adequate to meet the growing needs. By 1981-82, the consumption of fertilisers is likely to be of the order of 16,700 MTS in nutrients, equivalent to 5.50 lakh MTS in materials. Co-operatives are expected to handle 60 per cent of this stock. The peak Stock has been assessed at 50 per cent of the total, which works out to about 2 lakh MTS. The project envisages construction of new capacity of 2.14 lakh MT at a cost of about Rs. 7 crores and rehabilitation of existing godowns at a cost of about Rs. 82 lakhs. The project, if approved, will start from 1978-79, and will be implemented over a period of five years. The project is still under discussion.

CASHEW PROJECT (I. D. A. ASSISTED)

40-18. In Orissa, Cashew has hitherto been treated as a species more suitable for soil conservation than commercial plantation. His attitude has changed since the rise in the price of raw cashew-nut whose import from African countries has sharply declined. Experience has shown that cashew can be grown successfully on marginal lands and if proper cultural practice is followed and appropriate planting material is used, cashew cultivation can become a reasonably good economic proposition.

40-19. Government of India have been showing keen interest in extending cashew plantation in States having potential for the same and Orissa has been included in a Multi-state Cashew Development Project, along with Andhra Pradesh, Karnataka and Kerala, for which Government of India propose to seek assistance from the World Bank. The Orissa Project which is to be implemented in five years, envisages new plantation on Government lands over 25,000 ha., rehabilitation of existing Government plantation about 8,000 ha. and plantation by private farmers on their own lands over 7,000 ha. The estimated project cost is Rs. 11.70 crores. The project envisages institutional financing to the extent of Rs. 5.80 crores approximately through the Co-operative and Commercial banking channels. It is proposed to set up a Cashew Development Corporation with the participation of Government of India for implementing the Project which would not only generate significant employment in rural areas but also lead to proper utilisation of marginal lands having little alternative use.

40-20. The Project report has been submitted to Government of India and it is likely to be appraised by a World Bank Mission shortly. When implemented the Project is likely to generate a peak annual employment of about two million days in the 5th year. It would provide viable agriculture activity to about 10,000 small and marginal farmers house hold.

Other Projects

40-21. Additionally, a number of other Projects have been identified for seeking World Bank assistance through Government of India, some of which are mentioned below.—

1. Rengali Irrigation Project
2. Mahanadi-Birupa Weirs replacement project
3. Nutrition Project
4. Fish Seed Project
5. Talcher Super Thermal in the Central Sector
6. Coconut Development Project
7. Horticulture Development Project
8. Chilka Lake and Brackish Water Fisheries Project
9. Marine Fisheries Development Project
10. Intensive Live-stock Project

CHAPTER 41

(i) STATISTICS

Progress during Fifth Plan

41.1. With a view to establishing a sound statistical base for economic and social planning in the State, the Bureau of Statistics & Economics have implemented certain schemes during the Fifth Plan period. The progress of these schemes are as follows :—

41.2. The Scheme "Agronomic and Agro-Economic Studies" was continued during the Fifth Plan as a spill-over scheme. The field work in all the districts is expected to be completed during 1978-79. Thereafter the scheme is proposed to be discontinued. A Farm Management Data Unit set up in Orissa University of Agricultural Technology under World Bank Assistance has taken up the study under the Scheme.

41.3. The Scheme "Studies on Capital Formation" and "Price Collection and Construction of Price Indices" envisage important work of permanent nature and therefore these two schemes are proposed to be brought to the non-plan after 1978-79.

41.4. The Scheme "Collection of Village Information and Preparation of Village Index Card" has made satisfactory progress in collection of information on various Socio-economic indicators and infrastructures at Micro-level in different districts. It is anticipated that the Primary work will be completed by the end of 1980-81. Thereafter the number of primary staff will be reduced and a nucleus staff will be maintained for making the information up-to-date every year.

41.5. The Scheme "Strengthening of State Statistical Machinery" at headquarters and setting up of Regional Offices was proposed for implementation during the Fifth Plan for expanding the scope for collection of data with a view to assisting in micro level planning and providing adequate supervision in the regional level there by improving the quality of data collected. The Scheme could not be implemented during the Fifth Plan period. Since the State of Orissa lags behind most of the other States where the data base have been extended to lower levels and streamlined. It is therefore proposed to implement this scheme from the beginning of the Sixth Plan.

41.6. The Scheme "Computer Centre and Data Bank" was recommended by the Central Working Group on Statistics as a core scheme for inclusion during the Fifth Plan. Though this scheme has been implemented in several States, it could not be implemented in the State due to certain difficulties. It is now being proposed to implement the scheme during the Sixth Plan.

41.7. The Scheme "Strengthening of Statistical Training Institute" aimed at imparting training to lower level Statistical Staff and giving scope for a specialised training in "Econometrics". The Scheme could not be implemented during the Fifth Plan. It is proposed to implement the scheme during the Sixth Plan.

41.8. Besides the above schemes, a Central Scheme "Establishment of an Agency for Reorganisation of Agricultural Statistics" was implemented during the Fifth Plan. The Scheme has gone a long way to remove the vital gaps in the field of Agricultural Statistics and has been eligible for World Bank Assistance. The scheme aims at covering 20 per cent of the total methodology for complete enumeration of crop area in a phased manner. It is therefore proposed to continue the Scheme during the Sixth Plan period.

41.9. Another Central Scheme "Economic Census and Surveys" was implemented in the State in accordance with an All-India pattern during the Fifth Plan. It is envisaged that a final tabulation of data collected through this census will be taken up during the Sixth Plan.

41.10. The Scheme "Methodological Investigation into High Yielding Varieties Programme" is a special non-plan scheme receiving 75% assistance from the (Indian Agricultural Statistics Research Institute). It is envisaged that the Scheme will continue to operate during the Sixth Plan.

2. Programmes proposed for the Sixth Five-Year Plan, 1978-83

41-11. The Sixth Plan lays great emphasis on creation of massive employment potential to absorb ever increasing working force, regional and micro level development with special reference to uplift of backward classes and tribals, promotion of cottage and small scale industries, improving agricultural production and evolution of an efficient distribution system for essential consumption goods. The Statistical Machinery has to be geared up to meet the needs of planners in all the fields to help fulfilling the objectives. The statistical materials in all these fields are not only to be collected and analysed, but also to be made available in the required form with accuracy and in a short notice.

41-12. During 1978-79, i. e., the first year of the Sixth Plan all the Fifth Plan Schemes were continued. From the second year of the plan period, the Scheme Agronomic and Agro-economics Studies has to be wound up and the Scheme Capital Formation Studies and Price Collection Machinery and Construction of Price Indices are proposed to be taken up in non-plan.

Storing and Supply of Statistical Information

41-13. It has been proposed to instal a computer unit with a Central data Bank during the Sixth Plan. It will provide the permanent storage of large volume of data in readily accessible form and its rapid processing will ensure free flow of information in short time.

Strengthening of State Statistical Machinery and Widening the Data Base

41-14. District and Microlevel planning has the need of a wider data base which in turn requires the reinforcement of existing statistical machinery at various levels. For the purpose of efficient supervision and technical guidance it has been considered essential to set up "Zonal" offices at Revenue Divisional Headquarters. In order to enable District Plan formulation and with a view to maintaining the quality of data collected from lower levels through various surveys it has been emphasised by the Central Working Group on Statistics that the Divisional Offices are required to be set up.

Construction of Office and Residential Buildings

41-15. It has been proposed to complete construction of all office buildings by the end of Sixth Plan. Buildings for all the District Statistical Offices have been completed except at Cuttack and Balasore where the work is in progress. During the Sixth Plan the office buildings of Deputy Director, Bench Mark and Assessment Survey, Sambalpur, Statistical Training Institute at Bhubaneswar and Computer Centre at Bhubaneswar are to be taken up. It has also been proposed to put up additional rooms in different office buildings at district headquarters to provide accommodation for the additional staff for the District Planning Unit and also to complete residential quarters for Additional District Statistical Officers together with at least five quarters for staff in each district headquarters.

Statistical Training

41-16. The existing Statistical Training Institute has several deficiencies. The need for a mini bus has been keenly felt for field training in various survey methods of the trainees of the both courses. A good library and a laboratory are also needed for reference and training of various computational method. It has also been desired to open a new course of training in "Econometrics" for which a post of Assistant Director trained "Econometrics" has to be taken.

Employment Studies and Surveys

41-17. Keeping in line with the objectives of the Sixth Plan it is necessary to undertake various surveys and studies on magnitude of the problem and the potentiality of the Sixth Plan for providing employment, particularly in rural sector. Besides studies on the direct employment, multiplier effect of various projects for additional and indirect employments and co-ordination between education, training and employment are to be undertaken for an efficient employment planning.

41-18. It is proposed to set up a Research Cell in the Bureau of Statistics and Economics for an economic analysis of the statistical data form economic available for planning.

Socio-Economic Surveys in Tribal Areas

41.19. Tribal and Harijan Research-cum-Training Institutes, Bhubaneswar have undertaken studies on some specific problems relating to the socio-economic aspect of the tribals in the State. These are not adequate. Hence it is felt necessary to conduct studies on the socio-economic aspects of tribals, their resources, needs, response to development activities under various sectors and disparity in the level of development and infrastructural facilities available. These assessment surveys would be made every year so as to make a current appraisal of the effect of various projects and programmes.

Survey on Small Scale and Cottage Industries

4.20. Great emphasis is being laid on cottage and Small Scale Industries during the Sixth Plan for revitalising our economy and generating avenues of employment for our evergrowing labour force. It is, therefore, essential that correct baseline data on the economics of Small Scale and Cottage Industries are obtained by objective surveys.

Family living surveys and construction of cost of living Indices

41.21. The existing series of Indices now being constructed by Labour Bureau and others are based on the weighting diagram prepared on family budget enquiries made long time back. Since the consumption pattern changes, it is necessary to conduct family budget surveys in quick intervals. In order to update the the weighting diagram with a view to constructing reliable consumer price indices, it is also necessary to extend the scope of the family budget survey to rural areas as well.

Dissemination of Statistics

41.22. It has been felt to reduce the time lag in bringing out small and important publications of the organisation so as to make them more useful for everybody. Besides some Statistical surveys which are being conducted with time bound programme are unnecessarily delayed since the printing of Schedules and instructions take a considerably longer time in Government Press. Some brochures, Statistical Folders and Pamphlets are required to be brought out within a short period of a week or a month. Since the Bureau does not have any facility for quick printing these are either not being brought out at all or are being published with considerable intervals. Of late a decision has been taken to make an abstraction of research papers, publications and articles, etc., on important socio-economic subjects. These are to be brought out either weekly or fortnightly. It will be possible to stick to the time limit if an independent printing press is provided for the the Bureau.

41.23. In additions to the above programmes it has been suggested to implement the following schemes under the Central Sector. Some of these schemes are continued as spill-over schemes where as others are to be implemented as new schemes of the Sixth Plan.

- (a) Establishment of an Agency for reorganisation of Agricultural Statistics. (World Bank Project in Central Sector to be continued in the Sixth Plan).
- (b) Economic Census and Surveys (Central Scheme to be continued during the Sixth Plan).
- (c) Sample surveys for methodological investigation in to the High Yielding Varieties Programme. (Central Scheme of I. A. S. R. I.) to be continued in Sixth Plan.
- (d) Pilot Studies for estimation of area and production of Cashew nuts. (New Central Scheme).
- (e) Co-ordinated Programme for evolving sample survey methodology for estimation of area under grazing land and its utilisation. (Continuing Central Scheme).
- (f) Pilot survey to evolve a suitable sampling methodology for estimating the total catch of Inland Fish in Orissa (New Central Scheme).
- (g) Crop Estimation surveys of fruits and vegetables and other minor crops (New Central Scheme).

Financial Outlay

41.24. Financial outlays for the schemes proposed to be implemented during 1978-83 are shown prioritywise in Annexure I

ANNEXURE I

Statistical Programmes during Sixth Plan

Schemes (1)	Estimated cost (in lakhs Rs.) during					Total (7)
	1978-79 (2)	1979-80 (3)	1980-81 (4)	1981-82 (5)	1982-83 (6)	
First Priority Schemes						
((A)) Spill-over Schemes of the Fifth Plan						
1. Agronomic & Agro Economic Studies.	0.90	..	..	..	..	0.90
2. Studies on Capital Formation and Savings.	0.85	..	..	..	..	0.85
3. Price Collection Machinery for Collection of Producers Price and Construction of Price Indices.	1.75	..	..	..	..	1.75
4. Collection of village information & Preparation of Village Index Card.	1.90	2.25	2.40	1.42	0.73	8.70
5. Setting up of a computer Centre and Data Bank for Planning and Monitoring.	0.10	7.65	63.23	7.70	8.45	87.10
6. Strengthening of State Statistical Machinery.	1.50	5.70	8.05	7.80	5.05	28.10
7. Construction of Office and residential buildings and purchase of Vehicles.	3.00	12.00	12.00	7.00	5.00	39.00
8. Strengthening of Statistical Training Institute.	2.00	2.50	1.50	..	..	6.00
	..	2.43	0.81	0.78	0.78	4.80
((B)) New Schemes—						
1. Studies and Surveys on Growth of Employment.	..	1.55	3.60	3.53	3.45	12.15
2. Nucleus cell for Economic analysis of Statistical data for Planning and monitoring and Abstraction of research papers.	..	1.65	1.75	1.90	1.90	7.20
3. Socio-Economic Surveys in Tribal Areas.	..	3.45	2.85	2.75	1.00	10.05
((C)) Additional Schemes—						
1. Studies on Small Scale and Cottage Industries.	..	3.90	5.85	5.10	3.00	17.85
2. Family living surveys and construction of cost of living indices.	..	2.00	3.00	2.50	1.50	9.00
3. Establishment of a Small Printing Unit.	..	3.35	6.95	3.45	2.80	16.55
Total	12.00	48.43	111.96	43.95	33.66	250.00

(H) PRINTING, STATIONERY AND PUBLICATION

41.25. The Directorate of Printing, Stationery and Publication executes the Plan Scheme of Reorganisation and Expansion of the Government Press.

Review of Achievements

41.26. During the years 1972-73 to 1975-76 a new Forms Press Building was constructed at a total cost of Rs. 80.17 lakhs out of the Plan provision available for this scheme. During the years 1975-76 to 1977-78 machines worth Rs. 52.76 lakhs have been purchased for the Government Press. Previously with a number of old and obsolete machines, the Government Press suffered deficiencies in its full production capacity. With the installation of these new machines the deficiency has been made good and it has been possible to modernise the production line to some extent. As a result of expansion of the Press in terms of machines purchased during the past periods, the productive capacity in term of impressions has gone up to 16 crores in the year 1977-78 from that of 9.80 crores in the year 1960-61. Similarly, the production in terms of composing has gone up to 68 crores in the year 1977-78 from that of 30 crores in the year 1960-61. As a result of this increased productive capacity of the Press dependence on private printing presses for additional printing works has been considerably, reduced.

Objective and Target

41.27. (1) The first objective is to continue the replacement of obsolete machines and equipments. The total cost of replacement by similar pieces or by substitutes will cost approximately Rs. 255.00 lakhs. Wholesale replacement of old machines by modern ones at a time is not aimed at. As regards replacements some common and conventional types of machines have to be purchased to keep the factories going so as to maintain their production capacity and simultaneously some modern and sophisticated machinery will be acquired which will introduce modern technology and at the same time expand the existing press capacity.

41.28. According to their sources of purchase and involvement of foreign exchange, the machines can be categorised into three types. The first category of machines are manufactured and available in India. The second category of machines available in India on rupee payment basis. But the machines are imported from countries like East Germany and U. S. S. R., etc., are to be allotted by the Project and Equipments Corporation of India and can be had through their subsidiaries against their own stock and sale licence. The third category of machines are to be imported from countries like U. S. A. and U. K. on sanction of foreign exchange and issue of actual users' licence. The total involvement of foreign exchange is about £ 1,40,000.

41.29. The total value of the machines comes to Rs. 1,77,00,000 by installing the above machines and equipments it is hoped that there will be an overall increase in the production capacity to the extent of 15 per cent to 20 per cent every year.

41.30. The personnel side of the directorate has to be reorganised to take full advantage of the additional capital investment. Staff strength in the Branch Presses have to be augmented and all the Branch Presses are to run in a full-fledged manner. Two new Branch Presses one in the Northern Divisional Headquarters at Sambalpur and the other at the Southern Divisional Headquarters at Berhampur are to be started and there has to be necessary augmentation of staff.

41.31. Another aspect of this scheme will be the construction works like the additions and alternations to existing Branch Press construction of new Branch Presses at Sambalpur and Berhampur, construction of a suitable building for the existing Branch Press at Bhubaneswar and construction of staff quarters.

41.32. The break up of the total requirement during the period 1978-83 is given below :—

	(Rupees in lakhs)
(1) Purchase of Machine, 1978-83 ..	2,00.00
(2) Addition and alternation to the existing Branch Presses and Establishment of new Branch Presses.	20.00
(3) Construction of staff quarters ..	1,15.00
(4) Reorganisation of personnel ..	5.00
Total	3,40.00

Publication

41-33. During the Fifth Plan period sum of Rs. 1.45 lakhs was spent towards printing of perspective Plan in Orissa and other Plan Publications. A provision of Rs 1.50 lakhs has been made in the current Financial year, i. e., 1978-79 for the purpose. District level and Block level plans are being prepared in a phased manner and these plans are required to be printed. This provision will be utilised for printing charges. Besides various plan documents need printing which will require finance. Hence a sum of Rs. 10.00 lakhs has been estimated for the purpose during the Sixth Plan period.

(iii) BUILDING CONSTRUCTION PROGRAMME

A. Revenue-Administrative Buildings

41-34. With an extensive hierarchy of offices beginning from the level of Revenue Inspector circles for groups of villages up to the level of Board of Revenue, Revenue Department has a very large number of offices and employees. Besides, it has a programme of reorganisation of the revenue units which is being implemented in phases. There is already an accumulated shortage of office buildings and residential quarters. There may be further requirements for buildings because of reorganisations. The need for construction of office buildings and staff quarters is therefore very acute and urgent, as continued inadequacy of accommodation is bound to tell upon the efficiency of the administration. Therefore, it has been proposed to take up construction of the following buildings during the Sixth Plan period.

(1)	Number of office building	Number of residential building	Amount required (Rs. in lakhs)
(1)	(2)	(3)	(4)
1. Revenue Administration ..	390	3,598	13,05.65
2. Excise Administration ..	49	114	67.10
3. Registration Department ..	75	413	1,27.25
Total ..	514	4,125	1,500.00

B. Buildings of Police

41-35. The accommodation problem both residential and non-residential for the Police in this State is far from satisfactory. For their arduous nature of duties, the Police personnel are required to be provided with suitable accommodation near their place of duty as provided under the rules. In fact, proper housing for the Police is an essential prerequisite for maintaining their efficiency and discipline and to build up their morale. It is the primary responsibility of the State Government to provide the barest minimum accommodation to the force in order to utilise their services for maintaining law and order in the State at any moment. But due to dearth of resources no satisfactory improvements in this regard could be possible in the past.

41-36. The State Government have been receiving Central loan assistance for Police Housing Scheme since the year 1956-57 at the average rate of Rs. 17 lakhs a year. The Police Housing has also been included under State Plan and the average yearly plan allocation is Rs. 18 lakhs. Thus, a total sum of Rs. 35 lakhs is available each year for construction of Police buildings which is quite inadequate even to meet the immediate requirement.

41-37. For provision of required number of residential and non-residential buildings for the Police, funds to the tune of Rs. 31.24 crores are required. It is therefore absolutely necessary to provide adequate funds under State Plan to meet the barest minimum need of the force. During

the Sixth Plan period, the outlay for Police buildings has been fixed at Rs. 6.20 crores and it is proposed to be utilised in a phased manner as follows :—

(Rs. in lakhs)

Name of year	Cost of quarters for G. Os.	Cost of quarters/ barracks for N.-G. Os.	Cost of non-residential buildings	Total
(1)	(2)	(3)	(4)	(5)
1978-79	..	4.70	15.30	20.00
1979-80	..	12.00	66.50	1,50.00
1980-81	..	14.55	73.45	1,50.00
1981-82	..	12.65	74.75	1,50.00
1982-83	..	12.00	75.10	1,50.00
			Total	6,20.00

C. Jail buildings

41.38. Over years while the prison accommodation has remained static the prison population has increased manifold. In many jails and sub-jails like Baripada, Balasore, Koraput, Raipur, Jaypore, the population was four to five times the scheduled capacity. Most of the jail buildings were constructed in British time and by the ex-rulers. The jail buildings in the ex-State areas do not conform to the standard pattern of the jails and have several structural defects and are not secured. For want of repairs also many of the jail buildings are in dilapidated conditions. There are no jail buildings at the Subdivisional headquarters of Padmapur and Jagatsingpur. It is also necessary to have new sub-jail buildings at the Subdivisional headquarters of Chatrapur and Baliguda and in place of the Takuk Sub-jails.

41.39. During the first four Five-Year Plans, the prison administration did not receive any assistance from the plan sector excepting the social defence schemes which were implemented with 50 per cent assistance from the Government of India. During the last 3 years beginning from 1974-75 to 1977-78, a sum of Rs. 17 lakhs have been allotted for improvement to the five numbers jail buildings in phases, viz., expansion of special sub-jail at Bhubaneswar, construction of sub-jail at Padmapur, sub-jails at Jaypore and Hindol and expansion of Balasore Jail (Land acquisition charges only).

41.40. During the current year, a sum of Rs. 20 lakhs has been provided under the plan sector for construction of jail building and the following works are being taken up out of this amount at the estimated cost mentioned against each :—

(Rs. in lakhs)

Name of the project	Provision for 1978-79
1. 4th Phase construction of dormitory for Bhubaneswar special sub-jail.	1.25
2. Construction of sub-jail building at Padmapur	2.19
3. Addition and alteration to the Hindol sub-jail	0.50
4. Construction of work shop, school and fuel shed at Sundargarh jail	1.68
5. Extension of Koraput jail construction of dormitory for 80 prisoners	3.44
6. Construction of staff quarters for Hindol sub-jail	1.94
7. Construction of staff quarters for Padmapur sub-jail	1.44
8. Construction of staff quarters for Senepur sub-jail	1.19
9. Construction of staff quarters for Phulbani Jail	2.38
10. Improvement of water-supply in Rourkela Special jail	1.26
Total	17.25
Pro rata	2.75
Grand Total	20.00

41.41. It is probably the only state in the country which does not have a central jail. It is proposed to construct a central jail at Jagatpur in Cuttack district. This will not only be the central jail for the State but will also function as the District Jail for the Cuttack district, as it is proposed to shift the Cuttack Jail from its existing site which is in a very congested area of the city. It is estimated that a sum of about Rs. 3,00.50 lakhs will be required for the entire project. The jail will provide accommodation for one thousand prisoners. This work shall be taken up in phases so that the entire project will be completed in about 10 years. For the next four years it is proposed to spend a sum of rupees one crore for this work alone.

41.42. Similarly it is also proposed to construct new sub-jail building at Baliguda, Chhatrapur, Jagatsinghpur, Anandapur and Aska. The cost of a sub-jail building with staff quarters at the present schedule of rates is of the order of about rupees twenty lakhs. It is also proposed to complete all these buildings within the next five years in a phased manner. To complete the sub-jail building at Padmapur which has already been taken up since the last two years a sum of Rs. 9 lakhs have been provided during the next two years.

Training Institute

41.43. There is no training institute for training the custodial staff in the State. It is absolutely necessary to have a training institute for imparting foundation and refresher course of training to the custodial staff particularly the guarding staff. The requirement of funds for construction of the training institute shall be about Rs. 7 lakhs. It is proposed to construct the same during the next two years.

D. Fire Service buildings

41.44. The accommodation problem of the Fire Service both residential and non-residential is extremely acute. Excepting a few Fire Stations which have been accommodated in Government buildings either of their own or in portions of police/other Government buildings the remaining have been accommodated in rented houses with considerable difficulties. The Fire Station building at Bhubaneswar was constructed in the year 1964-65. Thereafter no such Fire Station buildings have been constructed due to non-provision of funds in the State's budget either under plan or non-plan. Under the Police Housing Scheme, at its initial stage, a few quarters for the Fire Service personnel at Sambalpur, Dhenkanal, Baripada and Bhubaneswar were constructed along with the staff quarters of the general police. Subsequently the grant under Police Housing Scheme was utilised for construction of Quarters/barracks for the general Police only and the Fire Service Buildings were not included in it.

41.45. In view of the acuteness of housing problem of Fire Service in the State both residential and non-residential it is urgently required to include this scheme under State Plan. During the Sixth Plan period the outlay of Fire Service Department has been fixed at Rs. 1.76 crores and the same is decided to be utilised as detailed below:—

(Rs. in lakhs)

Name of year	Cost of Quarters for G. Os.	Cost of Quarters for N.-G. Os.	Cost of Non- residential buildings	Total
(1)	(2)	(3)	(4)	(5)
11978-79
11979-80	..	1.01	24.58	44.00
11980-81	..	0.71	25.61	44.00
11981-82	..	0.71	23.48	44.00
11982-83	26.29	44.00
Total				176.00

E. Construction of Orissa Bhawan, etc.

41.46. In order to accommodate the increasing number of V. I. Ps and visitors to Delhi construction of new Orissa Bhawan has been taken up at Chanakyapuri. A sum of Rs. 43 lakhs has so far been allotted. Rs. 25 lakhs have already been spent and the rest amount will be spent during the year. The masonry work of ground floor has been completed and that of first floor is likely to be completed by September, 1978. The entire building is expected to be completed by March 1979. The cost of the building is likely to exceed the estimated amount of Rs. 38 lakhs. The revised estimate including the cost of interior decoration is under preparation. During the sixth Plan (1978--83) a sum of Rs. 15 lakhs has been allocated for this work. For this year Rs. 15 lakhs has been kept. To complete the project, it is necessary to allot about Rs. 7 lakhs more during the year 1979-80. In addition to this, a sum of Rs. 10 lakhs may be required during the coming financial year for improvement of State Guest House and construction of staff quarters, purchase of Government/Corporation flats for Utkal Bhawan and Orissa Bhawan.

F. Criminal Court Buildings

41.47. After separation of judiciary from the executive establishment of new courts has become necessary. Building under the occupation of the existing courts also require examination in order to accommodate the additional staff due to increase in work-load. In the previous five year plans, funds were allotted for the building projects of the High Court and the Magisterial Courts in the separation side. For the first time provision for Rs. 52 lakhs is being made for these buildings in the Sixth Five year Plan. Court Buildings which are essentially required will be taken up.

G. Buildings of Law Department

41.48. Construction of court building at different places of the State is an immediate necessity for normal working of the courts. In the mean time some new courts have been established which are functioning in rented buildings or accommodated in the building of other Departments. Construction of court buildings in the State has lagged behind. Unless the required funds for the purpose are provided on a priority basis completion of the projects will take a very long time. During the Plan period 1978-83, the requirement would be Rs. 100.00 lakhs.

H. Building Construction of Programme of Finance Department

41.49. A large number of offices of the Treasury, Commercial Taxes and Local Fund Audit Wing of Finance Department are being housed in rented private buildings or in a few cases in buildings of other Government Departments. The State Government are incurring expenditure every year on payment of rent. Dearth of suitable building even on hire is causing a good deal of inconveniences to the public. Inadequacy of residential accommodation has been a cause of wide spread dissatisfaction among the employees for quite sometime past. It is therefore necessary that a programme for construction of buildings for housing the offices and providing residential accommodation to the employees should be implemented expeditiously. In view of the inadequacy of allocation of plan funds for the purpose, the following programme of building construction is proposed for these wings.

Requirement of funds for the building programme during five year 1978-83

Year	Treasury Wing		Commercial Wing		Local Fund Audit Wing		Total	
	Residential	Non-residential	Residential	Non-residential	Residential	Non-residential	Residential	Non-residential
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1978-79								
Amount (Rs. in lakhs) ..		2.00	2.00	..	1.00	..	3.00	2.00
No. of buildings		5	5	..	3	..	8	5
1979-80								
Amount (Rs. in lakhs) ..	4.55	10.20	12.00	3.00	7.00	2.00	23.55	15.20
No. of buildings ..	18	6	30	2	29	2	77	10

Year	Treasury Wing		Commercial Wing		Local Fund Audit Wing		Total	
	Residential	Non-residential	Residential	Non-residential	Residential	Non-residential	Residential	Non-residential
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1980-81								
Amount (Rs. in lakhs)	6.25	8.75	13.00	2.00	4.00	1.00	23.25	11.75
No. of buildings ..	21	5	35	1	13	1	69	7
1981-82								
Amount (Rs. in lakhs)	6.11	9.45	10.00	..	..	..	16.11	9.45
No of buildings ..	25	4	25	..	..	..	50	4
1982-83								
Amount (Rs. in lakhs)	8.09	4.60	3.00	..	..	..	11.09	4.60
No. of buildings ..	36	3	10	..	..	..	46	3
Total—Amount (Rs. in lakhs).	25.00	35.00	40.00	5.00	12.00	3.00	77.00	43.00
No. of buildings..	100	23	105	3	45	3	250	29

I. Buildings of Vigilance Department

41.50. For construction of staff quarters and office buildings of State Vigilance Department, a sum of Rs. 80 lakhs has been proposed for the Sixth Plan as indicated below :—

Year	Residential Quarters	Non-Residential Buildings	Amount
(1)	(2)	(3)	(4)
			Rs.
1978-79	35	..	8,01,076.00
1979-80	61	1	18,04,984.00
		(Part allotment of S. P., Vigilance Sambalpur's Office Building).	
1980-81	60	(Part allotment of S. P., Vigilance Sambalpur's Office Building).	18,65,406.00
1981-82	62	..	15,67,126.00
1982-83	67	14	18,48,910.00
1982-83	..	Construction of compound walls around higher type quarters.	1,12,500.00
Total	285	16	80,00,002.00 or say 80.00 lakhs

J. Paradeep Area Development

41.51. For operation and development of Port, it is urgently necessary to provide official and residential accommodation for State Government offices and organisations. An area of 40 acres of land has been reserved for the purpose in the Port town. It is also propose to provide other civic amenities in the area. The total outlay for this purpose is estimated at Rs. 2,00.00 lakhs for the Sixth Plan period.

(iv) SCHEMES OF ORISSA CONSTRUCTION CORPORATION LTD.

41.52. The Central Workshop of O. C. C. Ltd. was set up in 1974 under the State Plan Scheme at a cost of Rs. 56.00 lakhs. This workshop is scheduled for completion in July, 1978. The annual production capacity of this workshop is 1,500 tonnes.

41.53. The present work-load of the Central Workshop, with the recent work orders for Radial Gates and Hoists of Rengali and Kalo Projects and penstocks of Rengali Project, is nearly 7,000 tonnes. Besides work orders for many other projects like Samal Barrage, Gohira, Daha and Sundar Projects, etc., involving design, manufacture and erection of about 6,500 tonnes are expected to be received during the current year. Since quotations for these works have already been submitted to the Department and negotiations are under progress. Further, it is anticipated that the works of some major projects like Upper Kalab, Indravati, Mahanadi Barrage and many other Medium and Minor Project, which have since been cleared by the Technical Advisory Committee, may be awarded to O. C. C., Ltd. in the near future. The total tonnage of fabrication involved for these projects shall be around 1,800 tonnes. Thus the total tonnage of fabrication that has to be executed over a period of 5—7 years is nearly 32,000 tonnes. Therefore the present annual capacity of 1,500 tonnes has to be stepped up many folds to meet the above demands.

41.54. For this purpose it is proposed to set up a Central Workshop Complex with an Annual Production capacity of 5,100 tonnes. The proposal envisages setting up the separate Fabrication Shops and Machine Shops depending on the Manufacturing progress, Technical skills and expertise involved.

41.55. The salient features are given below :—

(A) Capital cost	..	Rs. 3,09,80,000.00
(B) Cost of available Plan and Machinery, Buildings, etc.	Rs.	64,91,000.00
(C) Net Fnd Requirement (A—B)	..	Rs. 2,44,89,000.00
(D) Working Capital	..	Rs. 22,70,000.00
(E) Annual Production	..	5,100 Tonnes
(F) Annual Turnover	..	Rs. 6,66,15,000.00
(G) Gross Profits per annum	..	Rs. 66,61,500.00
(H) Cost of Plant and Machinery	..	Rs. 2,60,05,000.00
(I) Cost of Factory sheds	..	Rs. 29,38,000.00
(J) Employment Potential	..	1,031
(K) Total work-load including projects anticipated in the near future.		32,000 Tonnes (Appx.)

41.56. For the expansion of the Central Workshop a sum of Rs. 1.30 lakhs has been proposed for the five years (1978—83).

(v) PUBLIC CO-OPERATION

Grants for organising Planning Forums

41.57. In view of the added emphasis on the process of 'Planning from below' and the concept of popular participation in plan formulation and implementation the importance of the concept of 'Public Co-operation' in the planning process cannot be over emphasized.

41.58. The object of this scheme is to create plan consciousness among the public specially among the teaching staff as well as students of the Colleges and Universities. The Planning Forums of the educational institutions are required to organise Plan Information Centres, Lecturers, Seminars and Exhibitions on Plan Programmes and their achievements. They are also to conduct socio-economic surveys, small savings drives and community development activities, etc.

41.59. The Planning Forums in the State are being given financial aids in shape of grants. Government of India bear 60 per cent and the State Government bear 40 per cent of the grants.

41.60. So far 77 'A' category and 6 'B' category Planning Forums have been registered. 'A' category Planning Forums are required to organise Plan Information Centres and arrange atleast six talks/discussions on popular Planning topics in each academic year. Besides, it should also arrange plan publicity, debates, seminars symposia, essay competitions, etc. and organise celebration of Plan week. This category of Forum is entitled to get grant at the rate of Rs. 400 each per year. 'B' category Planning Forums are required to participate in National and State level conference and camps on Planning Forums. They are to undertake socio-economic surveys in development projects and research studies in economic and planning matters. This category of Forums is entitled to get grant at the rate of Rs. 1,600 each per year.

41.61. During the year 1977-78, grants-in-aid amounting to Rs. 25,600 have been sanctioned in favour of 56 'A' category and 2 'B' category Planning Forums. Steps are being taken to sanction grants during the current year 1978-79. Provision of Rs. 0.50 lakhs has been made in the current year budget under the scheme. Considering the importance of these Forums, it is proposed to encourage organisation of more Forums during the Sixth Plan period. A number of 'C' category forums are also proposed to be organised to stimulate plan consciousness among the people. A provision of Rs. 25 lakhs has been made for the Five-Year Plan 1978-83.

