

FIFTH FIVE-YEAR PLAN OF ORISSA



**G AND CO-ORDINATION DEPARTMENT
GOVERNMENT OF ORISSA
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CHAPTER 1·1

THE SOCIO-ECONOMIC BACK DROP

Orissa's backwardness in the midst of rich natural resources has often been described as a paradox; more appropriately, it is an affirmation of the historical experience that resource availability is not a sufficient condition for economic change. In general, the crucial difference between a developed and a low-income economy lies not so much in the size of the resource-base as in the degree of rational utilisation of its available resources, which in its turn depends on the quality of labour force and human resources, of technology and skills in production as also the level of employment of capital. The aim of planning in India as also in Orissa has been to bring about a high degree of rational utilisation of the existing resources, thereby initiating a process of development which will raise the living standards and open out new opportunities for a richer life for our people. The Fifth Five-Year Plan will also be a step in this direction. In the following paragraphs a review has been made of the socio-economic situation in Orissa prevailing on the eve of the Fifth Plan period so that this will provide the necessary background for systematic action during the years 1974—79.

2 In spite of the inadequacies from which the national and regional (State) income data suffer, these remain the most important summary index of the degree of development of an economy. Annexure I (1) gives data in respect of the growth of State income *i. e.*, net national product at factor cost and *per capita* income of Orissa both at current and constant (1960-61) prices during the period from 1951-52 to 1971-72. The State income at constant prices is a measure of the net domestic production in real terms. The State income of Orissa at 1960-61 prices has risen from Rs. 275·14 crores in 1951-52 to about Rs. 560·49 crores in 1971-72, *i. e.*, it has nearly doubled during the twenty-year period. It is also seen that the State income has increased at the (linear) rate of 3 per cent per annum during 1951-52 to 1955-56 (First Plan period), 3·6 per cent per annum during 1956-57 to 1960-61 (Second Plan), 4·6 per cent per annum during the period from 1961-62 to 1965-66 (Third Plan) and 5·4 per cent per annum during the years from 1966-67 to 1968-69 (Annual Plan period). As against the projected growth rate of 5·6 per cent per annum during the Fourth Plan period, the net national product of Orissa factor cost grew by 1·8 per cent during 1969-70, 5·1 per cent in 1970-71 and 0·6 per cent in 1971-72 which happens to be the third year of the Fourth Plan. It would thus appear that the rate of growth of the State income in Orissa, particularly during the first three years of the Fourth Plan, has been very sluggish.

3. The growth in *per capita* income at constant prices has been still worse. As the data in Annexure I(1) make clear the *per capita* income of Orissa at 1960-61 prices grew by 0·9 per cent during the years 1951-52 to 1955-56 (First Plan), by 1·6 per cent during the period 1956-57 to 1960-61 (Second Plan), by 1·8 per cent during the period 1961-62 to 1965-66 (Third Plan), and by 2·8 per cent during the years 1966-67 to 1968-69. The growth rates during the years 1969-70, 1970-71 and 1971-72 (the first three years of the Fourth Plan period) have been 0·24 per cent, 2·94 per cent and 1·36 per cent respectively. Thus the growth rate of *per capita* income in real terms has always remained low and the difference between the growth-rates of the State income and *per capita* income (at constant prices) is explained by the high rate of population growth which took place in Orissa during these two decades.

4. A comparison of the State income and *per capita* income data for Orissa with those for other States and also with the National income data further high-lights the backwardness and the slow growth of Orissa's economy. Annexure I (2) contains data of National income of India and the State income of Orissa at current prices during some of the years from 1951-52 to 1969-70. Annexure I (3) gives the adjusted comparable *per capita* income estimates (at current prices) of different States of the Indian Union. From this it can be seen that in 1969-70 the *per capita* income of Orissa at current prices was Rs. 467·00 compared to the all-India average of Rs. 589·00. Among the major States of the Union only Bihar had a *per capita* income lower than that of Orissa.

5. An examination of the composition of State income by various sectoral contributions provides further insight into Orissa's economy. Annexure I (4) contains data of the State income of Orissa at constant (1960-61) prices by industrial origin, from the years 1960-61 to 1971-72. Similar figures have been provided for State income at current prices in Annexure I(5)). These data would make clear that agriculture remains the most dominant sector in Orissa's economy contributing more than fifty per cent of the State income. However, its share has been declining in 1951-52 the share of agriculture in State income was 66.8 per cent whereas by 1971-72 it had gone down to 52.5 per cent. This fall in the share of the agricultural sector in the State income is mainly due to the relatively higher growth rate in other sectors, particularly in the services sector and transport and communications sector. The performance of the Industry and Mining sector has not been very bright since 1966-67 when its share in the State income stood around 16 per cent. Thereafter there has been relative decline and by 1971-72 its share had come down by 1 per cent. This is particularly depressing for a State like Orissa which has rich mineral resources, which can be exploited for rapid industrial progress.

6. As has been mentioned above, agricultural and allied activities remain the most dominant sector in Orissa's economy and although its relative share in State income has been declined, the value of agricultural produce in real terms has increased from Rs. 214.3 crores in 1951-52 to Rs. 302.7 crores in 1970-71 (at 1960-61 prices). The importance of agriculture in Orissa's economy is further emphasised by the fact that 79.59 per cent of the total working force in the State are engaged in agricultural and allied activities as revealed by the 1971 census. Annexure I (6) give the districtwise distribution of workers as per their occupation as revealed by these data. It is seen that only 20.4 per cent of the total working force were engaged in non-agricultural occupation compared to 31 per cent at the national level. Usually the development process for an economy is associated with reduction in the proportion of labour force employed in the agriculture sector; in Orissa's case, however, it is seen that the percentage of total population of workers in agriculture continues to be very high. This as also the prevailing low productivity of agriculture and sluggish growth of the industrial sector would indicate that the State's economy lacks in diversification and the concomitant resilience to withstand the fluctuations and pressures that may arise from time to time. This points to the need for promoting the growth of the secondary and tertiary sectors including industries and mining so that the economy of the State is not constantly exposed to the risk of instability as a result of natural calamities of fluctuations in the prices of agricultural produce.

7. The analysis in the preceding paragraphs shows agriculture occupies pre-eminent place in Orissa's agriculture, shows certain special characteristics which have to be taken into account while planning for development in the Fifth Plan. Table I gives data on area under and production from various principal crops grown in Orissa.

TABLE I
Area and production for 1969-70

Crop (1)	Area in 000 Hectares (2)	Production in 000 Tonnes (3)
Rice	4,406 (56.9)	4,317
Cereals (total) (including rice)	4,934 (63.7)	4,634
Foodgrains (Total) (including rice+cereals+pulses)	5,748 (74.3)	5,033
Oil-seeds (Total)	260 (3.1)	161
Commercial Crops (Total)	164 (2.1)	203*
Gross cultivated area	7,740 (100)	..

* Bales (Cotton & Jute)

SOURCE—Statistical Abstract of India, 1970

8. It can be seen that 74.3 per cent of the cultivated area was under foodgrains during 1969-70 and of this 56.9 per cent was under rice. Similarly, rice constituted the major agricultural produce of the State during that year. This would show that not only agriculture occupies a pre-eminent place in Orissa's economy, it also displays further lack of diversification inasmuch as the cultivation of rice provides the most important source of livelihood in the State, and the size and growth-rate of the State income are very closely linked with the production of rice from year to year. This exposes the economy to the risk of frequent instability as any fluctuation in food (rice) production affects a large segment of the State's population. In fact, natural calamities like cyclone and drought have been affecting the economy of Orissa adversely almost every year since 1965-66 with the result that much of the State's resources and energy are being spent on providing relief to the affected persons, thereby slowing down the process of planned development in the State. In fact, the extent of damage caused by a natural calamity can be best judged if one looks at figures of loss of property and life resulting in the cyclone in the year 1971. The cyclone which took place in the month of October affected an area of over 8,214 sq. miles spread over the districts of Cuttack, Balasore, Puri, Mayurbhanj and Dhenkanal. Nearly 60 lakhs of persons were affected by this disaster. In addition to the disruption of communication facilities in the coastal areas, this claimed 6,623 human lives, 1.07 lakhs of cattle and damaged crops worth Rs. 80 crores grown on 33 lakhs acres. Nearly 8 lakh houses were damaged and more than 10,000 educational institutions, many Government buildings, embankments, roads and several irrigation projects were damaged. The effect of such a disaster on a poor economy like Orissa's is substantial. Similarly, many parts of the State are exposed to drought conditions from year to year. Lack of irrigation facilities which could act as an insulator against drought and the absence of alternative employment opportunities in the secondary and tertiary sectors further compound the difficulties. All these point to the necessity of not only diversifying the economic structure of Orissa but also that of the agricultural sector itself by promoting higher production of crops like oil-seeds, commercial crops such as jute, cotton and the like.

9. Another important feature of Orissa's agriculture which needs attention is its low productivity. Since rice is the most important crop, its productivity in Orissa *vis-a-vis* that of other States of the Union is given in Table 2.

Average yield of Rice in different States of India (1969-70).

TABLE 2
(Quintals per hectare)

State 1	Rice (Quintals per hectare). 2
Andhra Pradesh	14.2
Assam	9.2
Bihar	7.3
Gujarat	1.0
Haryana	15.4
Himachal Pradesh	11.7
Jammu & Kashmir	20.0
Kerala	13.9
Madhya Pradesh	7.4
Maharashtra	10.3
Mysore	20.7
Nagaland	8.3
Orissa	9.6
Punjab	14.9
Rajasthan	3.6
Tamil Nadu	16.8
Uttar Pradesh	7.8
West Bengal	12.7

SOURCE—Statistical Abstract of India, 1970

It can be seen that the average yield of rice in Orissa is much lower than that of other States although rice is the principal crop of the State. The position is no better in respect of other crops. This points to the need for modernising agriculture and increasing its productivity, through the provision of the required inputs, irrigation facilities and better farm management practices.

10. Next, we consider some of the demographic characteristics of the State which have direct bearing on the process of development. According to the 1971 Census, Orissa has a population of 21.94 millions. Population increased by 25.05 per cent in the decade 1961—71 compared to 19.82 per cent in the previous decade (1951—61).

Growth of population		Millions
1951	..	14.64
1961	..	17.54
1971	..	21.94

11. The perpetuation of poverty and backwardness in spite of planned development that is being under-taken in the past twenty years is also partly due to the rapid increase in the population. For example, although in twenty years, 1951—1971, the State income (at constant prices) went up by 103.7 per cent, *per capita* income rose only by 34.9 per cent. The difference is explained by the growth of population. As elsewhere in the country, a decline in the death rate unaccompanied by a corresponding decrease in birth rate has been the major reason for the higher population growth. A long term solution to the problem of poverty and unemployment in Orissa would lie in regulating this growth of population through a comprehensive population policy.

12. Another characteristic of Orissa's population which underlines its backwardness is the low percentage of its urban population. According to 1971 Census 91.6 per cent of Orissa's 220 millions live in villages. Annexure I (7) shows that in some of the districts of the State this figure is as high as 95—97 per cent. Not only such a high percentage of population lives in the villages, the sizes of most of the villages are also small as can be seen from the data given in Annexures I (8) & I (9). These data show that more than 90 per cent of Orissa villages have each a population of less than 1,000 and 64.4 per cent of the rural population live in such small villages. Thus the villages are small and widely dispersed. Due to small size of the community, it is not possible for them to bear the cost of maintaining various common municipal and other facilities which are easily provided to a larger community. Also, such a configuration of rural communities make the provision of infrastructure and social consumption and municipal facilities very expensive. This fact has to be kept in mind while formulating proposals for implementation under the National programme of minimum needs.

13. Yet another demographic characteristic of Orissa is the high concentration of backward population in the State. Annexure I (10) provides data on the percentage of Scheduled Castes and Scheduled Tribes population to the total population of different districts of the State. It is seen that 38.2 per cent of Orissa's population belong to these backward categories and in some districts the percentage is as high as 70 per cent. This not only indicates the existing constraint of human resources, it also points to the necessity of taking suitable ameliorative measures for the welfare and development of these categories of persons who constitute a sizeable component of Orissa's population.

14. For better insight into the level of development and also the standards of living of the people of Orissa it is necessary to examine the pattern of *per capita* monthly household consumption in the State. This is also necessary for formulating suitable policies and programmes aimed at elimination of poverty which is one of the major objectives of the Fifth Plan. From the data collected for the 21st round of National Sample Survey (1966-67).

(State Samples) it is seen that in rural Orissa the poorest 5 per cent of the population spend about Rs. 11 on an average per person per month i. e., 33 paise per person per day. The figure for the corresponding group in urban Orissa is Rs. 16.42 per month i. e., about 55 paise per person per day. The richest 5 per cent in the rural sector spend Rs. 55.10 on an average per person per month as against Rs. 120.79 in the urban sector. These data would show that the vast majority of Orissa's population are evidently poor and even in richest groups the house-holds were not really well off in an absolute sense of the term. The efforts in planning will have to be directed towards the welfare of all sections of the population but more particularly towards the poorer house-holds in the lower rungs of the economic ladder.

15. The quality of living of the poorest sections of Orissa's population can be seen from Table 3.

TABLE 3

Broad pattern of consumer expenditure in Orissa according to the 21st round of the National Sample Survey, 1966-67

Rural

Fractile group	Average monthly per capita expr. (in Rs.)	Percentage distribution of per capita monthly consumption expenditure.				
		Cereals & cereals substitute	Other food	Fuel & Light	Clothing	Other non-food
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0—10 ..	15.11	73.5	15.4	6.8	0.8	3.5
10—20 ..	16.45	64.9	18.9	8.2	3.2	4.8
20—30 ..	29.11	40.1	13.4	42.5	0.5	3.5
General population ..	27.51	52.5	26.0	10.6	3.2	7.7

Urban

Fractile group	Average monthly per capita expr. (in Rs.)	percentage distribution of per capita monthly consumption expenditure.				
		Cereals & cereals substitute	Other food	Fuel & Light	Clothing	Other non-food
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0—10 ..	18.48	57.4	24.5	8.1	2.7	7.3
10—20 ..	24.54	54.1	27.1	8.3	1.9	8.6
20—30 ..	27.10	49.9	30.4	7.7	1.7	10.3
General population ..	41.61	33.2	33.2	6.1	4.8	22.7

Source — State Samples of National Sample Survey 21st Round (1966-67) published in ECONOMIC REVIEW OF ORISSA, 1971, Bureau of Statistics and Economics Orissa.

16. This shows the overall pattern of consumption in rural and urban Orissa as well as the pattern for the three lowest decile groups of population. Thus the lowest 10 per cent of the rural population spend 73.5 per cent of their meagre budget on cereals and substitute another 15.4 per cent on other food items and 6.8 per cent on fuel and light while only 4.3 per cent is devoted to clothing and other non-food items. The pattern for the same decile group for the urban area is little different in the sense that clothing and other non-food items claim 10 per cent of their budget, although cereals and other food items together still claim 81.9 per cent of their consumption expenditure. The pattern for other low income Orissa has a also not much different. From the data for the general population, it can be seen that in the rural areas 78.5 per cent of consumption expenditure is devoted to food in 1961-71. In the urban areas, the figure comes to more than 66 per cent. All these data indicate the poor standards of living of a major segment of Orissa's population.

17. For a more precise estimation of the number and percentage of people living in absolute poverty (defined in terms of a nationally accepted minimum standards of living), it is necessary to estimate the number of persons living below the poverty line in Orissa State.

18. In July, 1972 a study group set up by the Government of India and recommended that the *per capita* monthly consumer expenditure of Rs. 20 (at 1960-61 prices) should be deemed a national minimum. At the present (1973) prices this will amount to about Rs. 40. Considering the differential conditions in the rural and urban sectors, Dandekar and Rath in their study on "poverty in India" had suggested that at 1960-61 prices Rs. 15 *per capita* per month for the rural population and Rs. 22.5 *per capita* per month for the urban population should be regarded as the nationally desirable minimum. At 1968-69 prices, these work out to Rs. 27 per month in the rural areas and Rs. 40.5 per month in the urban areas. Basing upon this definition, various estimates of the percentages of population below the poverty line in different States of the Union for different years are available. The Planning Commission has made an estimate for the year 1964-65 on the basis of the official consumer expenditure data available from the 19th round of the National Sample Survey (Making adjustment for the price rise between 1964-65 and 1968-69, the Planning Commission have estimated that Dandekar & Rath definition of the poverty line would mean a *per capita* monthly expenditure of Rs. 20 in the rural areas and Rs. 30 in the urban areas at 1964-65 prices). Separately, an estimate has been made from the National Sample Survey data of the percentage of the rural population existing below the poverty line in different States of the Union in the years 1960-61 and 1967-68. Again utilising the same definition the Federation of Indian Chambers of Commerce and Industry in their Publication "Planning for Results" (1972) have made a Statewise estimate of the percentage of people living below the poverty line. All these estimates have been presented in table No. 4. It is seen that although these estimates differ slightly from each other (as they refer to different years) there is one fact which is common to all these estimates. It is that the percentage of persons living below the poverty line is the highest in Orissa amongst all the States in the Indian Union.

TABLE 4

Percentage of Population living below the poverty line in different States of India

States	Rural		Urban		For the entire Population October-1969
	1960-61	1964-65	1967-68	1964-65	
(1)	(2)	(3)	(4)	(5)	(6)
Andhra Pradesh	47.00	48.50	39.00	57.61	42.30
Assam	14.00*	18.30	21—32.80	48.51	40.60
Bihar	38.00	42.80	61—71.00	55.55	49.40

States	Rural			Urban		For the entire Popula- tion October 1969
	1960-61	1964-65	1967-68	1964-65	(6)	
(1)	(2)	(3)	(4)	(5)	(6)	
Gujarat ..	25—37·00	45·59	48·00	54·48	33·30	
Jammu & Kashmir ..	8·00	26·63	12·00	61·38	44·60	
Kerala ..	42·00	60·82	49·00	66·36	37·90	
Madhya Pradesh ..	36—47·00	46·32	61·00	54·73	44·90	
Maharashtra ..	40·00	47·02	56·00	43·93	33·50	
Mysore ..	34·00	48·99	48·00	51·81	41·30	
Orissa ..	56·00	62·04	64·00	57·58	64·70	
Punjab ..	13·00**	22·69	28—32·00**	43·39	20·80	
Rajasthan ..	33·00	35·29	37·00	51·71	45·60	
Tamil Nadu ..	51·00	50·94	59·00	55·16	40·40	
Uttar Pradesh ..	39·00	41·61	61·00	62·56	44·80	
West-Bengal ..	22—42·00	50·19	61—74·00	40·18	34·90	
All-India ..	38·00	44·57	53·00	51·34	41·20	

* Includes the figure for Manipur & Tripura.

** Includes the figure for Haryana.

Note—Cols. (3) and (5) are based on the Planning Commission's estimates derived from NSS 19th round data (1964-65). Cols. (2) and (-) on NSS 16th round and NSS 22nd round respectively (quoted in Mukherjee and others "Poverty in India: Measurement and Amelioration", Commerce, August 19, 1972, Bombay).

Col. (6) on FICCI : "Planning for Results" 1972)

19. The Planning Commission's estimate relating to the year 1964-65 puts it at 62·04 per cent for rural Orissa and 57·58 per cent for Urban Orissa. The estimate prepared from the N. S. S. 22nd round (1967-68) indicates that 64 per cent of the rural population in Orissa lived below the poverty line in that year. Also the estimates relating to the year 1969 given in the table shows that 64·7 per cent of the total population of Orissa live below the poverty line. Considering all these estimates, it will be safe for us to assume that nearly 64 per cent of Orissa's population of 220 millions are living below the poverty line on the eve of the Fifth five-Year Plan. This works out to nearly 14 million as against the national figure of 220 millions.

20. Although no separate study has been made for Orissa to find out the characteristics of the people living below the poverty line, one can make a reasonable inference about these characteristics from similar studies available for the country as a whole. Dandekar and Rath in their study referred to above have pointed out that the rural poor consist predominantly of agricultural labour households and small land holders with cultivated holdings of less than 5·0 acres and particularly less than 2·5 acres. These groups also include village artisans gradually thrown out of their traditional occupation, craftsmen and production process workers. There is also evidence to show that larger house holds tend to be poorer as they are burdened by too many members (probably dependants). Little is known about the characteristics of the urban poor although it is felt that "the urban poor are only a overflow of the rural poor into the urban area" and they belong to the same class as the rural poor. The casual workers and others not having regular employment probably from a large proportion of the urban poor. It is needless to mention here that in the Fifth Five-Year Plan which aims at eradication of poverty substantial efforts will have to be devoted for tackling the problem of absolute poverty which exists among Orissa's population.

21. Unemployment and under-employment are some of the major symptoms of the problem of poverty. Unfortunately, according to the report of an expert committee of the Planning Commission (1970), reliable estimates of the volume and composition of unemployment and underemployment are not available for this country; the problem is more acute in the case of a State like Orissa. However, in order to give an idea about the dimension of the problem some of the figures available on this subject have been discussed in the succeeding lines.

22. Defining unemployment as involuntary unemployment i. e. all those persons who offer themselves for work but are without it) on the part of persons in the working age-group generally taken as between the ages of 15 to 59, the volume of unemployment in Orissa has been variously estimated. One estimate prepared by the Bureau of Statistics and Economics, Orissa analysing the 1971 census data puts it at 31 lakhs unemployed persons in Orissa in 1971. This includes 6.5 lakhs of unemployed equivalent of underemployed persons. Under-employment has been defined as less than full employment where full employment means 48 hours of work per week. It has been found that in rural areas 51.1 per cent of female workers and 29.7 per cent of male workers are underemployed whereas in the urban areas the comparative figures are 31.7 per cent and 21.4 per cent respectively. On the basis of these ratios, it has been estimated that 15.3 lakhs male workers and 3.5 lakhs female workers were underemployed in Orissa in 1971. The estimate of 31 lakhs of unemployed persons has also been worked out on the assumption that 50 per cent of the females in the working age-group would offer themselves for work. If this assumption is relaxed and it is assumed that 25 per cent of such females would offer themselves for work, the estimate of unemployed persons in Orissa in 1971 could come down to 23 lakhs. In either case, the back log is formidable and the intensity of the unemployment problem is further aggravated by the fact nearly 2.1 lakhs persons in the age-group of 15-19 are entering into the labour force of Orissa every year. As against this the opportunities for new jobs are limited. It has been estimated that after taking into account the employment potential to be created in Orissa by investment in the State Sector as well as in the Central Sector during the Fourth Plan Period, the back log of unemployment at the end of 1973-74 will be about 24 lakhs. As has been stated, during the Fifth Plan period additional persons in the working age group will enter into the employment market thereby further increasing the dimension of the problem.

23. The characteristics of the people who constitute the unemployed in Orissa deserve special attention. A large number of these persons belong to the category of the rural unemployed and under-employed. Most of them subsist below the nationally accepted poverty line. To tackle their problem as part of the programme for elimination of poverty, suitable policies and schemes will have to be formulated during the Fifth Five Year Plan period. There is also the problem of the educated (Matriculate and above) unemployed. By the end of June, 1972 the number of the educated unemployed persons who had registered their names in the Employment Exchanges in Orissa stood at 61,328 out of which 401 were unemployed Engineers, 316 unemployed doctors and 8,249 graduates and post-graduates. This no doubt is a partial picture as registration in the Employment Exchanges is optional and the data also have their limitations. But it is seen that the number of educated unemployed in Orissa has been increasing from year to year. The Policies and programmes in the Fifth Plan must aim at solving this problem to an appreciable extent.

24. The analysis of the socio-economic situation in Orissa will not be complete unless the problem of regional imbalances is touched upon. The analysis in the preceding paragraphs has demonstrated the backwardness of Orissa's economy and population. In terms of *per capita* income Orissa, is one of the poorest States as can be seen from the data at Annexure 1 (3). The discussion on the population living below the poverty line and the data in Table 4 have clearly demonstrated that the percentage of poor people in Orissa is highest amongst all the States of the Indian Union. The relative backwardness of Orissa gets further high lighted when one looks at some of the data on the availability of infrastructure facilities in Orissa. For example, the State of Orissa is very poorly served by railways as can be seen from Annexure 1 (11) Which gives comparative data in respect of different States of the country. In 1967-68 Orissa had only 9 Kms. of railway line for lakh of population and 11 Kms. per 100 Sq. Kms of area as against the national averages of 12 Kms. and 18 Kms. respectively. (The figures for some of the States like Gujrat, Rajasthan, Andhra Pradesh and Madhya Pradesh are much higher).

25. The road communication facilities in Orissa are also no better. Annexure I (12) gives the relative position of Orissa vis-a-vis other States of the Union. In 1969-70 Orissa had only 8 kms. of surfaced road per 100 Sq. kms. of area and 59 kms. of surface road per lakh of population. The comparable All-India figures are 12 kms. and 73 kms. respectively and Orissa's position relative to other States was very low indeed. The situation has not improved very much since 1969-70 and Orissa continues to be backward in road development as in other areas of economic activity.

26. The percentages and figures mentioned above do not disclose the complete picture about the communication facilities in Orissa. Annexure I (13) indicates the length of different categories of roads which existed in Orissa on the 1st of April 1972. The condition of most of these roads is very poor. A large percentage of roads in Orissa is fair-weather with unbridged crossings and their crust is weak and formation very narrow. The conditions of the rural roads are still worse. These naturally affect economic activities very adversely for the development of the various sectors of the economy (including agriculture) and in order to help the rural masses to enjoy better standards of living, it will be necessary to improve the quality of road communication facilities in Orissa during the Fifth Plan period.

27. Another facility which has direct bearing on the development of agriculture and industry in Orissa is provision of electricity. At the beginning of the First Five Year Plan the total installed capacity of power in Orissa was only 9.6 M. W. and it is expected that by the end of Fourth Plan period this will reach 800 M. W. Looked at in isolation, this growth appears very impressive, but when one compares the figures of *per capita* consumption of power and the data on rural electrification in Orissa with those for other States of the country, the relative backwardness of the State becomes very clear. From the figures given in Table 5 it can be seen that in 1970-71, Orissa's *per capita* consumption of electricity per annum was 73.9 Kwh. compared to 80.9 Kwh. for the whole country and in the matter of *per capita* power consumption, both industrial and domestic, Orissa lagged behind many States.

TABLE No. 5

Consumption of Electricity in India

State	Consumption of electricity <i>per capita</i> in Kwh. per annum	Industrial consumption of electricity <i>per capita</i> in Kwh. per annum	Domestic consumption and others <i>per capita</i> in Kwh. per annum
Maharashtra	153.3	105.9	47.4
Punjab	140.0	93.5	46.5
Tamilnadu	129.8	74.9	54.9
Gujurat	124.0	90.2	33.8
West Bengal	106.0	74.1	31.9
Mysore	101.2	77.0	24.2
Haryana	88.3	47.4	40.9
Orissa	73.9	65.7	8.2
Kerala	72.3	60.3	12.0
Uttar Pradesh	57.4	38.1	19.3

State	Consumption of electricity per capita in Kwh. per annum	Industrial consumption of electricity per capita in Kwh. per annum	Domestic consumption and others per capita in Kwh. per annum
Andhra Pradesh	50.5	29.3	21.2
Madhya Pradesh	46.3	36.1	10.2
Bihar	44.5	32.9	11.6
Rajasthan	33.1	21.1	12.0
Assam	19.1	8.5	10.6
All-India	80.9	54.9	26.0

SOURCE—The Economic base of Orissa for Fifth Plan—Bureau of Statistics & Economics, Orissa

28. The pace of rural electrification has also been very slow in Orissa. By the end of 1972-73 (fourth year of Fourth Plan), the number of villages electrified stood at 7,373 which works out to 15.7 per cent of the total number of villages of the State. It is expected that by the end of 1973-74, 10,373 villages (i. e., 22.1 per cent of the total number of villages) will be electrified. It is quite low when compared with the situation obtaining in States like Haryana, Tamilnadu and Kerala. As in the case of road communication facilities, development of rural electrification is absolutely necessary for the growth of agriculture and other important sectors of our rural economy. This has to be taken note of the formulating the Fifth Five-year Plan of Orissa.

29. Regional disparities also exist amongst different districts of the State although a precise qualification of such differences has not yet been done. There are however differences in the availability of various infrastructure facilities which promote economic growth. For example in a district like Koraput which has a large tribal population, there are 3.6 Kms. of surfaced roads per 100 Sq. Kms. of area as against the State average of 6 Kms. and the figure of 12.2 Kms. for the Ganjam district. Similarly in the availability of the irrigation facilities, there are differences among the districts. For the districts of Koraput, Keonjhar, Kalahandi and Mayurbhanj the percentages of gross irrigated area to gross area sown in 1970-71 were 3.7, 4.8, 5.7 and 7.8 respectively, whereas the comparable State figure was 18.4 per cent and those for Cuttack (42.6 per cent), Ganjam (25 per cent) and Sambalpur (24.9 per cent) were much higher. Similarly, in rural electrification, only 5 districts of Orissa, namely, Cuttack, Dhenkanal, Ganjam., Puri and Sundargarh will have 40 per cent of their rural population covered under electrification by the end of Fourth Plan period whereas other districts will not have this facility by the end of 1973-74. In the Fifth Plan, the needs of these districts will have to be given greater attention.

30. Apart from these deficiencies in the availability of infrastructure facilities, there are areas in the State which suffer from various demographic and physical constraints. As the data in Annexure 1 (10) shows the districts of Koraput, Keonjhar, Mayurbhanj and Phulbani have a large percentage of their population under the category of Scheduled Tribes. When we take into consideration the existence of Scheduled Castes and other Backward Classes the percentage becomes larger for these districts. The areas inhabited by tribal and other backward population need to be developed on priority basis to bring them up to the level of other areas in the State. Similarly there are specific areas which suffer from natural calamities like cyclone, flood and drought repeatedly over the years. These areas have special problems and need concentrated attention for their development and for the welfare of the people inhabiting in those areas. The Fifth Plan has to take note of the specific problems and contain suitable programme for the development of the backward regions within the State.

31. Thus, Orissa presents the problem of a typically low income economy of slow pace of development of poverty and backwardness. In keeping with the national objective of removing poverty, the starting point in the Fifth Plan will have to be improvement in the living conditions of the poor and the backward sections of the community. This objective however, cannot be achieved in isolation as the problem in Orissa is also that of slow growth, of lack of diversification of the economy, of a precarious exposure to the vagaries of nature. Therefore the effort to raise the standards of living of the people, particularly of those living below the poverty line, can be successful only if there is development in various sectors of the economy in agriculture. Industry and mining and development of infrastructure facilities in the State. Such all-round development will provide employment to the people and lead to the production of goods needed for consumption. The Fifth Five year Plan of Orissa, along with the national planning process, will seek to achieve these goals.

Annexure I (1)

State Income and Per capita Income of Orissa at current and constant (1960-61) prices

Year	At current prices		At constant (1960-61) price		
	State Income (Rs. in lakhs)	per capita income (in Rs.)	State Income (Rs. in lakhs)	Per capita income (Rs.)	
(1)	(2)	(3)	(4)	(5)	
1951-52	..	22,771	155.43	27,514	187.80
1955-56	..	26,795	169.48	30,807	194.86
1960-61	..	36,450	210.94	36,450	210.94
1964-65	..	63,947	335.86	49,703	261.05
1965-66	..	63,307	324.98	44,852	230.25
1966-67	..	76,849	385.79	49,227	247.12
1967-68	..	88,314	433.76	49,423	242.75
1968-69	..	93,598	450.00	52,064	250.31
1969-70	..	99,144	466.78	53,009	249.57
1970-71	55,700*	256.90*
1971-72	56,049**	253.40**

SOURCE—The Economic Base of Orissa for the Fifth Plan Bureau of Statistics and Economics, Orissa.

NOTE—*Provisional

**Quick estimate

Annexure I (2)

*Comparative Statement of National Income and State Income (Orissa)
at current prices*

Year	National Income		State Income	
	Total (Rs. in crores)	Per capita (Rs.)	Total (Rs. in crores)	Per capita (Rs.)
(1)	(2)	(3)	(4)	(5)
1951-52 ..	9,970	274	228	155
1955-56 ..	9,980	255	268	169
1960-61 ..	13,294	306	365	211
1965-66 ..	20,621	426	633	325
1966-67 ..	23,903	483	769	386
1967-68 ..	28,374	561	883	434
1968-69 ..	28,678	555	936	450
1969-70 ..	31,174	589	991	467

SOURCE—The Economic Base of Orissa for the Fifth Plan & Bureau of Statistics and Economics, Orissa

Annexure I (3)

Per capita income of the States at current prices

Sl. No.	States	Adjusted comparable estimates (Rs.)	
		1968-69	1969-70
(1)	(2)	(3)	(4)
1	Andhra Pradesh	478 (86·7)	513 (87·1)
2	Assam	556 (100·9)	545 (92·5)
3	Bihar	402 (72·9)	402 (68·3)

Sl. No.	States	Adjusted comparable estimates (Rs.)	
		1968-69	1969-70
(1)	(2)	(3)	(4)
4	Gujarat	567 (102·9)	657 (111·5)
5	Haryana	621 (112·7)	788 (133·8)
6	Kerala	508 (92·0)	505 (85·7)
7	Madhyapradesh	481 (91·3)	534 (90·7)
8	Maharashtra	692 (125·6)	759 (128·9)
9	Mysore	500 (90·7)	515 (87·4)
10	Orissa	450 (81·7)	467 (79·3)
11	Punjab	881 (159·9)	881 (149·6)
12	Rajasthan	428 (77·7)	480 (81·4)
13	Tamilnadu	570 (103·5)	616 (104·6)
14	Uttarpradesh	462 (83·9)	506 (85·9)
15	West Bengal	561 (101·8)	511 (86·8)
16	ALL INDIA	551 (100)	589 (100)

SOURCE—Central Statistical Organisation and different States' State Income publications
(3 P. & C.—5)

Annexure I (4)

State and per capita income of Orissa by Industrial Origin at Constant (1960-61) Prices

Industry	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Agriculture, Animal Husbandry and Ancillary activities.	224.42 (61.6)	225.87 (59.5)	243.29 (58.6)	283.43 (60.9)	306.16 (61.6)	254.91 (56.8)	294.64 (59.9)
Mining Manufacturing and Small Enterprises.	53.54 (14.7)	64.02 (16.9)	73.63 (17.7)	76.99 (16.5)	80.05 (16.1)	81.33 (18.1)	78.08 (15.9)
Commerce Transport and Communication.	25.66 (7.6)	27.05 (7.1)	28.78 (6.9)	32.68 (7.0)	35.82 (7.2)	32.79 (7.3)	36.39 (7.6)
Other Services ..	60.88 (16.7)	62.84 (16.5)	69.62 (16.8)	72.64 (15.5)	75.00 (15.1)	79.49 (17.8)	83.16 (16.8)
Net domestic Product at factor cost (Rs. in crores).	364.50 (100.0)	379.78 (100.0)	415.32 (100.0)	465.74 (100.0)	497.03 (100.0)	448.52 (100.0)	492.27 (100.0)
Per capita Income in Rs. ..	210.94	214.32	228.70	250.40	261.05	230.05	247.12

SOURCE—The Economic Base of Orissa for the Fifth Plan Bureau of Statistics and Economics, Government of Orissa.

NOTE—Figures in the bracket indicate percentages

Industry	1967-68	1968-69	1969-70	1970-71	1971-72
(1)	(9)	(10)	(11)	(12)	(13)
Agriculture, Animal Husbandry and Ancillary activities.	292.70 (59.2)	312.72 (60.1)	326.68 (59.7)	331.84 (59.6)	325.00 (58.0)
Mining Manufacturing and small Enterprises.	77.71 (15.7)	77.93 (15.0)	79.38 (15.0)	80.93 (14.5)	82.93 (14.8)
Commerce, Transport and Communication and Banks.	36.74 (7.4)	39.53 (7.6)	40.74 (7.7)	46.71 (8.4)	46.19 (8.2)
Other Services ..	87.08 (17.7)	90.46 (17.3)	93.29 (17.6)	97.52 (17.5)	106.37 (19.0)
Net domestic Product at factor cost (Rs. in crores).	494.23 (100.0)	520.64 (100.0)	530.09 (100.0)	557.00 (100.0)	560.49 (100.0)
Per capita Income in Rs. ..	242.75	250.31	249.57	256.90	253.40

Annexure I (5)

State and Per capita Income of Orissa by Industrial Origin at current prices

(Rs. in crores)

Industry	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
1	2	3	4	5	6	7	8	9	10	11
Agriculture, Animal Husbandry and Ancillary activities.	224.42 (61.57)	237.83 (59.08)	298.64 (59.94)	356.22 (62.00)	386.55 (60.45)	350.30 (55.33)	469.68 (61.12)	537.53 (64.52)	570.61 (60.96)	608.78 (61.40)
Mining Manu- facturing and Small Enterprises.	53.54 (14.69)	68.31 (16.97)	88.08 (17.68)	99.26 (17.28)	113.87 (17.81)	126.93 (20.05)	122.54 (15.95)	147.04 (17.65)	153.67 (16.42)	156.07 (15.74)
Commerce, Trans- port and Commu- nication.	25.66 (7.04)	29.80 (7.40)	34.82 (6.98)	38.10 (6.63)	49.86 (7.80)	55.32 (8.74)	63.05 (8.20)	71.99 (8.64)	77.35 (8.26)	80.20 (8.09)
Other Services	60.88 (16.70)	66.62 (16.55)	76.72 (15.40)	80.95 (14.09)	89.19 (13.94)	100.52 (15.88)	113.22 (14.73)	126.58 (9.19)	134.35 (14.36)	144.39 (14.77)
Net domestic pro- duct of factor cost (Rs. in crores).	364.50 (100.0)	402.56 (100.0)	498.26 (100.0)	574.53 (100.0)	639.47 (100.0)	633.07 (100.0)	768.49 (100.0)	883.14 (100.0)	935.98 (100.0)	991.44 (100.0)
Per capita Income in Rs.	210.94	227.18	274.37	308.89	336.86	324.98	385.79	433.76	450.00	466.78

SOURCE—The Economic base of Orissa for the Fifth Plan, Bureau of Statistics and Economics, Government of Orissa.

NOTE—Figures in the bracket indicate percentages

Annexure I (6)

Distribution of Workers by Occupation or Industrial categories, Orissa (1971 Census)

(Figures in 000's)

Sl. No.	District	Total Workers	Cultivators	Agricultural Labourers	Live-stock, forestry, fishing, hunting, plantation and etc.	Mining and quarrying	Manufacturing, processing, servicing and repairs	
							Household Industry	Other than household Industry
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balasore	493.8 (100)	278.8 (56.460)	138.6 (28.068)	5.5 (1.114)	0.8 (0.162)	7.9 (1.600)	7.1 (1.438)
2	Bolangir	424.5 (100)	233.9 (55.100)	117.9 (27.774)	7.4 (1.743)	0.3 (0.071)	20.4 (4.806)	4.8 (1.132)
3	Cuttack	1052.1 (100)	504.1 (47.914)	278.1 (26.433)	19.8 (1.882)	1.6 (0.152)	37.5 (3.564)	33.2 (3.156)
4	Dhenkanal	389.2 (100)	199.5 (51.259)	105.8 (27.184)	14.4 (3.700)	6.5 (1.670)	15.1 (3.880)	4.8 (1.233)
5	Ganjam	746.4 (100)	309.2 (41.426)	239.8 (32.128)	22.7 (3.041)	0.5 (0.067)	30.8 (4.126)	13.5 (1.809)
6	Kalahandi	381.0 (100)	204.1 (53.570)	122.3 (32.100)	5.2 (1.365)	..	10.7 (2.808)	3.6 (0.945)
7	Keonjhar	292.4 (100)	155.8 (53.283)	64.4 (22.025)	5.0 (1.710)	21.6 (7.387)	7.8 (2.668)	4.2 (1.436)
8	Koraput	717.0 (100)	376.1 (52.455)	214.8 (29.958)	12.0 (1.674)	2.3 (0.321)	15.5 (2.162)	9.8 (1.367)
9	Mayurbhanj	478.2 (100)	220.8 (46.173)	178.9 (37.412)	11.4 (2.384)	0.9 (0.188)	22.6 (4.726)	3.3 (0.690)
10	Phulbani	219.4 (100)	121.0 (55.150)	63.5 (28.943)	3.1 (1.413)	0.1 (0.046)	8.0 (3.646)	1.1 (0.501)
11	Puri	680.6 (100)	316.6 (46.518)	174.6 (25.654)	24.3 (3.570)	0.4 (0.059)	24.0 (3.526)	12.8 (1.881)
12	Sambalpur	651.8 (100)	308.1 (47.269)	184.5 (28.306)	10.5 (1.611)	4.1 (0.629)	39.7 (6.090)	24.5 (3.759)
13	Sundargarh	324.1 (100)	140.0 (43.197)	54.3 (16.754)	5.7 (1.758)	12.6 (3.888)	8.9 (2.746)	34.6 (10.676)
14	Orissa State	6,850.5 (100)	3,368.0 (49.164)	1,937.5 (28.283)	147.0 (2.146)	51.7 (0.755)	248.9 (3.633)	157.3 (2.296)

SOURCE—Census of India, 1971, Series 16—Orissa, Part II-A, General Population Tables.

NOTE—Figures in the bracket indicate percentages.

Sl. No.	District	Construction	Trade and Commerce	Transport storage and communication	Other services
(1)	(2)	(10)	(11)	(12)	(13)
1	Balasore	1.7 (0.344)	12.1 (2.450)	7.3 (1.479)	34.0 (6.885)
2	Bolangir	1.2 (0.283)	9.4 (2.213)	4.0 (0.942)	25.2 (5.936)
3	Cuttack	5.3 (0.504)	49.6 (4.714)	21.0 (1.996)	101.9 (9.685)
4	Dhenkanal	1.9 (0.488)	7.6 (1.953)	3.0 (0.771)	30.6 (7.862)
5	Ganjam	5.3 (0.710)	37.4 (5.010)	9.8 (1.313)	77.4 (10.370)
6	Kalahandi	1.2 (0.315)	6.9 (1.811)	2.1 (0.551)	24.9 (6.535)
7	Keonjhar	1.0 (0.342)	6.6 (2.257)	4.5 (1.539)	21.5 (7.353)
8	Koraput	7.1 (0.990)	17.5 (2.441)	7.9 (1.102)	54.0 (7.531)
9	Mayurbhanj	1.1 (0.230)	6.3 (1.317)	3.1 (0.648)	29.8 (6.232)
10	Phulbani	0.9 (0.410)	5.2 (2.371)	0.9 (0.410)	15.6 (7.110)
11	Puri	5.5 (0.808)	33.8 (4.966)	12.9 (1.895)	75.7 (11.123)
12	Sambalpur	3.4 (0.522)	19.8 (3.038)	10.8 (1.657)	46.4 (7.119)
13	Sundargarh	2.1 (0.648)	14.5 (4.474)	11.5 (3.548)	39.9 (12.311)
14	Orissa State	37.7 (0.550)	226.7 (3.309)	98.8 (1.442)	576.9 (8.422)

Annexure I (7)

Percentage of Rural Population to total population of the State

Sl. No.	District	Total Population	Rural Population	Rural population as percentage of total population
(1)	(2)	(3)	(4)	(5)
1	Sambalpur	1,844,898	1,623,121	88.0
2	Sundargarh	1,030,758	791,073	76.7
3	Keonjhar	995,514	888,167	92.9
4	Mayurbhanj	1,434,200	1,394,249	97.2
5	Balasore	1,830,504	1,730,350	94.5
6	Cuttack	3,827,678	3,522,055	92.0
7	Dhenkanal	1,293,914	1,242,102	96.0
8	Phulbani	621,675	602,107	96.8
9	Bolangir	1,263,657	1,176,994	93.1
10	Kalahandi	1,163,869	1,107,316	95.1
11	Koraput	2,043,281	1,876,022	91.8
12	Ganjam	2,293,808	2,033,952	88.7
13	Puri	2,340,859	2,111,712	90.2
	State	21,944,615	20,099,220	91.6

SOURCE—Census of India 1971, Series 16—Orissa, Part II-A, General Population Tables

Annexure I (8)

Percentage distribution of villages with population less than 200, less than 500 and less than 1,000 to total number of villages of the State (Orissa)

Sl. No.	District	Total No. of villages	No. of Villages with population of		
			less than 200	less than 500	less than 1,000
(1)	(2)	(3)	(4)	(5)	(6)
1	Sambalpur	3,390	1,190 (35·1)	2,286 (67·4)	3,000 (88·5)
2	Sundargarh	1,621	439 (27·1)	1,081 (66·7)	1,460 (90·1)
3	Keonjhar	2,009	539 (26·8)	1,405 (69·9)	1,858 (92·5)
4	Mayurbhanj	3,712	1,246 (33·6)	2,807 (75·6)	3,540 (95·4)
5	Balasore	3,812	1,317 (34·5)	2,672 (70·1)	3,422 (89·8)
6	Cuttack	6,027	1,376 (22·8)	3,483 (57·8)	5,044 (83·7)
7	Dhenkanal	2,606	1,016 (39·0)	1,815 (69·6)	2,275 (87·3)
8	Phulbani	4,397	3,505 (79·7)	4,253 (96·7)	4,375 (99·5)
9	Bolangir	2,523	602 (23·9)	1,682 (66·7)	2,313 (91·7)
10	Kalahanci	2,653	1,117 (42·1)	1,850 (69·7)	2,398 (90·4)
11	Koraput	5,683	2,843 (50·2)	4,569 (80·4)	5,381 (94·7)
12	Ganjam	4,223	2,001 (47·4)	2,929 (69·3)	3,639 (86·2)
13	Puri	4,336	1,357 (31·3)	2,939 (67·8)	3,887 (89·6)
	State	46,992	18,548 (39·5)	33,771 (71·9)	42,592 (90·6)

SOURCE — Census of India 1971, Series 16— Orissa, Part II-A, General Population Tables.

NOTE — Figures in the bracket indicate percentages

Annexure I (9)

Percentage distribution of the population of the villages with population less than 200, less than 500 and less than 1,000 to the total rural population of the State (Orissa)

Sl. No.	District	Total rural population	Total rural population of the villages with		
			less than 200 population	less than 500 population	Less than 1,000 population
(1)	(2)	(3)	(4)	(5)	(6)
1	Sambalpur	1,623,121	118,173 (7.3)	483,405 (29.8)	982,922 (60.6)
2	Sundargarh	791,073	51,509 (6.5)	267,818 (33.8)	532,794 (67.3)
3	Keonjhar	888,167	65,254 (7.3)	348,932 (39.3)	659,715 (74.3)
4	Mayurbhanj	1,394,249	140,477 (10.1)	653,241 (46.8)	1,145,479 (82.1)
5	Balasore	1,730,350	138,795 (8.0)	580,270 (33.5)	1,106,257 (63.9)
6	Cuttack	3,522,055	157,444 (4.5)	864,415 (24.5)	1,960,269 (55.6)
7	Dhenkanal	1,242,102	98,939 (8.0)	360,321 (29.0)	682,780 (55.0)
8	Phulbani	602,107	261,214 (4.3)	483,536 (80.3)	565,234 (93.9)
9	Bolangir	1,176,994	72,449 (6.1)	436,214 (37.1)	866,858 (73.6)
10	Kalahandi	1,107,316	96,690 (8.7)	341,916 (30.9)	727,468 (65.7)
11	Koraput	1,876,022	275,880 (14.7)	825,723 (44.0)	1,392,878 (74.2)
12	Ganjam	2,033,952	169,165 (8.3)	473,554 (23.3)	984,776 (48.4)
13	Puri	2,111,712	141,012 (6.7)	669,429 (31.7)	1,334,417 (63.2)
	State	20,099,220	1,787,001 (8.9)	6,788,774 (33.8)	12,941,847 (64.4)

SOURCE—Census of India 1971, Series 16—Orissa, Part II-A, General Population Tables

NOTE—Figures in the bracket indicate percentages

Annexure I (10)

Percentage of S. C. & S. T, population to total Population of Orissa 1971 Census)

Sl. No.	District	Total population (in lakhs)	Scheduled Castes population (in lakhs)	Scheduled Tribes population (in lakhs)	Scheduled Castes + Scheduled Tribes population (4+5)	Scheduled Castes population as percentage of total population	Scheduled Tribes population as percentage of total population	Scheduled Castes and Scheduled Tribes population as percentage of total population
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Balasore	18.30	3.39	1.29	4.68	18.5	7.1	25.6
2	Bolangir	12.64	2.08	2.49	4.57	16.5	19.7	36.2
3	Cuttack	38.28	6.91	1.11	8.02	18.1	22.9	21.0
4	Dhenkanal	12.94	2.17	1.67	3.84	6.8	12.9	29.7
5	Ganjam	22.94	3.65	2.29	5.94	15.0	10.0	25.9
6	Kalahandi	11.64	1.99	3.41	5.40	17.1	29.3	46.4
7	Keonjhar	9.55	1.08	4.49	5.57	11.3	47.0	58.3
8	Koraput	20.43	2.74	11.51	14.25	13.4	56.4	69.8
9	Mayurbhanj	14.34	1.04	8.40	9.44	7.2	58.6	65.8
10	Phulbani	6.22	1.18	2.51	3.69	19.0	40.3	59.3
11	Puri	23.41	3.17	0.86	4.03	13.5	3.7	17.2
12	Sambalpur	18.45	2.88	5.19	8.07	15.6	28.1	43.7
13	Sundargarh	10.31	0.83	5.50	6.33	8.1	53.3	61.4
	State	219.45	33.11	50.72	83.83	15.1	23.1	38.2

SOURCE—“Census of India 1971, Series 16—Orissa, Part II-A General Population Tables
[3 P. & C.—7]

Annexure I (11)

Length of Railway line in Kms. (1967-68)

Sl. No.	States	Per lakh of people	Per 100 Sq. K. Ms area
1	Andhra Pradesh	.. 12 (100)	17 (94)
2	Assam	.. 16 (133)	11 (61)
3	Bihar	.. 10 (83)	30 (167)
4	Gujarat	.. 23 (192)	29 (161)
5	Haryana	.. 16 (133)	32 (178)
6	Jammu & Kashmir	.. N e g	N e g
7	Kerala	.. 5 (42)	23 (123)
8	Madhya pradesh	.. 14 (117)	12 (67)
9	Maharashtra	.. 11 (92)	17 (94)
10	Mysore	.. 10 (83)	14 (78)
11	Nagaland	.. 2 (17)	1 (6)
12	Orissa	.. 9 (75)	11 (61)
13	Punjab	.. 16 (133)	42 (233)
14	Rajasthan	.. 23 (192)	16 (89)
15	Tamilnadu	.. 10 (83)	28 (156)
16	Uttar Pradesh	.. 10 (83)	29 (161)
17	West Bengal	.. 9 (67)	39 (218)
All-India		.. 12 (100)	18 (100)

SOURCE—Railway Board for Railway lines

Note . Figures in brackets indicate the percentage to the All-India average (as 100)

Annexure I (12)

Density of Road Lengths (Total and Surfaced) relative to area and population State-wise (1969-70)

State/Union Territory.	Geog. area (000 Sq. K. Ms.) *	Popula- tion in 1971 (000')	Per 000' Sq. K. Ms of area		Per lakh of popu- lation	
			All roads	Surfaced roads	All roads	Surfaced roads
(1)	(2)	(3)	(4)	(5)	(6)	(7)
States:						
Andhra Pradesh	275.2	43,395	37	13	232	85
Assam	122.0	15,840	38	6	295	43
Bihar	174.0	56,387	49	14	152	48
Gujarat	187.1	26,661	28	10	194	73
Haryana	44.1	9,971	22	16	99	72
Himachal Pradesh	55.7	3,424	39	4	636	66
Jamu & Kashmir	222.9	4,615	8	7	36	90
Keral	38.9	21,280	153	55	279	100
Maharashtra	307.3	50,295	25	13	153	81
Madhyapradesh	443.5	41,450	23	7	246	72
Mysore	191.8	29,224	39	25	253	167
Nagaland	16.5	516	30	2	953	66
Orissa	155.9	21,935	43	8	304	59
Punjab	50.4	13,473	152	24	567	91
Rajasthan	342.3	25,724	21	6	276	81
Tamil Nadu	130.0	41,103	53	37	166	119
Utter Pradesh	294.4	88,300	55	12	184	41
West Bengal	87.7	44,440	67	22	131	43
Union Territories						
Delhi	1.5	4,044	187	178	69	66
Manipur	22.3	1,070	13	4	264	93
Nefa	81.4	445	5	07	872	13
Tripura	10.5	1,557	26	8	173	56
Others	13.1	1,807	167	19	1,212	136
All-India	3,268.1	5,469.56	36	12	217	73

*As on 1st January 1966

SOURCE—Basic Road Statistics (1969-70). Transport research Division, Ministry of Shipping and Transport, Government of India.

Annexure I (13)

Length of different categories of Roads in Orissa as on the 1st April, 1972

	(In Kms.)
1. National Highway (N. H.)	1,704
2. Expressway	67
3. State Highways (S. H.)	2,197
4. Major District Roads (M. D. R.)	5,235
5. Other District Roads (O. D. R.)	2,315
Total	11,518
6. Classified Village Roads (C. V. R.)	6,120
7. Roads with Rural Engineering Organisation (R.E.O.) (Mostly C. V. R.)	6,965
8. Panchayat Samiti Roads	6,550
9. Panchayat Roads	12,514
10. Forest Roads	6,792
11. Roads maintained by Grama Panchayat	27,200
Total	66,141
Grand Total	77,659

SOURCE: —Notes on subsidiary points presented to the Sixth Finance Commission, 1972 by the Government of Orissa, Volume III, Page 152 (Unpublished).

CHAPTER 1.2

THE FOURTH PLAN EXPERIENCE

The Fourth Five-Year Plan visualised the following broad objectives:—

- (i) Raising the *per capita* income of the people of Orissa to the level of the All-India average ;
 - (ii) Assuring a minimum income of Rs. 20 *per capita* per month (at 1960-61 prices) ;
 - (iii) Reduction in the disparities between the backward and advanced districts of Orissa ;
- and
- (iv) Improving the technology and entrepreneurial abilities of the people.

2. The size of the State Plan was placed at Rs. 222.60 crores. This was in anticipation that along with the Central Government and private sector outlays the investment would amount to about Rs. 750 crores. This however, has not materialised. The State Plan size is likely to go up to about Rs. 256 crores by the end of the Fourth Plan. This increase is largely due to the market borrowings of the Orissa State Electricity Board, increase in the State's share of the Centre's additional resource mobilisation and also the additional resource mobilisation of the State Government.

3. The broad percentage of allocations for the different Sectors during the Fourth Plan stood as follows :—

(Rupees in crores)					
Sectors		Original Fourth Plan Outlay	Percentage	Antici- pated outlay	Percentage
(1)		(2)	(3)	(4)	(5)
1. Agricultural Production	..	42.30	19.0	43.72	17.0
2. Co-operation & C. D.	..	8.20	3.7	11.91	4.7
3. Irrigation & Power	..	93.57	42.0	117.13	45.7
4. Industry & Mining	..	18.22	8.2	21.12	8.2
5. Transport & Communication	..	15.21	6.9	16.60	6.7
6. Social Services	..	43.82	19.6	44.57	17.3
7. Miscellaneous	..	1.28	0.6	1.28	0.4
		226.60	100.0	256.33	100.00

By end of this year the total outlay may go up by atleast another 2 crores.

4. Due to the increase in the resources, the original ceilings of various Sectors were slightly altered taking into account the priorities and tempo of each Sector and employment needs, after mid-term appraisal. Minor Irrigation (Flow) received an addition of Rs. 1.93 crores, Lift Irrigation Rs. 0.97 crores, Forest Rs. 0.80 crores and Soil Conservation Rs. 0.49 crore,



making the increase in the Agricultural Sector about Rs. 5·10 crores. Irrigation & Power, however, had received a sizeable amount out of the increased ceiling. While originally the ceiling was about Rs. 93·00 crores, the revised ceiling for this crossed the 100-crore mark. This was necessary to complete some of the medium irrigation projects, as also Balimela. The Industries and Mining Sector registered a faster tempo in expenditure in the first three years and consequently, very early the outlay reached the original ceiling; in this sector, about Rs. 3·00 crores is likely to be the increase in the ceiling. The Social Services Programmes in Education, Health and Water Supply, etc. had also received higher allocations than the original ceilings. In Education, the investment on Primary Education had to be further enhanced so as to accommodate the appointment of more teachers.

5. The following priorities were fixed for investment during the Fourth Plan :—

- (i) Quick yielding schemes, ensuring a selective approach in order to avoid diffusion of efforts.
- (ii) Maximum utilisation of potential already created, specially in Irrigation & Power ;
- (iii) Ensuring people's participation and improving the technological standards and practices, thereby creating fresh cycles of employment, income and production, specially in rural areas ;

and

- (iv) Feasible and economic schemes for which the State Plans to be techno-administratively prepared.

6. In accordance with these priorities for investment, the main strategies envisaged were to complete spill-over irrigation schemes during the first two years of the Fourth Plan, complete the incomplete road projects, achieve 6·4 per cent growth rate in foodgrain production, develop commercial crops, take up intensive cultivation in selected Blocks, introduce high-yielding varieties over large areas, as also increase production and efficiency in State's Public Sector industrial projects.

7. The base level of foodgrain production was assumed at 53 lakh tonnes for the year 1968-69. But the actual production fell short of this assumption and was 47·21 lakh tonnes. The likely level of foodgrain production at the end of the Fourth Plan is anticipated to be 60 lakh tonnes against the original target of 70 lakh tonnes envisaged for the Plan. The recurrence of drought, flood and cyclone brought down the level of foodgrain production below the targets set for each year of the Fourth Plan. The coverage of high yielding programme by 1971-72 was only 5·50 per cent of the total rice area of the State. Production of maize, jawar and bajra remained almost stagnant.

8. 95 departmental seed production farms covering 4,125 hectares existed at the beginning of the Fourth Plan. No new farm was established during the Fourth Plan; on the contrary, three farms were transferred to the Orissa University of Agriculture and Technology and an area of 40 hectares of the Similiguda farm was transferred to the Union Government for setting up the Central Jersey Cattle Breeding Station. Of the total farm area, 2,900 hectares would be brought under cultivation by the end of the Fourth Plan. The cultivable but unreclaimed area at the commencement of the Fifth Plan would be about 128 hectares. The total farm area available for seed production by the end of the Fourth Plan would thus be 3,028 hectares. Out of this, about 1,120 hectares of farm area would be irrigated and available for double cropping by the end of the Fourth Plan. Substantial area would also be available in the Soil Conservation Demonstration Centres for production of seeds of Millet, Pulses, Oil Seeds and Mesta. The main emphasis during the Fourth Plan has been to reclaim and irrigate the existing farms rather than go in for establishment of new farms. This departmental seed production programme was not supplemented by any worthwhile programme of seed production through registered growers during the Fourth Plan. Two seed processing and drying units were established at Sukinda and Similiguda during the Fourth Plan.

9. A target of 14 lakh hectares (Gross) under different Plan Protection measures was fixed for the last year of the Fourth Plan. It is estimated that the actual achievement will be somewhat less, i. e. about 12 lakh hectares. The measures included seed treatment, prophylactic control, and epidemic control. A subsidy of 25 per cent of the cost of sprayers supplied through the Agro Industries Corporation and Apex Co-operative Marketing Society was given during the Fourth Plan. It was noticed that this scheme led to large scale purchase of sprayers by the cultivators and the demand for supply of equipment by the Department diminished.

10. Composting of urban waste was also attempted during the Fourth Plan as in the previous plans and urban local bodies were assisted with loans for purchase of Trucks and Tractors for removal of garbage and nightsoil to the trenching ground. Till 1972-73, 47 urban local bodies have been given loans amounting to about Rs. 20.00 lakhs. The loan advanced during the Fourth Plan period amounts to Rs. 4.00 lakhs. It is estimated that the production of urban compost would be the order of 45,000 tonnes by the end of the Fourth Plan.

11. High-yielding varieties accounted for 1.74 lakh hectares of paddy and 0.56 lakh hectares wheat in 1969-70. The area under these two crops in 1972-73 is estimated at 5.50 lakh hectares. It is expected that the level of achievement in 1973-74 in respect of these two crops would be 7.30 lakh hectares.

12. Increasing emphasis has been given from last year to the Pulses and Millets Production programme. In the tribal areas, a programme of extensive millets cultivation has been organised. In 1973-74, the content of millets programme has been changed and subsidy on the cost of improved seeds is being given. Demonstration which earlier accounted for the entire programme has been reduced and has been limited to areas where the seed supply programme is undertaken.

13. Even in the irrigated areas, due to bad Oater management practices and mono-culture of rice the benefits available from the new programmes of multi-crop demonstration, short duration high-yielding varieties, scientific fertiliser use and plant protection practices have been hardly realised. The cultivators in the unirrigated areas, particularly the tribal cultivators, have still to feel the impact of technology. Consumption of fertiliser, however, registered 50 per cent increase during the Fourth Plan. The traditional constraints of people's non-responsiveness to fertiliser consumption in the irrigated areas has given way to higher demand for fertilisers. In the second half of the Fourth Plan period inadequate distribution of fertilisers was often experienced due to the general fertiliser famine in the country. In the last two years of the Fourth Plan, emphasis has shifted from Kharif to intensive Rabi cultivation and adequate measures are being taken to remove the difficulties confronted in the distribution of inputs. A beginning has been made in the direction of integrated ayacut development, although the impact of the programme in Salandi is yet to be felt. The pilot dry land farming project in Mayurbhanj District has not made much head-way due to the lack of adequate delegation of authority and proper self-sufficient organisation. This is being remedied the special schemes like S. F. D. A., M. F. A. L. and A. R. C. schemes have made their impact felt. By the end of January, 1973, the S. F. D. A. have registered an expenditure of Rs. 95 lakhs, identified 1,24,000 beneficiaries, enrolled 55,000 beneficiaries in the co-operatives given financial assistance for 5,932 dug wells and energised 198 pump sets. Eleven A. R. C. schemes have so far been sanctioned for Rs. 2.24 Crores and ten more schemes costing about Rs. 4 Crores are pending with the A. R. C. for sanction. The Commercial Banks have opened more than 200 Branches, covering all the Tahsils of the State and have started financing agriculture in a big way, apart from taking interest in A. R. C. schemes of horticulture, land reclamation and dug wells.

14. Development of Co-operative activities has also kept pace with the increased activities for agricultural development. This development, however, has been very much slower in the field of marketing and consumer movement as well as in the field of credit. The membership of all types of Co-operative Societies which stood at 2.95 lakhs in the beginning of the First Plan is expected to go up to 16.80 lakhs at the end of the Fourth Plan. Similarly, the working capital has gone up from Rs. 4.28 Crores at the beginning of the First Plan to Rs. 181.50 Crores by the end of the Fourth Plan. The investment of short term credit by the end of the Third Plan

stood at Rs. 11.87 crores. Because of weakness of the credit structure and the increasing overdues resulting in the slowing down of expansion of credit, it was not possible to maintain steady growth in the Fourth Plan period. By the end of the Fourth Plan, the expected achievement by way of short and medium term credit investment will be Rs. 18.00 crores. In the long-term sector, the anticipated cumulative investment by the end of the Fourth Plan is expected to be Rs. 20.00 crores as against the target of Rs. 18.00 crores. In the long-term sector, expansion of credit has not taken place. By the end of 1971-72, nearly 67,622 farmers availed of long-term credit as against 35.09 lakhs agricultural families in the State. Thus about 1.8 per cent of the agricultural families have so far been covered by long term credit assistance. Moreover, the bulk of investment in the long-term credit sector has gone to comparatively bigger farmers.

15. Till the beginning of the Fourth Plan, co-operatives had the monopoly in the distribution of fertilisers and the work done by them in the matter of agricultural marketing was limited to Rs. 1.41 crores. During the Fourth Plan period, greater emphasis was laid on agricultural marketing. By the end of the Fourth Plan period this is expected to go up to Rs. 8.00 crores. This will fall short of the target of Rs. 10.00 crores. The main reason for short fall in this regard is that agricultural production was not diversified to a very great extent, paddy remaining the main item of marketable surplus. The co-operatives were assigned some responsibility in marketing of paddy which was done under the monopoly procurement scheme of Government. Because of certain difficulties beyond the control of co-operatives, the performance was very much below expectation. In the field of storage, godowns set up at village level by various agencies prior to the Fourth Plan period were limited to 2,12,000 tonnes capacity. During the Fourth Plan period, due emphasis was laid on building up of additional storage capacity at the regional and primary levels. It was, however, realised that more storage capacity will be required for storing the agricultural produce at the regional and village levels. As such, in the last two years of the Fourth Plan, steps have been taken to take advantage of the Central Sector Scheme for building up storage godowns by the end of the Fourth Plan period, the total number of rural godowns and marketing godowns programmed to be assisted will be 890 with a capacity of 1,04,650 tonnes.

16. In the matter of supply of agricultural inputs, particularly fertilisers, the level of achievement by 1973-74 is expected to go up to Rs. 10.00 crores. In the consumer sector, the business turn over of the wholesale stores by the end of the Fourth Plan is likely to go up to Rs. 2.00 crores. A consumer Federation at the State level has been organised which has taken up distribution of controlled cloth, foodgrains, pulses and edible oils, etc. The coverage of consumers stores in the urban areas is expected to go up to 20 per cent by the end of the Fourth Plan, which will compare somewhat favourably with the All-India average.

17. Out of 56 Lift Irrigation Co-operative Societies, a few are only in working order. This is due to lack of proper organisation, supervision and inadequacy of funds and discriminatory water rates in respect of private and departmental executions.

18. Under the Fourth Plan, 88 new projects and 130 spillover projects within an outlay of Rs. 11 crores were envisaged for Minor Irrigation (Flow). But in effect, administrative approval has been accorded for 140 new projects including 42 renovation and linkage schemes with a total expenditure component of Rs. 15.49 crores including revised administrative approval for 21 spill-over projects at a total cost of Rs. 53 lakhs. It was, however, not possible to accommodate all these new projects within the ceiling of Rs. 11.00 crores as well as the additional allocation of Rs. 1.97 crores. Hence, 132 new projects, including 42 linkage schemes were taken up in addition to the spillover projects. Out of 130 projects which spilled over from the Third Plan, it is anticipated that most of the projects will be completed. Out of 132 new projects taken up in the Fourth Plan, 117 will also get completed in case special assistance from the Government of India amounting to Rs. 3.18 crores is released during the current year.

19. At the commencement of the Fourth Plan, 1.80 lakh hectares were covered under flow minor irrigation. It is anticipated that of 0.60 lakh hectares will be added to this during the Fourth Plan, against the target of 0.51 lakh hectares originally envisaged. The increased achievement in ayacut is due to extra allocation from E. A. P. P. and D. P. A. P.

20. Major success has, however, been achieved in lift irrigation programme. Apart from completion of the departmental projects and their energisation, the performance of dug wells has been encouraging.

21. The programme of consolidation of holdings has not made much head-way. Initially this programme was taken up on a pilot basis, in a few police-stations and the law for consolidation has been passed. A limited programmes in some of the irrigated areas are being started from the current year with a view to complete operation at consolidable areas within 12 years. But in preparing for the Fifth Plan, it was noticed that this target date has considerably to be extended. The work of ceiling of surplus lands has just commenced in the Fourth Plan.

22. In the power Sector, it was envisaged that the Balimela Project would be completed in all respects before the end of the Fourth Plan. The time schedule for completion of different stages of commissioning the Power Units as well as the Dam Project has been getting delayed due to delay in the supply of necessary materials and minor time lags. Even if the first Unit of the Power Plant at Balimela would be commissioned during the month of June '73, the Balimela-Talcher Transmission Line has not been completed as per schedule so as to synchronise with the commissioning of the power plant; but it is expected that this will be complete by the end of the Fourth Plan period, by which time four power units of 60 M. W. each will also be commissioned. The spell of drought for the last two years has been responsible for the fall in the generating capacity in Hirakud and Machkund Hydel Projects as well as in the Talcher Thermal Plant. This can be solved to a considerable extent if the Balimela-Talcher T & D Line is completed during the current year.

23. The progress in the field of rural electrification has, however, exceeded the original target: as against the original plan target of about 700 more than 7,000 villages have already been electrified by 1972-73 and it is likely that the target of 10,373 villages would be exceeded by the end of the current year. A number R. E. C. schemes have supplemented the efforts of rural electrification under the Plan.

24. The area under major and medium irrigation at the beginning of the Fourth Plan was 6.25 lakh hectares, including the pre-Plan coverage of 1.56 lakh hectares. As per the targets fixed for the Fourth Plan, a gross irrigation potential of 8.96 lakh hectares was to be reached by the end of the Fourth Plan. The pre-Plan irrigation coverage was not taken into account while fixing the target of irrigation coverage by the end of the Fourth Plan. The target would, accordingly, be revised to 10.12 lakh hectares. As against this target, the cumulative potential up to the end of the Fourth Plan is anticipated to be 8.71 lakh hectares. This shortfall in the target is due to the delay in the completion of some of the medium irrigation Projects which were originally targeted to be completed during the Fourth Plan. The nine continuing medium irrigation projects which spilled over from the Third Plan or Annual Plans were to be completed and give the desired benefits by the end of the Fourth Plan. But this has not been possible in the case of some of these projects in view of land acquisition difficulties and escalation in cost as well as paucity of materials like cement. The designs of certain projects had also undergone some changes. The Mahanadi Delta Project will also have spill over into the Fifth Plan. Land acquisition, inadequacy of funds and certain additions from time to time have created the problems. A special Land Acquisition Officer is appointed for this project and certain further simplification has also been achieved.

25. A bulk of the Fourth Plan allocation under Large and Medium Industries has been invested in the I. D. C. and out of the anticipated Fourth Plan expenditure of Rs. 1,118.54 lakhs, Rs. 943.97 lakhs will be the expenditure on I. D. C. alone. The proposal to meet the requirements of the I. D. C. by obtaining funds from the Central Financing Institutions like I. D. B. I. I. F. C. I., etc. did not materialise, as I. D. C. could not conform to their stipulations.

26. The I. D. C. has the difficulty of inadequate production in some cases, bad market conditions for the finished product in other cases and consequent depletion of internal financial resources and cash flow. The target of production could not be achieved by most of the existing units of I. D. C. due to various reasons. The major portion of the Plan investment had to be utilised for meeting the arrear liabilities of the firms including foreign commitments.

Two units, viz., Kalinga Iron Works and Ferro-Chrome Plant have been presenting particular problems. Paucity of nut coal as also supply of any coal with uniformity, the production below rated capacity, the high costs of production and the inadequate market have made the Kalinga Iron Works very uneconomical. Against the Fourth Plan target of one lakh M. T. the production to be achieved by the end of the Fourth Plan has been estimated at 80,260 M. T. In case of Ferro-Chrome Plant, the production during 1973-74 will be less in comparison with the Fourth Plan target as there is slump in Ferro-Chrom market both in the country and abroad. There is a stock accumulation of about Rs. 1.80 crores. Hira Cement Works is also unable to achieve the Fourth Plan target of 396,000 M. T. per annum due to defects in plant and machinery. For improving and maintaining the rated production, the plant and machinery in the factory as well in the quarry need to be balanced and rationalised. In case of Hira Cable Works, anticipated production during 1973-74 is about 2.250 M. T. (A. A. C. and S. E. S. R) and 506 M. T. (Copper) against Fourth Plan annual target of 3,000 M. T. (A. A. C. and S. E. S. R) and 660 M. T. (Copper) respectively. The main reason for short-fall is non-availability of raw materials, i. e., Aluminium and Copper and slump in the market. The other Industries under the I. D. C., viz., the Re-rolling Mill also faced the same difficulties, where the anticipated production during 1973-74 is 12,000 M. T. against the Fourth Plan target of 15,000 M. T. The non-availability of suitable raw materials, viz., billets is the main reason for low production. Against the annual requirement of 15,000 M. T., the allotment of billet to this unit by Billet Rerollers Committee during the last year was only 2,934. The Tile Factory of I. D. C. was able to operate only with two out of four plates. However, there will be slight improvement during 1973-74 as the demand for roofing tile seems to be increasing and it is proposed to run the third plate. As a result of this, the production is likely to increase to 66 per cent of this capacity. On account of fishermen's trouble, operation in salt Factory was restricted by Government and hence the production during 1973-74 is expected to be less. These problems seem to be insurmountable and the entire annual production has to pick up for assisting the offtake of these units. Steps to diversify production and to restructure the units are under consideration.

27. During the Fourth Plan, the I. D. C. obtained letters of credit/industrial licences to set up the following new units.

Schemes	Estimated cost (Rs. in lakhs)	Production capacity (Annual)
(1)	(2)	(3)
1. Sponze Iron	2,000.00	One lakh tonnes of Sponze Iron
2. Ferro-Vanadium	1,600.00	480 tonnes of Ferro-Vanadium and nearly 47,000 of Pig Iron.
3. Tyre and Tubes Plant	1,200.00	400 lakhs Tyres and equal number of Tubes.
4. Nylon Filament Yarns	900.00	2,100 tonnes Nylon
5. Calcium Carbide Plant	400.00	14,850 tonnes of Calcium Carbide.
6. Soda Ash and Ammonium Chloride	1,500.00	50,000 tonnes of Soda and 60,000 tonnes of Aluminium Chloride
7. Ferro-Chrome expansion (Chrome Chemicals)	140.00	15,000 tonnes of high carbon Ferro-Chrome.
8. Television	100.00	5,000 numbers of Television sets

28. These projects are being processed in different stages and in some cases, like in T. V. set project, much work has been done. This project will start production very soon. Orissa Small Industries Corporation is taking up this project in technical collaboration with H. A. L.

29. The Industrial Developed Area scheme at Rourkela on a site of 843 acres has been taken up. The work of development has been taken up in phases through the I. D. C. The total area occupied so far comes approximately to 107 acres including establishment of an ancilliary estate. Construction of water supply system and road work is in progress and will be completed by 1973-74. Two sites measuring about 1,200 acres have been selected for Bhubaneswar developed area, out of which an area of 450 acres has been taken over and cost has to be paid for acquisition. Preliminary works relating to selection of sites will also be completed during 1973-74 in respect of developed area schemes to be executed at Jajpur Road, Talcher, Paradeep and Choudwar.

30. Financial assistance in shape of share capital in large and medium scale industries has been extended to the extent of Rs. 40.00 lakhs during the first four years of the Fourth Plan to five parties. During the current year, there is proposal for investment in six big Companies. The important industries coming under the fold of this financial assistance during the Fourth Plan cover fish canning, breweries and distilleries and Sal seed extraction. Sick unit like Orissa Cotton Mills, Bhagatpur which has been taken over by the Textile Corporation is also being given financial assistance.

31. A total amount of Rs. 17.58 lakhs will be spent during the Fourth Plan period for providing incentives to the intending entrepreneurs by way of contributing 50 per cent cost of the feasibility reports and also to take up projects on Government account by engaging consultancy firms of repute where cent per cent cost is borne by Government. This includes project reports for establishment of industries to produce pig iron out of non-coking coal of Talcher, establishment of second steel plant, a brewery at Paradeep, establishment of distillery based on raw materials other than molasses, etc. Consultancy firms have been engaged for preparation of 20 project profiles and for preparation of project plan of action in Rourkela, Talcher and Paradeep zone as well as in two backward districts of Kalahandi and Balasore.

32. With a view to create a sound basis for private investment and entrepreneurship in medium and small industries, the Industrial Promotion and Investment Corporation has been established on the model of SICOM in Maharashtra during 1972-73.

33. During the Fourth Plan period, steps to encourage development of small scale industries were taken by provision of financial assistance, industrial estates and other services. There was a marked improvement in the performance in this sector in 1970-71, as a result of increased emphasis laid on construction of Industrial estates in different areas to meet the growing demands of the industrialists. Small Scale Industries, Handicrafts and Industrial Estates accounted for 75 per cent of the total expenditure on village and small industries sector.

34. 21 Handloom Schemes were implemented during the Fourth Plan period. It was contemplated to consolidate the activities of the Weavers' Co-operative Societies formed till the end of the Third Plan period and major portion of funds under the Handloom Sector was utilised for setting up of a Co-operative Spinning Mill of 12,000 spindles capacity. The Co-operative Spinning Mill went into production in the second year of the Fourth Plan period. It has, however, started earning profit and steps have been taken to expand the unit by increasing the spindleage to 18,400.

35. The programme of Sericulture in the tribal areas has been stepped up considerably during the Fourth Plan. With regard to the development of Handicrafts, the production could not increase to the desired extent for want of working capital required by the artisans and their co-operatives as well as due to non-availability of trained personnel and lack of knowledge in the modern technique of production and marketing.

36. A Coir Industrial Complex is being set up at Sakhigopal, where six different units will be run by private entrepreneurs. Construction of factory building and other infrastructure have already been taken up.

37. In the Mineral Development Sector, the progress of Daitari Iron-ore Project was impeded due to protracted litigation throughout the Fourth Plan period. It has just recently been cleared. Meanwhile by manual operations about 6 lakhs tonnes of ore has been produced.

But sizeable investment is necessary to commission the ore-handling plant and make the project function. The Orissa Mining Corporation has been provided with Rs. 65 lakhs during the last year of the Fourth Plan to meet the requirements of this Project. In the Fifth Plan, this will be fully commissioned.

38. The tempo of work in the field of prospecting and investigation of mineral resources by the Directorate of Mines has been intensified from 1971-72. Considerable drilling of core minerals is being taken up during 1973-74 field season. Besides, additional drilling involved in the rock gradation survey around Gopalpur and the drilling on hire charge basis will also be taken up. Against the production target of 47.96 lakh tonnes of iron-ore and 1.11 lakh tonnes manganese ore to be exploited during the Fourth Plan, the achievements till now has been 43.20 lakh tonnes and 0.82 lakh tonnes respectively. The export of these ores which was originally targeted to be 37 lakh tonnes has reached 40 lakh tonnes.

39. In the Social Service Sector, there was considerable step-up in the outlay. The total expenditure on General Education under Plan during five years would be about Rs. 14.79 crores, with about 7.56 crores outlay on elementary education. Against the target of the appointment of 9,000 teachers, 13,500 teachers will be appointed for Primary Schools, partly due to the additional assistance made available under the Special Employment Programme. The Fourth Plan envisaged to raise the enrolment in the age-group 6—11 from 70 per cent existing in 1968-69 to 80 per cent. This was estimated according to the 1961 Census; but as per the 1971 Census, it is expected that the enrolment at the end of 1973-74 may at best be 70 per cent of the students in this age-group. Similarly in the case of enrolment of age-group of 11—14, the enrolment at the end of 1973-74 is expected to be 24.5 per cent as against 21 per cent in the beginning of the Fourth Plan.

40. Due to extra emphasis on Primary Education, it has not been possible to provide adequate allocation for Higher Education. Very few new High Schools and Colleges have come up during the Fourth Plan due to constraint of resources.

41. The problem drop-outs, specially in the tribal and backward areas, has not been solved. Even attraction like mid-day meals and other facilities like free supply of reading and writing materials to the children of backward classes have not yielded the desired results.

42. Diversification of courses and sandwich system of teaching has been introduced in all the engineering schools and the Polytechnics during the Fourth Plan to meet the requirements of the new industries and to avoid unemployment of the technical diploma-holders. Its exact impact will be felt in the Fifth Plan. Apart from this, the vocationalisation of the Secondary Education has not been taken up in a big way, although this was contemplated as one of the strategies in the Fourth Plan.

43. The Health Programme during Fourth Plan mainly aimed at completion of building construction programme for the Primary Health Centres, improvement of the existing three Medical Colleges, as well as improvement of the District and Subdivisional Hospitals. Out of 314 Blocks in the State, only 4 Blocks remained to be covered by Primary Health Centres in the Fourth Plan. But only 141 Primary Health Centre buildings had been completed in the beginning of the Fourth Plan. Construction of buildings for 153 P. H. Cs. was in progress and in remaining 20 P. H. C. buildings with staff quarters were to be taken in the Fifth plan. The outlay for the Fourth Plan for construction and completion of P. H. C. buildings was Rs. 160.00 lakhs. Due to paucity of funds, provision of staff quarters for Laboratory Technicians in all the P. H. Cs. Health assistants quarters in 176 P. H. Cs. and second Sanitary Inspectors' quarters in 60 P. H. Cs. cannot be accommodated within the provision of the Fourth Plan. Besides, the idea of constructing 105 shifted dispensaries out of the funds allocated for the P. H. Cs. was abandoned since the outlay could not accommodate this. Electrification of all the P. H. Cs. cannot be completed within this provision.

44. The limited expansion of job potentialities of the Health Programme during the Fourth Plan resulted in surplus doctors and para-medical personnel. The training programme for para-medical personnel was accordingly reduced.

45. The deficiencies in the buildings and other facilities could not be made good due to the limited resources. Absence of foreign exchange allocation was another difficulty experienced, due to which most of the sophisticated equipments for post-graduate education and higher specialities had to be obtained from the indigenous dealers at prohibitive cost.

46. Reappearance of malaria was viewed with concern and anti-malaria programme has been intensified. Although communicable diseases control measures resulted in considerable reduction in death rates, occasional outbreak of Small Pox and Cholera specially in the wake of the severe cyclones and flood has necessitated a more conscious approach. Safe drinking water supply in endemic areas has been planned out with special assistance from Government of India during last year.

47. The Family Planning Programme with an approved outlay of Rs. 1,412.86 lakhs is expected to exceed more than Rs. 15.00 crores during the Fourth Plan. The physical achievement would, however, fall short of the target. As against the target of protecting 11 lakh couples by the end of the Fourth Plan, the anticipation is that about 8.76 lakh couples would be protected. The total number of acceptors under sterilisation is almost static. There is, however, some increase in I. U. C. D. insertions, but for perceptible decline in 1972-73. The number of contraceptive users is also on the decline. The reason for fall in I. U. C. D. insertions is the dearth of Lady Doctors in peripheral institutions mainly due to absence of staff quarters in rural areas. There has been delay in putting up the buildings at the main centres and the sub-centres. The cost of buildings approved by Government of India is lower than the prevailing rate of construction in the State; besides replacement of vehicles supplied by UNICEF which have become unserviceable has aggravated the position. The large exodus annually by Doctors for post-graduate studies has resulted in temporary vacancies. These defects are sought to be remedied.

48. So far as communication is concerned, the deficiencies of the railways have not been made up and no new railway lines have been laid except the Curtack-Paradeep link. New National Highways have been taken up in the State, But against the anticipation of about Rs. 22.00 crores of Central assistance, the likely assistance by the end of the Fourth Plan is somewhere around Rs. 14.00 crores. The procedure of detailed investigation, preparation of plans and estimates and execution in difficult areas as well as the problems of land acquisition have hindered the quick implementation of the National Highways Programme. The tempo is picking up from last year with the formation of a separate organisation. The State Highways and other roads maintained by the P. W. D. of the State was to be improved by way of completion of most of the bridges and cross drainage works within a provision of about Rs. 11.00 crores. Apart from the difficulties of getting construction materials, the main deficiency in roads programme of the P. W. D. is taking up a large number of projects—sometimes deviation from the approved plan projects and their specification. Priority requirements of new roads and bridges come up due to insufficient maintenance and repair grants and recurrence of heavy floods and cyclone. Moreover, the plan and estimate based on the old schedule of rates of 1964 had to be revised in 1972 leading to overall 40 per cent increase in the cost estimate. This has upset the original physical targets of the Fourth Plan. This will result in a heavy spill over to the Fifth Plan for which there is no other alternative.

49. Rural roads in Orissa are looked after by four or five agencies, viz., P. W. D., R. E. O., C. D. Blocks, Grama Panchayats, Forest and Irrigation. Although improvement of rural roads has been given greater attention and as much as 40 per cent of the total expenditure under roads programme has been allotted for rural roads, the programme has not touched the fringe of the infrastructure to be built. It has not been possible to make the important rural roads all weather in view of the low allotment and spreading the allotments too thinly over so many projects. The overall objective of avoiding diffusion of resource has been lost sight of in the quagmire of the competing requirements and pressures arising out of regional demands.

50. Backward Classes Welfare has been emphasised during the Fourth Plan and new strategies have been evolved to take an intensive area development approach. Certain new schemes have been introduced during 1972-73 to create large employment potential and to bring about

economic development of the tribals like organising small and cottage industries to wean away tribals from Podu cultivation and awarding stipend for learning Shorthand and Typewriting and setting up a Tribal Development Co-operative Society to prevent exploitation of tribals. Besides, with special assistance from Government of India two Tribal Development Agencies have been formed in concentrated tribal pockets for integrated area development. A more intensive approach taking the family as a unit has been brought out in a small scale by starting a Saura Development Scheme on the pattern of the Tibetan Re-settlement scheme at Chandragiri. The special efforts for education of the tribals and Scheduled Castes have been continued in the Fourth Plan.

51. The impact of the Area Development scheme will be felt during the Fifth Plan. The special efforts at education of tribals by maintaining separate institutions may not be proliferated as this leads to creating parallel educational institutions without proper facilities. Against the target of opening 9 Ashram Schools, 18 Schools have been opened and it has been difficult to provide necessary funds for completing these institutions in all respects. It would have been better to consolidate the existing institutions and start new institutions as per the approved target. The problem of enrolment has to be looked into from the broad socio-economic angle of drop-outs.

52. An attempt has been made in the paragraphs above to delineate some of the experiences of the Fourth Plan in the key sectors of the economy. These are, however, not exhaustive. More details of the Fourth Plan experience have been given in the next few chapters while presenting the sectoral programmes. Annexures I and II appended to this chapter give a broad over view of the financial and physical achievements of the selected Heads of Development. In certain cases, the targets have been fulfilled or have exceeded, but in important sectors there has been short-fall. The short-fall is not due to unrealistic or over ambitious target-setting but in most cases due to the various factors as stated in the previous paragraphs. Ayacut development has not yet been taken up in a big way so as to maximise utilisation of the potential already created. People's association in the Plan implementation have been achieved in the constitution of the District Development Advisory Boards with peoples representatives. In order to ensure co-ordination in implementation of Plan Schemes in the field level, the District Development Committees have been activated. This has started yielding good results. Consciousness in District Plans has been aroused.

53. The objectives of the Fourth Plan could have been attained despite the constraints analysed above, had there been sizeable investment. The limited size of the Public Sector investment and the difficult resources position of the State stood in the way of a bigger plan which could have counterbalanced the other organisational, socioeconomic and political constraints. The extremely limited private sector investment in this State is again due to undeveloped infrastructure which acts as a disincentive despite the vast potentiality of natural resources. Even the concessional finance for the Backward Districts for industrial development has not evoked much response from the private entrepreneurs. Due to paucity of investment, and the rise in costs, the *per capita* income has not risen as it should have. The gap between the All India average and Orissa may even widen, instead of being bridged in the Fourth Plan.

54. In financial terms the original target of Rs. 222.00 crores for the Fourth Plan has been exceeded. It is anticipated that the target of Rs. 256.00 crores will be reached and if certain deductions in Plan resources as in 1972-73 are not made, it may even touch Rs. 260.00 crores. On the physical side, the target in Agriculture could not be attained and industrial production was not up to the original anticipations. In Social Services and in rural electrification the performance has been very good. The special projects for drought, small farmers and tribals have made noticeable progress.

Annexure I

Expenditure in Fourth Plan

Sl. No.	Head of Development	Approved outlay Fourth Plan	Anticipated Fourth Plan Expenditure
(1)	(2)	(3)	(4)
1	Agricultural Production	1,525·00	1,380·27
2	Land Reforms	200·00	125·71
3	Minor Irrigation (Flow)	1,100·00	1,539·75
4	Lift Irrigation	150·00	
5	Soil Conservation	150·00	199·58
6	Ayacut Development	100·00	72·40
7	Animal Husbandry and Dairying	440·00	412·89
8	Forests	325·00	405·30
9	Fisheries	225·00	222·69
10	Warehousing and marketing	15·00	13·09
	Total—Agricultural Programme	4,232·00	4,371·68
11	Co-operation	400·00	774·14
12	Community Development	400·00	398·66
13	Panchayat	20·00	18·40
	Total—C. D. & Co-operation	820·00	1,191·20
14	Irrigation	2,400·00	2,629·58
15	Flood Control	300·00	292·00
16	Power	6,657·00	8,791·87
	Total—Irrigation & Power	9,557·00	11,713·45
17	Large & Medium Industries	985·00	1,124·37
18	Mineral Development	515·00	661·98
19	Village & Small Industries	322·00	325·94
	Total—Industries & Mining	1,822·00	2,112·29

Sl. No.	Head of Development	Approved outlay Fourth Plan	Anticipated Fourth Plan Expenditure
(1)	(2)	(3)	(4)
20	Roads	1,300·00	1,448·32
21	Road Transport	122·00	136·31
22	Inland Water Transport	5·00	1·00
23	Ore Transport	62·00	35·00
24	Tourism	32·00	39·61
	Total—Transport and Communication	1,521·00	1,660·24
25	General Education	1,425·00	1,479·32
26	Cultural Programme	40·00	53·40
27	Technical Education	116·00	96·63
28	Health	700·00	786·15
29	Water Supply	800·00	777·86
30	Housing	775·00	656·91
31	Urban Development	50·00	95·30
32	Welfare of Backward Classes	385·00	431·04
33	Social Welfare	20·00	12·48
34	Labour & Labour Welfare	18·00	16·81
35	Craftsman Training	52·00	50·14
36	Public Co-operation	1·00	1·00
	Total—Social services	4,382·00	4,457·04
37	Statistics	35·00	31·12
38	Publicity	25·00	27·61
39	Planning Machinery (Including Evaluation)	3·00	4·99
40	Government Press	65·00	64·31
	Total—Miscellaneous	128·00	128·03
	Grand Total	22,260·00	25,633·93

Annexure II

Selected physical targets and achievements of the 4th Plan in Orissa

Sl. No.	Item	Unit	1968-69 Level	Fourth Plan		Likely level expected by the end of Fourth Plan
				Target	Likely achievement	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Agricultural Production						
1	Foodgrains Production	000 tonnes	4,721·0	2,279·00	1,279·00	6,000·00
2	Oil Seed Production	000 tonnes	170·0	130·00	127·00	297·00
3	Jute and Measta Production	.. 000 bales	410·0	230·00	139·00	549·00
4	Sugarcane Production (In tonnes of gur).	000 tonnes	211·0	89·00	39·00	250·00
5	Area under H. Y. V. P. —					
	(a) Wheat	.. 000 Hectares	3·8	20·2	76·2	80·00
	(b) Paddy	.. 000 Hectares	144·4	855·6	505·6	650·00
	(c) Jawar	.. 000 Hectares	0·9	5·1	3·2	4·1
	(d) Bajra	.. 000 Hectares	0·1	..	..	..
	(e) Maize	000 Hectares	4·6	35·4	3·9	8·5
	Total	..	153·8	916·3	588·9	742·6
6	Area under improved variety	.. 000 Hectares	2,080·0	2,200·00	1,754·00	3,834·00
7	Consumption of Fertilizers—					
	(a) Nitrogeous	.. Lakh tonnes	0·16	1·14	0·40	0·56
	(b) Phospatic	.. Ditto	0·05	0·45	0·13	0·18
	(c) Potassic	.. Ditto	0·023	0·277	0·057	0·08
8	Area covered by plant protection—					
	(i) Food Crops	} 000 Hectares	164·0	1,036·0	1,200·0	1,200·00
	(ii) Commercial Crops					
	(iii) Horticulture					
9	Area under green manure	.. Ditto	810·0	1,690·0	1,690·0	2,500·00
10	Urban Compost distributed	.. 000 tonnes	42·0	58·0	3·00	45·00
Soil Conservation						
11	Soil Conservation on land.	Agricultural 000 Hectares	11·20	16·8	16·0	27·20
12	Soil Conservation in catchment Areas of River Valley Projects.	Ditto	4·60	23·4	17·5	22·11

Sl. No.	Item	Unit	1968-69 Level	Fourth Plan		Likely level expected by the end of the Fourth Plan
				Target	Likely achievement	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Minor Irrigation						
13	(a) Flow (Potential)	.. 000 hectares	180.00	50.60	59.94	239.94
	(b) Lift (Net)	.. Ditto	11.33	28.20	18.39	29.72
Animal Husbandry						
14	Veterinary Dispensary & Hospital	.. No	341	25	25	366
15	Intensive Cattle Development Blocks	.. No	1 Big sized	2 Medium	2 Medium	3
16	Artificial Insemination Centres	.. No	286	80	80	366
17	Key Village Blocks—					
	(a) Established	.. No	17	7	7	24
	(b) Expanded	.. No	2	2	2	4
18	Cattle Breeding Farm	.. No	10	5	3	13
19	Stockman Centres	.. No	1,125	50	50	1,175
20	Sheep Breeding Farms	.. No	1		..	1
21	Production of milk	.. Thousand tonnes	180.00	10.00	15.88	195.88
22	Government Poultry Farms	.. No	7	2 (Cuttack & Keonjhar)	2	9
Fisheries						
23	Mechanisation of boats/Trawlers	.. No	56	100	66	122
24	Cold Storage for Storing Fish	.. No	7	..	4	11
25	Landing & berthing facilities provided in harbours—					
	(a) Major Ports	.. Nos.	..	1	1	1
	(b) Minor Ports	.. Nos.	..	7	7	7
26	Fingerlings distributed	.. Million	23.5	16.5	11.5	35
27	Number of fish seed firms established	.. No.	..	5	5	5
28	Fish Production—					
	(i) Inland	.. 000 tonnes	15	15	8	23
	(ii) Marine	.. Ditto	10	17	7	17
Forest						
29	(i) Area under quick growing species.	000 Hectares	20.4	15.2	15.0	35.4
	(ii) Area under Economic plantation.	Ditto	38.4	14.8	14.2	52.6

Sl. No.	Item	Unit	1968-69 Level	Fourth Plan		Likely level expected by the end of the Fourth Plan
				Target	Likely achievement	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
30	Area under Fuel Plantation	000 Hectares	10.9	6.4	4.0	14.9
Co-operation						
31	Number of Primary Agricultural Credit Societies at the end of the year.	Nos.	4,471	3,323	3,323	3,323
32	Membership of Primary Agricultural Credit Societies.	Thousand	1,356	2,000	1,680	1,680
33	Loan advanced during the year—					
	(i) Short term	} .. Rs. in crores	10.99	85.84	64.38	18.00
	(ii) Medium term			(Cumulative)	(Cumulative)	
33	Long-term loan advances during the year.	Ditto	2.12	47.46 (Cumulative investment)	20.20	6.50
34	Rice mills	Nos.	46	42	42	42
35	Sugar Factories	Nos.	1	1	2	2
36	Regulated markets	Nos.	30	5	5	3
37	Grading Units	Nos.	5	24	23	28
Major and Medium Irrigation						
38	Area under Major and Medium Irrigation—					
A. Potential—						
	(i) Gross	000 Hectares	625.19	232.61	256.10	871.34
Power						
39	(i) Installed capacity	(M. W.)	497.5 (excluding 4.36 M.W. of small units).	422.5	302.5	800.00
	(ii) Electricity generated	(M. Units)	1420	9595	9595	2308.0
	(iii) Electricity sold	Ditto	1250.00	8520	8524	2039
40	Rural Electrification—					
	(a) Villages Electrified	Nos.	821 (704+117)	750	3756	10373 (9366+1007 villages hamlets).
	(b) Pumpsets energised by electricity.	Nos.	477	1800 (Revised)	2592	3069 (Both Plan & Non-plan).

Sl. No.	Item	Unit	1968-69 Level	Fourth Plan		Likely level expected by the end of the Fourth Plan	
				Target	Likely achievement		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Large & Medium Industries							
41	Hirakud Industrial Works						
	Fabricated materials production value	Rs. in lakhs	.. 31'69	30'00	..	51'64	
				(job work)	..	..
42	Kalinga Iron Works						
	(i) Pig Iron production	.. M. Tonnes	.. 31,359	1,00,000	..	80,260	
43	Hira Cement Works						
	Cement production per annum	.. Ditto	.. 2,05,717	3,96,000	3,55,000	..	
44	Hira Cable Works						
	(i) A. A. C. & A. C. S. R. Wire production.	Ditto	.. 6,530	3,000	2,250	..	
	(ii) Copper Wire production annual target.	Ditto	..	660	506	..	
45	Re-rolling Mill, Hirakuda						
	(i) Mild re-rolled Production	.. Ditto	.. 901	15,000	12,000	..	
46	Tile Factory, Choudwar						
	Roofing Tiles	.. Nos.	.. 9,49,329	48,07,000	..	27,00,000	
47	Ferro-Chrome Plant						
	(i) Low Carbon F. C.	.. M. Tons	}	..	10,000	7,750	..
	Low Carbon value	.. Rs. in lakhs					
	(ii) High Carbon F. C.	.. M. Tonnes					
	High Carbon Value	.. Rs. in lakhs					
	(iii) Silico Chrome	.. M. Tonnes					
	Silica Chrome Value	.. Rs. in lakhs					
	(iv) Ferro-Silicon	.. M. Tonnes					
	Ferro-Silicon Value	.. Rs. in lakhs					
48	Salt Factory, Sumandi						
	Industrial & Edible Grade Salt	.. M. Tonnes	.. 242	9,000	..	5,000	
49	Village & Small Scale Industries						
	Industrial Estate	.. No. of sheds	..	100	110	110	

Sl. No.	Item	Unit	1968-69 Level	Fourth Plan		Likely level expected by the end of the Fourth Plan	
				Target	Likely achievement		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Roads							
50	(i) State highway						
	(a) surfaced	..	K. M.	2,028	118	118	2,146
	(b) Unsurfaced	..	K. M.	151	55	30	63
	(ii) Major District Roads						
	(a) Surfaced	..	K. M.	4,102	508	352	4,454
	(b) Unsurfaced	..	K. M.	1,082	576	759	1,489
	(iii) Other District Roads						
	(a) Surfaced	..	K. M.	955	156	171	1,126
	(b) Unsurfaced	..	K. M.	1,344	1,202	1,194	2,367
	(iv) Village Road						
	(a) Surfaced	..	K. M.	479	168	314	793
	(b) Unsurfaced	..	K. M.	5,606	5,435	5,404	10,696
	(v) Total Rodsa						
	(a) Surfaced	..	K. M.	7,577	937	955	8,532
	(b) Unsurfaced	..	K. M.	8,183	7,268	7,387	14,615
	(vi) R. E. O. roads	..	K. M.	..	220	220	220
	Expressway No. II						
	(a) Surfaced	..	K. M.	13	..	..	..
	(b) Unsurfaced	..	K. M.	..	..	..	..
Road Transport							
51	Vehicles owned by State Transport Undertaking.						
	Buses		No.	406	137	123	529
General Education							
<i>Enrolement</i>							
52	(i) Classes I—V as percentage of population in age-group 6—11.						
	(a) Boys	..	%	88	100	90	90·0
	(b) Girl	..	%	47	60	50	50·0
	(c) Total	..	%	67	80	70	70·0
	(ii) Classes VI—VIII as percentage of population in age-group 11—14.						
	(a) Boys	..	%	34	50	35	35·0
	(b) Girls	..	%	8	15	14	14·0
	(c) Total	..	%	21	32·45	24·5	24·5

Sl. No.	Item	Unit	1968-69 Level	Fourth Plan		Likely level expected by the end of the Fourth Plan
				Target	Likely achievement	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(iii) Class IX—XI as percentage of population in age-group 14—17.					
	(e) Boys	.. %	14	49	23	24
	(b) Girls	.. %	2	13	6	6
	(c) Total	.. %	8	31	15	15
	(iv) Primary School Teachers	.. Nos.	54,125	9,000	14,775	68,900
	Technical Education					
53	I. Engineering Colleges					
	(a) Number of Institutions	.. Nos.	2	..	2	2
	(b) Sanctioned Annual Admission Capacity.	520	520	..	520	520
	II. Polytechnics					
	(a) Number of Institutions	.. Nos.	8	..	8	8
	(b) Sanctioned Annual Admission Capacity.	Nos.	1,235	..	1,235	1,235
	(c) Outturn	.. Nos.	415	..	415	415
54	Housing—					
	(i) Subsidised Industrial Scheme.	Housing No. of tenements	2,292	676	571	2,863
	(ii) Low Income Group Scheme.	Housing Ditto	2,560	739	579	3,139
	(iii) Village Housing Project Scheme	No. of houses	2,328	1,600	1,443	3,771
	(iv) Middle Income Group Scheme.	Housing No. of houses	460	436	477	937
	(v) Rental Housing Scheme	.. No. of houses	3,353	837	899	4,252
55	Water-supply and Sanitation					
	(a) Urban					
	(i) Towns covered	.. Nos.	7	30	12	19
	(ii) Population covered	.. Millions	0.25	0.94	0.24	0.49
	(b) Rural piped water-supply					
	(i) Villages covered	.. Nos.	9	100	91	100
	(ii) Population covered	.. Millions	0.04	0.39	0.39	0.43
56	Craftsman Training					
	Training of Craftsman Institutions..	Nos.	10	..	10	10
	Intake	.. Nos.	3,744	120	120	3,864
	Outturn	.. Nos.	1,078	1,422	1,122	2,200

CHAPTER 1-3

OBJECTIVES, STRATEGY AND PLAN IN OUTLINE

The objectives for the Fifth Plan emerge out of the socio-economic situation and the past experience in planning, particularly during the Fourth Plan period. In the approach paper for the Fifth Plan of Orissa, the following broad objectives were stated:—

- (1) To double Orissa's State income, at current prices during the year 1974—79
- (2) To meet the minimum consumption needs of all the people in education, drinking water-supply, health and nutrition, housing and other facilities.
- (3) To improve considerably the status of the relatively backward tribal population in the State, whose conditions still remain at the lowest level.
- (4) To remove the imbalances in the development of various regions within the State.

Further, it was mentioned that doubling the State income will have the effect of raising the *per capita* income of Orissa to the level of the average figure for the whole country. This has always been the basic aim of planning in the State and the Fourth Plan set it down as its main objective. But as shown in Chapters 1 and 2, the growth rate required for achieving the said objective (viz. 20 per annum) could not be attained for various reasons. The most important reason in the State Government's view is that the massive investment required for the purpose was not made. This would naturally raise the questions how, in what form and through which sectors (the Central, State or private) the required magnitude of investment outlays should be planned and ensured in the Fifth Plan if the *per capita* income of the State is to attain parity with the national *per capita* income.

2. The Approach document estimated that, for the above purpose, a total investment of Rs. 4,000 crores would be necessary. A rough break-up was also attempted. Rs. 1,000 crores was put down for the State, sector and the balance of Rs. 3,000 crores, it was assumed, would have to come mostly from the Central Sector and partly from the Private Sector. The allocation of the major share to Central Sector should not cause any surprise as the resource raising capacity of the State is admittedly limited and a massive induction of capital resources from outside has long been recognised as the only method of lifting up an underdeveloped area with rich potential not only for its sake but also for the sake of the nation as a whole. It was then hoped that by the time the State's Fifth Plan comes to be formulated, a clear idea will be available of the likely order of Central investment in the State during the next quinquennium. Unfortunately, however, this is still an unknown quantity. The State Government is, therefore, compelled to content itself with the preparation of the State Plan only and leave the rest of the exercise to a later stage while indicating the magnitude of investment to be made by or under the direction of the Central Government in pursuance of the declared objective.

3. Here it must be added that the objectives set out in the approach document of the State are in complete conformity with those accepted by the National Development Council while approving the Planning Commission's paper "Approach to the Fifth Plan, 1974—79". The following extract makes this amply clear:—

"Economic development during the two decades since the inception of planning has resulted in a sizeable increase in average *per capita* income. There is no doubt that living conditions have improved everywhere, even in the most backward districts. Yet large numbers have remained poor. The existence of poverty is incompatible with the vision of an advanced, prosperous, democratic, egalitarian and just society implied in the concept of a socialist pattern of development. In fact, it holds a potential threat to the unity, integrity and independence of the country. Elimination of poverty must, therefore, have the highest priority." (Page 1).

4. It has been shown elsewhere how Orissa among all the States has the highest percentage of people below the national poverty line. It follows that their uplift must claim the highest priority and investment outlays designed to achieve this result can be omitted only at the risk of defeating in advance the major task that the country has set out to accomplish. However, it is quite understandable to argue, as the Planning Commission has done, that 'poverty is too big and complex a problem to be overcome within the span of a single Five-Year Plan' and that 'removal of poverty over a reasonable period of time could alone constitute the key aim of the Fifth Plan'. In another context, the Planning Commission has stated that 'a substantial increase in the average *per capita* consumption of the lowest 30 per cent of the population is expected from the model finally adopted for the Fifth-Plan and that the maximum possible dent on the low end poverty' will be made while 'ensuring that the country moves one more step in the direction of economic independence'. The implication of these formulations for Orissa are clear. Firstly, if for any reason it is not possible to double the State 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. Common sense indicates that the gap should be narrowed to the extent possible in the next quinquennium or at least it should be maintained at the same level. Secondly, specially tailored programmes should be undertaken to promote distributive justice within Orissa and among the different groups of its people with a view to increase the consumption of the lowest 30 per cent. Such consumption may be partly private and partly social, there the National Programme for minimum needs assumes considerable importance. The Planning Commission and the National Development Council have recognised the limitations to the extent to which private consumption of the lowest three deciles of the population can be raised through the ordinary process of economic development and have seen fit to set apart resources for ensuring a higher level of social consumption for these unfortunate people. This must be followed up by adequate allocation for the areas where these target groups congregate and by evolution of suitable policies for reaching them. Planning Commission is fully aware of this as can be seen from the following statement in the Approach paper :—

"While the logic of a redistributive growth process demands a substantial narrowing down of consumption differentials between the different strata, the basic problem of economic policy is to ensure that such a logic gets translated into observed reality." (Page 18).

5. What are the implications, in terms of investment of the minimum objective of not widening the present gap in *per capita* income of India and Orissa. The disparity was Rs. 80.7 in 1962-63. This increased to Rs. 90 in 1969-70. It has been estimated that on account of the differential in growth rates, the gap between these two estimates, will be Rs. 121 (at 1960-61 prices) in 1973-74 since the *per capita* incomes will be Rs. 388 and Rs. 267 for India and Orissa respectively by the end of Fourth Plan or (say by the beginning of Fifth Plan). If the Fifth Plan aims at not allowing the gap to widen further (beyond Rs. 121) the *per capita* income of Orissa will have to become Rs. 348 (at 1960-61 prices) by 1978-79 as that for India has been estimated at Rs. 469 for that year. The estimated State income of Orissa at the existing growth rate works out at Rs. 614 crores in 1973-74 and that will have to be raised to Rs. 915 crores in 1978-79 so that the *per capita* income of Orissa by 1978-79 reaches Rs. 348 (at constant prices). Thus to maintain the existing gap we have to add another Rs. 301 crores to the State Income by the end of the Fifth Plan. Taking the capital output ratio to be 3.50 : 1, this gives an investment magnitude of Rs. 1,053.5 crores at 1960-61 prices. Assuming that the wholesale price index in 1973-74 would be 244, the total investment needed at 1973-74 prices, works out to Rs. 2,570.54 crores (Rs. 1053.5 crores × 2.44). In order to achieve an investment of Rs. 2,570.54 crores, the total outlay will have to be about Rs. 3,271.24 crores. This is based on the assumption that investment and current outlay components in Orissa situation will have to be somewhat different than the national plan. The latter has shown 88.6 per cent for investment while the State Plan may be of the order of 78.58 per cent. The lower percentage is explained by the fact that the outlays in agriculture and other services at the State level contain a comparatively high level of expenditure in the nature of current outlay.

6. The total Plan outlay in the State comprises of three parts, namely the State Sector, the Central Sector and the Private Sector. The first two may be determined after a view is taken on the possible magnitude of the third. It must be conceded at the outset that no reliable statistics is available in regard to private sector investment in the State and we can at best attempt an estimate on the basis of cognate data. The Rural Debt and Investment Survey of Reserve Bank of India 1961 and the 17th round of the National Sample Survey for Urban capital formation have thrown up certain norms which can be used for the purpose. These surveys give the per household investment in farm and non-farm business. In Rural Orissa the per household investment was found to be Rs. 37.8 in 1961. Accounting for the price rise this works out to Rs. 92.23 at 1973-74 prices. The total number of rural households engaged in agriculture being Rs. 32.7 lakhs, the estimated investment in agriculture in the Rural Sector is found to be Rs. 30.16 crores. In the Urban Sector, the per reporting household investment in agriculture is found to be Rs. 52.89 which gives at current prices a figure of Rs. 0.28 crore (there being an estimated number of 22,060 households reporting investment in agriculture in Urban Orissa). Thus the Rural and Urban investment taken together for agriculture comes to Rs. 30.44 crores per annum. In a five-year period the total investment in agriculture works out to Rs. 152.20 crores. The investment being 85.8 per cent of the total outlay it is estimated that the outlay for Orissa in Agriculture Sector is about Rs. 177.39 crores at 1973-74 prices. Some allowance has to be made for a change in the investment pattern due to rise in incomes and the adoption of the new technology. But as there is no data for determining this factor, we may assume 25 per cent increase during the Fifth Plan. This will roughly correspond to cent per cent increase of investment in 25 per cent of the total paddy area expected to be covered by the new technology. Thus, it is estimated that the total outlay in the Private Sector during the Fifth Plan in agriculture would be Rs. 221.74 crores. (Rs. 177.39 crores + Rs. 44.35 crores.)

7. In the Non-farm Sector the per household investment in the rural area at 1960-61 prices has been estimated by the Rural Debt and Investment Survey at Rs. 1.9. At 1973-74 price level this comes to Rs. 4.6. Multiplying this figure with the estimated number of households in the mid-plan period we get the total non-farm investment in the rural sector to be Rs. 2.12 crores per annum or Rs. 10.58 crores during the Fifth Plan period. In the urban areas the N. S. S. gives a per reporting household investment of Rs. 533.63 per annum. At 1973-74 prices this works out to Rs. 1,302.06. There being 22,000, households estimated to be making investment in the non-farm business it is estimated that the total investment in the Urban areas in the household sector in non-farm business is Rs. 2.86 crores per annum or Rs. 14.30 crores for the Five-Year period. The total household non-farm investment thus comes to Rs. 24.88 crores.

8 As regards non-household investments in farm and non-farm business, it is even more difficult to make estimates. These investments are made by companies in the Private Sector, financing institutions, public Corporations, Statutory Boards. There is no ready date and we can only make a guess on the basis of the trends observed in the past and anticipations for the future. Perhaps it may not be un-reasonable to assume that corporate investment in the non-farm business will be in the order of Rs. 25 crores per annum. or Rs. 125 crores during the Fifth Plan period. The fourth component, the non-household investment in farm business has been separately estimated to be about Rs. 170 crores.

9. Thus the total Private Sector investment (including that from the financing institutions) in Orissa during the Fifth Five-Year Plan is likely to be as follows:—

1. Household outlay in farm business	..	Rs. 221.74 crores.*
2. Household investment in non-farm business	..	Rs. 24.88 crores
3. Non-household investment in non-farm business..		Rs. 125.00 crores
4. Non-household (financing institutions) investment in farm business.		Rs. 170.00 crores**
	Total ..	Rs. 541.62 crores

* NOTE—This includes expenditure from borrowings (about 16 per cent). Financial institutions account for an insignificant portion (1.6 per cent) of this amount. So the investment by institutions has been worked out separately and shown against.

** In the chapter on “Rule of credit institutions” and on “Co-operation”, it has been indicated that a sum of Rs. 176 crores would be available as investment for agriculture from the credit institutions. Since item 1 includes an element of borrowings from the institutions, the figure of Rs. 170 crores has been assumed under this head.

10. If the above amount of private sector investment is deducted from the total plan outlay of Rs. 3,271.24 crores, we arrive at the public sector outlay viz., Rs. 2,729.62 crores. This has to be further divided into State sector outlay and Central sector outlay. The present draft places the former at Rs. 836.09 crores, leaving the balance of Rs. 1,893.53 crores to be provided in the Central sector. These figures, it may be classified, are meant only for indicating the magnitudes and the relative shares of the three sectors and should not be taken as precise estimates in absolute terms. It is quite possible that in practice the private sector, particularly the institutional part thereof, may do better than anticipated if appropriate policies and programmes are adopted by the Centre and implemented by the nationalised banks. To that extent direct outlays from budgetary sources, Central and State, can be readjusted within the overall plan outlay considered essential for improving the *per capita* income of the poor in Orissa.

11. It is interesting to note that the public and private sector outlays indicated above for Orissa amount for 7 per cent and 3.5 per cent of the corresponding figures for the country as a whole. The first mentioned percentage tallies exactly with the percentage of people below the poverty line in Orissa to those in India. Although it may be argued that plan outlays cannot be distributed among the States mechanically on the basis of population or even the poorer part of it, it cannot be again said that the Fifth Five-Year Plan with its central focus on the elimination of poverty of the lowest three deciles of the population can ignore only on peril of denial of its own professed aims the patent claims of Orissa for a reasonable share in the national public sector outlay. It can, in this context, be asserted that 7 per cent is not an unreasonable claim and the resulting figures can be fully justified as well on an economic ground, on the basis of project approach, and on the ground of optimum utilisation of scarce national resources. The second steel mill, the ship building yard and fertiliser factory at Paradeep, the nickel and lead factories, iron-ore mines development, the super thermal station at Talcher and the supporting railway line development are some of the more important items that help provide the required investment in Orissa and simultaneously fulfill the national priority needs. These are by no means exhaustive and have been mentioned by way of illustration to establish that it should not be difficult to synchronise the national priorities and the State's needs for the uplift of its poor.

12. A total outlay of Rs. 836.09 crores is envisaged for the State plan including the outlay needed for implementing the national programme of minimum needs. The summary statement given in Annexure I indicates the distribution among various sectors. Inter-sectoral allocation of Plan outlay on a sophisticated basis by using sectoral estimates of incremental capital output ratios is not at present possible as reliable statistics are had to get even on some basic items. Disaggregation of the State's economy into well defined sectors each with a homogenous commodity composition of time series data on output and investment for such disaggregated sectors are still a luxury at the State level. In such a situation the process of planning has to make a qualitative assessment of the existing socio-economic situation and correct it to the extent possible by some quantitative analysis in order to determine the priorities of investment for the Plan. Besides, in Orissa the back-log of development is so huge and the priorities to be adopted are so obvious that adoption of sophisticated quantitative techniques to arrive at a more precise allocation of funds among sectors may not lead to a different strategy for the development programme.

13. In the chapter on socio-economic back ground it has been stated that agriculture is the dominant sector of the economy contributing to more than 50 per cent of State income. Nearly 79 per cent of the total working force are engaged in agriculture and allied activities. This immediately points to the necessity of giving priority to the development of agriculture sector, particularly in view of the fact that agriculture in Orissa suffers from low productivity, backward technology and absence of diversification in production. This sector is also constantly exposed to the vagaries of natural calamities like floods and cyclone. To improve the total quantum of this sector's contribution to the State income and also for the realisation of the national objective of achieving economic self reliance, it is absolutely necessary to lay emphasis on the development, modernisation and diversification of Orissa's agriculture. This will also provide opportunities of employment to the large number of poor people living in rural areas and the backward districts with this end in view, substantial allocations have been made to agriculture and allied programme, Irrigation and power.

14. A comparative statement of inter sectoral allocations in the Fourth Plan and the draft Fifth Plan is given below:--

Sector	Anticipated expenditure in the Fourth Plan	Proposed outlay in the Fifth Plan	
		With minimum needs programme	Without minimum needs programme
1	2	3	4
Agricultural Production	.. 1380.27	2875.00	2875.00
Land Reforms	.. 125.71	1440.00	1440.00
Soil Conservation	.. 199.58	450.00	450.00
Ayacut Development	.. 72.40	2000.00	200.00
Animal Husbandry & Dairying	.. 412.89	589.00	589.00
Forests	.. 405.30	834.61	834.61
Fisheries	.. 222.69	500.00	500.00
Ware Housing and Marketing	.. 13.09	57.56	57.56
Total—Agricultural Programmes	.. 2831.93	8746.17	8746.17

(Rs. in lakhs)

(RUPEES IN LAKHS)

	1	2	3	4
Co-operation ..		774.14	2100.00	2100.00
Community Development ..		398.66	1050.00	1050.00
Panchayats ..		18.40	180.00	180.00
Total - C. D. & Co-operation ..		1191.20	3330.00	3330.00
Total - Agriculture & Allied Programmes ..		4023.13	12076.17	12076.17
Major & Medium Irrigation ..		2629.58	7600.00	7600.00
Flood Control ..		292.00	500.00	500.00
Minor Irrigation				
(a) Flood ..		1292.97	2000.00	2000.00
(b) Lift Irrigation (Lift) ..		246.78	1280.00	1280.00
Total—Irrigation (Major, Medium & Minor) & flood control.		4461.33	11380.00	11380.00
Power ..		8791.87	23402.00	21510.00
Total—Power ..		8791.87	23402.00	21510.00
Large & Medium Industries ..		1124.37	1660.26	1660.26
Mineral Development ..		661.98	1076.00	1076.00
Total—Large & Medium Industries and Mineral Development.		1786.35	2736.26	2736.00
Village & Small Industries ..		325.94	722.79	722.79
Total—Village & Small Industries ..		325.94	722.79	722.79
Roads ..		1448.32	6414.00	1540.00
Road Transport ..		136.31	260.00	260.00
Ports & Harbours (Ore Transport) ..		35.00	60.00	60.00
Inland Transport ..		1.00	10.00	10.00
Tourism ..		39.61	385.00	385.00
Total—Transport and Communication ..		1660.24	7129.00	2255.00
General Education ..		1479.32	8796.00	2806.00
Total—General Education ..		1479.32	8796.00	2806.00

(RS. IN LAKHS)

	1	2	3	4
Health and Nutrition ..		786·15	6263·45	973·45
Total—Health ..		786·15	6263·45	973·45
Cultural Programme ..		53·40	123·50	123·50
Technical Education ..		96·63	151·00	151·00
Water-Supply ..		777·86	4132·00	1632·00
Housing ..		656·91	2020·00	1020·00
Urban Development ..		95·30	165·00	100·00
Welfare of Backward Classes ..		431·04	725·00	725·00
Social Welfare ..		12·48	25·00	25·00
Labour and Labour Welfare ..		16·81	95·00	95·00
Craftsmen training ..		50·14	100·00	100·00
Public Co-operation ..		1·00	3·00	3·00
Total—Other Social Service Programmes ..		2191·57	7539·50	3974·50
Statistics ..		31·12	173·80	173·80
Publicity ..		27·61	50·00	50·00
Planning Machinery ..		4·99	25·00	25·00
Development of infrastructure strengthening of administration of Revenue and Police Departments. ..			3200·00	3200·00
Government Press ..		64·31	115·00	115·00
Total—Miscellaneous ..		128·03	3563·80	3563·80
Grand Total ..		25633·93	83608·97	61997·97

15. The statement at Annexure II gives the programmewise outlay proposed in different sectors of the economy in the Fifth Plan. A statement is also attached at Annexure III to this Chapter showing the physical targets anticipated to be achieved at the end of the Fourth Plan and those proposed for the Fifth Plan.

Annexure I

Draft Fifth Five-Year Plan—Orissa

Outlay and Expenditure—Summary

(Rs. in lakhs)

Sl. No.	Head of Development	Fourth Plan				Fifth Plan outlays proposed					
		Approved Fourth Plan outlay	Approved outlay for 1973-74	Anticipated expenditure 1973-74	Anticipated expenditure during Fourth Plan	Total	Capital outlay	Foreign exchange	Annual Plan for 1974-75		
1	2	3	4	5	6	7	8	9	Total	Capital	Foreign exchange
1	Agricultural production	1525·00	375·00	386·02	1380·27	2875·00	525·00	..	498·52	95·00	..
2	Land Reforms ..	200·00	67·00	67·00	125·71	1440·00	30·00	..	116·30	2·80	..
3	Minor Irrigation—										
	(a) Minor Irrigation (Flow),	1100·00	336·00	336·00	1292·97	2000·00	2000·00	..	400·00	400·00	..
	(b) Lift Irrigation (Lift)	150·00	45·00	45·00	246·78	1280·00	1268·00	12·00	370·00	43·00	2·00
4	Soil Conservation ..	150·00	63·00	61·00	199·58	450·00	20·62	..	88·57	9·75	..
5	Ayacut Development ..	100·00	37·00	31·00	72·40	2000·00	..	..	325·00	..	..
6	Animal Husbandry & Dairying.	440·00	145·00	145·00	412·89	589·00	103·64	93·48	129·99	23·24	93·48
7	Forests ..	325·00	110·00	112·00	405·30	834·61	35·00	..	194·85	7·00	..

8 Fisheries	..	225.00	70.00	75.00	222.69	500.00	105.89	..	86.84	32.09	..
9 Warehousing & Marketing.		15.00	5.00	5.00	13.09	57.56	37.50	..	10.60	8.50	..
Total—Agricultural Programmes.		4230.00	1253.00	1263.02	4371.68	12026.17	4125.65	105.48	2220.67	621.38	95.48
10 Co-operation	..	400.00	192.00	222.10	774.14	2100.00	..	..	473.84	..	..
11 Community Development		400.00	85.94	85.94	398.66	1050.00	..	..	215.20	..	..
12 Panchayats	..	20.00	4.06	4.06	18.40	180.00	20.00	..	36.00	4.00	..
Total—C. D. and Co-operation.		820.00	282.00	312.10	1191.20	3330.00	20.00	..	725.04	4.00	..
13 Major and medium Irrigation.		2400.00	680.00	680.00	2629.58	7629.58	7466.30	113.70	1115.00	1097.20	17.80
14 Flood control	..	300.00	100.00	100.00	292.00	500.00	500.00	..	113.00	113.00	..
15 Power	..	6657.00	2077.00	2077.00	8791.87	21510.00	21042.00	2051.36	3087.84	2077.00	..
Total—Irrigation & Power		9357.00	2857.00	2857.00	11713.45	29610.00	29008.30	2165.06	4315.84	3287.20	17.80
16 Large & Medium Industries		985.00	86.00	86.00	1124.37	1660.26	1591.26	1.00	721.41	624.76	..
17 Mineral Development	..	315.00	90.00	88.62	661.98	1076.00	965.00	48.00	223.55	198.50	21.00
18 Village & Small Industries		322.00	67.00	67.00	325.94	722.79	477.87	3.15	219.91	174.04	..
Total—Industries & Mining		1822.00	243.00	241.62	2112.29	3459.05	3034.13	52.15	1164.87	997.30	21.00

(Rs. in lakhs)												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
19	Roads	..	1300·00	366·00	366·00	1448·32	1540·00	1540·00	..	535·00	535·00	..
20	Roads Transport	..	122·00	34·00	34·00	136·31	260·00	256·00	..	52·00	51·80	..
21	Ports and Harbours (Ore Transport).	..	62·00	5·00	5·00	35·00	60·00	60·00	..	..	..	..
22	Inland Water Transport	..	5·00	0·50	1·00	1·00	10·00	..	..	2·00	..	..
23	Tourism	..	32·00	9·00	9·00	39·61	385·00	335·00	..	166·00	157·50	..
Total—Transport and Communication.			1. 21·00	414·50	415·00	1660·24	2255·00	2191·00	..	755·60	744·30	..
Social Service												
24	General Education	..	1419·00	482·90	482·50	1479·32	2806·00	1121·73	..	706·98	344·95	..
25	Cultural Programme	..	46·00	11·10	11·10	53·40	123·50	21·75	..	18·60	..	..
26	Technical Education	..	116·00	30·00	30·00	96·63	151·00	84·00	..	37·97	25·00	..
27	Health	..	700·00	217·00	217·00	786·15	973·45	490·43	34·00	247·07	..	..
28	Water-supply	..	800·00	255·00	298·29	777·86	1632·00	1232·00	..	439·56	359·56	..
29	Housing	..	775·00	196·00	196·00	656·91	1020·00	953·75	..	183·66	171·25	..
30	Urban Development	..	50·00	18·00	18·00	95·30	100·00	..	..	20·00	..	..
31	Welfare of Backward Classes.	..	385·00	130·00	130·00	431·04	725·00	..	..	123·67	..	..
32	Social Welfare	..	20·00	4·00	4·00	12·48	25·00	..	..	5·84	..	..
33	Labour and Labour Welfare.	..	18·00	9·98	9·94	16·81	95·00	43·16	..	17·00	11·34	..

34	Craftsman Training	..	52·00	13·02	13·02	50·14	100·00	70·72	..	18·37	13·00	..
35	Public Co-operation	..	1·00	1·00	1·00	1·00	3·00	..	..	0·60	..	..
Total—Social Service			4382·00	1368·00	1411·25	4457·04	7753·95	4017·54	34·00	1819·32	925·10	..
Miscellaneous												
36	Statistics	..	35·00	9·00	9·00	31·12	173·80	55·90	30·00	34·96	7·00	..
37	Publicity	..	25·00	9·00	9·00	27·61	50·00	10·82	..	19·67	10·82	..
38	Planning Machinery	—	3·00	3·50	3·50	4·99	25·00	..	..	5·00	5·00	..
39	Government Press	..	65·00	30·00	30·00	64·31	115·00	82·39	20·00	19·00	12·90	5·00
40	Development of Infra-structure—Strengthening of administration of Revenue and Police Department.	..	..	..	..	..	3200·00	..	..	400·00	..	..
Total—Miscellaneous			128·00	51·50	51·50	128·03	3563·80	149·11	50·00	478·63	35·72	5·00
Total—State Sector			22260·00	6469·00	6551·49	25633·93	61997·97	42545·73	2406·69	11479·97	6615·00	139·28

MINIMUM NEEDS PROGRAMME

1	Elementary Education	..	712·00	264·41	264·41	759·84	5990·00	725·00	..	1887·97	179·00	..
2	Primary Health Centres	..	159·51	52·55	52·55	159·51	1400·00	786·00	..	345·16	279·80	..
3	Rural Water-supply	..	136·00	28·00	41·90	149·10	2500·00	2000·00	..	500·00	400·00	..

[3 P. & C.—15]

(Rs. in lakhs)											
1	2	3	4	5	6	7	8	9	10	11	12
4. Rural Roads—											
	(i) For villages with 1500 & above population.	175.00	59.51	59.51	275.87	3500.00	3500.00	..	814.40	814.40	..
	(ii) For cluster ..	..	..	..	..	1374.00	1374.00	..	274.80	274.80	..
5.	Rural Electrification ..	605.00	413.00	413.00	1312.85	1892.00	1892.00	..	400.00	400.00	..
6.	House-sites for landless Labourers.	..	..	..	..	1000.00	1000.00	..	200.00	200.00	..
7.	Slum Improvement ..	15.00	15.00	15.00	47.00	65.00	..	..	20.00	..	..
8. Nutrition—											
	(i) S N P (Supliementary Feeding programme).	410.28	211.70	211.70	400.47	1890.00	..	..	240.00	..	..
	(ii) Midd day - M e a l s prog r a m m e for school children.	134.88	26.00	26.00	133.80	2000.00	..	..	352.00	..	..
	Total ..	2347.67	1070.97	1084.07	3238.44	21611.00	11277.50	..	5034.33	2548.00	..
	Grand Total ..	..	..	..	..	83608.97	53823.23	2406.69	16514.30	9163.00	139.28

NOTE:— The figures shown in columns 3—6 under Minimum needs programme are included in the Corresponding columns under the general programmes.

Annexurê II
Draft Fifth Five-Year Plan—Orissa
Programme-wise Outlay and Expenditure

(Rs. in lakhs)

Serial No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely Expenditure 1973-74	Likely Expenditure during Fourth Plan	Fifth Plan		Remarks
						Total outlay	Annual plan 1974-75 outlay	
1	2	3	4	5	6	7	8	9
I. AGRICULTURAL PROGRAMMES								
<i>(i) Agricultural Education and Research</i>								
1	Agricultural Education	.. 37.00	10.00	10.00	62.67	130.00	16.00	
2	Agricultural Research	.. 17.56						
	Total (1 & 2)	.. 54.56	10.00	10.00	62.67	130.00	16.00	
<i>(ii) Agriculture—</i>								
1	Extension, Training & Farmers' Education	.. 47.94	8.90	12.90	34.76	37.00	5.12	
2	Improved Seed Programme	.. 223.08	36.77	41.77	170.93	300.00	53.60	
3	Manures and Fertilizers	.. 44.92	13.21	13.21	41.47	115.00	16.00	
4	Plant Protection	.. 34.36	17.57	17.57	80.34	110.00	32.00	
5	Agricultural implements and Machinery including Agro Industries Corporation.	67.76	4.44	6.44	20.11	52.00	3.68	
6	Agricultural Statistics	.. ..	..	..	..	268.11	50.00	
7	H. V. P., I. A. D. P. Multiple Cropping and other intensive Cultivation Programme.	377.75	99.26	99.26	334.66	587.02	115.78	

(Rs. in lakhs)

1	2	3	4	5	6	7	8	9
8	Land Development	..	60·10	1·14	2·14	14·80	218·00	36·40
9	Land reforms (including consolidation of holding).	..	200·00	67·00	67·00	125·71	1440·00	116·30
10	Others	..	614·53	183·71	199·20	620·53	1057·87	169·94
Total (1 to 10)		..	1670·44	432·00	459·49	1443·31	4185·00	598·82
Total (i) and (ii)		..	1725·00	442·00	469·49	1505·98	4315·00	614·82
(iii) (a) Minor Irrigation (Flow)		..	1100·00	336·00	336·00	1292·97	2000·00	400·00
(b) Lift Irrigation		..	150·00	45·00	45·00	246·78	128·000	370·00
(iv) Soil Conservation		..	150·00	63·00	61·00	199·58	450·00	88·57
(v) Area Development		..	100·00	37·00	31·00	72·40	2000·00	325·00
(vi) Animal Husbandry		..	375·99	127·47	127·47	352·87	464·00	78·87
(vii) Dairying and Milk Supply		..	64·01	17·53	17·53	60·02	125·00	51·12
(viii) Forests		..	325·00	110·00	112·00	405·30	834·61	194·85
(ix) Fisheries		..	225·00	70·00	75·00	222·69	500·00	86·84
(x) Ware-housing and Storage		..	15·00	5·00	5·00	13·09	57·56	10·60
(xi) Marketing		..						
(xii) Small Farmers and Agricultural Labourers		Provision was made outside the State Plan						

(xiii) Co-operation—

1	Agricultural Credit	..	195.11	138.00	168.10	509.165	1672.00	346.98
2	Marketing	..	33.18	9.74	9.74	29.335	30.70	11.40
3	Processing other than Sugar Factories and Large Processing Units.		46.93	12.135	12.135	46.69	66.40	17.42
4	Co-operative Sugar Factories	..	11.00	..	..	50.00	38.00	30.00
5	Co-operative Farming	..	0.01	..	..	0.003	5.02	0.60
6	Urban Consumer Co-operatives	..	35.47	10.50	10.50	34.37	100.00	31.20
7	Co-operative Storage	..	25.50	6.185	6.185	50.307	36.00	8.00
8	Additional Departmental Staff	..	36.41	11.19	11.19	35.54	104.68	20.00
9	Others	..	16.39	4.01	4.01	18.05	37.32	0.36

Total (1—9) .. 400.00 192.00 222.10 774.14 2,100.00 473.84

(xiv) Community Development .. 400.00 85.94 85.94 398.66 1050.00 215.20

(xv) Panchayat .. 20.00 4.06 4.06 18.40 180.00 36.00

Total (i) to (xv) .. 5050.00 1535.00 1575.12 5562.88 15356.17 2945.71

(Rs. in lakhs)

(1)	2	3	4	5	6	7	8	9
II. IRRIGATION & POWER								
<i>(i) Irrigation—</i>								
i. Continuing and new Schemes of Fourth Plan								
<i>(a) Major Projects—</i>								
	<i>(i) Hirakud Stage-I</i>	..	100.00	8.00	8.00	22.17	..	..
	<i>(ii) Mohanadi Delta</i>	..	1400.00	350.00	350.00	1417.62	1500.00	140.00
	<i>(iii) Salandi</i>	..	60.60	28.00	28.00	112.26	70.00	70.00
	<i>(iv) Derjang</i>	..	66.00	30.00	30.00	101.21	40.00	40.00
	<i>(b) Medium</i>	..	699.00	224.00	224.00	827.32	2166.00	576.00
2	New Schemes of the Fifth Plan	..	..	15.00	15.00	29.00	3551.00	262.00
5.	Investigation and Research	..	75.00	25.00	25.00	120.00	273.00	27.00
	Total—Irrigation	..	2400.00	680.00	680.00	2629.58	7600.00	1115.00
	<i>(ii) Flood control</i>	..	3.00.00	100.00	100.00	292.00	500.00	113.00
	<i>(iii) Power</i>							
1.	Generation	..	3616.97	862.00	862.00	4529.84	8437.00	926.42
2.	Transmission and Distribution	..	2335.03	794.00	794.00	2877.20	7305.00	1181.42
	<i>(a) Rural Electrification</i>	..	6,05.00	413.00	413.00	1312.85	5300.00	880.00
	<i>(b) Investigations</i>	..	100.00	8.00	8.00	71.98	468.00	100.00
	Total	..	6657.00	2077.00	2077.00	8791.87	21510.00	3087.84

III. INDUSTRY & MINING

(i) Large & Medium Industries—

1	State Industrial Project	..	21·25	.	..	11·74	..	..
2	Industrial Areas	..	78·25	10·50	10·50	72·96	75·00	27·50
3	Industrial Development Corporation	..	750·00	45·00	45·00	943·97	888·26	441·26
4	State Finance Corporation	..	..	..	..	..	60·00	15·00
5	Research, Demonstration, Pilot Projects	..	1·25	0·25	0·25	1·25	2·00	0·40
6	Others	..	134·25	30·25	30·25	94·45	635·00	237·25
Total (1 to 6)		..	985·00	86·00	86·00	1124·37	1660·26	721·41

(ii) Village & Small Industries—

1	Handloom Industry	..	75·00	16·80	16·80	68·50	70·70	24·84
2	Power Looms	..	3·00	3·20	3·20	8·25	60·50	31·50
3	Small-Scale Industries	..	150·00	26·23	26·23	120·54	272·84	85·93
4	Industrial Estates—							
	(a) Rural							
	(b) Semi-Urban							
	(c) Urban							
5	Handicrafts	..	30·00	6·77	6·77	33·08	50·25	9·99
6	Sericulture	..	12·00	7·00	7·00	14·10	55·00	10·00

(Rs. in lakhs)

1	2	3	4	5	6	7	8	9
7	Coir Industry	...	2·00	2·00	2·00	6·50	13·50	2·65
8	K. & V. Industries	..	..	..	..	..	..	..
9	Others	..	..	..	..	..	..	..
Total—(1 to 9)		..	322·00	67·00	67·00	325·94	722·79	219·91
(iii) Mineral Development		..	515·00	90·00	88·62	661·98	1076·00	223·55
Total—(i to iii)		..	1,822·00	243·00	241·62	2,112·29	3459·05	1,164·87

IV. TRANSPORT AND COMMUNICATION

1. Roads

(a) Spill over work—

(i)	P. W. D. (excluding rural roads)	..	325·26	60·12	60·12	354·50	455·00	220·00
(ii)	Rural roads of P. W. D.	..	157·23	22·00	22·00	123·26	45·00	30·00
(iii)	Rural Roads of Rural Engineering Organisation.		Nil	Nil	Nil	Nil	400·00	127·00
(iv)	Municipal Roads	..	Nil	Nil	Nil	Nil	Nil	Nil

(b) New works—

(i)	P. W. D. (excluding rural roads)	..	445·04	138·07	138·07	446·24	525·00	100·00
(ii)	Rural Roads of P. W. D.	..	167·47	77·30	77·30	218·45	75·00	50·00

	(iii) Rural Roads of Rural Engineering Organisation.	175.00	59.51	59.51	275.87	Nil	Nil
	(iv) Municipal Roads	30.00	9.00	9.00	30.00	40.00	8.00
	Total	1,300.00	366.00	366.00	1,448.32	1,540.00	535.00
2	Road Transport	122.00	34.00	34.00	136.31	260.00	52.60
3	Inland Water Transport	5.00	0.50	1.00	1.00	10.00	2.00
4	Ore Transport	62.00	5.00	5.00	35.00	60.00	..
5	Tourism	32.00	9.00	9.00	39.61	385.00	166.00
	Total—(1 to 5)	1,521.00	4,14.50	4,15.00	1,660.24	2,255.00	755.60
V. (i) GENERAL EDUCATION AND CULTURAL PROGRAMMES							
1	Elementary Education	682.48	252.33	252.33	733.96	782.27	144.10
2	Secondary Education	284.97	105.73	105.73	336.34	572.00	136.64
3	University Education	398.00	94.17	94.17	337.37	1,065.00	290.44
4	<i>Teachers Training</i>						
	(a) Elementary	29.52	12.08	12.08	25.88	217.73	104.10
	(b) Secondary	10.03	5.29	5.29	11.77	28.00	9.10
5	Social Education	..	..	..	..	..	..
6	Other Educational Programme	14.00	13.30	13.30	34.00	141.00	22.60
7	Cultural Programmes	46.00	11.10	11.10	53.40	123.50	18.60
	Total—(1 to 7)	1,465.00	494.00	494.00	1,532.72	2,929.50	725.58
	(ii) Technical Education	116.00	30.00	30.00	96.63	151.00	37.97
	Total—(i and ii)	1,581.00	524.00	524.00	1,629.35	3,080.50	760.15

Rupees in lakhs

1	2	3	4	5	6	7	8
VI. HEALTH							
1	Medical Education	.. 311.46	79.00	79.00	401.31	310.00	148.83
2	Training Programme	.. 17.51	4.44	4.44	14.85	23.82	4.28
3	Hospitals and Dispensaries	.. 118.50	46.70	46.70	111.09	399.63	47.69
4	Primary Health Centres	.. 159.51	52.55	52.55	159.51	..	..
5	Indigenous System of Medicines	.. 50.00	23.01	23.01	58.28	130.00	31.11
6	Other programmes including Nutrition	.. 43.02	11.30	11.30	41.11	110.00	15.16
	Total—(1 to 6)	.. 700.00	217.00	217.00	786.15	973.45	247.07
VII. WATER SUPPLY & SANITATION							
1	Urban—						
	(a) Water Supply	..					
	(b) Swerage & Drainage Sanitary Latrine and Capital Project.	..					
		.. } 514.00	176.00	206.19	468.55	1232.00	359.56
2	Rural—						
	(a) Piped Water Supply including Tube-wells	.. 136.00	28.80	41.90	149.10	..	..
	(b) Wells & Hand-pumps	.. 150.00	50.20	50.20	160.21	400.00	80.00
	Total—(1 & 2)	.. 800.00	255.00	298.29	777.86	1632.00	439.56

VIII. HOUSING

1	Subsidised Industrial Housing	..	49·05	8·00	8·00	24·74	150·00	30·00	
2	Low Income Group Housing	..	92·00	26·00	26·00	80·04	50·00	10·00	
3	Village Housing Projects	.	53·95	24·00	24·00	52·18	240·00	50·16	
4	Slum Clearance	..	15·00	15·00	15·00	47·00	20·00	4·00	
5	Others (including housing in State Capital)	..	565·00	123·00	123·00	452·95	560·00	89·50	
Total—(1 to 5)			..	775·00	196·00	196·00	656·91	1020·00	183·66

IX TOWN PLANNING & URBAN DEVELOPMENT

1	Town Planning	}	50·00	7·00	7·00	22·16	60·00	12·00	
2	Urban Development			11·00	11·00	73·14	40·00	8·00	
Total—(1 & 2)			..	50·00	18·00	18·00	95·30	100·00	20·00

(Rs. in lakhs)

1	2	3	4	5	6	7	8	9
X WELFARE OF BACKWARD CLASSES								
1 Scheduled Tribes—								
(a) Education	..	230·00	77·99	77·99	260·96	392·00	73·15	
(b) Economic Uplift	..	32·50	17·83	17·83	53·52	233·75	34·30	
(c) Housing, Health & other Schemes	..	19·00	3·98	3·98	16·60	15·00	2·40	
2 Scheduled Castes—								
(a) Education	..	81·50	24·90	24·90	80·45	48·00	8·00	
(b) Economic Uplift	..	2·50	1·50	1·50	2·57	31·25	4·88	
(c) Housing, Health & other Programmes	..	19·50	3·80	3·80	16·94	5·00	0·94	
3 OTHER BACKWARD CLASSES—								
(a) Education	..	..	..	..	..	..	..
(b) Economic Uplift	..	..	..	..	..	..	..
(c) Housing, Health and Other Schemes	..	..	..	..	..	..	..
Total (1 to 3)	..	385·00	130·00	130·00	431·04	725·00	123·67	
XI SOCIAL WELFARE								
1	Child Welfare	}	5·00	1·25	1·25	3·08	3·00	0·60
2	Women Welfare							
3	Social defence	..	6·50	1·05	1·05	2·89	10·00	2·84
4	Welfare of physically and mentally handicapped.		6·00	1·20	1·20	4·00	9·00	1·80

5	Grants-in-aid to Voluntary Organization	..	2.50	0.50	0.50	2.51	3.00	0.60
6	Training and Administration	..	..	..	..	..	..	..
7	Others	..	..	..	..	..	..	..
Total (1 to 7)		..	20.00	4.00	4.00	12.48	25.00	5.84
XII. (a) Craftsman Training		..	52.00	13.02	13.02	50.14	100.00	18.37
(b) Labour and Labour Welfare		..	18.00	9.98	9.94	16.81	95.00	17.00
XIII. Public Co-operation		..	1.00	1.00	1.00	1.00	3.00	0.60
XIV. Information & Publicity		..	25.00	9.00	9.00	27.61	50.00	19.67
XV. Planning Machinery Including Evaluation		..	3.00	3.50	3.50	4.99	25.00	5.00
XVI. Statistics		..	35.00	9.00	9.00	31.12	173.80	34.96
XVII. Government Press		..	65.00	30.00	30.00	64.31	115.00	19.00
XVIII. Development of Infrastructure		..	..	..	..	..	3200.00	400.00
Total—State Sector		..	22260.00	6469.00	6551.49	25633.93	61997.97	11479.97

(Rs. in lakhs)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
MINIMUM NEEDS PROGRAMME								
1	Elementary Education	..	712·00	264·41	264·41	759·8	5990·00	1887·97
2	Primary Health Centres	..	159·51	52·55	52·55	159·51	1400·00	345·16
3	Rural Water Supply	..	136·00	28·80	41·90	149·10	2500·00	500·00
4	Rural Roads—							
	(i) For villages with 1500 & above population		175·00	59·51	59·51	275·87	3500·00	814·40
	(ii) For clusters	..	..	..	..	..	1374·00	274·80
5	Rural Electrification	..	605·00	413·00	413·00	1312·50	1892·00	400·00
6	House-sites for landless labourers	..	..	..	..	..	1000·00	200·00
7	Slum Improvement	..	15·00	15·00	15·00	47·00	65·00	20·00
8	Nutrition—							
	(i) SNP (Supplementary Feeding Programme)	..	410·28	211·70	211·70	400·47	1890·00	240·00
	(ii) Midday-meals Programme for School Children.		134·88	26·00	26·00	133·80	2000·00	352·00
	Total	..	2347·67	1070·97	1084·00	3238·44	21611·00	5034·33
	Grand Total	..	..	..	..	..	83608·97	16514·30

NOTE—1. *In addition a sum of Rs. 1,000 lakhs has been provided in the State Plan for general education for elementary education thereby bringing the total outlay to Rs. 6,990 lakhs.

2. The figures shown in columns 3—6 under the Minimum Needs Programmes are included in the corresponding columns under the general programmes.

Annexure III

Physical programmes—Targets and achievements

Serial No.	Item	Unit	1968-69 level	Fourth Plan		Level expected during 1973-74	Fifth Plan Targets		
				Targets	Likely achievement		Total	1974-75	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
I. AGRICULTURE AND IRRIGATION									
1	Area under Forests	..	Thousand hectares.						
	(i) Area under quick growing species.	..	Ditto	20.4	15.2	15.0	35.4	28.0	4.0
	(ii) Area under economic plantation for commercial uses.	..	Ditto	38.4	14.8	14.2	52.6	28.0	4.0
	(iii) Area under fuel plantations.	..	Ditto	10.9	6.4	4.0	14.9	12.0	2.0
	Total area under Forest	..	Ditto	69.7	36.4	33.2	102.9	68.0	10.0
	(iv) Others—communication	..	..	6.76	317	397	7.1	1.85	..
2	Area under orchards	..	Ditto	..	..	..	..	..	..
3	Net cropped area	..	Ditto	2184.6	9.8	9.8	2194.4	2220.7	2196.9
4	Gross cropped area	..	Ditto	2717	49.0	49.0	2860.7	3124.3	2922.2

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
5. Irrigated Area under Lift Irrigation—									
	(i) Net	.. (Thousand hectares).	} 11.33	28.20	18.39	29.72	358.7	45.3	
	(ii) Gross	.. Ditto							
6 Area under Minor Irrigation—									
	(a) New area (Potential added)	.. 000' Hect.	180.00	50.6	59.94	239.94	65.00	8.00	
	(b) Depreciation on existing works.	Ditto	..	Nil	..	Nil	..	..
	(c) Total potential available	... Ditto	180.0	50.6	59.94	239.94	65.00	8.00	
(d) Utilisation—									
	(i) Net	.. (Thousand hectares).	145.8	..	..	193.8	45.50	5.60	
	(ii) Gross	.. Ditto	180.00	..	..	239.94	65.00	8.00	
7 Area under major and medium irrigation—									
	(a) Potential	.. Ditto	625.19	232.61	256.10	871.34	1170.19	..	
(b) Utilisation—									
	(i) Net	.. Ditto	391.18	160.29	171.51	562.69	761.16	..	
	(ii) Gross	.. Ditto	558.87	271.98	285.46	844.33	1170.19	..	

8 Foodgrains

(i) Khariff

(a) Total area	.. Ditto ..	4655·0	273·0	45·0	4700·0	5,135·0	5,045·00
(b) Irrigation area	.. 000' Hect.	720·00	392·00	245·00	965·00	3723·00	2360·00
(c) Production	.. 000' tonnes	4164·00	1036·00	236·00	4300·00	5347·00	4500·00

(ii) Rabi—

(a) Total area	.. 000' Hect.	966·00	600·00	234·00	1200·00	1615·00	1250·00
(b) Irrigated area	.. Ditto	147·00	129·00	123·00	270·00	720·00	500·00
(c) Production	.. 000' tonnes	557·00	1243·00	1143·00	1700·00	2653·00	1900·00

Foodgrains (Total)

(a) Total area	.. 000' Hect.	5621·00	870·00	279·00	6127·00	6800·00	6295·00
(b) Irrigated area	.. Ditto	867·00	521·00	368·00	1235·00	..	..
(c) Production	.. 000' tonnes	4721·00	2279·00	1279·00	6000·00	8000·00	6221·00

9 Area under Commercial crops
(including tea and tobacco
crop-wise)

(a) Total	.. 000' hect	286·00	134·00	64·60	350·00	530·00	420·00
(b) Irrigated area	.. Ditto	10·00	30·00	30·00	40·00	300·00	220·00
(c) Production	.. 000' tonnes	170·00	130·00	1,271·00	297·00	486·00	337·00

Jute & Mesta

(a) Total	.. 000' hect	67·00	34·00	25·00	92·00	120·00	100·00
(b) Irrigated area	.. Ditto	25·00	25·00	25·00	50·00	80·00	60·00
(c) Production	.. 000' tonnes	410·00	230·00	139·00	549·00	940·00	660·00

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sugarcane								
(a) Total	.. 000' Hect.	37.00	15.00	15.00	40.00	60.00	43.00	
(b) Irrigated area	.. Ditto	37.00	15.00	15.00	40.00	60.00	43.00	
(c) Production (Interms of gur)	.. 000' tonnes	21.00	89.00	39.00	250.00	300.00	258.00	
10	Area Under High Yielding varieties	000' Hect.						
	Wheat	.. Ditto ..	3.8	20.2	76.2	80.00	200.00	..
	Paddy	.. Ditto ..	144.4	855.6	505.6	650.00	1600.00	..
	Jowar	.. Ditto ..	0.9	5.1	3.2	4.1	20.00	..
	Bajra	.. Ditto ..	0.1	..	..	..	..	..
	Maize	.. Ditto ..	4.6	35.4	3.9	8.5	40.00	..
	Total	.. Ditto ..	153.8	916.3	588.9	742.6	1860.00	..
11	Area Under Improved varieties							
	Area	.. Ditto ..	2080.00	2200.00	1754.00	3834.06	..	..
12	High Yielding varieties seed distributed	000 'tonnes						
	Wheat	.. Ditto ..	0.88	8.0	8.0	8.0	20.00	10.00
	Paddy	.. Ditto ..	7.2	40.3	40.3	47.5	80.00	54.5
	Jowar	.. Ditto ..	0.02	0.05	0.05	0.07	0.02	0.01
	Maize	.. Ditto ..	0.07	0.29	0.29	0.36	0.07	0.39

13	Improved varieties seed distributed 000' tonnes crop/Quality.								
	(i)	}	Ditto	..	..	..	8.25	12.00	..
	(ii)								
	etc.								
14	Fertilisers consumed—								
	Nitrogenous (As N)	..	Ditto	16.00	114.00	40.00	56.00	175.00	..
	Pheophatic (As Ps Os)	..	Ditto	5.00	0.45	13.00	18.00	80.00	..
	Potassic (K-2 O)	..	Ditto	0.23	2.77	5.07	8.00	40.00	..
15	Area under Green Manure	..	Ditto	810.00	1690.00	1690.00	2500.00	6000.00	..
16	Urban Compost distributed	..	Ditto	42.00	58.00	3.00	45.00	100.00	55.00
17	Area covered by Plant protection	..							
	(i) Food Crops	}	Ditto	164.00	1036.00	1036.00	1200.00	3000.00	700.00
	(ii) Commercial Crops								
	(iii) Horticulture								
	Total								
18	Soil Conservation on Agriculture Land		Ditto	11.20	16.80	16.00	27.20	50.00	10.748
19	Soil Conservation in catchment area of river valley projects.		Ditto	4.60	23	17.5	22.11	50.00	..
20	Area consolidated	..	Ditto	..	113	113	113	895	114

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
21	No of Regulated Markets	..	Nos.	30	5	5	35	20 Main 20 subsidiary	4
22	Agricultural implements distributed through Agro-Industries Co-operation.	..	Nos.						
	(i) Pumpsets	..	Do.	1,000	900	500	1500	..	..
	(ii) Power Tillers	..	Do.	32	425	268	300	..	..
	(iii) Tractors	..	Do.	..	..	..	30	..	..
23	Animal Husbandry	..	Nos.						
	(i) Veterinary Hospitals Dispensaries..	..		341	25	25	366	50	10
	(ii) Intensive Cattle Development Blocks	..		1 big size	2	2	3	2 Medium sized project	2 New project
	(iii) Artificial Insemination Centres	..		286	80	80	366	100 Centres	20 Centres
	(iv) Stockmen Centres	..		1125	50	50	1175	120 Centres	15 Centres
24	Key Village Blocks	..	Nos.						
	(a) Established	..		17	7	7	24	8 Units	1
	(b) Expanded	..		2	2	2	4	..	..
25	Cattle Breeding Farms established	..	Nos.	10	5	3	13	..	..
26	Sheep Breeding Farms established	..	Nos.	1	..	..	1	1	1
27	Sheep and Wool Extension Centres	..	Nos.	..	..	..	..	..	..

28	Sheep Rearing Grading & Marketing ..	Nos.	..	..	..	..	..	..
29	Production of Animal Products ..	Tonnes						
	(a) Milk/Milk Products ..	000' Tonnes	180	10	15·88	195·88	206·00	..
	(b) Meat ..		..	..	..	..	..	..
	(c) Wool ..		..	..	..	..	..	..
30	Number of Government Poultry Farms established.	Nos.	7	2	2	9	—	..
31	Number of Poultry Co-operatives ..	Nos.	..	2	2	2	..	..
32	Number of Poultry of Farmers trained..	Nos.						
	(i) Short-term course ..	Nos.	..	..	..	..		..
	(ii) Long-term course ..	Nos.	—	..	..	..	..	..
33	Intensive Egg and Poultry Production-cum-Marketing Centres.	Nos. Centres	2	..	..	2	1	1
FISHERIES—								
34	Mechanisation of Boats ..	Nos.	56	100	66	122	400	34
35	Trawlers procured ..	Nos.	—	4	4	4	20	2
36	Cold Storages for storing fish ..	Nos.	7	—	4	11	18	2
37	Co-operative Marketing ..	Quantity	..	..	..	..	15	5
38	Landing and Berthing facilities provided in the harbours.	Nos.						
	(a) Major ports ..	Nos.	..	1	1	1	4	1
	(b) Minor Ports ..	Nos.	..	7	1	1	6	2

1	2	3	4	5	6	7	8	9	10
39	Loans advanced to fishermen's Co-operatives.	(Rs. Crores)	..	..	..	..	0.35	0.01	
40	Fingerlings distributed	.. (in Millions)	23.5	16.50	11.5	35.0	239.00	40.00	
41	No. of fish-seed farms established	.. Nos. ..	..	5	5	5	313	22	
42	Fish production	.. 000'							
	(i) Inland	.. M. T. ..	15.00	15.00	8.00	23.00	35.0	23.00	
	(ii) Marine	.. M. T. ..	10.00	17.00	7.00	17.00	45.0	18.65	
II. CO-OPERATION									
(i) Primary Co-operative Societies (Agricultural credit)—									
	Number	.. ..	4471	3323	3323	3323	3350	3323	
	Membership	.. 000' Nos.	1365	2000	1680	1680	2150	1775	
	Share Capital of members	.. Rs. crores	3.75	6.00	5.20	5.20	10.00	6.70	
	Deposits of members	.. Rs. crores	..	..	..	..	..	..
(ii) Agricultural credit—									
	(a) Short and Medium terms advances during the year.	Rs. crores	10.99	85.84	64.38	18.00	183.00	24.00	
	(iii) Amount outstanding at the end of the year.		18.29	34.00	34.00	8.00	75.00	41.00	
	(b) Long-term advances during the year	Rs. crores	2.12	47.46	20.04	6.50	62.00	8.00	
	Amount outstanding at the end of the year.	Rs. crores	6.06	50.00	20.00	2.00	62.00	25.00	

(iii) Primary Marketing Societies Business handled during the year.	Rs. in crores.		8·00	8·00	8·00	24·40	10·00
(iv) Processing Societies							
(a) Rice Mills	.. Nos.						
Business handled	.. Rs. in lakhs.	46	42	42	42	10	2
(b) Sugar Factories production	Nos. In lakh.	1	1	2	2	2	1
	In lakhs O. 11272 MT	0·30193	0·30193	0·4000	1·50	0·10	
(c) Cotton ginning and pressing Business handled.	Nos. Rs. lakhs.	..	..	..	..	2	1

III. POWER

(i) Installed Capacity	.. 000 (MW)	497·5	422·5	302·5	800·00	390·00	120·00
		(including 4·36 MW smallsunit)					
(ii) Electricity generated	.. 000 (M units)	1,420·00	9595	9595	2,308·00	17,336·00	2,921·00
(iii) Electricity Sold	.. 000 (M units)	1,250·00	8,524·00	8,524·00	2,039·00	15,219·00	2,548·00
(iv) Rural Electrification—							
(a) Villages electrified	.. Nos.	821	4506	9,552 (Plan & Non-Plan)	10,373	15,000	3,000
(b) Pump sets energised by electricity.	Nos.	477	1,800	2,592	3,069	1,00,000	10·000

1	2	3	4	5	6	7	8	9	10
IV. TRANSPORT									
1	Roads								
	(1) State Highways								
	(a) Surfaced	..	Km.	2,028	118	118	2146	..	..
	(b) Unsurfaced	..	Km.	151	55	30	30	..	..
2	Major District Roads								
	(a) Surfaced	..	Km.	4,102	508	352	4454	..	..
	(b) Unsurfaced	..	--	1,082	576	759	1,489	..	..
3	Other district roads								
	(a) Surfaced	..	Km.	955	156	171	1126	..	..
	(b) Unsurfaced	..	Km.	1344	1,202	1194	2367	..	..
4	Village roads—								
	(a) Surfaced	--	Km.	479	163	314	793	..	..
	(b) Unsurfaced	..	Km.	5606	5,435	5404	10,696	..	..
5	Total roads—								
	(a) Surfaced	..	Km.	7577	937	955	8,532	9,382	8,676
	(b) Unsurfaced	.	Km.	8,183	7,268	7,387	14,615	6,587	8,906
6	Rural roads under the Rural Engineering Organisation (Unsurfaced).		Km.	..	220	220	220	3,500	350

7 Vehicles owned by State Transport Undertaking/Corporation.—

(a) Trucks	..	..	—	—	..	..	..	..
(b) Buses	..	Nos.	406	137	123	529	200	50
(c) Taxis	..	..	—	..	..	..	..	..
(d) Others	—	..	..	..	..	..	..	—

R. (V) General Education Enrolment

(i) Classes I—V as percentage of population in age-group 6—11.

(a) Boys	..	per cent	88	100	90	90	105	93
(b) Girls	..	per cent	47	60	50	50	65	53
(c) Total	..	per cent	67	80	70	70	85	73

(ii) Classes VI—VIII as percentage of population in age-group 11—14.

(a) Boys	..	%	34	50	35	35	72.4	54.4
(b) Girls	..	%	8	15	14	14	44.0	18
(c) Total	..		21	32.5	24.5	24.5	58.2	36.2

(iii) Classes IX-XI as percentage of population in age-group 14 to 17.

(a) Boys	..	%	19	49	24	24	30	24.6
(b) Girls	..	%	3	13	6	6	10	6.5
(c) Total			11	31	15	15	20	15.5

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	(iv) Output of Matriculates per Higher Secondary per 10,000 of population.	10,000 population							
	(a) Boys ..		N. A.	N. A.	N. A.	N. A.	N. A.	N. A.	
	(b) Girls ..		N. A.	N. A.	N. A.	N. A.	N. A.	N. A.	
	(c) Total ..		14	25	24.4	24	30	25	
	(v) University/Collegiate enrolment. Total (Arts, Science & Commerce).	Ditto ..	2	2	2	2.2	2.5	2.2	
	Teachers								
	Percentage trained in	Per cent							
	(i) Elementary Schools ..		70	70	83	83	88	83	
	(ii) Secondary Schools ..		44	50	42	40	50	42	
	TECHNICAL EDUCATION								
	(i) Engineering Colleges—								
	(a) Number of Institutions ..	Nos.	2	..	2	2	..	..
	(b) Sanctioned annual admission capacity.	Nos.	520	..	520	520	..	..
	(c) Outturn ..	Nos.	464	..	464	464	..	..
	(ii) Polytechnics								
	(a) No. of Institutions ..	Nos.	8	..	8	8	..	..
	(b) Sanctioned annual admission capacity.	Nos.	1,235	..	1,235	1,235	..	..
	(c) Outturn ..	Nos.	415	..	415	415	..	..

R. VI Health—

Hospitals/Dispensaries	..	Nos.							
(a) Urban	..	Nos.	90 (H)	4 (H)	7 (H)	97 (H)	97 (H)		
			40 (D)	19 (D)	16 (D)	56 (D)	56 (D)		
(b) Rural	..	Nos.	114 (H)	1 (H)	3 (H)	117 (H)	117 (H)		
			258 (D)	167 (D)	254 (D)	512 (D)	512 (D)		
Beds—									
(a) Urban Hospitals/Dispensaries	..	Nos.	6,497	200	526	7,023	8,208	126	
(b) Rural Hospitals/Dispensaries (Including upgraded P. H. Cs.)		Nos.	3,565	312	312	3,877	5,437	..	
Primary Health Centres									
(a) Main Centres	..	Nos.	309	5	5	314	314	126	79
						(20 P. H. C. Buildings will be completed in fifth plan).			
(b) Sub-Centres	..	Nos.	742	2012	2,012	2012	..	..
Training of Nurses—									
Institutes	..	Nos.	4	..	..	3	..	..

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Annual intake	..	..	200	100	100	300	700	200
	Annual outturn	..	..	126	144	144	270	630	180
	Training of Auxiliary Nurse-mid-Wives								
	Institutes	..	..	11	6	6	17	..	..
	Annual intake	..	..	225	60	100	325	345	..
	Annual outturn	..	..	128	152	132	260	280	..
	Control of Diseases								
	T. B. Clinics	..	..	12	4	1	13	..	..
	Leprosy Control Units	..	..	8	20	19	27	..	..
	V. D. Clinics	..	..	13	3	3	16	58	16
	Filaria Units	..	..	5	20	14	19	2,865	509
	S. E. T. Centres	..	..	64	60	20	84	314	124
	Maternity and Child								
	Welfare Centres	..	..	177	..	..	177	..	..
	Medical Education								
	Medical Colleges	..	..	4	..	..	4	..	..
	Annual admission	..	..	452	(-)-27	(-)-27	425	525	525
	Annual outturn	..	..	393	(-)-13	(-)-13	380	485	485

WATER-SUPPLY AND SANITATION

(a) Urban Corporation Towns

(i) Augmentation of protected water supply	Millions	..	..	..	..	..	..	..
(ii) Population covered other towns (Piped water supply).	"	..	..	..	..	..	..	..
(i) Towns covered	Nos.	7	30	12	19	24	3	
(ii) Population covered	Millions	0.25	0.94	0.24	0.49	1.35	0.12	

(b) Rural Piped water supply

(i) Villages covered	Nos.	9	100	91	100	..	..
(ii) Population covered	Millions	0.04	0.35	0.35	0.39	

(c) Simple Wells

(i) Villages covered	Nos.	17,331	7,183	6,343	23,674	8,824	1,765	
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Urban Sewerage

(i) Augmentation/provision of sewerage schemes.	Nos.	1 (part) To be continued during the 5th Plan		
(ii) Population covered	Millions	..	..	..	0.339	(Full Cuttack town 0.33).		

8. HOUSING

(i) Industrial	No. of tenements.	2,292	676	571	2,863	2,500	500	
(ii) Slum clearance	Ditto	48	290	290	338	—	..	
(iii) Low income group housing	Ditto	2,560	739	579	3,139	335	67	

1	2	3	4	5	6	7	8	9
(iv) Village housing—No. of houses completed		No. of houses completed.	2328	1600	1443	3771	5000	1000
(v) M. I. G. Scheme	..	Nos. ..	460	436	477	937	200	40
(vi) Land acquisition and Dev.	..	(Area Dev. res. acquired) Hectares)	27·861 acres	3 acres of land acquired.	2 acres acquired.	29 acres of land acquired.	Not finalised	
(vii) Plantation—Labour housing	..	Nos. ..	3667 acres of land developed.	335 acres developed	234 acres of land developed.	390 acres of land developed.	..	..
(viii) Rental Housing Scheme	..	House ..	3353	837	899	4252	1700	250
Loan to Housing Board	..	..	..	..	..	..	535	107
IX TRAINING OF CRAFTSMAN INSTITUTIONS		Nos.	10	..	10	10	..	..
Intake	} existing	11 institutes	3744	120	120	3846	4150	36
Outturn			1078	1422	1122	2200	3000	40

BACKWARD CLASSES

(a) General Courses—Graduate/Post-graduate

(i) Scheduled Tribes	..	Boys/Girls	693/2	..	..	..	..
(ii) Scheduled Castes	..	11 ..	888/9	..	..	..	..
(b) Technical and Professional courses—							
(i) Scheduled Tribes	..	..	812	..	..	..	..
(ii) Scheduled Caste	..	..	590	..	..	..	..
(Pre-examination S. C. & S. T. training)	..	..	—	8	19	19 (S. C. & S. T.)	100 (S. T.)
(iii) No. of Girl's hostels	..	..	..	..	..	..	..
(iv) Girl's Education (Matric)	..	Nos.	61	5	5	95 Both Ann- ual and Supplemen- tary.	16 (Annual and Supple- mentary).

XI. VILLAGE & SMALL-SCALE INDUSTRIES

Industrial Estates	..	Nos.	..	100	110	110	664
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XII. INFORMATION & PUBLICITY

(a) (i) Number of districts having publicity	..	Nos.	14/27	14/23	14/22	..	14/23
Offices/information offices							
(ii) Number of districts without publicity	..	Nos.	..	..	..	..	..
(b) (iii) Number of field publicity units	..	Nos.	58	2	2	..	60
(iv) Number of taluks /subdivisions covered by field publicity units.	..	Nos.	56	4	4	..	60
(v) Number of Taluks/subdivisions not covered by field publicity units.	..	Nos.	2	..	..	..	..

CHAPTER 1·4

FINANCIAL RESOURCES

The size of the Fourth Plan was originally fixed at the low level of Rs. 222·60 crores. This was even less than the actual outlay of Rs. 225·00 crores during the Third Five-Year Plan. From the year 1970-71 the State's share in Centre's additional resources mobilisation was allowed to be utilised for plan purposes under certain conditions. This coupled with a higher order of internal resource mobilisation and negotiated and market borrowings of State Enterprises has increased the Fourth Plan outlay to Rs. 257 crores which constitutes a mere 9·8 per cent increase over the Third Plan outlay. Considering the fact of escalation of prices which has taken place during this period, the outlay in real terms falls below the level of the Third Plan period and has therefore been totally inadequate for the needs of the State.

2. The estimated public sector Fifth Plan outlay for the country as a whole is Rs. 35,595 crores compared to Rs. 16,774 crores for the Fourth Plan. Within this provision are included all outlays which directly or indirectly go to finance capital formation and such items as outlay on Government administrative and residential buildings, loans to Government servants for House Building purposes and major replacement, renewal and renovation expenditure which during the Fourth Plan used to be treated as non-Plan outlays. The basic objectives of the Plan include removal of poverty and attainment of balanced regional development. The plan, therefore, provides for fulfilment of certain minimum needs in the spheres of of elementary education, drinking water facilities, health services, nutrition, home sites for the rural landless and roads and electricity in rural areas for betterment of conditions of the socio-economically handicapped and backward sections of the Community.

3. Keeping these basic objectives of the Plan in view, the State Government have estimated a Plan Outlay of Rs. 836·09 crores during the Fifth Plan. In a recent communication from the Planning Commission, however, the size of the State Plan has been indicated to be Rs. 535·00 crores. The State Plan outlay of Rs. 257 crores during the Fourth Plan period works out approximately to 1·54 per cent of the total Public Sector Plan outlay during that period and on the same basis the size of the State Plan during the Fifth Plan period against the projected outlay of Rs. 35,595 crores seems to have been tentatively fixed at Rs. 535 crores. Total outlay of this order will not subserve the basic aim of removing disparity in regional development nor would this provide to the State which has the highest percentage of rural population below the poverty line and approximately 40 per cent of whose population belong to the Scheduled Castes and Scheduled Tribes and which has seriously lagged behind others in economic development the required trust in plan efforts.

4. In the Paper "Approach to the Fifth Plan 1974-79" the resources of the public sector have been computed by taking into account the resources available from the following component :—

- (1) Balances from current revenues of the Centre and the States
- (2) Additional resources mobilisable by the Centre and the State Governments and the Public Sector enterprises.
- (3) Net-market borrowings of the Central and the State Governments and the public sector enterprises.
- (4) The gross negotiated borrowings of the State Governments and the Public Sector enterprises.
- (5) Mobilisation of Small Savings
- (6) Net accumulations in the State Provident Funds
- (7) Transfers to Sinking Funds and other Funds from current revenues, net of expenditure from those Funds, and
- (8) Internal surpluses consisting of depreciation provision and the retained surpluses of public enterprises.

5. An exercise made by the State Government on the basis of the concept of resources for the Plan as spelt out in the Approach Paper puts the total resources available for the purpose of the State's Fifth Plan at Rs. 384.12 crores or Rs. 384 crores. The State Government estimates that the Central assistance for implementing the State's Fifth Plan inclusive of the Minimum Needs Programme, should aggregate at least Rs. 452 crores of which Rs. 216 crores approximately would be available for the Minimum Needs Programme and the remainder as Block assistance.

6. The following table gives an estimate of total resources for the State Plan.

TABLE I
Estimate of resources for the State Plan

(Rs. in crores)

Source	State Government	State Enterprises	Total
1	2	3	4
1. Balance from current revenues ..	..	..	..
2. Additional Resource Mobilisation	58.00	10.00	68.00
(a) Tax ..	34.00	..	34.00
(b) Non-tax ..	24.00	10.00	34.00
3. Market borrowings ..	26.00 (net)	51.30 (Gross)	77.30
4. Negotiated Borrowings ..	23.00	50.20	73.20
(a) R. B. I. ..	15.00	..	15.00
(b) L. I. C. ..	8.00	20.20	28.20
(c) Others ..	..	30.00	30.00
5. Savings Mobilisations ..	60.00	..	60.00
(a) Small Savings ..	40.00	..	40.00
(b) State Provident Fund ..	20.00	..	20.00
6. Other budgetary Savings ..	39.58	30.04	69.62
(e) Sinking Funds ..	39.08	..	39.08
(b) Depreciation Funds (net) ..	0.50	30.04	30.54
7. State's share in Centre's additional resources mobilisation.	36.00	..	36.00
Total—1 to 7	242.58	141.54	384.12
8. Central Assistance for State Plan..	451.97	..	451.97
(a) Minimum Needs Programme ..	216.11	..	216.11
(b) Block assistance ..	235.86	..	235.86
Total—Resources for State Plan.	694.55	141.54	836.09

Each item is explained below

Balance from Current Revenues

7. The non-plan revenue and capital accounts of the State have been characterised by chronic deficits for several years past. This is essentially due to a poor tax base, inadequate return from commercial irrigation and power projects and progressively increasing levels of non-plan non-developmental and development expenditure on account of debt service charges, inescapable commitments for revision of dearness allowance of Government employees Primary School teachers and employees of local bodies and aided educational institutions, and maintaining general administrative and developmental services created during the successive plan periods, and above all, expenditure connected with relief operations of the natural calamities.

8. At the commencement of the Fourth Plan the State had an accumulated overdraft of Rs. 21.42 crores from the Reserve Bank of India. Large non-Plan budgetary deficits were also foreseen during the Fourth Plan period. The State Government had urged upon the Fifth Finance Commission for adequate central devolutions keeping in mind the financial difficulties of the State arising from the backwardness of its economy and lack of industrialisation and urbanisation. The awards of the Fifth Finance Commission, however, left considerable uncovered gap in the non-plan revenue account of the State budget. Deficits in the non-plan capital account were inevitable on account of heavy repayment liabilities in respect of Central and other loans. The non-plan gap, during the Fourth Plan originally assessed by the Planning Commission to be Rs. 155.00 crores even after diversion to the non-plan capital account, market borrowings, small savings loans and provident fund accumulations receipts from which should be normally available as plan resources, is likely to reach Rs. 164.00 crores by present indications; and this is being covered by non-plan special accommodation loans from the Centre. There was, therefore, no contribution from the State's current revenues for financing the Fourth Plan.

9. During the Fifth Plan also, large deficits in the non-plan Revenue and Capital Accounts are foreseen. In the forecasts of Revenue Receipts and Expenditure presented to the Sixth Finance Commission, the State Government have estimated the gap on non-plan revenue account of the State to be Rs. 830.23 crores as shown in table 2.

TABLE 2

Estimate of Balances from Current Revenues at 1972-73 rates during the period 1974-79

Particulars (1)	Amount (Rs. in crores) (2)
I—Revenue Account	
A—Revenue Receipts—	
1. State taxes ..	223.71
2. Non-Tax Revenue ..	163.52
3. Non-Plan specific purpose grants from Centre ..	3.24
Total—(A)—Revenue Receipt ..	390.47
B—Revenue Expenditure—	
1. Non-developmental ..	469.29
2. Developmental ..	509.25
3. Fresh expenditure to level up standards of administration and other commitments such as Pay, D. A. revision etc.	242.16
Total—(B)—Revenue Expenditure ..	1,220.70
C—Balance from Current Revenue (A-B) ..	(—) 830.23

10. This computation does not take into account the State's anticipated devolution of Central taxes under the Sixth Finance Commission's awards. It, however, assumes revenues from tax and non-tax sources with reasonably higher rates of growth than the average growth rate of the years 1968-69 to 1972-73, greater realisation from water rates on the basis of more extensive and intensive use of the irrigation potential already created and realisation of interest charges from the State Electricity Board and other debtors to State Government.

11. The non-plan capital account of the State will also not balance as repayment liabilities, particularly to the Centre will far exceed the estimated receipts by way of (a) Recoveries of loans and advances, (b) Appropriations from revenue other than sinking funds for reduction or avoidance of debt, and (c) miscellaneous deposits and advances. The deficit during the five-year period, 1974-79 is estimated to be Rs. 109.21 crores as shown in Table 3. This calculation assumes that the market borrowings (net) Small Savings and Provident Fund accumulation will be available for financing the Fifth Plan of the State, in conformity with the concept of resources for the Public Sector.

TABLE 3

Estimate of gap in State's non-plan Capital Account

Particulars	Amount (Rs. in Crores)
(1)	(2)
A—Receipts	
1. Recoveries of Loans and Advances ..	39.97
2. Other appropriations for reduction or avoidance of debt ..	94.87
3. Miscellaneous deposits and advances ..	(—)0.22
4. Miscellaneous non-plan loans ..	2.50
5. Deposits of Local Funds ..	(—)5.96

Total—A—Receipts	131.16
B—Disbursement	
1. Repayment of Loans included up to the end of 1973-74	
(a) To Centre	230.73
(b) To Others	6.34
2. Non-Plan Loans and Advances	3.25
3. Miscellaneous Non-Plan outlay	0.05

Total—B—Disbursement ..	240.37

C—Non-Plan Capital Gap. B—A—	.. 109.21

The State Government have urged upon the Sixth Finance Commission to recommend a suitable scheme of devolution of taxes, grants-in-aid and debt relief as would result in balancing the non-plan Revenue and Capital Accounts, and hope that a favourable award would be received. In any event, the likelihood of there being a surplus from current revenues for financing the plan is rather remote.

Additional Resource Mobilisation by the State Government and State Enterprises

12. The additional resource mobilisation by the State Government and State enterprises during the Fourth Five-Year Plan period, is expected to reach Rs. 39.42 crores. In the Fifth Plan period, a much greater effort has to be made to mobilise additional resources of a substantially higher order to sustain and make possible the projected developmental outlay of Rs. 836 crores. At the same time, the State Government are conscious of the constraints in this direction due to the low elasticity of sources of tax revenues available to States, and the low *per capita* income, and poverty of nearly 70 per cent of the rural population in the State. A balance has also to be struck between increase in and revision of structure of various direct and indirect taxes and non-tax sources and the need to grant incentives for attracting private capital investment. Keeping these in view, the State Government have estimated additional resources mobilisation of Rs. 68 crores during the Fifth Plan period. This is made up of (a) Direct Taxes Rs. 20.95 crores (b) Indirect Taxes Rs. 13.05 crores (c) Non-Tax revenue of State Government Rs. 24.00 crores and (d) Non-tax revenue of State enterprises Rs. 10.00 crores.

Borrowings of the State Government

13. *Market Borrowing (net)* - On the basis of a growth rate of 10 per cent over the estimated level of net borrowing of the 1973-74 the Planning Commission has assessed the net total loan to be raised from the open market to be Rs. 26 crores (net), during the period 1974-79 though considering the total net market borrowing of Rs. 4,317 crores by the central and State Governments (as indicated in the Approach document), this State would qualify for a higher order of net receipts from this sources.

14. *Negotiated Borrowings*—The Planning Commission in a discussion held in April, 1973 indicated that on the basis of a growth rate of 10 per cent on the level of estimated borrowings in the year 1973-74 the State would be able to get the negotiated borrowing of Rs. 8 crores and Rs. 15 crores from the L. I. C. and the Reserve Bank of India respectively.

Savings Mobilisation

15. *Small Savings*—The Planning Commission has assessed the States share in Small Savings collection at Rs. 40 crores during the Fifth Plan, assuming annual increase of Rs. 1 crore over the level of 1973-74 which will be consistent with the past trends and the overall magnitude of savings mobilisation estimated in the Approach document.

16. *Provident Fund*—The net accumulation during the Fifth Plan is estimated at Rs. 20.00 crores, by assuming approximately 7.5 per cent growth over the level of 1973-74. This is an achievable target.

Other Budgetary Savings

17. *Sinking Fund*—It has been indicated in the Approach document that transfers from the Revenue Account to Capital Account represent budgetary savings and credit has been taken of this as Plan Resource. Consistently with this concept, in the calculation of State Plan Resources, credit has been taken of transfers of the order of Rs. 39.08 crores to be made to the Sinking Funds during the Fifth Plan period.

18. *Depreciation Funds*—The gross transfer to these funds during the period 1974-79 is estimated to be approximately Rs. 2.00 crores. A modest sum of Rs. 0.50 crores is expected to be available, after meeting normal replacement charges, as plan resources.

State Shares in the Centre's Additional Resource Mobilisation

19. Additional resource mobilisation by the Centre is entirely taken as Plan resource and it follows that the State's share in such resources on the basis of the formula of sharing to be recommended by the Sixth Finance Commission should constitute Plan resources of the State. The Fourth Plan target of additional resource mobilisation of the Centre was of the order of Rs. 2,100 crores. Out of this the State is likely to receive Rs. 18 crores by the end of the year 1973-74. Assuming that the pattern of additional resource mobilisation of the Centre during the Fifth Plan to be substantially the same as during the current Plan, then, on the basis of the current formula of sharing, the State's share in the Centre's estimated additional resource mobilisation of Rs. 4,150 crores during the Fifth Plan period will be at least Rs. 36 crores.

Resource of the State Enterprises

20. *Additional Resource Mobilisation of the State Enterprises*—The power generating assets of the Multipurpose River Valley Schemes and other schemes have been transferred to the State Electricity Board. Therefore, revenue from electricity tariff forms a part of Board's own resource. The increase in resources of the Board on account of increase in tariff is estimated at Rs. 10 crores as mentioned earlier.

21. *Internal Surplus of State Enterprises*—The internal surplus of the State Electricity Board is estimated at Rs. 30.04 crores as shown in Table 4.

TABLE—4
Internal Surplus of the State Electricity Board

Items (1)	Amount (Rs. in Crores) (2)
1. Depreciation Reserve ..	38.16
2. General Reserve ..	6.88
3. Miscellaneous Debts & Deposits ..	4.50
4. Consumer's Deposits ..	2.00

5. Total (1+2+3+4) ..	51.54

6. <i>Deduct</i> —	
(a) Repayments	
(i) Market borrowing ..	4.31
(ii) To L. I. C. ..	13.39
(iii) To R. E. C. ..	1.80
(b) Deposit works ..	2.00

Total (a+b) ..	21.50

7. Net Surplus (5 - 6) ..	30.04

22. *Negotiated Borrowings*—(a) *L. I. C.*—During the discussion in April 1973, it was indicated by the Planning Commission that the State Electricity Boards' negotiated borrowings may be assumed at Rs 20.20 crores during the Fifth Plan on the basis of a growth rate of 10 per cent over the level likely to be reached in 1973-74.

(b) *Rural Electrification Corporation*—The Planning Commission has assessed availability of loans from the Rural Electrification Corporation for execution of Rural Electrification Schemes at Rs. 30.00 crores and treated this as Plan resource of the Board during the Fifth Plan period in its Circular No. I-10(11) (5)/72 P. & E., dated the 7th May 1973.

23. *Market Borrowings*—On the basis of a rate of progression of 10 per cent over the level to be reached in 1973-74, the Electricity Board should be able to raise a gross loan of Rs. 51.30 crores during the Fifth Plan period. The assessment of the Planning Commission is of the same order.

24. *Central Assistance*—(a) In the “Approach Paper” it has been indicated that Rs. 33.00 crores will be set apart for the Minimum Needs Programme, and that funds for this programme will be provided on a priority basis. The State Government have presented schemes for a total outlay of Rs. 216.11 crores under this programme, for implementation of specific projects described in greater detail in the appropriate chapter. The State Government hope that the programme and provision of funds will be approved by the Central Government for the reasons mentioned in detail.

(b) The existing formula of Central Assistance for the State Plan Schemes is rather harsh to the under developed States. It does not take into account the special characteristics of the population of this State where about 40 per cent of the total are tribals and scheduled castes. It does not also take into account the abject poverty of more than 64 per cent of the population living below the poverty line. The earmarking for spill-over projects discriminates in favour of the developed States inasmuch as these States get a premium for having large spill-overs to the next Plan. Taking these into account the State had suggested a new formula for allocation of Central Assistance. The State's view point is that 30 per cent of the Central Assistance should be shared on the basis of general population, 20 per cent on the basis of scheduled tribes and scheduled castes population, 10 per cent on the basis of population living below the poverty line, 20 per cent on the basis of *per capita* income below the national average, 10 per cent on the basis of tax efforts and 10 per cent on the basis of identified special problems inclusive of natural calamities.

(c) The total Central Assistance envisaged by the State Government is Rs. 452 Crores. Assistance of this order is the minimum necessary to maintain at least the tempo of developmental efforts reached during the Fourth Plan.

CHAPTER 1-5

ROLL OF CREDIT INSTITUTIONS

The dimensions of credit from Co-operative Institutions have been dealt with in Chapter 2-4. Here in this chapter, the assistance from Commercial Banks and term-lending institutions like Agricultural Refinance Corporation, Industrial Development Bank of India, Industrial Finance Corporation and State Financial Corporations is considered.

2. The Commercial Banks had less than 100 branches in Orissa in the beginning of 4th Plan. Now there are 217 branches. It is likely that there will be nearly 300 branches of Commercial Banks by the end of 4th Plan. Even then, the average population per branch in Orissa is highest among the States. The State Government is pressing to the Government of India to increase rapidly the number of branches.

3. With the existing branches, the Commercial Banks have done well in deposit mobilisation. By June 1973 their deposits have gone up to Rs. 70 crores. Most of the branches have skeleton staff. Specially trained Field Officers for Rural Credit are not adequate. This has resulted in a relatively small investment by the Commercial Banks in Agriculture, namely Rs. 1.06 crores to 12,000 persons as production loans. Term-loan in Agriculture was given up to Rs. 44 lakhs to 1,200 persons. Besides this, 900 persons received Rs. 32 lakhs as indirect loans in Agriculture for purposes such as trading in fertiliser. On the whole, the Commercial Banks have 14,000 Agricultural Accounts amounting to Rs. 1.82 crores.

4. In 1972-73, there has been considerable improvement both quantitatively and qualitatively in the agricultural finance given by the Commercial Banks. The staff are gaining experience for handling this. The Banks have responded sympathetically and quickly to the priorities set by the State Government for agricultural financing. It is hoped that the tempo will increase rapidly even in the last year of the 4th Plan.

5. These Banks have assisted 1,200 small scale industries with a loan of Rs. 3.10 crores. In this case, the State Bank of India particularly has an excellent record for over a decade in assisting small scale industries.

6. There are 526 accounts for transport operators involving Rs. 1 crore. About 3,300 small traders have also taken Rs. 1.19 crores as loan. In 660 cases, self-employed persons have taken Rs. 20 lakhs as credit from the Commercial Bank.

7. In addition to this effect in the priority sectors, the Commercial Banks have continued to lend to the major and medium industries, both for block capital and working capital. This is of the order of Rs. 3 crores.

8. As against Rs. 70 crores collected as deposit, the Commercial Banks have invested Rs. 35 crores as loans by the end of June 1973. Besides, these Banks have also subscribed to the loans of the State Government debentures of the Electricity Board and the Land Development Bank.

9. The Agricultural Refinance Corporation has sanctioned 19 schemes worth Rs. 6.83 crores for land development, horticulture, tractors and fisheries. Of this, the State Bank of India is seeking refinance for Rs. 1.73 crores and the balance is for the Land Development Bank. Ten more schemes costing Rs. 2.25 crores are pending with A. R. C. for sanction. It is expected that A. R. C. would sanction over Rs. 0 crores by the end of the 4th Plan. Orissa has been slow to take advantage of the A. R. C. schemes in the initial stages. Adequate administrative steps have since been taken to ensure that this tempo improves.

10. The Industrial Development Bank of India and Industrial Finance Corporation have been assisting major and medium industries in Orissa. The State Finance Corporation has assisted 251 small scale industries for term loans of the order of Rs. 4.3 crores.

11. The progress in the Fourth Plan may be considered reasonably satisfactory. Adequate ground work has been prepared. Different Departments of Government and the Banks have come together in formulating programmes which are bankable. With this experience, it is hoped to build up a more ambitious programme of drawing finance from institutional sources during the Fifth Plan.

12. With this end in view, different Departments of Government have made or proposed to make certain structural changes in their organisation so as to enable them to avail of this source of funds. For instance, Irrigation & Power Department is setting up a Lift Irrigation Corporation. The Animal Husbandry Department proposes to have a Dairy Development Corporation. The Tribal & Rural Welfare Department has set up a Tribal Development Co-operative Society for marketing on agricultural and forest produce of the tribals. In Fisheries also, similar attempt is being made to avail of loans for boats for fishermen.

13. Already number of State-owned Corporation exist in the State. Examples are Industrial Development Corporation, Agro & Small-scale Industries Corporation and Transport Corporations.

14. In each of these cases, a Master Plan has been prepared for development in the particular sector. For example, in the Lift Irrigation, a Master Plan for Rs. 150 crores has been prepared covering one-third of the State for development of groundwater through dug wells, pumpsets, diesel engines and tube-wells. This has been presented to the World Bank. In the first phase covering the first three years of the Fifth Plan, it is proposed to undertake a scheme of the order of Rs. 50 crores. In the second phase, it should be possible to utilise Rs. 50 crores even in the later half of the Fifth Plan. Of this Rs. 100 crores, Lift Irrigation Corporation will borrow Rs. 60 crores from Commercial Banks and the balance will be borrowed by individual farmers for digging wells, purchasing pumpsets and diesel engines from Land Development Bank and Commercial Banks.

15. For Chilka Development, a Master Plan has been prepared for Fisheries, Port development and tourist development costing Rs. 13 crores. Of this, Rs. 10 crores is bankable. This has also been presented to the World Bank.

16. Similarly, the Dairy Development Corporation has schemes for borrowing Rs. 5 crores from Banks, of which Rs. 1 crore will be as working capital and Rs. 4 crores as term finance. In the Fisheries, Rs. 3 crores are needed for purchase of boats. In the Agro Industries Corporations, for purchasing 100 crawler tractors and for setting of agricultural processing units and servicing stations for Fisheries, there will be need for Rs. 1 crore of term loan and Rs. 2 crores of working capital loan. For marketing of fertiliser and procurement of foodgrains and setting up incidental storage and transport capacity, the Orissa State Co-operative Marketing Society would need Rs. 1 crore as term loan and Rs. 30 crores as working capital. Similarly, Orissa Tribal Development Co-operative Society will need for marketing of agricultural and forest produce of tribals an incidental storage and transport, Rs. 1 crore on term loans and Rs. 2 crores as working capital. In the case of Small-Scale Industries, Rs. 20 crores are expected as term loans from the State Finance Corporation and Rs. 10 crores as working capital from Commercial Banks. The Industrial Development Corporation and Orissa Mining Corporation have schemes of drawing Rs. 35 crores and Rs. 3 crores respectively from the Banks. The Forest Corporation also needs Rs. 1 crore for its operations. Thus, over Rs. 150 crores will be needed by these institutions for the programmes which they have already drawn up in the Fifth Plan. In addition to this, Commercial Banks are expected to lend directly to Agriculture at least Rs. 10 crores. Major and medium industries in the private sector are likely to draw Rs. 20 crores as block loans.

17. In the Fifth Plan, therefore, it is expected to utilise about Rs. 200 crores of institutional finance in different activities. Necessary changes in the administrative structure are being made and experience in project formulation is being acquired at different levels to achieve this objective.

CHAPTER 1·6

REGIONAL IMBALANCES AND TRIBAL AREAS

The economic backwardness of Orissa is proverbial. Any set of indicators taken either individually or campositely show the relative low position of the State. All schemes for development process have to take into account the serious intra-regional imbalances and the 38 per cent of tribal and scheduled caste population.

2. The intra-regional disparities are naturally of historical origin, complicated by certain geographical situations. Part of the State has to entirely depend upon rainfall conditions which are irregular although heavy, or lean and sporadic. In 1972 out of the thirteen districts in Orissa, three districts, viz. Kalahandi, Keonjhar and Koraput do not have any major and medium irrigation projects. Out of the other ten districts, irrigation facilities are concentrated in three districts, viz. Cuttack (34·53 per cent), Sambalpur (21·14 per cent) and Puri (14·79 per cent). The rest of the 30 per cent of irrigation is shared by the other seven districts.

3. At present, only about 16 per cent of the cultivated land receives the benefit of irrigation. The failure of monsoon, and at frequent intervals, aggravates the situation in the rests of the region. Assuming that drought-prone area is the one where drought conditions prevailed for five years or more during the last seven years, it is noticed that as many as 242 C. D. Blocks out of 314 are drought-prone. The drinking water facilities are also scarce in some of these regions. In places like Padampur, Boden, Sinapali and Himgiri the water table is low and dug-wells have not succeeded. Due to inadequate ground water survey, it has not been possible to tap drinking water sources. With neither irrigation facilities nor even drinking water, the agricultural activities are weak and the general stamina of the people enervated.

4. For according incentives for industrialisation, seven out of the thirteen districts have been identified as relatively backward. Concessional rate of interest from lending institutions, as also 10 per cent subsidy, have been in vogue by the Government of India but due to the very inadequate infra-structure facilities, it has not been possible for any Industries—small, or big—to avail of these special facilities. The attempts to alleviate the industrial backwardness have been thus frustrated by the very physical backwardness of the areas.

5. Out of the 22 million population of Orissa, 38 per cent constitute the scheduled tribes and scheduled castes. The scheduled tribes are mostly concentrated in Mayurbhanj, Phulbani, Koraput, Keonjhar and Sundargarh districts. A Survey of the State Tribal Research Institute during 1967-68 revealed that the *per capita* income of some of the backward tribals is as low as Rs. 158 at current prices. Although 80 per cent of the total outlay of the Backward Class Welfare Sector is invested in education, only about 1,100 students out of 33,000 students attended the schools in Ganjam district, 775 out of 8,700 in Koraput district, 854 out of 6,700 in Kalahandi district. Their overall percentage is also as low. Taking into account the percentage of tribal population, percentage of illiteracy, agricultural labour and holdings below one acre of land and evolving a composite indicator, it is noticed that about 35 out of the 52 Tahasils where the tribals generally predominate have been located to be backward and *inter se* backwardness is also established in Appendix-I. It is also noticed that landlessness among the tribals is the highest. The task of putting them into an agriculture occupational pattern is, in itself, a complex socio-economic problem due to their peripatetic nature and habits of shifting cultivation. Even among the tribal population, certain disparities in economic standards have emerged.

6. It has been possible for certain tribals to absorb the various benefits sought to be introduced by Government, while certain others, such as the Juangs of Keonjhar district, Bauri Bhuyans in Dhenkanal and Sudargarh districts, Bondas of Koraput district, Kutia Konds of Phulbani district and the Konds in Kalahandi district are still in extremely primitive conditions.

Irrigation

7. While several attempts during the last 25 years have been made to obliterate the relative backwardness of certain parts of the State and also tackle the economic situation of the tribals, the process seems to be somewhat long drawn, if not difficult. In the Fifth Plan, a further intensive attempt is contemplated: all the new medium and major irrigation projects are now specifically being located only in areas where there were no previous irrigation facilities. Out of the total Fifth Plan outlay of Rs. 75 crores on irrigation, about Rs. 19 crores will be spent on tribal areas and an equal amount on the irrigation-scarce areas. It is anticipated that about 80,000 acres can be added to the irrigated area for Kharif and at least about 1/4th of this in Rabi season. These figures for the tribal areas compare very well with the Fourth Plan figures of an addition of only 16,000 acres in the tribal areas.

8. A number of Colonies were established for the tribals in the past few years with a view to settle them to a new pattern of living, with settled agricultural habits. But in some cases, these Colonies were not as successful due to the absence of sufficient irrigation facilities. Such instances are now being investigated and out of the ceiling on Minor Irrigation, adequate sum is sought to be allocated for providing irrigation facilities to such areas. In certain other areas where minor irrigation facilities have been created, the problems of land levelling, land shaping and field channels have also to be tackled, in order to smoothly induct the tribals into agricultural occupations. In the Fifth Plan, this aspect is being specifically tackled by suitable provision for departmental work for subsidies and for loans in the Tribal & Rural Welfare Department Budget.

Agriculture

9. While most of the schemes envisaged in the Fifth Plan for Agriculture have to take into account the State as a whole due to the insistence on a sizeable growth in this Sector and the achievement of a target of 8 million tonnes of foodgrains, the investment will be maximised in areas with potential for particular crops, as also the advantage of agro-climatic conditions. The tribal areas can gradually develop certain specialisation. While monetary allotments cannot be fixed with absolute precision, the following programmes have substantial coverage in tribal areas:—

- (a) *Horticulture*—The programme of Horticulture is envisaged with a total outlay of Rs. 230 lakhs. The major part of the programme will be in the hilly regions which have large tribal populations. An expenditure of Rs. 150 lakhs is likely to be incurred in these areas;
- (b) A large programme for millets is going to be launched, the target for the Fifth Plan being 1.47 lakh tonnes. This will be mostly in the tribal areas with an expenditure of Rs. 30 lakhs.
- (c) The target for production of oilseeds at the end of the Fifth Plan is 4.86 lakhs tonnes as compared to the Fourth Plan's anticipated achievement of 2.96 lakhs tonnes. The programmes for mustard, til, castor, linseed will be partly executed in the tribal areas, but niger will be exclusive to the tribal areas. Besides, Kharif groundnut will be introduced. Cultivation of mesta will also be encouraged in the tribal areas for which, an increased production of 37.5 per cent above the Fourth Plan level has been estimated. For the oil seeds programme in the tribal areas, about Rs. 40 lakhs may be spent ; for development of mesta, Rs. 5 lakhs will be spent ;
- (d) Cultivation of monsoon potato and temperate vegetables will be taken up only in the tribal areas and will be supported both by loans and demonstrations. The total amount given by way of loan is estimated to be of the order of Rs. 12 lakhs over the Plan period. Besides, a large part of the spices development programme involving an expenditure of about Rs. 2 lakhs will be organised in the tribal areas ;

- (e) Rs. 15 lakhs have been earmarked for opening of a Seed Farm in Koraput District. Apart from that, there will be one seed processing and drying unit at Similiguda in Koraput District costing about Rs. 3.50 lakhs;
- (f) For subsidy on the cost of wells, Rs. 100 lakhs have been provided; out of this Rs. 20 lakhs may be spent in the tribal areas; and,
- (g) The programme for Area Development envisages an outlay of Rs. 20 crores during the Plan period; out of this, Rs. 6 crores is to be spent on Small and Marginal Farmers, Rs. 12.50 crores on command area development and Rs. 1.50 crores in the drought-prone areas. The allocation for tribal sector in these three programmes may be of the order of Rs. 3 crores, Rs. 4 crores and Rs. 1 crore respectively, with a total of Rs. 8 crores.

10. Besides, the work of the Soil Conservation Organisation mostly covers areas inhabited by tribal population. Out of a Plan Budget of Rs. 4.50 crores, Rs. 3.30 crores are meant directly for the tribal areas. The schemes of Soil Conservation have the advantage of providing the tribal labourer with wages for working in his own environment and often in his own field. The activities include conservation measures of the interior catchment areas of rivers, utilisation of waste land, testing the growth of commercial crops, land shaping, as also soil conservation in hilly areas.

Education

11. In the field of Education, the status of the tribal population was earlier touched. By the end of the Fourth Plan, the State average of illiteracy will be about 73 per cent. The districts predominately inhabited by the scheduled tribes have percentages much higher. Keonjhar has 79 per cent, Mayurbhanj 82 per cent, Phulbani 80 per cent and Koraput 89 per cent.

12. In the Fifth Plan, the attempt for tribal education is more intensive and widened. Out of a total Plan provision of Rs. 77 crores, the amounts roughly estimated to be utilised in the tribal areas will be of the order of Rs. 39 crores.

13. The Draft Plan proposals for Elementary Education have the objective of 85 per cent enrolment in the age group of 6—11, 58 per cent in the age group of 11—14. The tribal population have to obtain a much higher percentage of enrolment in order to reach the State average. This attempt will be one of the most important features of the Fifth Plan.

14. Out of a total number of 5,400 primary schools, about 3,400 schools are proposed to be in the hard core areas predominately inhabited by the scheduled tribes. Similarly, out of 2,000 new middle schools, 1,600 will be located in these areas. In the matter of building of schools, the areas predominately inhabited by the scheduled tribes will get 75 per cent of the total requirement of funds. The entire provision meant for teachers' quarters is being utilised in the tribal areas.

15. Another important feature is that 59 existing tribal High Schools previously managed by the Tribal & Rural Welfare Department will be now part of the regular work of the Education Department. A stage has reached where these schools will attain the uniformity with other institutions. In order to remove any deficiencies in buildings, etc. that are existing, a sum of Rs. 25 lakhs is specially provided for them. The hostels as necessary will, however, be constructed by the Tribal & Rural Welfare Department.

Health

16. In Health also, attention was always being given for the tribal areas. In Koraput, Keonjhar, Mayurbhanj, Sundargarh, Phulbani and Kalahandi Districts, there are 54 Hospitals, 59 Dispensaries, 130 Public Health Centres, five Medical-aid Centres and nine Mobile Health Units. Most of them are under the Health Department and a few under the

Tribal & Rural Welfare Department. The Tribal & Rural Welfare Department run 19 hospitals, 11 dispensaries and 14 mobile health units. It is now proposed that in the Fifth Plan, all these will be taken over by the Health Department and run on uniform standards.

17. In the Fifth Plan, much greater attention is being paid to the health and nutrition conditions of the tribals. In view of the wide dispersal of the villages and the difficulties of the terrain, the number of existing institutions will have to be augmented. The number of Sub-Centres in the tribal and difficult areas are being set up at the rate of one for 7,000 population, as against 10,000 for other areas. Similarly, one surveillance worker under N. M. E. P. is being placed in 35 Sq. miles in the difficult hilly tracts. In almost all the Public Health Centres and Sub-Centres, medicine grants at rate of Rs. 12,000 and Rs. 2,000 respectively are being made available. In the tribal areas, living accommodation being scarce, special steps have to be taken for invariably providing residential accommodation in the Public Health Centres and also in the Sub-Centres.

18. The work of the Tribal & Rural Welfare Department will be one of augmenting the activities of other Departments. Certain specialised schemes also are being taken up by them. One of them is the intensive integrated area development where under about 450 to 500 families will be taken as one unit for steady development of their economy. In other areas, such as in Education, hostels for the tribal students will be constructed in the High Schools and in Colleges, this will give an opportunity for these young persons to gradually get acclimatised to a new environment till they can occupy the regular hostels. The scholarship are definitely liberal for the Scheduled Tribes and Castes, so that the percentage of school attendance will increase. The possibilities for the tribals being evicted from their land by interested traders will be avoided in offering them legal assistance. The entire trend of education and economic development of the Tribal & Rural Welfare Department will be, unlike in the previous Plans, only supplementary in nature.

19. It is not possible in one Plan to obviate all the regional imbalances, but each Department is trying to locate the backward areas and pay special attention to them. The tribal development is also part of avoiding these regional imbalances.

Appendix I
Identification of Backward Tribal Areas
Tahasil-wise—Orissa

Appen-
Identification of Backward Tribal

Serial No.	Name of the Tahasil	Percentage of Tribal population	Indicator	Percentage of illiteracy	Indicator	Percentage of Agrl. Labour and total worker
1	2	3	4	5	6	7
Balasore						
1	Nilagiri	.. 38.88	71	74.32	90	39.11
Dhenkanal						
2	Pallahara	.. 38.23	69	79.19	96	30.97
Ganjam						
3	Parlakhemendi	.. 37.38	68	81.01	98	34.77
4	R. Udayagiri	— 65.67	119	87.77	106	20.27
Mayurbhanja						
5	Baripada	— 53.31	97	79.74	96	44.03
6	Betnati	.. 46.11	84	80.54	97	39.88
7	Rairangpur	... 64.30	117	83.99	102	41.17
8	Karanja	.. 63.44	115	82.93	100	33.63
9	Udala	... 65.37	119	83.18	101	47.64
Phulbani						
10	Khandmal	.. 54.85	100	81.07	98	28.00
11	Balliguda	.. 57.32	104	87.53	106	30.82
12	G. Udayagiri	.. 53.74	98	76.83	90	28.86
Keonjhar						
13	Keonjhar	.. 54.63	997	81.51	995	23.95
14	Kanjipani	.. 63.10	115	87.24	105	27.44
15	Champua	.. 44.42	81	76.58	93	21.67
16	Badbil	.. 55.64	101	81.00	98	7.38

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Areas—Tahasil-wise—Orissa

Indicator	Percentage of household below 1 acre of land	Indicator	Percentage of distribution of households by type of wells	Indicator	Composite indicator	Rank
8	9	10	11	12	13	14
135	8.99	147	0.60	3	446	25
107	2.68	44	49.80	43	559	10
120	11.78	192	0.70	3	481	18
70	32.79	372	58.30	284	951	1
152	8.98	146	3.00	15	506	14
138	7.72	126	0.60	3	448	23
142	3.55	58	5.70	28	447	24
116	3.30	54	13.90	68	453	22
164	7.84	120	9.40	46	558	11
97	9.32	152	42.50	207	654	3
106	25.72	420	10.60	52	788	2
100	9.83	160	6.90	34	485	17
83	2.60	42	3.50	17	340	33
95	2.77	45	14.80	72	432	27
75	2.63	43	49.50	241	533	12
25	3.54	58	19.70	96	378	30

Appen-
Identification of Backward Tribes

Serial No.	Name of the Tahasil	Percentage of tribal population	Indicator	Percentage of illiteracy	Indicator	Percentage of Agrl. labour and worker
1	2	3	4	5	6	7
Koraput						
17	Koraput ..	63.02	114	90.74	110	25.29
18	Nandapur ..	50.49	92	89.38	108	18.03
19	Jaypur ..	45.56	83	84.40	102	34.01
20	Kotpad ..	59.21	108	89.67	108	30.70
21	Bariguma ..	53.07	96	89.59	108	47.30
22	Nawarangpur ..	54.07	98	90.29	109	33.59
23	Umerkote ..	56.08	102	92.99	112	28.79
24	Malkangiri ..	56.65	103	89.01	108	13.39
25	Motu ..	58.47	106	92.27	112	8.45
26	Rayagada ..	62.90	114	86.75	105	33.20
27	Kashipur ..	64.01	116	95.81	116	24.15
28	Gunupur ..	61.07	111	84.81	103	44.98
29	Bissamcuttack ..	53.41	97	89.19	108	43.32
Sambalpur						
30	Kuchinda ..	55.63	101	76.35	92	37.50
Sundargarh						
31	Sundargarh ..	53.94	98	75.97	92	30.29
32	Hemgiri ..	49.16	89	80.52	97	35.10
33	Rajagangpur ..	68.73	125	78.20	95	16.05
34	Panposh ..	43.15	78	65.43	79	5.09
35	Bonai ..	65.41	119	81.93	99	19.45
<hr/>						
Total ..		55.07	100	82.74	100	28.99

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Area—Tahasilwise—Orissa

Indicator	Percentage of household below 1 acre of land	Indicator	Percentage of distribution of households by type of wells	Indicator	Composite Indicator	Rank
8	9	10	11	12	13	14
87	6.64	108	3.70	18	437	26
62	2.84	48	1.80	9	319	34
120	5.24	85	6.80	34	424	28
106	4.47	73	19.60	95	490	16
163	5.84	95	30.80	150	612	6
116	4.45	73	13.20	64	460	21
96	9.99	163	34.90	170	640	45
46	2.25	37	43.10	210	504	15
295	2.06	34	68.20	332	613	5
115	10.33	169	15.20	74	577	9
83	2.58	42	13.40	65	422	29
155	3.73	61	34.10	166	596	8
149	5.07	83	34.00	166	603	7
120	2.99	49	20.90	102	473	20
104	2.47	40	7.50	37	371	31
121	3.20	52	24.90	121	480	19
55	2.46	40	10.20	50	365	32
18	11.67	27	5.20	25	227	35
67	1.66	27	41.40	202	514	13
100	6.13	100	20.53	100	500	..

CHAPTER 1·7

MAN POWER

Man power planning is the process of developing and determining objectives, policies and programmes that will lead to rational utilization of the existing human resources in order to achieve economic and other goals. Man power is an economic resource and in planning for development, the utilization of this resource has also to be planned so as to meet the requirements that will be determined by the economic goals to be attained and the nature of economy visualised. In this sense man power requirement must flow from economic plans and development programmes, and therefore man power planning will also mean an exercise in adjusting and developing the available human resources to the requirement of the society and the matching of supply and demand in quantitative terms. In the context of Orissa's economy, man power planning has also a negative aspect in the sense that the programmes for utilization of man power resources have to be so designed as to make the maximum impact on the problems of unemployment and under-employment that exist in a low income economy. It is against this background that a study of the man power situation in Orissa on the eve of the Fifth Plan as also the impact of the plan programmes on the employment situation during the Fifth Plan period, has been made in the following paragraphs.

2. Unfortunately, any analysis of the man power situation is handicapped by the fact that correct statistics on the man power resources of Orissa particularly about the demand for various categories of personnel in different sectors of the economy are not available. The problem is worse in case of the figures relating to the number of persons unemployed and under-employed in the State. According to the report of an expert Committee of the Planning Commission (1970), reliable estimates of the volume and composition of unemployment and under-employment are not available in this country; the problem is more acute in case of a State like Orissa where the statistical base for these data is yet to be built up. Therefore utilising the reports of decennial Census, the N. S. S. and Employment Exchange data as well as estimates prepared by the State Government Departments in a number of unpublished reports, some figures on the subject of man power, planning and employment have been discussed below in order to give an idea about the dimension of the problem. These, however cannot replace the need for firm and reliable figures on the subject of employment and unemployment during the Fifth Plan period.

3. The population of Orissa stood at 175·49 lakhs according to 1961 Census and it rose to 219·5 lakhs in 1971 Census exhibiting a growth rate of 2·5 per cent per annum. The following are some of the characteristics of Orissa's population revealed by the 1971 Census.

1. Total Population, 1971 :—	.. 219·44 lakhs
(a) Male	.. 110·41 lakhs
(b) Female	.. 109·03 lakhs
2. Workers 1971 :—	.. 68·50 lakhs
(a) Male	.. 61·07 lakhs
(b) Female	.. 7·42 lakhs
3. Non-Workers, 1971 :—	.. 15·93 lakhs
(a) Male	.. 49·33 lakhs
(b) Female	.. 101·60 lakhs

Thus the workers constituted 31.22 per cent of the total population whereas the equivalent figure according to 1961 Census was 43.66 per cent. This difference may be partly due to the fact that the definition of 'Workers' in 1961, was more liberal than in 1971.

4. Annexure I gives the district wise distribution of workers as per their occupation as revealed by the 1971 Census data. It can be seen there from that 79.59 per cent of the total working force in the State are engaged in agricultural and allied activities whereas a little more than 20 per cent are in nonagricultural occupations. The mining and manufacturing sectors provide employment to only 6.67 per cent of the total working Force. The percentage distribution of workers in various categories of occupation in 1961 and in 1971 have been given in Table-I.

TABLE I
Workers and Non-Workers According to Main activity

(Figures in ' 000)

Occupation (1)	1971		1961	
	Workers (2)	percentage (3)	Workers (4)	Percentage (5)
1. Cultivators	.. 3368	(49.17)	4353	(56.81)
2. Agricultural Labourers	.. 1938	(28.28)	1304	(17.02)
3. Live-stock, Forestry, Fishing, Hunting, Plantation, etc.	147	(2.14)	132	(1.72)
4. Mining and Quarrying	-- 52	(0.76)	..	(..)
5. Manufacturing processing				
(a) House-hold industry	.. 249	(3.63)	531	(6.93)
(b) Other than House-hold Industry.	157	(2.29)	86	(1.12)
6. Construction	-- 38	(0.56)	31	(0.40)
7. Trade and Commerce	.. 226	(3.30)	147	(1.92)
8. Transport, Storage and Communication.	and 99	(1.44)	52	(0.69)
9. Other services	.. 577	(8.43)	1026	(13.39)
Total	.. 6851	(100.00)	7662	(100.00)

As has been mentioned earlier, there was slight variation in the definition of "Workers" between the Census in 1961 and that in 1971 and also the workers in live stock, forestry, fishing, etc., were grouped with those in mining in 1961 Census whereas they were grouped separately in 1971. Barring these limitations, Table I gives the comparative figures as revealed by the two censuses. From these it is seen that whereas the percentage of cultivators in the total working force has gone down over the decade, 1961-1971, that of agricultural labourers has increased. The percentage of workers in manufacturing and processing has gone down from about 8 per cent to about 6 per cent over this period.

Table-II gives the distribution of workers and non-workers according to main activity classified in to rural and urban categories.

TABLE II

Workers and non-workers according to main activity classified by sex and age groups, 1971

(Figures in lakhs)

Workers		Rural	Urban	Total
(1)		(2)	(3)	(4)
(i) Cultivators	..	33.25	0.43	33.68 (49.2)
(ii) Agricultural Labourers	..	19.00	0.38	19.38 (28.3)
(iii) Livestock, Forestry, Fishing, Hunting and Plantation, Orchard and allied activities.		1.30	0.17	1.47 (2.1)
(iv) Quarrying	..	0.40	0.12	0.52 (0.8)
(v) Manufacturing Processing, etc.—				
(a) House-hold industry	..	2.25	0.23	2.48 (3.6)
(b) Other than house-hold industry.		0.80	0.77	1.57 (2.3)
(vi) Construction	..	0.24	0.14	0.38 (0.6)
(vii) Trade and Commerce	..	1.24	1.03	2.27 (3.3)
(viii) Transport, Storage and Communication.		0.40	0.59	0.99 (1.4)
(ix) Other services	..	4.02	1.75	5.77 (8.4)
A. Total workers	..	62.90 (91.8)	5.61 (8.2)	68.51 (100)
B. Non-workers	..	138.10	12.84	150.94
(A+B)	..	201.00	18.45	219.45
			Workers ...	68.5 (31.2)
			Workers ..	150.94 (68.8)
			Total ..	219.45 (100)

It may be seen that more than 91 per cent of the workers were in rural areas as may be expected in an economy where agriculture happens to be the predominant sector.

Problem of Unemployment and under Employment

4. It has been stated above that firm estimates of the volume and composition of the unemployed and under employed in Orissa are not available. However, defining 'unemployment' as involuntary unemployment (i. e., all those persons who offer themselves for work but are without it) on the part of the persons in the working age-group generally taken as between the ages of 15 to 59, the volume of unemployment in Orissa has been variously estimated. One estimate prepared by the Bureau of Statistics and Economics, Orissa *analysing the 1971 Census and the N. S. S. data puts it at 31 lakhs un-employed persons in the State in 1971. This includes 10.5 lakhs of unemployed equivalent of under-employed persons. Under employment has been defined as less than full employment where full employment means 48 hours of work per week. The details of this estimate are as follows.

Age-group	(Figures in lakhs)						
	Unemployed		Unemployed equivalent to under employed		Total		Total
	Male	Female	Male	Female	Male	Female	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
15—59	2.1	18.4	5.7	4.8	7.8	23.2	31 lakhs

It has been found that in rural areas 51.1 per cent of female workers and 29.7 per cent male workers are under employed whereas in urban areas, the comparative figures are 31.7 per cent and 27.4 per cent. On the basis of these ratios, it has been estimated that 15.3 lakhs male workers and 3.5 lakhs female workers were unemployed in Orissa in 1971. The estimate of 31 lakhs of un employed persons has also been worked out on the assumption that 50 per cent of the females in the working age-group would offer themselves for work. If this assumption is relaxed and it is assumed that 25 per cent of such females would offer themselves for work, the estimate of unemployed persons in Orissa would come down to 23 lakhs. In either case, the problem appears formidable.

5. On the basis of the estimates of unemployed persons in 1971 and by utilising the Census data and particularly, the participation rate as shown by 1961 Census, the back log of unemployment at the end of the Fourth Plan and the number of persons that would need to be provided with employment opportunities in the Fifth plan period has been worked out both by the Bureau of Statistics and Economics, Government of Orissa and the State Planning Department. On the basis of these estimates it is found that at the end of the Fourth Plan, the back log of unemployment will be about 29.7 lakhs and an additional 9.70 lakhs persons would be entering the labour market during the year 1974—79. Thus in the Fifth Plan about 39.40 lakhs persons would be seeking employment. The details of these calculations have been given in Table No. 3 and Annexure II. In estimating these

TABLE III

1. Back log of unemployed by March 1971	..	31.00 lakhs
2. New entrants to the labour force during 1971-72 to 1973-74	..	5.9 lakhs
3. Employment potential during the Fourth Plan period	..	7.21 lakhs
4. Back log of employment at the end of Fourth Plan	..	29.7 lakhs
5. New entrants to the labour force during the Fifth Plan period (1974-75 to 1978-79).		9.70 lakhs
. Employment opportunities to be provided during the Fifth Plan period.		39.40 lakhs

* "A note on the estimates of employment in Orissa", Bureau of Statistics and Economics, Government of Orissa (1971).
(Un-published)

figures the number of new entrants to the labour force during the period 1971—74 and 1974—79 have been estimated by utilising the Census data (of 1961 and 1971) as also the workers participation rate as indicated in 1961 Census (Annexure II). The employment potential during the Fourth Plan period has been estimated by the Bureau of Statistics and Economics, Orissa by developing suitable outlay-employment norms on the basis of the statistics available for the first four years of the Fourth Plan.*

6. It has already been mentioned in a previous chapter that a large number of persons who constitute the unemployed, belong to the category of the rural unemployed and under employed. Most of these subsist below the nationally accepted poverty line. The major thrust of the Fifth plan will be to implement suitable policies and programmes to tackle their problem as part of the programme for elimination of poverty. There is also the problem of the educated (persons having qualifications up to matriculation or equivalent and above) unemployed which needs special attention as they have a high potential for contributing to the success of various plan programmes and schemes. In a more positive sense the development of educated man power has to be undertaken in such a manner as to meet the requirements of the growing sectors of the economy.

7. As in the case of other categories of unemployed persons, it is difficult to get reliable statistics on the number and composition of various categories of educated unemployed persons. There is of course the Employment Exchange data on job seekers which however suffer from a number of obvious limitations. In addition, an attempt has been made to collect data on the number of various categories of educated persons remaining unemployed in the year 1971 by contacting State Governments Departments and Universities in Orissa; the figures on the availability and supply of various categories of educated persons have also been compiled from the intake-out turn data of various Universities and other higher educational institutions. Some of these figures have been discussed below in order to give an idea about the dimension of the problem of the educated unemployed in Orissa during the Fifth Plan period.

8. Annexure III gives the figures (for Orissa) on the number of job seekers who were on the live registers of the Employment Exchange as on December, 31, 1972. The educated unemployed (i e., persons having qualification in matriculation or equivalent and above) constituted 38.96 per cent of the total number of persons who were on the live registers. Besides a significant number of persons with technical qualifications in engineering, medicine and other subjects were also unemployed and seeking for jobs. Table IV gives the comparative figures in respect of a few categories of job seekers during the years 1969 to 1972. It may be seen that

TABLE IV
Job-seekers as on the 31st December

Category	(Figures in '000)			
	1969-70	1970	1971	1972
1. Matriculates	25.0	33.0	42.00	56.00 (22.9)
2. Below Graduates	3.2	3.0	5.00	7.00 (2.90)
3. Graduates	5.0	7.0	9.00	12.00 (4.90)
4. Post-graduates	0.6	0.8	1.00	1.00 (0.5)
	33.6	43.8	57.0	76.0 (31.2)
Live Registrant	123	152	188	243 (100)

NOTE—Figures in brackets indicate percentage

* “ Un-employment in Orissa during the Fourth Plan’ Bureau of Statistics & Economics, Government of Orissa. (Unpublished).

the absolute number of persons of various qualifications who were seeking jobs have been on the increase thereby pointing to the necessity of proper manpower planning for these categories of personnel. The total number of educated persons (excluding technical diploma-holders) seeking jobs had also increased from about 33,000 in December, 1969 to about 76,000 in December, 1972.

9. As estimate of various categories of educated personnel particularly those having technical qualifications who will remain unemployed on the eve of the Fifth Plan and the additional number of such personnel who will come into the labour-market of Orissa during the year 1974-79 is not available. However in Table V data have been presented regarding the number of various categories of personnel who would pass out from the higher educational institutions in Orissa during these years. This estimate has been prepared

TABLE V

**Estimates of out-turn of Educational Institutions in Orissa during 1974-79*

Category		Additional No of persons who would be available for employment from the educational institution during 1974-79
1. Engineering Degree	..	1,080
2. Doctors (Graduates and Post-Graduates)	..	1,715
3. Agricultural Graduates and Post-Graduates	..	715
4. Agricultural Engineering	..	80
5. Veterinary Graduates and Post-Graduates	..	195
6. Science Graduates & Post-Graduates	..	11,195
7. Humanities (Graduates and Post-Graduates in Arts, Commerce, etc).		26,220
8. Engineering Diploma	..	1,785
		<u>42,985</u>

*SOURCE—Intake and outturn figures obtained from the Universities and State Directorate of Industries for various years from 1966-67 to 1969-70 and 1971-72.

by analysing intake and outturn data of the educational institutions in the State for the period from 1966-67 to 1970-71. In particular, it has been assumed that intake capacity as existing in 1970-71 would continue during the Fifth Plan period. Although these data suffer from a number of limitations, they indicate the trend in the availability of educated personnel in the State during these years. However these do not give a complete picture because no estimate is available regarding the number of persons who would come out of the educational institutions existing outside the State but would be available for employment in the labour market of Orissa. The Employment Exchange data for 1972 have shown that there is already unemployment amongst various categories of educated personnel particularly amongst persons with technical qualifications in engineering and medicine. The number of persons with degree qualifications in Humanities who remain unemployed was also large and their outturn will be substantial during the years 1974-79. It is necessary to plan for the utilisation of these personnel; at the same time the programmes for higher education have to be oriented in such a manner that the production of persons with specific qualifications who are remaining unemployed is substantially scaled down. These statistics also emphasise the need for vocationalisation at the secondary stage. The programmes for development of education in the Fifth Plan reflect these concerns.

10. Promotion of employment opportunities through the implementation of suitable programmes is one of the main objectives of the Five-Year Plans. In the Fourth Plan itself, rural and labour-intensive works were emphasised in order to alleviate the problem of unemployment in the rural areas. In addition to the normal schemes included in the Plan, various special employment schemes have been implemented, particularly during the years 1972-73 and 1973-74 for creation of job opportunities for the educated unemployed. In the Fifth Plan also employment policies would concentrate on the promotion of development in those areas, which would generate more employment consistent with other objectives of the Plan. In the State's Fifth Plan emphasis is being given on agriculture and allied areas which include the development of minor irrigation, soil conservation, dairying and animal husbandry, forestry, fisheries, area development and the like. These are in the nature of rural works and would create employment opportunities in the rural areas. At this stage, however, it has not been possible to isolate the total quantum of investment on these works, neither has it been possible to estimate the employment generation in the private sector due to the implementation of those programmes. In addition to these schemes, various development programme in the sphere of elementary education, public health, rural water-supply, rural roads and rural electrification will be implemented during the Fifth Plan with a total outlay of about Rs. 216 crores. These will also provide scope for creation of employment opportunities for the people.

11. At an aggregative level it may be possible to estimate job creation, due to the implementation of the State Plan, although such a macro figure will have a number of limitations. First of all, details regarding public and private sector investment and sectoral growth in employment are lacking to analyse the probable effects of the pattern of investment on employment opportunities. In addition, the estimate will suffer from limitations as at the present stage of the formulation of the Plan there is no adequate data on the quantum of investment by the Central Government, public financing institutions and the private sector during the Fifth Plan period in the State of Orissa. Besides, the estimate of job creation outside the public sector and particularly in agriculture, small industries and household enterprises are not quite firm. Subject to these limitations, however, the macro figure will give an idea about the quantum of job creation in the Fifth Plan because of investment in the State Sector.

12. The investment required to employ one man during a Five-Year period has varied from one Plan to other. According to a study of the Reserve Bank of India (Table VI) it had cost Rs. 5,854 (in 1960-61 prices) to create a single additional job during the First Plan period; the ratio increased to 1:7031 in the Second Plan and marginally declined to 1:6939 in the Third Plan. Since the data for the subsequent years and

TABLE VI

Item (1)	First Plan (2)	Second Plan (3)	Third Plan (4)
1. Total investment (Rs. in crores) ..	3,360	6,750	11,370
2. Index of investment cost at 1960-61 prices ..	82	96	113
3. Investment at 1960-61 prices .. (Rs. in crores).	4,098	7,031	10,062
4. Employment—Investment Ratio. ..	1:5854	1:7031	1:6939

SOURCE—"Growth of Employment 1950-51 to 1968-69", Reserve Bank of India Bulletin, December 1969.

for the Fourth Plan period are not available, it may be reasonable to use the investment-employment norm for the Third Plan in order to estimate the possibilities of job creation as a result of the implementation of the State Sector Plan during 1974-79.

13. The State Plan provides an outlay of Rs. 836.09 crores on various developmental programmes. Utilising the investment/outlay ratios for different sectors specified in the approach document for the national Fifth Plan (Planning Commission) the investment component of the outlay has been estimated as Rs. 657.02 crores at current (1973-74) prices. The details of the calculations have been given at Annexure IV. When reduced to 1960-61 prices the total investment proposed in the Fifth Plan (State Sector) comes to Rs. 268.73 crores. If it is assumed that a sum of Rs. 6,939 (1960-61 prices) would be needed to create one additional job as it happened in the Third Plan, the investment proposed in the State's Fifth Plan (Rs. 268.73 crores at 1960-61 prices) will create additional jobs of 3,87,275. Against a total requirement of 39.40 lakh jobs (as has been estimated in the preceding paragraphs) the job creation that would result due to the implementation of the State's Fifth Plan would be very low indeed. This immediately points to the necessity of additional investment which should be steered into the State by the Central Government, the private sector and the public financing institutions.

14. An attempt has also been made to assess the man power requirements in specific categories in the State public sector due to the implementation of the various sectoral development programmes. The data collected, however, are fragmentary in nature due to the fact that the details of the programmes and schemes are yet to be spell out for assessing man power requirements. The various departmental authorities incharge of the implementation of the sectoral development programmes have given a tentative projection of their man-power requirements as summarised in Table VII. This figures have been shown along

TABLE VII
Impact of Fifth Plan Programme—on Employment an estimation

Category	Additional number of persons who will come out of Educational institutions in Orissa during 1974—79 (excluding backlog)	Employment Potential of Fifth Plan Schemes
(1)	(2)	(3)
1. Engineering degree ..	1,080	2,049
2. Doctors (Graduates and Post-Graduates).	1,715	1,250
3. Agricultural Graduates and Post-Graduates.	715	1,996
4. Agricultural Engineering ..	80	N. A.
5. Veterinary Graduates and Post-Graduates.	195	152
6. Science Graduates and Post-Graduates.	11,195	N. A.
7. Humanities (Graduates and Post-Graduates in Arts, Commerce, etc).	26,220	6,838

with the data on the outturn of the various categories of educated personnel during the Fifth Plan period from the education institutions in Orissa. These data would show that there may be surplus of medical graduates in the Fifth Plan, as also in the category of Persons with qualifications in humanities and arts. These statistics have a number of limitations arising from the methodology of collection of those data in addition, these do not give a complete picture even in respect of the supply and demand of educated personnel in Orissa during the year 1974—79.

15. In addition to these categories of personnel, there will be the need for 21,700 Primary School teachers for classes I—V and 21,765 school teachers for classes VI-VII (including continuation classes) as a result of the implementation of the Minimum Needs Programme for Elementary education. The present manpower situation would indicate that there may not be any difficulty in recruiting these teachers.

16. The proceeding discussion would indicate that although the Problem of educated unemployed will continue to attract special attention in the Fifth Plan, the main thrust of the development programme in the Fifth Plan will have to be on the alleviation of the problems of unemployment and under employment among Orissa's rural masses. This approach will be in keeping with the national objective of removal of poverty from the country.

Annexure I
Distribution of workers by occupation in Industrial Categories, Orissa

(Figures in 000's)

Sl. No.	District	Total workers	Cultivators	Agricultural Labourer	Live-stock, forestry, fishing, hunting, plantation and etc.	Mining and quarrying	Manufacturing, processing and repairs		Construction	Trade and Commerce	Transport storage and communication	Other services
							Household Industry	Other than household Industry				
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Balasore	498.8 (100)	278.8 (56.460)	138.6 (28.068)	5.5 (1.114)	0.8 (0.162)	7.9 (1.600)	7.1 (1.438)	1.7 (0.344)	12.1 (2.450)	7.3 (1.479)	34.0 (6.885)
2	Bolnggir	424.5 (100)	233.9 (55.100)	117.9 (27.774)	7.4 (1.743)	0.3 (0.071)	20.4 (4.806)	4.8 (1.132)	1.2 (1.283)	9.4 (2.213)	4.0 (0.942)	25.2 (5.93)
3	Cuttack	1052.1 (100)	504.1 (47.914)	278.1 (26.433)	19.8 (1.882)	1.6 (0.152)	37.2 (3.564)	33.2 (3.156)	5.3 (0.504)	49.6 (4.714)	21.0 (1.996)	101.9 (9.685)
4	Dhenkanal	389.2 (100)	199.5 (51.259)	105.3 (27.184)	14.4 (3.700)	6.5 (1.670)	15.1 (3.880)	4.8 (1.488)	1.9 (0.488)	7.6 (1.953)	3.0 (0.771)	30.6 (7.862)
5	Gajjam	746.4 (100)	309.2 (41.426)	239.8 (32.128)	22.7 (3.041)	0.5 (0.067)	30.8 (4.126)	13.5 (1.809)	5.3 (0.710)	37.4 (5.010)	9.8 (1.313)	77.4 (10.370)
6	Kalahandi	381.0 (100)	204.1 (53.570)	122.3 (32.100)	5.2 (13.65)	..	10.7 (2.808)	3.6 (0.945)	1.2 (0.315)	6.9 (1.811)	2.1 (0.551)	24.9 (6.535)
7	Keonjhar	292.4 (100)	155.8 (53.283)	64.4 (22.025)	5.0 (1.710)	21.6 (7.387)	7.8 (2.668)	4.2 (1.436)	0.10 (0.342)	6.6 (2.257)	4.5 (1.539)	21.5 (7.353)
8	Koraput	717.00 (100)	376.1 (52.455)	214.8 (29.958)	12.0 (1.674)	2.3 (0.321)	15.5 (2.162)	9.8 (1.367)	7.1 (0.990)	17.5 (2.441)	7.9 (1.102)	54.0 (7.531)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
9	Mayurbhanj	478.2 (100)	220.8 (46.173)	178.9 (37.412)	11.4 (2.384)	0.9 (0.188)	22.6 (4.726)	3.3 (0.699)	1.1 (0.230)	6.3 (1.317)	3.1 (0.648)	29.8 (6.232)
10	Phulbani	219.4 (100)	121.0 (55.150)	63.5 (28.943)	3.1 (1.413)	0.1 (0.046)	8.0 (3.646)	1.1 (0.501)	0.9 (0.410)	5.2 (2.371)	0.9 (0.410)	15.6 (7.110)
11	Puri	680.6 (100)	316.6 (46.518)	174.6 (25.654)	24.3 (3.570)	0.4 (0.059)	24.0 (3.526)	12.8 (1.881)	5.5 (0.808)	33.8 (4.966)	12.9 (1.895)	75.7 (11.123)
12	Sambalpur	651.8 (100)	308.1 (47.269)	184.5 (28.306)	10.5 (1.611)	4.1 (0.629)	39.7 (6.090)	24.5 (3.759)	3.4 (0.522)	19.8 (3.038)	10.8 (1.657)	46.4 (7.119)
13	Sundargarh	324.1 (100)	140.0 (43.197)	54.3 (16.754)	5.7 (1.758)	12.6 (3.888)	8.9 (2.746)	34.6 (10.676)	2.1 (0.648)	14.5 (4.474)	11.5 (3.548)	39.9 (12.311)
14	Orissa State	6,850.5 (100)	3,368.0 (49.164)	1,937.5 (28.283)	147.0 (2.146)	51.7 (0.755)	248.9 (3.633)	157.3 (2.296)	37.7 (0.550)	226.7 (3.309)	98.8 (1.442)	576.9 (8.422)

Source—Census of India, 1971, Series 16—Orissa, Part-IJA, General Population Tables

Note—Figures in the brakes indicats percentages

Annexure II*Estimates of un-Employment and under Employment on the basis of 1961 Census—Participation rate to Labour Force*

1	1971 Census population	..	219.4 lakhs
2	Population in the age group 15—59	..	113.8 lakhs
3	Estimated population 1971—74: @ 15—59: @ 2.5% per annum.		122.3 lakhs
4	Addition to population in the working age group 15—59 (3-2)		8.5 lakhs
5	Participation rate (1961)%	..	68.1%
6	Addition to labour force by 1971—74 (Applying % as in item 5).		5.9 lakhs
7	Estimated population 15—59, 1971—79: @ 2.5%	..	136.6 lakhs
8	Addition to population in the working age group 15—59 (7-3)		14.3 lakhs
9	Addition to labour force (applying participation as at item 5).		9.7 lakhs

Annexure III

Break-up of job Seekers as on the 31st December 1972

1. Middle English including unskilled job seekers	..	97,979	
2. Non-Matriculates	..	50,685	
3. Matriculates	..	56,448	(59.46)
4. Passed out I. T. I. Trainees (Ex.-T. T.)	..	2,069	(2.18)
5. Other Technical personnel	..	10,923	(11.51)
6. Other Skilled personnel	..	3,697	(3.89)
7. Engineering Diploma Holders—			
(a) Civil	..	634	
(b) Mechanical	..	404	
(c) Electrical	..	399	
(d) Chemical	..	25	
(e) Mining	..	12	
(f) Metallurgical	..	23	
(g) Other Branches	..	..
8. Under-graduates	..	7,149	(7.53)
9. Graduates	..	12,118	(12.77)
(a) Arts	..	5,288	
(b) Science	..	4,261	
(c) Commerce	..	157	
(d) Medical	..	451	
(e) Engg./Tech.	..	467	Civil, Mech., Elec. Others.
(f) Agriculture	..	84	
(g) Law	..	78	
(h) Veterinary	..	71	
(i) Education	..	1,199	
(j) Others	..	62	
10. Post-graduates	..	1,022	(1.08)
(a) Arts	..	475	
(b) Science	..	362	
(c) Commerce	..	15	
(d) Medical	..	3	
(e) Agriculture	..	19	
(f) Veterinary	..	1	
(g) Education	..	138	
(h) Others	..	9	
(i) Post-graduates in other branches of Engg.	..		
11. Total educated (item 3 to 10)	..	94,923	(100)
Grand Total (item 1+2+11)	..	2,43,587	

Source—Director of Employment, Government of Orissa, Cuttack

Annexure IV

Estimation of Investment-component of Fifth Plan of Orissa

Sector	** Investment/ Outlay	State Fifth Plan Proposed outlay (Rs. in crores)	State Fifth Plan Investment component (Rs. in crores)
1	2	3	4
1. Agriculture (including irrigation).	85.8	238.56	204.68
2. Mining & Manufacturing ..	98.0	34.59	38.90
3. Electricity ..	99.1	234.02	231.91
4. Transport and Communication	99.1	71.29	70.65
5. Housing and House Sites ..	100.0	20.20	20.20
6. Other Services, Education, Health, Drinking water, Nutrition, Slum Improvement, Social Welfare and other Misc.	40.3	237.43	95.68
Total ..	78.6*	836.09	657.02

(i) State Plan Outlay is calculated at current (1973-74) prices.

(ii) Wholesale Price Index for 1973-74 is estimated to be 244 (Base 1961-62=100)
The corresponding index for 1960-61 is derived as 99.8.

(iii) The investment in 1973-74 prices of Rs. 657.02 crores is equivalent to Rs. 268.73 crores at 1960-61 prices ($99.8 \times \text{Rs. } 657.02$ crores).

Note: ** Ratios obtained from " Approach to Fifth Plan, 1974-79 " Planning Commission (1973).

* (Derived figure: Col. 4 + Col. 3)

CHAPTER 1·8

NATIONAL PROGRAMME FOR MINIMUM NEEDS

Removal of poverty is one of the basic objectives of the Fifth Plan. This implies that the Plan should contain adequate measures for improving the living conditions of the poor and the backward sections of the community. Opportunities of employment will be created under various programmes and schemes included in the Plan and this will generate income for enabling persons in different strata in the society to satisfy their consumption needs. It may not however be possible for the poor, with their existing levels of earnings to buy for themselves all the essential goods and services needed for maintaining reasonable living standards. Therefore, in the Plan, a National Programme for minimum needs has been included under which certain social consumption facilities and investment will be provided in the form of education, health, drinking water, communication, electricity, housing and nutrition in order that the rural poor are able to reach a certain minimum standard of living. The proposals under this programme have been formulated on the basis of the norms laid down in "Approach to the Fifth Plan, 1974—79" which was approved by the National Development Council and also in the light of the available resources for implementing such a programme.

2. The detailed concrete proposals under the Minimum Needs Programme were earlier submitted to the Planning Commission, Government of India and these proposals had also been subsequently discussed with the Commission. In the mean time the State Government have been informed about the tentative allocations made under various items included in the programme. In the following paragraphs a summary of the proposals under this programme has been indicated. In formulating these proposals as part of the Fifth Plan, the tentative allocations made by the Planning Commission have been kept in view although for some of the facilities like rural roads, drinking water-supply and elementary education, there have been some variations from the allocations already made by the Planning Commission as it is felt that the proposals relating to these items presented to the Commission and 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

3. The detailed proposals on elementary education were discussed between the representatives of the State Government and the Planning Commission in May, 1973. At that time it was agreed that the total cost of the programmes for the development of elementary education in the Fifth Plan would come to about Rs. 70 crores out of which the cost to be met from the Minimum Needs Programme would be Rs. 59·85 or Rs. 60 crores. The programme for development of elementary education in the Fifth Plan have been presented on this basis although in the mean-time the Planning Commission have intimated the State Government that a tentative allocation of Rs. 27·81 crores only has been made for elementary education under the Minimum Needs Programme. It is quite obvious that acceptance of this latter figure would mean further scaling down of the physical targets which were already less than what was originally envisaged in the Approach Document.

4. Annexure II indicates the physical targets that will be achieved under this programme in the Fifth Plan. In the age group of 6—11 additional enrolment of 6·50 lakhs is envisaged which would mean that in full time course the percentage of enrolment would be about 85. As can be seen the percentage for girls will be lower than this average. For the age group 11—14 the percentage of enrolment will be 58·2.

5. About 20 per cent of the population in the age group of 11—14 will be covered for part-time courses and 5 per cent for continuation classes. (The targets for continuation classes and part-time courses have been worked out as 0·92 lakh and 3·66 lakhs respectively).

6. In view of large sparsely populated areas in the State, the teacher-pupilratio in respect of additional enrolment in classes I—V has been fixed at 1:30 and in classes VI—VIII has been fixed at 1:18. Accordingly, it has been estimated that the number of additional teachers required in the Fifth Plan will be as follows—

	Classes I—V	Classes VI Full time courses	VIII Continuation classes
Additional enrolment (in lakhs)	6.50	2.27	0.91
Additional teachers	21,700	12,600	9,100

For part-time courses, it is proposed to utilise mainly the services of teachers in the existing schools.

7. It has been estimated that the total cost of appointing teachers would come to Rs. 15.46 crores for the classes I—V and Rs. 10.43 crores for the classes VI—VIII. The non-teacher cost had been estimated at 15 per cent of the teacher cost in classes I—V and 20 per cent of the teacher costs in classes VI—VIII. These come to Rs. 231.9 lakhs and Rs. 208.00 lakhs respectively.

8. In order to attract children under the relevant age-groups to attend schools a number of incentives will be provided particularly for the poorer sections of the community living in the tribal areas. The incentives are as follows:—

- (i) Free text books and stationery at Rs. 5 per annum per child in classes I—V (3.25 lakhs students) and Rs. 10 per child in classes VI—VIII (1.13 poor and backward class children) for 50 per cent of the additional enrolment.
- (ii) For girls, at Rs. 10 per girl per annum for uniform and Rs. 30 per annum for attendance scholarship for 25 per cent of additional enrolment. (This will work out to 2.35 lakhs students in classes I—V and 80,000 girls in poor and backward classes for classes VI—VIII).
- (iii) In order to encourage the education of girls and ensure that teachers remain in schools particularly in tribal areas, it is proposed to construct 7,250 quarters at a cost of Rs. 10,000 per quarter. This will provide living accommodation to 50 per cent of $\frac{1}{3}$ rd of the women teachers who will be recruited during the fifth plan.
- (iv) For combating wastage and drop outs particularly in the age-group 6—11 it is proposed to give mid-day meals in schools and a sum of Rs. 4.39 crores is earmarked for the purpose.
- (v) A sum of Rs. 3.74 crores has been provided for Ashram Schools in tribal areas. In addition a number of other incentives like programmes of development of pre-school children (age-group 3-5 particularly in the urban slums and tribal areas, welfare of teachers provision of advance increments to teachers, setting up of book banks, etc., will also be implemented under this programme.

9. A sum of Rs. 5.13 crores has been provided for construction of class rooms (school buildings) particularly in the backward areas and in the areas predominantly inhabited by tribals. These class rooms will be both for classes I—V and classes VI to VIII. This amount will be given as grant by the Government. It is expected that the matching contribution ranging from 50 per cent to 75 per cent of the total requirement might come from the public although in the tribal areas it will be difficult to get people's contribution for this purpose.

10. As has been indicated above, the programmes for development would cost a sum of Rs. 69.90 crores. Out of this amount, Rs. 59.90 crores is proposed to be met under the Minimum Needs Programme and the balance of Rs. 10 crores has been provided in the State Plan for General Education.

Primary Health Centres

11. An outlay of Rs. 14 crores has been suggested for strengthening the provision of medical facilities in the rural areas, particularly at the level of Primary Health Centres and Sub-centres. There are 314 Community Development Blocks each with one Primary Health Centre. Under the Minimum Needs Programme construction of buildings for 20 Primary Health Centres and 380 Sub-centres will be completed as these would remain incomplete at the end of the Fourth Plan. In addition, 187 Sub-centres will be established in the hilly areas at the rate of 1 Sub-centre for a population of 7,000. At present the supply of drugs for each of the Centres and Sub-centres is inadequate. It is proposed to supply more drugs to the Primary Health Centres and Sub-centres during the Fifth Plan. As part of the Minimum Needs Programme, 77 Primary Health Centres will be upgraded to 30 bedded Rural hospitals at an estimated cost of Rs. 831.60 lakhs.

Rural Drinking Water Supply

12. Drinking water supply will be provided in problem and difficult villages which have been identified by the State Government through the Public Health Engineering Organisation. Out of a total number of 46,992 villages in the State, so far 10,295 villages have been identified as problem villages after investigation by the Public Health Engineering Organisation. This is in addition to a total number of 1,592 identified villages which have already been covered under the accelerated water supply programme. The identification of these problem villages has been done following the norms fixed by the Government of India. These villages include those which suffer from scarcity in drinking water, villages suffering from health hazards like cholera or guinea worm in endemic areas, excess chloride, iron and brackishness. Many of these villages are in the tribal areas. It has been tentatively estimated that in Orissa, there are about 20,000 such problem villages out of which 10,295 villages will be covered under the Minimum Needs Programme in the Fifth Plan.

13. It is proposed to spend a sum of Rs. 25 crores during the Fifth Plan under this programme. This is as against a tentative allocation of Rs. 12.50 crores communicated by the Planning Commission. This allocation was made on a tentative basis as the proposals earlier submitted by the State Government on the basis of the data collected by the C. D. Department was not accepted. Subsequently, detailed proposals were submitted on the basis of the data collected by the State Public Health Engineering Organisation and the present proposal has been formulated on the basis of these data. Since the tentative allocation of Rs. 12.50 crores is too inadequate to meet the minimum needs of the people living in the backward areas of the State, it is proposed that a further allocation of Rs. 12.50 crores should be made thereby bringing the total to Rs. 25 crores.

14. Under this programme, deep tube-wells would be dug in 8,641 problem villages, 74 bigger villages will be covered by piped water supply and cisterns will be provided in 20 villages in hilly areas. The total number of population covered comes to 4.52 millions.

Rural Roads

5. Under this programme, all-weather link roads would be provided to all villages each with a population of 1,500 and above as also to a number of clusters of villages mostly in tribal areas. The detailed proposals submitted by the State Government had been discussed with the Planning Commission and a tentative allocation of Rs. 35 crores has been made by the Commission. This will be inadequate to meet the norms set for this facility in the Approach Document. Therefore, it has been proposed to provide an outlay of Rs. 48.74 crores for construction and improvement of rural roads under this programme.

16. There are 878 villages each with a population of 1,500 and above which do not have all-weather communication facilities. These will be linked with the nearest all-weather roads. It has been estimated that to realise this objective, it will be necessary

to undertake improvement/construction of 8,145 kilometres of roads in various districts of the State. Assuming that a sum of Rs. 50,000 per kilometre will be required for improving/constructing these roads, the total amount required for the purpose comes to Rs. 40.72 crores. As against this a sum of Rs. 35 crores (already indicated as tentative allocation by the Planning Commission) would be spent for linking these villages with all-weather roads.

17. The Approach Document also provides that in coastal and hilly areas, all-weather communication facilities will be provided to clusters of villages. In Orissa, there are a large number of sparsely populated villages which are widely dispersed. Most of these villages are in tribal areas which have remained backward over the years. After examination and detailed enquiry, it has been found that it is absolutely necessary to provide links to 366 clusters of villages in these hilly areas under the Minimum Needs Programme. These are located in five districts (Koraput, Sundergarh, Mayurbhanj, Keonjhar and Phulbani) where more than 50 per cent of the total population belong to backward classes. Besides, five clusters in the hilly district of Kalahandi and a few clusters in the Tribal Development Blocks in the districts of Sambalpur, Ganjam and Dhenkanal have been suggested for coverage by this programme. For connecting these clusters, a total length of 3,664, kilometers will have to be constructed or improved at a total cost of Rs. 13.74 crores. Originally it was estimated that these roads would require a sum of Rs 18.32 crores at the rate of Rs. 50,000, per kilometre. After discussion with Officers of the Government of India, this has been reduced by 25 per cent both in the length of roads and the estimated cost.

18. Thus the total provision for rural roads under this programme comes to Rs. 48.74 crores.

Rural Electrification

19. By the end of the Fourth Plan five districts, namely, Cuttack, Dhenkanal, Ganjam, Puri and Sundergarh will have 40 per cent or more of the rural population covered under the Rural Electrification Programme. Under the Minimum Needs Programme, it is proposed to cover 40 per cent of the rural population in the remaining eight districts of the State during the Fifth Plan. This will mean that 2,312 villages in the eight districts will be electrified as per the break up given below :—

(1) Balasore	..	190 villages
(2) Bolangir	..	256 Do.
(3) Kalahandi	..	463 Do.
(4) Keonjhar	..	89 Do.
(5) Koraput	..	437 Do.
(6) Mayurbhanj	..	331 Do.
(7) Phulbani	..	452 Do.
(8) Sambalpur	..	94 Do.

Total	..	2,312 villages

In many of these districts, these are areas inhabited by tribal population which will be brought under rural electrification programme in the Fifth Plan.

20. The cost of construction of 11 K. V. lines 11/04 K. V. sub-stations and L. T. lines in these villages comes to Rs. 14.54 crores. A further sum of Rs. 4.38 crores would be needed for constructing 33 K. V. lines and 33/11 K. V. sub-stations for feeding the 11 K. V. lines. This State has very little sub-transmission and distribution lines and rural electrification will not become feasible unless the programme is supported adequately by 33 and 11 K. V. lines. Since most of the villages suggested for coverage under the Minimum Needs Programme belong to the backward areas and have tribal population, it is absolutely necessary to provide these facilities.

21. Thus the total cost for rural electrification under the Minimum Needs Programmes comes to Rs. 18.92 crores which works out to an average of 80,200 per village.

Housesites for landless Labourers

22. On the basis of a limited sample survey of 300 villages each in two districts of the State it has been estimated that the total number of houseless families in the State comes to 12.87 lakhs. Accordingly, in the proposal earlier submitted to the Planning Commission, it was suggested that a sum of Rs. 35.31 crores would be needed for providing housesites to the rural landless. However, the Planning Commission have indicated a tentative allocation of Rs. 10 crores for this purpose. With this outlay, housesites can be allocated to about 4.1 lakh families. At a density of 25 sites to an acre, the total requirement of land will be 16,000 acres.

Assuming that half of this will be made available from the total extent of land that would be acquired comes to 8000 acres. At the rate of Rs. 5,000 per acre, a sum of Rs. 4 crores would be needed for the purpose. In addition, a sum of Rs. 6 crores would be needed towards cost of development at the rate of Rs. 150 per site. This works out to a total outlay of Rs. 10 crores. At the time of actual implementation, there may be some variations from the assumed figures. Therefore, it may be necessary to revise the physical targets.

Slum Improvement and Clearance

23. Environmental improvement in slum areas will be undertaken only in the city of Cuttack which has a (population of about two lakhs) as part of the Minimum Needs Programme. It has been estimated by the Planning Commission that about 37,600 slum dwellers may need to be covered under the environmental improvement programme. The total cost of this programme works out to Rs. 75 lakhs including Rs. 20 lakhs for land acquisition. A provision of Rs. 10 lakhs has been made for 1973-74. The balance amount of Rs. 65 lakhs is proposed under the Minimum Needs Programme for undertaking environmental improvement in slum areas of Cuttack City. Under the scheme, improvement of the slum areas will be taken up by providing link roads, drains, water taps, public sanitary latrines, community bath, street lights, school buildings and other community facilities for various slum areas of Cuttack City.

Nutrition

The detailed proposals under Nutrition submitted to Government of India was discussed with the Planning Commission and accordingly a tentative allocation of Rs. 38.90 crores has been communicated under the Minimum Needs Programme. These consists of Rs. 18.90 crores for supplementary feeding programme for pre-school children and pregnant women and nursing mothers and Rs. 20 crores for mid-day meal programmes for school children. The following proposals have been formulated on the basis of this provision.

25. During the Fourth Plan a provision of Rs. 410.28 lakhs has been made under the Special Nutrition Programme for covering pre-school children (0-6 years) and pregnant and lactating mothers. In addition, a mid-day meal programme for the school children was also being run. Under both these programmes food-stuff was being made available under CARE but this facility would not be available during the Fifth Plan and therefore the proposals have been formulated for utilising local food-stuff during 1974-79.

26. On the basis of the total provision of Rs. 38.90 crores indicated by the Planning Commission the number of beneficiaries and also expenditure over the Fifth Plan will be phased in the following manner.

Programme (1)	Year (2)	Beneficiaries (3)	Cost (4)
1. Supplementary Feeding Programme for pre-school children, pregnant women and nursing mother (S. N. P.),	1974-75	4 lakhs	Rs. 240 lakhs
	1975-76	5 lakhs	Rs. 300 lakhs
	1976-77	5.5 lakhs	Rs. 330 lakhs
	1977-78	7 lakhs	Rs. 420 lakhs
	1978-79	10 lakhs	Rs. 600 lakhs
			Rs. 1,890 lakhs
2. Mid-day meal programme (Unlike S. N. P, which is for 300 days in a year the mid-day meal for School children will be school working days, i.e., 220 days).	1974-75	8 lakhs	Rs. 352 lakhs
	1975-76	8.45 lakhs	Rs. 370 lakhs
	1976-77	9.50 lakhs	Rs. 418 lakhs
	1978-79	10 lakhs	Rs. 450 lakhs
			Rs. 2,000 lakhs

27. The outlay proposed for the Minimum Needs Programme comes to Rs. 216.11 crores (Annexure I) as against the tentative allocation of Rs. 157.78 crores suggested by the Planning Commission. This difference of Rs. 58.33 crores is due to the fact that additional provision, in excess of the allocations communicated by the Commission have been proposed under three items, namely, Elementary Education (Rs. 32.09 crores) Rural Roads (13.74 crores) and Drinking Water Supply (Rs. 12.50 crores). The concrete proposals under each of these items have been prepared and furnished to the Planning Commission. The outlay proposed for Elementary Education (Rs. 59.90 crores) had been agreed to in the Working Group discussions held in May, 1973 in the Planning Commission after examination of the specific schemes included in the proposals. Similarly, the additional outlay of Rs. 13.74 crores suggested for Rural Roads is meant to provide all-weather link roads to a small member of clusters of villages mostly in the tribal and hilly areas. These villages have been identified and schemes have been prepared to take up construction and improvement of specific roads. The amount suggested is the minimum required to provide these facilities in the backward and tribal areas of the State. The provision of Rs. 25.00 crores suggested for Drinking Water Supply is also based on specific schemes and Projects for Providing protected drinking water in the problem and difficult villages which have been identified. These schemes have been prepared after field investigation and collection of necessary data.

28. Thus the outlay suggested for the Minimum Needs Programme is based on location-specific projects and schemes and is the minimum needed to realise some of the norms indicated in the Approach Paper. In some cases, some of these norms have been scaled down in view of the constraint of resources.

29. From another angle also the provision of Rs. 216.11 crores for the minimum needs programme of Orissa is justified. The programme is primarily meant to provide social consumption and investment facilities to enable the poor to reach a certain minimum standard of living inspite of their low personal income. Therefore, the allocation under this programme to different States should bear a correlation with the number and percentage of persons living below the poverty line in different States. It has been estimated that nearly 64 per cent of Orissa's population live below the nationally accepted poverty line-highest among the States and they constitute a little less than seven (7) per cent of the total number of such persons in the country. In the National Fifth Plan an outlay of Rs. 3,300 crores is earmarked for the minimum needs programme. And seven per cent of this total outlay (Rs. 231.00 crores) comes to Rs. 231.00 crores which should be available for implementing the minimum needs programme in Orissa. This argument gets further strengthened by the fact that the proposals formulated under this programme are based on schemes and projects which are location-specific and time-bound and are also the minimum needed to reach the norms laid down in the Approach Document.

Annexure I

Minimum Needs Programme—Outlay and Expenditure

(Rs. in Lakhs)

Sl. No.	Programme	Fourth Plan 1969—74				Fifth Plan 1974—79					
		Outlay	1973-74	1973-74	Anticipated Expr. during the Fourth Plan	Five year outlay			1974-75		
			Approved outlay	Anticipated Expr.		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12
1	Elementary Education.	712·00	264·41	264·41	759·84	5,990·00	725·00	..	1,887·97	179·00	..
2	Primary Health Centres.	159·51	52·55	52·55	159·51	1,400·00	786·50	..	345·16	279·80	..
3	Rural Water-Supply	136·00	28·80	41·90	149·10	2,500·00	2,000·00	..	500·00	400·00	..
4	Rural Roads—										
	(i) For villages with 1,500 and above population.	175·00	59·51	59·51	275·87	3,500·00	3,500·00	..	814·40	814·40	..
	(ii) For clusters					1,374·00	1,374·00	..	274·80	274·80	..
5	Rural Electrification	605·00	413·00	413·00	1,312·85	1,892·00	1,892·00	..	400·00	400·00	..
6	House-sites for landless labourers.	..	..	..	..	1,000·00	1,000·00	..	200·00	200·00	..

1	2	3	4	5	6	7	8	9	10	11	12
7	Slum Improvement	15'00	15'00	15'00	47'00	65'00	..	..	20'00	..	..
8	Nutrition—										
	(i) SNP, (Supplementary Feeding Programme).	4,10'28	211'70	2,11'70	4,00'47	18,90'00	..	..	2,40'00	..	..
	(ii) Mid-day-meals Programme for School children.	1,34'88	26'00	26'00	133'80	2000'00	..	..	352'00	..	..
	Total	2347'67	1070'97	1084'07	3238'44	21611'00	11277'50	..	5034'33	2548'00	..

* In addition a sum of Rs. 1,000 lakhs has been provided in the State Plan for general education for elementary education thereby bringing the total outlay to Rs. 6990 lakhs.

Annexure II

Minimum Needs Programme—Physical Target

Sl. No.	Programme	Unit	Target	Likely achievement	Likely 1973-74 achievement	Five-Year target 1974—79	Target for 1974-75
1	2	3	4	5	6	7	8
1	Elementary Education, 6—11 age-group—						
	(a) Additional enrolment in terms of numbers.						
	(i) Boys	.. ..	1.25 lakhs	1.19 lakhs	0.585	4.15 lakhs	0.765 lakhs
	(ii) Girls	.. ..	0.80 lakhs	0.79 lakhs	0.143	2.35 lakhs	0.435 lakhs
	Total	.. ..	2.05 lakhs	1.98 lakhs	0.728	6.50 lakhs	1.200 lakhs
	(b) In terms of percentage coverage.						
	(i) Boys	.. ..	100.00%	90.00%	90.00%	105.00%	93%
	(ii) Girls	.. ..	60.00%	50.00%	50.00%	65.00%	53%
	Total	.. ..	80.00%	70.00%	70.00%	85.00%	73%

1	2	3	4	5	6	7	8
11—14 age-group—							
(a) Additional enrolment in terms of numbers.							
	(i) Boys	.. ..	0.20 lakhs	0.10 lakhs	0.0595	1.47 lakhs	0.42 lakhs
	(ii) Girls	.. ..	0.50 lakhs	0.42 lakhs	0.0999	0.80 lakhs	0.23 lakhs
	Total	.. ..	0.70 lakhs	0.52 lakhs	0.1594	2.27 lakhs	0.65 lakhs
(b) In terms of percentage coverage.							
	(i) Boys	.. ..	50%	35.00%	35.00%	72.4%	54.4%
	(ii) Girls	.. ..	15%	14.00%	14.00%	44.0%	18.0%
	Total	.. ..	32.5%	24.5%	24.5%	58.2%	36.2%
2	Primary Health Centres						
	(a) Main Centres	.. No.	314	294	294	20 Buildings Spilled over from Fourth Plan.	20
	(b) Population covered	.. No.	201,20,000	188,92,024	188,92,024	12,27,976	12,27,976
	(c) Sub-Centres	.. No.	2,012	2,012	..	187	93
	(d) Population covered	.. No.	201,20,000	201,20,000	..	13,09,000	6,51,000
	Referral Hospitals				..	13,09,000	6,51,000
	(a) Hospitals	.. No.	..	..	..	77	25
	(b) Population covered	.. No.	..	..	..	49,28,000	16,00,000

3	Rural Water-Supply							
	(a) Villages covered	.. No. ..	1,592	1,432	1,012		8,141	1,628
	(b) Population covered	.. Million..	0.485	0.310	0.226		4.52	0.905
4	Rural Roads—							
	(a) New constructions	.. Kms. ..	210	210	..	}	10,893 Kms.	2,218 Kms.
	(b) Improvement	..	220	220	..			
	(c) Number of target villages	.. ..	..	..	..		878	175
	(d) Number of cluster of villages	.. ..	..	..	..		366	53
5	Rural Electrification-number of villages electrified.		9,552	9,552	10,373		15,000 (2,312 minimum needs)	3,000
6	House sites for landless labour							
	(a) Population covered	..					4.1 lakhs families (or 20.5 lakhs persons).	80,000 families
	(b) Number of house-sites allotted	.. ..	..	..	..		4.1 lakhs	Ditto
	(c) Number of homesteads on which rights including security of tenure proposed to be conferred.	.. ..	..	..	..		4.1 lakhs	Ditto
7	Slum Improvement	..	Only one town i. e. Cuttack.	Detailed provisional schemes amounting to Rs. 16.96 lakhs for environmental improvements of sanitation in 3 slum pockets namely Sankarpur, Jobra and Patapola have been furnished to Government of India for their approval for execution during 1973-74 for which Rs 10.00 lakhs has been allotted by the Government of India for the purpose of environmental improvement of slum areas of Cuttack towns.	The following slum pockets of the Cuttack town will be taken up for improvement :—			
	(a) Towns covered with names of towns.						1. Thoria Sahi 2. Tulasipur Deul Sahi 3. Bidanasi 4. Tulasipur Sahar Sahi 5. Tulasipur Baodia Sahi 6. Mansinghapatna 7. Kafia Sahi 8. Oriya Bazar Harijan Sahi 9. Sutahat	

1	2	3	4	5	6	7	8
	(b) Population covered	..	..	..	..	205,759	
	(c) Construction of tenements if any (Nos.)	..	Nil				
	Vulnerable groups to be catered for—						
	(a) Pregnant women	} No. in lakhs					
	(b) Lactating mothers (No.)		0·86	0·86	0·86	3·08	1·23
	(c) Children in the age-group of 0—6	No. in lakhs	2·90	2·90	2·90	6·92	2·77
	(d) School-going children of the waker sections.	No. in lakhs	7·00	7·00	7·00	10·00	8·00
	Supplemental feeding programmes—						
	(a) Special Nutrition feeding programmes.	No in lakhs	3·76	3·76	3·76	10·00	4·00
	(b) Mid-day meals programme	.. No. in lakhs	7·00	7·00	7·00	10·00	8·00
	(c) Balwadi feeding programmes..	No. in lakhs	..	..	..	..	..
	Applied Nutrition Programms—						
	(a) Present coverage		..	..	..	..	..
	(b) Future coverage contemplated	..	..	..	..	..	..
	Self-reliance in production of local foods						
	(a) Name of the food with details	..	..	..	..	..	..

CHAPTER 2·1

AGRICULTURE, AYACUT DEVELOPMENT AND SOIL CONSERVATION

(I) AGRICULTURE AND AYACUT DEVELOPMENT

I. Introduction

With the bulk of its labour force (77%) engaged in agriculture which also accounts for 57% of its total income, larger agricultural production would have a relatively greater impact on employment and State income. The State's agricultural sector is unfortunately one of the most indigent in the country. Frequent floods, droughts and cyclones not only reduce crop yields substantially but also cause such acute distress in the affected areas that massive expenditure on relief including foodgrains supply has to be incurred. Apart from natural disasters, productivity in this sector is relatively lower than in many other States due to the irrigation facilities being meagre, rural credit supply being extremely inadequate, holdings yet being fragmented and above all supplies and services, especially the inputs, being unsatisfactory.

2. It should also be noticed that the statistical base is extremely weak and base-level¹ production estimates are at best tentative. The 1968-69 production of foodgrains was, for purposes of formulation of Fourth Plan targets, was assumed at 53·00 lakh tonnes; with a projected 6·4% growth rate per annum, the Fourth Plan target for foodgrains production was estimated at 70·00 lakh tonnes. The actual production in 1968-69, however, was 47·21 lakh tonnes. The revised targets for 1972-73 and 1973-74 are 57·00 lakh tonnes and 60·00 lakh tonnes respectively as against the original targets of 65·00 lakh tonnes and 70·00 lakh tonnes. Jute production in 1968-69 was 2·90 lakh bales against an assumption of 3·60 lakh bales. A scaling-down of the Fourth Plan targets to a more realistic level has thus become inevitable. Taking these revisions into account, the base level production estimates and the Fifth Plan targets for the principal crops are estimated as follows:—

TABLE I

Crop	Unit	Assumed base level production 1973-74	Targets for the Fifth Plan (197—479)	
			Area in thousand hectares	Production
1	2	3	4	5
Foodgrains ..	Lakh tonnes ..	60·00	6,750·00	80·00
Oilseeds ..	Lakh tonnes ..	2·97*	6·06	4·86
Sugarcane ..	Lakh tonnes Gur ..	2·50	50·00	3·00
Jute ..	Lakh bales ..	3·88	70·00	5·18
Mesta ...	Lakh bales ...	1·60	40·00	2·20

* Includes Niger and Safflower

3. The major objectives and strategies may be delineated as follows:—

- (a) The khariff yield rate for paddy should be significantly improved through a much larger high-yielding varieties programme.
- (b) Irrigation availability should increase appreciably, especially during the Rabi season.
- (c) Gall-midge resistant paddy varieties should account for a substantial share of the khariff acreage.
- (d) Special agricultural production programmes have to be developed for tribal and rainfed areas.
- (e) Proper soil and water management (including drainage) practices should be developed in command areas of irrigation projects.
- (f) Commercial and horticultural crops should receive much greater emphasis. So far as horticultural crops are concerned, area programmes should be developed wherever possible, with institutional financial support.

The entire programme as worked out in the following pages is estimated to cost to Rs. 28.75 crores. It is estimated that during the Fifth Plan, foodgrains production will increase by 2 million tonnes.

II. Improved Seeds

4. The availability of improved seeds is the first step towards a modern agriculture. A seed industry being virtually non-existent in the State, seed production has become a major departmental operation. The total area of departmental farms increased from about 1,600 hectares (36 farms) at the beginning of the First Plan to 4,125 hectares (95 farms) during the Fourth Plan. No new farm was established during the Fourth Plan on the contrary, three farms were transferred to the Orissa University of Agriculture and Technology and an area of 40 hectares of the Similiguda Farm was transferred to the Union Government for setting up the Central Jersey Cattle Breeding Station.

5. Of the total farm area, 2,900 hectares would probably have been brought under cultivation by the end of the Fourth Plan. The cultivable but unreclaimed area at the commencement of the Fifth Plan would be about 128 hectares. The total farm area available for seed production would thus be 3,028 hectares. On the basis of a minimum seed production programme, the farm area should be 4,365 hectares (an increase of 1,337 hectares). The assumptions underlying this estimate may be seen in Annexure I.

6. By the end of the Fourth Plan, about 1,120 hectares of farm area would be irrigated and available for double cropping. If this is adjusted against the total additional area requirement of 1,337 hectares, the net additional requirement of farm area would be 217 hectares. It will not be difficult to obtain this area by adding to irrigation facilities in the existing farms. Besides, the estimates in Annexure I relate to the final year of the Fifth Plan and the area requirement in the preceding years would be less. Substantial area would also be available in the soil conservation demonstration centres for production of seeds of millets, pulses, oilseeds and mesta. A lump sum provision of Rs. 15.00 lakhs has been made in the Plan with a view to increasing the area under existing farms and setting up a new farm in the Malkanagiri subdivision particularly for encouraging orchards. For land levelling and reclamation of the existing farms a sum of Rs. 4.37 lakhs has been provided. It is also proposed to provide irrigation to a further 1,200 hectares at a cost of Rs. 45.00 lakhs. It is estimated that a sum of Rs. 79.43 lakhs would be required to finance various schemes connected with the maintenance of the farms and the provision of minimum facilities. A list of these schemes may be seen in Table II given below.

7. A large programme of seed production through registered growers would have to be organised and this would involve certification of seeds through a seed certification agency. The agency will take up certification of seeds of major crops in the first instance and will discharge the duties and functions contained in the Seed Act. This envisages an expenditure of Rs. 25.00 lakhs including an organisation for enforcement of the Seed law.

8. During the Fourth Plan, two seed processing and drying units have been established at Sukinda and Similiguda. It is proposed to set up four more units during the Fifth Plan. The cost of each unit would be Rs. 3.50 lakhs. (Equipment Rs. 1 lakh, Buildings Rs. 1.25 lakhs and staff Rs. 1 lakh at Rs. 25,000 per annum for four years). It is proposed to incur expenditure on equipment and buildings in respect of all the four units in the first year of the Plan. The staff should be in position from the second year onwards. It is proposed to provide Rs. 14.00 lakhs in the Plan for establishment of four seed processing units.

9. The total expenditure on the Fifth Plan programme is thus estimated at Rs. 186.00 lakhs, the annual break-up of the outlay would be as indicated in Table II below:—

TABLE II

(Rs. in lakhs)

	1974-75	1975-76	1976-77	1977-78	1978-79	Total
	1	2	3	4	5	6
Establishment of new farms ..	2.00	3.00	3.00	4.00	3.00	15.00
Reclamation, layout and levelling	5.00	2.57	..	..	..	7.57
Soil improvement measures ..	1.00	1.25	1.25	1.25	1.25	6.00
Construction of roads and culverts	..	1.00	1.75	1.00	2.25	6.00
Fencing ..	1.10	2.28	3.00	4.75	2.87	14.00
Replacement of bullocks and purchase of 10 tractors.	1.60	1.60	1.60	1.60	1.60	8.00
Replacement of vehicles and purchase of new vehicles.	0.80	0.80	0.80	0.80	0.80	4.00
Tools and implements ..	0.50	0.50	0.60	0.60	0.60	2.80
Electrification of farm buildings ..	2.00	1.00	5.00	3.00	4.00	15.00
Repair and construction of staff quarters and farm buildings.	2.00	4.00	6.00	7.00	4.63	23.63
Irrigation ..	16.00	20.00	9.00	..	..	45.00
Seed Certification ..	3.20	4.00	4.40	4.40	4.00	20.00
Seed law enforcement ..	0.80	1.00	1.10	1.10	1.00	5.00
Seed processing unit ..	10.00	1.00	1.00	1.00	1.00	14.00
Total ..	46.00	44.00	39.50	29.50	27.00	186.00

III. Plant Protection

10. A target of 14 lakh hectares (gross) under different plant protection measures was fixed for the last year of the Fourth Plan. It is estimated that the actual achievement will be somewhat less (about 12 lakh hectares)*. The area coverage is sought to be extended to 20 lakh hectares in the last year of the plan; the size of the programme in each year of the plan in respect of major plant protection schemes would be as indicated in the following Table III:—

TABLE III

(In lakh hectares)

	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
1. Seed treatment ..	3.00	4.00	5.00	6.00	7.00	25.00
2. Prophylactic control	1.50	2.00	2.25	2.30	2.50	10.55
3. Epidemic control ..	3.40	3.50	3.70	4.00	4.30	18.90
4. Rodent control ..	4.00	4.30	4.80	5.40	5.70	24.20
5. Weed control ..	0.10	0.20	0.25	0.30	0.50	1.35
Total ..	12.00	14.00	16.00	18.00	20.00	80.00

* Year	Target (in lakh hectares)	Achievement (in lakh hectares)	
		Gross	Net
1	2	3	4
1969-70 ..	3.28	3.20	0.05
1970-71 ..	6.00	5.20	4.50
1971-72 ..	10.80	9.50	6.00
1972-73 ..	12.00	9.06	6.50
1973-74 (Estimates) ..	12.00	..	..

11. The Fifth Plan programmes would by and large be the same as in the Fourth Plan, but the programme size would be increased substantially and modifications in programme content would be effected in some cases. The outlines of the programme to be confined during the Fifth Plan are discussed below—

- (i) *Seed treatment*—Of the target of 25 lakh hectares, it is estimated that seed treatment in respect of 15 lakh hectares would be done by the cultivators themselves and the Department would have to organise the programme in respect of 10 lakh hectares. The cost of seed treating chemicals is estimated at Re. 1 per hectare and a total expenditure of Rs. 10 lakhs will thus be involved. It is also proposed to supply 2,500 seed treating drums free of cost to Grama Panchayats for undertaking seed treatment on a custom basis. The cost on this account is estimated at Rs. 5 lakhs in the Plan period.
- (ii) *Prophylactic measures*—Prophylactic control measures against paddy stemborer, leaf hoppers, gallfly, blast and brown spot diseases will be taken up in an area of 10.55 lakh hectares during the Plan of which the department will take up the programme in 30,000 hectares. The cost of pesticides for prophylactic spraying per hectare will be about Rs. 50 and a sum of Rs. 15 lakhs will be necessary during the Plan period.
- (iii) *Epidemic control*—A sum of Rs. 17 lakhs has been provided in the Plan for this programme. Pesticides at Rs. 40 per hectare would be necessary but the department will organise epidemic control measures only in 42,500 hectares; the balance of the programme will be covered by the cultivators themselves.
- (iv) *Rodent control measures*—The Fifth Plan provides a sum of Rs. 8 lakhs for rodent control programmes to be introduced in selected areas.
- (v) *Subsidy on Plant Protection Equipments*—At present a subsidy of 25 per cent of the costs of sprayers supplied through the Agro and Small Industries Corporation, the Orissa State Co-operative Marketing Society, Ltd., is being given. In view of the encouraging response as also the result achieved with the individually owned sprayers it is proposed to continue the subsidy throughout the Fifth Plan at a cost of Rs. 15 lakhs.
- (vi) *Purchase of Plant Protection Equipment and spare parts*—(a) The provision for purchase of plant protection equipment and spare parts is Rs. 9 lakhs throughout the Plan period. The new equipment will generally be used for replacement and supply to farmers in tribal areas where private ownership of sprayers is difficult.
- (b) In addition to the continuing scheme, organisation of three new schemes during the Fifth Plan is contemplated. The first scheme relates to weed control. The weed menace is serious in some areas and it is necessary to promote weed control with the use of herbicides. Of the target of 1.35 lakh hectares under the programme, the department would limit itself to 25,000 hectares, the balance being taken up by the farmers themselves. Since the cost of herbicides would be about Rs. 40 per hectare, a total expenditure of Rs. 10 lakhs will be necessary. The programme will be supervised by an Assistant Director of Agriculture (Weed Control) and two Agricultural Overseers.
- (c) The second new scheme would relate to biological control of insect pests and diseases. Control of some crop pests by parasites, predators and pathogens has proved more effective than chemical control. In view of the wide spread concern about ecological balance and the harmful effect of pesticides residue it is necessary to diversify pest control measures to include non-chemical measures. In case of coconut the serious damage to the crop by *Nephanties Serionopa* has been successfully controlled by parasites. It is proposed to take up multiplication and release of this parasite in coconut plantations. An effort would be made to collect information on recent advances in techniques of biological control and examine the prospects of their adoption in the State. A small laboratory staff would have to be posted.

(d) The last of these schemes is pest surveillance. The information will be collected by trained extension staff and will be collated at the State headquarters by an Assistant Director (Pest Surveillance) and two Assistant Plant Protection Officers.

(e) The total outlay during the Fifth Plan is estimated to be of the order of Rs. 104.00 lakhs. The yearwise and scheme wise breakup of the outlay is given in the following Table IV.

TABLE IV

(Rs. in lakhs)

	1974-75	1975-76	1976-77	1977-78	1978-79	Total
	1	2	3	4	5	6
1. Seed treatment ..	1.80	1.20	2.00	2.10	2.20	10.00
2. Prophylactic control.	2.00	2.50	3.00	3.50	4.00	15.00
3. Epidemic control	2.63	3.00	3.40	3.80	4.20	17.00
4. Rodent control ..	1.52	1.56	1.60	1.64	1.68	8.00
5. Weed control ..	1.46	1.68	1.96	2.38	2.52	10.00
6. Biological control	1.00	1.00	1.00	1.00	1.00	5.00
7. Pest surveillance..	1.00	1.00	1.00	1.00	1.00	5.00
8. Purchase of spare parts.	1.00	1.00	1.00	1.00	1.00	5.00
9. Purchase of sprayers.	..	..	2.00	2.00	..	4.00
10. Subsidy on sprayers.	3.00	3.00	3.00	3.00	3.00	15.00
11. Pre-harvest control measures.	0.20	0.20	0.20	0.20	0.20	1.00
12. Purchase of seed treating drums.	1.00	1.00	1.00	1.00	1.00	5.00
13. Miscellaneous schemes and contingencies.	0.50	0.50	1.00	1.00	1.00	4.00
	17.08	18.34	22.16	23.62	22.80	104.00

IV. Soils, Fertilisers and Manures

12. The full application of requisite manures and fertilisers along with good soil management practices will be impossible unless along with adequate fertilisers, the production of urban and rural compost is adequate. Composting of urban waste has been attempted during the earlier Plans and will be continued during the Fifth Plan. Urban local bodies have been assisted with loans amounting to Rs. 4.00 lakhs. The Fifth Plan aims at increasing urban compost production to 1 lakh tonnes. It is proposed to provide Rs. 4.00 lakhs as loans to local bodies for purchase of trucks. In addition, a sum of Rs. 30 lakhs is set apart for setting up a mechanised compost plant in one major urban area. An effort will be made to set up the plant through the Agro Industries Corporation, with share capital assistance; depending upon the economy of the project other Unit will be attempted.

13. As regards rural composting, the objective is to produce 135 lakh tonnes of rural compost by the final year of the Fifth Plan. The cost of organising this campaign is estimated at Rs. 5 lakhs over the Plan period.

14. Green manuring and water hyacinth composting would be given greater importance during the Fifth Plan. The area under green manure crops is estimated at 60 lakhs hectares by the end of the Fifth Plan with the free distribution of seeds at an annual cost of Rs. 0.16 lakh. The water hyacinth composting would be organised with a small incentive in selected Panchayats at a total cost of about Rs. 0.20 lakh.

15. Two new schemes are contemplated during the Fifth Plan. The first relates to the installation of cow-dung gas plants. A subsidy of 50% of the cost of the plant may be provided for 20 plants during the Plan period. The second scheme relates to sewage farming. A sewage farm at Rourkela is proposed to be established over an area of 40 hectares. The cost of establishing this farm would be about Rs. 5 lakhs.

16. There has been a noticeable increase in the consumption of chemical fertilisers. In 1969-70, the consumption was 19,000 tonnes nitrogen, 6,000 tonnes P_2O_5 and 3,000 tonnes of K_2O . The estimated consumption in 1972-73 was 43,000 tonnes, 12,500 tonnes and 5,000 tonnes respectively. By the end of the Fourth Plan the consumption would have increased to 56,000 tonnes of nitrogen, 18,000 tonnes P_2O_5 and 8,000 tonnes of K_2O . By the end of the Fifth Plan it is estimated that consumption would have increased to 1.75 lakhs tonnes of nitrogenous, 80,000 tonnes of phosphatic and 40,000 tonnes of potassic fertilisers (in terms of nutrients). The State used to experience inadequate demand for chemical fertilisers sometime ago; there is now an acute shortage of fertilisers in the market and the trend of consumption is likely to grow rapidly in future. Distribution of fertilisers is done both through co-operatives and private trade and financial involvement on the part of the Government is not necessary. It is, however, necessary, to ensure quality control of fertilisers and this can be done by analysing a larger number of samples. Collection and analysis of samples would require considerable staff support and an expenditure of Rs. 10 lakhs will be necessary during the Plan period. Since the fertiliser utilisation decides the achievement of the plan target of 8 million tonnes, of food grains, it is very necessary that the required quantities should also be made available.

17. Facilities for soil testing are at present inadequate, there being only 5 soil testing laboratories in the State. These will be equipped with mobile vans so that collection of samples does not take much time and the results of the analysis can be made available to the farmers on the spot. It is proposed to acquire three such vans during the Plan period. It is also likely that 8 more laboratories will be set up by the Government of India during the Plan period, bringing the total number of laboratories to 13 (one per district).

18. It is also considered necessary to establish a central control laboratory under a Chief Chemist for efficient co-ordination of soil testing work in the State. The cost is estimated at Rs. 16.31 lakhs.

19. The existing laboratories would need some further equipment and a small expenditure on farmers' training would also be necessary. The total expenditure on the schemes discussed above is estimated at Rs. 90.93 lakhs; the year-wise break-up is given in Annexure II.

V. Food Crops

20. The target of food grains production during the Fifth Plan is 80 lakhs tonnes. This is a substantial increase over the 1968-69 production of 47.21 lakhs tonnes. The contribution of each food grains crop to the estimated production is as follows:—

TABLE V

(In lakh tonnes)

Crop		1968-69	1972-73	1978-79
1		2	3	4
Rice	..	39.76	40.85	65.90
Wheat	..	0.16	0.84	5.00
Pulses	..	4.47	4.31	5.50
Millets	..	2.82	3.00	3.60
Total	..	47.21	49.00	80.00

21. Since increment to the cropped area will not be substantial, the gains in production can only come from modern cultivation practices including larger application of inputs. The use of these inputs and the adoption of modern farming practices would however depend on the availability of irrigation. The irrigated potential at the end of the Fourth Plan will be about 8.38 lakh hectares; this is estimated to increase to about 14.36 lakh hectares at the end of the Fifth Plan, the Potential for rabi being of the order of 8.85 lakh hectares.

22. The increase in irrigation facilities has to be supported by a programme of cultivation of high-yielding varieties in order that food output is maximised with necessary supplies and services support. The attempt to provide a package of services in potentially productive areas began initially in 29 Blocks of Sambalpur district through what is known as the Intensive Agricultural District Programme (I. A. D. P.). This was followed by the Intensive Agricultural Area Programme (I. A. A. P.) in 106 Blocks. Again, in 1966, 90 Blocks under the I. A. D. P./I. A. A. P. were brought under the High Yielding Varieties Programme. In these Blocks size of the extension organisation was larger, the assumption being that an increased intensity in farming involved more intensive farm counselling.

23. The high yielding varieties programme has, notwithstanding the larger extension effort, yet to make an impact on Khariff cultivation. It will be necessary to extend the coverage of the programme in the Khariff which accounts for the larger share of the total foodgrains production. Since the programme in the Khariff can be sustained under rainfed conditions, it is necessary to review the present disposition of the extension personnel. It has also to be remembered that pulses and millets production needs to be increased and there are several areas which are eminently suited to these crops. To starve these crops of extension support will be inexpedient. In the course of the Fifth Plan, therefore, the objective will be to set up an agricultural extension machinery of uniform size throughout the State. In this process the size of the extension setup will come down somewhat in the I. A. A. P./H. Y. V. P. Blocks. The other Blocks, however, will have a larger extension machinery, the justification for which has been given above. This is not likely to involve any extra cost since it will largely be a programme of redistribution of the existing staff.

24. High yielding varieties accounted for 1.74 lakhs hectares of paddy and 0.056 lakhs hectares of wheat in 1969-70. The area under high yielding paddy and wheat in 1972-73 is estimated at 5.50 lakh hectares (5 lakh hectares under paddy and 0.50 lakh hectares under wheat). It is expected that the achievement in 1973-74 in respect of these two crops would be 7.30 lakh hectares which will increase to 18 lakh hectares at the end of the Fifth Plan. Annexure III contains a projection of the cropwise area under high yielding varieties in each year of the Plan.

25. The I. A. D. P. Scheme will continue in all the 29 Blocks of the Sambalpur district during the Fifth Plan and the estimated expenditure over the Plan period is Rs. 20 lakhs. The main thrust of the programme will be on increasing the coverage of high yielding paddy in the Khariff, extending the area under various commercial and horticultural crops (especially in the rainfed areas of the district), and on promoting efficient soil and water management practices. Each Block in the State (except those under the I. A. D. P.) will be provided with two Agricultural Extension Officers and 15 Village Level Workers. The Community Development Department is likely to augment the number of Village Level Workers during the Plan period. The expenditure, as indicated above, will generally remain at the Fourth Plan level with normal trend increases. The estimate of expenditure during the Fifth Plan has been attempted separately for each scheme though, in the course of the Plan, the schemes will be integrated and spread over the entire State. The estimate is at Annexure IV.

26. In the tribal areas and in other areas of extensive millets cultivation, a programme of increasing production will be organized. In 1973-74, the content of the millets programme was changed and a subsidy on the cost of improved seeds was given. Demonstrations which earlier accounted for the entirety of the programme were reduced and were limited to areas where the seed supply programme was undertaken. The scheme will be continued during the Fifth Plan, and extension activities would relate, in these areas, increasingly to millets.

27. Pulses, similarly, deserve much larger attention, especially because the crop can be sustained on residual moisture and can, if grown in time, do without irrigation or rainfall. The millet areas would be chosen for intensive pulse development because the crop can precede or follow millets and will lead to double cropping in rainfed condition. In other areas too, a large number of demonstrations would be organized and a programme of supply of rhizopium culture undertaken. A small subsidy on the cost of improved seeds may also have to be given.

28. The millets and pulse programme would be co-ordinated in a cell in the Directorate of Agriculture under an officer of the rank of Deputy Director. He will be assisted by an Assistant Director of Agriculture and an Agricultural Supervisor besides some ministerial staff. The cell, however, will not have an independent field set up, extension being done through the Block level staff and the staff under the District Agriculture Officer.

VI. Commercial Crops

A. OILSEEDS—

31. The Fourth Plan aimed at increasing oilseeds production from 1.70 lakh tonnes in 1968-69 to 2.70 lakh tonnes. The achievement at the end of the Fourth Plan (1973-74) is estimated as follows:—

TABLE VII

Crop	Area (in hectares)			Production (in tonnes)		
	Kharriff	Rabi	Total	Kharriff	Rabi	Total
1	2	3	4	5	6	7
Ground-nut ..	74,000	20,000	94,000	55,500	40,000	95,500
Mustard ..	..	69,000	69,000	..	69,000	69,000
Castor ..	14,800	12,200	27,000	11,100	9,150	20,250
Til ..	71,000	50,000	121,000	35,500	25,500	61,000
Linseed ..	..	22,400	22,400	..	11,200	11,200
Niger ..	..	80,000	80,000	..	40,000	40,000
Safflower ..	..	600	600	..	300	300
Total ..	159,800	254,200	414,000	102,100	195,150	297,250

32. It is proposed to increase the area under oilseeds to 606,400 hectares and production to 486,200 tonnes. The following table contains estimates of area and production in the final year of the Plan (1978-79):—

TABLE VIII

Crop	Area (in hectares)			Production (in tonnes)		
	Khariff	Rabi	Total	Khariff	Rabi	Total
1	2	3	4	5	6	7
Groundnut ..	94,000	40,000	134,000	70,500	80,000	150,500
Mustard ..	..	150,000	150,000	..	150,000	150,000
Til ..	80,000	70,000	150,000	40,000	42,000	82,000
Castor ..	23,160	16,840	40,000	17,370	12,630	30,000
Linseed ..	..	22,400	22,400	..	11,200	11,200
Niger ..	..	80,000	80,000	..	40,000	40,000
Safflower ..	..	15,000	15,000	..	7,500	7,500
Sunflower ..	..	15,000	15,000	..	15,000	15,000
Total ..	197,160	409,240	606,400	127,870	358,330	486,200

33. The programme of work in respect of different oilseeds crops would broadly be as follows:—

- (i) *Groundnut*—The total area under the crop is estimated to reach 134,000 hectares in 1978-79; the plan contemplates an increase by 20,000 hectares each in the Khariff and Rabi seasons. The Khariff programme would be extended in the Baripada, Karanjia, Sundargarh, Dhenkanal, Bargarh, Bolangir Kuchinda, Raygada, Koraput, Phulbani and Sonepur agricultural districts. Soil amendment measures through application of soil conditioners would be undertaken. As the Khariff production will meet the seed requirement in the Rabi season, short duration varieties without dormancy and suited to Rabi cultivation would be grown in the Khariff. The supply of soil conditioners would be subsidised and the subsidy would be of the order of Rs. 20 lakhs over the plan period. A large programme of demonstrations both in the Khariff and Rabi seasons would also need to be organised and the cost on this account is estimated at Rs. 5 lakhs. The present subsidy of Rs. 50 per quintal on seed would be continued in view of rapid driages in transportation and handling of groundnut seeds; the annual expenditure is estimated at Rs. 1,20,000 and the over-all expenditure at Rs. 6 lakhs. There are pest and weed problems of the crop, but it is proposed to tackle these through the demonstrations. Some demonstrations therefore, may not be composite ones and may relate only to prophylactic plant protection and weed control measures.

- (ii) *Mustard*—(a) A substantial expansion in the mustard area has been envisaged. The strategy would be to popularise mustard after monsoon potato and maize in hilly areas and in between two high yielding paddy crops elsewhere. Long duration varieties with higher yield potential would be advocated in areas with prolonged winter. It is also possible to grow mustard as a mixed crop with wheat; it is proposed to distribute 70 quintals of improved mustard seeds each year in small 250 grams packets to wheat farmers, preferably along with sale of wheat seeds to them. This would involve an annual expenditure of Rs. 22,000 and a total expenditure of Rs. 1,10,000 during the plan period.
- (b) Aphids pose a major problem in mustard areas. It is proposed to organise demonstrations of prophylactic measures over 1,000 hectares annually. The cost of each demonstration is estimated at Rs. 60 and the annual requirement of funds would be Rs. 60,000. In addition to these demonstrations, 100 one-hectare demonstrations will be organised annually in potential areas. Each such demonstration would cost Rs. 150 and an annual expenditure of Rs. 15,000 would be necessary.
- (iii) *Til*—The til area is proposed to be increased to 1,50,000 hectares from 1,21,000 hectares at the end of the Fourth Plan. It could come up as a pre-paddy crop or in paddy, potato and wheat fallows. The additional programme would be organised in such areas. It is proposed to distribute 75 quintals of til seeds annually in 250 grams packets to potato farmers. The total cost of both these programmes is estimated at Rs. 1,10,000 during the plan period.
- (iv) *Castor*—The additional castor area will be identified in the southern districts. Castor NPH-1 would be multiplied. The programme would be supported by demonstrations which would, through out the Plan period, cost Rs. 0.50 lakh.
- (v) *Safflower*—(a) It is proposed to increase the safflower area considerably (from 600 hectares to 15,000 hectares) during the Fifth Plan Period. Since this is a relatively new crop, free supply of seeds for an area of 1,500 hectares annually would be undertaken. Safflower production would need considerable marketing support as it is unlikely that farmers would take to this crop without an assurance of a reasonable price. The plan makes an annual provision of Rs. 4 lakhs for procurement of seeds. This expenditure would no doubt be recouped through sale-proceeds, but that should not prevent a suitable outlay on marketing support. These funds may also be available for giving a subsidy to co-operative societies undertaking procurement of safflower seeds. A transportation and handling subsidy of Rs. 20,000 per annum is also envisaged.
- (b) The Department will conduct 100 one-hectare demonstrations annually. The cost of each demonstration is estimated at Rs. 100. The expenditure on demonstrations would thus amount to Rs. 50,000 over the plan period.
- (vi) *Sunflower*—(a) There is at present hardly any area under sunflower. Some demonstrations have been taken up and the problem of marketing has already come to surface. In view of the target of bringing 15,000 hectares under the crop, marketing support as in the case of safflower would be necessary. The provision made for procurement of safflower seed and meeting transport and handling losses would be utilised for procurement of sunflower seed as well. Free distribution of seeds for 8,000 hectares during the plan period would be undertaken at a total cost of Rs. 2 lakhs.

- (b) As in the case of safflower, 100 demonstrations will be organised annually. Since this crop needs polinates for stepping up the yield, the demonstrations would include the cost of setting up bee colonies; the cost of demonstrations including that of bee hives is estimated at Rs. 1,75,000.
- (c) The Directorate of Agriculture would be strengthened by an Assistant Director, an Agricultural Supervisor and five Sub-Overseers, etc. to take up the heavy work programmed.
- (d) Annexure V contains an outline of the annual targets of area coverage and production in respect of various oilseed crops; Annexure VI contains an estimate of the annual as well as overall expenditure on the various schemes discussed above.

B. JUTE AND ALLIED FIBRES

34. Orissa accounts for a little more than 6 per cent of the country's area under jute and also of production of jute fibre. The jute area of the State has however, remained more or less, fixed during the last two decades, fluctuating between 42,000 to 52,000 hectares according to weather conditions. Since the yield rate has not registered any significant improvement, production has also remain at about the same level, as shown below.

Year	Area in hectares	Production in bales	Bales/ha
1	2	3	4
1968-69 ..	41,854	2,90,000	6.9
1969-70 ..	44,800	3,12,700	7.0
1970-71 ..	43,700	3,27,846	7.4
1971-72 ..	51,680	3,79,705	7.2
1972-73 ..	42,272	2,23,450	5.3

This seems to be true of the crop in the country as a whole, for the area fell from 9.06 lakh hectares in 1961-62 to 8.09 lakh hectares in 1971-72; production in these years was 63.07 lakh bales and 56.65 lakh bales respectively. The single most important factor limiting increase in the cropped area in the State is the competitive claim of high yielding summer paddy which tends to occupy the land beyond the jute sowing season.

35. The Fourth Plan target of production cannot fully be realised. The target was based on an assumption that the base-level (1968-69) production (3.60 lakh bales), will go up to of 5.60 lakh bales, in the last year of the Fourth Plan (1973-74); actual production would, it is clear, be less than 4 lakh bales. An effort has been made during 1973-74 to bring additional areas under the crop, and it is estimated that the area may increase to 54,000 hectares. The estimated production would, the weather being favourable, be 3.89 lakh bales approximately. During the Fifth Plan it may be to bring a further 16,000 hectares under the crop. The additional area will be selected in the command of irrigation

projects and in flood-affected areas. An effort will also have to be made in the traditional areas to advance harvesting of the summer paddy crops and utilise the land for jute. The yearwise breakup of the area and production during the Fifth Plan is indicated below—

TABLE IX

Summer	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6
1. Additional area to be brought under Jute.	2,500	3,000	3,000	3,500	4,000
2. Total area ..	56,500	59,500	62,500	66,000	70,000
3. Total Production ..	4,06,800	4,28,400	4,56,250	4,81,800	5,18,000
Bales/ha ..	7.2	7.2	7.3	7.3	7.4

(NOTE—1. Area in hectares. 2. Additive to the base-year area of 54,000 hectares. 3. Production in bales).

36. Thus, the Fifth Plan envisages a production increase of 33½ per cent over the estimated production at the end of the Fourth Plan. The yield rate it may be seen, has been assumed at about the present rate because no significant improvement in the yield rate has been noticed in the jute-growing areas and it is unlikely that the experience will be different during the next five years.

37. The additional production effort would need to be supported by several measures. These are outlined below:—

(i) *Seed supply*—At present a subsidy of 50 per cent on the cost of seeds is allowed under the central sector Intensive Jute Development Programme (IJDP) which operates in the Cuttack district. This scheme would, in all likelihood, continue during the Fifth Plan. It would be necessary to provide 50 per cent of the cost of seeds in the Plan budget although this will be recovered from the farmers. It is proposed to extent the scheme of subsidised seed supply to new areas; although 50 per cent of the cost of seed will be recovered, 100 per cent of the cost needs to be provided since, not being a central sector scheme, there will be no subsidy at source. Assuming that 100 per cent of the seed requirement in new areas and 20 per cent of the requirement in traditional areas would have to be met, a total seed supply programme of 1,000 to 1,200 quintals per annum would have to be organised. The total cost on this account is estimated at Rs. 10,99,200.

(ii) *Demonstrations*—While a number of demonstrations are organised under the IJDP jute cultivation in the new areas would have to be supported by a large number of demonstrations. A total expenditure of Rs. 2,50,000 @ Rs. 50,000 per annum is proposed to be incurred; 100 one-hectare demonstrations would be organised annually and the cost of each demonstration is estimated at Rs. 500.

(iii) *Farmers training*—Apart from local training camps and supply of publicity material, it is proposed to send prospective jute farmers to jute-growing areas to observe cultivation techniques. A total expenditure of Rs. 42,500 is envisaged.

	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Farmers' field trips and local training cost.	2,000	3,000	3,000	3,000	3,000	14,000
Publicity material	1,000	1,000	2,000	2,000	2,000	8,000
Purchase of films and projectors.	..	10,000	10,000	..	..	20,000

(iv) *Retting facilities*—In order to improve the quality and marketability of jute/mesta fibre, it is necessary to provide retting facilities both in the traditional and new areas. This would involve a total expenditure of Rs. 5 lakhs @ Rs. 1 lakh per annum.

38. A review of the adequacy of the present organisation has been made. The IJDP staff (1 Jute Package Officer, 10 Supervisors and 100 Fieldmen Demonstrators) would continue in the Cuttack district with Central sector funds. It is proposed to involve the Block agency with the area expansion programme, but the District Agricultural Officers of areas having substantial jute/mesta programmes will have to be assisted by an Overseer each. Their number is likely to exceed 5.

39. Mesta is an important fibre crop of the State and is grown on poorer soils. As in the case of jute, the yield rate has not improved. The estimates of the area under the crop and of production are given below:—

TABLE X

Year	Area in hectares	Production in bales	Bales/ha	
1	2	3	4	
1968-69	..	25,000	120,300	4.8
1969-70	..	28,140	138,000	5.7
1970-71	..	28,500	151,500	5.3
1971-72	..	30,147	150,000	5.0
1972-73	..	26,000	130,000	5.0
1973-74	..	32,000	160,000	5.0

4). An effort has been made in 1973-74 to bring additional areas under the crop. It is felt that the crop should be encouraged in tribal areas so that the tribal farmer grows a cash crop. Assuming that the target fixed for 1973-74 will be achieved, an increase in the cropped area by 8,000 hectares during the Fifth Plan is contemplated. With the popularisation of improved practices it may not be difficult to secure an yield rate of 5.5 bales per hectare. The Fifth Plan thus envisages the production of 220,000 bales. Table XI below would indicate the year wise break-up of area and production.

TABLE XI

	1974-75	1975-76	1976-77	1977-78	1978-79
Additonal area to be brought under mesta. 1	2,000	1,000	2,000	1,000	2,000
Total area 2	34,000	35,000	37,000	38,000	40,000
Total production 3	187,000	192,500	209,000	209,000	220,000
Bales/ha	5.5	5.5	5.5	5.5	5.5

NOTE—(1) Area in hectares, (2) Additive to the base year area of 32,000 hectares, (3) Production in bales.

41. A production increase of 37.5 per cent over the Fourth Plan level is thus estimated. As in the case of jute, the programme will be supported by seed supply and demonstrations. Availability of improved mesta seeds has been difficult and efforts will be made to increase supplies so as to meet 100 per cent of the requirement in new areas. In the traditional areas, seeds of new varieties would be introduced. As the backward areas of the State would be selected for area expansion, it would be necessary to subsidise the seed cost by 50 per cent. An annual seed supply programme of 300 quintals costing Rs. 90,000 is envisaged.

42. It is proposed to conduct 100 one-hectare demonstrations in the new areas. The cost of each demonstration is estimated at Rs. 300 and an annual expenditure of Rs. 30,000 would be necessary.

43. The staff already in position for the mesta development programme would be utilised in addition to the staff in Blocks. It will however be necessary to provide for intensive supervision of the programme. An Assistant Director of Agriculture (Mesta Development) will be posted under the Deputy Director of Agriculture, Koraput Range.

44. The area under sun hem is not large, but demand from Paper Mills for sunhemp fibre is substantial. Taking this into account, a few demonstrations have been organised in 1973-74. Demonstrations will be continued during the Fifth Plan and cultivation of sunhemp would be encouraged in compact areas. It is proposed to conduct 20 one-hectares demonstrations (the cost of each demonstration is estimated at Rs. 400) annually and the total expenditure during the Fifth Plan would be Rs. 40,000. It is also proposed to supply improved seeds. The supply programme would be 25 quintals annually during the first two years of the Plan and would increase to 50 quintals annually thereafter. The total cost of seeds to be supplied during the Plan period is estimated at Rs. 60,000. It is proposed to give a two-thirds subsidy on the cost of seeds. As the subsidy would be met from the total provision on account of seeds, no separate provision in the budget is made.

45. The total expenditure on the Fifth Plan programme of jute and allied fibre development is estimated at Rs. 28.88 lakhs; the details of expenditure during each year of the Plan are given in Annexure VII.

C. SUGARCANE

46. The sugarcane area in the State was 37,000 hectares in 1968-69 and production (in terms of gur) was estimated at 2.11 lakh tonnes. The Fourth Plan target was to increase the area to 40,000 hectares and production to 2.50 lakh tonnes. Taking these as base-level figures, the Fifth Plan targets have been set as follows:—

TABLE XII

	1974-75	1975-76	1976-77	1977-78	1978-79
Area in hectares ..	43,000	45,000	47,000	49,000	50,000
Production (gur in lakh tonnes).	2.58	2.70	2.82	2.94	3.00

47. Although the yield rate has been assumed at a flat 0.60 tonne of gur per hectare the effort during the Fifth Plan will be to increase it through an intensive package programme in the factory areas. The number of sugarcane development centres would be increased from 20 to 25. It is proposed to conduct 800 demonstrations annually.

48. There was during the Fourth Plan, a crop competition scheme under which prizes were awarded. This will be discontinued, but supply of improved seeds will be augmented and a transport subsidy of Rs. 20 per tonne will be allowed. It is also proposed to add substantially to production of seed cane. For this scheme the Fifth Plan estimates of expenditure are Rs. 35.00 lakhs as detailed below:—

TABLE XIII

—	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Pay of Officers ..	8,800	9,400	10,000	10,600	11,200	50,000
Pay of Establish- ment.	54,460	56,340	58,240	60,630	64,600	2,94,270
Allowances ..	1,05,600	1,05,600	1,05,600	1,06,100	1,06,100	5,29,000
Contingencies (Rec.)	4,60,250	4,65,750	4,65,750	4,65,750	4,65,750	23,23,250
Contingencies (N. R.)	87,600	31,000	64,000	71,000	50,000	3,03,600
Total ..	7,15,710	6,68,090	7,03,590	7,14,080	6,97,650	35,00,120

D. COTTON

49. There is virtually no area under this crop and even the earlier little area under cotton has been diverted to other crops. The demand for lint both within the State and without is very large and a programme of cotton development would be extremely worthwhile. Some demonstration taken up during 1972-73 gave promising results and a much larger programme is being organised in 1973-74. It is not unlikely that the area would have increased to 600 hectares on the eve of the Fifth Plan and to increase it to 5,000 hectares during the Plan period may well be possible.

50. The programme would be supported by a large number of demonstrations which could be classified under two categories. In the initial introduction, demonstrations would include the supply of all inputs, while the second category demonstrations would meet a portion of the plant protection cost.

51. It is proposed to establish a departmentally managed cotton farm of about 50 hectares both for seed production and demonstration of farming techniques at an estimated cost of Rs. 3.00 lakhs.

	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Pay and allowances of the staff.	18,000	18,000	18,000	18,000	18,000	90,000
Cultivation expenses	25,000	25,000	25,000	25,000	25,000	1,25,000
Staff quarters ..	20,000	22,000	..	..	..	42,000
Reclamation and Contingencies.	10,000	8,000	5,000	5,000	5,000	33,000
Office-cum-Godown ..	10,000	..	..	..	..	10,000
Total ..	83,000	73,000	48,000	48,000	48,000	3,00,000

52. The programme will be supervised in the Agriculture Directorate which will be given the post of a Deputy Director of Agriculture besides a few technical and ministerial staff. Efforts will be made to purchase all the Kapas/lint offered for sale at reasonable prices. The Plan provides Rs. 1.00 lakh per annum towards this if necessary for a P. L. Account. A small provision of Rs. 5,000 per annum has been made for farmers' training and information support.

53. The cost of the programme thus works out to Rs. 19,75,000. The details are given in the following Table:—

TABLE XIV

	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cost of demonstrations.	1,87,500	1,87,500	1,87,500	1,87,500	1,87,500	9,37,500
Establishment of a Cotton Farm.	83,000	73,000	48,000	48,000	48,000	3,00,000
Purchase of a Jeep	35,000	..	..	..	..	35,000
Contingencies including running charges of the Jeep.	10,000	10,000	10,000	10,000	10,000	50,000
Purchase of cotton	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	5,00,000
Cotton development staff at headquarters.	25,000	28,000	30,000	34,500	35,000	1,52,500
Total	4,40,500	3,98,500	3,75,500	3,80,000	3,80,500	19,75,000

E. VEGETABLE PRODUCTION

54. In order to encourage the cultivation of improved varieties of potato, the Department has taken up a seed production programme. The area under the seed production scheme would be about 1,000 hectares at the end of the Fourth-Plan; this is proposed to be increased to 2,000 hectares annually with a view to meeting the seed requirement of 7,500 hectares. In addition, a much larger programme of cultivation of monsoon potato and temperate vegetables would be organised. Since monsoon potato is harvested in October when the potato price is high, farmers (who would, generally, be tribals since the crop can only be raised in altitudes above 2,000 which are situated in tribal areas) would be able to obtain a better price. The Fifth-Plan targets have been set at 1,200 hectares of monsoon potato, 400 hectares of temperate vegetables and 800 hectares of other Khariff vegetables.

55. Yet another objective of the Plan would be to develop a "green belt" around some urban areas, specially those with a substantial industrial workers population with a view to organising vegetable production within a reasonable distance of such markets. Intensive vegetable development around Rourkella, Sambalpur, Talcher, Parship and Sunabeda is proposed to be taken up. The sale of inputs will be taken up on a commercial basis. Demonstrations and extension facilities will, however, have to be financed from the Plan and an annual provision of Rs. 25,000 at Rs. 5,000 per centre would be necessary.

56. The additional programme would need a larger organisation. At present a unit consists of an Assistant Director of Agriculture (Vegetable Development), an agricultural Supervisor, four Overseers and 11 Fieldmen Demonstrators. Since the programmes outlined above would cover an area of 4,400 hectares, 13 units will have to be set up. There are at present 9 units and it will be necessary to organise 4 more. Besides, each of the "green belt" areas would be kept in charge of a unit although such units would be less intensively staffed (an Assistant Director, an Agricultural Supervisor, two Overseers and five Fieldmen Demonstrators).

57. It is likely that 20 centres for sale of vegetable seeds, fertilisers and insecticides would have been set up by the end of the Fourth Plan; 16 more centres would be set up during the Fifth Plan. The subsidies and demonstrations involve an expenditure of Rs. 10,000 per annum.

58. The vegetable production programme would need an adequate marketing support. The cultivation of vegetable crops is expensive and if the farmer is forced to sell the produce at unremunerative rates there is little doubt that the land would soon be diverted to other crops. What makes marketing arrangements imperative is the perishable nature of the commodity and to believe that the market will take care of the production would simply be incorrect. It is proposed therefore to organise a marketing cell in the Direct rate of Agriculture under a Class II Officer who will be assisted by some ministerial staff. The cell will be provided with two refrigerated vans.

59. Recovery of loans must be ensured through a Cell consisting of a Class II Officer belonging to the O. A. S. and some ministerial officers.

60. The seed production programme involves the supply of quality foundation seed material. Any infection in the foundation seed stock is likely to be multiplied several times in the field. It is necessary therefore to test the foundation seed material for virus infection before release. It is proposed to set up a virological laboratory at Similiguda which will collect samples of foundation seed material both from departmental farms and from the fields of registered growers at a cost of Rs. 5.64 lakhs over the Plan period.

61. Funds under P. L. Accounts have been provided for meeting the working capital requirement of cold storages. It has been estimated that a 15,000 quintals cold storage would need, annually, Rs. 6.00 lakhs towards the cost of seed potato and a further Rs. 4.00 lakhs towards other expenses such as electricity and water charges, wage payments, etc. The total requirement of funds for handling 90,000 quintals would be Rs. 60.00 lakhs. The existing provision of Rs. 30 lakhs would, therefore, be augmented by Rs. 30 lakhs.

62. A small programme of mushroom cultivation is being attempted in 1973-74. This will be expanded during the Fifth Plan with a view to producing spawans for supply to farmers. The scheme including the cost of staff and demonstrations would involve an expenditure of Rs. 3.00 lakhs over the Plan period.

63. The programmes discussed above would involve a total expenditure of Rs. 2,69,24,000 which will be spread over the Plan period in the manner as indicated in Annexure VIII.

64. With a view to developing the area under various spices crops, a provision of Rs. 5.00 lakhs (@ Rs. 1.00 lakh per annum) has been suggested for conduct of demonstration and subsidised supply of planting material.

VII. Horticulture

65. Production of fruit crops has not increased noticeably in the past; this may be attributed to lack of organised extension, as also to limited graft supply programme and sporadic campaigns which cease with the rains. In 1973-74, an effort has been made to develop area programmes which seek to bring compact areas under specific fruit crops; the logic of this approach is that it would be possible to link production to marketing. Such programmes could be assisted with a comprehensive extension service which would also arrange for the flow of institutional finance for market-oriented horticulture.

66. The Fifth Plan would continue with this strategy, but the extension set-up would have to be larger in consideration of the size of the programme contemplated. The objective would be to bring 10,000 additional hectares under horticultural crops and increase production by 1.25 lakh tonnes. Apart from larger extension support, the Department would —

- (i) encourage, in the coastal and agriculturally developed areas, the supply of institutional credit for commercial horticulture in compact areas;
- (ii) provide, in respect of selected crops and areas a subsidy on planting materials
- (iii) undertake free supply of planting material and free/subsidised supply of other inputs in potential tribal areas in view of the indigence of the farmers and the difficulty in supply of institutional credit;
- (iv) give monetary incentives for co-operative marketing of horticultural crops; and
- (v) expand its presently limited activities connected with processing/preservation of vegetables and fruits.

67. Improvement in the quality of fruits grown in existing orchards is as important as area extension. The State has a very large area already under mango, but the quality in many cases is indifferent. Old seedling trees can bear quality fruits when top-worked through this technique. It is proposed to improve 40 hectares annually through this method. The programme will be assigned to a squad which will select seedling trees that could be top-worked with scions from disease-free mother plants of known progeny.

68. In pursuance of the objective set forth above, a large programme of supply of planting materials of mango, guava, pomegranate, pine-apple, kagzi lime, mandarin orange and ber would be organised. The programme is estimated to cover 5,000 hectares during the Plan period. Subsidised supply of planting materials (and other inputs in tribal areas) would be undertaken in selected compact areas.

69. The State has a very large potential for banana; presently, however, the production is meagre and the market is supplied with imports from other States. The Banana Development Corporation is also interested in organising banana production for export. A scheme of free supply of banana suckers has been undertaken in 1973-74 in selected areas and it is likely that this scheme alone would bring an additional 250 hectares under the crop

during the year. Farmers' response to the scheme has been encouraging and Commercial Banks have begun financing cultivation in areas where suckers have been supplied. It will not be difficult to bring 2,000 hectares under the crop during the plan period. Free supply of suckers would be continued in the new areas and a small amount would be provided for possible assistance to co operatives undertaking banana marketing.

70 To support the programme, larger production of planting materials would be necessary which will have to be organised in the Department's own progeny orchards as well as in selected private orchards.

71. Some horticultural schemes have already been approved by the Agricultural Refinance Corporation and a number of more schemes would be sponsored. The Department would supervise such schemes as well as schemes taken up by the Tribal Development Blocks, T. D. Agencies and Small Farmers/Marginal Farmers Development Agencies.

72. The programme would need a number of trained malis and grafters. It is proposed to set up a training school under the Principalship of an Assistant Director of Agriculture. Each trainee will be given a stipend of Rs. 80 per month and will undergo an one year training course.

73. During the Fourth Plan period, Assistant Horticultural Development Officers have been posted in some districts. In view of the workload of the District Agricultural Officer, it would be necessary to assist him with the services of an officer who will be in exclusive charge of horticultural development programmes. It is proposed to post such officers to 20 Agricultural Districts during the Fifth Plan.

74. The school orchards set up under the Applied Nutrition Programme are supervised by the Department. In many cases the orchards need substantial improvement and gap filling. The proper maintenance of these orchards is estimated to cost Rs. 15 lacs during the Plan period.

75. It will be possible to obtain some funds from T. D. Agencies/T. D. Blocks; but it is obvious that suitable programmes will have to be developed for specific areas and intensive counselling provided to farmers. Production and supply of planting material will also have to be the exclusive responsibility of the Department, even though another agency may finance the subsidies.

76. The Department has a Fruit Technology organisation which was started in 1947-48 in a small scale. The Organisation was expanded considerably during 1962-63. The level of expenditure during the first four years of the Fourth Plan has been as follows :

TABLE XV

	1969-70	1970-71	1971-72	1972-73
	1	2	3	4
Pay and allowances ..	1,38,795	1,58,718	1,53,165	1,60,679
Contingencies ..	1,23,630	1,59,400	1,81,600	1,92,348
Total ..	2,62,425	3,18,168	3,34,765	3,53,027

77. The organisation is engaged in commercial production of fruit products; its sales turnover during the period under reference has been of the following order :—

		Rs.	P.
1969-70	..	1,64,931	42
1970-71	..	1,55,577	61
1971-72	..	75,730	88
1972-73	..	1,89,920	38

78. It will be seen that the expenditure on the scheme has been far higher than sales. The organisation has no doubt some extension functions, but these are meagre and the reason for its uneconomic working is its small production and inadequate marketing arrangements. An effort has been made during 1972-73 to increase the sale proceeds to the level of the contingency expenditure and it is anticipated that the working results hereafter would be more satisfactory. The marketing arrangements are being streamlined and the production programme is being augmented and diversified. It will be noticed that the 1972-73 sales figures are substantially higher than that of 1971-72 and this can be attributed mainly to increased production; comparative statistics of production are given in the following Table:—

TABLE XVI

Item		Production in 1971-72		Production in 1972-73
1		2		3
Orange squash	..	11,481 Nos. bottles	..	20,926 Nos. bottles
Pineapple squash	..	8,213 Ditto	..	27,019 Ditto
Lemon squash	..	1,706 Ditto	..	7,110 Ditto
Mango squash	..	8 Ditto	..	1,051 Ditto
Guava Jelly	..	1,438 Ditto	..	2,216 Ditto
Cashewnuts	..	Nil (Kgs.)	..	2,041 (Kgs.)
Pineapple Slices	..	1,553 Nos. canes	..	949 Nos. canes
Pineapple Juice	..	338 Nos. canes	..	1,091 Nos. canes
Lime pickle	..	Nil Nos. bottles	..	412 Nos. bottles

79. At present funds are sanctioned annually towards production expenses. It will be necessary to provide Rs. 2 lakhs under P. L. Account; this amount may be divided equally between the two production units at Bhubaneswar and Chatikona.

80. The plant at Chatikona is likely to be fully commissioned by the end of the Fourth Plan. The staff strength in both these units would have to be augmented if a larger production programme is taken up. The total cost of adding to the facilities at Chatikona would be of the order of Rs. 4.65 lakhs over the Plan period. In order to diversify production and develop specialised manufacturing units, it is proposed to set up an additional production unit during the Fifth Plan at a cost of Rs. 4.70 lakhs.

81. It is proposed to set up a Fruit Technology Laboratory with a view to conduct analytical and quality control work. The Laboratory will fix up standards for different products and also conduct trials in utilisation of fruit and vegetables. The Laboratory is estimated to cost Rs. 1.25 lakhs.

82. With the increase in the scale of operations, the headquarters office will be strengthened. The overall expenditure during the Plan period would not exceed Rs. 80,000.

83. A special effort is necessary for the coconut crop which has an estimated area of 10,000 hectares in the State. The average production of coconuts per tree is among the lowest in the country. It is proposed to double the area under the crop in the course of the next ten years and to take up programmes designed to improve productivity of the existing orchards.

84. The area expansion programme will be attempted through supply of institutional finance and direct sale of seedlings to farmers. The organisation would have to be strengthened for effective supervision, for encouraging institutionally financed plantations, and for supply of seedlings for the entire additional area. Assuming that an additional area of 1,000 hectares would be brought under the crop each year and that 10 per cent existing orchard area would need gap filling, the total requirement of seed nuts would be 4.30 lakhs after allowing usual casualties. The cost of seed nut has gone up in the meantime. In addition to the cost of seed nuts, transport, storage and tending expenses would have to be borne and the all in cost of 4.30 lakhs seedlings may work out to Rs. 9 lakhs. The Plan therefore provides Rs. 45 lakhs for purchase of seed nuts and towards other expenses. A further sum of Rs. 5 lakhs has been provided for training and demonstration expenses. Demonstrations would relate primarily to intercropping and manuring since both these operations are usually neglected by the farmers.

85. It is estimated that the existing nursery area would be adequate and it will not be necessary to add to this area during the Plan period.

86. The foregoing schemes would involve a total expenditure of Rs. 230.00 lakhs during the Plan period; the annual break-up of the expenditure of different schemes would broadly be as indicated in Annexure IX. It may be added, however, that adjustments in the programme content may be necessary in the course of execution and the allocations indicated in Annexure IX should, therefore, be regarded as tentative.

VIII. Land Development and Farm Mechanisation

87. Development of land has assumed great importance in the command areas of irrigation projects but land shaping however has to be done under proper supervision as otherwise there is a risk of removal of valuable top soil. A number of land development schemes have been sanctioned by the Agricultural Refinance Corporation and are being executed under the supervision of the Soil Conservation Organisation. The Agro and Small Industries Corporation has also undertaken an ambitious scheme of land development.

88. During the Fourth Plan period, the scheme of hiring of tractors (crawler as well as wheel tractors) was continued and 3 crawler tractors were added to the fleet of 14. It is estimated that reclamation of about 2,200 hectares was done through this fleet. As it has been decided that the Agro and Small Industries Corporation would take up a large programme of land development, addition to the fleet is not contemplated. The maintenance of these machineries will cost Rs. 2.5 lakhs during the Fifth Plan period. A further sum of Rs. 2 lakhs per annum will be necessary for replacement of implements/purchase of spare parts. A token provision of Rs. 1.40 lakhs has been made for replacement of tractors which outlive their utility.

89. The Soil Conservation Organisation will be strengthened to provide supervision of institutionally financed land development schemes. The Agro and Small Industries Corporation will have its own organisation both for execution of the schemes and their

supervision. It will be necessary to provide a subsidy on the cost of land development in areas with a predominately Scheduled Tribes populations. The subsidy should however come from agencies engaged in promoting the economic welfare of these communities. In the command areas of the projects where integrated command area development schemes are under execution, some funds may be available out of the provision under those schemes. The Plan, therefore, does not provide any expenditure directly on schemes of land development; the scheme however need be encouraged through share capital assistance to the Agro and Small Industries Corporation which, as indicated earlier, is undertaking a large land development programme.

90. Attempts have been made during the Fourth Plan period to popularise improved agricultural implements like mouldboard ploughs, harrows, low lift hand pumps, etc. manufactured by the departmental Impements Factory at Bhubaneswar as well as certain specialised implements manufactured outside the State. Successful demonstrations have been conducted in the four coastal districts and implements sold at 10 per cent subsidy. It is proposed to extend the subsidy to the whole State and discontinue demonstrations. The present and projected level of sale of implements is given below:

TABLE XVII

Year	Receipts from sale of implements	Target	
		Year	Estimated receipts
1	2	3	4
1969-70	41,533	1974-75	1,50,000
1970-71	71,295	1975-76	2,00,000
1971-72	46,570	1976-77	2,20,000
1972-73	87,173	1977-78	2,50,000
1973-74	90,000	1978-79	2,80,000

91. At 10 per cent of the receipts indicated in Column 4 the total expenditure on subsidy will be Rs. 1.10 lakhs. In addition, it is proposed to organise exhibitions with a view to popularising improved bullock-drawn implements. The exhibition stalls will be hired out to manufacturers/distributors. If ten such exhibitions are organised annually at a cost of Rs. 5,000 each, a total expenditure of Rs. 2.50 lakhs will be involved.

92. 20 Blocks were taken up during the Fourth Plan for integrated agricultural engineering extension. The objective was to popularise the use of improved implements and to promote proper water management practices. The programme is sought to be extended to a further 15 Blocks during the Fifth Plan with a target of bringing 20,000 hectares under water management demonstrations. These demonstrations would relate to practices designed to reduce conveyance and seepage losses and to provision of proper drainage. The bulk of the cost would be met by the beneficiaries themselves and the demonstrations would only provide for the cost of materials. A total provision of Rs. 30 lakhs is proposed for the Fifth Plan.

93. The Agricultural Engineering Organisation in the Directorate of Agriculture and Food Production would be suitably reorganised and a new Zonal Office would be set up for supervision of agricultural engineering programmes in the districts of Sundargarh, Kalahandi and Bolangir. The Zonal Office will be placed under an Executive Engineer. Moreover, the present contingent of Assistant Agricultural Engineers would be so distributed that there is one Assistant Engineer in each Revenue district. This will involve the creation of 3 posts of Assistant Agricultural Engineers. The re-organisation scheme would involve a total expenditure of Rs. 15 lakhs over the Plan period.

94. A reference has already been made to the role of the Agro and Small Industries Corporation in land Development Programmes. The Corporation will have to take up several other Industries using Agricultural/Horticultural produce. All these activities would need considerable finance and the share capital base of the Corporation is proposed to be increased by Rs. 200 lakhs. 50 per cent of which may be contributed by the Government of India.

95. Annexure-X indicates the schemewise and yearwise break-up of the cost.

IX. Miscellaneous Programmes

96. It is not possible, within the framework of this outline, to discuss all the schemes the Department of Agriculture has been administering or proposes to undertake. These details will be worked out after finalisation of the overall Plan ceiling and the ceiling for each year. Some schemes, however, deserve special mention both because of the size of the outlay proposed and their significance for the production target of the Fifth Plan.

97. The major drawback in the formulation of a Plan for the agricultural sector has been the absence of information on the area and production of different crops. The Bureau of Statistics and Economics (BSE) estimates the area and yield of Autumn, Winter and Summer rice in regard to other crops, the Bureau has no estimate whatever although the importance of these crops in the State's agricultural economy is obviously very large. Production estimates of oilseeds, jute and pulses are essential for formulation of Development Programmes in respect of these crops. Moreover, the Bureau's estimates pertain to the State as a whole whereas for purposes of an Agricultural Development Plan, area and production estimates for each district and block are important. It will otherwise be difficult to measure the present achievement in any local area and formulate targets for Development. The main handicap in formulating these estimates has been the absence of a primary reporting agency.

98. The Department, in consultation with the Bureau has developed a scheme for crop estimation for formulation of block level estimates of area and production at a cost of Rs. 263.20 lakhs and this will involve setting up a reporting agency.

99. The statistical section in Directorate of Agriculture will take up analysis of the data and also bench mark surveys in area selected for implementation of special projects. The cost of strengthening this unit is estimated at Rs. 5.51 lakhs.

100. A provision of Rs. 250 lakhs has been made for purchase of debentures floated by the Orissa State Co-operative Land Development Bank, Ltd. These debentures would raise resources for financing schemes of irrigation and land development.

101. A subsidy of 25 per cent on the cost of dug wells has been given during the Fourth Plan period. It is proposed to continue this scheme during the Fifth Plan at an estimated cost of Rs. 100 lakhs.

102. There is a Botanical Garden at Nandankanan with an area of nearly 70 hectares. The main objective of the Garden is to conduct researches on medicinal, horticultural and economic plants and to supply ornamental plants. It is proposed to increase the staff size of the Garden and to take up levelling and terracing of the land. A nursery will be established for medicinal plants as also a herbarium, an aquatic garden, a hydroponicum, a green house, a fern house, an orchard house and a cacti house.

103. Expenditure on the development of the Botanical Garden is estimated at Rs. 23.00 lakhs at the rate of Rs. 3 lakhs in the first year, Rs. 4 lakhs in the second year and Rs. 5 lakhs in each subsequent year.

104. The programmes discussed in the preceding chapters would depend for their success on the field. Extension, it is well known, is largely effective communication. It is proposed to upgrade the competence of the extension worker and to equip him with communication aids. The production of audio-visual aids and of the printed word would obviously have to be organised centrally.

105. The publication wing in the Directorate of Agriculture and Food Production needs to be strengthened. It is proposed to acquire a flatbed press, a trade press and an offset press. It will then be possible to increase the output of printed matter.

106. The radio has come to be used for dissemination of agricultural information including information on improved practices. The scripts are supplied by the Agriculture Information unit. This work is being strengthened with a provision of Rs. 4 lakhs.

107. Farmers' training has so far been left to the Community Development Organisation. But in view of necessity for imparting knowledge of new techniques and practices and of solutions to specific problems a provision of Rs. 20.00 lakhs has accordingly been made.

108. For development of agricultural education, Government have been supporting the Orissa University of Agriculture and Technology through grants. The annual grants have generally been of the order of Rs. 36 lakhs to Rs. 40 lakhs. Rs. 24-26 lakhs from the non-plan budget and Rs. 10-15 lakhs from the Plan budget). The activities of the University have increased substantially and the revision of pay and allowances of the University employees in accordance with the recommendations of the University Grants Commission have strained University's resources. The Plan grants are therefore proposed to be increased to 20.00 lakhs per annum for this and other programmes that the department has. It is further proposed to assist a certain number of schools with grants for creation of appropriate physical facilities and for meeting the cost of employing trained agricultural teachers. A lump sum provision of Rs. 5.00 lakhs has been made on this account.

109. In order to upgrade the knowledge and skills of sub-professional personnel of the department and equip them with the competence to assume higher responsibilities, it is proposed to set up institutional training facilities under the guidance of qualified instructional staff. A sum of Rs. 5.00 lakhs including staff cost is envisaged.

110. The Fifth Plan programmes would naturally involve considerable additional workload for the Directorate of Agriculture. At the field level, it may be necessary to reorganise the jurisdiction of agricultural ranges so as to limit the jurisdiction of each Range Deputy Director to a manageable area. The reorganisation of some agricultural districts will also be necessary. The scheme of reorganisation is under the consideration of the Government, but it is obvious that additional staff support at the Directorate and district levels would be necessary. It is felt, however, that the tentative requirement of funds during the Fifth Plan would be of the order of Rs. 45 lakhs.

111. A programme which needs to be taken up on priority is the provision of staff quarters. The organisation has expanded considerably during the last two Plan periods, but facilities for accommodation of the staff have not been commensurate. As different programmes develop the level of organisation of extension activities becomes close to the village. Hired accommodation is not available in these areas and in the absence of any accommodation there is a disinclination on the part of the staff to take up positions in rural areas. Besides, office buildings have not been provided at many places. The total cost of provision of staff quarters and office accommodation to a reasonable extent would be Rs. 200 lakhs.

112. Training to candidates passing out from the Industrial Training Institutes in operation and maintenance of agricultural machinery will be continued; farmers' training in maintenance of agricultural machinery will also be continued. The cost during the plan period of the first scheme will be Rs. 3.00 lakhs and that of the latter Rs. 8.00 lakhs.

113. For better appreciation of the programmes relating to agricultural production, the following annexures are also given:—

- (1) Annexure XI—Targets and achievements of production cropwise during the Fourth Plan.
- (2) Annexure XII—Area covered under the High Yielding Varieties Programme (Cropwise) and consumption of chemical fertilisers during the Fourth Plan.
- (3) Annexure XIII—Target of crop production for terminal years 1973-74 and 1978-79.
- (4) Annexure XIV—Fifth Plan targets of crop production for five years
- (5) Annexure XV—Fifth Five-Year Plan—Selected programme: Base Level and Targets.
- (6) Annexure XVI—Programmewise expenditure for Fourth Plan and proposed outlay for the Fifth Plan.

X. Area Development

114. During the Fourth Five-Year Plan period some attempts have been made in the direction of a area Development. Three districts have been covered by S. F. D. A., two district have been covered by M. F. A. L. Programmes and T. D. A. project has been introduced in two districts, one of which has a S. F. D. A. Project also. These projects have had a good impact in the districts and we are encouraged to introduce new projects. This has also been necessitated by the fact that more than 64 per cent of the population of the State live below the poverty line as compared to the All India average of 46 per cent. It is now proposed to have 8 projects in the State Sector, each having an outlay of Rs. 75 lakhs over a period of five years, covering a population of 25,000 farmers having less than 5 acres of land. These projects will be smaller than the present S. F. D. A. or M. F. A. L. having outlays of Rs. 1.5 crores and Re. 1 crore respectively. The programmes will include enrolment of small/marginal farmers in the co-operatives, adoption of suitable cropping patterns and package of practices, construction of dug-wells and tube-wells, subsidiary occupations, construction of field channels and the like. Subsidies as obtaining in the existing projects will continue to be given. The project areas will be selected soon and project reports prepared. Although the objective is to benefit small farmers, the essential approach of area development will be adopted. The financial outlay for 5 years for this programme will be Rs. 6 crores.

115. The T. & R. W. Department are separately trying to have more of 'Tribal Development Agencies' projects in the State in view of the large percentage of tribal population. Hence in the sectoral programme of agriculture no separate T. D. A. projects are being thought of. The Government of India and the Planning Commission have lately been emphasising on the importance of Development of command areas of Irrigation projects. The irrigation potential of the State is likely to be doubled by the end of the 5th Plan. This will give rise to problems of soil and water management, land development, storage, processing, marketing, etc. It is, therefore, proposed that command areas of both proposed and new projects will be adopted for purposes of integrated development. Each command area is likely to have specific problems and gaps in the infrastructure. Separate project reports will be prepared for the command areas, particularly of the major and medium irrigation projects. It is proposed to have an outly of Rs. 12.5 crores for 5 years for all these projects. The major items of expenditure will be as follows :

116. For optimum utilisation of the irrigation potential created, it is now necessary to modernise existing irrigation works, lining the canals and provide control structures. Secondly field channels are to be dug along the contours, so that each plot of land can separately receive irrigation. Thirdly, field drainage is equally essential for proper water management. Fourthly, major drains should also be provided wherever necessary. The response of the people to this has not been very encouraging in the past, except in pilot areas. For water management, it is now proposed to induce the Banks to give the cultivators loans for digging field channels and field drains. A lump sum provision of Rs. 3.50 crores is being kept in the State Plan for the purposes enumerated above. It is expected that the Government of India will give double this amount to undertake these works.

117. The programme of land shaping and land development is extremely important. Most of the ayacut areas have undulating land seaps. In order to level the lands and bring them within the command areas, encouragement to the farmers is necessary. Banks are now willing to give loans for this purpose. A. R. C. Schemes are being drawn up in respect of different areas.

118. It is useful to give subsidies of 25 per cent to atleast the small farmers for land shaping and land development. The Agro and Small Industries Corporation is launching an ambitious tractorisation scheme for taking up customs service in these areas. Provision for subsidy of the tune of Rs. 3 crores is being kept for this purpose.

119. A rapid growth in agricultural production will increase the need for improved communications, storage, marketing and processing. The infrastructural facilities have to be developed. It is proposed to subsidise co-operative institutions like Regulated Marketing Committees, Regional Marketing Co-operative Societies and the Service Co-operative Societies to increase their storage capacity by construction of modern godowns. Godowns can be constructed either by assistance from N. C. D. C. or refinance from the A. R. C. A. subsidy of 25 per cent is proposed. A provision of Rs. 3 crores kept for the purpose. This includes construction of feeder roads also.

120. The Co-operative Institutions do not have the required amount of organisational viability to handle problems of large magnitudes. It is proposed to strengthen their organisation by the appointment of qualified staff by giving subsidies to the Central Co-operative Banks, Regional Co-operative Marketing Society, Regulated Marketing Committees and the Service Co-operative Societies, on a tapering basis. A provision of Rs. 1 crore is kept for the purpose.

121. In the command areas it will be necessary to make a balanced utilisation of surface and ground water. This will not only ensure optimum agricultural development but also solve problems of water logging and salinity. Farmers will be given subsidy to construct dug-wells and tube-wells. A provision of Rs. 1 crore is kept for the purpose. This would include payment of subsidies for agricultural implements.

122. Constitution of project authorities, armed with autonomous powers will involve an expenditure of about Rs. 1 crore. The details will be worked out when the project reports are ready. Thus a total provision of Rs. 12.5 crores is being kept for command area development. This programme will be supplemented by the other on going programmes in the State and the Central Sector.

123. Although it is envisaged to cover the whole State by projects of the type mentioned above, still some areas will be left which are extremely susceptible to drought conditions. Such areas have already been identified broadly. It will be necessary to popularise techniques of dry farming, diversify cropping pattern and make all attempts to retain the moisture in the soil. In such identified areas subsidy will be given for activities like horticulture, contour bunding, cultivation of light duty crops, and subsidiary occupations like goat breeding poultry etc. A bulk provision of Rs. 1.5 crores is kept for the purpose.

124. Thus the outlay of Rs. 20 crores for area development will have three components : (a) Rs. 6 crores for S. F. D. A./M. F. A. L. projects, (b) Rs. 12.5 crores for command area development and (c) Rs. 1.5 crores for drought prone areas (Annexure XVII). The requirements under these programmes are substantial and cannot be met fully from the small outlay of Rs. 20 crores. Hence adequate Central assistance should be made available in order to supplement the State's efforts.

XI. Programme for Backward Classes

125. The tribal population of the State is concentrated mostly in the districts of Koraput, Phulbani, hill areas of Ganjam, Sundargarh, Keonjhar, Mayurbhanj and Kalahandi. There is a small percentage of tribal population in other districts as well. So far the Scheduled Caste population is concerned, they are dispersed evenly throughout the State and have merged themselves with the general population. Most of them work as marginal farmers or as agricultural labourers. They will be covered by S. F. D. A. and M. F. A. L. Agencies as well as by the 8 new projects on area development which are being proposed during the plan period. Besides, the intensification of the drive for higher agricultural production will push upwards the demand for labour. The Soil Conservation Organisation has also drawn up an elaborate plan which will generate a higher degree of employment potential for their programmes.

126. So far as the tribal population is concerned it has essentially to be a programme of area development keeping the economics of their livelihood in view. A large section of the tribals will be directly benefited by the soil conservation measures taken up by the department. This will provide them with employment and at the same time ensure improvement in their agriculture by measures like gully plugging, contour bunding, terracing, plantations etc. They will also be benefited by the treatment of critical watersheds which have been specifically included in the Plan.

127. It has been decided to popularise cold resistant varieties of paddy and also early maturing varieties of high yielding paddy to be grown under rainfed conditions. The focus for these programmes will be on the tribals.

128. A large programme of horticulture has been drawn up along with liberal elements of subsidy. This entire programme will benefit the tribals mostly as the hilly areas have been chosen for concentrated efforts in this direction.

129. The programme for millets, pulses, oil-seeds, etc., will also be in the interest of the tribals. It has been proposed to increase the coverage of jowar, bajra, ragi and maize. In all these crops better yielding varieties have been evolved and demonstrations will be laid out in the tribal areas with 100 per cent subsidy to induce them to arrange their cropping pattern. The entire programme of niger and a large part of the programmes for til, castor, sunflower, mustard, groundnut and mesta will be for the tribal areas.

130. Groundnut cultivation in khariff season is becoming popular and this will continue during the Fifth Plan particularly in the hilly regions. The programme of monsoon potato which can be taken up at an altitude of 2,000 feet and above will be exclusively in the tribal areas.

131. Till now most of the extension staff was concentrated in the irrigated blocks where programmes like I.A.A.P. and H.Y.V.P. were under operation. It has now been proposed to re-distribute the staff evenly so that each block has atleast two A.E.Os and atleast 15 V.L.Ws, This will help the blocks located in tribal areas to have better extension support.

Annexure I

Farm area required for Seed Production in 1978-79

(Seed requirement in tonnes)

(Area in hectares)

Crop	Fifth Plan target of area coverage	Requirement of certified seeds	Area required for certified seeds production	Area required for departmental production of certified seeds	Requirement of foundation seeds	Area required for production of 100% of foundation seeds	Total Col. 5+7	Remarks
1	2	3	4	5	6	7	8	9
H. Y. V. P. Paddy.	1,600,000	80,000	32,000	1,600	1,600	640	2,240	1. @ 5% of the total requirement.
Wheat	200,000	20,000	10,000	3,202	320	160	480	2. To meet 10% of the requirement of the additional area and 20% of the requirement of the existing area.
Maize	40,000	666	444	1,803	..	..	180	3. To meet 100% of the requirement of the additional area and 33 1/3% of the requirement of existing area.

Jowar	..	20,000	200	200	⁴ 200	..	80	80	4. As above	
Ragi	..	130,000	1,300	1,300	⁵ 130	13	13	143	5. 10% of the total requirement.	
Pulses	..	200,000	8,000	16,000	⁶ 360	144	288	648	6. 10% of the new area and 2% of existing area.	
Groundnut	..	134,000	16,800	11,200	⁷ 100	125	85	185	7. 10% of the requirement of the area under 'A' class seed production.	
Mustard	..	150,000	1,500	3,000	..	30	60	⁸ 60	8. Foundation seeds only will be produced.	
Til	..	150,000	1,500	3,000	..	30	60	⁹ 60	9. As above	
Jute	..	70,000	525	1,000	¹⁰ 105	7.8	16	121	10. 10% of total certified seeds requirement.	
Mesta	..	40,000	500	600	¹¹ 671	8.4	11	78	11. As above	
Sugar-cane	..	50,000	250,000	400	¹² 641	1,600	26	90	12. 20% of the total area under 'A' class seed.	
							Total	..	4,365	

Annexure II

Projection of Annual Outlay on Soil and Manure Schemes

(For Rs. in lakhs)

Scheme	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
1. Loans to Urban local bodies for transport facilities.	0.50	0.75	1.00	1.25	1.00	4.50
2. Subsidies to small local bodies for transport facilities.	0.10	0.10	0.10	0.10	0.10	0.50
3. Establishment of mechanised composting plant.	5.00	15.00	10.00	..	..	30.00
4. Rural compost production campaigns	1.00	1.00	1.00	1.00	1.00	5.00
5. Subsidy on green manure seeds ..	0.16	0.16	0.16	0.16	0.16	0.80
6. Water hyacinth composting ..	0.05	0.05	0.05	0.05	0.05	0.25
7. Subsidy on cowdung gas plants ..	0.03	0.03	0.03	0.03	0.03	0.15
8. Quality control of fertilisers ..	2.00	2.00	2.00	2.00	2.00	10.00
9. Mobile soil testing vans ..	5.06	3.59	1.59	1.59	1.59	13.42
10. Equipment for Soil Testing laboratories and farmers' training.	2.50	2.50	3.00	1.00	1.00	10.00
11. Establishment of a Central laboratory.	7.60	2.73	1.98	2.00	2.00	16.31
Total ..	24.00	27.91	20.91	9.18	8.93	90.93

Annexure III

Projected Area Coverage under High Yielding Varieties

(In thousand hectares)

Year	Paddy		Total	Wheat	Maize		Jowar		Total
	Kharif	Rabi			Kharif	Rabi	Kharif	Rabi	
1	2	3	4	5	6	7	8	9	10
1973-74	400	250	650	80	8	0.5	4	0.1	742.6
1974-75	500	300	800	100	25	1	10	0.2	936.2
1975-76	600	350	950	120	28	2	12	0.4	1112.4
1976-77	700	400	1100	140	30	3	14	0.8	1287.8
1977-78	800	450	1250	170	32	4	16	1.0	1473.0
1978-79	1100	500	1600	200	35	5	18	2.0	1860.00

Annexure IV
Projection of annual expenditure on I.A.D.P./I.A.A.P./H.Y.V.P. Schemes

(Rupees in lakhs)

Item	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
A—I.A.D.P.						
1. Pay and Allowances ..	1·843	1·943	2·043	2·143	2·143	10·215
2. Contingencies ..	0·757	0·757	0·757	0·757	0·757	3·785
3. Demonstrations ..	0·600	1·300	1·600	1·500	1·000	6·000
Total ..	3·200	4·000	4·400	4·400	4·000	20·000
B—I.A.A.P.						
1. Pay and Allowances ..	46·14	46·54	46·94	47·30	47·70	234·62
2. Contingencies including demonstration.	4·44	4·44	4·44	4·44	4·44	22·20
Total ..	50·58	50·98	51·38	51·74	52·14	256·82
C—H.Y.V.P.						
1. Pay and Allowances ..	29·50	29·80	30·00	30·15	30·40	149·85
2. Contingencies ..	5·50	5·40	5·00	4·80	4·65	25·35
3. Demonstrations ..	5·00	5·00	5·00	5·00	5·00	25·00
Total ..	40·00	40·20	40·00	39·95	40·05	200·20
Grand Total (A+B+C) ..	..	..	..	..	..	477·02

Annexure V

Area and production targets of Oilseeds Crops

A—Area

P—Production

Area in lakh hectares

Production in lakh tonnes

Crop	1974-75		1975-76		1976-77		1977-78		1978-79		Total	
	A	P	A	P	A	P	A	P	A	P	A	P
1	2	3	4	5	6	7	8	9	10	11	12	13
Groundnut ..	1.02	1.06	1.10	1.18	1.18	1.28	1.26	1.39	1.34	1.51	5.90	6.42
Mustard ..	0.85	0.85	1.01	1.01	1.17	1.17	1.33	1.33	1.50	1.50	5.86	5.86
Til ..	1.34	0.67	1.37	0.68	1.41	0.70	1.46	0.73	1.50	0.82	7.08	3.60
Castor ..	0.31	0.23	0.34	0.25	0.36	0.27	0.38	0.28	0.40	0.30	1.79	1.33
Linseed ..	0.22	0.11	0.22	0.11	0.22	0.11	0.22	0.11	0.22	0.11	1.10	0.55
Niger ..	0.80	0.40	0.80	0.40	0.80	0.40	0.80	0.40	0.80	0.40	4.00	2.00
Safflower ..	0.03	0.02	0.03	0.02	0.05	0.08	0.09	0.04	0.15	0.07	0.35	0.18
Sunflower ..	0.03	0.03	0.06	0.06	0.09	0.09	0.12	0.12	0.15	0.15	0.45	0.45
Total ..	4.60	3.37	4.93	3.71	5.28	4.05	5.65	4.40	6.06	4.86	26.53	20.31

Annexure VI

Projection of expenditure on Oilseeds Development Schemes

(Rs. in lakhs)

Item	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
1. Subsidy on soil conditions for groundnut ..	4.00	4.00	4.00	4.00	4.00	20.00
2. Subsidy on transport and handling of groundnut seeds.	1.20	1.20	1.20	1.20	1.20	6.00
3. Groundnut demonstrations ..	1.00	1.00	1.00	1.00	1.00	5.00
4. Free supply of mustard seeds in new areas	0.22	0.22	0.22	0.22	0.22	1.10
5. Plant protection demonstration on mustards	0.60	0.60	0.60	0.60	0.60	3.00
6. Composite demonstrations on mustard ..	0.15	0.15	0.15	0.15	0.15	0.75
7. Free supply of til seeds in new areas ..	0.22	0.22	0.22	0.22	0.22	1.10
8. Demonstration on castor	0.10	0.10	0.10	0.10	0.10	0.50
9. Free supply of safflower and sunflower seeds in new areas.	1.50	1.50	1.50	1.50	1.50	7.50
10. Safflower and sunflower demonstrations ..	0.45	0.45	0.45	0.45	0.45	2.25
11. Transport and handling subsidy on safflower and sunflower seeds.	0.20	0.20	0.20	0.20	0.20	1.00

12. Procurement of safflower and sunflower seeds.	4.00	4.00	4.00	4.00	4.00	20.00
13. Purchase of one truck and one jeep with trailer	1.10	..	..	..	..	1.10
14. Running and maintenance charges of vehicles	0.18	0.18	0.18	0.18	0.18	0.90
15. Hiring charges of godowns	0.07	0.07	0.07	0.07	0.07	0.35
16. Staff pay and allowances	0.57	0.57	0.59	0.59	0.60	2.92
Total	15.56	14.46	14.48	14.48	14.49	73.47

Annexure VII

Projected annual expenditure on jute and Allied Fibres Development Schemes

(Rupees in lakhs)

Sl. No.	Item	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7	8
1	Pay and allowances of staff ..	0.25	0.35	0.36	0.37	0.38	1.71
2	Purchase of jute seeds for distribution to farmers.	2.60	2.60	2.71	1.48	1.60	10.99
3	Purchase of mesta seeds for distribution to farmers.	0.90	0.90	0.90	0.50	0.90	4.50
4	On hectares jute demonstrations in new areas @Rs. 300 per demonstration.	0.50	0.50	0.50	0.50	0.50	2.50
5	One hectares mesta demonstrations in new areas @Rs. 300 per demonstration.	0.30	0.30	0.30	0.30	0.30	1.50
6	Purchase of sunhemp seeds for distribution to farmers.	0.07	0.08	0.15	0.15	0.15	0.60
7	One-hectare sunhemp demonstration @ Rs. 400 per demonstration.	0.08	0.08	0.08	0.08	0.08	0.40
8	Farmers Training and information ..	0.03	0.14	0.15	0.05	0.05	0.42

9	Purchase of jeeps	..	0.35	0.35	..	..	..	0.70
10	Excavation of community retting tanks	..	1.00	1.00	1.00	1.00	1.00	5.00
11	Maintenance and running charges of jeeps	..	0.04	0.08	0.08	0.08	0.08	0.36
12	Miscellaneous contingencies	..	0.04	0.04	0.04	0.04	0.04	0.20
Total		..	6.16	6.42	6.27	4.95	5.08	28.88

Annexure VIII

Projection of Annual Expenditure on Vegetable Development Schemes

(In lakhs of Rupees)

Name of the Scheme	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
1. Production of seed potato provision for loans*.	25.00	25.00	25.00	25.00	25.00	125.00
2. Cultivation of monsoon potato and temperate vegetables (demonstrations).	0.03	0.03	0.03	0.03	0.03	0.15
3. Strengthening of the vegetable Development Organisation.	15.25	15.25	15.25	5.25	5.25	56.25
4. Demonstration for extension of vegetable cultivation in green belt areas.	0.25	0.25	0.25	0.25	0.25	1.25
5. Setting up of 15 seed sales centres ..	0.60	1.20	1.80	2.40	2.40	8.40
6. Continuance of 20 sale centres ..	2.00	2.00	2.00	2.00	2.00	10.00
7. Subsidy on introduction of new vegetables and on cultivation in new areas.	0.15	0.15	0.15	0.15	0.15	0.75
8. Establishment of a marketing cell ..	1.80	1.80	0.80	0.80	0.80	6.00

9. Establishment of a loan cell	..	1.28	0.88	0.88	0.88	0.88	4.80
10. Setting up of a virological laboratory	..	1.80	1.80	0.68	0.68	0.68	5.64
11. Cultivation of mushroom	..	0.70	0.70	0.60	0.50	0.50	3.00
12. Development of foundation seed farm	..	5.00	5.00	2.00	..	..	12.00
13. Continuance of cold storages	..	2.00	2.00	2.00	2.00	2.00	10.00
14. P. L. Accounts for cold storages	..	30.00	..	..	..	..	30.00
		85.86	56.06	47.44	39.94	39.94	269.24

*Includes loan provision for monsoon potato.

Annexure IX

Projection of annual outlay on Horticulture Development Scheme

(Rupees in lakhs)

Name of the scheme	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
1. Improvement of progeny orchards and establishment of new orchards.	12.00	12.00	12.00	12.00	12.00	60.00
2. Subsidised supply of planting materials ..	2.00	4.00	4.00	4.00	4.00	18.00
3. Intensive banana cultivation ..	4.00	4.00	4.00	4.00	5.00	21.00
4. Development of floriculture ..	0.10	0.10	0.08	0.10	0.12	0.50
5. Purchase of quality planting material for distribution.	4.00	4.00	4.00	4.00	4.00	20.00
6. Top working of existing orchards ..	0.70	0.30	0.30	0.30	0.30	1.90
7. Transit nurseries ..	1.00	1.00	1.00	1.00	1.00	5.00
8. Horticulture Training School ..	0.25	0.30	0.35	0.35	0.35	1.60
9. Strengthening of the horticulture organisation	1.00	1.00	1.00	1.00	1.00	5.00

10. Applied Nutrition Programme	..	3.00	3.00	3.00	3.00	3.00	15.00
11. Expansion of the Chatikana Plan	..	1.90	0.67	0.68	0.70	0.70	4.65
12. Establishment of new Fruit Production Unit		0.50	1.50	1.50	0.60	0.60	4.70
13. P. Loaccount for the Production Units	..	2.00	..	—	..	..	2.00
14. State Fruit Technology Laboratory	..	0.32	0.23	0.23	0.23	0.24	1.25
15. Strehgthening of Fruit Technology	..	0.24	0.15	0.16	0.16	0.19	0.90
16. Pineapple Development	..	3.00	4.00	4.00	5.00	2.50	18.50
17. Production of coconut seedlings	..	9.00	9.00	9.00	9.00	9.00	45.00
18. Demonstration and Training in coconut cultivation.		1.00	1.00	1.00	1.00	1.00	5.00
		46.01	46.25	46.30	46.44	45.00	230.00

Annexure X

Projection of annual expenditure on Agricultural Engineering Schemes

(Rs. in lakhs)

—	1974-75	1975-76	1976-77	1977-78	1978-79	Total
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Replacement of tractors ..	..	0.60	0.50	0.30	..	1.40
Maintenance of tractors and purchase of implements and spares.	2.50	2.50	2.50	2.50	2.50	12.50
Subsidy on sale of agricultural implements ..	0.15	0.20	0.22	0.25	0.28	1.10
Exhibitions of improved implements ..	0.50	0.50	0.50	0.50	0.50	2.50
Promotion of agricultural engineering in 15 blocks.	3.75	7.50	11.25	15.00	18.00	55.50
Water management demonstrations ..	2.00	4.00	6.00	8.00	10.00	30.00
Reorganisation of the Agricultural Engineering Organisation.	2.50	2.50	3.00	3.50	3.50	15.00
Share Capital contribution to the Agro and Small Industries Corporation.	25.00	25.00	25.00	25.00	..	100.00
Total ..	36.40	42.80	78.97	55.05	59.78	218.00

Annexure XI

Fourth Five-Year Plan—Targets and Achievements of Crop Production

Sl. No.	Item	Unit	Fourth Plan		Actual production				Anticipated production		Remarks
			Assumed base level	Targetted level for 1973-74	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	
1	2	3	4	5	6	7	8	9	10	11	12
1	Foodgrains...	Lakh tonnes.	47.21	60.00	47.21	47.28	48.63	43.54	49.00	60.00	} The base level estimate was unrealistic.
2	Sugarcane (in terms of Gur)	Lakh tonnes.	2.11	3.00	2.11	2.02	1.63	1.92	2.00	2.50	
3	Oil seeds ..	Lakh tonnes.	1.70	3.00	1.70	1.91	1.79	2.32	1.90	2.97	
4	Jute ..	Lakh bales.	2.90	5.60	2.90	3.13	3.28	3.80	2.23	3.89	
5	Mesta ..	Lakh bales.	1.20	1.60	1.20	1.38	1.51	1.50	1.30	1.50	

Annexure XII

Fourth Five-Year Plan Selected Programmes, Targets and Achievements

Sl. No.	Item	Unit	Fourth Plan		Actual achievement				Anticipated achievement		Remarks
			Assumed base level	Targeted level for 1973-74	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	
1	2	3	4	5	6	7	8	9	10	11	12

1 High Yielding Varieties—

(a) Paddy	..	000'Hect.	144.4	650.0	144.4	173.4	182.7	252.7	400.0	650.0		
(b) Wheat	..	Ditto	3.8	80.0	3.8	5.6	6.9	13.4	40.0	80.0		
(c) Maize	..	Ditto	4.6	8.5	4.6	3.9	3.4	4.9	7.0	8.5		
(d) Jowar	..	Ditto	0.9	4.1	0.9	0.4	0.3	0.8	1.5	4.1		
(e) Bajra	..	Ditto	0.1	..	0.1	0.1	0.1	0.3	..	..
Total—H. Y. V.			..	153.8	742.6	153.8	183.4	193.4	272.1	448.5	742.6	

II. Consumption of
Chemical Fertilisers (Nutrients)—

(a) Nitrogenous	..	Lakh tonnes	0·16	1·30	0·16	0·18	0·20	0·37	0·43	0·56
(b) Phosphatic	..	Ditto	0·05	0·50	0·05	0·05	0·05	0·08	0·12	0·18
(c) Potassic	..	Ditto	0·023	0·30	0·023	0·03	0·02	0·04	0·05	0·08

Annexure XIII

Fifth Five-Year Plan targets of Crop/Production for Terminal Years

Area in thousand Hectare—Production in thousand tonnes/Yield in Quintals/Hectare

Sl. No.	Item	Fifth Plan base level (1973-74)			Fifth Plan targets (1978-79)			1974-75 target		
		Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
1	2	3	4	5	6	7	8	9	10	11

1 Foodgrains

(a) Rice

(i) Autumn	775	5.7	442	800	6.0	480	800	5.7	456
(ii) Winter	3,750	10.2	3,825	3,750	12	4,473	3,750	10.0	3,750
(iii) Summer	250	30.0	750	500	32.0	1,610	300	30.0	900

Total—Rice..	4,775	10.5	5,017	5,050	13.0	6,563	4,850	10.5	5,016
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(b) Wheat	80	25.0	200	200	25.0	500	120	25.0	300
(c) Maize	85	10.0	85	100	9.7	97	90	10.0	90
(d) Jowar	25	10	25	40	10.0	40	30	10.0	30

(e) Bajra	2	10	2	10	10.0	10	5	10.0	5
(f) Other cereals	300	8.0	240	300	8.0	240	300	8.0	240
(g) Pulses	.. 8 60	5.0	431	1,100	5.0	550	900	5.0	450
Total—Foodgrains	.. 6,127	9.79	6,000	6,800	11.8	8,000	6,295	10.0	6,221
2 Sugar-cane (Gur)	.. 40	60.20	250	50	60.0	300	43	60.0	258
3 Oilseeds	... 414	..	297	606	7.4	486	460	..	337
4 Jute	. 54	7.2*	389**	70	7.4*	518**	56.5	7.2*	406**
5 Tobacco	.. 17	94	16	30	10.3	31	20	10	20

*Bales
** 1,000 Bales

Annexure XIV

Fifth Plan Targets of Crop Production for Five Years

Sl. No.	Item		Fifth Plan target for five years	Remarks
	2		3	4
1	Foodgrains	..	359.00	Lakh tonnes
2	Oilseeds	...	20.39	Lakh tonnes
3	Sugar-cane	..	14.04	Lakh tonnes Gur
4	Jute	..	22.91	Lakh bales
5	Mesta	..	10.12	Lakh bales

Annexure XV

Fifth Five-Year Plan—Selected Programme base level & targets

Sl. No.	Item	Unit	Fourth plan base level	Fifth Plan target	Remarks
1	2	3	4	5	6
1.	Expansion of cropped area—				
	(a) Gross unirrigated .. cropped area.	000'Hect.	6,146	6,184	
	(b) Gross irrigated cropped .. area.	000'Hect.	1,206	2,552	
	Total (a)+(b)	000'Hect.	7,352	8,736	
2.	High Yielding (Cereals) varieties.—				
	(a) Paddy	000'Hect.	650·0	1,600·0	
	(b) Wheat	000'Hect.	80·0	200·0	
	(c) Maize	000'Hect.	8·5	40·0	
	(d) Jowar	000'Hect.	4·1	20·0	
	(e) Bajra	000'Hect.	..	..
	Total ..		742·6	1,860·0	
3.	Consumption of chemical fertilisers (Nutrients)—				
	(a) Nitrogenous	Lakh tonnes	0·56	1·75	
	(b) Phosphatic	Lakh tonnes	0·18	0·80	
	(c) Potassic	Lakh tonnes	0·08	0·40	
	Total (a)+(b)+(c)	Lakh tonnes	0·82	2·95	
4.	Organic manure and green manures—				
	(a) Urban compost	000·Tonnes	45·0	100·0	
	(b) Green manuring	Lakh Hect.	25·00	60·00	

Sl. No.	Item	Unit	Fourth plan base level	Fifth Plan target	Remarks
1	2	3	4	5	6
5. Plant Protection—					
	(a) Consumption of pesticides.	} Lakh Hect.	12.00	30.00	
	(b) Seed treatment chemical				
	(c) Insecticides				
	(d) Fungicides				
	(e) Others				
6. Certified seeds—					
Quantity distributed					
	(a) Food crops	} Tonnes	8,255	12,000	
	(b) Others				
7. Agricultural Machinery and Implements—					
	(a) Tractors	Nos.	} N. A.	} N. E.	
	(b) Power tillers	Do.			
	(c) Thrashers	Do.			
	(d) Seed-cum-fertiliser drillers	Do.			
	(e) Sprayer/Duster hand operated	Do.			
8. Agricultural Machinery Hiring Centres—					
	(a) Operated by Agro Industries Corporation.	.. ..	3 (30 tractors)	12 (80 tractors)	
	(b) Operated by others	.. ..	N. A. 9	N. E. 9	
	(c) Operated by Department	.. ..	(103 tractors)	(103 tractors)	
9. Soil Conservation—					
	(a) Agricultural land	.. 000'Hect.	27.16	50.00	
	(b) Catchment area of River Valley Project.	.. 000'Hect.	22.11	50.00	

N. A.—Not available

N. E.—Not estimated

Annexure XVI

Headwise/Sub-headwise break up of the financial outlays

(Rs. in lakhs)

Sl. No.	Head of development programmes	Fourth Plan		Fifth Plan
		Approved outlay	Anticipated expenditure	Proposed outlay
1	2	3	4	5
I. Agricultural Research and Education—				
1.	Agricultural Research ..	17.56	0.67	} 105.00
2.	Agricultural Education ..	37.00	62.00	
	Total ..	54.56	62.67	105.00
II. Agricultural Extension and Administration—				
1.	Farmers Training ..	26.94	18.82	28.00
2.	Agricultural Extension and Extension Training.	21.00	15.94	8.00
3.	Agricultural Administration including buildings.	75.17	54.93	245.00
4.	Agricultural Statistics ..	..	0.23	268.71
	Total—(1 to 4) ..	123.11	89.92	549.71
III. Agricultural Inputs				
1.	Seeds (Improved) ..	223.08	170.95	186.00
2.	Fertilizer and Manures ..	44.92	41.47	90.93
3.	Plant Protection ..	34.36	80.34	104.00
4.	Implements and Machinery	67.76	20.36	218.00
	Total—(1 to 4) ..	370.12	313.12	598.93

(Rs. in lakhs)

Sl. No.	Head of development programmes	Fourth Plan		Fifth Plan
		Approved outlay	Anticipated expenditure	Proposed outlay
1	2	3	4	
IV. Crop oriented programmes—				
	1. H. Y. V. P., I. A. A. P. I. A. D. P., etc.	377.75	334.66	587.02
	2. Pulses			
	3. Commercial crops ..	208.66	214.81	431.34
	Total--1 to 3 ..	586.41	549.47	1,018.36
V. Others—				
	1. Horticulture Development ..	89.03	81.50	230.00
	2. Land Development * ..	60.10	14.80	..
	3. State Botanical Garden ..	16.57	16.81	23.00
	4. Special Loaning Programme..	225.10	216.98	250.00
	5. Special Schemes ** ..	..	35.00	..
	6. Subsidy for Wells ..	..	..	100.00
	Total --(1 to 6) ..	390.80	365.09	603.00
	Grand Total ..	1,525.00	1,380.27	2,875.00

* Included in III (4)

** Included in Area Development Programme

Annexure XVII

Area Development (Anticipated expenditure for Fourth Plan and proposed outlay for Fifth Plan)

(Rupees in lakhs)

Sl. No.	Programme	Fourth Plan		Fifth Plan outlay	
		Approved outlay	Anticipated expenditure	Total	1974-75
1	2	3	4	5	6
1	S. F. D. A./M. F. A. L. Projects			600.00	100.00
2	Command Area Development	100.00	72.40	1,250.00	200.00
3	Drought Prone Area			150.00	25.00
	Total	100.00	72.40	2,000.00	325.00

(ii) SOIL CONSERVATION

Soil conservation measures assume importance in view of the fact that soil erosion poses a serious problem for agricultural productivity in the State. Soil erosion in different parts of Orissa results from a number of causes the more important being the practice of shifting cultivation in the backward districts inhabited by tribals, erosion of crop lands in various parts of the State particularly the uplands and the catchment areas of the river valley and irrigation projects, and sand casting and shifting of sand dunes in the coastal areas. There is also the problem of waste land including Gochar land and forest land which have to be used for productive purposes. All these necessitate adoption of soil conservation measures on an integrated basis.

2. In the Fourth Plan, soil conservation measures were undertaken both under the State sector and Central sectors. In the State sector the provision (revised) was for Rs. 199.58 lakhs with the physical target of bringing nearly 524,000 hectares under the soil conservation measures, by the end of 1972-73, nearly 347,000 hectares had been covered and an area of nearly 137,000 hectares would be covered by the end of 1973-74.

3. In order to increase production from the crop land as well as from the waste (idle) land the pasture (Gochar) land and the forest land, a comprehensive and diversified land use programme on water shed basis would be continued during the Fifth Plan period. More emphasis will be given to critical water sheds devastated by shifting cultivation the areas mostly inhabited by tribals who will have increased opportunities of employment. The soil conservation programme will have an area approach on the basis of the water sheds and will include all aspects of land and water development. This would involve not only the development of arival practice but also orchards and grass and afforestation. An inventory of land resources together with their treatment needs will be made as part of the soil conservation programme in order to facilitate investment in soil conservation measures.

4. In the State sector the total provision proposed is Rs. 450 lakhs. 49.418 thousand hectares of eroded land will be treated with different soil conservation measures under the State Plan Schemes and nearly 480,000 hectares of land will be brought under capability survey.

5. The scheme proposed to be implemented during the Fifth Plan period can be grouped under the following categories—

- (1) inventory of land resources through the establishment of resources cell
- (2) soil conservation research, demonstration and training;
- (3) soil conservation in hilly areas;
- (4) soil conservation in agricultural land;
- (5) soil conservation in river valley projects;
- (6) utilisation of waste land and introduction of commercial crops;
- (7) development of pastures through the treatment of eroded land and Gochar land;
- (8) soil conservation in coastal sand dunes;
- (9) special scheme for treatment of critical water sheds;

Each of these groups of the scheme have been indicated in the Annexures I and II in terms of outlay and physical programmes.

5. A proper inventory of land resources will be prepared by undertaking soil and land use survey, hydrological studies and field experiments, establishment of photo interpretation and cartography laboratory as also a "data bank" at the headquarters. Training programmes in soil conservation, research in the field and pilot studies of plantation of crops, grasses as well as soil conservation demonstration centres in the affected areas will be organised.

6. Soil conservation measures will be undertaken in the hilly areas particularly on land subjected to shifting cultivation by primitive hill tribes living in those areas. On the basis of pilot studies, horticultural as well as spices crops will be planted in those areas requiring critical attention. Besides basic land treatment like stone and bench terracing and protective tree plantation (horticultural) will be undertaken. Similarly, soil conservation measures on agricultural land in the rain fed areas as well as in the drought prone areas including introduction of dry farming techniques will be undertaken. All these schemes will be taken up on a project basis.

7. Soil conservation in the catchment areas of the river valley projects and of the irrigation projects will be undertaken. These areas include the Brahmani catchment, the Baitarani catchment and the catchment areas of Pusikulya and Mahendratanya rivers and also some medium and minor irrigation projects. The catchment areas of the inter-state river valley projects will be taken up as Centrally sponsored schemes.

8. There are vast stretches of waste (idle) land which can be used for commercial and other plantation crops. Some of these will be covered in the Fifth plan as also eroded land and village Gochar lands for development of pastures.

9. In addition to all these measures, cocconut, casurina and other plantations will be taken up in the coastal areas where the sand dunes are subjected to acute wind erosion and high soil temperature. Soil conservation measures will be undertaken mostly in the coastal areas of the Ganjam district.

10. Comprehensive soil conservation measures will be undertaken on a number of mini water sheds lying in remote corners of the State inhabited by tribals. These water sheds suffer from acute erosion and the tribals keep on changing their place of cultivation. Soil conservation measures will be undertaken from the hill tops to the sloping valley lands and eroding stream banks in these critical water sheds.

11. In order to implement these comprehensive soil conservation measures in different areas of the State, the existing administrative machinery will be reorganised and strengthened.

Annexure I
Outlay and expenditure summary

STATE—ORISSA

(Rs. in lakhs)

Serial No.	Head/Sub-head	Fourth Plan				Fifth Plan outlay proposed			Annual Plan for 1974-7		
		Approved Fourth Plan outlay	Approved outlay for 1973-74	Anticipated expenditure during 1973-74	Anticipated expenditure during Fourth Plan	Total	Capital outlay	Foreign exchange	Total	Capital outlay	Foreign exchange
1	2	3	4	5	6	7	8	9	10	11	12
I	Establishment of resources Inventory Cell—										
	I (A) Soil and Land use Survey.	16 00	4.89	4.59	17.45	24.00	..	..	4.77	—	..
	I (B) Establishment of photo-interpretation and cartographic laboratory.	..	..	..	..	3.00	0.35 Jeep	..	0.91	0.35 Jeep	..
	I (C) Hydrological studies and field experiments in small water sheds.	:	..	..	..	2.00	..	..	0.37	..	..
	II Soil Conservation Research and Demonstration and Training—										
	II (A) Soil Conservation training.	..	..	..	..	5.00	0.55 (Building)	..	1.46	0.55 (Building)	..
	II (B) Establishment and continuance of Soil Conservation Demonstration Centre.	..	1.70	1.69	4.20	13.00	..	..	2.81	..	..

II (C) Soil Conservation Research and Plant introduction.	3.00	6.85	6.84	15.32	5.00	..	..	1.00	..
III Integrated Soil Conservation Measures in priority waters heads.									
III(A) Soil Conservation in hilly areas.									
III (A) 1. Basic land treatment .. like stone and bench terracing, field bunding and contour bunding, water harvesting and moisture conservation structures in tribal areas.	20.00	8.00	8.00	24.82	55.00	2.00 (Building)	..	11.57	.. ..
III (A) 2. Protective tree planting (Mango, Guava, Jack, Tamarind, Cashew etc.) and conservation fruit farming including introduction of spices etc. (Pineapple, hill banana, pepper, cardamum etc.)	4.00	2.78	2.78	7.54	50.00 (Building 2.50, Jeep 0.45)	2.95	..	8.71	2.45 .. (Building- 2.00, Jeep 0.45)
III (B) Soil Conservation in Agricultural land.									
III (B) 1. Soil Conservation in Assured Rainfed areas.	21.00	3.64	3.56	14.56	20.00	1.00 (Building)	..	4.18	0.40 (Building) ..
III (B) 2. Water Conservation in Drought prone areas including introduction of dry farming techniques for moisture conservation.	..	..	..	..	30.00	2.07 (1.75 Building, 0.32 Jeep)	..	6.10	1.32 (1.00 (Building, 0.32 Jeep) ..

(Rs. in lakhs)

Serial No.	Head/Sub-head	Fourth Plan				Fifth Plan outlay proposed			Annual Plan for 1974-75		
		Approved Fourth Plan outlay	Approved outlay of 1973-74	Anticipated expenditure during 1973-74	Anticipated expenditure during Fourth Plan	Total	Capital outlay	Foreign exchange	Total	Capital outlay	Foreign exchange
1	2	3	4	5	6	7	8	9	10	11	12
IV	Soil Conservation in river valley Projects.										
IV (A)	Soil Conservation in Brahmani Catchment (Down stream Rengali)	14.50	5.12	4.80	15.22	15.00	0.32 (Building)	..	3.66	0.32	..
IV (B)	Soil Conservation in Baitarani Catchment. (Down stream Bhimkund).	14.50	5.43	5.32	17.25	15.00	1.70 (Building)	..	2.38	..	..
IV (C)	Soil Conservation in Rushikulya Catchment.	..	..	..	..	10.00	..	..	1.98	..	..
IV (D)	Soil Conservation in Mahendratanya Catchment.	..	..	..	..	10.00	..	..	1.53	..	..

IV (E) Soil Consesvation in Medium & Minor Irrigation Projects.	8·00	3·49	3·38	10·50	30·00	1·80 (1·50 Building, Jeep 0·30)	..	6·68	1·30 (1·00 Building, 0·30 Jeep)	..
V Utilisation of waste land and introduction of Commercial crops.										
V (A) Cashew	.. 20·00	6·07	6·07	22·57	40·00	2·68 (2·36 Building, 0·32 Jeep)	..	6·38	0·32 (Jeep)	..
V (B) Sisal	.. 20·00	6·42	6·22	23·35	10·00	0·75 (Building)	..	1·41	0·10 (Building)	..
VI Development of Pasture in eroded land and rehabilitation of village Gochar Land.	..	0·78	0·78	3·55	13·00	..	..	2·91	..	..
VII Headquarters Organisa- tion.	4·00	8·83	6·97	15·25	30·00	..	..	6·00	..	..
VIII Soil Conservation in coastal sand dunes.	5·00	2·00	..	7·00	40·00	2·32 (2·00 Building, 0·32 Jeep)	..	6·60	1·32 (1·00 Building, 0·32 Jeep)	..

(Rupees in lakhs)

Serial No.	Head/Sub-head	Fourth Plan				Fifth Plan outlay proposed			Annual Plan for 1974-75		
		Approved Fourth Plan outlay	Approved outlay for 1973-74	Anticipated expenditure during 1973-74	Anticipated expenditure during Fourth Plan	Total	Capital outlay	Foreign exchange	Total	Capital outlay	Foreign exchange
1	2	3	4	5	6	7	8	9	10	11	12

IX	Special Scheme for treatment of critical watersheds.	30.00	2.13 (1.81 Building, 0.32 Jeep)	..	7.16	1.32 (1.00 Building, 0.32 Jeep)	..	
Total		..	150.00	66.00	61.00	199.58	450.00	20.62 (18.24 Building, 2.38 Jeep)	..	88.57	9.75 (7.37 Building, 2.38 Jeep)	..

Annexure II

Physical programme—Targets and achievements

STATE—ORISSA

Target in 000' Hectares

Sl. No.	Item	Unit	1968-69 level	Fourth Plan		Level expected during 1973-74	Fifth Plan target	
				Target	Likely achievement		Total	1974-75
1	2	3	4	5	6	7	8	9

1	Soil Conservation on Agricultural land.	000' Hectors	11.20	16.80	16.00	27.20	}	50.00	10.748
2	Soil Conservation in Catchment Area of River Valley Projects.	000' Hectares	4.60	23.40	17.50	22.20			

CHAPTER 2.2

LAND REFORMS

The problems of land reforms in Orissa have some district features, which lend special significance in the overall economic planning of the State. These, *inter alia*, are the inequalities of land ownership, scatteredness of agricultural holdings, uneconomic interests of small tenants and the out-dated condition of land records. In a State where 92 per cent of the population is rural based, the implementation of agrarian reforms has not been easy. It is therefore, necessary to undertake a minimum programme of operation in high priority areas on an integrated basis. Such a minimum programme, in this State, would cover three main items, namely, (i) completion of survey and settlement operation in the unsurveyed areas and those already surveyed and settled but in need of revision; (ii) ceiling fixation on land holdings and (iii) consolidation of holdings.

Review of the Progress up to the end of the Fourth-Plan

(a) Survey and Settlement Operation

2. 657 villages of two districts, namely, Dhenkanal and Bolangir were brought under settlement operation from Plan funds in 1970-71. The target was set about attestation of land records to enable the agriculturists to have basis records enabling them to draw institutional credit. 165 villages of Keonjhar district will also be brought under settlement operation from Plan funds in 1973-74.

(b) Ceiling fixation of land-holdings

3. After the enforcement of the ceiling law with effect from 7-1-1972, implementation of land ceiling has been taken up as a plan programme in the Fourth Plan. The programme envisages strengthening of the administrative machinery in the revenue administration by providing additional staff at each level. The objective is to clear the back-log of revenue cases, complete follow-up action where necessary; rectify the remediable errors and bring the record-of-rights up-to-date to form the basis for the imposition of ceiling.

4. Since the existing provisions of the ceiling law are undergoing revision and an Amendment Bill for the purpose is in the process of enactment, the statutory ceiling has not yet been enforced in the field. The ground work for the purpose, has, however, been initiated and the old record-of rights are being made up-to-date in all Tahasils. An assessment of the expected availability of surplus lands is also being simultaneously made to facilitate the assessment of compensation. The plan expenditure on the above programme up to the end of the Fourth Five Year Plan will be of the order of Rs. 15.30 lakhs.

(c) Consolidation of holdings

5. Consolidation of holdings has been taken up as a Plan programme with effect from 1970-71. With a view to facilitating the implementation of the programme, Pilot Units were started in all the districts of the State in the subsequent years. In these pilot areas the main emphasis was placed on pre-consolidation work, i. e. disposal of revenue cases, correction of record-of-rights, publicity and dissemination of information regarding the benefits of consolidation, mock consolidation and collection of data relevant to the consolidation programme.

The Orissa Consolidation of Holdings and Prevention of Fragmentation of Land Act, 1972 has since been passed. Under the aegis of the new law, consolidation measures are being initiated during the current year.

Objectives and Strategy for the Fifth Plan

6. The Plan programme for land reforms, covering ceiling fixation and consolidation of holdings will be implemented in the Fifth Five-Year plan in an integrated manner, keeping in view the supporting services to be available to the beneficiaries. The strategy will take into account institutional changes, operational programmes, changes in the implementation machinery, where necessary, people's involvement and financing of the respective operations. So far as the programme of survey and settlement operation is concerned, it will be implemented from non-plan funds barring a small spill over from the Fourth Plan and some requirement for augmenting the resources of the Survey and Map Publication Office. A minimum Plan outlay of Rs. 1,440.00 lakhs is envisaged for the 5th Plan.

Specific Programme in the Fifth Plan

Survey and Settlement Operation

7. A programme has been formulated for the completion of Attestation of the spi over villages of Dhenkanal and Keonjhar districts which had been taken up under Plan Scheme but could not be completed till the end of the Fourth Plan period. The number of such villages is expected to be 572. As further operation will not be taken up under Plan Scheme, there is no necessity for strengthening the organisation from Plan funds.

8. The functional capacity of the Survey and Map Publication Office will have to be augmented in order to cope with the increased work load in the Fifth Plan. Photographic and printing machinery will have to be provided in the office for speedy execution of work. The capital expenditure of Rs. 30 lakhs as well as operational cost of Rs. 10.00 lakhs for the purpose will be met from plan funds.

9. The breakup of the plan outlay for settlement operation in the Fifth Five Year Plan will be as follows :—

		(Rupees in lakhs)
(a) Field operation including recess	..	8.00
(b) Head Office Establishment	..	2.00
(c) Survey and Map Publication Office (excluding training.		40.00
	Total	50.00

Ceiling fixation on land holdings

10. The Plan programme for imposition of ceiling on land-holdings will be a spill over programme in the Fifth Five-Year Plan. It aims at fixing statutory ceiling on the lands held by raiyats and land-holders and bringing the record-of-rights up-to-date for the purpose of ceiling fixation.

11. The Fifth Plan Programme for implementation of land ceiling envisages the following :—

- (a) Strengthening the administrative machinery at various levels of revenue administration for implementation of land reforms programmes.

- (b) Settlement of land rights of raiyats, tenants and land-holders and incorporating them in the record-of-rights.
- (c) Ceiling fixation of land-holdings
- (d) Payment of compensation for surplus lands vested in the State
- (e) Distribution of surplus lands
- (f) Construction of buildings for office and residential purposes.

12. Strengthening of the implementing and supervisory levels in the revenue hierarchy is a prime need. With the proliferation of various land laws and implementation of estates abolition and land reforms measures, there has been a phenomenal increase in the duties and responsibilities of Revenue Officers at the base. Full contingent of required staff is proposed for the first three years of the Plan with gradual reduction to the extent of fifty per cent in the 4th and 5th years as it is expected that bulk of the cases would be disposed of by the third year of the Plan.

13. It is equally important to strengthen the supervisory levels and create new supervisory posts to look after the work of the Revenue Officers. It is therefore, proposed to provide exclusive supervisory officers at the district level to look after the land reforms administration. No separation is, however, proposed to be effected between the administration of land reforms and land revenue. At the district level the Additional District Magistrate, proposed to be provided for the supervision of the land reforms programmes, will also supervise all matters relating to land revenue and land management. At the Subdivisional level only clerical hand is proposed to assist the Subdivisional Officer in the land reforms work. Matters relating to land revenue administration and land reforms will thus remain integrated at all levels in the district under the overall supervision and control of the Collector.

14. With the addition of officers and staff at the Tahasil, Subdivisional and the District levels, the existing strength of officers and staff at the level of the Revenue Divisional Commissioner and the Board of Revenue will also have to be strengthened. It is proposed to provide for them under the Plan programme.

15. Payment of compensation for ceiling surplus land is a statutory obligation. Special provision exists for the purpose in the Orissa Land Reforms Act, 1960. It is estimated that about 1 lakh acres of surplus land will be available after ceiling fixation in various areas of the State. Since ceiling operation has been treated as a plan programme, payment of compensation for ceiling surplus lands, which is its necessary concomitant, is also proposed to be included in the plan. The overall expenditure towards payment of compensation on ceiling surplus lands will be of the order of Rs. 400.00 lakhs, out of which a provision of Rs. 100.00 lakhs is proposed under the Fifth Five Year Plan. Since payment of compensation is a statutory obligation, necessary funds for the purpose may have to be augmented as per actual requirement.

16. The break up of the Plan outlay for the implementation of land ceilings in the Fifth Five-Year Plan will be as follows :—

	Rs. in lakhs
(1) Compensation for ceiling surplus lands.	100.00
(2) Strengthening of administrative machinery.	90.00

Total ..	190.00

Consolidation of holdings

17. The programme for consolidation of holdings which is in operation in the Fourth Five-Year Plan will be continued in the Fifth Plan. An operational pattern for the purpose, which will include updating of land records and consolidation of land-holdings has been broadly identified for implementation in the ensuing phase.

18. The availability of staff and equipage at present is adequate to meet the requirement of the operation in about 2.27 lakh hectares by the end of the first year of the Fifth Plan. In the remaining 4 years of the Fifth Plan, about 16.17 lakh hectares more will be covered by the operation. In all, the total area will constitute 24.25 per cent of the cultivated area in the State. The selection of areas for consolidation will be made on the basis of their consolidability, condition of land records, facility of irrigation and power, potentiality for agricultural development and the existence of other agricultural development schemes and package programmes. The operation will proceed in a phased manner and it will be necessary to provide the requisite functional staff in each phase. For this purpose, it is proposed to train 200 Assistant Consolidation Officers, 600 Kanungoes, 3,000 Amins and 300 Draftsmen during the Plan period.

19. The organisational strength will also have to be supplemented on a large scale. The requirement of officers both for field work and supervision will be considerable. Since the operation will be time-bound and the entire work in any given locality will have to be completed in a continuous process, the provision of staff in time and in accordance with the requirement will be the key-note.

20. The break-up of plan outlay for the implementation of consolidation of holdings in the Fifth Five-Year Plan will be as follows :—

		Rs. in lakhs
(a) Superintendence	..	17.70
(b) Field operation	..	1,148.85
(c) Compensation	..	15.00
(d) Training	..	18.45
Total	..	1,200.00

21. The Annexure gives the details of the proposed outlay on these schemes.

Annexure
Outlay and expenditure

State—Orissa

Serial No.	Head/Sub-head	Fourth Plan					Fifth Plan outlay proposed				
		Approved Fourth Plan outlay.	Approved outlay for 1973-74.	Anticipated expenditure 1973-74.	Anticipated expenditure during the Plan.	Total	Capital outlay	Foreign exchange	Plan 1974-75		
									Total	Capital outlay	Foreign outlay
1	2	3	4	5	6	7	8	9	10	11	12

Land Reforms

1	Survey and Settlement Operation.	55·00	13·00	13·00	44·05	50·00	30·00	..	16·80	2·80	..
2	Implementation of Chapter IV of the O. L. R. Act, 1960. (Ceiling Provision)	95·00	12·00	12·00	15·31	190·00	..	..	32·00	..	..
3	Consolidation of holdings	50·00	42·00	40·00	66·35	1,200·00	..	..	67·50	..	..
		200·00	67·00	67·00	125·71	1,440·00	30·00	..	116·30	2·80	..

CHAPTER 2:3

(I) ANIMAL HUSBANDRY, DIARYING AND MILK SUPPLY

Fourth Plan Review

During the Fourth Plan period an outlay of Rs. 440.00 lakhs was provided for development of Animal Husbandry, Dairying and Milk Supply in the State. Out of the above outlay Rs. 34.00 lakhs was working capital for Milk Union Scheme and production of premixed Poultry Feeds.

2. With the intention of achieving the production targets, only production oriented schemes were taken up. The total number of 81 schemes were included in the Fourth Plan, 70 under Animal Husbandry and 11 under Dairying. But it was not possible to take up all the schemes. Only 61 schemes, 53 under Animal Husbandry and 8 under Dairying were taken up.

3. By the end of Fourth Plan period, the total cattle population covered under various breeding programmes are given below :—

	Population covered	Per cent of total breedable population
(1) I. C. D. Project ..	246,777	7.05
(2) K. V. Scheme ..	230,000	6.57
(3) A. I. Scheme ..	403,000	11.51
(4) U. G. S. ..	191,400	5.17

4. Apart from continuance of the large sized I. C. D. Project, Cuttack, two more medium sized I. C. D. Projects were set up one at Berhampur during 1971-72 and the other at Sambalpur during 1972-73. Each of these medium sized I. C. D. Projects cover 50,000 breedable population. Till end of the Third Plan period 19 K. V. Blocks were functioning in the State. To these 7 more K. V. Blocks were added during the Fourth Plan period making the total of 26 K. V. Blocks. By the end of the Third Plan period 270 A. I. Centres were functioning in the State which were added by 80 more A. I. Centres to bring the total to 350 by the end of Fourth Plan.

5. To meet the requirement of semen to take up the breeding programme it was considered necessary to set up new Live-stock Breeding Farms and to expand the existing ones to produce pedigree bulls. During the period it was proposed to set up 5 new Live-stock Breeding Farms out of which it was possible to organise only 3 Farms at Sundargarh, Kathpal and Angul. Further the expansion of 9 Live-stock Farms were taken up by addition of animals and providing additional facilities.

6. In order to increase the availability of eggs various Poultry Development Programmes were taken up. The existing 2 Poultry Breeding Farms continued during the period which were added by two new Farms at Cuttack and Keonjhar. The existing Farms at Angul and Chiplima were expanded by raising the layer strength and providing additional facilities.

7. The farms at Bhubaneswar and Similiguda also continued under the Plan. Under Poultry Development Programme I. P. D. P. S heme aims at organising poultry development under private sector. During the period the two centres at Rourkela and Cuttack-Bhubaneswar continued and their area of operation was expanded.

8. In view of the cross breeding programmes taken up it was considered necessary to increase the fodder production in the State by encouraging the farmers to take up fodder cultivation for their economic benefit. To produce seed materials, a seed production farm has been set up at Panchamahar in the district of Dhenkanal with the total area of 108.5 acres out of which 10 acres have been reclaimed and brought under fodder cultivation.

9. Action was also taken up during the Fourth Plan period to increase the production of meat, mutton and pork. Schemes were taken up for development of small animals. For development of sheep, one Sheep Breeding Farm has been set up at Bolangir and the existing Farm at Chiplima was expanded.

10. For increasing the facilities for animal health cover during the period 25 new Veterinary Dispensaries and 50 Veterinary Stockman Centres were opened. This brings the total Veterinary Dispensaries to 366 and the Veterinary Stockman Centres to 1,177 at the end of the Fourth Plan.

11. For providing required biologicals for the developing Livestock, expansion of the Biological Products Institute was taken up to provide additional facilities and additional production.

12. For effective supervision over the field activities the District Administration was organised and 2 new Animal Husbandry Districts were created.

13. Under Dairy Development the expansion of Cuttack Milk Union Scheme was taken up to handle additional quantity of milk to meet the demands of consumers at Cuttack and Bhubaneswar. Further two more milk supply schemes have been set up at Berhampur and Sambalpur. During the period the Milk Society at Kaimati has been reorganised and additional members have been brought under its fold. Four new Rural Dairy Centres were started at Talcher, Angul, Jajpur Road and Puri.

Fifth Plan

14. During the Fifth Plan to increase the production of food of animal origin it is considered necessary to further increase the improved breeding facilities in the State. To achieve this, it is proposed to set up new medium sized I. C. D. Projects and to continue the existing two medium sized projects already set up and strengthen the large sized I. C. D. Project at Cuttack.

15. For providing increased A. I. facilities it has been proposed to open 100 new A. I. Centres. To increase the coverage under K. V. Scheme, 8 new K. V. blocks will be set up during the Fifth Plan period. For meeting the requirement of stud bulls, it is proposed to provide additional facilities to the S. L. B. Farm, Chiplima. The grant to U. G. S. will be provided to maintain bull and buck centres to carry on natural breeding through improved stock.

16. One new Fodder Seed Production Farm will be set up and for extension purpose a scheme for reorganisation of fodder cultivation will be taken up. It has been proposed to provide subsidy for cultivation of fodder in 3,000 perennial fodder plots of one acre each. Seasonal cultivation of fodder will be taken up in about 50,000 acres during the Plan.

17. Under Poultry Development one new I. P. D. Project will be set up for the benefit of the interested farmers. For supplying chicks to the interested public and the special project areas, 33 new poultry units will be opened and 8 duck extension centres will be provided to the existing poultry farm for controlled breeding and research.

18. Poultry Programmes have been implemented since First Five-Year Plan. During the Fourth Plan it was proposed to make 12 eggs available per head. As against this 9 eggs are likely to be available per head per year in Orissa at the end of the Fourth Plan. It is also proposed to give a boost to the poultry farming in the private sector. As there is a large demand for supply of day-old chicks and six-week old birds to the poultry farmers in the private sectors and identified beneficiaries in the S. F. D. A./M. F. A. L. Project Agencies and also in T. A. Agencies, it is proposed to expand State Poultry Breeding Farms during the Fifth Five-Year Plan. All the A. N. P. Centres that have not yet been revived will be revived during this plan period. The egg production by the end of Fifth Plan period will be 300 millions.

19. As the coastal Orissa is struggling with a large number of rivers, canals, creeks, ponds and reservoirs, it is inherently suitable for duck raising. Ducks contribute a large number of eggs to the total egg production of the State. For lack of adequate attention, the number of ducks available in the State is gradually declining. As the ducks do not require balanced feed in such proportions as the poultry requires, duck raising will be a profitable concern to the farmers. In order to encourage the people in duck keeping in latest scientific methods like rearing of good breeding of ducks, providing feeding and shelter and ideal routine management practices, it is proposed to establish Duck Demonstration Centres.

20. For increasing the production of mutton, it has been proposed to take up the expansion of Sheep Breeding Farm, Bolangir and to take up extension programme under the scheme for Introduction of Sheep in Mixed Farming Economy.

21. For production of cattle feed and Poultry Feed, Plants will be set up by the Agro-Industries Corporation and also in the private sector during the Plan. The Dairy Development Corporation will also set-up such units during the Plan. Efforts will be made to set up at least one Cattle Feed Plant and one Poultry feed Plant in each of the Districts in the State in the Corporate and the private Sector.

22. In order to increase the Animal Health cover, it has been proposed to open 50 new Veterinary Dispensaries and 120 Veterinary Stockman Centres. To increase the production of biologicals to achieve self sufficiency, it is proposed to expand the existing Biological Products Institute.

23. It is proposed to provide additional grants to O. U. A. T. to take up Field Oriented Research. To meet the increased demand of technical man-power, to take up additional schemes and to work under special projects, it has been proposed to train further personnel. To impart training to the interested farmers, it is also proposed to train 600 farmers to take to animal husbandry and dairying on improved methods.

24. To organise Dairy Development activities, expansion of Milk Supply Schemes, Sambalpur and Berhampur and expansion of Rural Dairy Centres will be taken up. During the period it has been proposed to organise small Dairy Co-operatives which will be provided with managerial subsidy feed subsidy for purchase of Tempo and bulk coolers for effective marketing of their products. For bringing about all round development in the sector of Dairy Industry it has been proposed to set up a Dairy Development Corporation in the State.

25. It is also proposed to undertake resources survey in milk, egg and meat supply in order to know the potential in the state and take up Individual Development Schemes accordingly.

26. The details of the schemes to be taken up during the Fifth Plan are given in Annexure I and the physical programmes of some of the Major Schemes in Annexure II.

Annexure I

ORISSA

Programmewise Outlay and Expenditure

(Rs. in lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved Outlay for 1973-74	Likely expr. 1973-74	Likely expr. during 4th Plan	Fifth Plan	
						Total outlay	Annual plan 1974-75 outlay
1	2	3	4	5	6	7	8
CATTLE DEVELOPMENT							
1	Intensive Cattle Development Project ..	80.85	36.44	36.44	80.85	135.00	25.00
2	Contribution to U. G. S. ..	7.80	1.30	1.30	7.80	8.00	0.45
3	Expansion of B. L. B. Farm, Chiplima ..	13.23	3.48	3.48	13.23	30.00	6.00
4	Opening of new A. I. Centre ..	8.86	3.10	3.10	8.86	15.00	0.68
5	Opening of K. V. Blocks ..	22.84	7.49	7.49	22.84	36.00	3.31
6	Expn. of K. V. Blocks and strengthening of Supervisory Staff for K. V. and A. I.	2.44	0.60	0.60	2.44	..	..
7	Expn. of State Buffalo Breeding Farm, Rourkela.	12.97	3.14	3.14	12.97	..	..
8	Expn. of D. L. B. Farm, Remuna and Kalyani.	8.92	1.82	1.82	8.92	..	..
9	Expn. of D. L. B. Farm, Sundargarh and Kathpal.	13.44	6.92	6.92	13.44	..	..
10	Estt. of D. L. B. Farm, Kalahandi ..	9.95	2.20	2.20	9.95	..	..

11	Expn. of D. L. B. Farm, Bolangir	..	4.92	0.80	0.80	4.92	..	..
12	Reorganisation of A. I.	..	2.14	0.52	0.52	2.14	..	..
13	State Share for Estt. of Cattle Feed Plant in Private and Corporation Sectors.	..	..	..	..	..	20.00	..
14	Estt. of Sire Evaluation Cell	..	1.80	1.80	1.80	1.80	..	..
15	Hill Cattle Development	..	6.15	2.04	2.04	6.15	..	..
16	Mass castration of scrub bulls	..	3.28	0.75	0.75	3.28	..	..
17	Expn. of D. L. B. Farm, Ctc.	..	2.40	1.17	1.17	2.40	..	..
18	Expn. of D. L. B. Farm, Bhanjanagar	..	0.50	0.09	0.09	0.50	..	..
19	Expn. of D. L. B. Farm, Keonjhar	..	1.30	0.80	0.80	1.30	..	..
20	Estt. of D. L. B. Farm, Angul	..	1.36	0.58	0.58	1.36	..	..
21	Estt. of Regional Breeding Farm, Kajalaganda	..	0.40	..	..	..	..	..
22	Estt. of Exotic Cattle Breeding Farm	..	1.38	..	..	..	..	..
23	Estt. of Demonstration Unit of exotic breed in Live-stock Breeding Farms.	..	2.80	1.61	1.61	1.61	..	..
24	Expn. of D. L. B. Farm, Landibandh	..	1.34	0.84	0.84	1.34	..	..
25	Reorganisation of Live-stock Marketing Cell	..	3.60	0.83	0.83	0.83	..	..
26	Estt. of Gosadan	..	1.25	..	..	0.30	..	..
Total—Cattle Development			..	216.92	78.32	78.32	209.23	244.00	35.44

Sl. No.	Programme	Fourth Plan approved Outlay	Approved Outlay for 1973-74	Likely Expr. 1973-74	Likely expr. during 4th plan	Fifth Plan	
						Total Outlay	Annual plan 1974-75 outlay
1	2	3	4	5	6	7	8
FODDER DEVELOPMENT							
27	Estt. of Fodder Seed Production Farm..	2.17	0.76	0.76	2.17	6.85	2.00
28	Subsidised Fodder Cultivation ..	0.48	0.98	0.98	1.29	9.00	1.85
29	Reorganisation of Fodder Devt. activities in the State.	1.96	0.89	0.89	0.89	4.15	0.79
30	Estt. of Fodder Bank ..	1.00	..	..	--	..	..
	Total— Fodder Development ..	5.60	2.63	2.63	4.35	20.00	4.64
POULTRY DEVELOPMENT							
31	Intensive Egg. & Poultry Production from Marketing Centre.	13.12	2.80	2.80	13.12	15.34	4.71
32	Estt. of Poultry Farm for Controlled Breeding & Research.	0.94	0.48	0.48	0.94	6.78	2.55
33	Estt. of Poultry Units under ANP ..	3.15	1.90	1.90	3.09	16.04	3.25
34	Estt. of Duck Extension Centres ..	0.10	..	..	..	6.38	0.78
35	Estt. of Regional Poultry Farms, Sundergarh and Koraput.	..	..	..	..	4.04	..
36	Estt. of Poultry Breeding Farms, Bhubaneswar and Simimilguda.	11.72	1.98	1.98	11.70	..	..

37	Expn. of State Poultry Farms, Angul ..	2.42	0.75	0.75	2.42	..	..
38	States share in Estt. of Poultry Feed Plant in Private & Corporate Sector. ..	20.05	1.00	1.00	18.05	11.42	1.95
39	Expn. of Duck Breeding Farm, Chiplima ..	0.52	..	..	--	..	..
40	Expn. of Poultry Extn. Centres ..	3.70	1.68	1.68	3.70	..	..
41	Appointment of Supervisory staff for Poultry Development. ..	0.20	..	..	..	..	..
42	Expn. of special Poultry unit at Chiplima ..	0.65	0.50	0.50	0.50	..	..
43	Estt. of Duck Demonstration Centres ..	..	1.81	1.81	1.81	..	..
Total—Poultry Development ..		56.57	12.90	12.90	54.50	60.00	13.24

SHEEP AND GOAT DEVELOPMENT

44	Estt. of Sheep Breeding Farm, Bolangir ..	4.19	3.22	3.22	4.19	14.00	6.00
45	Introduction of Sheep in Mixed Farming Economy. ..	0.63	0.48	0.48	0.63	2.00	0.40
46	Expn. of Sheep Breeding Farm, Chiplima ..	3.38	0.50	0.50	3.38	..	..
47	Expn. Goat Breeding Farm, Chiplima ..	0.17	..	--	..	..	..
Total—Sheep and Goats Development ..		8.37	4.20	4.20	8.20	16.00	6.40

(Rs. in lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during 4th Plan	Fifth Plan	
						Total outlay	Annual Plan 1974-75 outlay
1	2	3	4	5	6	7	8
PIGGERY DEVELOPMENT							
48	Expn. of Pig Breeding Farm ..	0·59	0·50	0·50	0·50	..	..
ANIMAL HEALTH							
49	Expn. of Vety. Hospital & Dispensaries ..	4·53	3·29	3·29	4·53	11·00	3·20
50	Expn. of Biological Products Institute ..	7·69	1·79	1·79	7·69	16·00	2·50
51	Estt. of Carcass Utilisation Centre ..	1·05	1·79	1·79	1·79	3·00	0·45
52	Opening of new Vety. Dispensaries ..	20·77	6·06	6·06	20·77	30·00	6·20
53	Opening of new V. S. M. Centre ..	10·43	3·30	3·30	10·43	32·00	3·00
54	Intensification of Cattle Sterility Scheme ..	0·81	..	..	..	..	..
55	Estt. of Mobile Squads ..	0·75	..	..	..	..	..
56	Estt. of Vety. Public Health ..	2·30	..	..	..	..	..
57	S. P. C. A. including Animal Welfare Board ..	1·35	0·27	0·27	1·34	..	..
Total—Animal Health ..		49·67	16·50	16·50	46·55	92·00	15·35

Education and Training								
58	Grants-in-aid to O. U. A. T.	..	1.80	0.20	0.20	1.80	3.00	0.60
59	Training in A. H. & Dairying	..	0.30	..	..	..	8.00	1.20
60	Training of Farmers in Dairying	..	..	..	..	..	2.00	0.40
61	Training of V. S. M.	..	..	..	..	..	8.00	1.60
62	Expansion of Inservice Training of Personnel.	..	4.03	1.45	1.45	4.03	..	..
63	Studies in the control and immunity of Haematozan Parasites.	..	0.96	0.42	0.42	0.96	..	..
64	Advance Training in India & abroad	..	0.60	..	..	0.03	..	..
65	Establishment of Live-stock Disease Investigation Division.	..	3.00	0.50	0.50	0.56	..	..
66	Establishment of clinical Laboratory at Range level.	..	2.17	1.00	1.00	2.17	..	..
Total—Education and Training		..	12.86	3.57	3.57	9.55	21.00	3.80
Other Schemes								
67	Strengthening of Staff at Veterinary Directorate.	..	6.75	3.38	3.38	5.42	..	..
68	Provision of staff at Range level	..	1.50	..	..	..	..	..
69	Reorganisation of District Administration	..	7.34	2.50	2.50	7.34	..	..
70	Strengthening of Statistical Unit	..	0.86	0.25	0.25	0.63	..	..
71	Live-stock Census	..	4.67	1.22	1.22	4.67	..	..
72	Reorganisation of Information Bureau	..	0.44	..	..	..	..	..

(Rs. in lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely exp. 1973-74	Likely exp. during 4th plan	Fifth Plan	
						Total outlay	Annual Plan 1974-75
1	2	3	4	5	6	7	8
73	Resources Survey in milk, egg and meat supply.	..	..	..	..	11.00	..
74	Reorganisation of Mobile and Propaganda Unit.	0.72	..	..	..	..	..
75	Expn. of Small Farmers Dev. Agency	1.93	1.50	1.50	1.93	..	..
76	Introduction of House surgeonship	1.20	..	..	..	..	..
	Total—Other Schemes	..	25.41	8.85	8.85	19.99	11.00
	Total—Animal Husbandry	..	375.99	127.47	127.47	352.87	464.00
						78.87	

DAIRYING AND MILK SUPPLY

77 Establishment of Milk Supply Scheme Berhampur and Sambalpur.	12·54	4·54	4·54	11·24	40·00	6·00
78 Establishment of Rural Dairy Milk Societies	13·65	8·28	8·28	10·46	20·00	3·50
79 Orissa State Dairy Corporation ..	..	..	..	..	39·00	35·62
80 Assistance to Milk Producers Co-operative Societies.	..	..	..	..	26·00	6·00
81 Cuttack Milk Union Scheme ..	33·56	2·93	2·93	33·56	..	..
82 Pilot Scheme for Collection of Milk ..	2·71	1·45	1·45	3·48	..	..
83 Reorganisation of Dairy Development ..	1·45	0·33	0·33	1·28	..	..
84 Survey and Statistics ..	0·10	..	..	..	..	..
Total—Dairying and Milk Supply ..	64·01	17·53	17·53	60·02	125·00	51·12
Total—Animal Husbandry, dairying and milk supply	440·00	145·00	145·00	412·89	589·00	129·90

Annexure II

Physical Programmes—Targets and Achievements

State—Orissa

Serial No.	Item	Unit	1968-69 level	Fourth Plan		Level expected during 1973-74	Fifth plan target	
				Target	Likely achievement		Total	1974-75
1	2	3	4	5	6	7	8	9
1	Animal Husbandry							
(i)	Veterinary Hospitals/Dispensaries.	Nos.	341	25	25	366	50	10
(ii)	Intensive Cattle Devt. Blocks.		One large sized Project.	Estt. of two medium sized Projects.	Estt. of two medium sized Projects.	3 Projects	Estt. of two new medium sized Projects.	Estt. of two new Projects.
(iii)	Artificial Insemination Centres.	Nos.	286	80	80	366	100 Centres	20 Centres
(iv)	Stockman Centres		1,125	50	50	1,175	120 Centres	15 Centres
(v)	Area under fodder crops	000 hectares	615	1,483.60	6,024.80	1,766		

2 (a) Key Village Block	..	Nos.	17 blocks with 170 units.	7 blocks with 70 units.	7 blocks with 70 units.	24 blocks with 240 units.	8 blocks with 80 units.	One block with 10 units.
(b) Expanded	..	Do.	2 expanded blocks with 4 units.	2	2	4	..	..
3 Cattle Breeding Farms Estab- lished.	..	Do.	10	5	3	13	..	..
4 Sheep Breeding Farms Estta- blished.	..	Do.	1	..	..	1	1	1
5 Sheep and Wool Extension Centres.	..	Do.	..	..	..	..	..	..
6 Sheep Rearing, Grading and Marketing.	..	Do.	..	..	..	..	..	..
7 Production of Animal (Tonnes) Products —(a) Milk/ Milk Products.	..	..	180	10	15.88	195.88	206 thousand M. T.	..
(b) Meet	..	..	..	..	..	..	..	..
(c) Wool	..	..	..	..	..	..	..	..
8 No. of Government Poultry Farms Established.	..	Nos.	..	2	2	9	..	..

Serial No.	Item	Unit	1968-69 level	Fourth Plan		Level expected during 1973-74	Fifth Plan target	
				Target	Likely achievement		Total	1974-75
1	2	3	4	5	6	7	8	9
9	No. of Poultry Co-operations..	Nos.	..	..	2	2	..	..
10	No. of Poultry Farmers Trained—							
	(1) Short Term Course ..	Nos.	..	..	..	..	..	..
	(2) Long Term Course ..	Do.	..	..	—	..	..	..
11	Intensive Egg and Poultry Production-cum-Market i n g Centres.	Do.	2 Centres	..	..	2	1	1

(ii) FISHERIES

Fourth Plan Review

1. During the Fourth Plan the outlay for development of fisheries in the State Plan was Rs. 225 lakhs. For the marine fisheries there was a provision of Rs. 95.90 lakhs and for the inland Fisheries the outlay was Rs. 37.69 lakhs. The rest amounting Rs. 91.41 lakhs, was meant for marketing, processing, storage, research, training and administration.

2. With the intention of achieving the production targets, only production oriented schemes were taken up. There were 16 schemes in the original Fourth Five-Year Plan, but later on another scheme namely "Loan to Private Pisciculturists in the Scheduled districts" was added. The latter scheme was not executed in 1972-73. It is expected that all the schemes will be executed in the final year of the Fourth Plan period. The anticipated expenditure during the Fourth Plan will be Rs. 222.69 lakhs, as shown in Annexure I.

3. The target for mechanised boats during the Fourth Plan was 100 but the likely achievement during this period is 66, in addition to 4 numbers of 57' steel trawlers for deep sea fishing. The target of the mechanised boats was not achieved due to want of boat building yards inside the State and lack of interest in private sector to own mechanised boats. The target for marine fish production was 27,000 tonnes against the base level of 10,000 tonnes in 1968-69. The likely achievement of marine fish production at the end of the Fourth Plan will be 17,000 tonnes. The shortfall of marine fish production against the target was due to lack of owning mechanised boats in the private sector due to want of landing and berthing facilities and due to natural calamities.

4. The target for fry production was 40 millions out of which the likely achievement is 35 million. The shortfall in the target of fry production is due to lack of raising fry in the private sector and for untimely rain and drought condition during the time of fry production. At present the Department alone produces the fry required in the State. The target of inland fish production was 30,000 tonnes during the Fourth Plan period against the base level of 15,000 tonnes in 1968-69. The likely achievement of inland fish production is 23,000 tonnes in the last year of the Fourth Plan. The shortfall in fish production is due to lack of raising fish farms by private pisciculturists and lack of pisciculture in irrigation reservoirs and natural calamities. Physical achievements of the Fourth Plan are indicated in Annexure II.

Objectives of Fifth Plan

5. The main aim of the Fifth Five-Year Plan is to raise the fish production, to establish fishing industries and to improve the socio-economic condition of fishermen.

6. It is proposed to raise the inland fish production from the base level 23,000 tonnes per annum at the end of the Fourth Five-year Plan to 35,000 tonnes in the final year of the Fifth Plan. The marine fish production will increase from 17,000 tonnes per annum at the end of the Fourth Five-year Plan to 45,000 tonnes per annum in the final year of the Fifth Five-year Plan. Thus the annual level of fish production in the final year of the Fifth Five-year Plan will become 30,000 tonnes from the annual base level of 40,000 tonnes of the Fourth Five-year Plan. Hence there will be an additional fish production of 40,000 tonnes per annum at the end of the Fifth Five-year Plan.

7. The spawn collection will be raised from 350 million of the base level of 1973-74 so as to reach the figure of 500 millions in the last year of the Fifth Five-year Plan. The total production of spawn during the Fifth Five-year Plan will be 2,280 millions out of which 1,250 millions will be collected from rivers of the State and the rest 1,030 millions will be produced by induced breeding. The fry production will increase from the base level of 35 millions in 1973-74 to 51 millions in the last year of the Fifth Plan. It is proposed to increase the number of mechanised boats from 122 to 400 at the end of the Fifth Five-year Plan and thus 278 new mechanised boats will be constructed. The number of medium sized steel trawlers will increase from 4 to 20.

8. The main strategy for fisheries development during the Fifth Five-Year Plan is to attract institutional finance and therefore subsidy at the rate of 20 to 25 per cent have been proposed for acquiring steel trawlers, mechanised wooden boats and small country boats, for establishing boat building yards, ice plants, cold storages and freezing plants and for reclaiming tanks and water areas to take up pisciculture. Greater support will be given to traditional inland and marine fishermen and 15 Fisheries Co-operatives will be organised. Fishermen will be helped so as to construct their dwelling houses and 1,600 persons will be trained to develop marine and inland fisheries. Chilka lake will be developed so as to produce an additional quantity of 11,650 tonnes of fish.

9. Efforts will be made to have fishing harbour at Paradip, Dhamra, Chilka and Gopalpur and fishing jetties at Kirtania, Adhuan, Hansua, Astarang and Ganja.

10. An amount of Rs. 5 crores has been proposed in the State Sector. Schemewise outlay and physical targets proposed for the Fifth Plan are shown in Annexures IV and V respectively.

11. In the Central Sector Rs. 15.60 crores have been proposed to develop fishing harbours, approach roads and other programmes.

12. The details of the schemes are explained below:—

(1) Introduction of Medium Steel Trawlers for deep sea fishing

(a) It is anticipated that by deep sea fishing beyond 50 fathoms from the coast about 60,000 tonnes of fish can be caught annually. Three fishing harbours have been proposed at Paradip, Gopalpur and Dhamara for this purpose 20 medium sized steel trawlers of 57 footers will be required for deep sea fishing at Paradip and Gopalpur. Since there are four steel trawlers during the Fourth Five-Year Plan 16 steel trawlers have to be acquired during the Fifth Five Year Plan in the private sector. To encourage private industries to acquire such trawlers it has been proposed to provide 20 per cent subsidy towards the cost of such trawlers. The subsidy will be given only if a processing industry is set up within the stipulated period inside the State. It is estimated that the annual catch of a medium steel trawler is about 500 tonnes and so for 16 medium steel trawlers there will be an additional production of 8,000 tonnes in the last year of the plan period but the total fish production under this scheme during the entire plan period is estimated to be 16,500 tonnes.

(b) The cost of an indigenous steel trawler is about Rs. 12 lakhs. 20 per cent subsidy towards the cost of trawlers will be about Rs. 2.4 lakhs. For 16 such trawlers the subsidy alone is Rs. 38.4 lakhs.

(c) A good workshop is necessary for repairing and maintenance of these trawlers which will cost about Rs. 8 lakhs. It is proposed that this workshop will come up in the private sector. If it comes up under any corporation like the Agro Industries Corporation, 20 per cent subsidy can be given which will come to about Rs. 2 lakhs.

(d) Suitable technical staff will be added.

(e) The total cost of the scheme will be Rs. 42.4 lakhs.

(2) Purse Seining in Balasore Coast

In Balasore coast pelagic fishes are at present caught by gill netting but the catch is not much. By using purse seining, it is expected that the catch of valuable pelagic fishes such as Hilsa, Mackrel etc., will increase considerable as an entire shoal of fish can be entrapped by purse seining. It is expected that about 100 tonnes of fish will be caught in the last year of the plan period but the total fish production by this scheme in the entire plan period is expected to be 450 tonnes. The total cost of the schemes will be about Rs. 7 lakhs.

(3) Expansion of mechanised wooden Boats

Mechanised wooden boats are used for off-shore fishing between 10-40 fathoms. It is expected that from this belt, Orissa can produce 30,000 tonnes of fish. Three fishing harbours will come up during the Fifth Five-Year Plan at Paradeep, Gopalpur and Dhamra excluding the one at Chilka for which about 180 mechanised boats are required for trawling purposes. Also 5 jetties are expected to come up along the Orissa coast for which 100 mechanised boats are required. Thus the total requirement of mechanised boats is 280. During the end of the Fourth Plan 66 wooden boats will have been procured. There are already 56 wooden boats which were acquired before the Fourth Plan. Hence the level expected in 1973-74 is 122. Additional 158 mechanised boats are required during the Fifth Five-Year Plan, each of which costs about Rs. 1.5 lakhs. It is proposed to give 25 per cent subsidy so as to encourage the private people to acquire mechanised boats from institutional finance. So an amount of Rs. 59.25 lakhs will be required as subsidy. It is expected that by the operation of these wooden trawlers there will be an additional fish production of 7,900 tonnes in the last year of the Plan but the total production will be 21,300 tonnes in the entire Plan period. Necessary staff will be provided and the total cost of the scheme will be Rs. 60 lakhs.

(4) Assistance to Traditional Marine Fishermen

(a) Although there are several thousands of marine fishermen in the State no steps have been taken to help them in their trade as a result of which their socio-economic conditions are very poor.

(b) The traditional marine fisherman can smoothly catch fish in the inshore belt of the sea if he has a country boat and adequate nets for which about Rs. 2,000 is required. With the help of his family members and friends he can catch about 4 tonnes of fish per annum at the rate of 20 Kgs. per day for 200 fishing days. It is envisaged to help him by giving 25 per cent subsidy (Rs. 500) and 25 per cent as loan (Rs. 500) so that he will be attracted to take 50 per cent loan from the financial institutions. Even this 50 per cent loan can also be guaranteed by the State Government so as to encourage them. The scheme envisages to help 2,000 marine fishermen for which about 10 lakhs will be required as loan. Hence a sum of Rs. 20 lakhs has been proposed under the scheme. Fishermen organised into the Co-operatives will be given preference in the Scheme.

(c) It is anticipated that there will be an additional landing of 8,000 tonnes of fish in the last year of the Plan, but 24,000 tonnes of fish will be produced in the entire Plan period.

(5) Establishment of boat building yard

(a) The scope for construction of mechanised boats in the State in private sector is very limited and there is only one boat building yard in the State whose performance is very poor. Hence it is proposed to establish a boat building yards one in each of the maritime districts namely Balasore, Puri, Ganjam and Cuttack for construction of fishing boats.

(b) The boat building yard will cost about Rs. 10 lakhs with modern equipments. It is proposed to offer 25% of the cost as subsidy to the person who establishes such a yard. It is expected that each of the four boat building yards expected to be established can construct about 70 boats during five years and so all the 278 mechanised boats proposed in the Fifth Five-year Plan can be built inside the State which will give employment to a large number of people. An amount of Rs. 10 lakhs has been proposed for this scheme.

(6) Establishment of Ice Plant and Cold Storage facilities

For proper preservation of the marine fish it has been proposed to have four Ice Factories with capacity of producing 5 tonnes ice and 2 tonnes cold storage one each at Kirtania, Adhuan, Hansua and Astaranga. Freezing plant of 3 tonnes with frozen storage 30 tonnes, Ice Plant 10 tonnes and cold storage 15 tonnes are proposed to be established at Paradip, Dhamara and Gopalpur near the proposed fishing harbours. Besides one integrated 25 tonnes ice plant with 20 tonnes cold storage, 1 tonne Deep Freezer Plants.

0.5 tonne individual quick freezing plant and 15 tonnes frozen store are required in the Chilka area which will cost about Rs. 25 lakhs. For construction of such ice plants and cold storages about Rs. 100 lakhs will be required and it is proposed to give 25% as subsidy for such ice plants if these will be started by Agro-Industries Corporation, Marine Product Corporation and private firms. An amount of Rs. 25 lakhs will be required as subsidy on this score. Necessary staff will be provided and the scheme will cost Rs. 26.47 lakhs. There will be an additional production of 43,000 tonnes of ice during the Plan period.

(7) Establishment of Riverine Spawn Collection Centres

The Department of Fisheries collects large numbers of riverine spawn from river Mahanadi and Brahmani every year and rear it in departmental fish farms so as to supply fry to Grama Panchayats, Blocks and private pisciculturists. The scheme will be continued and it is proposed to have 2 major riverine spawn collection centres, one at Nuapatna and the other at Banki. The Nuapatna centre will be strengthened and Banki centre will be established. The total production of spawn will be 1,250 million during the entire Plan period, with an annual production of Rs. 250 million.

(8) Assistance to Traditional Inland Fishermen and Pisciculturists

(a) The traditional inland fishermen along the rivers of Mahanadi, Brahmani, Baitarani, Rusikulya and Bahuda could not be encouraged in the past and it is proposed to encourage them to take up their trade by providing 25 per cent subsidy and 25 per cent loan so that they will be attracted to raise the rest 50 per cent from financial institutions. Each fisherman requires about Rs. 2,000 to have a boat with net to catch fish in the rivers. The aim of the scheme is to help 1,500 fishermen @ 500 fishermen in each zone. It is expected that there will be an additional fish production of 6,600 tonnes during the Plan with a production of 3,000 tonnes in the last year of the Plan.

(b) It is also envisaged in the scheme to provide loan to private pisciculturists to take up pisciculture by renovating their tanks and reclaiming small derelict water areas. Rs. 4,000 per acre will be required to develop such water areas for pisciculture. 25 per cent subsidy can be given to such persons owning such water areas so that they will be attracted to take rest 75 per cent as loan from financial institutions. Providing Rs. 1,000 per acre for each such private pisciculturist, about 1,300 acres are proposed to be reclaimed and brought under fish production which will lead to annual fish production of 2,800 tonnes during the entire Plan period, but the production will be 1,300 tonnes in the last year of the Plan. The subsidy part of this programme works out to Rs. 13 lakhs.

(c) Hence to provide loan and subsidy to the traditional riverine fishermen and private pisciculturists about Rs. 28.00 lakhs will be required. Necessary staff will be provided. The total cost of the scheme will be Rs. 30 lakhs.

(9) Development of Ansupa Lake

Ansupa Lake is situated at a distance of 60 Kms. from Cuttack and provides an area of about 300 acres for pisciculture. The present scheme aims at developing the lake for culture and capture fish in an area of 130 acres by departmental operation. Adequate provision has been made for nurseries, rearing tanks and breeding tanks to raise the required quantity of quality fish seed to stock the lake. About Rs. 16.60 lakhs will be the capital cost and necessary staff and recurring expenditure will be provided. The total cost of the scheme will be Rs. 19.08 lakhs. The total fish production from the lake will be 120 tonnes in the entire Plan period, with production of 80 tonnes in the last year.

(10) Remodelling of District Fish Farms

There are about 100 fish seed farms in the State reclaimed from swamps during First and Second Plan periods. These have been silted up to a great extent. So as to step up production in these farms, it is proposed to remodel these farms so that 252 acres of nursery area will be available. There will be an additional production of about 20 tonnes

of fish and 25 millions of fry in the entire Plan period but there will be production of 13 tonnes of fish and 10 million fry in the last year of the Plan. Not only riverine spawn collected under the spawn collection programme will be reared here but also quality fish seed will be produced by induced breeding of major carps. These fry will be supplied to Blocks, fish farms and private pisciculturists of the State. The total cost of the scheme will be about Rs. 14.10 lakhs.

(11) Expansion of Marketing of Fish and by-Products.

(a) At present marketing of fish is done at Cuttack, Bhubaneswar and Balasore by operation of a P. L. Account by the Department. It is proposed to expand the marketing of fish in those three areas and also at Sambalpur, Berhampur and Rourkela by operation of the P. L. Account. Marketing of fish will also take place in all the district headquarter towns and if possible it will be extended to subdivisional towns. Fish will be marketed in good stalls by maintaining hygienic conditions.

(b) It is also proposed to encourage the Local Bodies and consumer co-operative societies to take up marketing of fish and for this purpose 25 per cent subsidy will be given to instal small deep freeze units. Also it has been proposed to sell cooked fish at some tourist centres such as Nandankanan, Bhubaneswar and Cuttack. Suitable staff components will be provided.

(c) It is anticipated that 680 tonnes of fish will be sold to the consumers during the Fifth Five-Year Plan.

(d) The total cost of the Scheme will be Rs. 15.84 lakhs.

(12) Establishment of Brackish Water Fish Farms

(a) The Scheme envisages development of swampy areas along the sea coast to establish brackish water fish farms by the Department. Also creeks along the estuaries can be converted into brackish water reservoirs for rearing of fry of mullets, prawn, milk fish, etc. This programme will be taken up departmentally to train people in brackish water fish farming so that people along the coast and Chilka area will be attracted to take up brackish water fish farming.

(b) It is proposed to develop 5 hectares of brackish water areas and 5 hectares of creek areas in the maritime districts. The total production of fish will be about 7 tonnes in the plan period.

(13) Fisheries Extension Programme

(a) The fisheries extension programme is highly essential to render technical advice to Grama Panchayats and private pisciculturists to take up pisciculture. In various Scheme it has been proposed to help the fishermen and pisciculturists by providing subsidy and marginal loans so that they will be attracted to take loan from financial institutions. This is a very hard task and so sufficient number of Fisheries Extension Officers are required. Necessary staff will be provided to cover 314 blocks. The Fishery Extension Officers will also help the pisciculturists to procure quality fish seed from the departmental fish farms and can help the producers for marketing the fish. They will give technical advice from time to time during the culture of the fish.

(b) The Scheme also envisages establishment of small nursery units @ 0.50 acre in about 300 Blocks so that 76 millions of fry can be raised at the Block level in the plan period with a production of 30 millions in the last year of the plan.

(c) 25 per cent subsidy can be given to private people and Grama Panchayats desiring to construct nursery tanks and the rest of the expenditure can be borne from their own funds or from financial Institutions. The total cost of the scheme will be Rs. 35 lakhs 50 per cent of which will be borne by the Central Government under the Central Sector. So an amount of Rs. 17.5 lakhs has been proposed for this scheme in the State Sector.

(14) Training in Fisheries

To make the marine and inland fisheries programme successful, trained and skilled personnel will be required. Candidates will be deputed to Government of India Institutions for training as Soipper, Bksun, Shore Mechanic, Radio Operator, Purse-scining, Gear technology and Fish processing. Officers will be trained at the Central Institute of Fisheries Education, Bombay and inside the State. Necessary staff and stipend will be provided.

(15) Applied Research in Inland and Marine Fisheries

Research is an important element to tackle specific local problems so as to increase the productivity. Research will be conducted in major fish farms including brackish water fish farms creek fish farms and marine stations located at different parts of the State. Necessary staff and equipment will be provided. The total cost of the scheme will be about Rs. 5.91 lakhs.

(16) Expansion of Fisheries Co-operatives

Fisheries Co-operatives have been transferred from the control of Co-operative Department to the Fisheries Department. Unless Fishermen's Co-operatives are properly organised, fishermen will not be induced to avail the institutional finance and subsidy from the Department. It is, therefore, proposed to develop at least 15 well organised fisheries Co-operative covering marine, inland and brackish water fisheries. Loan and necessary staff will be provided and the scheme is likely to cost of Rs. 7.34 lakhs.

(17) Rehabilitation of Fishermen

The Scheme is proposed to provide loan to the fishermen to construct their dwelling houses so that they may live under sanitary condition. Rs. 6 lakhs has been earmarked to help 150 fishermen to construct their dwelling houses at the rate of Rs. 4,000 each. The loan will be recovered with interest.

(18) Administration Planning and Evaluation at headquarters

(a) The administration at headquarter should be properly strengthened so as to make adequate supervision in the districts as various inland marine schemes will be operating. Since greater emphasis has been given for institutional finance, the headquarters will take leadership to stimulate the field officers and district officers so that they will be in direct touch with co-operatives, private firms and private individuals in order to attract them to avail institutional finance. Necessary personnel will be provided.

(b) Total cost of the scheme will be about Rs. 13 lakhs.

(19) Provision of office and quarters

There are about 1,600 staff in the Fisheries Department. Their number will increase by 250 during the Fifth Plan. There is practically no accommodation for any of the staff. In many of the districts there is no building for the office even private buildings have been taken for office accommodation. It is, therefore, proposed to construct about 85 residential and 8 office buildings. Necessary engineering staff have been proposed to take care of various construction programmes. The sheme will cost Rs. 16.05 lakhs.

(20) Administration at Zonal and District level

The work-load of the District Fisheries Officers will considerably increase during the Fifth Plan. They will be actively associated with fishermen and private people to step up inland and marine fish production. The extension programme and various loan programmes will be considerably strengthened in the district and hence to help the District Fisheries Officer and Zonal Officers necessary staff will be provided. The total cost of the Scheme is about Rs. 6 lakhs.

(21) Development of Chilka lake

(a) The department has prepared scheme of Rs. 13 crores for the development of Chilka lake. The developmental programme provides for a straight cut between the sea and the lake, deepening of the palur channel, dredging of the outer channel, construction of a

fishing harbour, construction of roads for which about Rs. 7.3 crores will be required. All this can be accommodated in the Central Sector as Government of India generally provides money for dredging operations, construction of fishing harbours and approach roads.

(b) Once there is straight cut between the lake and the sea there will be more migration of fish into the lake. This will mean that production in the Chilka lake will increase to 1,850 tonnes of fish per year. There are at present about 3,000 country crafts used in the lake. It is necessary to improve the condition of these crafts. Each country craft with equipment will cost about Rs. 2,000. It is proposed to give 25 per cent subsidy (Rs. 500) to about 1,200 needy fishermen so that they will use improved gear. A sum of Rs. 6 lakhs has been proposed as subsidy on this account. There will be fish farming in 4,000 hectare on the North-East side of the lake by which there will be an additional production of 5,600 tonnes of fish. For construction of fish farms about Rs. 2.58 lakhs will be required. It is proposed to give subsidy of 25 per cent and so Rs. 55 lakhs have been proposed on this account.

(c) There is provision of 120 mechanised boats to catch fish from off shore areas of the sea near fishing harbour. There will be an additional production of 4,200 tonnes. About Rs. 1.60 lakhs will be required for these fishing vessels. It is also proposed to give 25 per cent subsidy for these 120 boats. About Rs. 40 lakhs has been earmarked for this purpose. There will be an additional production of 11,650 tonnes of fish per year from the Chilka area. Necessary staff will be provided and the total cost of the scheme will be Rs. 1.10 lakhs.

(22) Establishment of Marine Products Corporation

One Marine Products Corporation is proposed to be established so that it can take up setting up of ice factory, cold storage, refrigeration units, boat building yards, construction of boats and operation of mechanised boats. They may take up marketing of fish and process marine products and export them. Subsidy has already been proposed for ice plants, cold storage, freezing plant, mechanised boats and boat building yards. The corporation can get Departmental subsidy and can get financial assistance in shape of loans from financing institutions. To start the corporation, an amount of Rs. 6 lakhs has been proposed as loan.

(23) Improvement of Kausalyaganga Fish Farm

An amount of Rs. 5.92 lakhs will be required during the Fifth Five-Year Plan to complete the remaining works for remodelling of the fish farm at Kousalyaganga. Excluding that, there will be an annual recurring expenditure of Rs. 3.30 lakhs which will be about Rs. 16.50 lakhs during the Fifth Five-Year Plan. The total expenditure that will be required for the Kausalyaganga Fish Farm is Rs. 22.42 lakhs (Annexure III). It is expected that it will produce 450 Millions of spawn by induced breeding and 350 tonnes fish at the rate of 600 kgs. of fish per acre and about 26 million of fry from 5 acres of nurseries during the plan period. In the last year of the plan about 100 million spawn, 6 million fry and 102 tonnes of fish will be produced.

(24) Resources Survey in Inland and Marine Fisheries

Resources survey in inland and marine fisheries has not yet been done in the State. In order to assess the potential and work out individual Development Plans accordingly an amount of Rs. 12 lakhs has been provided for resources survey.

25. The following annexures are also given for a better appreciation of the schemes namely:—

(a) Annexure IV—(Schemewise) classified Break up of the financial outlay.

(b) Annexure V—Production and programme targets

Annexure I

Programme wise Outlay and Expenditure

(Rs. in lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during the Fourth Plan	5th Plan total outlay	Annual in 1974-75 outlay
1	2	3	4	5	6	7	8
1	Inland Fisheries ..	95·90	20·51	20·71	59·90	99·05	19·46
2	Marine Fisheries ..	37·69	33·47	35·47	87·46	139·40	20·07
3	Marketing, Processing and Storage.	20·00	2·71	2·71	11·37	42·31	21·36
4	Research, Education and Training.	31·61	7·81	7·81	45·78	25·35	5·74
5	Fisheries Extension and Administration.	39·80	5·50	8·30	18·18	36·50	6·95
	Others ..	..	..	..	..	157·39	13·26
	Total—Fisheries ..	225·00	70·00	75·00	222·69	500·00	86·84

Annexure II
Physical Programmes--Targets and Achievements

Sl. No.	Items	Unit	1968-69 Level	Fourth Plan		Level Expected during 1973-74	Fifth Plan target	
				Target	Likely achievement		Total	1974-75
1	2	3	4	5	6	7	8	9
1	Machanism of Boats ..	No.	56	100	66	122	400	34
2	Trawlers procured ..	No.	..	4	4	4	20	2
3	Cold Storage for storing fish.	No.	7	..	4	11	18	2
(Private Sector)								
4	Co-operating Marketing ..	Qty.	..	..	..	..	15	5
5	Landing and Berthing facilities provided in harbours.	No.	..	..	..	..	..	..
	(a) Major ports ..	No.	..	1	..	..	4	1
	(b) Minor ports ..	No.	..	7	1	1	6	2
6	Loan advance to Fisherman Co-operative (Rs. in Crores).	..	..	..	..	..	0.35	0.01
7	Fry/Fingerlings distributed (in millions).	..	23.5	16.5	11.5	35	2.39	40
8	Number of fish seed farms established.	No.	..	5	5	5	313	22
9	Fish Production—							
	(i) Inland ..	(000 M. T.)	15	15	8	23	35	23
	(ii) Marine ..	(000 M. T.)	10	17	7	17	45	18.65

Annexure III

Continuing and Spill Over Schemes included in the State Sector

(Rs. in lakhs)

Sl. No.	Name of the scheme	Approved estimated cost	Total physical target of the schemes	Exp. likely to be achieved up to the end of the 4th Plan	Target anticipated to be achieved by end of the 4th Plan	Spill over amount, if a spill proposed to be provided in the 5th Plan	Capital component	Foreign exchange component	Yearwise breakup				
									1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Improvement of Kausalya ganga Fish Farm.	37.36	Remodelling of brooder tanks N. T. raising the existing on bank not of total area 260 acres. Production of fib. 100 n. t. production of spawn—1000 lakhs.	14.94	Remodelling of brooder stocking and N. T. tanks.	22.42	22.42	..	9.22	3.30	3.30	3.30	3.30

Annexure IV

State—Orissa

Fisheries—Fifth Five-Year Plan, 1974—79

(Schemewise) Classified break up of the Financial Outlay, Fifth Plan Outlay, 1974—79

Serial No.	Name of the Scheme	Total	Capital	Foreign exchange
1	2	3	4	5
I. Inland Fisheries				
1	Establishment of Reverine spawn collection centres ..	9.95	3.45	..
2	Assistance to traditional Inland Fisheries & Pisciculturists	30.00	7.51	..
3	Development of Fisheries in Ansupa Lake ...	19.08	16.60	..
4	Remodelling of district Fish Farms ..	14.10	13.45	..
5	Improvement of Kausalyagang Fish Farm ..	22.42	5.92	..
6	Establishment of Brakish Water Fish Farm ..	3.50	2.00	..
		99.05	50.93	..
II. Marine Fisheries				
1	Introduction of medium steel trawlers for sea fishing ..	42.40	..	..
2	Purse seining in Balasore coast ..	7.00	4.00	..

Sl. No.	Name of the Scheme	Total	Capital	Foreign exchange
1	2	3	4	5
3	Expansion of mechanised wooden boats ..	60.00	..	..
4	Assistance to traditional marine fishermen ..	20.00	10.00	..
5	Establishment of boat building yard ..	10.00	..	..
		139.40	14.00	..
III. Marketing, Processing and Storages—				
1	Establishment of ice plant and cold storage facilities ..	26.47	0.35	..
2	Expansion of marketing of fish and bye-product ..	15.84	4.35	..
		42.31	4.70	..
IV. Research, Education and Training—				
1	Training in Fisheries ..	19.44	3.00	..
2	Applied research in intensive fish production ..	5.91	1.30	..
		25.35	4.30	..
V. Fisheries Extension and Administration—				
1	Fisheries Extension Programme ..	17.50	2.38	..
2	Administration of headquarters ..	13.00	2.41	..
3	Administration of zonal and district level ..	6.00	1.30	..
	Total ..	36.50	6.09	..

VI. Others

1	Expansion of Fisheries Co-operatives	..	7.34	3.50	..
2	Rehabilitation of Fishermen	..	6.00	6.00	..
3	Provision of office and quarters	..	16.05	11.29	..
4	Scheme for development of Chilka lake	..	110.00	2.08	..
5	Organisation of Marine product corporation	..	6.00	6.00	..
6	Resources Survey in Inland and Marine Fisheries	..	12.00	..	..
Total		..	157.39	28.87	..
Grand Total		..	500.00	105.89	..

State—Orissa

Annexure V

Fifth Five-Year Plan, 1974—79, Production and Programme Targets—Fisheries

Sl. No.	Item	Unit	Base level 1973-74	Fifth Five-Year Plan target, 1978-79
1	2	3	4	5

1. Physical Programme

1	Boats mechanised	..	No	122	278 (Additional)
2	Trawlers procured	..	No	4	16 Do.
3	Refrigerator				
(a)	Cold Storage—				
	(i) Number	—	No	11	7 Do.
	(ii) Rated capacity	..	Tonnes	55	73 Do.
(b)	Ice plants—				
	(i) Number	..	No	16	8 Do.
	(ii) Rated capacity	..	..	220	73 Do.
(c)	Freezing Plants—				
	(i) Number	..	No	7	4 Do.
	(ii) Rated capacity	..	Tonnes	4	9.5 Do.

4	Minor ports with landing and berthing facilities	..	No.	1	5 (additional)
5	Fish Seed procured—				
	(a) Spawn	..	Million	350	500 (Progressive)
	(b) Fry Fingelings	..	Million	35	51 ..
6	Fish Seed farms—				
	(i) Number	..	No.	5	313 (Additional)
	(ii) Area	..	Hectares	..	..
7	Nursery area	—	Do.	90	72 ..
8	Development of reservoirs	..	Do.	161	Nil
9	Brackish water fish farming area	..	Do.	48	4,010 ..
10	Fish marketed through institutions i.e., Co-op. Corporation		Tonnes	50	174 ..
11	Fish production—				
	(a) Inland	..	'000 Tonnes	23	35 Level in 1978-79
	(b) Marine	..	Do.	17	45 Ditto

(iii) FORESTS

The total forest area of the state is 67,461 Square Km. which is roughly 43 per cent of the total geographical area. The arcawise breakup is given in Appendix I. Out of the total forests, the reserved forests, demarcated protected forests, reserve lands and other demarcated forests is about 35,000 Sq. Km. Others are undemarcated protected forests. Out of which about 15,000 Sq. Km. cannot be rehabilitated, while the rest needs urgent attention. Out of the remaining forests, about 12,500 Sq. Kms. require afforestation and another 12,500 Sq. Kms. require enrichment or replacement by valuable species.

2. The original ceiling on expenditure in the Fourth Plan was Rs. 3.25 crores while the final figure would be about Rs. 4 crores. The size of the Fifth Plan is kept at nearly double this amount i. e., Rs. 8.35 crores.

3. The estimated growing stock of forests, increment, etc., are furnished below :—

Estimated growing stock of forest (1962—70)		109 million m ³
	Increments	
Gross annual increment		0.88 million m ³
	Yield	
(a) Industrial wood		517 thousand m ³
(b) Fuel wood (including charcoal)		599 thousand m ³
	Demand (in 000 m ³)	
Forest produce	Estimated consumption in 1970	Projected demand for 1972-73, 1978-79
1. Round wood ..	0.21	0.24 0.30
2. Fuel wood ..	8.0	9.3 10.5

Review of progress upto the end of Fourth Plan

4. By the end of the Fourth Five-Year Plan, the total area likely to be covered by plantations under all schemes will be about 257,000 acres or about 4,000 Sq. miles.

5. About 14,500 Sq. miles of forests will be completely demarcated and surveyed by way of forest consolidation. Thus by the end of the Fourth Plan, there will be about 5,500 Sq. miles of forests to be demarcated, surveyed and brought under scientific management.

6. If a target of 1 mile of forest road for each Sq. mile of forest is to be assumed by the end of the Fourth Plan, there will be about 7,000 Kms. of forest roads, with a balance of 9,000 Kms. of forest roads yet to be constructed.

7. Under Nature conservation the activities were almost confined to the development of Zoological Park at Nandankanan in the Fourth Five-Year Plan. The expenditure under Nature conservation is likely to be Rs. 32.5 lakhs as against the provision of Rs. 21.58 lakhs. At present there are 8 sanctuaries, a proposed National Park at Similpal and one Biological Park.

8. Working Plans or Schemes will have to be prepared for areas demarcated for reservation to bring them under scientific management.

9. Under forest protection, by the end of Fourth Plan there will be only 8 mobile parties.

10. Podu prevention and plantation in the coastal belt were two new schemes taken up in the State Plan in 1971-72 and 1972-73 respectively.

11. Under forest research a number of research gardens have been established in different zones and experiments are undertaken with various exotic species.

12. The assessment of the level of development achieved in the Fourth Plan is given in Appendix II. There is no spillover project which will be taken to the Fifth Plan. The physical targets and achievements of the Fourth Five-Year Plan with reference to the base level (1968-69) is given in Appendix III.

Targets and strategy for Fifth Plan

13. The main areas of development in the field of forestry are consolidation and scientific management, afforestation of barren land and enrichment of existing forests of low value by replacement where necessary, intensification of management and development of communication in the forests, conservation of nature and wild life for scientific study of flora and fauna.

14. The Fifth Plan strategy has been specified in terms of levels. The past level (i. e., anticipated for 1973-74) and the level targeted for 1978-79 in respect of the important schemes are given in Appendix IV. The production of wood for these years is indicated in Appendix V. The extent up to which man made forestry is proposed in the Fifth Plan is indicated in Appendix IV. The schemewise expenditure during the Fourth Plan and the proposed outlay for the Fifth Plan are shown in Appendix VI.

15. Specific Projects/Programmes/Schemes

(i) *Economic Plantation*—It is proposed to plant up 28,000 hectares with species like teak, bamboos, red sandals, rose wood, biza, Gambhar and Silili at a cost of Rs. 170 lakhs. The employment potential will be about 15 lakhs labourers. These plantations are expected to mature in about 60 years but revenue will start accruing from the 10th year from thinings. It is estimated that one acre of plantation will yield a revenue of Rs. 45,000 during final fellings and Rs. 5,000 from thinning.

(ii) *Farm Forestry*—The scheme envisages planting of small patches of lands located near villages so that dearth of forest materials in rural areas can be overcome. It is proposed to plant up 2,000 hectares at a cost of Rs. 18.25 lakhs. This will create employment potential for about one lakh labourers.

(iii) *Forest Development Consolidation*—This scheme will be given special priority in the Fifth Plan. The object is to quickly demarcate and survey forest areas for bringing them under scientific management. It is proposed to demarcate and survey 50,000 Kms. of forest boundaries covering an area of about 15,000 sq. Kms. at a cost of Rs. 67.85 lakhs. The scheme will generate employment potential for 25,000 labourers.

(iv) *Communication*—It is proposed to construct 650 Kms. of forest roads at the rate of Rs. 7,500 per Km. and to improve 1,200 Kms. of existing forest roads at the rate of Rs. 5,000 per Km. during the Fifth Plan. The total cost including the cost of establishment and the cost for construction of bridges and culverts will be Rs. 120 lakhs.

(v) *Buildings*—It is proposed to construct 350 Forest Guards' quarters, 30 Forester's quarters and 15 other buildings during Fifth Plan at a cost of Rs. 35 lakhs.

(vi) *Forest Research*—It is proposed to create a Forest Genetics Division or a Forest Botany Division. Besides this, the experimental plantation of exotics and other forest research will be conducted at a cost of Rs. 20 lakhs. The flora of Orissa, particularly those of useful medicinal plants available in our forests have to be compiled.

(vii) *Training of staff*—It is proposed to provide a sum of Rs. 7.59 lakhs for training of officers and subordinates.

(viii) *Improved logging*—A sum of Rs. 2 lakhs has been provided for imparting training to forest labourers on improved logging and usage of cutting instruments.

(ix) *Intensification of Forest management*—A planning and evaluation circle has been proposed. Another circle is proposed to look after the coastal afforestation programme and the plantation. Six Additional D. F. Os. and 54 Forest Guards are proposed to be appointed. The total provision under this scheme is Rs. 16 lakhs.

(x) *Nature Conservation*—The provision under this scheme has been kept at Rs. 50 lakhs out of which Rs. 41 lakhs has been kept for development of Nandan Kanan and Rs. 9 lakhs for the Deer Parks and enforcement of game laws.

(xi) *Forest Protection*—By the end of the Fifth Plan, it is proposed to have 26 Mobile Patrol Parties, i.e., one party for each Territorial Division and one party for the headquarters. Besides these, it is proposed to provide guns to Mobile Parties and Forest Guards and to install weigh bridges to check the weight of bamboos removed by different paper mills to arrive at the correct assessment of royalty on the Paper Mills. Each division is also to be provided with a prosecution Ranger. An outlay of Rs. 26.00 lakhs has been proposed under this scheme.

(xii) *Forest Publicity*—There is provision of Rs. 5 lakhs for forest publicity during the Fifth Plan. The object of the scheme is to make the public understand the harmful effects of forest fire, podu cultivation, poaching of wild animals and destruction of forests. This scheme envisages publication and distribution of pamphlets, folders etc., audio-visual aids and exhibitions.

(xiii) *Working Plan*—The scheme has been included in the Fifth Five-Year Plan with an outlay of Rs. 20 lakhs. Four Working Plans Divisions will take up the preparation of working plans. It is expected that by the end of Fifth Plan, four working plans and four working schemes will be completed.

(xiv) *Planning Cell*—The existing staff in the planning cell will continue in the Fifth Plan in the committed side. There is a provision of Rs. 2 lakhs in the Fifth Plan under this scheme for additional staff.

(xv) *Development of Minor Forest Produce*—Since minor forest produce are an important source of revenue, development of these requires attention. During the Fourth Plan plantation of medicinal plants, development of lac and Tassar rearing has been done under the scheme. In the Fifth Plan, plantation of cashewnut, rubber, medicinal plants, etc. is proposed to be done at a cost of Rs. 15 lakhs.

(xvi) *Podu Prevention*—This scheme was started in the middle of the Fourth Plan and will continue in the Fifth Plan. The programme is to take up Tangya plantation in podu areas and survey the availability of land with irrigation facilities where podu cultivating Adivasis can be settled. Plantation of fast crops like coffee and cocoa will be done through the podu cultivating Adivasis. It is also intended to plant fruit bearing trees in the podu areas where the podu cultivating Adivasis will enjoy the usufructs, although the land will belong to Government an outlay of Rs. 25.00 lakhs has been proposed under the scheme for Fifth Plan period.

(xvii) *Creation of protective shelter belt*—This scheme was begun in the middle of the Fourth Plan period in the State Sector. It is proposed to continue this scheme in the Fifth Plan with a provision of Rs. 125 lakhs. The total duration of the programme will be ten years. The programme is to plant up 10,000 hectares of shelter belt along the sea coast, the river and creek banks and in the existing banks in the tidal forest. The organisation proposed is two Forest Divisions. A sum of Rs. 6 lakhs will be required for purchase of trawlers, motor launches, country boats etc. A sum of Rs. 5 lakhs is provided for distribution of seedling to local people to plant trees on their lands along the sea coast.

(xviii) *Environmental forestry*—This is a new scheme in the Fifth Plan. A provision of Rs. 2.5 lakhs has been made for the purpose of creation of recreation forests in industrial localities like Rourkela, Rajgangpur, Bargarh, Talcher, Paradeep, Barbil, etc. and to have some pic-nic spots at district headquarters. This is an aspect of social forestry about which the National Commission on Agriculture have made special mention in their interim report on man-made forests.

(xix) *Amenities to staff and labourers*—We have a number of forest villages. The residents of these villages are normally engaged as forest labourers in our forestry operation. As these villages have not been declared as Revenue villages they have been deprived of the usual facilities available to the other villages. Hence, a provision of Rs. 2.5 lakhs has been kept for construction of hutmments and water supply to these villages.

(xx) *Establishment of Plantation Corporation*—As per the recommendations of the National Commission on Agriculture the State has contemplated to take up an extensive programme of man-made forests during the Fifth Plan. A Forest Plantation Corporation and a Cashew Development Corporation are proposed to be set up in the Fifth Plan. These two Corporations will be plantation-oriented. A sum of Rs. 30 lakhs has been provided for setting up these Corporations. It is anticipated that about Rs. 3 crores in the minimum can be borrowed by these Corporations from financial institutions. The Similipal area will be covered by schemes of the Corporations.

(xxi) *Setting up of plants for production of substitute fuel for domestic consumption*—A sum of Rs. 10 lakhs has been provided for the purpose for setting up of plants for production of substitute fuel for domestic consumption on the lines of experience gained by the Central Fuel Research Institute, Jealgora and Regional Research Laboratory, Hyderabad.

(xxii) *Purchase of shares in the Orissa Forest Corporation Ltd.*—The Orissa Forest Corporation Ltd. have a programme to expand the business of timber export by 5 lakhs cft. Also they have plans for starting the Chip Board Factory with a capital of Rs. 50 lakhs approximately. They are also keen to set up a Sal Seed Oil Plant. In order to expand their activities in supply of timber to the D. G. S. & D. and supply of slippers to Railways, the Corporation have to take on lease more forest coupes. A huge financial outlay would be necessary for all these activities of the Corporation. In the Fifth Plan at least an outlay of Rs. 50 lakhs is proposed to be provided as additional share capital for participation of Government in the Orissa Forest Corporation Ltd.

(xxiii) *Resources Survey*—Survey of forest resources has not yet been done in the State. The State has vast potential to supply forest materials for both industrial and domestic use. An amount of Rs. 15 lakhs has been provided in the Fifth Plan under the Resources Survey Scheme.

Appendix I

Area of forests in Orissa

A.	Total Geographical area of the State		1,55,845 sq.K.M
B.	Forest area as on 31-3-1969		
	Class of Forests	Area Sq. K.m.	Total Sq. K. m.
(a)	(i) Reserve Forests	24,166	--
	(ii) Demarcated Protected Forests	562	--
	(iii) Reserve land and other demarcated	10,278	35,006 forests
(b)	(i) Undemarcated protected forest and unreserve Forests.	32,250	..
	(ii) Lakhraj Forests	139	--
	(iii) Debotar Forests	53	..
	(iv) Unclassed Forests	13	32,455

	Total	..	67,461

Appendix II
Fourth Five-Year Plan Outlays and Achievements under Forestry Sector

(Rupees in Lakhs)

Name of the Scheme	Total Fourth Plan approved by the Planning Commission		Achievement up to 1971-72		Target for 1972-73		Proposal for 1973-74	
	Outlay	Target	Financial	Physical	Financial	Physical	Financial	Physical
1	2	3	4	5	6	7	8	9

II. State Schemes—

1. Plantation of quick growing species—

(a) Eucalputs

(b) Others

Total	..	76.25	38,000 Ac.	38.04	17,217 Ac.	20.703	9,400 Ac.	21.147	9,100 Ac.
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2. Economic plantations for industrial & Commercial uses—

(a) Teak

(b) Sal

(c) Match wood

(d) Others

Total	..	74.29	37,000 Ac.	41.91	16,495 Ac.	21.00	9,400 Ac.	19.649	9,100 Ac.
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Fourth Five-Year Plan Outlays and Achievements under Forestry Sector

(Rupees in Lakhs)

Name of the Scheme	Total Fourth Plan approved by the Planning Commission		Achievement up to 1971-72		Target for 1972-73		Proposal for 1973-74	
	Outlay	Target	Financial	Physical	Financial	Physical	Financial	Physical
1	2	3	4	5	6	7	8	9
3. Rehabilitation of degraded Forests.	24.99	12,400 Ac.	7.85	1,645 Ac.	7.00	3,500 Ac.	6.00	3,000 Ac.
4. Farm Forestry cum - fuelwood plantations—								
(a) Fuelwood plantations.	7.25	3,600 Ac.	3.13	873 Ac.	1.50	500 Ac.	1.45	500 Ac.
5. Development of Minor Forest Produce.	7.71	Plantation of medicinal Spp. Dev. of Lac & Tassar and Cocoa Plantation.	3.97	Plantation 322 Ac. Dev. of Lac Tassar & Cocoa.	1.649	Plantation of 310 Ac. Dev. of Lac, Tassar & Cocoa.	1.02	Development of Lac, Tassar & Cocoa & plantation of medicinal Plants.
6. Communications—								
(a) New constructions.	..	317 Km.	..	160 Km.	..	137 Km.	..	100 Km.

(b) Improvements	..	166 Km.	..	55 Km.	..	76 Km.	..	30 Km.
Total	18.56		10.12		11.21		10.00	
7. Development of Pasture and Grazing.	0.75	..	..	..	..	..	-	..
8. Forest Protection.	11.22	Creation of M. P. P. in the State to check illicit feeling.	3.57	4 M. P. P. created and 3 Jeeps purchased.	3.20	Provision for creation of 4 M. P. P. and purchase of 4 Jeeps.	3.93	Provision for creation of 4 M. P. P. and purchase of 4 Jeeps.
9. Consolidation of Forests including Survey and Demarcation:—								
(a) Survey	10.22	9,900 Km.	5.61	4,700 Km. Demarcated	3.495	3,000 Km.	3.00	3,000 Km.
(b) Demarcation of boundaries								
10. Nature Conservation:—								
(a) Sanctuaries	21.58	Development of Nandan Kanan and National Park and other Sanctuaries.	17.45	Development of Nandan Kanan and N. Park and other Sanctuaries.	8.085	Maintenance of Nandan Kanan—Creation of Deer Park.	7.32	Maintenance of Nandan Kanan—Creation of Dear Park.
(b) National Parks.								

Appendix II

Fourth Five-Year Plan Outlays and Achievements under Forestry Sector

(Rupees in lakhs)

Name of the Scheme	Total Fourth Plan approved by the Planning Comm.		Achievement up to 1971-72		Target for 1972-73		Proposal for 1973-74	
	Outlay	Target	Financial	Physical	Financial	Physical	Financial	Physical
1	2	3	4	5	6	7	8	9

11. Training of Staff—

(a) Gazetted Officers.

(b) Rangers

(c) Deputy Rangers/Foresters.

(d) Forest Guards

(e) Others

14.88	Training of A. C. Fs./ F. Rs./Foresters & F. Gs.	5.57	Staff trained	2,828	Training of staff.	3.00	Training of staff.
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12. Working Plan ..

16.10	Compilation of W. P. & W. Scheme.	10.16	Compilation of W. P. & W. Scheme.	3.39	Compilation of W. P. & W. Scheme.	3.62	Compilation of W. P. & W. Scheme.
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13. Forest Research ..

5.36	Maintenance of Research Gardens.	3.22	Research Garden maintained.	1.601	Maintenance of Research Garden.	2.47	Maintenance of Research Garden.
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14. Forestry Publicity	1.15	Maintenance of Publicity Wings.	0.50	Publicity wing maintained.	0.426	Maintenance of Publicity wing.	0.47	Maintenance of Publicity wing and purchase of van.
15. Estt. of Statistical & Planning Cell.	2.77	Maintenance of officers.	1.52	Officers staff maintained.	0.55	Maintenance of officers and staff.	0.67	Maintenance of officers and staff.
16. Construction of buildings.	9.30	Construction of officers and staff quarters.	4.41	Qr. constructed	4.323	Construction of staff and officers quarters.	5.00	Construction of officers and staff quarters.
17. Intensification of Management.	15.77	Maintenance of officers and staff.	8.51	Officers and staff maintained.	3.60	Maintenance of officers and staff.	3.678	Maintenance of officers and staff.
18. Podu Prevention	6.85	..	0.57	..	1.00	..	1.50	..
19. Shares in O. F. C. Ltd.	..	..	24.00	..	..	..	..	..
20. Training of candida- tes in cultivation of Cardamom.	..	..	0.19	..	0.20	..	0.192	..
21. Afforestation in Coastal Belt.	..	..	..	..	10.45	..	14.675	..
Total—States Schemes	325.00	..	190.30	..	105.00	..	110.00	..
II. Centrally Sponsored Schemes.								
1. Forest Resources Survey.	10.00	.. 2,800 Sq. M.	4.19	..	2.00	..	2.00	..
2. Extension work for Lac.	..	..	0.76	..	0.84	..	1.00	..
3. Establishment of Broad Lac.	..	..	0.05	..	0.05	..	0.20	..
Total	..	..	5.00	..	2.89	..	3.20	..

Annexure III
Physical Targets and Achievements
Fourth Five-Year Plan
Forests

Sl. No.	Item	Unit	Base level 1968-69	Targets for the Fourth Plan	Achievements in Fourth Plan			Total 6, 7 and 8
					Actual 1969-72	Anticipated 1972-73	1973-74 anticipated	
1.	2	3	4	5	6	7	8	9
1.	Plantation of quick growing species.	000 hec.	20.4	15.2	7.5	3.8	3.7	15.0
2.	Economic Plantations for industrial and commercial uses.	000 hec.	38.4	14.8	6.7	3.8	3.7	14.2
3.	Farm Forestry-cum Fuel-wood Plantations.	000 hec.	10.9	6.04	1.0	1.6	1.4	4.0
4.	Communications ..	K.M.	6.76	3.17	1.60	1.37	1.00	3.97

Appendix IV

Physical Programmes - Targets and Achievements

State— Orissa

Sl. No.	Item	Unit	1968-69 level	Fourth Plan		Level Expected during 1973-74	Fifth Plan Target	
				Target	Likely achievement		Total	1974-75
1	2	3	4	5	6	7	8	9
1	Agriculture & Irrigation	(Thousand hectares)						
	Area under Forests							
	(i) Area under quick growing species.	Ditto ..	20.4	15.2	15.0	35.4	28.0	4.0
	(ii) Area under Economic plantation for Industrial and commercial use.	Ditto ..	38.4	14.8	14.2	52.6	28.0	4.0
	(iii) Area under Fuel plantation and Farm Forestry.	Ditto ..	10.9	6.4	4.0	14.9	12.0	2.0
	(iv) Communication ...	000 Kms. ...	6.76	0.317 (new.) 0.166 (Improvement)	0.397	7.1	1.85	...

Appendix V

Unit = Million m³

	1969	1973-74	1978-79
1	2	3	4
Industrial wood ..	0.5	1.0	2.0
Fuel wood ..	0.6	1.25	2.5

Appendix VI

Scheme-wise expenditure in the Fourth Plan and proposed outlay for the Fifth Plan—State Sector

(Rs. in lakh)

Sl. No.	Name of the Scheme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure in 4th Plan	Fifth Plan			Annual Plan 1974-75		
					Outlay	Capital	Foreign exchange	Outlay	Capital	Foreign exchange
1	2	3	4	5	6	7	8	9	10	11
1	Training of staff ..	14·88	3·00	11·398	7·59	..	..	1·52	..	..
2	Communication ..	18·56	11·21	31·33	120·00	..	..	24·00	..	..
3	Consolidation ..	10·22	3·00	12·105	67·85	..	..	13·57	..	..
4	Working Plan ..	16·10	3·619	17·169	20·00	..	..	4·80	..	..
5	Intensification of Forest Management.	15·77	3·678	15·788	16·00	..	..	3·20	..	..
6	Nature Conservation ..	21·58	7·319	32·854	50·00	..	..	10·00	..	..
7	Planning Cell ..	2·77	0·67	2·74	2·0	..	..	0·40	..	..
8	Development of M. F. P.	7·71	1·02	7·664	15·00	..	..	3·00	..	..
9	Publicity ..	1·15	0·47	1·396	5·00	..	..	1·0	..	..
10	Protection ..	11·22	3·93	10·70	26·00	..	..	5·20	..	..
11	Podu Prevention ..	6·85	1·50	3·07	25·00	..	..	3·16	..	..
12	Forest Research ..	5·36	2·47	7·291	20·00	..	..	4·0	..	..
13	Farm Forestry ..	7·25	1·45	6·08	18·25	..	..	2·0	..	..

[3 P. & C.—62]

Appendix VI

Scheme-wise expenditure in the Fourth Plan and proposed outlay for the Fifth Plan—State Sector

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure in 4th Plan	Fifth Plan			Annual Plan 1974-75		
					Outlay	Capital	Foreign exchange	Outlay	Capital	Foreign exchange
1	2	3	4	5	6	7	8	9	10	11
14	Coastal Belt ..	..	14·675	25·125	125·00	..	..	25·00	..	..
15	Buildings ..	9·30	5·00	13·733	35·00	..	..	7·00	..	..
16	Economic plantation ..	74·29	19·649	82·599	170·00	..	..	35·00	..	..
17	Establishment of plantation corporations.	..	..	..	30·00	—	..	30·00	..	..
18	Substitute fuel ..	..	..	..	10·00	..	..	10·00	..	..
19	Improved lodging ..	..	..	..	2·00	..	..	..	—	..
20	Environmental Forestry	..	..	..	2·50	..	..	..	..	..
21	Amenities to staff and labour.	..	..	..	2·50	..	..	..	—	..
22	Share capital in Orissa Forest Corporation.	..	..	24·00	50·00	..	..	10·00	..	..
23	Resources survey ..	..	..	..	15·00	..	..	2·00	..	..
24	Plantation of quick growing species.	76·25	21·147	79·89	..	..	..	..	..	..
25	Rehabilitation of degraded Forests.	24·99	6·00	20·85	..	..	..	..	..	..
26	Pasture and grazing ..	0·75	..	..	..	..	..	..	..	..
27	Training of candidates in cultivation of cardamum, etc.	..	0·20	0·582	..	..	..	..	..	..
	Total ..	325·00	110·00	405·30	834·61	35·00	..	194·85	7·00	..

CHAPTER 2·4

CO-OPERATION, WARE HOUSING AND MARKETING

CO-OPERATION

Review of Progress upto the end of the Fourth Plan

By the end of the Fourth Plan the membership of all types of co-operative societies is expected to go up to 16·80 lakhs and the working capital to Rs. 181·50 crores. Similarly short-term and medium term credit investment is expected to be Rs. 18 crores. In the long-term sector, the anticipated cumulative investment is expected to be Rs. 20 crores. By the end of 1971-72 nearly 67,622 farmers or 1·8 per cent of the agricultural families would have availed of long term credit.

Marketing, Storage, Supply of Agricultural inputs

2. In the field of agricultural marketing the co-operatives would have done work for approximately Rs. 8 crores. This is Rs. 2 crores short of the target fixed for the Fourth plan period. By the end of the Fourth Plan, in the field of storage-godown set up at village level, the total number would go up to 890 with a capacity of 1,04,650 lakh tonnes. In the matter of supply of agricultural inputs, the level of achievement by the end of 1973-74 is expected to be Rs. 10 crores in value.

3. In the field of primary consumers stores, 422 have been organised, mostly in urban areas. In the rural areas, 57 regional co-operative marketing societies and 30 forest marketing co-operative societies along with Tikaballi Agency Marketing Co-operative Society Ltd. have undertaken distribution of essential consumers articles. Besides this 15 wholesale co-operative stores have been organised to cover 12 districts except Phulbani. The wholesale stores at Cuttack, Bhubaneswar, Berhampur and Sambalpur have been assisted for opening departmental stores. Further stores are proposed at Rourkela and Puri under the Central Sector. The business turnover for these whole sale stores by the end of the Fourth Plan is likely to be Rs. 2 crores. The coverage of consumers stores in the urban areas is expected to go up to 20 per cent by the end of the Fourth Plan. A consumers federation at the State level has also been organised.

4. In other types of co-operatives, the 56 Lift irrigation co-operative societies are going to be reorganised as very few of them are working. The Housing Corporation at the State level which was set up in 1955 has got 600 societies affiliated to it. The investment by the Corporation was Rs. 165·62 lakhs by the end of 1972-73 and the share capital of the Corporation is Rs. 14·85 lakhs. So far 3,590 houses have been constructed. Out of 83 Farming Co-operative Societies, 48 are in a working condition. It is proposed to rehabilitate these during the Fifth Plan Period. The Primary Labour Contract Co-operative Societies which number 253 have also to be re-vitalised. The Engineering Co-operative Societies which were established to give employment to un-employed engineering personnel at Baripada, Karanjia, Nilgiri, Kendrapara and Berhampur are proposed to be strengthened. During the Fourth Plan a share capital of Rs. 40,000, working capital of Rs. 20,000 and the managerial subsidy of Rs. 8,000 have been provided.

Co-operative Education Training

5. The Co-operative Education Training Programmes which trained 1251 persons in the junior category and organised 2069 training camps and 438 study circles as well as training of 33462 office bearers, secretaries, managing committee members by the Fourth Plan are to be continued.

Objectives and targets of the Fifth Plan

6. By the end of 1973-74, the target for short-term and medium term credit investment has been projected to Rs. 18 Crores with an outstanding credit of Rs. 34 crores. The short and medium term investment is expected to go up to Rs. 50 crores with an outstanding of Rs. 75 crores by the end of 1978-79 and the cumulative investment would be in

the order of Rs. 183 crores. This can be achieved by supporting the 3,350 Co-operative Societies and by increasing the membership of Primary Credit Service Co-operative Societies to about 22 lakhs. In the long-term sector, the cumulative investment by 1978-79 is expected to be Rs. 62 crores.

Marketing, Supplies, Storage and Consumers

7. In the field of marketing, it is expected that the value of the agricultural produce marketed would rise to Rs. 24.40 crores. As regards the handling of fertilizer in the Fifth Plan, the quantity of fertilizer to be handled would be of the value of Rs. 30 crores. As regards storage, an additional capacity of 50,000 tonnes has been proposed. As regards the consumer's co-operatives rationalisation of the 422 primary stores by converting them into 300 viable units is proposed, as well as an affiliation of stores at the rate of 20 stores to each whole-sale store. Besides this, rehabilitation of 8 Wholesale Co-operative Societies and 2 departmental stores, strengthening of the remaining 6 whole-sale stores, as well as organisation of 3 more whole-sale stores at Phulbani, Rayagada, Sundargarh is also proposed. Finally the existing two University Stores at Sambalpur and Berhampur are to be strengthened and one University Store is to be opened at Bhubaneswar during the Fifth Plan Period.

Specific Programmes and Schemes

Credit—Establishment of pool of Managerial Staff for Primary Societies and Central Co-operative Banks.

8. Non-availability of suitable personnel to work as Secretaries of primary agricultural credit societies is a factor inhibiting expansion of credit. As per the cadre scheme introduced in 1967-68, the Secretaries of the Primary Societies and Administrative Inspectors of the Central Banks were to be included in the cadre. By now all the 17 Central Banks have accepted the Scheme. This scheme would be continued in the Fifth Plan with the change that the societies would pay 75 per cent in accordance with the existing pattern instead of 33½ per cent subject to the condition that contribution of a Society should not be more than the actual expenditure to be incurred on the cadre staff. Similarly, the Central Banks would contribute actual expenditure on their staff taken in the cadre scheme instead of 20 per cent as at present. In view of the above, the requirement of the scheme during the Fifth Plan has been estimated to be Rs. 50 lakhs. The cumulative expenditure by the end of Fourth Plan is expected to be of the order of Rs. 35.48 lakhs. An outlay of Rs. 50.00 lakhs is proposed for the purpose in the 5th Plan.

Outright grant for Incentive award for collection

9. Because of rising overdues in the short term and medium-term sector, the higher investment programme will have to be merged with better performance in recovery. For this it is suggested that incentive award would be given for good collection to the Secretaries of Primary Societies and administrative Inspectors of Banks in the following manner:—

(a) Secretaries of primary Societies whose collection performance will be between 70-80% and where investment would increase by 25% shall get incentive award of one month's basic pay which is taken to be Rs. 200.

(b) Where the average collection of all the societies in charge of an administrative Inspector will be above 60%, he shall be entitled to get incentive award of one month's basic pay which is taken at Rs. 400.

10. In calculating the percentage of collection the amount collected by way of conversion will not be taken into account. For this, a fund will be created at the Central Bank level and the State Government would contribute @ Rs. 2 lakhs each year of the Plan to this fund. So an outlay of Rs. 10.00 lakhs is proposed during the fifth Plan Period.

Outright Grant to Primary Credit Societies and Central Co-operative Banks for Special Bad Debt Reserve.

11. The existing scheme would continue with the following modifications:—

(a) The scheme would be in operation in areas not covered by Small Farmers and Marginal Farmers Development Agency

(b) The rate of contribution to the primary societies would be reduced to 6% from the present 12% and that to Central Banks would be reduced to 2% from the present 4%.

(c) Additional investment amongst the small and marginal farmers and share-croppers would be calculated towards entitlement of subsidy. An outlay of Rs. 6 lakhs is proposed for this scheme.

Subsidy for Mobilisation of Deposits

12. In the Fifth Plan the Central Co-operative Banks will be expected to finance a large portion of investment from their own resources. This would require mobilisation of deposit at a much higher level than the expected achievement of Rs. 10 crores by 1973-74. In the Fourth Plan, a subsidy scheme was operating to encourage the Central Banks to open new branches to tap deposits. It is suggested that the Central Banks will increase their deposits and fix the target at Rs. 20 crores by the end of 1978-79 through affiliated primary societies selected for the purpose. The primary societies selected shall act as branch or agent of the concerned Central Banks in tapping deposits. For meeting the cost of managerial staff, and for meeting the cost of buildings, fixtures, etc. a subsidy of Rs. 10,000 is proposed to be given to each society. An outlay of Rs. 11.00 lakhs is proposed for this purpose.

Scheme for Rehabilitation of Weaker Central Co-operative Banks

13. At the time of introduction of the Central Sector Scheme in the year 1972 none of our Central Banks was considered weak enough according to the norms of the scheme to get the assistance. By the end of the Fourth Plan, five Banks, i. e., Cuttack, Boudh, Khurda, Koraput and Sundargarh would qualify for assistance. With the expansion of credit programme in the Fifth Plan, the position of Banks is expected to improve substantially. The present scheme is, therefore, suggested as a sort of contingent plan. It has been calculated that the State Government involvement would be of the order of about Rs. 40.00 lakhs if the operation of Central Co-operative Bank would increase to meet the credit need. In view of limited funds, an outlay of Rs. 10 lakhs only is proposed in the Fifth Plan.

Share Capital Contribution to Co-operative Credit Institutions

14. This is a continuing scheme from the Second Five Year Plan. The original outlay in this scheme in the Fourth Five Year Plan was Rs. 142.52 lakhs. The anticipated cumulative expenditure by the end of Fourth Plan will be Rs. 448 lakhs. An outlay of Rs. 15 crores Rs. 3 crores in each year of the Plan is proposed during the Fifth Plan. Besides providing for normal subscription to the share capital of credit societies at different levels, different special types of societies sought to be set up in the tribal areas will also be financed under this scheme.

Subsidy to Land Development Bank for Creation of Cadre of Key Personnel

15. The outlay in the scheme for the Fourth Plan is Rs. 5.15 lakhs as against which the expenditure in the Fourth Plan would be Rs. 6.50 lakhs. In consideration of the large programme of long term investment of Rs. 62 crores in the investment scheme during the Fifth Five-Year Plan, it is proposed to have adequate supporting staff as follows:—

(1) Secretaries of Primary Land Development Banks	..	48
(2) Assistant Secretaries	..	48

(3) Supervisors	..	500
(4) Administrative Inspectors	..	165
(5) Engineering Overseers	..	24
(6) Accountants and Additional Accountants	..	58

Besides, the field staff of the State Land Development Bank including the technical officers and the Inspecting Officers will also have to be encadred. Further, regional offices of the State Land Development Bank will be opened at all Divisional headquarters to streamline the procedure of scrutiny of loan applications. For this an outlay of Rs. 70 lakhs is proposed in the Fifth Plan.

Establishment of Agricultural Credit Stabilisation Fund for Orissa State Co-operative Land Development Bank.

16. Successive natural calamities in the last few years in the State have affected the repaying capacity of the borrowers. This has ultimately affected free flow of long term finance to a considerable extent. In order to make the Primary Land Development Banks eligible to borrow funds from the State Co-operative Land Development Bank by removing the default and to ensure annual contribution to the sinking fund it is considered essential to set up a Credit Stabilisation Fund in the long term sector on the same lines as in the short term and medium term sector. Hence an outlay of Rs. 5.00 lakhs under the scheme in the Fifth Plan is proposed.

Common Cadre Scheme of the Orissa State Co-operative Bank and the Central Co-operative Banks.

17. The need of employing trained and qualified hands in the administrative cadre of Central Co-operative Banks and Orissa State Co-operative Bank for efficient management is keenly felt as in case of other credit institutions. So a Common Cadre Scheme for training of the Key Personnel of both the institutions was implemented during the Third and Fourth Plans. But due to various reasons, the Scheme did not work except giving training to three personnel who are at present working as Secretary or Additional Secretary of Central Banks. It is, therefore, proposed to revise the Scheme and implement it in the Fifth Plan. As per the scheme, the Secretaries of Central Co-operative Banks and the Executive Officers of Central Co-operative Banks and the Orissa State Co-operative Banks will be brought to the Cadre Scheme. For this purpose, the Central Co-operative Banks have been classified under three categories, i.e. A, B, and C according to their working capital to which Staff will be allotted suitably as decided by the Cadre Committee formed at the level of Orissa State Co-operative Bank from time to time.

18. The Cadre Fund will be maintained at the level of Orissa State Co-operative Bank. The contribution to the Fund by the Orissa State Co-operative Bank and Central Co-operative Bank will cover the expenses incurred for their staff. The deficit in the cost on account of higher pay, training, leave salaries, G. P. F. Contribution etc. will have to be met from the Cadre Fund to which Government will contribute by way of subsidy. It is proposed that 223 personnel under different categories will be brought on the cadre and the deficit cost to the extent of Rs. 10 lakhs will be borne by Government for the five years of the Fifth Plan, as follows:—

		(Rupees in lakhs)
1974-75	..	1.40
1975-76	..	1.80
1976-77	..	2.00
1977-78	..	2.30
1978-79	..	2.50
Total	..	10.00

Marketing Revitalisation of Co-operative Marketing Societies

19. By the end of the Fourth Plan, 61 Regional Marketing Societies would have been organised. Some of these societies have become financially weak and are in moribund condition. It is proposed to revitalise 20 such societies at an outlay of Rs. 6 lakhs during the Fifth Plan Period. For revitalisation, Government assistance in shape of share capital will be given at the ratio of 1.5 and managerial subsidy of Rs. 1.50 lakhs for the first two years of the Fifth Plan. Subsidy on the borrowing for Block Capital loans availed by the Society from the Orissa State Financial Corporation will be provided for which an outlay of Rs. 250 lakhs is also proposed. In all an outlay of Rs. 10 lakhs is proposed during the Fifth Plan.

Organisation of Fruits, Vegetable and Other Commodities Marketing Societies

20. It is proposed to organise 6 societies of the above types. These societies would be given share capital of Rs. 50,000 by the State Government. Accordingly an outlay of Rs. 3 lakhs is proposed.

Managerial subsidy to the fruit, vegetable and other commodity Marketing Societies

21. The above 6 societies would be given managerial subsidy for 2 years at the rate of Rs. 8,000 per year. An outlay of Rs. 1 lakh is proposed under this scheme.

Margin money for purchase of Transport Vehicles

22. In the current Plan, Government assistance is available as loan to a maximum extent of Rs. 50,000 towards the cost of each truck to be purchased by the Regional Co-operative Marketing Societies. During the Fifth Plan it is proposed to provide margin money at 25% of the cost of the vehicles to new societies. Besides, old marketing societies will have to be given share capital for purchasing additional transport vehicles where their turn over is more than Rs. 60 lakhs in a year. In the Fifth Plan, 25 societies will be provided assistance under this scheme at the rate of Rs. 20,000 to each society. An outlay of Rs. 5 lakhs is proposed under this scheme.

Subsidy to the Marketing Societies for price fluctuation fund

23. The existing scheme would continue with some minor changes. The rate of subsidy is suggested in the following manner :—

Value of outright purchase made from members within a year	Rate of subsidy on the total purchase
(1)	(2)
1. Upto Rs. 5 lakhs	.. 2%
2. Between Rs. 5—10 lakhs for the additional amount	.. 3%
3. Above Rs. 10 lakhs for the additional amount	.. 4%

24. It is proposed that the Forest marketing Co-operative societies at the primary level would get the subsidy at 4% of their purchase irrespective of turnover because of high pattern of fluctuation in the price. An outlay of Rs. 10 lakhs is proposed for this scheme in the Fifth Plan.

Creation of common cadre at the level of Apex Marketing Co-operative society.

25. This is a contingent scheme and an outlay of Rs. 2.50 lakhs is proposed for this scheme.

Share capital to Forest Marketing Co-operative Societies

26. These societies are required to be strengthened considerably so as to enable them to buy a commanded portion of forest produce marketed in their areas. Because of inadequate working capital the Societies are not able to develop their business. Financial assistance to these societies will be provided at the rate 1:5. It is therefore proposed that each society would be given Government share capital of Rs. 10,000 in each year of the Fifth Plan for which an outlay of Rs. 5.00 lakhs is proposed for the 10 societies.

Subsidy to the Forest Marketing Societies for purchase of transport vehicles

27. In case of these societies 50% of the cost of each vehicle is proposed to be provided by way of share capital, eight Societies are proposed to be financed under this scheme and for this an outlay of Rs. 3.20 lakhs is proposed.

Co-operative Processing

28. By the end of the Fourth Plan 42 Rice Mills will be commissioned with a milling Capacity of 1.70 lakh tonnes in three shifts. Besides, 13 Cold Storage Units of 11,670 tonnes capacity would also be functioning by the end of Fourth Plan. One Cashewnut Processing Society will be commissioned by the end of current year and 2 such units will be commissioned in the first year of the Fifth Plan.

Modernisation of the Rice Mills

29. Modernisation of Rice Mills in the Co-operative Sector will have to be taken up on a priority basis as the out-turn of conventional Rice Mills is sometimes below the economic level and is a source of loss to the Society. It is, therefore, Proposed to modernise the conventional Rice Mills during the Fifth Plan. Of the 42 Rice Mills to be commissioned by the end of the Fourth Plan only 39 Rice Mills require modernisation equipment like par boiling system and mechanised dryer system, This programme for modernisation will be taken up at the rate of 10, 14 and 15 Mills during the first three years of the fifth Plan. so it is proposed to provide an outlay of Rs. 39.00 lakhs at the rate of Rs. 1.00 lakh each for the 39 Rice Mills. Besides 10 more Rice Mills will be set up at the rate of 2 in each year of the Fifth Plan. For this the expenditure on this account would be Rs. 55.00 lakhs, 80% of which would come from the National Co-operative Development Corporation under the Central Sector Scheme as loan and the balance 20% will be provided as share capital to the Society by the State Government on 1:5 ratio. An outlay of Rs. 9.16 lakhs is accordingly proposed under this Scheme. So, the total outlay under this scheme will be Rs. 48.16 lakhs, which is being provided.

Establishment of Dal Mills

30. After paddy, pulses are very important crops in this State. Two Dal Mills will start functioning by the end of 1973-74. It is proposed to establish 3 such units during the first three years of the Fifth Plan at the rate of one a year. A sum of Rs. 1.00 lakh would be required for each unit. Besides, a subsidy of Rs. 24,000 at the rate of Rs. 8,000 for each unit will be provided. An outlay of Rs. 3.24 lakhs is being provided in the Fifth Plan.

Share Capital to Sugar Factory and Distillery Unit

31. It is proposed to provide Rs. 30.00 lakhs for completion of the Bargaarh Sugar Mill and Rs. 8.00 lakhs for the Distillery Unit of the Mill during the Fifth Plan.

Co-operative Storage**CO-OPERATIVE GODOWN**

32. It is proposed to provide additional storage capacity of 50,000 tonnes during the Fifth Plan at the rate of 10,000 tonnes in each year. The programme will be financed both in the form of subsidy and loan. Subsidy component will be available in the State Sector at 37½% of the cost at the rate of Rs. 150 per tonne and the loan component will be made available from the National Co-operative Development Corporation at 62½% of the cost under a Central Sector Scheme. Hence a sum of Rs. 5.60 lakhs will be required during each year of the Fifth Plan period under the State Sector. Thus an outlay of Rs. 28 lakhs is proposed in the Fifth Plan.

COLD STORAGE

33. It is proposed to instal three Cold Storages in the Fifth Plan under Central Sector Schemes for financing the small and medium sized processing units. The State Government will be required to contribute in form of share capital Rs. 2 lakhs in the 1st, 3rd and 5th year of the Plan. So an outlay of Rs. 6 lakhs is proposed under the scheme. The balance amount will be provided by N.C.D.C. under Central Sector Schemes.

Re-organisation of Danpur Jute Marketing Co-operative Society

34. This society is not able to procure jute in Cuttack and Keonjhar districts adequately because of weak financial position and the heavy rate of interest that the Society has to pay on the borrowings from the State Bank of India. With all these handicaps, the Society is not able to provide margins in the field.

35. It is proposed to strengthen the share capital base of the Society. No share capital has been contributed to the Society after 1962-63. It is proposed that a share capital contribution of Rs. 5.00 lakhs may be provided at the rate of Rs. 1.00 lakh in each year of the Fifth Plan. The disbursement of share capital would depend upon the increased volume of business turn over in the preceding year.

Share Capital to Jute Mills

36. There are possibilities of locating Jute Mills in Orissa. A provision of Rs. 5.00 lakhs towards share capital is proposed in the Fifth Plan.

Co-operative Supplies

37. A projection has already been made about the value of fertilisers to be handled by the Co-operatives by the end of Fifth Plan. The funds for handling the fertiliser of 4.50 lakhs tonnes will be found from financing institutions but there is need for giving subsidy for transportation of fertilisers to the interior areas. It is suggested that some subsidy should be provided for this purpose. Subsidy at the rate of Re. 0.50 paise per tonne may be provided. An outlay of Rs. 2.00 lakhs is proposed for this scheme in the Fifth Plan.

Cotton Ginning Co-operative Society

38. Cotton cultivation over 6,000 acres has been programmed. There is scope for expanding the area under cotton. For processing of cotton, it is proposed to set up a Cotton Ginning Factory in the Fifth Plan. An outlay of Rs. 5.00 lakhs has been proposed.

Consumers Co-operatives

39. The Primary Consumers' Cooperative Stores have been affiliated to 15 Wholesale Co-operative Stores. The wholesale stores as well as the University Central Stores are federated into a State Level Federation, namely, the State Wholesale Consumers Federation.

It is proposed to integrate the Primary Stores with the Wholesale Stores and ultimately with the State Federation by establishing organic link in business transactions. The Wholesale Stores will purchase non-controlled articles from the State Federation and supply these articles to the Primary Stores. The provision for the Fifth Plan is Rs. 14 lakhs.

Consumers Co-operatives

40. It is proposed to rationalise and reorganise the existing 422 Consumers' Co-operatives (Urban and Rural) into 300 viable or potentially viable units at the base. For this purpose, it is proposed to provide share capital at the rate of Rs. 11,000 to Rs. 12,000 and subsidy at the rate of Rs. 2,000 for the 300 proposed reorganised primaries. In respect of the Service Societies interest free working capital will be provided in the ratio of 1: 4. In respect of College Stores and other Primary Stores, share capital will be provided in the ratio of 1:2 and 1:3 respectively. It is accordingly proposed to provide share capital of Rs. 10 lakhs and subsidy of Rs. 2 lakhs for Consumer Co-operatives (Rural Consumers) and share capital of Rs. 20 lakhs and managerial subsidy of Rs. 4 lakhs under Urban Consumer Co-operatives in the Fifth Plan.

Rehabilitation and strengthening of wholesale and departmental store

41. Out of existing 15 Wholesale Stores, 8 Wholesale Stores at Balasore, Puri, Cuttack, Rourkela, Sambalpur, Ganjam, Koraput and Bhubaneswar are proposed to be rehabilitated and 6 Wholesale Stores at Bolangir, Kalahandi, Dhenkanal, Mayurbhanj, Keonjhar and Bargarh are proposed to be strengthened in the Fifth Plan by way of share capital and subsidy to make them economically viable and eligible for getting financial assistance from Banks to undertake distribution of foodgrains, sugar, controlled cloth, pulses, edible oil etc. An outlay of Rs. 27 lakhs towards share capital and Rs. 40,000, as subsidy has been proposed.

42. It is also proposed to rehabilitate the departmental Stores at Bhubaneswar and Cuttack and make them viable units. It is proposed to provide share capital of Rs. 8 lakhs and subsidy of Rs. 20,000 to these stores during the first two years of the Fifth Plan.

Organisation of new wholesale stores and modern retail units

43. It is proposed to organise three new Wholesale Stores in the backward areas like Phulbani, Rayagada and Sundargarh as these are not served by Wholesale Stores. These areas have large concentration of tribal population.

An outlay of Rs. 5 lakhs as share capital and Rs. 0.50 lakh as managerial subsidy is proposed in the Fifth Plan. The Wholesale Stores are operating through branches as independent primary stores have not been organised. It is proposed to set up five modernised retail outlets for the wholesale stores at the rate of one retail outlet per annum. Accordingly an outlay of Rs. 1.50 lakhs towards share capital and Rs. 0.25 lakh towards subsidy has been proposed in the Fifth Plan.

University Stores

44. Emphasis has been laid by Government of India on organisation of Consumers Stores in Universities. The two University Stores at Berhampur and Sambalpur are proposed to be strengthened and one new store for the Utkal University at Bhubaneswar is proposed to be organised during the Fifth Plan. Accordingly, an outlay of Rs. 2.50 lakhs towards share capital and Rs. 0.25 lakh towards managerial subsidy has been suggested.

Strengthening of Consumers' Federation

45. It is proposed to set up a consultancy and promotional Cell at the level of the State Consumers' Federation during the Fifth Plan. A subsidy of Rs. 1.40 lakhs during the first three years of the Fifth Plan for this Cell has been proposed. Simultaneously, it is necessary to build up a cadre of trained personnel in management, accountancy, and sales

promotion techniques. Accordingly, a managerial cadre, consisting of managers, accountants and sales executive is proposed to be created. A subsidy of Rs. 2 lakhs for the managerial cadre has been suggested for the first three years in the Fifth Plan representing 50% of the estimated cost. The remaining 50% will be provided by the Consumers' Federation.

46. In view of the recent decision of the Government to entrust distribution of controlled cloth and wholesale foodgrains sugar, and other essential commodities to the Co-operatives, it is necessary to strengthen the capital base of the Consumers' Federation to take up such business. Therefore it is proposed to provide share capital of Rs. 15 lakhs to the Federation for wholesale business during the Fifth Plan.

Co-operative Education and Training

47. The scheme of Co-operative Education and training broadly falls into two parts : (i) education of office bearers, members and prospective members, and (ii) training of the staff of Co-operative Department and institutions at various levels. The responsibility for implementing the programme relating to the first category rests with the State Co-operative Union and the District Co-operative Unions in the State. The training of the second category is the responsibility of the Central Committee of Co-operative Training under National Co-operative Union of India and the State Co-operative Union. There are two Co-operative Training Centres, one at Gopalpur and the other at Bargarh. The centre at Gopalpur imparts training to the cadre secretaries, Bank Supervisors and Junior Inspectors of Co-operative Societies. It also conducts junior basic course and Supervisors' course. The capacity is 40 for junior personnel and 40 for secretaries of societies. The training centre at Bargarh gives training to Secretaries of Societies. The capacity is 40 only. By the end of the Fourth Plan, it is expected that 1,251 persons of junior category will have been trained in these two training centres.

Member Education

48. The Member Education Programme includes education of office bearers of primary societies such as Presidents and Secretaries and education to members of Managing Committees and other members including prospective members of societies in regard to principles, practices, and policies of co-operatives, rules and business and accounting procedures and other functions and rights and responsibilities of members. There are at present 13 peripatetic training Instructors one for each district for this programme.

49. With the existing number it has not been possible to cover all the districts at least once over a period of ten years. It is, therefore, proposed in the Fifth Plan to appoint at least 30 District Instructors so as to enable them to cover all societies at least once in four years. By the end of the Fourth Plan, 2,069 training camps and 438 study circles will have been organised under the Member Education Programme and 33,462 office bearers, secretaries, Managing Committee members and other members will have been trained.

50. In the Fifth Plan it is proposed to strengthen and expand the training programme in the following manner :—

- (i) It is proposed to increase the capacity in the existing centres at Gopalpur and Bargarh and conduct functional and sectoral courses in addition to general courses.
- (ii) It is also considered necessary to repair the existing building at Gopalpur and take more houses on hire at Bargarh to take up the programme as indicated above. An outlay of Rs. 1.50 lakhs is proposed.
- (iii) In addition to the above, it is proposed to appoint 30 District Instructors and provide some incentive for the Member Education Programme.
- (iv) Propaganda and publicity programme will be continued and more funds will be provided.

51. It is estimated that the requirement of funds under the scheme will be as follows :—

	Rs. in lakhs
(1) Training programme ..	21.35
(2) Appointment of District Instructors for Member Education Programme.	13.30
(3) Propaganda and publicity ..	8.00

Total	... 42.65

52. Out of this amount Rs. 35.50 lakhs will be provided in the Fifth Plan in the Co-operation budget as grants-in-aid to the Co-operative Union. The balance will be found out by the Union from its own resources.

Co-operative Council

53. As per the provisions in the Co-operative Societies Act, the meeting of the Co-operative council is required to be held twice in a year. So sum of Rs. 3,000 per annum will be required for T. A., etc., of the Members for attending the meetings. Accordingly Rs. 15,000 is proposed under this scheme in the Fifth Plan.

Co-operative Farming

54. During the Fifth Plan it is proposed to rehabilitate 25 Farming Co-operative Societies into viable units by giving them managerial subsidy @ 100 % for first two years, 75 % in the 3rd year and 50 % in the 4th and 5th years. As the intention is to stabilise and strengthen the existing ones into effective units it is proposed to provide an outlay of Rs. 5.02 lakhs for this purpose.

Labour Co-operatives

55. It is also proposed to provide a technical wing consisting of one executive Engineer and one Sub-Assistant Engineer with minimum requisite staff for supervising the work of the labour contract Co-operatives on the Maharashtra pattern. Accordingly an outlay of Rs. 1.67 lakhs has been provided for this purpose during the 5th Plan.

Engineering Co-operative Societies

56. During the Fifth Plan it is proposed to continue the existing 4 Engineering Co-operative Societies at Baripada, Karanjia Nilgiri and Kendrapara and strengthen them by providing financial assistance of Rs. 0.88 lakh as working capital and managerial subsidy during the first year.

Institutional Finance

57. A Scheme for financing the Primary Service Co-operative Societies by the Commercial Banks has been drawn up. In Cuttack district, 22 Societies are being financed by these Commercial Banks including the Orissa State Co-operative Bank at present. The level of advance in these societies is rather low. It is expected that gradual financing to these Primary Societies by the Commercial Banks will expand so as to cover all the Societies. In some parts of the State, Commercial Banks like the State Bank of India have opened agricultural development branches and it is proposed to assign certain Blocks with 6 to 10 Service Co-operative Societies to them so that instead of the concerned Central Banks the Commercial Banks will finance these societies. Besides, the

Commercial Banks are advancing direct finance to the cultivators who are not members of Co-operative Societies. No precise information is available about the extent of such advances. The Reserve Bank of India has been sanctioning loans to the State Government from Long Term Operation Funds for contribution as share capital to various Co-operative Credit Societies. It has already been indicated that in the Fifth Plan loans to the tune of Rs. 15 crores at the rate of Rs. 3 crores a year is expected. This will go a long way in strengthening the financial position of the Co-operative Societies assisted under the schemes.

58. Besides, under various schemes assistance is expected from the National Co-operative Development Corporation and other financing institutions.

Administrative Reorganisation

PLANNING CELL

59. With increase in the magnitude and complexity in the Plan there is need for detailed field study, collection and processing of data and supervising Plan implementation and expenditure. It is, therefore, considered essential to set up a Planning Cell to take up programme planning, undertake evaluation studies and man-power planning and resource utilisation. For this purpose, it is proposed to appoint a full-time Deputy Registrar of Co-operative Societies (Planning). The Planning Cell will be assisted by two Research Assistants and a few ministerial staff.

60. The offtake of fertiliser by the Co-operatives has been considerably stepped up during the Fourth Plan and will go up during the Fifth Plan to the extent of about Rs. 30 crores. The distribution of fertiliser from the Apex Marketing Society to the Regional Co-operative Marketing Society and from the Regional Co-operative Marketing Society to Service Societies needs close supervision and check in the field. It is, therefore, proposed to have a separate Deputy Registrar (Fertiliser), who will look after distribution of fertiliser at different points, verification of stock, reconciliation of accounts, recovery of sale-proceeds and payment of loan, etc.

61. It is proposed to strengthen the Accounts Cell to deal with preparation and administration of the budget, review the collection of various loans, take follow up action for obtaining utilisation certificates and payees receipts, take up internal audit, take steps to comply with the various audit objections requiring reconciliation etc. It is proposed to post one Accounts Officer in Class II (Senior Branch) of Finance service in addition to the existing officer from Junior Branch.

62. Due to inadequacy of staff the [audit is in huge arrears in a number of societies particularly the Marketing, Consumers, and Apex Societies for a long time. It has been estimated that on 1-1-1972, 4,112 societies were in arrears for 15,012 arrears requiring 750 auditors. The Public Accounts Committee have adversely commented on this delay. During the Fifth Plan, it is proposed to reorganise the Audit Organisation in the following manners, namely :—

- (1) The staff posted to Audit Organisation would normally work for atleast five years in the organisation. This will secure independence and continuity of audit.
- (2) There shall be internal audit of all Co-operative Societies with a transaction of Rs. 5 lakhs or above. The Regional Co-operative Marketing Societies, Forest Marketing Societies and Consumers Cooperative Stores will have a system of concurrent audit even though their transaction is less than Rs. 5 lakhs. The cost of such concurrent audit will be borne by the Government and the concerned Societies on 50 : 50 basis. In the last year of the fifth Plan the cost will be borne fully by the Societies.
- (3) The system of audit will be changed. Instead of detailed audit which is time taking, it is proposed to introduce management audit.

- (4) It is proposed to set up one flying squad in each Division which will take up audit of such organisation or society as may require it immediately.
- (5) The system of scrutiny and vouching of cent per cent transaction at the time of audit will be substituted by a method of percentage check. But before this is done, the Accountant and the Secretary should bring up the accounts to a satisfactory level and internal audit system should be fully implemented. It is proposed to create requisite number of posts of Audit Officers and Senior Inspectors for undertaking audit of the Fisherman Co-operative Societies, Consumers' Stores and also to work as flying squads at the Division level.

Rehabilitation of Central Co-operative Bank

63. It is proposed to post 10 Sales Officers to each of the 5 Central Co-operative Banks at Khurda, Boudh, Sundargarh, Koraput and Cuttack which will be rehabilitated in the Fifth Plan. These Sales Officers will look to the verification of loan, filing of disputes and execution and disposal of sale cases.

Construction of office buildings and staff quarters

64. There are 29 Co-operative Circle Offices and 12 Audit Circles in the State. Besides, there are a large number of Sub-Assistant Registrars, Senior Inspectors, Junior Inspectors ministerial staff and Class IV employees. In some of the areas, particularly in the backward and inaccessible areas, houses on rent are not available. It is therefore necessary to provide quarters to the officers and staff in these areas in the following manner.

	Rs. in lakhs
For 20 Assistant Registrar of Co-operative Societies @ Rs. 25,000,	5.00
For 65 Sub-Assistant Registrars and Senior Inspectors @ Rs. 20,000,	13.00
For 80 other staff @ Rs. 15,000	12.00

Total ..	30.00

Stenographers and class IV staff and driver

65. It is proposed to provide two Grade II Stenographers for Deputy Registrar (Planning) and Deputy Registrar (Fertiliser) and 12 Grade III Stenographers for the 12 Audit Officers besides the corresponding number of Peons. It is proposed to provide one driver for the Deputy Registrar (Fertiliser) who will be provided with a vehicle. The expenditure on account of the above proposal is estimated to be Rs. 71.84 lakhs.

Jeep and petrol

66. Some of the jeeps are very old and have outlived their utility particularly the jeeps utilised in hilly areas need replacement. It is proposed to replace two jeeps each year during the Fifth Plan. It is also proposed to provide Rs. 4,800 towards cost of petrol and lubricants. So an outlay of Rs. 2.84 lakhs has been proposed under this head.

67. Thus under the Administrative Reorganisation scheme, an outlay of Rs. 104.68 lakhs has been suggested.

68. Relevant data relating to Co-operation programme have been indicated in the following Annexures.

- (1) Annexure I .. Programmewise expenditure in the Fourth Plan and outlay for Fifth Plan.
- (2) Annexure II .. Physical achievements of the Fourth Plan and targets for Fifth Plan relating to agricultural credit and cooperative marketing.
- (3) Annexure III .. Base level physical achievements for the terminal years 1973-74 and 1978-79 with regard to membership coverage of agricultural facility, percentage of borrowing members and advancement of short-term, medium term and long term loans.
- (4) Annexure IV .. Schemes of the Fifth Plan showing the continuing and new schemes separately.

(ii) WARE HOUSING AND MARKETING

69. The scheme of Regulation of Markets started in the State during the Second Plan. By the end of Fourth Plan, 35 Regulated Markets would be established. In the Second Plan the annual average arrival of agricultural commodities was valued at Rs. 2.66 crores. This was increased to Rs. 5.66 crores per year in the Third Plan. In the Fourth Plan it is expected to go up to Rs. 40 crores per year.

70. The scheme of Regulation of Market has been very much beneficial to the farmers. The Market Committees have also reached viability within a very short period.

71. At the beginning of the Fourth Plan, 5 grading units and 15 ware-houses with 17,000 tonnes capacity had been set up. The achievements in this regard by the end of the Fourth Plan will be 28 grading units and 28,000 tonnes of ware-housing capacity. In view of the increased production targets in Salandi, Mahanadi and Hirakud ayacuts, the existing markets are expected to handle agricultural produces of a much greater volume.

72. Out of the 80 markets in the State 35 main markets and 25 sub-markets would be regulated by the end of the Fourth Plan. In the Fifth Plan, 20 main markets along with 20 sub-markets will be regulated at the rate of 4 markets per year. Previously, a loan of Rs. 50,000 and a subsidy of Rs. 6,000 spread over a period of three years were given to each market for construction of market-yard, for maintaining the staff and for providing basic facilities. It is proposed that each new market committee will be provided with a loan assistance of Rs. 1.00 lakh and a subsidy of Rs. 10,000 for a period of 2 years. The 4 market committees regulated in the last year of the Fifth Plan would not get entire assistance for staff expenditure during the Plan period. Similarly 2 market committees regulated in the last 2 years of the current Plan will be given spill over subsidy in the Fifth Plan. An outlay of Rs. 4.50 lakhs is proposed for this. The regulated markets in S. F. D. A. and M. F. A. L. areas have received additional loan assistance from these agencies to the tune of Rs. 1.00 lakh each. The 9 existing market committees which are outside the operation would get no assistance beyond a loan of Rs. 50,000 provided earlier. It is proposed to give additional loan of Rs. 50,000 each and for this an additional outlay of Rs. 4.50 lakhs is proposed. So the total outlay for this will be Rs. 29.00 lakhs.

Grading & Standardisation

73. The existing scheme in this regard will be a continuing one and 20 new units will be set up at the rate of 3 units during the first and second years of the Fifth Plan and 4 units, 5 units and 6 units respectively in the last three years of the Plan. Each unit will be given a subsidy of Rs. 5,000 for purchase of grading equipments and appointment of staff. For this an outlay of Rs. 1.00 lakh is proposed. Moreover, 25 grading units set up earlier would also require subsidy at the rate of Rs. 2,000. For this an outlay of Rs. 50,000 is proposed. It is proposed to assist five such old units in each year of the Fifth Plan. It will also be necessary to set up a supervisory grading units at the rate of one for 10 grading units. However, in the Fifth Plan it is proposed to set up only 2 supervisory grading units. This is as per the pattern fixed by Government of India. The estimated cost of each unit would be Rs. 30,000 and for this an outlay of Rs. 60,000 has been proposed. The State Grading Laboratory requires strengthening. For this an outlay of Rs. 90,000 has been proposed. So the total outlay on this scheme for grading and standardisation is Rs. 3.00 lakhs.

Market Research and Survey

74. This scheme was introduced in the State in the third year of the Fourth Plan. It will be necessary to provide some staff for implementing the scheme. It is, therefore, proposed to have six market supervisors with supporting staff, as well as one Assistant Marketing Officer at the State headquarters. The Engineering Cell created at the State headquarters will also be required to be strengthened. Besides, these posts, some supporting staff will have to be appointed and some materials and a vehicle will have to be purchased. For this an outlay of Rs. 5.00 lakhs has been proposed.

Training of Personnel

75. With the increase in the number of regulated markets, grading and standardisation units it will be necessary to provide adequate and suitable training facilities to persons who should be engaged in field work. The Diploma Courses in Agricultural Marketing training and training of graders is being arranged by the Agricultural Marketing Adviser, Government of India. At present there are 4 Diploma-holders, 16 Market Secretaries and 3 trained Graders. During the Fifth plan more persons will be deputed for training for Diploma Course and Graders' training. For this an outlay of Rs. 50,000 has been proposed at the rate of Rs 10,000 per year.

Share Capital Contribution to State Warehousing Corporation.

76. To keep pace with the increasing market surpluses in the Fifth Plan, the State Warehousing Corporation, has a proposal to provide additional storage capacity of 20,000 tonnes. For this an outlay of Rs 25.00 lakhs would be required. As per the pattern of financial assistance investment in the State Warehousing Corporation has to be shared equally by the State Government and the Central Warehousing Corporation. An outlay of Rs. 12.50 lakhs is proposed for providing share capital contribution to the State Warehousing Corporation.

Scheme for Improvement of Market Intelligence

77. During Fifth Plan it is proposed to cover 37 more centres under the scheme. A provision of Rs. 7.56 lakhs is proposed.

78. The total outlay for the schemes on Warehousing and Marketing during the Fifth Five-Year Plan period works out to Rs. 57.56 lakhs. Scheme-wise provision is shown in Annexure I.

Annexure I
Programmewise outlay and Expenditure

(Rupees in lakhs)

Serial No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during 4th Plan	Fifth plan total outlay	Annual Plan for 1974-75	Remarks
1	2	3	4	5	6	7	8	9
CO-OPERATION								
Credit								
1	Subsidy for the establishment of a pool of managerial staff for Primary Societies and Central Co-operative Banks.	23.23	14.00	14.00	35.48	50.00	15.00	
2	Outright grant to Primary Agricultural Societies and Central Co-operative Banks for special bad debt reserve.	11.27	2.00	2.00	9.94	6.00	0.88	
3	Share capital contribution to Co-operative Credit Institutions.	142.53	120.00	150.00	448.085	1,500.00	300.00	
4	Subsidy to the Orissa State Co-operative Land Development Bank for creation of common care of key personnel.	5.15	2.00	2.10	6.50	70.00	20.50	
5	Outright grant for incentive award for collection.	..	..	..	..	10.00	2.00	
6	Subsidy for mobilisation of deposits.	..	..	..	..	11.00	2.20	

7	Establishment of Agricultural Credit Stabilisation Fund of O. S. C. L. D. Bank.	..	..	..	..	5.00	1.00
8	Rehabilitation of weak Central Co-operative Bank.	..	..	..	..	10.00	4.00
9	Subsidy to Central Co-operative Bank for appointment of key personnel and supervisory staff.	3.50	..	..	3.50	..	..
10	Subsidy to Central Co-operative Bank for opening of branches.	1.00	..	..	0.75	..	..
11	Subsidy for managerial staff for potential viable society.	2.31	..	..	1.81	..	..
12	Subsidy for Central Co-operative Bank and Credit Societies for membership drive of small farmers.	2.00	..	..	1.25	..	..
13	Subsidy to Central Co-operative Bank for appointment of supervisory in backward areas.	0.90	..	..	0.90	..	..
14	Common Cadre Schemes of the Orissa State Co-operative Bank and Central Co-operative Bank.	2.50	..	..	0.25	10.00	1.40
15	Subsidy to Primary Land Development Bank for managerial staff.	0.72	0.70

Total	..	195.11	138.00	168.10	509.165	1,672.00	346.98
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(Rupees in lakhs)

Serial No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during 4th Plan	5th Plan total outlay	Annual Plan for 1974-75	Remarks
1	2	3	4	5	6	7	8	9
Marketing—								
1	Share capital to new R. C. M. S.	2.00	0.509	0.50	2.00	..	..
2	Revitalisation of Co-operative Marketing Society.	5.00	1.75	1.75	5.00	10.00	5.00	Outlay for 5th Five-Year Plan is for revitalisation of existing R. C. M. S.
3	Managerial subsidy to fruit and vegetable and other commodity M. S.	0.70	0.10	0.10	0.40	1.00	0.20	Ditto
4	Loans to R. M. C. S. for purchase of transport vehicles.	6.10	1.50	1.50	3.20	..	..
5	Subsidy to Marketing Societies for price fluctuation fund.	5.00	1.375	1.375	4.39	10.00	2.00	
6	Creation of common cadre at the Apex Marketing Co-operative Society.	3.50	0.90	0.90	3.19	2.50	0.50	

7	Promotional and assesment cell at the Apex Marketing Co-operative Society.	0.70	..	..	0.70	..	..
8	Development of coconut marketing.	0.50	0.115	0.115	0.505	..	..
9	Subsidy for interest on loan obtained from O. S.F. C by the Marketing Society.	2.38	1.50	1.50	4.33	..	..
10	Subsidy to Marketing for opening of Branches.	4.50	2.00	2.00	3.00	..	..
11	Organisation of fruit and vegetable and other commodity Marketing Co-operative Society.	..	..	..	..	3.00	0.50
12	Margin money for purchase of transport vehicles.	..	..	..	..	5.00	1.00
13	Subsidy to F. M. C. S. for purchase of transport vehicles.	..	..	..	..	3.20	1.20
14	Share capital to F. M. C. S.	..	..	..	..	5.00	1.00
15	Loan-cum-Subsidy to new R. C. M. S. godown.	2.80	..	..	2.12	..	..
16	Loans to Utkal Ayurvedic Pharmacy.	..	..	..	0.50	..	..
Total ..		33.18	9.74	9.74	29.335	39.70	11.40

(Rupees in lakhs)

Serial No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during 4th Plan	Fifth Plan total outlay	Annual Plan for 1974-75	Remarks
1	2	3	4	5	6	7	8	9

Co-operative Processing other than Sugar Factory

1	Modernisation of rice mills ...	42.00	10.00	10.00	39.24	48.16	11.84	
2	Managerial susidy to Rice Mills.	1.38	..	..	0.96	..	..
3	Subsidy to cashewnut processing.	0.20	0.05	0.05	0.19	..	-	
4	Share capital to Cashewnut Processing Unit.	2.00	0.75	0.75	3.05	..	..
5	Loan to Cashewnut Processing Unit.	..	..	..	0.10	..	..
6	Share capital to Turmeric Power plant.	0.15	..	..	0.15	..	..
7	Share capital to Coconut Marketing Society for oil expeller.	0.20	..	..	0.20	..	..
8	Establishment of dal mill ..	1.00	0.50	0.50	1.00	3.24	1.08	
9	Share capital to oil mill ..	..	0.835	0.835	1.80	..	..

10	Re-organisation of D a n p u r J.M. C. S.	..	..	..	..	5.00	1.00
11	Share capital to jute mill	..	..	..	..	5.00	1.00
12	Cotton Ginning Plant	..	..	..	..	5.00	2.50
	Total	..	46.93	12.135	12.135	46.69	66.40

Co-operative Sugar Factory

1	Share Capital to Sugar Factory	11.00	..	..	36.00	30.00	30.00
2	Distillery Unit	..	..	..	7.00	8.00	..
3	Short term loans to Sugar Factory.	..	..	..	7.00	--	..
	Total	..	11.00	..	..	50.00	38.00

Co-operative Storage

1	Co-operative Godowns	..	9.00	5.935	5.935	28.560	28.00
2	Subsidy for hiring of godown	..	1.50	0.25	0.25	1.50	..
3	Co-operative Cold Storage	..	15.00	..	..	20.247	6.00
4	Co-operative Supplies	..	..	..	..	..	2.00
	Total	..	25.50	6.185	6.185	50.307	36.00

	Grand Total	..	116.61	28.06	28.06	176.332	180.10
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(Rupees in lakhs)

Serial No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during 4th Plan	Fifth Plan total outlay	Annual Plan for 1974-75	Remarks
1	2	3	4	5	6	7	8	9
Consumer Co-operatives								
1. Rural Consumers—								
	(i) Additional share capital to Marketing Co-operative Societies on consumers business.	2.20	0.70	0.70	1.50	10.00	2.40	
	(ii) Managerial subsidy to Marketing C. S. on consumers business.	0.80	0.23	0.23	0.43	2.00	0.40	
	Total	3.00	0.93	0.93	1.93	12.00	2.80	
2. Urban Consumers (Primary Store).								
	(i) Share capital to Primary/ Branch Stores.	0.68	0.28	0.28	0.76	20.00	4.60	
	(ii) Additional share capital to existing Primary/ Branch Stores.	0.90	0.10	0.10	0.76	..	..
	(iii) Managerial subsidy to Primary/Branch Stores.	0.39	0.07	0.07	0.315	4.00	0.80	

(iv) Spill-over Managerial subsidy.	0.10	0.04	0.04	0.10	..	..
(v) Assistance for furniture, fixture and fitting, etc., for strengthening of Primary Stores.	1.05	0.42	0.42	1.05	..	..
Total ..	3.12	0.91	0.91	2.985	24.00	5.40
3. Organisation of New Wholesale Stores						
(i) Share Capital ..	3.00	0.75	0.75	3.73	5.00	5.00
(ii) Loan-cum-Subsidy for construction of godown.	1.40	0.70	0.70	1.75	..	..
(iii) Loan-cum-Subsidy for purchase of truck.	2.00	0.50	0.50	0.50	..	..
(iv) Managerial subsidy ..	0.38	0.04	0.04	0.385	0.50	0.10
(v) Spill-over Managerial subsidy.	..	0.10	0.10	0.10	..	..
(vi) Development of large size retail outlets.	2.65	0.85	0.85	2.57	..	..
(1) Share Capital ..	..	..	..	..	1.50	0.30
(2) Subsidy ..	..	..	..	..	0.25	0.05
(vii) Construction of business premises of Wholesale stores.	1.00	0.50	0.50	1.00	..	..
(viii) Assistance for Refrigerator Van.	4.00	0.30	0.30	0.60	..	..
Total ..	14.43	3.74	3.74	10.635	7.25	5.45

Serial No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during 4th Plan	Fifth Plan total outlay	Annual Plan for 1974-75	Remarks
1	2	3	4	5	6	7	8	9

4 (I) Rehabilitation and strengthening of Wholesale stores.

(i) Share Capital ..	..	..	..	..	..	27.00	6.00	
(ii) Managerial subsidy ..	..	..	..	..	..	0.40	0.20	
(II) Loan-cum-subsidy for purchase of truck.		1.00	..	..	..	..	-
Total ..		1.00	..	..	..	27.40	6.20	

(III) Departmental Store—

(i) Share Capital ..	3.00	1.50	1.50	4.50	8.00	4.00		
(ii) Assistance for furniture, fixture and fittings.	1.00	0.50	0.50	1.50	..	..
(iii) Loan for construction of buildings.	2.00	1.00	1.00	2.00	..	..
(iv) Managerial subsidy ..	0.18	0.05	0.05	0.18	0.20	0.10		
(v) Spill-over subsidy ..	0.10	0.05	0.05	0.15	..	..
Total ..	6.28	3.10	3.10	8.33	8.20	4.10		

5	Agricultural Inventory Lasses Funds.	1.76	0.40	0.40	2.03	..	..
		1.76	0.40	0.40	2.03	..	..
6	(a) University Store—						
	(1) Share Capital ..	..	..	—	..	2.50	1.50
	(2) Loan —	2.00	..	..	0.50	..	—
	(3) Managerial subsidy ..	0.20	—	..	0.08	0.25	0.05
	(b) College Stores—						
	(1) Share Capital ..	0.32	0.16	0.16	0.36	..	..
	(2) Share Capital to existing College Stores.	0.16	0.08	0.08	0.16	—	..
	(3) Managerial subsidy and spill-over managerial subsidy.	0.12	0.09	0.09	0.14	..	..
	Total ..	2.80	0.33	0.33	1.24	2.75	1.55
7	Strengthening of Consumer Federation—						
	(1) Share Capital ..	1.00	1.00	1.00	2.00	15.00	4.00
	(2) Loans for distribution of control cloth.	..	..	..	5.00	..	..
	(3) Loan-cum-subsidy for godown.	1.00	—	..	..	..	..

(Rupees in lakhs)

Serial No.	Programme	Fourth plan approved outlay	Approved outlay for 1973-74	Likel expenditure 1973-74	Li kely expenditure during 4th Plan	Fifth plan total outlay	Annual Plan for 1974-75	Remark
1	2	3	4	5	6	7	8	9
	(4) Subsidy for Promotion Cell.	..	..	..	..	1.40	0.70	
	(5) Formation of Managerial Cadre.	0.09	0.09	0.09	0.18	2.00	1.00	
	Total ..	2.09	1.09	1.09	7.18	18.40	5.70	
8 Consumers Industries—								
	(1) Share capital ..	0.13	..	..	..	..	..
	(2) Managerial subsidy ..	0.06	..	..	0.04	..	..
	(3) Grant of periodically inventory losses funds.	0.05	..	..	..	..	..
	(4) Public relation, member education and study tour.	0.30	..	..	..	..	..
	Total ..	0.99	..	..	0.04	..	..
	Total ..	35.47	10.50	10.50	34.37	100.00	31.20	

Others Training and Education.							
(a) Education of non-officials peripatetic parties.	}	15.50	4.00	4.00	18.00	35.50	7.00
(b) Junior Co-operative Training School.							
(c) Subsidy to Orissa State Co-operative Council.		0.09	0.01	0.01	0.03	0.15	0.03
Total	--	15.59	4.01	4.01	18.03	35.65	7.03
9 Co-operative Farming	..	0.01	..	..	0.003	5.02	0.60
(a) Assistance to District Labour Construct Co-operative Union.		0.80	..	..	0.02	1.67	0.33
(b) Share Capital to Engineering Co-operatives.		..	0.24	0.24	0.68	0.88	0.88
Total	..	0.81	0.24	0.24	0.703	7.57	1.81
10 Additional Departmental Staff.		36.41	11.19	11.19	35.54	104.68	20.00
Grand Total	..	400.00	192.00	222.10	774.14	2100.00	473.84

Annexure II

Physical Programmes Target and Achievement relating to Agricultural Credit & Co-operative Marketing

Sl. No.	Item	Unit	1968-69 level	Fourth plan		Level expected during 1973-74	Fifth Plan Target		Remarks
				Target	Likely achievement		Total	1974-75	
1	2	3	4	5	6	7	8	9	10

II. Co-operation

(i) Primary Co-operative Societies.

(Agricultural credit)

Number .. No. 4471 3323 3323 123 3350 3323 ..

Membership .. No. 1365000 2000000 1680000 105000 2150000 1775000 ..

Share capital of Members. Rs. in lakhs. 374.91 600 520 600 1000 670

(ii) Agricultural credit.

(a) Short and medium term advance during the year. Rs. in crores 10.99 85.84 64.38 18.00 183.00 24.00

Amount outstanding at the end of the year. Rs. in Crores. 18.29 34.00 34.00 8.00 75.00 41.00

(b) Long term Advances during the year. Rs. in crores. 2.12 47.46 20.04 6.50 62.00 8.00

Amount outstanding at the end of the year. Rs. in crores 6.06 50.00 20.00 2.00 62.00 25.00

Marketing Processing and Storage :—

Storage capacity available.	No	Rural-404 Mkg. 48	50,000 T	Unit—438 Cap. 54650 T.	Unit—438 Cap. 54650	Unit—132 Cap. 15900 T	50,000 T	10,000 T	Utilisation forth Five Year Plan end.
		452							

Primary Marketing Societies Nos.

For fertiliser 90000 T
For foodgrain 12000 T
For others 2650 T

Business handled by Marketing Co-operative Society during the year.

Figures not available

800·00 Rs. in lakhs
800·00

800·00 2,440·00

Rs. in lakhs
1000·00

Fifth Five-Year Plan anticipated

For fertiliser 135000 T
For Foodgrain 16000 T
For others 3650 T

(v) Processing Societies Rice Mills (Units) Business handled).

46

46

42
Rs. in lakhs
487·23

42
Rs in lakhs
487·23

42
200

10
Rs. in lakhs
1500·00

2
300·00

4 units have been dropped during Fourth Plan.

Sugar Factory (Unit).

1

1

1

2

1

Sugar Factory (Production).

In lakhs 0·30193
0·11272 MT.

0·30193

0·4000

1·50

0·10

Cotton ginning & Precession Units (business handled).

2

1

Annexure III

Physical Targets and Achievements

Base Level for the Terminal years 1973-74 and 1978-79 with regard to Membership Coverage of Agricultural family percentage of borrowing members and advancement of short-terms, medium-terms and long-term loans.

State—Orissa

Serial No.	Item	Unit	Fourth Plan (Anticipated) Achievement, 1973-74	Fifth Plan Target, 1978-79	REMARKS
1	2	3	4	5	6
1	No. of Primary Agricultural Credit Societies at the end of the year.	No.	3,323	3,350	(Reorganised).
2	No. of viable Primary Agricultural Credit Societies at the end of the year.	No.	1,500	3,350	
3	Membership of Primary Agricultural Credit Societies at the end of the year.	In thousand	1,680	2,150	
4	Coverage of Agricultural families at the end of the year.	Percentage	58	74	
5	Percentage of borrowing members.	Percentage	25	75	
6	Short-term loan advanced during the year.	Rs. in crores	15.00	40.00	
7	Medium-term loans advanced during the five years of the plan.	Rs. in crores	9.14	39.00	
8	Long term loans advanced by Land Development Banks during the five years of the plan.	Rs. in crores	20.04	62.00	

Serial No.	Item	Unit	Fourth Plan (Anticipated) Achievement, 1973-74	Fifth Plan Target, 1978-79	Remarks
1	2	3	4	5	6
9	Agricultural Produce Marketed by Co-operatives during the year (Value in crores of rupees).	..	8.00	24.40	
10	No. of crop processing units installed at the end of the year (commodity-wise)—	No.	..	..
	(i) Sugar Factories ..	2	2	..	
	(ii) Rice Mills ..	46	42	10	
	(iii) Dal Mills ..	2	2	3	
	(iv) Cottonginning and processing ..	..	..	1	
	(v) Jute Bailing units ..	..	..	..
	(vi) Jute Mills ..	..	..	..
	(vii) Oil seeds Units (Mill) ..	..	11	..	
	(viii) Plantation crops units ..	..	..	..
	(ix) Dairing units ..	..	..	..
	(x) Fruits vegetable units ..	..	..	6	
	(xi) Cold Storages ..	13	14	3	
	(xii) Other (Cashewnut, Coconut, Termeric powder).	5	5	..	
11	Fertilisers retailed by Co-operatives during the year (Value in crores)—	..	10.00	49.37	
	(i) Quantity in terms of materials.				
	M. T. ..	..	1.31 lakhs M. T.	6.48 lakhs M. T.	
	(Value) ..	..	10.00 crores	49.37 crores	
	No. of Co-operatives/retailed fertiliser depots at end of the year.	2,792	2,792 units	3,000	

Serial No.	Item	Unit	Fourth Plan (Anticipated) Achievement, 1973-74	Fifth Plan Target, 1978-79	Remarks
1	2	3	4	5	6
12	Marketing godowns assisted up to the end of the year.	..	122	..	
	(a) Constructed up to the end of the year.	..	43	} 50,000 tonnes	
	(b) Capacity up to the end the year (Thousand tonnes).	..	27,850 M. T.		
13	(a) Rural godowns assisted up to the end of the year.	No.	..	768	
	(b) Constructed up to the end of the year.	No.	..	341	
	(c) Capacity up to the end of the year.	Tonnes	1,000	76,800	
14	Distribution of consumer articles during the year (in crores of rupees).	..	0.50	2.00	
15	Retail sale of urban consumers during the year (in crores of rupees).	..	1.50	4.00	

Annexure IV
CO-OPERATION

Schemes of the 5th plan showing the continuing and new Schemes separately
State—Orissa (Rs. in lakhs)

Sl. No.	Title of the Scheme	Whether continuing/new	Fourth Plan		Fifth plan outlay	Remarks	
			Outlay	Anticipated expenditure			
1	2	3	4	5	6	7	
A—CREDIT							
1	Subsidy for establishment of a pool of managerial staff for Primary Societies and Central Banks.	Continuing..	23.23	35.48	50.00		
2	Out-right grant for Incentives award for collection.	New		—	10.00		
3	Subsidy for mobilisation of deposits.	New	..	—	11.00		
4	Out-right grant to Primary Agricultural Co-operative Societies and Central Co-operative Banks for special bad debt reserve.	Continuing..	11.27	9.94	6.00		
5	Rehabilitation of weak Central Co-operative Banks.	New	..	..	10.00	
6	Share capital contribution to Co-operatives Credit Institutions.	Continuing..	1,42.53	4,48.085	1,500.00		
7	Subsidy to Orissa State Co-operative Land Development Bank for creation of common cadre of key personnel.	Do.	5.15	6.50	70.00		
8	Establishment of Agriculture Credit stabilisation fund of Orissa State Co-operative Land Development Bank.	New	..	..	5.00	
9	Common Cadre Scheme of Orissa State Co-operative Bank and Central Co-operative Bank.	New	..	..	10.00	
Total credit					..	16,72.00	

(Rs. in lakhs)

Sl. No.	Total of the Schemes	Whether continuing/new	Fourth Plan		Fourth Plan outlay	Remarks
			Outlay	Anticipated expenditure		
1	2	3	4	5	6	7

B—MARKETING**I. Co-operative Marketing**

1	Organisation of fruit, vegetable and other commodities Marketing Co-operative Society.	New	..	--	3.00	
2	Managerial subsidy to fruit and vegetable and other commodity Marketing Co-operative Society.	New	--	..	1.00	
3	Revitalisation of Co-operative Marketing Co-operative Society.	New	..	..	10.00	
4	(i) Margin money for purchase of transport vehicles.	Continuing	6.10	3.20	5.00	
	(ii) Subsidy to Forest Marketing Co-operative Society for purchase of transport vehicle.	New	..	..	3.20	
5	Subsidy to Marketing Society of Price Fluctuation Fund.	Continuing	5.00	4.39	10.00	
6	Creation of common cadre at the level of Apex Marketing Co-operative Society.	Do.	3.50	3.19	2.50	

(Rs. in lakhs)

Sl. No.	Total of the Schemes	Whether continuing/new	Fourth Plan		Fourth Plan outlay	Remarks	
			Outlay	Anticipated expenditure			
1	2	3	4	5	6	7	
7	Share capital to Forest Marketing Co-operative Society.	New	..	..	5.00	
II. Co-operative Processing other than Sugar Factory.							
1	Modernisation of Rice Mills.	Continuing	42.00	39.24	48.16		
2	Establishment of Dal Mill.	Ditto	1.00	1.00	3.24		
3	Re-organisation of Danpur Jute Marketing Co-operative Society.	New	..	..	5.00	
4	Share Capital to Jute Mills.	New	..	..	5.00	
5	Cotton Ginning Plant	New	..	..	5.00	
III. Co-operative Sugar Factory							
1	Share Capital to Sugar Factory.	Continuing	11.00	36.00	30.00		
2	Distillery Unit ..	New	..	..	8.00	
IV. Co-operative Storage							
1	Co-operative Go-down.	Continuing	9.00	28.56	28.00		
2	Co-operatives Cold Storage.	Do.	15.00	20.247	6.00		
3	Co-operative Supplies	New	..	--	2.00		
Total Marketing					..	180.10	

(Rs. in lakhs)

Sl. No.	Title of the Scheme	Whether continuing/new	Fourt Plan		Fifth Plan outlay	Remarks
			Outlay	Anticipated expenditure		
1	2	3	4	5	6	7

C—CONSUMER CO-OPERATIVES

1 Cosumer Co-operatives
Rural Consumer—

(i) Additional Share Capital to Marketing Co-operative Societies for Consumer Business. Continuing 2.20 1.50 10.00

(ii) Managerial Subsidy to Marketing Co-operative Societies on Consumer Business. Continuing 0.80 0.43 2.00

2 Urban Consumer (Primary Stores)—

(i) Share Capital to Primary Branch Stores. Continuing 0.68 0.76 20.00

(ii) Managerial Subsidy to Primary Branch Stores. Continuing 0.39 0.315 4.00

3 Organisation of New Wholesale Stores—

(i) Share Capital .. Continuing 3.00 3.73 5.00

(ii) Managerial Subsidy. Continuing 0.38 0.385 0.50

(iii) Development of Large-sized retail outlets. Continuing 2.65 2.57 ..

1. Share Capital 1.50

2. Subsidy 0.25

(Rs. in lakhs)

Sl. No.	Name of the Schemes	Whether continuing/new	Fourth Plan		Fifth Plan outlay	Remarks
			Outlay	Anticipated expenditure		
1	2	3	4	5	6	7

4 Rehabilitation and strengthening of Wholesale Store—

1. Share Capital ..	New	..	..	27.00
2. Managerial Subsidy.	New	..	..	0.40

Departmental Stores—

(i) Share Capital ..	Continuing	3.00	4.50	8.00
(ii) Managerial Subsidy.	Continuing	0.18	0.18	0.20

5 University Stores—

(i) Share Capital ..	New	..	..	2.50
(ii) Managerial Subsidy.	Continuing	0.20	0.08	0.25

6 Strengthening of Consumer Federation—

1. Share Capital ..	Continuing	1.00	2.00	15.00
2. Subsidy for Promotional Cell.	New	..	—	1.40
3. Formation of Managerial Cadre.	Continuing	0.09	0.18	2.00

Total—Consumer 100.00

No.	Title of the Scheme	Whether continuing/new	Fourth Plan		Fifth Plan outlay	Remarks
			Outlay	Anticipated expenditure		
1	2	3	4	5	6	7
D—OTHERS—						
1	Co-operative Education and Training—					
	(a) Education of non-officials peripatatic parties.	..	15 50	18 00	35 50	..
	(b) Junior Co-operative Training School.					
	(c) Subsidy to Orissa State Co-operative Council.	..	0 09	0 03	0 15	..
			15 59	18 03	35 65	..
2	Co-operative Farming.	..	0 01	0 003	5 02	..
3	Assistance to District Contract Co-operative Union.	..	0 80	0 02	1 67	..
4	Share Capital to Engineering Co-operatives.	..	..	0 68	0 88	..
		..	0 81	0 703	7 57	..
5	Additional Departmental Staff.	..	36 41	35 54	104 68	..
	Total—Others.	..	52 81	54 273	147 90	..

Annexure I

Warehousing and Marketing

(Rs. in lakhs)

Sl. No.	Title of the scheme	Whether continuing/new	Fourth Plan		Fifth Plan outlay	Outlay 1974-75
			Outlay	Anticipated expenditure		
1	2	3	4	5	6	7
1	Regulation of market	.. Continuing	7.25	5.06	29.00	5.00
2	Grading and standardisation	.. Do.	1.60	1.42	3.00	0.50
3	Market research, survey and enterim	.. Do.	1.85	1.61	5.00	1.00
4	Training in marketing	.. Do.	0.36	0.14	0.50	0.10
5	Share capital contribution to State Warehousing Corporation.	Do.	0.94	2.76	12.50	2.50
6	Integrated scheme for improvement of of Market intelligence.	Do.	3.00	2.10	7.56	1.50
		Total ..	15.00	13.09	57.56	10.60

Chapter 2·5

COMMUNITY DEVELOPMENT AND PANCHAYATS

(i) COMMUNITY DEVELOPMENT

In 1961 Panchayat Samitis and Zilla Parishads were established in the State at Block and District Levels. Prior to this, the entire State was covered by Grama Panchayats at the village level. Thus the Grama Panchayats, Panchayat Samitis and Zilla Parishads formed the three tiers of the Panchayati Raj set up in the State.

2. The Zilla Parishads as constituted during the year 1961 had no power to execute any development work. Subsequently during the year 1967, the Zilla Parishads were abolished as they had no useful role to play in regard to actual execution of development works.

Review of Progress during Fourth Plan period

3. By the end of the year 1965-66, the entire State had been covered by Community Development Blocks, numbering 314 in all.

4. The phasing of Blocks during the Fourth Plan is indicated below:—

Stage of th. Block	1969-70	1970-71	1971-72	1972-73	1973-74
Stage-I	6½ (13 Stage-I Blocks continued for 6 months after which they were reverted to Stage-II phase.)				
Stage-II	167	150	125	75	43
Post-Stage-II	140½	164	189	239	271
	314	314	314	314	314

5. Against the Fourth Plan outlay of Rs. 400 lakhs the expenditure is likely to be Rs. 398.66 lakhs out of which Rs. 81.29 lakhs would be spent on staff and Rs. 378.36 lakhs on developmental works mainly under Agriculture, Animal Husbandry, Irrigation, Health and Rural Sanitation, Education, Social Education, Rural Arts and Crafts and Communication. The main physical targets and achievements during the Fourth Plan period are indicated in Annexure-I.

6. During the Fifth Plan period the Blocks will have to function effectively as the primary unit of development agency. The responsibility of the Block machinery will be increased considerably in connection with the implementation of the Minimum Needs Programme and other development programmes by ensuring people's participation to the maximum. It is assumed that the Crash Scheme for Rural Employment which is now implemented in the Central Sector will be transferred to the State Sector. Considering the work-load of Blocks in the Fifth Plan, it is absolutely necessary to strengthen the administrative machinery of the Blocks suitably. Keeping these broad objectives in view, the following programmes are proposed to be included in the Fifth Plan, namely:—

(1) *Continuance of 13 Stage-II Blocks*—13 Stage-II Blocks will continue for first six months of the year, 1974-75. The Stage-II Blocks are given financial assistance at the rate of Rs. 1 lakh per annum. Therefore, for six months, a provision of Rs. 6.50 lakhs is required. This will be spent for various approved schematic schemes.

(2) *Social Action Programme*—In order to secure people's participation in the increasing developmental activities under the Minimum Needs Programme, Employment Oriented Programmes Agricultural Programmes and various social action schemes will be implemented during the Fifth Five-Year Plan period in the rural areas. The details of these schemes are given below:—

(i) Assistance to Mahila Samitis and Yubak Sanghas at rate of Rs. 2,000 per Block per year for 314 Blocks for 5 years.	Rs. 31,40,000
(ii) Organisation of Craft Centres for Mahila Samitis (3 Centres per Block) @ Rs. 900 for 314 Blocks for 5 years.	Rs. 14,13,000
(iii) Baby shows at the rate of Rs. 100 per Block per year for 314 Blocks for 5 years.	Rs. 1,57,000
(iv) Nutritional demonstration @ Rs. 185 per Block per year for 314 Blocks for 5 years.	Rs. 2,90,450
Total ..	Rs. 50,00,450

(3) *Strengthening of Block staff and replacement of old jeeps*—The Blocks will continue to be the unit of development administration at the village level. Due to large scale retrenchment of various staff during the year, 1967, the Block administrative machinery has now become very weak and it is not possible to implement the various important programmes like Drinking Water Supply Projects, construction and improvement of Primary School buildings, Integrated Child Care Services including feeding etc., proposed for Fifth Five-Year Plan, unless the administrative machinery is considerably strengthened. Therefore, it is proposed to appoint the following additional staff :—

- (i) There are at present 88 Lady Social Education Organisers in 88 Blocks. It is proposed to appoint one Nutritional Extension Officer (S. E. O.) in the remaining Blocks of the State.
- (ii) There are at present 673 Engineering Overseers in the Blocks out of which 314 are under the normal C. D. Programme, 71 under T. D. Schemes, 286 under Crash Programme and 2 under other special schemes. It is proposed to provide one more Engineering Overseer in each Block to cope with the increased work-load during the Fifth Five-Year Plan period.
- (iii) There are at present 3,140 V. L. Ws., and 314 Lady V. L. Ws., under the normal C. D. programmes. Besides there are 1,350 V. L. Ws., under the Intensive Agriculture Schemes and 112 Lady V. L. Ws. under the Nutrition Programme. In order to reduce their operational areas for more efficient execution of various schemes, it is proposed to appoint 370 more V. L. Ws. and 215 more Lady V. L. Ws. during the Fifth Five Year-Plan.
- (iv) In view of the increase of the number of Engineering Extension Officers and S. E. Os. at least one additional Peon has to be provided in each Block during the Fifth Plan period.
- (v) (a) There is need for providing one Additional B. D. O. in each Agricultural Intensive Block and T. D. Block. Necessary provision on this account has been made in Agriculture and Tribal & Rural Welfare Departments.

- (b) Besides, the skeleton ministerial staff of the Block consisting of one Head Clerk-cum-Accountant, one U. D. Clerk and one L. D. Clerk-cum-Typist is not at all able to cope with the additional work-load entrusted by the different Departments of Government. Due to limited provision for the C. D. Programme, it is proposed to provide additional staff in the Education budget.

(vi) 209 Block Jeeps require replacement during the Fifth Five-Year Plan period.

(4) *Training of V. L. Ws etc.*—(a) (i) In order to meet the additional requirement of V. L. Ws. during the Fifth Five-Year Plan under different schemes, it is proposed to train 1,570 more V. L. Ws. in the Grama Sevak Talim Kendras of Bhubaneswar, Bolangir and Rangeilunda. For this purpose some additional buildings, furniture and staff are required. Besides, the rate of stipend per head is proposed to be increased from Rs. 50 to Rs. 60 per month. In addition, under Applied Nutrition programme, a sum of Rs. 6.25 lakhs for the Fifth Plan is provided for training of various functionaries under that programme. This will be continued. The amount is re-imbursable from the UNICEF. It is also proposed to train 1,150 more Lady Village Level Workers during the Fifth Five-Year Plan so as to meet the additional requirement under different schemes. For this purpose the two Home Economic Training Centres at Bhubaneswar and Barpali need strengthening by appointment of additional staff. Some more buildings are also required to be constructed. Besides, provision has to be made for payment of stipends to the trainees.

(ii) Higher training to 50 Matriculate V. L. Ws. will also be provided each year in each of the 3 G. S. T. Ks. of the State.

(b) The total requirement of funds for various training programmes during the Fifth Five-Year Plan period will be as follows:—

(i) Training of additional V. L. Ws. in 3 G. S. T. Ks. including Rs. 6.25 lakhs for training cost of A. N. P. ..	Rs. 29,70,720
(ii) Higher Training of V. L. Ws.	Rs. 11,15,000
(iii) Training of Lady V. L. Ws. in two H. E. T. Cs. ..	Rs. 5,95,000
	Rs. 46,89,720

(5) *Cvash Scheme for Rural Employment*—The Crash Scheme for Rural Employment was introduced with effect from the 1st April 1971 as a Central Sector Scheme with a view to alleviate the problem of unemployment and under employment in rural areas. The total number of uneducated unemployed persons at the end of the Fifth Five-Year Plan will be 24 lakhs. It will not be possible to provide for employment of all these persons as a huge investment would be required for the purpose. Therefore, it is proposed to implement a modest programme of Rs. 120 lakhs per year and during the Fifth Five-Year Plan, the total outlay required for the purpose will be Rs. 600 lakhs. With this investment, it will be possible to provide employment to 6.37 lakhs of uneducated persons. This scheme is proposed for inclusion in the State Sector on the presumption that the Central Sector Scheme will be no longer continue in the Fifth Five-Year Plan.

6 Scheme-wise outlay for the Fifth Plan is shown in Annexure II.

Annexure I

Target and Achievement during the Fourth Plan

Item	Target	Achievement
(1)	(2)	(3)
I. Agriculture—		
1. Improved seeds distributed (quintal) ..	34,49,668	36,01,171
2. Fertilisers distributed (quintal) ..	79,43,580	45,65,714
3. Pesticides distributed—		
(a) Power (Kg.) ..	20,97,767	10,72,095
(b) Liquid (litre) ..	5,92,168	4,05,585
4. Demonstration held (No.) ..	25,682	23,766
5. Compost produced (metric tonne) —	2,14,71,398	2,40,34,982
II. Minor Irrigation—		
Net additional area likely to be irrigated through Minor Irrigation (Hect.)	1,62,759	39,713
III. Social Education—		
1. No. of beneficiaries under Feeding Programme—		
(a) Women ..	14,44,112	1,44,464
(b) Pre-School Children ..	3,24,181	3,35,923
2. Poultry Units maintained (No.) ..	732	143
3. Birds reared in above (No.) ..	10,177	2,267
4. Radio supplied (No.) —	1,687	460
5. Sewing Machines distributed (No.) ..	1,672	1,815
6. Grama Sahayak Camp Organised (No.) ..	593	176
7. Grama Sahayak Youth Training Camp Organised (No.)	9,004	2,444
IV. Communication—		
1. Length of new Katcha Road (Km.) ..	12,789	9,513
2. Length of existing Katcha Road improved (Km.) ..	43,775	38,162
3. Culverts constructed (No.) ..	7,372	3,724
4. Culverts repaired (No.) ..	2,937	928

Annexure II

Scheme for Fifth Plan

(Rs. in lakhs)

Name of the scheme	Outlay proposed for Fifth plan	Outlay proposed for 1974-75
(1)	(2)	(3)
(a) Continuance of 13 Stage II Blocks	6.50	6.50
(b) Social Action Programme	50.00	10.00
(c) Strengthening of Block staff and replacement of old Jeeps—		
(i) Social Education Organiser	53.46	10.69
(ii) Sub-Assistant Engineer	100.00	20.00
(iii) V. L. W. and Lady V. L. Ws.	100.38	20.08
(iv) Peons	30.06	6.01
(v) Replacement of old Jeeps	62.70	12.54
Total—c	346.60	69.32
(d) Training of V. L. Ws. etc—		
(i) Training of V. L. Ws. in three Grama Sevak Talim Kendras, including Rs. 6.25 lakhs for training cost of A. N. P.	29.80	5.96
(ii) Training of Lady V. L. Ws.	5.95	1.19
(iii) Higher Training to V. L. Ws.	11.15	2.23
Total—d	46.90	9.38
(e) Crash Scheme for Rural Employment	600.00	120.00
Grand Total	1050.00	215.20

(ii) PANCHAYATS

The Orissa Grama Panchayat Act, 1948 was replaced by Orissa Grama Panchayat Act, 1964 with effect from the 22nd January 1965. In view of the unwieldy size of the Grama Panchayat it was decided by Government to reorganise them into smaller units for their efficient functioning. As a result of reorganisation on the basis of reduced population coverage, 3,826 Grama Panchayats have been constituted in the State covering a population of about 2 crores in 46,992 villages. At present the population coverage of each Grama Panchayat varies between 2,000 to 6,000.

Review of the progress up to end of Fourth Plan

2. For the 4th Plan a small outlay of Rs. 20 lakhs was provided for the various Panchayat Schemes. The actual expenditure is anticipated to be Rs. 18.40 lakhs. The aforesaid provision was most inadequate as compared to the requirement of the Grama Panchayats.

3. The following table will indicate the Schemewise position:—

(Rs. in lakhs)

Name of the scheme	Fourth Plan outlay	Anticipated expenditure by end of 4th Plan	Physical target proposed for 4th Plan	Anticipated achievement
1	2	3	4	5
1. Construction of Panchayat Ghars.	7.74	7.74	157 G. P. Ghars to be constructed.	157 G. P. Ghars will be constructed.
2. Construction and improvement of roads.	4.13	3.57	128 Kms. of roads to be completed.	128 Kms. of roads will be completed.
3. Loans to G. Ps. for productive schemes.	2.66	1.62	19 tanks to be renovated and 3 market sheds to be constructed.	19 tanks will be renovated and 3 market sheds will be constructed.
4. Construction of staff quarters.	4.84	4.84	17 IIRB & 8 IIR Ors. to be constructed & 14 IIRB Ors. to be completed.	17 IIRB & 8 IIR Ors. will be constructed & 14 IIRB Ors. will be completed.
5. Panchayati Raj Journal	0.62	0.62	..	..
6. Completion of incomplete Grain Golas.	0.01	0.01	1 Grain Gola to be completed.	1 Grain Gola will be completed.
Total ..	20.00	18.40		

It may be seen from the above that the targets proposed under different schemes will be reached. No particular difficulty or bottleneck was faced in the execution of the schemes. All the Projects taken up during the Fourth Plan period will be completed and there will be no spill over programme for the Fifth Plan.

4. The duties and functions assigned to the Grama Panchayats can be broadly placed under the following categories:

- (i) Provision of the usual municipal services and other civic amenities;
- (ii) Social welfare activities; and
- (iii) Development works.

5. A large number of obligatory functions have been entrusted to the Grama Panchayats by section 44 of the Orissa Grama Panchayats Act. Besides, a good number of discretionary functions have been entrusted to them under section 45 of the Act. Due to the inadequate resources they were not able to take up the multifarious obligatory and discretionary functions as statutorily entrusted to them.

6. The income position of the Grama Panchayats further deteriorated as from the year 1967, the powers of Grama Panchayats in regard to imposition of Panchayat Tax, Vehicle Tax and Profession Tax have been withdrawn. As a result of abolition of these taxes, the financial condition of most of the Grama Panchayats in the State is now deplorable. At present, out of 3,826 Grama Panchayats of the State only 164 Grama Panchayats have income of more than Rs. 10,000 from their internal resources. The other Grama Panchayats of the State are mostly depending on Government grants for taking up various development works.

7. For efficient management of Grama Panchayats, Matriculates with proper training are to be appointed as Secretaries. But due to inadequate resources only 453 Grama Panchayats of the State have appointed whole-time Matriculate Secretaries. The remaining 3,373 Grama Panchayats of the State are not in a position to appoint whole-time Matriculate Secretaries without substantial financial aid from the State Government. Besides, qualified Secretaries, each Grama Panchayat requires a building for holding office and keeping various stock and store. By end of the Fourth Plan 3,142 Grama Panchayats of the State will not be in a position to construct Panchayat Ghars. Further 12,232 Kms. of approved Panchayat roads cannot be brought up to durable standard by the end of Fourth Plan period.

Objectives and targets for the Fifth Plan

8. The broad objective kept in view in preparing the programmes for village Panchayats is to augment the resources of the Panchayats and develop them as self-sustained units, to provide qualified and trained Panchayat Secretaries to enable them to manage the Panchayats more efficiently and to provide certain minimum amenities to the Panchayats. With these objectives in view an outlay of Rs. 180 lakhs is proposed.

9. 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. Besides, an office building has to be provided to each of 3,142 Grama Panchayats of the State.

Specific Projects, Programmes and Schemes

10. As already noted above there are no spillover projects from the Fourth Plan. All the projects proposed for the Fifth Plan are new projects.

11. The outlays of the various schemes proposed for the Fifth Plan are given below :—

- (1) *Construction of Panchayat Ghar*—(a) Every Panchayat requires a building of its own for office accommodation and storage of seeds, fertilisers, etc. In the absence of regular office systematic maintenance of various records and accounts cannot be done.
- (b) By end of the Fourth Plan period, Panchayat Ghars will have been constructed in 684 Grama Panchayats. The remaining 3,142 Panchayats will have to be provided with office buildings during the Fifth Plan period. For each Panchayat Office building, a minimum provision of Rs. 5,000 will be required. In view of limited resources, a provision of Rs. 35.60 lakhs is proposed to be made in the Fifth Five Year Plan for giving grants to Grama Panchayats @ Rs. 2,500 per Panchayat for construction of 2,144 Panchayat Ghars. A similar provision of Rs. 53.60 lakhs will be made by the Grama Panchayats themselves for completion of these Panchayat Ghars.
- (2) *Training of Panchayat Secretaries*—(a) It is absolutely necessary to arrange for the requisite training of Panchayat Secretaries in regard to Panchayat Laws, maintenance of Office records, recording of measurement of works, preparation of simple plans and estimates, etc.
- (b) It is proposed that training of Panchayat Secretaries may be imparted in at least 3 training institutes. One institute will cater to the needs of about four districts.
- (c) The period of training of Grama Panchayat Secretaries will be 4 months and in one batch 80 Secretaries will be trained. Thus, in a year 240 Secretaries will be trained in one training institute. In three training institutes 720 Secretaries will be trained in a year, 226 matriculate trained hands are already available. The remaining untrained Secretaries will be trained during the Fifth Five-Year Plan period.
- (d) A sum of Rs. 1.28 lakhs will be required for running the 3 training institutes. Thus, a provision of Rs. 6.40 lakhs is proposed to be made in the Fifth Plan for this scheme.
- (3) *Loans to Grama Panchayats for productive Schemes*—(a) Government have transferred various public properties like markets, ferries, cattle pounds, tanks, orchards, etc., to the control and management of the Grama Panchayats. By end of 1963-64, 1,012 markets, 759 ferries, 2,095 cattle pounds and 57,046 tanks have been transferred to the Grama Panchayats. In order to develop these public properties, the State Government are advancing loans to the intending Grama Panchayats from year to year. By development of these public properties, the Grama Panchayats will be able to raise some non-tax income. During the Fourth Five Year Plan, the State Government have advanced loans amounting to Rs. 1.62 lakhs for renovation of 19 tanks and construction of 3 market sheds.
- (b) Loans will have to be provided to the Grama Panchayats during Fifth Plan for improvement of these public properties. A provision of Rs. 10 lakhs is proposed to be made in the Fifth Plan for sanction of loans to the Grama Panchayats at the rate of Rs. 2 lakhs per annum. With this investment it will be possible to renovate 100 tanks and construct 100 market-sheds.
- (4) *Construction of staff quarters*—(a) By the end of the Fourth Plan period, 8 III R and 52 IIRB quarters will be constructed including the quarters constructed prior to Fourth Plan.
- (b) A large number of staff have been sanctioned by the Grama Panchayat Department at District and Subdivisional level. Most of these staff have not been provided with any quarters for which they are put to serious difficulties. It is, therefore, proposed to make a provision of Rs. 2 lakhs annually for construction of staff quarters. Thus, during the Fifth Plan period a sum of Rs. 10 lakhs would be required for the purpose. With this outlay it will be possible to construct 5 III R quarters and 42 IIRB quarters.

- (5) *Incentive grants to the Grama Panchayats*—It is proposed to have an outlay of Rs. 100 lakhs in the Fifth Five-Year Plan for sanction as counter-vailing grants to the Grama Panchayats who are able to raise an equal amount by way of various taxes from their respective areas. These grants would be utilised by the Grama Panchayats for taking up various development works approved by Government.

12. In brief the total outlay for Fifth Plan will be as indicated below :—

(Rs. in lakhs)

Sl. No.	Name of the scheme	Proposed outlay for 5th Plan	Physical target proposed for 5th Plan
1	Construction of Panchyat Ghars.	53.60	2,144 G. P. Ghars will be constructed
2	Training of Panchayat Secretaries.	6.40	3,600 G. P. Secretaries will be trained @ 720 per year.
3	Loans to G. Ps. for Productive Schemes.	10.00	100 tanks to be renovated and 100 market-sheds to be constructed.
4	Construction of staff quarters.	10.00	5 IIR & 42 IIRB quarters will be constructed.
5	Incentive grants to G. Ps.	100.00	For execution of various development works at G. P. levels.
Total ..		180.00	

13. An outlay of Rs. 36.00 lakhs is required during 1974-75

CHAPTER 2.6

IRRIGATION AND FLOOD CONTROL

IRRIGATION

Orissa has a total cultivable area of 81,17,000 hectares, out of which the net cultivated area is 75,76,000 hectares, amounting to 93.4% of the former. The State is rich in water resources due to a net work of large and small rivers flowing through the terrain and the total irrigation potential in the State has been assessed to be 53,07,920 hectares under major and medium irrigation. This amounts to 84% of the total irrigation potential of the State i.e. 63,48,312 hectares, and, thus, reveals great potential for further development of flow water resources in the State.

(i) MAJOR AND MEDIUM IRRIGATION

Review of the Progress up to the end of Fourth Plan

2. During the pre-plan period about 1,56,209 hectares were under irrigation. This was raised to 4,80,716 hectares under khariff and 2,22,160 hectares under rabi by the beginning of the Fourth Plan. By the end of the Fourth Plan, it is hoped to achieve khariff irrigation of 6,40,404 hectares and rabi irrigation of 3,08,620 hectares. The details of growth of irrigation potential during the pre-plan and plan periods up to the end of the Fourth Five-Year Plan is given in Appendix-I.

3. During the Fourth Plan, it was proposed to achieve additional irrigation of 197,386 hectares under khariff and 111,750 hectares under rabi. As against this, the likely achievements is 159,681 hectares under khariff and 86,460 hectares under rabi. The short-falls are due to deficiency in the organizational set up, delays in land acquisition, non-availability of earth moving machineries, spare parts, cement, iron and steel and diesel in time and in required quantities. The schemewise details of irrigation potential anticipated and achieved during different years of the Fourth Plan may be seen in Appendix II.

4. The original Fourth Plan allocation for major and medium irrigation projects was fixed at Rs. 24.00 crores, but the anticipated expenditure by the end of the year 1973-74 is Rs. 26.29 crores. It is interesting to note that while the financial targets of the Fourth Plan are likely to be exceeded by the end of the Plan period, there will be short-fall on the physical achievements. This is explained by the escalation in the cost of materials, labour etc. due to which the project costs are going up from year to year. The details of Fourth Plan outlay and anticipated as well as actual expenditure, yearwise during the plan period may be seen in Appendix III.

5. On an analysis of the cumulative potential likely to be created by the end of the Fourth Plan districtwise, it is seen that the percentage of this potential to the total irrigable area varies from nil in Keonjhar district to 0.99 in Koraput, 1.60 in Dhenkanal, 2.80 in Kalahandi, 1.50 in Mayurbhanj and 2.40 in Sunjargarh districts. These six districts of the State have very low achievements under major and medium irrigation. The other seven districts have percentages ranging from 14.50 in case of Phulbani, 56.00 in case of Cuttack. A detailed statement identifying the variations in the levels of developments of different districts of the State may be seen in Appendix IV.

6. Scrutiny of non-going schemes during the Fourth Plan has revealed 3 important constraints in realising the plan targets. These are—

- (i) organizational deficiencies like inadequate staffing pattern in the Designs Directorate and in the field ;
- (ii) non-availability of critical items, like cement and iron and steel materials in time ; and
- (iii) delay in availability of land for distribution systems in particular.

7. For removing these deficiencies in achieving the goals of planning, it is proposed to expand the Designs as well as Field organizations during the Fifth Plan period and to introduce improvements in the land acquisition organisation to speed up delivery of land. It is also proposed to decentralise certain design functions so as to give enlarge powers to field officers for speedy execution of works in the distribution systems.

8. There are 4 continuing major projects under the Fourth Plan and 2 new. Among the former, Hirakud is being completed in all respects by the end of Fourth Plan and Salandi and Derjang are being completed by the first year of the Fifth Plan. As regards Delta, it is proposed to substantially complete the on-going programme by the 3rd year of the Fifth Plan. There are 2 new major projects, namely, Anandapur barrage and Rengali, both of which are likely to be completed by the end of the Fifth plan period. As regards medium projects, there are 8 old continuing and 10 new projects under execution during the Fourth Plan period. Of the 8 continuing schemes, all will be completed under the Fourth Plan excepting the Godahado project, which will spill over to the first year of the Fifth Plan. All the 10 new projects of the Fourth Plan are spilling over to the Fifth Plan and all of them are likely to be completed during the Fifth Plan excepting 3, namely, Utei, Baghua and Dahuka, which are likely to be completed by the first year of the Fifth Plan, for which additional central assistance of Rs. 2.15 crores has been sought for. Details of financial and physical picture of these projects have been given in Appendix II and Appendix III. The total financial requirement of the spill over projects into the Fifth Plan is estimated at Rs. 61.07 crores.

Objectives and Targets for the Fifth Plan

9. The objectives for the Fifth Plan may briefly be stated as follows:—

- (i) to give greater emphasis for completion of on-going schemes including the Delta irrigation project.
- (ii) to locate new projects in such districts of the State as are backward in terms of existing irrigation facilities, and by composition of population.
- (iii) to provide green belts around industrial growth centres
- (iv) to provide relief to chronically drought affected areas (with World Bank Assistance)
- (v) to investigate new schemes in the districts with a view to bring under irrigation 50 per cent of irrigable area in each district within a decade.

10. In addition to the spill-over schemes of the Fourth Plan, it has been proposed to start only 7 new medium projects during the Fifth Plan. The number of new projects has necessarily become small since the main emphasis has been to meet the needs of the continuing projects and their financial requirements. The total outlay proposed on the new projects is only Rs. 12.20 crores, with net additional potential of 17,200 hectares under khariff and 7,320 hectares under rabi. Appendices II and III give in detail the outlay for the spill over projects and the new projects under the Fifth Plan and the irrigation potential to be created under each. The cumulative irrigation potential to be reached by the end of the Fifth Plan period has been assessed at 8,38,894 hectares under khariff and 4,09,050 hectares under rabi.

Specific Projects

11. There are 5 Major projects spilling over into the Fifth Plan, namely, Mahanadi Delta, Salandi, Derjang, Anandapur Barrage and Rengali.

12. It is proposed to complete the Mahanadi Delta in all respects substantially by the end of the third year of the Fifth Plan excepting the Doab between Mahanadi and Chitrotpala and the low laying Bramhagiri area, which requires drainage control before irrigation. The financial outlay proposed for the project is Rs. 15.00 crores during the Fifth Plan including a beginning to be made on the works of Mahanadi Chitrotpala Doab. If an additional sum of Rs. 9 crores can be provided for, this project can be completed in all respects inclusive of the Mahanadi-Chitrotpala Doab and the Bramhagiri area.

13. The Salandi Project is expected to be completed by the end of the first year of the Fifth Plan with an outlay of Rs. 0.70 crores exclusive of recoveries. The items of work left out for execution are gates, spill-way, bridge and extension of small areas in the tail end.

14. The Derjang Project is proposed to be completed as per original planning by the end of the 1st year of the Fifth Plan after providing the gates and completing the work of the distribution systems. The outlay proposed is Rs. 0.40 crores.

15. For the Anandapur Barrage Project, a Fifth Plan outlay of Rs. 15.31 crores has been proposed to complete the project substantially with khariff irrigation of 41,280 hectares and rabi irrigation of 20,230 hectares by end of Fifth Plan by integrating it with Salandi Project.

16. As regards Rengali project, it is proposed to complete the Dam during the Fifth Plan. The expenditure on the dam is expected to be met out of flood control grants to be provided by the Government of India separately and an outlay of Rs. 10.00 crores has been provided to take care of the eventual sharing of cost of the dam on irrigation account.*

17. It is proposed to construct four dams, one on the river Indravati, a tributary of the Godavari and the remaining three on its tributaries to form a single reservoir connected by link channels. It is conceived as an irrigation-cum-power project and is estimated to irrigate 1,21,400 hectares in the drought-affected district of Kalahandi which has no other sizeable irrigation project and which is mostly inhabited by backward and tribal population. It is also estimated to generate 227 M. W. of firm power by utilising a high head of 1180 feet, the installed capacity being 600 M. W. This is obviously an attractive project. The Project Report is under preparation and is expected to be available in a couple of months. Similarly, the Upper Kolab Project included in the Power Sector of the Plan will use a natural fall for generation of 89 M. W. of Power at 100 per cent load factor, with an installed capacity of 240 M. W. The tail-race water will be picked up by a diversion weir from where two main canals will take off to irrigate about 44,500 hectares. No financial outlay has been proposed for these two irrigation projects at this stage. It is, however, proposed to include these projects in the plan at a later date after completing the requisite formalities like clearance from the Central Water and Power Commission.

18. There are 10 medium projects spilling over into the Fifth Plan period, namely:— Uttei, Baghua, Dahuka, Ong, Sunder, Saipala, Kalo, Dadarghati, Ramiala and Kharkei. Out of these, the first three are proposed to be completed by the end of first year of the Fifth Plan with Central assistance, if available. The total outlay required for these 10 projects is Rs. 20.80 crores. It is expected to achieve the full potential of these projects by the end of the Fifth Plan period.

19. Since the spill over projects are consuming about 80% of the total Fifth Plan outlay the scope for inclusion of new schemes has become very much limited. However 7 projects have been selected out of a districtwise shelf of 114 projects keeping in view the regional imbalances in the percentage of irrigation achieved in the different districts. The details of these projects are given below:—

[Area in 000' hectares and Rs. in lakhs]

Serial No.	Name of the Project	Name of the district	Estimated cost	Potential		B. C. Ratio
				Khariff	Rabi	
1	2	3	4	5	6	7
1.	Ramanadi St. I ..	Ganjam ..	280.00	0.99	0.33	2.74
2.	Daha ..	Ganjam ..	425.40	3.99	1.60	2.22
3.	Remal ..	Keonjhar ..	61.00	4.05	1.21	1.70
4.	Nesa ..	Mayurbhanj ..	299.00	0.62	0.40	1.80
5.	Sunei ..	Mayurbhanj ..	110.50	6.64	3.32	N. A.
6.	Aunli ..	Dhenkanal ..	54.00	3.44	1.72	N. A.
7.	Pillasalki ..	Phulbani ..	160.00	2.49	1.25	1.78

20. All these projects are likely to be completed during the Fifth Plan period, excepting Sunei, which may spill over into the Sixth Plan. These projects have been selected with due regard to their technical feasibility and cost benefit ratio.

Regional Imbalance and Area Development

21. It is unfortunate that our previous planning did not help in the removal of the regional imbalances. This can be seen from the analysis, given below, of districtwise percentage of cumulative potential that will be achieved by the end of the Fourth Plan, out of the total irrigable area in each district under major and medium irrigation schemes.

Sl. No.	Name of the district	Percentage of cumulative potential by end of Fourth Plan out of the total irrigation potential under major and medium irrigation schemes
1	2	3
1	Balasore ..	52.00
2	Bolangir ..	18.90
3	Cuttack ..	56.00
4	Dhenkanal ..	1.60
5	Ganjam ..	27.40
6	Koraput ..	0.99
7	Kalahandi ..	2.80
8	Keonjhar ..	..
9	Mayurbhanj —	1.50
10	Puri ..	30.60
11	Phulbani ..	14.50
12	Sambalpur ..	36.70
13	Sundargarh ..	2.40

22. From the above, districts lagging behind in respect of the irrigation development can be identified as Dhenkanal, Koraput, Kalahandi, Keonjhar, Mayurbhanj and Sundargarh. The details of the districtwise total irrigable areas, potential created so far, potential to be added through different schemes during the Fifth Plan and percentages etc., have been given in Appendix-IV.

23. As it is imperative to substantially complete the continuing and new schemes of the Fourth Plan during the Fifth Plan period, the impact of Fifth Plan on removal of regional imbalances can mostly be felt through the new schemes of the Fifth Plan. As the scope for inclusion of new schemes in the Fifth Plan is restricted due to limitations of resources available, the regional differences can be relieved to some extent only, the details of which can be seen as below:—

Serial No.	Name of the district		Percentage of the cumulative potential by end of Fifth Plan to be total irrigable area under major & medium irrigation schemes
1	2		3
1	Bolangir	.. ..	28.80
2	Cuttack	.. ..	78.70
3	Dhenkanal	.. ..	17.50
4	Ganjam	.. —	30.00
5	Koraput	.. ..	13.15
6	Kalahandi	.. ..	4.60
7	Keonjhar	.. ..	33.80
8	Mayurbhanj	.. ..	6.35
9	Puri	.. ..	44.70
10	Phulbani	.. ..	16.50
11	Sambalpur	.. ..	37.30
12	Sundargarh	.. ..	2.40
13	Balasore	.. ..	52.00

24. From the above it can be seen that within the limited scope available maximum effort has been made to relieve the regional differences as far as possible. The Fifth Plan will practically pioneer efforts towards removal of regional imbalances.

25. However, the investigation programme during the Fifth Plan has been so formulated that with the necessary organizational expansion to meet the needs of this programme, shelves of completely investigated projects will be ready, which, when completed during the subsequent plans, will boldly relieve the regional differences and bring up the districtwise irrigation development to satisfactory percentages which can be seen in Appendix No. V.

26. The identification of all the backward and tribal areas along with the details of expenditure and potential achievement during the Fourth Plan and Fifth Plan by schemes of the Fourth and Fifth Plans can be seen in Appendix VI.

27. Apart from the objective of removal of regional differences, another objective of the Fifth Plan is to effect area development around the industrial growth centres like Rourkela, Talcher etc., by way of providing green belts around them. This objective can be fulfilled to some extent by Pitamahal project in Sundargarh district and by Derjang, Ramiala, Dadaraghati and Aunli Projects in the Dhenkanal district.

28. For providing relief to chronocally drought affected areas in Kalahandi district and part of Sambalpur, two projects, viz. Norla and Dumerbahal, not listed under Fifth Plan Schemes, will be executed during the Fifth Plan with assistance from the World Bank. Dumerbahal project report has been accepted by the C. W. & P. C. and Norla Project has been completely investigated and the project report is under compilation. Norla and Dumerbahal projects will cost Rs. 81.90 lakhs and Rs. 195.02 lakhs respectively and on completion will generate an irrigation potential of 1,275 hectares of Khariff, 648 hectares of Rabi and 2,832 hectares of Khariff, 1,416 hectares of Rabi respectively.

Administrative Reorganisation, Organisational Planning, Appraisal and Monitoring

29. The details of organisational innovations necessary to meet the demands of Fifth Plan are mentioned below.

30. To meet the requirement of construction designs during the Fifth Plan, it has been proposed to expand the present Directorate of Designs by adding 1 more Circle and 6 more Divisions. It is also proposed to expand the present field organisation suitably to meet the demands of the Fifth Plan.

31. Recently a step has been taken to decentralise the designs functions in such a manner that the Superintending Engineers in the field will have powers to approve the designs for minor and sub-minor irrigation channels including the structures there on. This will, to a large extent, help in expediting the works during the Fifth Plan.

32. As creation of a shelf of completely investigated projects is one of the major objectives of the Fifth Plan, it has been proposed to create a special organisation for investigation and planning including statistical cell.

Programmes, Targets and Resources for the Districts

33. The Fifth Plan for Major and Medium irrigation for Orissa covers almost all the districts and districtwise disaggregation will make it too voluminous. However, in almost all the statements, appendices and annexures, distinct references have been made to the concerned districts. Districtwise levels of irrigation developments through the Fourth and Fifth Plan Irrigation Schemes have also been tabulated separately under Appendix IV.

Appendix No. I*Growth of Irrigation in different Plan period by major and medium irrigation projects*

Area in 000' hectares		All figures cumulative	
Sl. No.	Particulars of plan period	Irrigation potential created	
		Khariff	Rabi
1	2	3	4
1	Pre-plan period ..	156·209	55·576
2	First Five-Year Plan ..	156·209	55·576
3	Second Five-Year plan ..	242·002	124·643
4	Third Five-Year Plan ..	310·997	182·950
5	Three annual plans (1966-67 & 1968-69) ..	480·726	222·176
6	Fourth Five-Year Plan (Expected) ..	640·404	308·620

Name of the State—ORISSA									
Sl. No.	Name of Scheme	District to be benefited and area	Ultimate Irrigation potential	Cumulative					
				1968-1969		4th Plan (Target)		1969-70 (Actuals)	
				Potential	Utili- sation	Potential	Utili- sation	Potential	Utili- sation
1	2	3	4	5	6	7	8	9	10
A—Continuing Schemes									
I—Major									
1	Hirakud Stage—I	Sambalpur.. K-117.76 Bolangir K-46.13	K. 163.89 R. 89.84	157.83 89.84	145.09 81.84	163.89 89.84	163.89 89.84	157.83 89.84	147.49 89.84
2	Mahanadi Delta	Puri K-147.62 Cuttack K-260.70	K. 408.32 R. 275.19	191.02 127.19	191.02 75.17	233.55 183.85	283.55 161.88	200.72 133.55	200.72 97.13
3	Salandi	Balasore .. K-45.72 ..	K. 45.72 R. 16.18	21.45 ..	21.45 ..	45.72 16.18	45.72 16.18	21.45 ..	21.45 ..
4	Derjang	Dhenkanal.. K-6.47 ..	K. 6.47 R. 3.24	2.43 0.40	2.43 0.34	6.47 3.24	6.47 3.24	3.32 0.40	3.32 0.40
Total ..			K. 624.40 R. 384.45	372.73 217.43	350.90 155.35	499.63 233.11	499.63 271.14	383.32 223.79	372.98 187.37
II—Medium									
1	Salia	Puri .. K—6.07 Ganjam K—2.02	K. 8.09 R. 2.73	.. ..	.. ..	8.09 2.73	8.09 2.73	....	....
2	Salki	Phulbani .. K. 19.87	K. 19.87 R. 2.02	16.19 2.02	16.19 0.61	19.87 2.02	19.87 2.02	18.21 2.02	18.21 2.02
3	Budhabudiani	Puri .. K. 2.63	K. 2.63 R. 1.09	2.63 1.09	2.50 0.63	2.95 1.09	2.95 1.09	2.63 1.09	2.63 1.09
4	Ghodahado	Ganjam .. K. 4.38	K. 4.33 R. 2.15	.. ..	.. ..	2.02 0.40	2.02 0.40	....	....
5	Dhanei	Ganjam .. K. 3.85	K. 3.85 R. 1.42	3.85 1.20	3.85 1.63	3.85 1.42	3.85 1.42	3.85 1.42	3.85 1.42
6	Pitamahal	Sundergarh K. 3.24	K. 3.24 R. 1.62	.. ..	.. ..	1.21 0.40	1.21 0.40	....	....
7	Bahuda Stage-I	Ganjam .. K. 8.54	K. 8.54 R. 0.61	3.24 0.20	3.24 0.20	7.89 0.61	7.89 0.61	3.64 0.61	3.64 0.61
8	Hiradharbati	Ganjam .. K. 5.09	K. 5.09 R. 0.22	4.41 0.22	4.41 0.22	5.31 0.22	5.31 0.22	4.65 0.22	4.65 0.22
Total ..			K. 55.64 R. 11.86	30.32 4.73	30.19 2.34	51.19 8.69	51.19 8.89	32.98 5.36	32.98 5.36
Grand total—(A) (I+II)			K. 680.04 R. 396.31	403.05 222.16	391.18 167.69	550.82 307.00	550.82 280.03	416.30 229.15	405.96 192.73

II

and Medium Irrigation Schemes

(1000 Hectares gross)

benefit to end of									
1970-71 (Actuals)		1971-72 (Actuals)		1972-73 (Anticip.)		1973-74 (Target)		Fifth Plan (Target)	
Potential	Utilisation	Potential	Utilisation	Potential	Utili- sation	Potential	Utili- sation	Potential	Utili- sation
11	12	13	14	15	16	17	18	19	20
157.83 89.84	152.16 89.84	157.83 89.84	154.59 89.84	159.85 89.84	157.83 89.84	163.89 89.84	163.89 89.84	163.89 89.84	163.89 89.84
214.48 142.85	214.48 113.31	231.19 142.85	231.19 129.50	256.86 171.18	256.86 145.69	283.55 188.85	283.55 161.87	359.65 244.42	359.65 244.42
45.72 16.18	34.40 3.04	45.72 16.18	38.45 8.09	45.72 16.18	40.47 8.09	45.72 16.18	45.72 16.18	45.72 16.18	45.72 16.18
4.05 1.21	4.05 1.21	5.27 2.03	5.27 2.03	5.27 2.03	6.47 3.24	6.47 3.24	6.47 3.24	6.47 3.24	6.47 3.24
422.08 250.08	405.09 207.40	440.01 250.90	429.50 229.46	467.71 279.23	461.63 246.86	499.63 298.11	499.63 271.13	575.73 353.68	575.73 353.68
3.04 0.40	.. ..	3.44 0.40	3.44 0.40	6.07 1.21	6.07 1.21	8.09 2.73	8.09 2.73	8.09 2.73	8.09 2.73
18.62 2.02	18.62 2.02	19.02 2.02	19.02 2.02	19.02 2.02	19.02 2.02	19.87 2.02	19.87 2.02	19.87 2.02	19.87 2.02
2.63 1.09	2.63 1.09	2.95 1.09	2.95 1.09	2.95 1.09	2.95 1.09	2.95 1.09	2.95 1.09	2.95 1.09	2.95 1.99
..	..	..	..	..	..	2.02 0.40	2.02 0.40	5.26 2.15	5.26 2.15
3.85 1.42	3.85 1.42	3.85 1.42	3.85 1.42	3.85 1.42	3.85 1.42	3.85 1.42	3.85 1.42	3.85 1.42	3.85 1.42
..	..	..	..	..	..	1.21 0.40	1.21 1.40	3.24 1.62	3.24 1.62
4.86 0.61	4.86 0.61	5.26 0.61	5.26 0.61	6.10 0.61	6.10 0.61	8.54 0.61	8.54 0.61	8.54 0.61	8.54 0.61
5.09 0.22	5.09 0.22	5.09 0.22	5.09 0.22	5.09 0.22	5.09 0.22	5.31 0.22	5.31 0.22	5.31 0.22	5.31 0.22
38.09 5.76	35.05 5.36	39.61 5.76	39.61 5.76	43.08 6.57	43.08 6.57	51.84 8.89	51.84 8.89	57.11 11.86	57.11 11.86
460.16 255.84	440.14 212.76	479.62 256.66	469.12 235.22	510.79 285.80	504.71 253.43	551.47 307.00	551.57 280.02	623.84 365.54	632.84 365.54

Sl. No.	Name of Scheme	District to be benefited and area	Ultimate Irrigation potential	Cumulative					
				1968—1969		4th Plan (Target)		1969-70 (Actuals)	
				Potential	Utilisation	Potential	Utilisation	Potential	Utilisation
1	2	3	4	5	6	7	8	9	10
B—New Scheme of 4th Plan									
I—Approved									
(a) Major—									
1	Rengali ..	Dhenkanal, .. Keonjhar, Balasore, Mayurbhanj.	K. 174.02 R. 139.21	..	..	..	..	..	..
2	Anandapur ..	Keonihar .. K. 109.05 Balasore, K. 45.32.	K. 154.37 R. 73.31	..	..	..	..	..	..
Total ..			K. 328.39 R. 212.52	..	..	..	..	..	..
(b) Medium—									
1	Uttei ..	Kalahandi .. K. 8.90	K. 8.90 R. 2.43	..	..	6.48 0.81	6.84 0.81	..	..
2	Baghua ..	Ganjam .. K. 3.24	K. 3.24 R. 0.81	..	..	3.24 0.81	3.24 0.81	..	..
3	Dahuka ..	Puri .. K. 3.04	K. 4.65 R. ..	..	..	1.50	1.50	..	..
4	Ong ..	Bolangir .. K. 24.69	K. 24.69 R. ..	..	..	..	..	..	..
5	Sunder ..	Kalahandi .. K. 2.76	K. 2.76 R. 1.47	..	..	..	..	..	..
6	Saipala ..	Sambalpur .. K. 2.06	K. 2.06 R. 1.09	..	..	..	..	..	..
7	Kalo ..	Mayurbhanj. . K. 3.64	K. 3.64 R. 1.94	..	..	..	..	..	..
8	Dadraghati ..	Dhenkanal .. K. 2.63	K. 2.63 R. 1.48	..	..	..	..	..	..
Total ..			K. 52.57 R. 9.22	..	..	11.22 1.62	11.22 1.62	..	..
Total—B-I—(a+b) ..			K. 380.96 R. 221.74	..	..	11.22 1.62	11.22 1.62	..	..

benefit to end of									
1970-71 (Actuals)		1971-72 (Actuals)		1972-73 (Anticip.)		1973-74 (Target)		Fifth Plan (Target)	
Potential	Utilisation	Potential	Utilisation	Potential	Utilisation	Potential	Utilisation	Potential	Utilisation
11	12	13	14	15	16	17	18	19	20
..
"	"	"	"	"	"	"	"	41.28 20.23	41.28 20.23
..	41.28 20.23	41.28 20.23
..	6.48 0.81	6.48 0.81	8.90 2.43	8.90 2.43
..	3.24 0.81	3.24 0.81	3.24 0.81	3.24 0.81
..	1.50	1.50	8.09	8.09
..	24.69	24.69
..	2.76 1.47	2.76 1.47
..	2.06 1.09	2.06 1.09
..	3.64 1.94	3.64 1.94
..	2.63 1.48	2.63 1.48
..	11.22 1.62	11.22 1.62	56.01 9.22	56.01 9.22
..	11.22 1.62	11.22 1.62	97.29 29.45	97.29 29.45

Sl. No.	Name of Scheme	District to be benefited and area	Ultimate Irrigation potential	Cumulative					
				1968-1969		4th Plan (Target)		1969-70 (Actuals)	
				Potential	Utili- sation	Potential	Utili- sation	Potential	Utili- sation
1	2	3	4	5	6	7	8	9	10

II—Unapproved Medium

1	Rajjala ..	Dhenkanal ..	K. 7.89 R. 3.68	..	..	..	..	..	..
	Khadkhei ..	Mayurbhanj ..	K. 5.24 R. 3.04	..	..	..	..	..	..
Grand Total—B (I+II)			K. 394.79 R. 228.76	..	..	11.22 1.62	11.22 1.62	..	..

C—New Schemes of the Fifth Plan. Medium—

1	Remal ..	Keonjhar ..	K. 4.05 R. 1.21	..	..	..	..	..	..
2	Sunei ..	Mayurbhanj ..	K. 6.64 R. 3.32	..	..	..	..	..	..
3	Ramanadi ..	Ganjam ..	K. 0.99 R. 0.33	..	..	..	..	..	..
4	Daha ..	Ganjam ..	K. 3.99 R. 1.60	..	..	..	..	..	..
5	Aunji ..	Dhenkanal ..	K. 3.44 R. 1.72	..	..	..	..	..	..
6	Nesa ..	Mayurbhanj ..	K. 0.62 R. 0.40	..	..	..	..	..	..
7	Pilasalki ..	Phulbani ..	K. 2.49 R. 1.25	..	..	..	..	..	..
Total ..			K. 22.22 R. 9.83	..	..	..	..	..	..
Grand Total—(A+B+C)			K. 1097.05 R. 634.90	*403.05 222.16	391.18 167.69	562.04 308.62	550.82 280.03	416.30 229.15	405.96 192.73

*These figures do not include the preplan irrigation of 77.70 thousand hectares of khariff under

benefit to end of

1970-71 (Actuals)		1971-72 (Actuals)		1972-73 (Anticipated)		1973-74 (Target)		Fifth Plan (Target)	
Potential	Utili- sation	Potential	Utili- sation	Potential	Utili- sation	Potential	Utili- sation	Potential	Utili- sation
11	12	13	14	15	16	17	18	19	20
..	..	..	..	..	..	..	..	7.89	7.89
								3.68	3.68
..	..	..	..	..	..	..	..	5.94	5.94
								3.04	3.04
..	..	..	..	..	..	11.22	11.22	111.12	111.12
						1.62	1.62	36.17	36.17
..	..	..	..	..	..	..	..	4.05	4.05
								1.21	1.21
..	..	..	..	..	..	..	..	1.62	1.62
								0.81	0.81
..	..	..	..	..	..	..	..	0.99	0.99
								0.33	0.33
..	..	..	..	..	..	..	..	3.99	3.99
								1.60	1.60
..	..	..	..	..	..	..	..	3.44	3.44
								1.72	1.72
..	..	..	..	..	..	..	..	0.62	0.62
								0.40	0.40
..	..	..	..	..	..	..	..	2.49	2.49
								1.25	1.25
..	..	..	..	..	..	..	..	17.20	17.20
								7.32	7.32
460.17	440.14	479.62	469.11	510.79	504.71	562.69	562.69	761.16	761.16
255.84	212.76	259.66	235.22	285.80	253.43	*308.62	281.64	409.03	409.03

Rushikulya system and Haladia and Baldia systems.

Appendix

Name of State—Orissa
Schemewise details of outlays and
Irrigation

Sl. No.	Name of Project	Latest esti- mated cost	Expenditure to end of 1968-69	Fourth Plan outlay	Expenditure during	
		Amount			1969-72 Actual	1972-73 Anticipated
1	2	3	4	5	6	7

(A) CONTINUING SCHEMES

I—Major—

1	Hirakud Stage I	.. 6781·94	6537·68	100·00	11·17	3·00
2	Mahanadi Delta	.. 6838·07	2942·53	1400·00	755·29	285·00
3	Salandi	.. 1517·00	1334·32	60·00	66·10	17·00
4	Derjang	.. 610·00	328·84	66·00	56·08	15·08
Total		.. 15747·01	11143·37	1626·00	888·64	320·08

II—Medium—

1	Salia	.. 407·01	247·36	123·00	94·42	5·50
2	Salki	.. 182·67	138·84	27·00	22·39	8·80
3	Budhabudhani	.. 161·98	149·72	8·00	3·04	2·00
4	Ghodahado	.. 388·13	117·85	103·00	109·42	44·86
5	Dhanei	.. 152·57	125·65	15·00	16·50	2·50
6	Pitamahal	.. 168·81	1·89	151·00	70·60	51·09
7	Bhouda Stage-I	.. 176·57	70·14	89·00	36·12	14·30
8	Hiradharabati	.. 41·11	34·79	6·00	3·67	0·77
Total		.. 1679·03	886·24	522·00	356·16	129·82
Total—A (I+II)		.. 17426·04	12029·61	2148·00	1244·80	449·90

III

Irrigation

expenditure on Major and Medium
Schemes

(Rupees in lakhs)

1973-74 Approved	Total Fourth Plan likely expendi- ture	Fifth Plan Outlay			Proposed outlay for 1974-75		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
8	9	10	11	12	13	14	15
8.00	22.17	..	..	..	..	..	..
350.00	1417.62	1500.00	1500.00	..	140.00	140.00	..
28.00	112.26	70.00	70.00	..	70.00	70.00	..
30.00	101.21	40.00	40.00	..	40.00	40.00	..
416.00	1653.26	1610.00	1610.00	..	250.00	250.00	..
21.00	123.01	..	..	..	..	..	..
6.00	37.19	..	..	..	..	..	..
1.00	6.04	..	..	..	..	..	..
30.00	184.28	86.00	86.00	..	86.00	86.00	..
2.00	21.00	..	..	..	..	..	..
25.00	146.81	..	..	..	..	..	..
30.00	80.43	..	..	..	..	..	..
1.00	5.44	..	..	..	..	..	..
116.00	604.20	86.00	86.00	..	86.00	86.00	..
532.00	2258.46	1696.00	1610.00	..	336.00	336.00	..

Sl. No.	Name of Project	Latest estimated cost	Expenditure to end of 1968-69	Fourth Plan outlay	Expenditure during	
		Amount			1969-72 Actual	1972-73 Anticipated
1	2	3	4	5	6	7

B—New Schemes of Fourth Plan

(a) Approved

I—Major

1	Rengali (Dam)	..	4190·00	..	..	..	..
2	Anandpur	..	1360·00	..	..	..	14·00
Total		..	5552·00	..	..	..	14·00

II—Medium

1	Uttei	..	167·97	0·50	} 107·00	8·10	23·65
2	Baghua	..	100·10	..		10·28	22·00
3	Dahuka	..	165·45	..		0·34	11·00
4	Ong	..	405·00	..	..	..	4·00
5	Sundar	..	182·00	..	..	..	3·24
6	Saipala	..	136·00	..	..	..	3·30
7	Kalo	..	240·00	..	70·00	..	11·60
8	Dadaraghati	..	173·00	..	..	..	3·00
Total		..	1571·52	0·50	177·00	18·72	81·79

Total—B (I+II) .. 7123·52 0·50 177·00 18·72 95·79

(Rupees in lakhs)

1973-74 Approved	Total Fourth Plan likely expendi- ture	Fifth Plan outlay			Proposed out lay for 1974-75		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
8	9	10	11	12	13	14	15
..	..	1000·00	1000·00	..	100·00	100·00	..
15·00	29·00	1331·00	1331·00	..	40·00	40·00	..
15·00	29·00	2331·00	2331·00	..	140·00	140·00	..
20·00	51·75	116·00	116·00	..	116·00	116·00	..
16·00	48·28	54·00	54·00	..	54·00	54·00	..
12·00	23·34	142·00	142·00	..	40·00	40·00	..
12·00	16·00	389·00	389·00	..	40·00	40·00	..
10·00	13·25	160·00	160·50	8·50	40·00	38·00	2·00
10·00	13·30	123·00	117·00	6·00	40·00	40·00	2·00
10·00	21·60	218·00	207·00	11·00	40·00	38·00	2·00
5·00	8·00	165·00	157·00	8·00	40·00	38·00	2·00
95·00	195·52	1376·00	1342·50	33·50	410·00	402·00	8·00
110·00	224·52	3707·00	3673·50	33·50	550·00	542·00	8·00

Sl. No.	Name of Project	Latest estimated cost Amount	Expenditure to end of 1968-69	Fourth Plan outlay	Expenditure during	
					1969-72 Actual	1972-73 Anticipated
1	2	3	4	5	6	7

(b) Unapproved

Medium

1	Ramiala	..	438.51	..	..	..	3.00
2	Khadakhai	..	293.00	..	..	..	11.60
..	Total—II	..	731.51	..	..	..	14.60
..	Total—B (a+b)	..	7855.03	0.50	177.00	18.72	110.39

(C) New Scheme of Fifth Plan

Unapproved

Medium

1	Remal	..	280.00	..	..	..	..
2	Sunei	..	426.40	..	..	..	..
3	Ramanadi St-I	..	61.00	..	..	..	..
4	Daha	..	299.00	..	..	..	..
5	Aunli	..	110.50	..	..	..	..
6	Nesa	..	54.00	..	..	..	..
7	Pilasalki	..	160.00	..	..	..	..
..	Total	..	1390.90	..	..	..	..
..	Grand Total (A+B+C)	..	266,71.97	120,30.11	2325.00	1263.52	560.29

(Rupees in lakhs)

1973-74 Approved	Total Fourth Plan likely expenditure	Fifth Plan outlay			Proposed outlay for 1974-75		
		Total	Capital	Foreign exchange	Total	Capital	Foreign exchange
8	9	10	11	12	13	14	15
5.00	8.00	431.00	409.50	21.50	40.00	38.00	2.00
8.00	19.60	273.00	259.50	13.50	40.00	38.00	2.00
13.00	27.60	704.00	669.00	35.00	80.00	76.00	4.00
123.00	252.12	4411.00	4342.50	68.50	630.00	618.00	12.00
..	..	280.00	266.00	14.00	28.00	26.60	41.00
..	..	256.00	243.00	13.00	25.00	23.75	1.25
..	..	61.00	61.00	..	6.00	6.00	..
..	..	299.00	284.00	15.00	30.00	28.50	1.50
..	..	110.00	104.50	5.50	11.00	10.45	0.55
..	..	54.00	51.30	2.70	6.00	5.70	0.30
..	..	160.00	152.00	8.00	16.00	15.20	0.80
..	..	1220.00	1161.80	58.20	122.00	116.20	5.80
655.00	2509.58	7227.00	7100.30	126.70	1115.00	1097.20	17.80

Sl. No.	Name of Project	Latest estimated cost	Expenditure to end of 1968-69	Fourth Plan Outlay	Expenditure during	
		Amount			1969-72 Actual	1972-73 Anticipated
1	2	3	4	5	6	7
1	Investigation and Statistical Cell.	..	100.50	..	49.93	20.00
2	Research	..	44.41	75.00	15.30	..
	Total	..	144.91	75.00	65.23	20.00
	Total—Irrigation (A+B+C+D)	26671.97	12175.02	2400.00	1328.75	580.29

(Rupees in lakhs)

1973-74 Approved	Total Fourth Plan likely expenditure	Fifth Plan Outlay			Proposed Outlay for 1974-75		
		Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
8	9	10	11	12	13	14	15
25.00	90.00	200.00	200.00	..	20.00	20.00	..
..	30.00	73.00	66.00	7.00	7.00	7.00	..
25.00	120.00	273.00	266.00	7.00	27.00	27.00	..
680.00	2629.58	7600.00	7466.30	133.70	1115.00	1097.20	17.80

Sl. No.	Name of district	Total Irrigable area in acres (Major & Medium)	Cumulative potential to be created by end of 4th plan	Percentage of the total irrigable area
1	2	3	4	5
1	Bolangir ..	6,03,668	1,15,385	18.90
2	Cuttack ..	8,70,591	4,94,665	56.00
3	Dhenkanal ..	10,09,592	16,195	1.60
4	Ganjam ..	6,60,335	1,82,837	27.4
5	Koraput ..	12,32,713	12,145	0.99
6	Kalahandi ..	7,88,424	22,267	2.80
7	Keonjhar ..	3,28,979	..	..
8	Mayurbhanj ..	6,06,533	9,220	1.50
9	Puri ..	8,80,634	2,33,167	30.60
10	Phulbani ..	3,38,197	49,640	14.50
11	Sambalpur ..	7,92,252	2,94,353	36.70
12	Sundargarh ..	3,32,911	8,097	2.40
13	Balasore ..	3,01,700	1,59,110	52.00

dix IV
of Khariff

Cumulative potential to be created after completion of the continuing and new scheme of 4th plan by end of 5th plan	Percentage of the total irrigable area	Cumulative potential to be created by augmentation through the new scheme of the 5th plan by end of 5th plan	Percentage of the total irrigable area	Remark
6	7	8	9	10
1,76,386	28·90	1,76,385	28·80	
6,94,665	78·70	6,94,665	78·70	
1,63,195	16·30	1,70,695	17·00	
1,85,133	27·80	1,97,463	30·00	
1,62,145	13·1	1,62,145	13·15**	
37,087	4·60	37,087	4·60	
1,02,000	30·60	1,12,000	33·80	
32,890	5·30	38,420	6·35	**This includes 1,50,000 acres through Pott. Irr. Project
3,89,287	44·30	3,89,287	44·30	
49,649	14·50	55,799	16·50	
2,99,635	37·30	2,99,635	37·30	
8,097	2·40	80·97	2·40	
1,59,110	52·00	1,59,110	52·00	

Appendix

Area in lakhs acres kharif—

Position of Irrigation potential district

Sl. No.	Name of district	Total Irrigation Potl. (khariff) of the district	Potl. that will be created to end of the Fourth Plan	Potl. that will be created during 5th Plan by continuing Schemes
1	2	3	4	5
1	Bolangir ..	6·04	1·15	..
2	Cuttack ..	8·71	4·95	2·00
3	Dhenkanal ..	10·10	0·16	0·21
4	Ganjam ..	6·60	1·83	0·023
5	Koraput ..	12·33	0·12	..
6	Kalahandi ..	7·88	0·22	0·08
7	Keonjhar ..	3·28	..	..
8	Mayurbhanj ..	6·07	0·09	..
9	Puri ..	8·81	2·73	1·16
10	Phulbani ..	3·38	0·50	..
11	Sambalpur ..	7·92	2·95	..
12	Sundargarh ..	3·33	0·08	..
13	Balasore ..	3·02	1·59	..

No. V

75% of C C A.

wise (Major + Medium)

Potl. to be created by new schemes commencing during 4th plan	Potl. to be created by the new schemes of 5th Plan	Potl. to be created by continuing and new schemes under Inv. and project awaiting clearance from C. W. and P. C.	Total Col. 4+5+6+7+8	Percentage Col. 8×100 Col. 3	Remarks
6	7	8	9	10	11
0·61	..	1·923	3·683	61	
..	..	0·136	7·086	81	
0·26	0·085	5·6	6·385	63·1	
..	0·123	1·35	3·326	50·5	
1·50	..	3·98	5·60	45·4	
0·068	..	3·55	3·918	49·7	
1·02	0·10	1·74	2·86	87	
0·237	0·055	2·975	3·357	55·3	
..	..	0·162	4·052	46	
..	0·061	1·66	2·221	65·8	
0·051	..	0·785	3·786	47·8	
..	..	1·33	1·41	42·4	
..	..	0·75	2·34	77·5	

Details of likely expenditure and potential achievement during 4th Plan and 5th Plan and Backward areas

Sl. No.	Name of Project	District	Likely expenditure in 4th Plan Rs. in lakhs	Additional area under Irrigation 000' acres during 4th Plan		Total 4th Plan outlay for Orissa Rs. in lakhs
				Kharif	Rabi	
1	2	3	4	5	6	7
1	Salki ..	Phulbani ..	37.19	9.10	--	} 2629.58
2	Pitamahal ..	Sundergarh ..	146.81	8.00	4.00	
3	Ong ..	Bolangir ..	16.00	..	..
4	Sunder ..	Kalahandi ..	13.25	..	..
5	Saipala ..	Sambalpur ..	13.30	..	..
6	Kalo ..	Mayurbhanj ..	21.60	..	..
7	Khadkhei ..	Do. ..	19.60	..	..
8	Badanalla ..	Korapnt ..	..	..	..
9	Sunei ..	Mayurbhanj ..	..	..	..
10	Nesa ..	Do ..	..	..	..
11	Pilasalki ..	Phulbani ..	..	..	..
12	Sapai ..	Sundergarh ..	..	..	..
13	Kansabahal ..	Do. ..	..	..	..
14	Remal ..	Keonjhar ..	..	..	..
15	Kuanria ..	Puri ..	..	..	..
16	Hirakud Stage-I	Sambalpur & Bolangir	22.17	15.00	..	
Total			289.92	32.10	4.00	2,629.58

VI

by continuing and new schemes of 4th Plan and by new scheme of 5th Plan in Tribal of the State.

Total additional area in Orissa under irrigation during 4th Plan in 000' acres		5th Plan outlay Rs. in lakhs	Additional area under irrigation during 5th Plan in 000' acres		Cumulative area under Irr. up to end of 5th Plan in 000' acres		Remarks
Kharif	Rabi		Kharif	Rabi	Kharif	Rabi	
8	9	10	11	12	13	14	15
..	49.10	5.00	Expenditure on execution shall be met out of Central non-plan assistance during 4th Plan.
..	..	389.00	61.00	..	61.00	..	} Out of plan provision.
..	..	169.00	6.80	3.64	6.80	3.64	
..	..	123.00	5.10	2.70	5.10	2.70	
..	..	218.40	9.00	4.80	9.00	4.80	
410.470	224.42	273.00	14.67	7.51	14.67	7.51	
..	..	300.00	5.00	2.50	5.00	2.50	
..	..	300.03	4.00	2.00	4.00	2.00	
..	..	54.00	1.53	0.99	1.53	0.99	
..	..	160.00	6.15	3.08	6.15	3.08	
..	..	200.00	7.66	3.84	7.68	3.84	
..	..	322.40	12.40	6.20	12.40	6.20	
..	..	280.00	10.00	3.00	10.00	3.00	
..	..	260.00	9.60	4.80	9.60	4.80	
..	120.00	60.00	
410.470	224.42	3,048.80	152.93	45.06	330.03	114.06	

(II) MINOR IRRIGATION (FLOW)

At the beginning of Fourth Plan 1,80,000 hectares were under Minor Irrigation (flow). The Fourth Plan started with 130 spill over schemes of the previous plans. During the first four years of the Fourth Plan 89 new schemes were taken up in addition to the spill over schemes. Out of these schemes, 65 spill over schemes have been completed by the end of 1972-73. Thus execution of 65 spill over schemes and 89 new schemes were carried over to 1973-74. During 1973-74 one more new project has been taken up making a total of 90 new projects.

2. In addition to this during the year 1972-73 Central assistance of Rs.295 lakhs was available under the Emergency Agricultural Production Programme to speed up the execution of some of the reservoir projects and tanks to provide rabi irrigation. Under this programme work on 48 reservoir projects and 37 tanks have been accelerated and rabi irrigation to 2320 hectares was provided from these projects. This assistance has helped a great deal to advance completion of these schemes.

3. During 1973-74, a sum of Rs.326 lakhs only is available for these projects. Out of this, Rs. 26.50 lakhs is earmarked for survey and investigation. Thus only Rs.299.50 lakhs is available for expenditure on works. In addition to this amount, Government of India have been moved to sanction special assistance of Rs. 3.18 crores in 1973-74 to complete 26 projects in backward areas. Assuming that this assistance would be available, it is programmed to complete all the spillover projects of the Third Plan and 75 new projects (out of 90) and make adequate progress on the balance of 15 projects so that these can also be completed during the 1st two years of the Fifth Plan. The spill over is at present estimated at Rs. 3.5 crores anticipating the receipt of special Central assistance of Rs.3.18 crores in 1973-74.

4. In the first three years of the Fourth Plan additional irrigation has been provided to 12,000 hectares. During 1972-73, 12,140 hectares more have been added to the command area which will get irrigation for the first time during the current kharif season. With this achievement the total area that has been brought under irrigation during Fourth Plan up-to-date will be 24,140 hectares. During 1973-74 an additional area of 35,800 hectares is expected to be added to it. Thus by the end of Fourth Plan, an area of 239,940 hectares will be under Minor Irrigation (flow).

5. The Fifth Plan outlay envisages an expenditure of Rs.20 crores on minor irrigation.

6. During the Fifth Plan attention will be focussed on new schemes in drought-prone areas, backward areas and other areas where no irrigation facility is available. Government have established many colonies of tribals. Some of them do not have irrigation facilities. The requirement of all these colonies will be investigated and as many of them as possible will be covered by new projects. It is hoped that about 160 new schemes will be taken up. The outlay has been distributed in such a way that the weaker section of the people will get the maximum benefit. It is estimated that during the Fifth Plan an additional area of 65,000 hectares will get benefit of irrigation.

7. Annexures I and II give all the details on the points mentioned above.

Annexure I

Outlay and expenditure summary

STATE—ORISSA

(Rs. in lakhs)

Sl. No.	Head/Sub-head					Total	Capital	Foreign exchange	Annual Plan for 1974-75		
		Approved 4th Plan outlay	Approved outlay for 1973-74	Anticipated expenditure for 1973-74	Anticipated Expenditure during the 4th Plan				Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8	9	10	11	12
1	M. I. (Flow)	1,100.00	336.00	336.00	1,292.97*	2,000.00	2,000.00	..	400.00	400.00	..

* Includes Rs. 25.38 lakhs spent in S. F. D. A. areas.

Annexure II

STATE—ORISSA

Physical programmes—Targets and achievements

Sl. No.	Item	Unit	1968-69 level	Fourth Plan		Level expected during 1973-74	Fifth Plan Target	
				Target	Likely expected during 1973-74		Total	1974-75
1	2	3	4	5	6	7	8	9
1	M. I. (Flow)							
	(a) New area (Potential added).	000 Hectares	180.00	50.6	59.94	239.94	65.00 (addl.)	8.00
	(b) Depreciation on existing works.	..	Nil.	..	..	Nil	..	..
	(c) Total Potential available.	Hectares	180.00	50.6	59.94	(1973-74) Level (Gross) 239.94	65.00	8.00
	(d) Utilisation	.. Net	145.8	..	..	198.80 (Net)	45.50	5.60
		Gross	180.00			(Gross) 239.94	65.00	8.00

(iii) LIFT IRRIGATION

Review of Progress up to end of Fourth Plan

Prior to the Fourth Plan, 414 Lift Irrigation Projects were sanctioned in the different districts. Out of these, 313 projects were completed and 306 energised creating an irrigation potential of 11,330 hectares. During the Fourth Plan, 386 new projects were sanctioned. 108 projects spilled over to the Fourth Plan for energisation. Thus the total number of projects taken up for energisation during the Fourth Plan was 494. Out of these 494, 322 have been energised creating an additional irrigation potential of 6,740 hectares by the end of the 31st March 1973. Out of the remaining 172 projects, 12 have been found not feasible and have been dropped. During the year 1973-74, it is proposed to energise 118 projects with the provision of Rs. 30 lakhs and to create an additional irrigation potential of 1,900 hectares. The remaining 42 projects will spill over to the Fifth Plan. Cumulatively by the end of Fourth Plan, irrigation potential of 19,970 hectares will be available.

Non-Plan Schemes

2. In the non-Plan side new projects numbering 436 were taken up during the year 1971-72 and 558 during 1972-73. Out of these 994 projects, at the end of 1972-73, 453 have been energised creating irrigation potential of 8,290 hectares. From the balance 541 projects 17 projects have been found not feasible. Of the remaining 524 projects to be completed and energised, infrastructures have been created in respect of most of the projects and it is proposed to energise 22 projects during the current year (1973-74) creating additional irrigation potential for 350 hectares. The remaining 502 projects would spill over to the Fifth Plan for completion as there is no provision and these could not be accommodated within the Plan resources

S. F. D. A./M. F. A. L. Schemes

3. By the end of 1972-73, 26 Lift Irrigation Projects have been completed and energised creating an additional irrigation potential of 520 hectares. 29 more projects would be completed during 1973-74 creating additional irrigation potential for 590 hectares.

4. Thus at the end of Fourth Plan, the following irrigation potential will be created :—

Name of scheme	No. approved	No. dropped	Net approved	No. energised	Potential created hectares	No. spilled to Fifth Plan
1	2	3	4	5	6	7
Plan						
I. Project completed till 1968-69 end.	306	..	306	306	11,330	..
II. Fourth Plan Projects—						
(a) Spill over 108	494	12	482	440	8,640	42
(b) New 386						
III. Non-Plan Projects	1,049	17	1,032	530	9,750	502
Total	1,849	29	1,820	1,276	29,720	544

5. For completing the spill over projects an amount of Rs. 130 lakhs is required and an irrigation potential of 10,400 hectares, will be created thereunder. Annexure I, gives the details for these projects.

6. Against the original ceiling of Rs. 150 lakhs for Lift Irrigation Programme during the Fourth Plan, an expenditure of Rs. 201.78 lakhs has already been incurred during the first four years. The provision for 1973-74 is Rs. 45 lakhs. So by the end of Fourth Plan, an expenditure of Rs. 246.78 lakhs would be incurred for Lift Irrigation Programme.

Ground Water Survey

7. The existing ground water potential of the State after deducting surface and sub-surface run off and evaporation losses has been roughly estimated to be 21.16 million acre ft. which can bring about 17 lakh hectares under assured irrigation during both Khariff and rabi season. Though the State has 81.17 lakh hectares of cultivable land, only an area of about 10.53 lakh hectares have been brought under ayacut of flow irrigation projects at the end of 1972-73. It is, therefore, considered necessary to develop the ground water potential of the State in all areas which lie beyond the ayacut of flow irrigation projects with priority to areas affected by chronic problems of drought, flood and drainage. A Ground Water Cell was created in the Directorate of Lift Irrigation in the year 1967 to undertake systematic survey of ground water potential in the State. An area of 30,267 Sq. miles (78,392) Sq. Km. was covered demarcating 12,000 Sq. miles (31,080 Sq. Km.) as ground water worthy by 1972-73. By the end of Fourth Plan an area of 1,02,311 Sq. kilometers is expected to be covered by preliminary geo-hydrological survey. The preliminary survey of the rest of the area and intensive survey will be undertaken in the Fifth Plan.

Objectives and Targets for the Fifth Plan

8. The main objectives during the Fifth Plan period may be stated as follows:—

- (a) to exploit ground water potential to a great extent by constructing deep, medium and shallow tube-wells and dug wells,
- (b) to exhaust the scope of execution of direct pumping projects (another 200 projects are taken to be adequate to exhaust this potential),
- (c) to give preference to chronically drought and cyclone-affected areas in execution of tube-wells,
- (d) to give preference to schemes feasible in tribal and backward areas with a view to removing regional imbalances, and,
- (e) to keep in view the remunerativeness of power lines drawn to serve Lift Irrigation points.

9. The target is to complete preliminary reconnaissance survey in 53,000 Sq. Km. during first two years and intensive survey for the entire State in the remaining three years of Fifth Plan period. Besides 544 spill-over projects will be energised at a cost of Rs. 130 lakhs. It is also envisaged to execute 10,000 shallow tube-wells and 2,000 deep tube-wells at a cost of Rs. 48 crores by obtaining World Bank loan by the Lift Irrigation Corporation proposed to be constituted. The irrigation potential that will be available is indicated below:—

	Under Plan	Under World Bank Programme
1. Spill over works ..	10,400 hectares	..
2. Deep tube-wells and shallow tube-wells.	..	2,00,000 hectares
3. Dug wells under private sector	..	1,44,000 hectares
Total ..	10,400 hectares	3,44,000 hectares

10. In private sector, it is proposed to construct 1,20,000 open wells, out of which 40,000 dug wells will be constructed and operated with electrical pumping sets. 40,000 dug wells will be operated with diesel engines and the remaining 40,000 dug wells will be operated by indigenous lift like Tenda by obtaining loan assistance from financing institutions. An additional irrigation potential of 1,44,000 hectares is proposed to be created under this programme.

11. By the end of the Fifth Plan period, under public and private sector an additional irrigation potential of 3,54,400 hectares will be created.

SPECIFIC PROGRAMME

12. Investigation by the Ground Water Cell, with the present rate of coverage (at the rate of 7,000 Sq. miles per annum) will take five more years to complete the preliminary geo-hydrological survey.

13. With the outlay of Rs. 700 lakhs for Ground Water Survey during the Fifth Plan it is programmed to complete the preliminary reconnaissance survey in the balance 53,000 Sq. kilometers to cover the entire State during the first two years of the Fifth Plan. In the rest three years intensive survey covering the whole State will be undertaken and completed. In order to take up this massive programme, the Ground water survey Organisation will be adequately strengthened. In addition it is proposed to emerge 544 spill over projects and take up execution of 12,000 shallow and deep tube-wells in the public sector and 1,20,000 open wells in the private sector to create irrigation potential for 3.54 lakh hectares during the Fifth Plan as detailed in the Annexure II.

Financial Outlay of Fifth Plan

14. The tentative financial outlay proposed during the Fifth Plan period under different item of works as noted below is Rs. 12.80 crores.

- (i) In the plan outlay provision for Rs. 200.00 lakhs is kept under debenture programme to support the institutional agencies in processing loans to the individual cultivators or beneficiaries for execution of the private dug wells and tubewells.
- (ii) For spill over works a provision of Rs 130 lakhs has been made.
- (iii) In the Plan outlay a provision of Rs. 250 lakhs is kept for being paid to the proposed Lift Irrigation Corporation as subsidy to enable the corporation to undertake operation, maintenance and construction of projects.
- (iv) A provision of Rs. 700.00 lakhs for carrying out the Ground Water Survey during Fifth Plan has been made.

Institutional Finance

15. During the Fifth Plan, it is proposed to construct 1,20,000 dug wells under Private sector on the basis of a World Bank Scheme. It is proposed to operate 40,000 dug wells with electrical pumps, another 40,000 with diesel pumps and the remaining 40,000 by indigenous methods. It is estimated that irrigation potential of 1.44 lakh acres will be created after completion and energisation of the above dug wells. These dug wells will be constructed by individual cultivators or beneficiaries with the financial assistance from the Commercial Bank, Co-operative Bank or other credit institutions. To support the institutional agency, provision of Rs. 200.00 lakhs under debenture programme has been proposed in the Fifth Plan.

16. Besides the provision in plan out-lay, the Lift irrigation programme includes installation of 10,000 shallow tube wells and 2,000 deep tube-wells at an estimated cost of Rs. 4800.00 lakhs. This amount will be obtained by the proposed Lift Irrigation Corporation as loan from the World Bank.

17. The scheme-wise requirement of funds is indicated in Annexure-III.

Annexure No. 1

Continuing and Spill over Schemes included in the Fifth Plan—Irrigation Sector (Lift)

Sl. No.	Name of the scheme	Approved estimated cost	Total physical target of the scheme		Expenditure likely to be incurred up to the end of Fourth Plan (Rs. in lakhs)	Target anticipated to be achieved by end of Fourth Plan		Spill over amount if any proposed to be provided in the Fifth Plan	Capital component	Foreign exchange component	Year wise break up				
			Nos.	Ayacut in Hecst.		Nos.	Ayacut in Hecst.				1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Completed Plan Projects till end of 1968-69.	..	306	11,330	..	306	11,330	..	..	..	..	..	..	..	..
1	Plan Projects (Fourth Plan).	..	482	9,400	246.78	440	8,640	} 130.00	130.00	..	130.00	..	..	..	..
2	Non-Plan schemes (Fourth Plan).	..	1,032	18,800	299.00	530	9,750								
Total		..	1,820	39,530	545.78	1,276	29,720	* 130.00	130.00	..	130.00				

* Cost of completing 544 Spill over Projects

Annexure II

New Schemes for the Fifth Five-Year Plan—Irrigation Sector (Lift)

(Rs. in lakhs)

Serial No.	Name of the scheme location	Estimated cost	Fifth Plan outlay (Tentative)	Capital expenditure component of the outlay	Foreign Exchange component of the outlay	Physical Targets			
						Item	Unit numbers	Proposed Target Lakh acres	
1	2	3	4	5	6	7	8	9	
1	Ground Water Survey and Investigation.	700.00	700.00	688.00	12.00	1	Preliminary Geo-hydrological Survey.	53,000 Sq. Km.	325
						2	Intensive Geo-hydrological Survey.	1.55 lakhs Sq. Km.	
2	Debenture ..	200.00	200.00	200.00	..		Dugwell 1,20,000	.. 1.44 lakhs Hectares.	
3	Subsidy ..	250.00	250.00	250.00	..	..	..	..
	Total	.. 1,150.00	1,150.00	1,138.00	12.00				

(Rs. in lakhs)

Serial No.	Name of the scheme location	Estimated cost	Fifth Plan outlay (Tentative)	Capital expenditure component of the outlay	Foreign Exchange component of the outlay	Physical Targets		
						Item	Unit number	Proposed Target Lakh acres
1	2	3	4	5	6	7	8	9

World Bank Programme

1	Shallow Tubewell	.. 3,000.00	3,000.00	3,000.00	..	S. T. W.	10,000	} 2.00 lakhs hectare
2	Deep Tubewell	.. 1,400.00	1,400.00	1,400.00	..	D. T. W.	2,000	
3	Tools and Plants	.. 400.00	400.00	350.00	50.00			
	Total	.. 4,800.00	4,800.00	4,750.00	50.00			
	Grand Total	.. 5,950.00	5,950.00	5,888.00	62.00			

Yearwise break up of financial outlay

	1974-75	1975-76	1976-77	1977-78	1978-79	Total
Plan Programme	.. 370.00	220.00	230.00	230.00	230.00	1,280.00
World Bank Programme	.. 800.00	800.00	1,000.00	1,100.00	1,100.00	4,800.00
Total	.. 1,170.00	1,020.00	1,230.00	1,330.00	1,330.00	6,080.00

Annexure III

Programme wise outlay and expenditure

Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during Fourth Plan	Fifth Plan outlay			Annual Plan 1974-75		
					Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11
Agricultural Programme										
(Lift Irrigation)										
(a) L. I. from Streams, reservoirs, etc.	84.00	25.00	25.00	117.34	130.00	..	..	130.00	..	..
(b) Construction of Tube-wells.	36.00	5.00	5.00	36.62						
(c) G. W. & S. Inv. ..	30.00	10.0	10.00	37.82	700.00	..	..	150.00	..	..
(d) T. & P. ..	..	4.00	4.00	..	..	..	..	40.00	..	..
(e) Debenture Programme	..	..	..	55.00	200.00	..	..	..	..	..
(f) Subsidy ..	..	1.00	1.00	..	250.00	..	..	50.00	..	..
	150.00	45.00	45.00	246.78	1,280.00	1,268.00	12.00	370.00	43.00	2.00

Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during Fourth Plan	Fifth Plan outlay			Annual Plan 1974-75		
					Total	Capital	Foreign Exchange	Total	Capital	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11
II. World Bank Programme										
(a) Construction of S. T. W.	3,000.00				..	
(b) Construction of D. T. W.	1,400.00			800.00	..	..
(c) Tools & Plants	400.00					
Total	4,800.00	..	..	800.00	..	..
Grand Total	..	150.00	45.00	45.00	246.78	6,080.00	..	..	1,170.00	..

(iv) FLOOD CONTROL

An area of 6·878 lakh hectares mainly in the costal districts of Orissa is susceptible to floods and saline inundation. Distribution of the affected area can be broadly stated as below :—

Basin		Area in lakh hectares
Subarnarekha basin	..	2·15
Brahmani and Baitarani	..	3·89
Mahanadi	..	0·717
Rushikulya	..	0·121
	Total	6·878

2. A comprehensive master plan covering all river basins in the State of Orissa is under preparation. The approximate cost of this scheme is Rs. 122·81 crores. The details of the scheme basin-wise may be seen in Annexure-I.

3. The investigation of the coastal belt involving an area of about 2,000 square miles is also in progress. It is expected to complete survey of 400 square miles within the Fourth Plan, the rest will be surveyed in the Fifth Plan. After completion of the survey, the master plan for drainage improvement and development of the coastal area will be prepared which is likely to be ready by the 3rd year of the Fifth Plan.

Review of progress upto the end of 4th Plan

4. The flood control works in the Fourth Plan as in previous years have been taken up on an *ad hoc* basis on local needs and as per availability of funds, without any overall effect on the control of floods of a particular basin. By the beginning of Fourth Plan the achievement in flood control was protection of about two lakhs hectares of cultivated area with an expenditure of Rs. 266·92 lakhs.

5. The Fourth Plan Outlay for flood control works was Rs. 3·00 crores and the anticipated expenditure upto the end of Plan period is Rs. 2·92 crores. The details of the expenditure and requirement for spillover works in the Fifth Plan are shown in Annexure-II.

6. The physical target and achievements in Fourth Plan are given below in the table.

Serial No.	Categories of work	Physical target	Achievement up to end of 3/73	Anticipated achievement in 1973-74	Spillover to Fifth Plan
(1)	(2)	(3)	(4)	(5)	(6)
		K. M.	K. M.	K. M.	K. M.
1	(a) Marginal embankments construction of new embankments (in Kms.).	110	30	20	60
	(b) R/S of embankments (in K. M.).	205	68	37	100
2	Protection of towns and villages (in Nos.).	12 Nos.	8 Nos.	1 No.	3 Nos.

Serial No.	Categories of work	Physical target	Achievement up to end of 3/73	Anticipated achievement in 1973-74	Spillover to Fifth Plan
(1)	(2)	(3)	(4)	(5)	(6)
3	River improvement and anti-erosion schemes (in Nos.).	90 spurs	19 Nos.	20 Nos.	51 Nos.
4	Drainage improvement works (K. M.).	24 K. M.	10 K. M.	3 K. M.	9 K. M.
5	Emergent works in (K. M.) included in 1 (b) above				
6	Saline embankment (K. M. Marginal).	32 K. M.	21 K. M.	6 K. M.	5 K. M.
7	Area protected (in lakh hectares).	1.61 lakh hectares	0.88 lakh hectares	0.18 lakh hectares	0.55 lakh hectares

7. The major bottle-neck in taking up the flood control works systematically was lack of funds. If liberal Central assistance is given, then only the works can be taken up systematically in different basins resulting in some tangible achievements. Keeping this in view the construction of marginal embankments (including those in the coastal area) of all major rivers have been provided outside the State Plan in the Central Sector during the Fifth Plan period.

Outlay, Objectives and Targets for the Fifth Plan

8. The outlay of the Fifth Plan in State Sector is Rs. 5.00 crores and for 1974-75, the outlay is Rs. 1.13 Crores. This consists of Rs. 2.29 crores of continuing works spilled over from Fourth Plan and Rs. 2.71 crores for new works. Out of the approximate cost of Rs. 122.81 crores in the Master Plan, the Central loan assistance required in the Fifth Plan over and above the State Plan outlay is 13.00 lakhs.

9. The objectives of the Fifth Plan are:—

- To take up flood control works as per the State Master Plan
- To take up priority works in the Brahmani and Baitarani basins
- To complete the first stage of Subarnarekha flood control schemes covering 56 Kms. of marginal embankments.

10. The physical targets envisaged in the Fifth Plan both in State and Central Sectors are given in the following table—

Sl. No.	Categories of work	Target in State Plan for Rs. 5.00 crores	Target for Central loan for 13 crores
(1)	(2)	(3)	(4)
1	Marginal embankments—	..	
	(a) Construction of new embankments in Km.	30 Km.	300 Km.
	(b) R/S embankments in Km.	56 Km.	240 Km.

Sl. No.	Categories of work	Target in State Plan for Rs. 5.00 crores	Target for Central loan for 13 crores
(1)	(2)	(3)	(5)
2	Protection of towns and villages in numbers.	20 Nos.	95 nos.
3	River improvement and anti-erosion schemes in Nos.	100 Nos.	..
4	Drainage improvement works in Km.	127 Km.	..
5	Saline embankments in K. M. R/S ..	23 Km. 128 Km.	160 (Marginal embankments in coastal area).
6	Saline embankments in Km. ..	..	200 Km.
7	Area protected (in lakh hectares) ..	1.73 lakh hectares or 3.05 lakh acres.	1.356 lakh hectares or 3.35 lakh acres.

11. There is no separate organisation to execute flood control works up to now. The existing set up which is handling irrigation work is engaged in executing flood control works. This aspect has been dealt in general under irrigation sectoral plan. However, the staff specially required for speedy and efficient execution of flood control works will be as follows:—

(1) Circle	..	2 Nos.
(2) Divisions	..	10 Nos.
(3) Subdivisions	..	40 Nos.
(4) Sections	..	160 Nos.
(5) Land Acquisition Officer with non-technical staffs equivalent to 1 division.		1 No.

Statement showing the funds required for flood control works of different river basins & financial

River basins	Detention reservoirs		Marginal embankment		Anti-erection works		Drainage improve- ment	
	Central sponsor	State sponsor	Central	State	Central	State	Central	State
1	2	3	4	5	6	7	8	9
Subarnarekha .. ..	..	..	848'00	..	..	100'00	..	100'00
Budhabalang ..	200'00	..	31'00	..	..	20'00	..	5'00
Baitarani ..	400'00	..	400'00	..	..	32'00	..	122'00
Brahamani ..	250'00	..	1,206'00	..	..	78'00	..	137'00
Mahanadi .. ..	..	..	1,042'00	..	..	200'00	..	188'00
Rushikulya, Basadhara Mahendranaya.	..	..	..	63	..	30'00	..	..
Saline affected area ..	..	..	1,250'00	..	..	500'00	..	..
Miscellaneous F. C. Works in other area of the State.	..	..	..	..	..	..	..	10'00
	2,450'00	..	4,777'00	63'00	..	959'00	..	652'00

Ure I

programme for their execution in different plan periods both under State Fia and Central Plan

(In Lakhs of Rupees)

Misc. works in the basin		Total		Fourth Plan provision		Fifth Plan provision		Subsequent Plan provision	
Central	State	Central	State	Central Assistance	State Assistance	Central Assistance	State	Central Assistance	State
10	11	12	13	14	15	16	17	18	19
..	..	848·00	200·00	..	10·96	300·00	25·00	548·00	164·04
..	30·00	231·00	55·00	..	7·78	25·00	25·00	206·00	22·22
..	20·00	6,573·00	174·00	..	42·44	2,250·00	100·00	4,323·00	31·56
..	20·00	2,456·00	244·00	..	68·18	1,650·00	100·00	806·00	75·82
..	50·00	1,042·00	438·00	..	128·43	100·00	150·00	942·00	159·37
..	10·00	..	93·00	..	24·01	..	35·00	..	33·99
..	950·00	1,250·00	550·00	..	3·48	225·00	65·00	1,025·00	481·52
..	200·00	..	300·00	..	6·52	..	..	..	293·48
..	380·00	12,400·00	2,054·00	..	292·00	4,550·00	500·00	7,850·00	1,262·00
		144·45 crores							

Continuing and Spill over Flood Control Schemes

Sl. No.	Name of the scheme	Estimated cost	Total physical target of the scheme in lakh hec.	Expenditure likely to be incurred up to the end of Fourth Plan in crores	Target anticipated to be achieved by end of Fourth Plan
1	2	3	4	5	6
(43—100)					
1	Flood control works of Mahanadi basin ..	316.43	0.81	..	0.60
2	Flood control works of Brahmani basin ..	177.33	0.58	..	0.39
3	Flood control works of Baitarani basin ..	41.62	0.16	..	0.06
4	Flood control works of Subarnarekha basin	0.69	0.02	2.92	..
5	Flood control works of Budhabalanga basin	..	0.02	..	..
6	Flood control works of Rushikulya, Vansadhara and Mahendratanaya.	13.25	0.02	..	..
7	Saline Embankment ..	..	..	..	..
		549.32 lakhs	1.61 lakhs hec.	2.92 crores	1.61 lakh hec.

Yearwise outlay for Flood Control, drainage and

Sl. No.	Categories of works	Expenditure	
		1974-75	1975-76
1	2	3	4
1	Marginal embankments		
	(a) Construction of new embankments	0.05	0.05
	(b) R/S. Embankment		
2	Protection of towns and villages ..	0.40	0.20
3	River Improvement and anti Erosion schemes ..	0.45	0.48
4	Drainage Improvement works ..	0.10	0.10
5	Emergent works ..	0.08	0.08
6	Saline Embankments ..	0.10	0.15
		1.18	1.07

II

included in the fifth Plan from 1974-79

(Rs. in lakhs)

Spill over amount, if any, proposed to be provided in fifth Plan in crores of rupees	Capital component	Foreign exchange component	1974-75	1975-76	1976-77	1977-78	1978-79
	7	8	9	10	11	12	13	14
0.98	0.50	0.48	..	..	..
0.40	0.20	0.20	..	..	..
0.56	0.30	0.26	..	..	..
0.10	0.05	0.05	..	..	..
0.10	0.03	0.03	0.04	..	..
0.10	0.05	0.05	..	..	..
0.05	0.05	..	..	..	..
2.29	1.18	1.07	0.04	..	..

III

Anti-sea-erosion schemes

likely in Fifth Plan			Total
1976-77	1977-78	1978-79	
5	6	7	8
0.10	0.10	0.05	0.35
0.20	0.20	0.25	1.10
0.39	0.40	0.40	2.00
0.10	0.10	0.10	0.50
0.08	0.08	0.08	0.40
0.15	0.10	0.15	0.65
1.02	0.98	1.03	5.00

CHAPTER 2'7

INDUSTRIES

(i) LARGE AND MEDIUM INDUSTRY

In surveying the current state of industrialisation in the large and medium scale industry sector, one cannot fail to notice the poor overall growth and poor impact it has so far made on Orissa's economy as a whole. Orissa's share in India's industrial production was about 2.5 per cent in 1965-66 compared to 2 per cent in 1960-61 and 0.26 per cent in 1950-51. In spite of vast industrial potential in the State, Orissa continues to be industrially backward. In terms of gross *per capita* output in industry, the State is behind the all India average as well as of other States. Its gross output *per capita* is only Rs. 69 as against all India average of Rs. 179, Rs. 451 for Maharashtra, Rs. 399 for West Bengal, and Rs. 310 for Gujarat. All other States except Jammu & Kashmir and Rajasthan are having better status than Orissa in this regard. The value added by manufacture *per capita* in Orissa is also very low being only Rs. 18, whereas apart from the industrially prosperous States like West Bengal with Rs. 94, and Maharashtra with Rs. 112, the less industrially developed States like Assam has Rs. 27 and Bihar Rs. 25. This is also well reflected in terms of factory employment which shows that average daily employment of factory workers per thousand of population is only 3.4 for Orissa as against 9.0 at the all India level. In order to reach the all India level, we will have to ensure larger investments in the large and medium scale industries sector, both in private and public sectors.

2. "Value added" is one of the best indicators of the efficiency of the industries as well as of the industrial activities in the State in general. It will be observed that in the year 1961-72 the value added by manufacture was only Rs. 13 crores which increased to Rs. 20 crores in the subsequent year and went on increasing upto Rs. 41 crores in the year 1965-66. After that it decreased to 34 crores in 1966-67. and Rs. 25 crores in 1967-68. This fall was rather alarming. However, there was a quick revival in 1968-69, when it went up to Rs. 41 crores.

3. An analysis of the share of the industrial sector in the total State income reveals that it has almost remained constant at 7 per cent between 1960-61 to 1966-67. The corresponding position is, however, better in other States. In Andhra Pradesh it has increased from 7.87 per cent to 9.44 per cent, in Tamil Nadu from 13.95 per cent to 16.90 per cent and in Haryana from 11.77 per cent to 15.3 per cent during the period from 1960-61 to 1966-67.

4. The total contribution from industries to—

Orissa's State Income in 1960-61 was ..	Rs. 26.52 crores	7.30%
(S. I. Rs. 364.50 crores), in 1965-66 ..	Rs. 34.43 crores	7.68%
(S. I. Rs. 448.52 crores), in 1966-67 ..	Rs. 35.81 crores	7.27%
(S. I. Rs. 492.27 crores), & in 1967-68 ..	Rs. 37.31 crores	7.50%
(Rs. 497.31 crores)		

5. The factory employment constitutes a very low per centage of the total working force in this State. The total factory employment in 1967 was 49,197 out of which 42,228 were employed in factories employing 50 or more workers.

Review of progress up to the end of Fourth Plan—

6. The sequence of industrialisation upto the end of the Fourth Five-Year Plan in Orissa was roughly as follows. After independence, the economic and institutional background, in general, is characterised by scarcity of capital, of managerial talent and technical skills

poor infrastructure, inadequate transportation facilities, and limited markets for industrial goods. These conditions have favoured types of industries that are technologically relatively simple to operate and required less capital per unit of output. Examples can be found in textile industries, food processing units etc. Gradually, as more favourable conditions set in, and a more determined effort to utilise vast resources was made, though greatly limited by scarce finance, the structure tended to become more diversified through the development of other branches like heavy chemicals, fertilisers, machine building, steel production, ferro-alloys, cables, cement etc. The base of the diversification remained very poor due to very poor, initiative of the private sector in large and medium sector. Most of the investment in this sector was by public undertakings. Deficiency in the private sector contribution to industrial growth was due to poor infrastructure facilities, inadequate financial provision of services in the areas of project identification, project location and project implementation.

7. The following table will indicate the achievements made so far.

TABLE
Industrial growth in Orissa

Sl. No.	Item	Unit	Year					
			1960	1965	1966	1967	1968	1969
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 Factories—								
	Registered	.. Nil	679	1079	907	1095	1159	1229
2 Capital—								
	(i) Fixed	.. Lakhs	3590	32810	34379	40129	40807	38377
	(ii) Working	.. Do.	849	5942	6834	8531	8233	8422
	(iii) Productive	.. Do.	4439	38752	41213	48660	49040	46799
3 Gross output—								
	(i) Products and by products.	Do.	3848	14355	12647	16343	17813	..
	(ii) Addition in stock of semi finished goods	Do.	3	(—)38	508	303	(—)877	..
	(iii) Work done for customers.	Do.	51	160	285	356	360	..
	(iv) Others	.. Do.	..	90	162	226	190	..
	(v) Total	.. Do.	3902	14567	13602	17228	17486	22260

Sl. No.	Item	Unit	Year					
			1960	1965	1966	1967	1968	1969
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4 Value added—								
	(i) By manufacture	Lakhs	914	4089	3407	5431	4083	5389
	(ii) As percentage of—							
	(a) Gross out put.	Do.	23·42	28·07	25·05	..	23·35	24·21
	(b) Productive capital.	Do.	20·59	10·55	8·27	..	8·33	11·51
	(iii) Per Person employed.	Do.	3012	5089	4187	7043	4907	5629

8. During the Third Plan the most conspicuous achievement in this field was the setting up of the Industrial Development Corporation (I. D. C.) for encouraging the growth of medium industries in the State. It took over two existing industries, namely, Hirakud Industrial Works and Kalinga Iron Works and undertook the construction of a Cement Plant and a Tile Factory during the Third Plan.

9. The original outlay in the Fourth Plan for this sector is Rs. 985 lakhs which included Rs. 750 lakhs for schemes of the Industrial Development Corporation, Rs. 210 lakhs for the schemes implemented departmentally and Rs. 25 lakhs for weights and measures programme. The expenditure in the first three years was Rs. 955·92 lakhs, for 1972-73 it was Rs. 82·45 lakhs and the proposed outlay for 1973-74 is Rs. 86·00 lakhs, thus making a total of Rs. 1,124·39 lakhs in five years. The original plan ceiling is thus exceeded by Rs. 139·39 lakhs.

10. The I. D. C. is the major project under which a bulk of the Fourth Plan allocation has been invested. Out of the total anticipated expenditure of Rs. 1,124·39 lakhs, Rs. 943·97 lakhs will be the expenditure on the I. D. C. alone. The proposal to meet the requirement of I. D. C. by obtaining funds from the Central Financing Institutions like I. D. B. I., I. F. C. I., etc. did not materialise and the financing institutions who were moved for the purpose did not extend any assistance.

11. The targets of production could not be achieved by most of the existing units of I. D. C. due to various reasons. In case of the Kalinga Iron Works, against the Fourth Plan target of 1,00,000 tonnes the production to be achieved by the end of the Fourth Plan has been estimated at 80,260 tonnes. The productivity of the Plant is suffering heavily due to want of nut coke and price fluctuations and periodic slump in the market. The Hira Cement Works is also unable to achieve the Fourth Plan target of 3,96,000 tonnes per annum due to defects in the plant and machinery. For improving and maintaining the rated production, the plant and machinery in the factory as well as in the quarry need to be balanced and rationalised. In case of the Hira Cables the anticipated production during 1973-74 is expected to be 2,250 tonnes (A. A. C. and A. C. S. R.) and 506 tonnes (Copper) against the Fourth Plan annual target of 3,000 tonnes. (A. A. T. and A. C. S. R.) and 660 tonnes (Copper) respectively. The

main reason for short fall is non-availability of principal raw materials, i.e. aluminium and copper and slump in the market. The other industries of the Corporation, i.e. the Re-rolling Mill also faced the same difficulties. The anticipated production during 1973-74 is 12,000 tonnes against the Fourth Plan target of 15,000 tonnes. Non-availability of suitable raw materials, i.e. billet, is the main reason for low production. Against the annual requirement of 15,000 tonnes the allotment of billet to this units by the Billet Re-rollers' Committee during the past year was only 2,934 tonnes. The tile factory of the Corporation was able to operate only with two out of four presses ; the production, therefore, fell. However, there will be slight improvement during 1973-74 as the demand for roofing tile seems to be increasing and it is proposed to run the third press. As a result of this, the production is likely to increase to 66 per cent of the capacity. In case of the Ferro-Chrome Plant, the production during 1973-74 will be less than the target as there is a slump in ferro-chrome market both in the country and abroad. On account of the fishermen's trouble, operation in the salt factory was restricted and the production during the year 1973-74 is expected to be less than the targeted capacity.

12. An Industrial Developed Area Scheme at Rourkela on a site of 843 acres has been taken up. The work of development has been taken up in phases through the I. D. C. the total area occupied comes approximately to 107 acres including the establishment of an ancillary estate. Construction of water-supply system and road work is in progress and will be completed by 1973-74. Two sites measuring about 1,200 acres have been selected for the Bhubaneswar Developed Area out of which an area of 450 acres has been taken over and cost has to be paid for acquisition. Some preliminary works relating to the selection of sites, etc. will be completed during the year 1973-74 in respect of the Developed Area Schemes to be executed at Jajpur Road, Talcher, Paradeep and Choudwar.

13. Financial assistance in the shape of share capital in the large and medium-scale industries has been extended to the extent of Rs. 21.05 lakhs during the first three years of the Fourth Plan period to five industrial units. During 1972-73, a sum of Rs. 18.00 lakhs have been provided as financial assistance to three industries and in 1973-74 there is a proposal for investment in six big companies for which there is a provision of Rs. 15 lakhs.

14. As per the Industrial Development Policy Resolution of the State Government, 1971—76 power will be given to all new industries as well as for expansion of the existing industries involving a capital investment up to Rs. 25 lakhs at rates which will be $12\frac{1}{2}$ per cent less than the usual tariff rates (inclusive of duty) from the date of construction till five years after commissioning of the Plant. Although the Resolution took effect from 1971, the scheme was introduced in 1972-73 for the first time and a subsidy of Rs. 21,600 was paid to 17 industries. There is a provision of Rs. 0.50 lakhs during the year 1973-74.

15. The State Government also extends financial help for preparation of feasibility and project reports as a prelude to the establishment of new industries in Orissa. A sum of Rs. 15.89 lakhs will be spent by the end of the Fourth Plan on this account. Apart from the preparation of feasibility/project reports for a pig iron (with non-cooking coal) and a steel plant, and a brewery about twenty project profiles are being prepared for industrial development in the Rourkela, Talcher and Paradeep areas and some backward districts of the State as well as for some specific industry groups like chemical industries.

16. With a view to create a sound basis for private investment and entrepreneurship in medium and small industries an Industrial Promotion and Investment Corporation has been established on the model of the S. I. C. O./M. in Maharashtra during 1972-73. In the first year a sum of Rs. 1 lakh was invested and during 1973-74 a sum of Rs. 5 lakhs is proposed to be invested in this Corporation.

Objectives of the Fifth Plan :

17. In the Fifth 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 programmes 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 the 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 the benefits of industrialisation are spread as equitably as possible among the population living in different parts of the State ; (iv) promotion of industrial projects with the aim of utilising the natural resources available in Orissa.

18. These objectives will be achieved by implementing a number of measures which include physical and financial assistance to entrepreneurs including technically qualified personnel for setting up industries in the Orissa State, preparation of feasibility studies and project profiles, development of infrastructure facilities in the growth-centres and promotion of industrial research. Apart from the direct services to be provided by the Directorate and Department of Industries, three special institutions, namely, the Industrial Development Corporation of Orissa (IDC), the Industrial Promotion and Investment Corporation (IPICOL) and the Orissa State Finance Corporation (OSFC) will also implement various programmes and provide financial and other assistance to the respective industrialists to set up new industries in the State. The existing capacities of the industrial units of the I. D. C. will be utilised fully and if necessary their capacities will be expanded. A number of new units will be set up through the Industrial Development Corporation, preferably, in the joint sector.

19. Private entrepreneurs and technically qualified personnel will be given all necessary facilities for establishing new industries in Orissa. An Industrial promotion and Investment Corporation has been established on the model of similar institutions in Gujrat and Maharashtra in order to provide promotional and other assistance to private entrepreneurs for setting up large, medium and small scale industries in Orissa.

Specific Projects/Programme/Schemes

SPILL OVER PROJECT OF THE I. D. C.

(a) Current Project (Cement Plant)—

20. A Cement Plant with an installed capacity of 3,96,000 tonnes of Portland Cement per annum was set up at Bargarh. The Unit is unable to achieve the Fourth Plan target of 3,96,000 tonnes per annum because of the defects in the plant and machinery. The expert advice available to the I. D. C. states that the Unit can only produce 3 lakhs tonnes a year with the present equipment, and under the present conditions of working. The total funds required for rectification of the defects and other modifications in the plant to reach and maintain the rated production is Rs. 105.06 lakhs. This will also considerably reduce the cost of maintenance which has been increasing from year to year.

21. In order to continue the present rate of raising of lime-stone and its despatch to the cement plant, it is absolutely necessary to invest funds on further equipment to overcome the ever increasing difficulties in mining, and to prevent the rise in the cost of such mining. It has, therefore, been estimated that an amount of Rs. 23 lakhs is necessary for the purpose of development of the Dungri Lime-stone Quarry. Thus, a total sum of Rs. 128.06 lakhs is absolutely necessary for the Hira Cement Works during the Fifth Five-Year Plan.

(b) Investment through I. D. C.

21. A provision of Rs. 15.20 lakhs has been made for investment in the other Companies, namely, the East Coast Breweries and Distilleries Limited and the Kalinga Exporters Ltd. in order to meet the future calls on shares held by the I. D. C. to the extent of Rs. 14.25 lakhs in the East Coast Breweries and Distilleries Ltd., and Rs. 0.95 lakh in the Kalinga Exporters Ltd.

NEW (EXPANSION) PROJECTS

(a) Kalinga Iron Works -

22. This Unit is suffering a cash loss due to the high cost of production of hot metal on account of the rise in the price of raw materials, especially coke. In the year 1971-72, the total loss in the Plant was about Rs. 61.00 lakhs, i. e., a cash loss of approximately

Rs. 13 lakhs. As per the decision of the Expert Committee set up for this Unit an attempt is being made to make it profitable by diversifying the production. As per the decision of the Committee a Spun Pipe Plant and Foundry is to be erected and commissioned there for which most of the machinery is lying idle in the Plant. As per the estimates an amount of Rs. 300 lakhs is necessary to complete the erection. An amount of only Rs. 60 lakhs has been proposed to be financed by the Government and the rest from the financial institutions.

(b) Ferro-Chrome Plant—

23. The Ferro-Chrome Plant at Jajpur Road has been designed to produce nearly 10,000 tonnes of low carbon ferro-chrome per annum. This plant is also capable of producing high carbon ferro-chrome, ferro silicon as and when necessary. The expansion programme envisages production of additional 15,000 tonnes of high carbon ferro-chrome per annum for which the letter of intent has been obtained.

24. The process envisages pelletisation of chromite ore fines and re-reducing the same in a rotary kiln and then charging the hot pellets in electrical furnace for production of high carbon ferro-chrome. This scheme ensures maximum utilisation of chromite ore fines, largely generated during the mining of lumpy ore besides the natural fines which are generated from friable ores. For implementation of this programme a sum of Rs. 40.00 lakhs will be required.

(c) Ingot Casting Plant—

25. Mild Steel billet is the main raw material for the Corporation's Re-rolling Mill at Hirakud. The present licensed capacity of the Mill is 15,000 tonnes of re-rolled products. As per the licensed capacity the annual requirement of raw material of the Mill is 16,500 tonnes, i. e., 1,375 tonnes per month.

But from the very beginning the production of the Mill has been very much affected due to scarcity of raw materials, and for which, the Mill is operating now only at 43 per cent of its licensed capacity. The installation of a captive Steel Casting Unit will ensure continuous supply of raw materials for the present licensed capacity.

26. M/s. W. S. Atkins Private Limited have already submitted a Project Report for the installation of the Ingot Casting Plant at Hirakud. The process involves production of rerollable ingots from a captive mini steel plant through the melting of steel scraps or spong iron in electric arc furnace and pouring the molten steel into moulds to make ingots. To feed the present licensed capacity of the mill, a steel casting unit with a capacity of 18,000 tonnes per annum will be necessary. The project report envisages a capital cost of Rs. 1,00.00 lakhs. It has been decided that Rs. 30.00 lakhs will be the equity capital; Rs. 10.00 lakhs will be found from own resources and the balance amount of Rs. 60 lakhs will be arranged in the shape of loan from the financing institutions. Out of the equity capital of Rs. 30.00 lakhs, the Government have provided Rs. 10 lakhs in the Budget Estimates for 1973-74 and the balance of Rs. 20.00 lakhs is the spill over to the Fifth Five-Year Plan.

(d) Proporz Plant at Hirakud—

27. The Hira Cable Works at Hirakud requires approximately 2,500 tonnes of E. C. Grade aluminium rods per annum. The unit gets allotment of aluminium ingots and wire bars and gets them converted into wire rods at different cable manufacturers who have their own reducing units.

28. The above procedure involves transportation of aluminium ingots/bars from producers to different cable manufacturers and transporting them back to the plant at Hirakud. This procedure involves much additional cost on raw material.

29. In addition to this cost, sometime the factory also faces closure due to delay in converting the bars by the cable manufacturers, transportation difficulties etc. In view of the various difficulties faced in the plant, it is proposed to establish a Captive Proporz Unit for Hira Cable Works. M/s. W.S. Atkins has already prepared the Project Report. The capital cost estimate of the Plant is Rs. 50.00 lakhs.

30. For implementation of this project, a sum of Rs. 15.00 lakhs is required from the State Government during the Fifth Five-Year Plan.

Completely new Schemes

(a) Chrome Chemicals .

31. The Project envisages production of 3,300 tonnes of Sodium Dichromate and 1520 tonnes of an hydrous Sodium Sulphate per year adjacent to the fero Chrome Plant at Jajpur Road.

32. The industrial license for the industry was received in 1971. This Plant will utilise chromite ore fines for the production of these chemicals. The Project study has already been completed by M/s. Chemical and Metallurgical Design Co. Ltd.

33. The total installed cost of the Plant has been estimated at Rs. 140.00 lakhs including margin for working capital of Rs. 8.37 lakhs.

34. A sum of Rs. 20.00 lakhs is necessary for the Project from the Government for implementation of the work during the Fifth Five-Year Plan.

(b) Nylon Filament Yarn—

35. It envisages production of 2100 tonnes of Nylon-6 Filament Yarn per year. A letter of intent has been issued by the Government of India.

36. The capital cost of this project has been estimated at Rs. 900 lakhs. It has been decided to implement this project in joint collaboration with a private party.

37. An amount of Rs. 93.00 lakhs is required during the Fifth Five-Year Plan for implementation of the Project.

(c) Calcium Carbide Plant—

38. The Project envisages utilisation of high-grade limestone of Koraput District and the charcoal from the forests of the area for manufacture of Calcium Carbide.

39. The Industrial Development Corporation of Orissa Limited has obtained a letter of intent for this Project. It has been decided to implement the project through the joint sector as per the guide-lines of Government of India.

40. In order to meet the equity share capital for implementing the project a sum of Rs. 41.00 lakhs is required from the Government during Fifth Five-Year Plan.

(d) Tyre and Tube Plant—

41. It envisages production of 400,000 tyres and equal number of tubes of various sizes per year. A letter of intent has been received from the Central Government since 1970.

42. The capital cost of the project is Rs. 1,500 lakhs. The detailed feasibility report for this project is under preparation by M/s. ESCONS Consultants Limited.

43. An amount of Rs.156.00 lakhs is required during the Fifth Plan for implementation of the Project.

(e) Ferro Vanadium—

44. The project envisages utilisation of vanadi-ferrous magnetite ore available in the State for manufacture of ferro-vanadium and low phos pig iron. The installed capacity of the project envisaged is 480 tonnes per annum of ferro-vanadium and 47,500 tonnes per annum of low phos pig iron. The location of the plant will be at Rairangpur in the Mayurbhanj district.

45. Detailed prospecting work is being conducted by the Geological Survey of India and the Directorate of Mines to establish the reserve of the ore.

46. A sum of Rs. 180.00 lakhs is required during the Fifth Five-Year Plan for implementation of the project.

(f) Sponge Iron Plant—

47. The project envisages production of sponge iron utilising high grade iron ore abundantly available in Orissa and non-metallurgical coal. The sponge iron will be utilised in electrical steel making for manufacture of billets.

48. The Industrial Development Corporation of Orissa Ltd. has obtained a letter of intent for this project. Accordingly a detailed feasibility report is under preparation by M/s. W.S. Atkins Private Limited. Technological tests with raw materials in connection with preparation of the feasibility report are being conducted at the National Metallurgical Laboratory, Jamshedpur.

49. An amount of Rs. 50 lakhs is required for the Project in the Fifth Five-Year Plan.

(g) Jute Mill—

50. For the establishment of Jute Mill under co-operative sector Rs. 50 lakhs is proposed to be invested during the Fifth Five-Year Plan through the I. D. C.

(h) Electrolytic Manganese Dioxide Project—

51. The project envisages utilisation of manganese ore available in Orissa for manufacture of dry cell-grade manganese dioxide through electrolysis. Both power and manganese ore are readily available in the Barbil-Joda area for promoting this project.

52. An application has been made to Government of India by the Industrial Development Corporation of Orissa Limited for industrial licence. The project is likely to be implemented in the joint sector with indigenous know-how available through CSIR and NRDC.

53. The capital outlay of the project is Rs. 200.00 lakhs and the capacity of the project is 3,000 tonnes per annum of electrolytic manganese dioxide.

54. In view of the acute shortage of the commodity in the country and the proposed location offering advantage in respect of supply of raw material and power, the project has been included in the Fifth Plan.

55. To meet the requirement of equity capital, a sum of Rs. 20.00 lakhs has been proposed in the Fifth Plan.

(i) Proposed Paper Plant—

56. The Industrial Development Corporation of Orissa and the Orissa Paper Mills Ltd. will be the promoters in connection with establishment of a paper plant in the Koraput district. Financial assistance to the extent of Rs. 300 lakhs is proposed to be given for this Project through the I. D. C. of Orissa during the Fifth Five-Year Plan.

57. Thus a sum of Rs. 1188.26 lakhs has been proposed for the I. D. C. for the above projects including Rs. 300 lakhs for the paper plant. The details are shown in Annexure I.

Other Programmes (New Schemes)

DEVELOPED AREA PROJECT :

58. New areas will be taken up at Bhubaneswar, Paradeep, Talcher and Jajpur Road with an estimated cost of Rs. 75 lakhs, Rs. 140 lakhs, Rs. 30 lakhs and Rs. 75 lakhs respectively. During the Fifth Five-Year Plan, a total amount of Rs. 75 lakhs will be spent under this scheme i. e. Rs. 23.50 lakhs for Bhubaneswar, Rs. 29.75 lakhs for Paradeep, Rs. 8.50 lakhs for Jajpur Road and Rs. 13.25 lakhs for the Talcher Project. The physical targets are indicated below for each case :—

- (a) Bhubaneswar—Land development to the extent of 450 crores
- (b) Paradeep Project—Land development to the extent of 25 crores
- (c) Jajpur Road Project—Land development to the extent of 25 crores
- (d) Talcher Project—Land development to the extent of 50 crores

59. There is a growing demand for allotment of developed industrial plots with facility of water and power and communication facilities etc. at Bhubaneswar. Projects like belt-conveyors Unit, Tyre and Tube Plant, Heavy Engineering Units, Mini-steel Plant etc. are likely to come up. It is, therefore, essential to develop suitable areas and attract industries by provision of the physical and infrastructural facilities at Bhubaneswar.

60. At Paradeep, similar facilities will have to be provided. Large scale industries like Fertiliser, Soda-ash, Annomia Chloride, Jute Mill, Zinc Smelter, Ship building Yard and Petroleum Refinery are being planned for location at Paradeep. Due to these activities and addition of a general cargo-berth at Paradeep, a high growth potential at Paradeep is visualised. There is, therefore, an immediate need for the establishment of a Developed Industrial Area at Paradeep for the growth of industries, specially in the medium sector. Without the State Government's initiative in this regard, entrepreneurs are not likely to enter into the Paradeep area. The State Government have also appointed a Consultant for examining the feasibility for different industries at Paradeep and it is proposed to utilise such a report for attracting new industries which will require development of suitable sites at Paradeep. In the Fifth Five-Year Plan provision has accordingly been made.

61. A Nickel Smelter Plant is being located at Sukinda near Jajpur Road where a Ferro Chrome Plant has already come up. It is envisaged that industries like Heavy Engineerins Workshops, Structural Fabrication and Mining Equipment and other allied industries would come up in that area. Similarly, at Talcher a Fertiliser Project is already under construction. Other large industries which are likely to come up in the near future are refractory and formed coke as well as a number of ancillary industries like general Engineering Workshop units for mechanical spares, nihard pipes, fertiliser bags etc. It is proposed to provide developed industrial plots in these areas during the Fifth Plan period under this scheme.

Share Capital Investment in large and medium Industries

62. The State is rich in mineral and other natural resources. The Government are launching a programme of providing physical and infrastructural facilities for setting up of large, medium or small industries by the private entrepreneurs in Orissa. These industries will also need financial assistance in the shape of share capital investment in their ventures. A sum of Rs. 1.00 crore is being provided in the fifth Plan for this purpose.

Payment of subsidy to new Industries towards supply of power

63. The objective of the scheme is to provide incentives to the new industries in the State by way of subsidising the energy charges paid by them to the Orissa State Electricity Board and thereby encourages growth of more industries. On the basis of information available

by the end of 1973-74, 2,000 units will be eligible for receipt of the subsidy. Keeping an average of 50 KW connected load and 8 working hours, the energy bill will come to Rs. 8 lakhs. This will entail payment of subsidy to the tune of Rs. 1 lakh during 1974-75. During the subsequent years of the fifth Five-Year Plan period, keeping the rate of growth of new industries, at the rate of 2,000 per annum having connected load of 50 HP, the annual increase of subsidy will also be Rs. 1 lakh. The requirement of funds during fifth Plan period has been estimated at Rs. 15 lakhs.

Preparation of Project report and Project Profiles

64. During the Fifth Plan many entrepreneurs will come forward for availing facilities under this scheme (financial assistance for preparation of feasibility and project reports) and the State Government may also take up projects by engaging Consultancy Firms of repute. In view of the rapid industrialisation of this State, greater attention is proposed to be paid for completing investigation and survey of vast natural resources including mineral resources available in the State during the fifth Five-Year Plan. This is of special importance from the point of view of assessing the potential of the industrial development as well as from the point of view of employment.

65. The Planning and Design Cell in the I. D. C. will also play the role of technical consultancy organisation through formulation of project and feasibility reports and by undertaking technical studies for projects for which letters of intent or licenses have been received. In order to cater to the minimum needs of the P. & D. Cell an amount of Rs. 4.00 lakhs per annum will be necessary, in the fifth Five-Year Plan. The allocation within the available resources will be on additional staff, equipping the library and design office to meet the minimum needs of the Cell.

66. For all these activities it is proposed to provide a sum of Rs. 24 lakhs under this scheme during the fifth Five-Year Plan period.

Industrial Promotion and Investment Corporation

67. The Government of Orissa have already taken up a Developed Area Scheme in Rourkela and are starting shortly one such scheme at Bhubaneswar. There is also a plan for implementing such schemes at Talcher, Paradeep, Jajpur Road etc. This Corporation will be able to catalyse investments in these areas where all infrastructure facilities at focal points will be provided. This Corporation also will be able to make a very effective follow up to ensure good utilisation of facilities in these areas.

68. The Corporation will provide financial assistance apart from capital participation in the schemes mentioned above in a number of firms as follows:—

- (a) Provide short term, medium term or long term loans ;
- (b) subscribe directly to share capital ;
- (c) offer under-writing support ;
- (d) guarantee finances from other institutions.

69. This Corporation proposes to provide plant location, Project investigation and Project implementation service to the entrepreneurs. It is proposed to provide separate cells for these three services.

70. Under the plant location service the IPICOL will help industries, select sites where the industries will be most profitable. It is proposed to have a team of well-trained engineers and financial experts to provide a formal evaluation of alternate location.

71. Under the Project investigation service, it is proposed to have engineers and technologists to help entrepreneurs by suggesting new project possibilities, offering assistance in locating supplies of raw materials, machinery etc., supplying supporting information about various industries and projects, provide 50-75% of the cost of feasibility studies under the incentive scheme of Government of Orissa, suggesting consultancy organisation for implementing projects.

72. Under the Project Implementation Service, the IPICOL will assist entrepreneurs in speedy and smooth implementation of their projects by overcoming various practical difficulties faced by industries coming up in different areas of the State. IPICOL will secure expeditious clearances from various authorities for the basic industrial needs like water, land, power, telephone and telex. In addition, the IPICOL will have a special responsibility for initiating improvements in infrastructures like transport for workers, industrial housing and communication.

73. In order to achieve the aforesaid objectives as discussed above it is estimated that IPICOL will require a minimum of Rs. 7.5 crores to be invested in it to come to the help of the entrepreneurs and achieve the objective of industrialisation. Within the available resources Rs. 75 lakhs is proposed to be invested under this scheme during the fifth Five-Year Plan period, and raise the balance through Institution.

74. Taking the average cost of projects to be Rs. 50 lakhs in the medium and large scale sector which are likely to come up with the assistance of IPICOL it is expected that roughly 200 feasibility reports will be available in the medium and large scale sector for implementation by the entrepreneurs.

75. Keeping the same average target of investment in view, it is expected that it will be possible to promote around 90 medium and large scale industries during the Plan period.

76. Other assistance in shape of services enumerated above should be able to roughly catalyse an investment of Rs. 50 crores extra which will mean another 100 units in the medium and large scale sector within the State.

77. With the investments as expected on the lines indicated aforesaid, it will be possible for us to have a large number of small scale industries for making ancillary supplies to these units in the medium and large scale sector.

Establishment of second Co-operative Spinning Mill in Orissa

78. It is proposed to have a Second Spinning Mill in Co-operative Sector of 25,000 spindle capacity. At present the cost of such unit will come to Rs. 2.50 crores at rate of Rs. 1,000 per spindle.

The break up of the total cost of the project will be approximately as follows :—

1. Land	..	Rs. 2'00 lakhs
2. (a) Building	..	Rs. 30'00 lakhs
(b) Staff Qrs.	..	Rs. 10'00 lakhs
3. Machinery and Plants including erection charges	..	Rs. 166'00 lakhs
4. Pre-operational expenses	..	Rs. 12'00 lakhs
5. Margin money for working capital	..	Rs. 30'00 lakhs
		<hr/>
		Rs. 250'00 lakhs
		<hr/>

79. The financing institutions like the I. F. C. of India advocate that the loan-equity ratio should be 40:60 respectively for smooth running of a Mill. Therefore the amount of equity capital required for the proposed Spinning Mill will be to a tune of 100 lakhs.

80. It is proposed to provide an outlay of 90 lakhs in the fifth Plan period for a second Co-operative Spinning Mill to meet the yarn demand of various sectors of the State.

81. A Spinning Mill of 25,000 spindles capacity is able to produce on a 3 shift basis 2.5 lakhs Kgs. of yarn/month approximately, i. e., about 30.00 lakhs Kgs. of yarn/Year the value of which is roughly about Rs. 3.00 crores only. In other words it will require 34.5 lakh Kgs. of cotton or 18,500 bales of cotton of value Rs. 2.00 crores only. If cotton is grown in Orissa properly and extensively it will give additional income of Rs. 2.00 crores to the growers. Thus there is a great scope for cotton growing.

82. The mill will incur loss in the first year of starting and from the 2nd year running at full capacity it will start earning profit on an average Rs. 15.00 lakhs per annum.

Orissa State Financial Corporation

83. To enable the corporation for meeting the increased demand for investment it is proposed to augment the share capital of the Corporation in the Fifth Five-Year Plan. Out of the paid capital of Rs. 1.00 crore, shares worth Rs. 64,16,500 are held by the State Government and Rs. 20.00 lakhs are held by the Reserve Bank of India and the rest are held by others.

84. Under the provisions of the State Financial Corporations (Amendment) Act., 1972, provision for a special class of shares has been made from out of which soft loans and quasi-equity can be granted to the weaker and/or neglected priority sector of Industries. This share capital will be formed by contribution from the State Government and the Reserve Bank of India in such proportions as may be agreed upon. The main feature of this class of shares is that the corporation is not bound to pay guaranteed dividend on this class of shares. Therefore the corporation will have facility to make available loans on soft terms or on quasiequity basis to the technical entrepreneurs or undertake innovative measures for industries in the backward areas.

Since there will be no dividend obligation on this class of shares, it will be possible for the corporation not to charge interest on this capital for the first few years for starting the industry. The details, however, will be finalised in consultation with the Government and the Reserve Bank regarding eligibility of this type of loans to the category or class of industry. Therefore it is planned to take advantage of the amended provisions of the Act and to set apart Rs. 30.00 lakhs as contribution to the special share capital, so that at least a marching contribution of Rs. 30.00 lakhs will be available from the Reserve Bank of India.

85. Out of the total demand of the Corporation on share capital during the Fifth Five-Year Plan, it is planned to have the balance Rs. 30.00 lakhs from the State Government with a matching contribution of Rs. 30.00 lakhs from the Reserve Bank during 1976-77. This capital, however, will carry dividend.

86. Therefore it is planned to raise the share capital of the corporation during the fifth Plan from Rs. 1.00 crore to Rs. 2.20 crores. Necessary measures will be taken for increasing the authorised share capital of the Corporation.

87. The capital will be procured in 3 instalments of Rs. 15.00 lakhs, Rs. 15.00 lakhs and Rs. 30.00 lakhs during the years 1974-75, 1975-76 and 1976-77 respectively. It is also planned to have equal contribution from the Reserve Bank during 1974-75, 1975-76 and 1976-77.

88. The special feature of this capital is that in case of normal capital of the SFCs, they are only authorised to underwrite shares of public limited companies whereas in case of special capital the SFCs, have been empowered to contribute to the equity capital by direct subscription.

89. Since most of the Small-Scale Industrial Units are organised as proprietary or partnership concerns, the ability of the SFCs, to contribute to the equity capital of such industries would be limited. Therefore the SFCs, would have invariably to go in for quasi-equity loans, i. e., loans with a fairly long maturity and a suitable start-up period coupled with an interest holiday for the first few years.

90. The development of backward regions will form an important aspect of Government policy in the Fifth Five-Year Plan. The SFCs, are expected to finance most of the small industries which will have to play a big role in minimising regional disparities. Therefore, this category i. e. industrial units set up in backward districts would justify extension of loans on soft terms.

91. The next category which could qualify for soft loans is the industries which help adoption of newer technology and require longer gestation period such as electronics, chemicals manufacture of precision engineering and tool room equipment, manufacture of items under the patents of National Research and Design Corporation or Regional Research Laboratories or such other bodies which are either innovative and conducive to import substitution.

Leather Corporation

92. In the Fifth Plan a Leather Corporation will be set up by amalgamating the existing departmental units, namely, the tanneries at Titilagarh and Boudh, the shoe factories at Cuttack and Titilagarh and the leather unit at Rourkela. The functions of the Corporation will include (a) collection of hides and skin, horn and bone by improving flaying technique in different districts, (b) tanning of hide into bark tanning and chrome tanning to produce high quality leather for different purposes; (c) manufacture of safety leather articles like ammunition boots, industrial gloves and all kinds of civilian footwears for domestic and external markets and other miscellaneous articles like sports goods, industrial belts, etc., (d) processing of bone and manufacturing bone meal and marketing of horn and bone.

93. A sum of Rs. 76.5 lakhs will be invested during the Fifth Plan period for the working of this Corporation. The fixed assets of the four existing units proposed to be transferred will have an estimated value of Rs. 38.84 lakhs, which will be shown as the share of the Government. Further amount of Rs. 20 lakhs would be needed, out of which only Rs. 3 lakhs is being provided in the Fifth Plan.

This will constitute seed money to raise the balance of funds from the financing institutions.

94. It is proposed that the Corporation will produce 40,000 pcs of safety and ammunition boots and 10,000 pcs. of civilian footwears and 60,000 pcs of safety leather gloves during 1974-75 with an increase of 20 per cent in the subsequent years in the Fifth Plan. New units will be set up for manufacture of cycle seat, sports goods, orthopaedic appliances, etc.

Planning and Design Cell

95. The Planning and Design Cell of the Industries Department will be strengthened for preparation of feasibility studies, project reports and technical data for promotion of industrial development in the State. A sum of Rs. 1 lakhs will be spent on staff and equipment.

Board of Scientific and Industrial Research

96. The Board of Scientific and Industrial Research, Orissa' set up in 1947 will continue its activity of encouraging young scientists of Orissa to undertake fundamental and applied scientific and technological research which will contribute to the industrial development of the State. It is seen that the demand for funds for applied research is more than the resources available to the Board. A sum of Rs. 2 lakhs is being provided in the Fifth Plan's grant-in-aid in order to meet the growing needs of the Board.

Weights and Measures

97. During the Fourth Plan the financial outlay for the schemes was fixed at Rs. 25 lakhs, against which the expenditure is likely to be Rs. 16.17 lakhs. The physical achievements of the Fourth Plan are indicated in the following Table.

	Target	Target achieved by 1972-73	Targets proposed for 1973-74
1. Working Standard Laboratory ..	15	10	1
2. Mobile Laboratory ..	2	1	1
3. Water Metre Testing Unit ..	2	..	..
4. Taxi Metre Testing Unit ..	2	1	..
5. Central Workshop —	1	1	..
6. Construction of building for Working Standard Laboratory.	10	3 in complete	To be completed during 1973-74.
7. Extension and Education Unit ..	1	..	1

98. The short fall in achieving the targets is due to non-availability of equipments for laboratory, suitable land for construction of buildings and change in the policy of Government in the matter of charging water rent on metre basis.

Objectives and Targets for the Fifth Plan

99. During the Fifth Five-Year Plan the scope and coverage of the schemes are proposed to be extended in a phased manner to the following items of work:—

- (1) Verification and testing of weighing and measuring instruments used in the Railways and Postal Departments.
- (2) Verification and testing of taxi metres
- (3) Survey of sophisticated weighing and measuring instruments used in the trade and industry.
- (4) Introduction of standard weights and measures, in under developed and backward areas particularly where poor Adivasis are being exploited by middlemen.
- (5) Testing and inspection of sealed packages of important commodities like baby-food, soap, detergent, tea, vanaspati, biscuit, aereated water, etc.
- (6) To extend facilities to the public as well as to the traders for accurate weighment and measurement of the commodities transacted by them in the important centres of the State.
- (7) Setting up Mobile Laboratories to extend the facilities for verification and testing of weights, measures, etc. in rural markets.
- (8) To make available at subsidised 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.

Establishment of Working Standards Laboratories

100. 50 working standards laboratories are functioning in the State where testing and certification of various types of weights, measures, weighing and measuring instruments manufactured within the State, procured from outside the State and used by the trading public in their day-to-day transactions are taken up as required under the Orissa Weights and Measures (Enf.) Rules, 1960. It is proposed to set up 10 more centres in the Fifth Plan at the rate of 2 per year. Each of the above laboratories will be provided with working standards, balances and other equipments necessary for verification and stamping.

Verification and Testing of Weights, Measures Weighing and Measuring Instruments used in Railways and Post and Telegraph Department

101. Verification and stamping of weights, measures, weighing and measuring instruments used in the Railways and Posts and Telegraphs Departments will be taken up by the Weights and Measures Department. As advised by Government of India, this work should be taken up by a set of Inspectors and other staff who will be exclusively earmarked for the purpose. It is proposed to create three posts of Inspectors of Weights & Measures with three Manual Assistants. These Inspectors will be provided with working standards, balances and other equipments as necessary for verification and stamping of weight and measures used in Railways and Posts and Telegraphs Departments. The work will be taken up in a phased manner during the Fifth Plan period 1 in 1st year, 1 in second year and 1 in third year.

Strengthening of the Weights and Measures Organisation

102. With the increase in developmental activities in the State and establishment of more and more industries, the use of weights, measures, weighing and measuring instruments is increasing rapidly. These are required to be tested and certified by the Weights and Measures Organisation. The weights and measures work relating to Government Departments, bigger Commercial and Industrial Organisations having their branches in different States has to be properly co-ordinated and arranged systematically so that the normal work of the Departments or Industries are not affected adversely. New posts of Inspectors and Senior Inspectors and Supervisory Officers are to be created during the Fifth Plan.

103. The field staff will undertake survey of sophisticated weighing & measuring instruments used in the Trade and Industries and Supervisory Officers will mobilise the field staff in the survey work in a systematic and planned manner. There are at present six Zonal Assistant Controllers of Weights & Measures and one more Zone is being created in 1973. It is proposed to create four more zones to cover the remaining districts of the State in the Fifth Plan period. These will cover districts with mainly backward population. As, however, the number of Inspectors in these districts will be comparatively less, it is proposed to create posts at the level of Sub-Assistant Controllers, with the necessary complement of staff. In order to facilitate proper and adequate supervision, ensure mobility and arrange Mobile Courts and surprise inspection, it is also proposed to provide the Supervisory Officers with a vehicle.

Extension and Education Programme

104. The tribal people who are habituated to the barter system hardly appreciate the utility of standardisation of weights and measures and are not able to derive adequate benefit out of the scheme.

In order to educate the public in general and tribal people in particular about the details and the benefits which are derived by them from this scheme, it is proposed to undertake extension and education programme with particular emphasis in the rural and Adivasi areas. For this purpose, it is proposed to create the post of one Education & Extension Officer at the Headquarters with the necessary complement of staff connected with *audio visual* unit. He will visit rural and Adivasi areas to undertake demonstrations and educational campaign. It is also proposed to continue programmes of showing cinema slides, documentary films, arranging exhibitions, raising hoardings, etc.

Setting up Taxi Metres Testing Units

105. At present taxis operating in the State have not been provided with tested metres. It has not been possible so far to ask the taxi owners to use tested metres as requisite testing facilities are not available in the State. Steps have been taken to instal one taximetre testing units at Bhubaneswar. During the 5th Plan period, it is proposed to set up 3 more Testing Units one each at Berhampur, Sambalpur and Rourkela.

Mobile Laboratories

106. All the weights, capacity measures, length measures, beam scales and other weighing and measuring instruments used by the traders and the public in transactions are required to be tested periodically in the working standards laboratories and thier accuracy Certified by the Weights and Measures Department. The users in far off and remote places find it difficult to come to the working standards laboratories. It is proposed to operate Mobile Laboratories which will go to far off and remote places of the State specially to rural hats and mandies to take up verification and stamping of weights, measures, etc. used by the local traders thereby relieving the trading public from the trouble of carrying their weights, measures, etc to the Laboratories. It is proposed to set up 3 such Laboratory Units during the Fifth Plan period in addition to two which would have been put into operation in the Fourth Plan period. These units will be provided with mobile vans.

Construction of buildings for Working Standard Laboratories

107. At present, the Working Standards Laboratories are functioning in rented houses which are hardly suitable for the purpose. It is proposed to construct buildings for such laboratories during the Fifth Plan period in a phased manner. By the end of Fourth Plan period, three such buildings would have been completed. It is proposed to construct eight buildings.

Testing and Certification of Sealed Packages

108. Varieties of commodities like baby food, biscuit, vanaspati, tea, soap, detergent aereated water, etc. are sold in sealed packages or containers. The quantities of the goods contained in such packages are determined by the manufacturers. The transactions in such commodities are made in good faith without taking recourse to weighment and measurement at the time of sale or delivery. One of the important duties of the Weights and Measures Organisation is to ensure that the sealed packages contain the quantities of goods purported to be contained therein. This work has not been taken up in this State so far. It is proposed to start the work during the 2nd year of Fifth Plan period. To start with, one Sealed Package Testing Unit, will be established at headquarters and the facility will be extended to other areas gradually.

Subsidised sale of Tested Weights, Measures, etc, among the Tribal Traders to save them from Exploitation

109. The tribals do not have adequate means to purchase the sets of weights and scales at market rates. If these weights, scales, etc. are provided to the tribal people at subsidised rates, they will habituate themselves with the new system of weights and measures and there by they will be saved from the exploitation of the Sahukars. The total cost will be Rs. 2'00 lakhs (with subsidy of Rs. 1'00 lakh) for the Fifth Plan period.

110. It is estimated that an amount of the order of Rs. 27'00 lakhs will be required for the Weights and Measures Scheme during the Fifth Plan period. Scheme wise financial outlay and targets are given in Annexure IV.

111. The total outlay proposed for the Fifth Plan in the Large and Medium Industries Sector, comprising the programmes of the Industrial Development Corporation, Weights and Measures Programme and others, is Rs. 1,663'26 lakhs programme wise distribution of their outlay is shown in Annexure II some basic information about the proposed Industrial Projects are given in Annexure III [(a) to (o).]

Annexure I

Details of I. D. C. Projects (Rs. in lakhs)

Sl. No.	Name of the Scheme/ Projects	Total cost original/ revised	Foreign Exchange component	Fourth Plan		Proposed outlay for Fifth Plan		Phasing of outlay in the Fifth Plan				
				Approved outlay	Estimated Expenditure	Total	Foreign Exchange	1974-75	1975-76	1976-77	1977-78	1978-79
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
A. Spill over Projects												
(i)	Hiracement Works ..	903.24 ----- 1009.18	150.36	71.95	202.80	128.06	..	128.06	..	..	..	..
(ii)	Investment in East Coast Breweries and Distilleries.	..	..	..	14.62	15.20	..	15.20	..	..	..	..
	Sub-Total 'A' ..	..	150.36	71.95	217.42	143.26	..	143.26	..	..	..	..
B. New (Expansion Projects)												
(i)	Kalinga Iron Works for Spun Pipe Plant and Foundry.	300.00	Not finalised.	..	..	60.00	Not finalised.	60.00	..	..	..	..
(ii)	Ferrochrome Plant ..	400.00	Ditto	..	..	40.00	Ditto	20.00	20.00	..	..	..
(iii)	Ingot Casting Plant, Hirakud.	100.00	Ditto	..	10.60	20.00	Ditto	20.00	..	..	..	..
(iv)	Properzi Plant, Hirakud	50.00	Ditto	..	..	15.00	Ditto	10.00	5.00	..	..	..
	Sub-Total 'B' ..	..	..	..	10.60	135.00	..	110.00	25.00	..	..	..

Sl. No.	Name of the Scheme/ Project	Total cost original/ revised	Foreign exchange component	Fourth Plan		Proposed outlay for Fifth Plan		Phasing of outlay in the Fifth Plan				
				Approved outlay	Estimated expenditure	Total	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<i>C. New Schemes</i>												
(i)	Chrome Chemicals ..	140'00	Not finalised.	..	..	20'00	Not finalised.	20'00	..	..	..	..
(ii)	Nylon Filament Yarn ..	900'00	Ditto	..	..	93'00	Ditto	60'00	33'00	..	..	..
(iii)	Calcium Carbide Plant ..	400'00	Ditto	..	..	41'00	Ditto	31'00	10'00	..	..	..
(iv)	Tyre & Tube Factory	1,500'00	Not finalised.	..	..	156'00	Not finalised.	82'00	52'00	22'00	..	..
(v)	Ferro Vanadium ..	1,100'00	Ditto	..	13'75	180'00	Ditto	60'00	60'00	60'00	..	..
(vi)	Sponge Iron Plant ..	2,000'00	Ditto	..	0'95	50'00	Ditto	10'00	20'00	20'00	..	..
(vii)	Jute Mill ..	..	Ditto	..	..	50'00	Ditto	25'00	25'00	..	..	..
(viii)	Electrolytic Manganese Dioxide.	200'00	Ditto	..	..	20'00	Ditto	..	10'00	10'00	..	..
	Sub Total 'C'	..	..	..	14'70	610'00	..	288'00	210'00	112'00	..	..
	D. Paper Plant ..	..	..	..	..	300'00	Ditto	60'00	60'00	60'00	60'00	60'00
	Grand Total ..	..	..	..	232'72	188'26	..	601'26	295'00	172'00	60'00	60'00

Annexure II
Large and Medium Industries

Sl. No.	Name of the Scheme/ Project	Total cost original/ revised	Foreign exchange component	Fourth Plan		Proposed outlay for Fifth Plan		Phasing of outlay in the Fifth Plan				
				Approved outlay	Estimated expenditure	Total	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	State Industrial Project ..	..	..	21.25	11.74	..	..	..	..	..	..	..
2	Industrial area ..	..	..	78.25	72.96	75.00	..	27.50	32.50	8.25	5.50	1.25
3	(a) Industrial Development Corporation.	7,090.00	..	750.00	943.97	888.26	..	541.26	235.00	112.00	..	..
	(b) Paper Plant (Financial Assistance).	..	..	..	..	300.00	..	60.00	60.00	60.00	60.00	60.00
4	Financial assistance to Large and Medium Industries	..	..	60.00	54.05	100.00	..	30.00	30.00	20.00	10.00	10.00
5	Subsidy to Power ..	..	..	1.00	0.54	15.00	..	1.00	2.00	3.00	4.00	5.00
6	Formulation of Project Report.	..	..	46.25	15.89	24.00	..	5.00	5.00	5.00	5.00	4.00
7	Industrial Promotion and Investment Corporation.	750.00	..	..	5.00	75.00	..	15.00	15.00	15.00	15.00	15.00
8	Planning and Designs Cell ..	..	..	2.00	1.87	1.00	..	0.25	0.18	0.18	0.19	0.20
9	Board of Scientific and Industrial Research.	..	..	1.25	1.25	2.00	..	0.40	0.40	0.40	0.40	0.40
10	Co-operative Spinning Mill..	250.00	..	..	..	90.00	1.00	18.00	36.00	36.00	..	..
11	Investment in State Financial Corporation.	..	..	..	..	60.00	..	15.00	15.00	30.00	..	..
12	Leather Corporation ..	76.48	..	..	..	3.00	..	3.00	..	..	..	..
13	Weights and Measures Programme Schemewise outlay is shown in Annexure IV.	..	..	25.00	17.14	27.00	..	5.00	5.00	5.50	5.50	6.00
	Grand Total ..	8,411.48		985.00	1,124.37	1,660.26	1.00	721.41	436.08	295.33	105.59	101.85

Annexure III(a)

*Basic information about Industrial and Mineral Projects***1. Name and capacity of the Project**

(i) Name of the Project	..	Tyre & Tube Project
(ii) Location (actual or likely)	..	Mancheswar in Cuttack district (Tentative)
(iii) Nature of the Projects—	..	
(a) New Project	..	New
(b) Expansion of an existing Project.	..	
(iv) Products/Output	..	400,000 Nos. of Automobile Tyre & Tube.
(a) Capacity	..	Ditto

2. Schedule of Implementation

(i) Whether feasibility study DPR prepared	..	Under preparation
(a) By whom	..	M/s. ESCON Pvt. Ltd.
(b) Present status whether approved, submitted for approval, etc.	..	Project report under preparation
(ii) Nature of foreign collaboration required—Technical or Financial.	..	Technical from M/s. General Tires
(iii) Date of start of construction	..	1973
(iv) Date of commencement of production	..	1976
(v) Achievement of rated capacity—likely date	..	1979

3. Project Expenditure

(i) Land	..	0.30 crores (Appx.) Details can be given after the project report is completed.
(ii) Buildings and civil works	..	3.5 crores
(iii) Machinery and equipment	..	3.0 crores (Appx. Total Capital Outlay Rs. 15 crores).
(iv) Others	..	6.2 crores.

4. Financing and Execution of the Projects

(i) Name of the executing agency	..	New company to be formed
(ii) Arrangements for financing	..	Joint Sector
(iii) Source and extent of institutional finance envisaged.	..	Public Financing Institutions, IDBI, IFCI, ICICI, etc.
(iv) To what extent internal resources of the company/corporation are to be deployed,	..	25 per cent of the equity share of the project on the basis of joint sector guide line.

5. Material Requirement

- | | |
|-------------|----|
| (i) Steel | .. |
| (ii) Cement | .. |

6. Employment Potential

- | | | |
|---|----|-------|
| (i) During construction | .. | 400 |
| (ii) After construction | .. | 1,200 |
| (a) Managerial | .. | 5 |
| (b) Technical Engineers and Supervisors | .. | 95 |
| (c) Clerical | .. | |
| (d) Skilled Workmen. | .. | 800 |
| (e) Unskilled Workmen | .. | 300 |

Annexure III (b)*Basic Information about Industrial and Mineral Projects***1. Name and capacity of the Project**

- | | | |
|--------------------------------------|----|---|
| (i) Name of the Project | .. | Ferro Vanadium Project |
| (ii) Location (actual or likely) | .. | Rairangpur, Mayurbhanj district |
| (a) New Project | .. | New Project |
| (b) Expansion of an existing Project | .. | |
| (iii) Products/Output | .. | |
| (a) Capacity | .. | 480 tons per year. Ferro-Vanadium
47,500] tons of Low Phos Pig Iron. |

2. Schedule of implementation

- | | | |
|---|----|--|
| (i) Whether feasibility study/DPR prepared | .. | Yes |
| (a) By whom | .. | M/s. M. N. Dastur & Co. Ltd. |
| (b) Present status—whether approved, submitted for approval, etc. | .. | Projects being implemented through Centre and State participation. |
| (ii) Nature of foreign collaboration required—Technical or Financial. | .. | Technical |
| (ii) Date of start of construction | .. | 1974 |
| (v) Date of commencement of production | .. | 1977 |
| (iv) Achievement of rated capacity likely date | .. | |

3. Project Expenditure

Rupees in crores

(i) Land	..	0.06	
(ii) Buildings and Civil Works	..	1.44	Total outlay
(iii) Machinery and Equipment	..	7.23	Rs. 11.04 crores
(iv) Others (Foreign Exchange)	..	2.31	as per the feasibility report

		11.04	crores

4. Financing and Execution of the Projects

(i) Name of the executing agency	..	New Company
(ii) Arrangements for financing	..	State and Central Government
(iii) Source and extent of institutional finance envisaged		Financial Institution like IDBI, IFCI, ICICI, etc.
(iv) To what extent internal resources of the company/ corporation are to be deployed.	33½	per cent of the equity share

5. Material Requirement

(i) Steel	..
(ii) Cement	..

6. Employment Potential

(i) During construction	..	500
(ii) After construction	..	740
(a) Managerial	..	6
(b) Technical— Engineers & Supervisors	..	104
(c) Clerical	..	---
(d) Skilled workmen	..	400
(e) Unskilled workmen	..	230

Annexure III (c)*Basic Information about Industrial and Mineral Project***1. Name and capacity of the Project**

(i) Name of the Project	..	Sponge Iron Project
(ii) Location (actual or likely)	..	
(a) New Project	..	New
(b) Expansion of an existing Project.	..	
(iv) Products/Output	..	Sponge Iron & Steel Billets ultimate in the 1st phase.
(a) Capacity	..	300,000 tons per year Sponge Iron 150,000 tons per yr. sponge. 240,000 "Billets 120,000 tons per yr. billet.

2. Schedule of Implementation:

- | | | |
|--|----|---|
| (i) Whether feasibility study/DPR prepared | .. | Under preparation |
| (a) By whom | .. | M/S W. S. Atkins representing
M/S W. S. Atkins & Lurgi |
| (b) Present status whether approved, submitted | .. | Pilot test on the raw materials under
progress in N. M. L. |
| (ii) Nature of foreign collaboration required technical
or financial. | .. | |
| (iii) Date of start of construction | .. | 1974 |
| (iv) Date of commencement of production | .. | 1978 |
| (v) Achievement of rated capacity likely date | .. | |

3. Project Expenditure

- | | | |
|-------------------------------|----|--|
| (i) Land | .. | Details will be known after the
feasibility report is prepared. |
| (ii) Building and civil works | .. | |
| (iii) Machinery and Equipment | .. | Total capital outlay Rs. 20 crores
(Appx.) on the first phase 8-10
crores. |
| (iv) Others | .. | |

4. Financing and Execution of the Projects

- | | | |
|--|----|--|
| (i) Name of the executing agency | .. | New company |
| (ii) Arrangements for financing | .. | Central & State Government |
| (iii) Source and extent of institutional finance envisaged | .. | Public Financing Institution,
IDBI, IFCI, ICICI, etc. |
| (iv) To what extent, internal resources of the company/
corporation are to be deployed. | .. | To be decided later. |

5. Material Requirement

- | | | |
|-------------|----|--|
| (i) Steel | .. | |
| (ii) Cement | .. | |

6. Employment Potential

- | | | |
|---|----|-------|
| (i) During construction | .. | 400 |
| (ii) After construction | .. | 1,000 |
| (a) Managerial | .. | 10 |
| (b) Technical—Engineers and Supervisors | .. | 190 |
| (c) Clerical | .. | |
| (d) Skilled Workmen | .. | 550 |
| (e) Unskilled Workmen | .. | 250 |

Annexure III (d)

*Basic information about Industrial and Mineral Projects***1. Name and capacity of the project**

(i) Name of the project	..	Electrolytic Manganese Dioxide plant.
(ii) Location (Actual or likely)	..	Barbil Joda areas
(iii) Nature of the projects—	..	
(a) New Project.	..	New
(b) Expansion of an existing project	..	
(iv) Products/Output	..	Electrolytic Manganese
(a) Capacity	..	3,000 tons per year

2. Schedule of Implementation:

(i) Whether feasibility study/DPR prepared	..	No
(a) By whom		
(b) Present status—Whether approved, submitted for approval, etc.		Application submitted for issue of letter of intent from Government.
(ii) Nature of foreign collaboration required—Technical or Financial.		Not necessary
(iii) Date of start of construction	..	1975
(iv) Date of commencement of production	..	1977
(v) Achievement of rated capacity likely date.	..	

3. Project Expenditure:

(i) Land	..	Details can be given after the project report is prepared. Capital
(ii) Buildings and civil works	..	outlay Rs. 2 crores.
(iii) Machinery and Equipment	..	
(iv) Others	..	

4. Financing and execution of the projects

(i) Name of the executing agency	..	New Company
(ii) Arrangements for financing	..	Through Joint Sector, 26 per cent IDC & 25 per cent by the Collaborator.
(iii) Source and extent of institutional finance envisaged		IDBI, IFCI, ICICI, etc.
(iv) To what extent internal resources of the company/corporation are to be deployed.		26 per cent of the equity share

5. Material Requirements:

(i) During construction	..	200
(ii) After construction —	..	240
(a) Managerial	..	3
(b) Technical Engineers and Supervisors	..	17
(c) Clerical		
(d) Skilled Workmen	..	130
(e) Unskilled Workmen	..	90

Annexure III (e)*Basic Information audit Industrial and Dinerl Projects***1. Name and capacity of the projects**

(i) Name of the project	..	Second Co-op. Spinning Mills (Kalinga Co-op. Spinning Mills).
(ii) Location (actual or likely)	..	Rayagada in the district Koraput.
(iii) Nature the project—		
(a) New project	..	New
(b) Expansion of an existing project	..	
(iv) Products/Output	..	
(a) Capacity	..	Cotton yarn 25,000 spindles capable of producing 30.00 lakh Kg./annum.

2. Schedule of Implementation

(i) Whether feasibility study/DPR prepared	..	Under preparation
(a) By whom	..	Orissa State Power loom Servicing Co-operative Society Ltd.
(b) Present status whether submitted for approval, etc.		Application submitted for approval.
(ii) Nature of foreign collaboration required technical or financial		Does not arise
(iii) Date of start of construction	..	Proposed date—October 1974
(iv) Date of commencement of production	..	Proposed date—January 1977
(v) Achievement of rated capacity likely date	..	1977

3. Project Expenditure

(i) Land	..	Rs. 20.00 lakhs
(ii) Building and Civil works	..	Rs. 30.00 lakhs
(iii) Machinery and Equipment	..	Rs. 166.00 lakhs
(iv) Others	..	Rs. 52.00 lakhs

4. Financing and Execution of the project

(i) Name of the executing agency	..	Orissa State Powerloom Servicing Co-operative Society.
(ii) Arrangement for financing	..	State Government Industrial Financial Corporation & Orissa State Financial Corporation.
(iii) Source and extent of institutional finance envisaged		Institutional finance worth Rs. 150 lakhs to be obtained from industrial finance corporation.
(iv) To what extent internal resources of the company/corporation are to be deployed.		

5. Material requirements

(i) Material requirements	..	2000 M. T. (Steel)
(ii) Cement	..	2000 M. T.

6. Employment potential

(i) During construction	..	1 Engineer
(ii) After construction	..	2 Overseers
(a) Managerial	..	2
(b) Technical Engineers and Supervisors	..	10
(c) Clerical	..	30
(d) Skilled workmen	..	800
(e) Unskilled workmen	..	200

Annexure III (f)

*Basic Information about Industrial and Mineral Projects***1. Name and Capacity of the projects**

(i) Name of the project	.. State Leather Corporation
(ii) Location (actual or likely)	.. Cuttack/Bhubaneswar
(iii) Nature of the projects	..
(a) New project	.. New
(b) Expansion of an existing project	.. X
(iv) Products/Output	.. Leather and leather products
(a) Capacity	.. 75,000 Kgs. of rust leather, 25,000 Kgs. of sole leather 75,000 Kgs. of chrome leather 60,000 pairs of footwear and 50,000 pairs of gloves.

2. Schedule of Implementation

(i) Whether feasibility study/DPR prepared	.. Yes
(a) By whom	.. Dy. Director, Leather, Orissa, Cuttack
(b) Present Status (Whether approved, submitted for approval, etc.).	.. To be submitted for approval
(ii) Nature of foreign collaboration required Technical or financial:—	No
(iii) Date of start of construction	.. 1974-75
(iv) Date of commencement of production	.. 1974-75
(v) Achievement of rated capacity—	.. Likely date 1977-78

3. Project Expenditure

(i) Land	.. Rs 0.25
(ii) Buildings and Civil Works	.. Rs. 2.53
(iii) Machinery and Equipment	.. Rs. 7.48
(iv) Others	.. Rs. 27.38

4. Financing and Execution of the project

- (i) Name of the executing agency .. State Leather Corporation
- (ii) Arrangements for financing .. Government investment
- (iii) Source and extent of institutional finance envisaged Government Share and loan from Banki O. S. P. C.
- (iv) To what extent, internal resources of the company/ corporation are to be deployed. Accounts of existing leather unit valuing Rs. 38,84 lakhs. (approximately) will be transferred to the corporation.

5. Material requirements

- (i) Steel ..
- (ii) Cement .. Not yet assessed

6. Employment potential

- (i) During construction .. 10,800 in man days
- (ii) After construction ..
- (a) Managerial .. 5
- (b) Technical Engineers and Supervisors .. 10 Leather Technologist
15 Leather Supervisors
- (c) Clerical .. 32
- (d) Skilled workmn .. 30

Annexure III (g)*Basic Information about Industrial and Mineral Projects***1. Name and Capacity of the projects**

- (i) Name of the project .. Development Area Project
- (ii) Location (actual) .. (a) Paradeep, Jajpur Road, Talcher ,
(b) Bhubaneswar.
- (iii) Nature of the projects ..
- (a) New project .. As under (a) above
- (b) Expansion of an existing project .. As under (b) above
- (iv) Products/Output ..
- (a) Capacity .. Development of land

2. Schedule of Implementation—

- | | | |
|---|----|------------------------------|
| (i) Whether feasibility study/DPR prepared | .. | No |
| (a) By whom | .. | Does not arise |
| (b) Present status, whether approved | .. | Submitted for approval, etc. |
| (ii) Nature of foreign collaboration required technical or financial. | | Nil |
| (iii) Date of start of construction | .. | 1974-75 |
| (iv) Date of commencement of production | .. | X |
| (v) Achievement of rated capacity | .. | Likely date: X. |

3. Project Expenditure—

- | | | |
|-------------------------------|----|-------------------|
| (i) Land | .. | Rs. 37.50 lakhs |
| (ii) Building & Civil works | .. | Rs. 1,04.50 lakhs |
| (iii) Machinery and equipment | .. | K |
| (iv) Other | .. | K |

4. Financing and Execution of the Projects—

- | | | |
|--|----|--|
| (i) Name of the executing agency | .. | Orissa Small Industries Corporation Ltd. |
| (ii) Arrangement for financing | .. | Fully financed by Government |
| (iii) Source and extent of institutional finance envisaged | .. | .. |
| (iv) To what extent, internal resources of the company corporation are to be deployed. | .. | Does not arise |

5. Material requirements—

- | | | |
|-------------|----|--------------|
| (i) Steel | .. | Not assessed |
| (ii) Cement | .. | .. |

6. Employment Potential—

- | | | |
|---|----|---------------------------------|
| (i) During construction | .. | 90 regular and 450,000 man days |
| (ii) After construction | | |
| (a) Managerial | .. | .. |
| (b) Technical-Engineers and Supervisors | .. | .. |
| (c) Clerical | .. | .. |
| (d) Skilled workman | .. | .. |
| (e) Unskilled workman | .. | .. |

Annexure III (b)

*Basic Information about Industrial and Mineral Products***1. Name and capacity of the project —**

(i) Name of the project	.. Hira Cement Works
(ii) Location	.. Bargarh in the district of Sambalpur
(iii) Nature of the projects—	
(a) New project	.. ..
(b) Expansion of an existing project	.. Continuing Project
(iv) Products/Output	.. ..
(a) Capacity	.. 396,000 M. T. of Portland Cement per annum.
(v) Capital cost estimate	Rs. 10,09'18 lakhs

2. Physical Achievement—

Year	Production		Achievement to licensed capacity Clinker	Despatch M. T.
	Cement M. T.	Clinker M. T.		
(1)	(2)	(3)	(4)	(5)
1967-68 ..	16,055	49,222	13 per cent	5,969
1968-69 ..	205,717	165,137	44 per cent	213,426
1969-70 ..	188,094	196,345	52 per cent	187,722
1970-71 ..	246,440	246,860	65 per cent	242,950
1971-72 ..	291,331	285,792	75 per cent	294,030
1972-73 ..	340,240	315,900	83 per cent	340,327
1973-74 ..	335,000	340,000	89 per cent	355,000
(Budget)				

Annexure III (i)*Basic Information About Industrial and Mineral Products***1. Name and capacity of the Projects**

(i) Name of the Project	..	Diversification of Kalinga Iron Works.
(ii) Location (Actual or likely)	..	Barbil
(a) New Project	..	..
(b) Expansion of an existing Project	..	Diversification of the existing Plant at Barbil.
(iv) Products/Output	..	..
(a) Capacity	..	36,000 tons of spun/ductile pipes, 36,000 tons comprising of sheets castings including pipe specials-ingot whould bottem-plates and various items of other products depending on the market demand.

2. Scheme of Implementation—

(i) Whether feasibility study/DPR prepared	..	No
(a) By whom	..	..
(b) Present status—Whether approved, submitted for approval, etc.	..	..
(ii) Nature of foreign collaboration required— Technical or Financial.	..	..
(iii) Date of start of construction	..	..
(iv) Date of commencement of production	..	..
(v) Achievement of rated capacity—likely date	..	..

3. Project Expenditure—

(i) Land	}	Rs. 3 crores
(ii) Building & Civil Works		
(iii) Machinery and Equipemnts		
(iv) Others		

4. Financing and execution of the project—

(i) Name of the executing agency	..	IDCOL
(ii) Arrangements for financing	..	100 per cent shares by IDC and the balance as loan from IDBI, Bank etc.
(iii) Source & extent of institutional finance envisaged		
(iv) To what extent, internal resources of the Company deployed.		To be decided later

5. Material requirements

- (i) Steel ..
- (ii) Cement.

6. Employment potential

- (i) During construction ..
- (ii) After construction .. 500
- (a) Managerial- .. 5
- (b) Technical—Engineers & Supervisors 45
- (c) Clerical
- (d) Skilled workmen .. 200
- (e) Unskilled workmen .. 250

Annexure III (J)*Basic Information about Industrial and Mineral Projects***1. Name & capacity of the project**

- (i) Name of the Project .. Expansion of Ferrochrome Plant
- (ii) Location (actual or likely) .. Jajpur Road in Cuttack District
- (iii) Nature of the Project ..
- (a) New Project
- (b) Expansion of an existing Project .. Expansion of existing Unit
- (iv) Products/Output ..
- (a) Capacity .. High carbon Ferrochrome 15,000 tonnes per year.

2. Schedule of implementation

- (i) Whether feasibility study/DPR prepared .. Pre-feasibility report prepared with the advice of SOWA DENKO
- (a) By whom ..
- (b) Present status—Whether approved, submitted for approval, etc. The Project has been deferred as the market of ferrochrome has shown a downward trend.
- (ii) Nature of foreign collaboration required—Technical or Financial. Technical collaboration with M/s SOWA DENKO of Japan.
- (iii) Date of start of construction .. 1975
- (iv) Date of commencement of production .. 1978
- (v) Achievement of rated capacity—likely date .. 1978

3. Project Expenditure

- (i) Land .. This will be in the premises of the existing Ferrochrome plant largely utilising the infra-structure already created.
- (ii) Buildings and Civil Works
- (iii) Machinery and Equipment
- (iv) Others .. Total outlay Rs. 4 crores

4. Financing and execution of the projects :

- (i) Name of the executing agency .. The Industrial Development Corporation of Orissa Limited,
- (ii) Arrangements for financing .. Public financing Institutions and State Government.
- (iii) Source and extent of institutional finance envisaged. IDBI, IFCI, ICIC, etc.
- (iv) To what extent, internal resources of the company/corporation are to be deployed.

5. Materials requirement

- (i) Steel
- (ii) Cement

6. Employment potential

- (i) During the construction .. 200
- (ii) After construction .. 200
- (a) Managerial .. 2
- (b) Technical—Engineers and Supervisors .. 18
- (c) Clerical
- (d) Skilled Workmen .. 100
- (e) Unskilled Workmen .. 80

Annexure III (k)*Basic Information about Industrial and Mineral Products***1. Name and capacity of the Projects**

- (i) Name of the Project .. Ingot casting Plant
- (ii) Location (actual or likely) .. Hirakud
- (iii) Nature of the projects ..
- (a) New project
- (b) Expansion of an existing project .. Expansion of the existing Re-rolling Mills.
- (iv) Products/ Output .. Steel
- (a) Capacity .. 18,000 Tonnes per year of Steel

2. Schedule of Implementation

- (i) Whether feasibility study/DPR prepared .. Yes
- (a) By whom .. M/s. W. S. Atkins Private Ltd.
- (b) Present status whether approved, submitted for approval, etc. Approval from State Government obtained.
- (ii) Nature of foreign collaboration required—Technical or Financial. Not necessary
- (iii) Date of start of construction .. 1974
- (iv) Date of commencement of production .. 1978
- (v) Achievement of rated capacity likely—date ..

3. Project Expenditure

- (i) Land—Nil .. Total capital outlay Rs. 1 crore
- (ii) Buildings and civil works .. Rs. 0.11 crore (appx.)
- (iii) Machinery and equipment .. Rs. 0.53 crore (appx.)
- (iv) Others .. Rs. 0.36 crore (appx.)

4. Financing and Execution of the Projects

- (i) Name of the executing agency .. Industrial Development Corporation of Orissa Ltd.
- (ii) Arrangements for financing .. State Government and Financing Institutions.
- (iii) Source and extent of institutional financing envisaged. Financing Institutions to the extent of Rs. 60 lakhs—IDBI, IFCI, ICICI, etc.
- (iv) To what extent, internal resources of the company/corporation are to be deployed. Rs. 40 lakhs

5. Material requirements

- (i) Steel
- (ii) Cement

6. Employment Potential

- (i) During construction .. 100
- (ii) After construction .. 200
- (a) Managerial .. 3
- (b) Technical Engineers and Supervisors .. 7
- (c) Clerical
- (d) Skilled Workmen .. 150
- (e) Unskilled Workmen .. 90

Annexure III (I)*Basic Information about Industrial and Mineral Projects***1. Name & capacity of the Projects**

(i) Name of the Project	Properzi Plant
(ii) Location (Actual or likely)	Hirakud
(iii) Nature of the Projects—	
(a) New Projects	
(b) Expansion of an existing project	Expansion of the existing Hira Cable Works.
(iv) Products/Output	Properzi road (Aluminium)
(a) Capacity	7,000 tonnes per year.

2. Schedule of Implementation

(i) Whether feasibility study/DPR prepared	Yes
(a) By whom	M/s W. S. Atkinds Private Limited
(b) Present status whether approved, submitted for approval, etc.	It has been decided to implement this scheme by IDCOL—submitted for approval of State Government.
(ii) Nature of foreign collaboration required—Technical or Financial.	Not necessary
(iii) Date of start of construction	1974
(iv) Date of commencement of production	1976
(v) Achievement of rated capacity—Likely date	

3. Project Expenditure

(i) Land	
(ii) Buildings & Civil works	Rs. 0.03 crore (appx.)
(iii) Machinery and equipment	Rs. 0.31 crore (appx.)
(iv) Others	Rs. 0.16 crore

4. Financing and Execution of the Projects

(i) Name of the executing agency	Industrial Development Corporation of Orissa Limited.
(ii) Arrangements for financing	State Government & Financial institutions.
(iii) Source and extent of institutional finance envisaged.	IDBI, ICICI, IFC, etc. to the extent of Rs. 0.35 crore.
(iv) To what extent, internal resources of the company/corporation are to be deployed.	Rs. 0.15 crore from internal sources

5. Material requirements

- (i) Steel
- (ii) Cement

6. Employment Potentila

(i) During construction	..	50
(ii) After construction	..	80
(a) Managerial	..	1
(b) Technical Engineer and Supervisors	..	4
(c) Clerical		
(d) Skilled Workmen	..	50
(e) Unskilled Workmen	..	25

Annexure III (m)*Basic information about inudstrial and mineral project***1. Name and Capacity of the Project**

(i) Name of the project	..	Chrome chemical
(ii) Location (actual or likely)	..	Jajpur Road, Cuttack district
(iii) Nature of the Projects—		
(a) New Projects		New Project
(b) Expansion of an existing projects		
(iv) Products/Output—		
(a) Capacity	..	Sodium Dichromate and Sodium Sulphate. 3,300 ton, per years Sodium Dichromate 1,520 tons per year Sodium Sulphate.

2. Schedule of Implementation

- | | | |
|---|----|--|
| (i) Whether feasibility study/DPR prepared | .. | Yes |
| (a) By whom | .. | M/s. Chemical & Metallurgical Design Company Private, Limited. |
| (b) Present Status—Whether approved, submitted for approval, etc. | .. | Approval from State Government-obtained. |
| (ii) Nature of foreign collaboration required—Technical or Financial. | .. | Nil |
| (iii) Date of start of construction. | .. | 1974 |
| (iv) Date of commencement of production. | .. | 1976 |
| (v) Achievement of rated capacity—likely date | .. | 1977 |

3. Project Expenditure

- | | | |
|--------------------------------|----|---|
| (i) Land | .. | Existing (By the side of Ferro-chrome Plant). |
| (ii) Buildings and civil works | .. | Rs. 10 lakhs |
| (iii) Machinery and equipment | .. | Rs. 110 lakhs |
| (iv) Others | .. | Total outlay 1.4 crores |

4. Financing and execution of the Projects

- | | | |
|---|----|-------------------------|
| (i) Name of the executing agency | .. | IDCOL |
| (ii) Arrangement for financing. | .. | State Government |
| (iii) Source & extent of institutional finance envisaged | .. | IDBI, IFCI, ICICI, etc. |
| (iv) To what extent, internal resources of the company/ Corporation are to be deployed. | .. | To be decided later |

5. Material Requirement

- | | |
|-------------|----|
| (i) Steel | .. |
| (ii) Cement | .. |

6. Employment Potential

- | | | |
|---------------------------------------|----|-----|
| (i) During construction | .. | 200 |
| (ii) After construction | .. | 250 |
| (a) Managerial | .. | 2 |
| (b) Technical Engineers & Supervisors | .. | 48 |
| (c) Clerical | .. | .. |
| (d) Skilled workmen | .. | 120 |
| (e) Unskilled workmen | .. | 80 |

Annexure III (n)

*Basic information about industrial and mineral projects***1. Name & capacity of the Project**

(i) Name of the Project	.. Nylon Filament Yarn Project
(ii) Location (actual or likely)	.. Paradeep or Balangir (Tentative)
(iii) Nature of the Project—	..
(a) New Project	.. New Project
(d) Expansion of an existing project	..
(iv) Products/output	.. Nylon-6 Filament Yarn 2100 tonnes per year Nylon Yarn
(a) Capacity.	

2. Schedule of Implementation

(i) Whether feasibility study/DPR prepared.	.. Under preparation in consultation with the joint Sector Collaboration
(a) by whom	..
(b) Present status whether approved, submitted for approval, etc.	It has been decided to implement the Project in Joint Sector.
(ii) Nature of foreign collaboration required—Technical or Financial.	Not necessary
(iii) Date of start of construction.	.. 1974
(iv) Date of commencement of production	.. 1976
(v) Achievement of rated capacity likely date	.. 1977

3. Project Expenditure

(i) Land Rs. 0.02 crores (Appx.)	.. The details could be given after the collaboration is finalised and project report completed.
(ii) Buildings and civil works— Rs. 0.8 crores (Appx.)	.. ..
(iii) Machinery & equipment—Rs. 8 crores (Appx.)	.. ..
(iv) Others—Rs. 0.18 crores (Appx.)	.. Total outlay Rs. 9 crores.

4. Financing & Execution of the Projects

- (i) Name of the executing agency .. New Company
- (ii) Arrangements for financing .. Through Joint Sector 26 per cent by IDC. & 25 per cent by the collaborator & balance by Financial institutions.
- (iii) Source & extent of institutional finance envisaged.. IDBI, IFCI, ICICI, etc.
- (iv) To what extent, internal resources of the Company/ corporation are to be deployed. 26 per cent of the equity share

5. Material Requirement

(i) Steel

(ii) Cement ..

6. Employment Potential

- (i) During construction .. 300
- (ii) After construction .. 1,000
- (a) Managerial .. 5
- (b) Technical Engineers & Supervisors- .. 95
- (c) Clerical ..
- (d) Skilled workmen .. 700
- (e) Unskilled workmen .. 200

Annexure III (a)*Basic information about industrial and mineral projects***1. Name and capacity of the project—**

- (i) Name of the project .. Calcium Carbide
- (ii) Location (actual or likely) .. Koraput district
- (iii) Nature of the Projects—
- (a) New Project .. New Project
- (b) Expansion of an existing project
- (iv) Products/output
- (a) Capacity .. Calcium Carbide 14,850 tonnes per annum.

2. *Schedule of Implementation—*

- (i) Whether feasibility study/DPR prepared Under Preparation in consultation with the Joint Sector collaborator.
- (a) By whom
- (b) Present status—Whether approved, submitted for approval, etc. It has been decided to implement the project through joint Sector.
- (ii) Nature of foreign collaboration required—Proposals under study by IDCOL Technical or Financial.
- (iii) Date of start of construction .. 1974
- (iv) Date of commencement of production 1977
- (v) Achievement of rated capacity likely date. 1978

3. *Project Expenditure—*

- (i) Land Details can be given after the project report is completed.
- (ii) Buildings and equipment works
- (iii) Others .. Total outlay Rs. 4 crores

4. *Financing and Execution of the project—*

- (i) Name of the executing agency .. New company
- (ii) Arrangements for financing .. Joint Sector-26% by IDCOL and 25% by the Collaborator.
- (iii) Source and extent of institutional finance envisaged. IDBI, IFCI, ICICI, etc.
- (iv) To what extent, internal resources of the company/ corporation are to be deployed. 26% of equity share of the project

5. *Material requirements—*

- (i) Steel
- (ii) Cement

6. *Employment potential—*

- (i) During Construction .. 200
- (ii) After construction .. 450
- (a) Managerial .. 5
- (b) Technical Engineers and Supervisors. 95
- (c) Clerical
- (d) Skilled workmen .. 200
- (e) Unskilled workmen .. 150

Annexure IV

Sl. No.	Name of the Scheme with locations	5th Plan outlay tentative (Rs. in lakhs)	Proposed Physical Targets
(1)	(2)	(3)	(4)
1	Large and Medium Industries. Enforcement of Metric System of Weights and Measures.		
1	Establishment of Working Standards Laboratory. (Paradeep, Chandbali, Rambha, Malkangiri, Gunupur, Boudh, Padmapur Kesinga, Bonai, Anandapur).	8.00	Laboratory—10 Nos.
2	Verification of Testing of Weights, Measures, Weighing and Measuring instruments used in the Railways & Posts and telegraphs Department Bhubaneswar, Sambalpur and Berhampur.	1.50	Testing Unit—3 Nos.
3	Strengthening the Weights and Measures Organisation. (Bolangir, Keonjhar, Kalahandi Mayurbhanj)	4.00	Staff Scheme
4	Extension & Education Programme	1.00	Extension & Education Unit—1 No.
5	Setting up Taxi metre Testing Unit (Berhampur, Sambalpur, Rourkela).	1.00	Testing Unit—3 Nos.
6	Mobile Laboratory (Cuttack, Berhampur, Sambalpur)	4.00	Mobile Unit—3 Nos.
7	Construction of Building for Working Standards Laboratory. (Kendrapara, Khurda, Bhadrak, Angul, Nowraipur, Bargarh, Sundargarh, Champua).	5.00	Buildings—8 Nos.
8	Testing and Certification of Sealed Packages (at State Headquarters).	0.45	Testing Unit—1 No.
9	Subsidised sale of tested weights, measures, etc. among the Tribal Traders to save them from exploitation. (Ganjam, Phulbani, Koraput, Dhenkanal, Mayurbhanj, Keonjhar, Sundargarh, Sambalpur, Balasore).	2.00	Sets of weights measures etc.—7,200 sets.

(ii) VILLAGE AND SMALL-SCALE INDUSTRIES

Development of small-scale and village industries is essential for realisation of one of the basic objectives of the plan, namely, removal of poverty through the provision of increased opportunities of employment to the people of the State, particularly those living below the poverty line. This sector covers a large segment of population and includes small-scale units using different levels of technology. These industries produce some of the essential commodities needed by the community and also provide substantial quantities of goods for export.

2. Absence of reliable statistics for the small-scale and village industries sector is an obstacle for the proper assessment of the level of development in this area. A limited survey conducted by the Director of Industries, Orissa covering those units employing five persons and above indicate that there are 4,500 such units employing about 45,000 workers. Another survey conducted during 1965 by the Bureau of Statistics and Economics, Orissa concluded that there were about 3,72,000 units employing about 7,00,000 persons in village and small industries in the non-factory sector, employing less than 20 persons without power and less than 10 persons with power. This survey however excluded the industries registered under the Factories Act and included a large number of units which do not strictly fall within the definition of small-scale industries.

Review of the progress of the Fourth Plan

3. During the Fourth Plan period development of small-scale industries were promoted through the provision of financial and physical assistance as well as consultancy services. By the end of the Fourth Plan 110 additional sheds will be constructed in the Industrial estates thereby bringing the total number of sheds available in Orissa to 299. Till the end of May, 1973, 248 sheds have been allotted to various parties. Financial assistance to small-scale units have been provided as loan under the State Aid to Industries Act and through investment in the share capital of small-scale units. The Orissa Small Industries Corporation was also set up to provide assistance in the shape of raw materials and consultancy services to small-scale industries. During the Fourth Plan period 710 parties will be advanced loans under the State Aid to Industries Act and the total amount disbursed would be Rs. 29.19 lakhs. In May, 1973, 278 applications were pending for a loan of Rs. 442.50 lakhs.

4. In the handloom sector, 25 million metres of cloth would be produced during the Fourth Plan period in the co-operative fold as against the target of 22.5 million metres ; besides 300 million metres of cloth will be produced outside the co-operative fold. Nearly 1.2 lakh persons would get employment in the Co-operative fold. During the Fourth Plan period Major portion of funds ear-marked for the handloom sector was utilised for setting up a Co-operative Spinning Mill with 12,000 spindles and action has been taken to consolidate the activities of the weavers' Co-operative Societies formed during the previous plan periods. The Co-operative Spinning Mill went into production during the second year of the Fourth Plan and steps are being taken to expand the unit to a spindleage of 18,400.

5. By the end of the Fourth Plan, eight units with 800 power looms (1 units of 100 looms each) would be running in the Co-operative sector. Due to non-availability of sized beams, it was not possible to utilise 4,250 power looms allotted to the State during the Fourth Plan period. In the Fifth plan corrective action has been suggested to remove these difficulties. In the Fourth plan a sum of Rs. 33.03 lakhs were provided, in the State sector for the development of handicraft. The production units in the State have gone up from 98 handicrafts co-operative to 121 during the Fourth Plan. 4,500 artisans have got full employment, besides creating additional employment for 800 persons and the annual production in the societies have increased to Rs. 47.07 lakhs. Non-availability of trained hands and lack of experience in the modern techniques of production and marketing of handicrafts has been a major handicap in the development of handicraft units. The financial position of the handicraft Co-operative Societies continued to be very weak.

6. During the Fourth Plan an amount of Rs. 1.20 lakhs as loan and Rs. 80,000 as subsidy have been given to the different coir co-operatives in the State for helping 753 artisan members in all the coir co-operative societies. A coconut industrial complex has been set up at Sakhigopal in Puri district to process the components of coconut grown in the area.

7. Under Sericulture, 13 schemes had been taken up during the Fourth Plan period for helping the tribal persons in the production of tassar cocoons in the tribal areas. Finance was a big constraint and it was difficult for the Rearing Primary Societies to get institutional finance even for their working capital. For sericulture, as also for other groups of small-scale industries absence of adequate funds was a bottleneck for development and growth.

Objectives of the Fifth Plan

8. The main objectives of the Fifth Plan in the small-scale industries and village industries sector will be as follows :—

- (1) Development and promotion of entrepreneurship, particularly amongst the technically qualified persons including unemployed engineers, experienced artisans and other suitable persons for the development of small-scale industries in Orissa.
- (2) Provision of consultancy-services and marketing assistance to small-scale industries and entrepreneurs for their development and growth.
- (3) Progressive improvement in the technique of production and introduction of quality control measures for bringing the small-scale units to a viable level and also to modernise these units.
- (4) Development and growth of small-scale industries in the growth-centres and other focal points of growth which have hitherto remained outside the orbit of industrialisation.
- (5) Promotion of industries based on locally available raw materials particularly agro industries and growth oriented small-scale industries in the fields of electronics, plastics, machine-tools and chemicals, etc.
- (6) Promotion of ancillary industries and subsidiaries and encouragement of the system of sub-contracting in production.
- (7) Improvement in exports by small-scale industries and encouragement of research.

9. The target in the Fifth Plan is to set up about 10,000 small-scale industrial units in Orissa. For achieving these objectives and targets a number of promotional measures will be undertaken. The development programme of small-scale industries will be integrated with that of the growth of large scale units and establishment of ancillary industries will be encouraged. Other measures include development of infrastructural facilities including setting up of industrial estates in the identified growth-centres, provision of consultancy services to small-scale entrepreneurs by making area surveys and feasibility studies, provision of financial assistance and other facilities at one point, identification of ancillary industrial units with growth potential at places like Rourkela, Talcher and Paradeep, etc., provision of marketing assistance to small-scale units and the like.

10. Financial assistance will be provided to co-operative societies and for the development of coir industries.

11. In the handloom and handicrafts sector, financial and managerial assistance will be provided to individual artisans and co-operative societies for increasing production and improving their productivity. Necessary credit facilities, marketing assistance, tools and equipments

will be provided for the development of these units. Growth of sericulture will be promoted in tribal areas and the existing of obstacles will be removed for the development of powerloom units in the State.

Specific Programmes and Schemes

SMALL-SCALE INDUSTRIES—

12. Finance, difficulties of marketing, low productivity and absence of economics of scale are some of the basic problems of the small-scale industries. The small industries development programme in the Fifth Plan will aim at removing some of these difficulties and providing assistance so that a large number of modern small-scale units come up in Orissa. A number of schemes will be implemented to meet these requirements of small scale industries. Financial assistance will be provided by granting loans under the State-Aid to Industries Act to small-scale entrepreneurs, through the investment in the share capital of the Panchayat Samiti and Pilot Project units set up during the previous plan periods and through investment in the equity share of small-scale industrial units made by the Orissa Small Industries Corporation (mostly in ventures promoted by technical entrepreneurs and the educated unemployed). Besides a special scheme will be implemented for providing loan-assistance to technical entrepreneurs and the educated unemployed to meet fifty per cent of the requirement for margin money by these entrepreneurs. This will help them in obtaining finance from the financing institutions. In addition, the scheme for hire purchase of machinery will be implemented through the Orissa Small-Industries Corporation, which will also function as a raw material bank for the small-scale industries. Finances of the Small-Industries Corporation will be augmented for bearing these responsibilities.

13. Marketing assistance will be provided to the small scale units both through the Orissa Small Industries Corporation and through the Directorate of Export Promotion and Marketing under the Industries Department. This assistance will include conclusion of rate contract with the local manufacturers to provide them with an assured market with the Government departments and the public corporations, provision of market intelligence both for internal and external market, negotiating supply orders and the like. Financial assistance will be provided for the establishment of an export house in the State for promotion of exports and a State award will be instituted for recognising outstanding export performance by small scale units.

14. Besides these, a number of schemes will be implemented for helping the small scale units in tiding over their difficulties. These schemes will include provision of subsidy for power tariff to the small scale units, subsidy to central financing agencies on interest payable by industrial co-operatives, interest subsidy to small scale industries so that they are able to get finance from the Orissa State Finance Corporation with a lower rate of interest, etc. For promoting quality control measures, the existing testing laboratories will be strengthened and suitable technical advice will be provide to the small scale units. Publicity measures will be undertaken through the organisation of and participation in fairs and exhibitions and through the publication of catalogues and brochures on the products of the village and small scale industries.

15. The Orissa Small Scales Industries Corporation will be strengthened to provide consultancy services to the small-scale units and also to provide marketing assistance and other facilities to the industrial units in the State.

16. A unit to manufacture 5,000 T. V. sets annually will be set up through the Small Industries Corporation and with the technical assistance of Hindustan Aeronautics Limited. The pottery development centre at Jharsuguda will be re-organised on a commercial scheme.

17. To implement all these measures and schemes, the administrative machinery will be reorganised and strengthened.

INDUSTRIAL ESTATES —

Provision of factory buildings through the construction of industrial estates at the identified growth centres of the State will continue to be an important instrument for developing small scale industries during the Fifth Plan. An amount of Rs. 200 lakhs is being provided in the Fifth Plan for constructing a large number of factory buildings along with

other infrastructure facilities in important growth centres and backward areas. For providing flexibility in design and construction of sheds as also for expeditious construction, the scheme will be implemented through the agency of the Small Industries Corporation instead of doing it through the State P. W.D. The Government will invest a sum of Rs. 200 lakhs in the corporation for this purpose and it is expected that the Corporation will be able to borrow a further sum of Rs. 300—400 lakhs from the financing institutions. Thus a total amount of Rs. 500—600 lakhs will be spent in the Fifth Plan leading to the construction of nearly 664 sheds.

HANDLOOM—

19. Handloom industry occupies an important place in Orissa's rural economy. During the Fifth Plan period financial and other assistance would be provided to weavers and Weavers' Co-operative Societies for increasing the production of cloth in the handloom sector. Financial assistance will be given in the shape of (a) share capital loan to Weavers' Co-operative Societies, (b) subsidy to Weavers' Co-operative Societies both primary and apex, for meeting a part of their managerial expenses, (c) share and working capital loan to handloom, silk and tassar, weavers' co-operative societies, (d) interest subsidy to these co-operative societies for getting loans from the Reserve Bank of India and other institutions, (e) provision of working capital to cotton weavers' co-operative societies for their revival, (f) loan and subsidy to weavers, co-operative societies for construction of godowns. Besides, the State Government will contribute to the share capital of the Orissa State Handloom Weavers' Co-operative Society which is an apex body for supplying raw materials to the weavers' co-operative societies and also help them in marketing their products in urban areas and also outside the State. This society will open sales emporia in the metropolitan cities and promote exports of handloom products. Apart from provision of financial assistance, the handloom industry will be helped through the provision of up-to-date designs to be introduced in fabrics and also assistance in introducing printing of handloom fabrics in the State. The weavers also will be trained in latest equipment and techniques in the production of handloom fabrics in order to enable them to diversify their products. Marketing assistance will also be provided by giving financial assistance to weavers co-operative societies to give rebate on the sale of handloom products during the All-India Handloom Week, through publicity and propaganda measures like exhibition and fairs and also by promoting exports of their products. It is also proposed to set up regional dye houses in the Cuttack and Sambalpur districts, common service centres in different areas and also to streamline the administrative machinery for the collection of statistics so that these are able to fulfil the objectives of the Fifth Plan.

POWERLOOM—

20. During the Fourth Plan period, the Government of India had allotted 4,250 powerlooms to be utilised in the private sector but only 100 powerlooms have so far been set up. Slow progress is due to the fact that it has not been possible to supply sized beams to the powerloom units. In the Fifth Plan it is proposed to set up Central preparatory and common service facilities in order to remove these difficulties. Seven preparatory units will be set up (each unit costing Rs. 11 lakhs) and 30 per cent of the total requirement of funds for setting up these units would be provided to the Apex Powerloom Co-operative Society as share capital in order to help the society in borrowing the balance amount from the financing institutions.

21. Besides these facilities, financial assistance in the shape of loan and subsidy for construction of warehouses would be given to the apex State Powerloom Servicing Co-operative society and the State Government will also purchase share in that organisation during the Fifth Plan. A scheme for dyeing, bleaching, printing and finishing of powerloom products through the establishment of a processing plant will be implemented in the Fifth Plan.

22. It is expected that in the Fifth Plan 300 million metres of cloth will be produced through the powerloom sector as against the Fourth plan achievement of 232 million metres and this sector will provide employment to 3,000 persons.

HANDICRAFTS

23. Orissa's handicrafts have earned name both inside and outside the country. Large number of artisans are employed in the production of handicrafts. It is expected that by the end of the Fourth Plan, handicrafts worth Rs. 70 lakhs would be sold through emporia and

worth Rs. 28 lakhs would be exported. The targets in the Fifth Plan are Rs. 100 lakhs and Rs. 150 lakhs respectively. The handicraft units are expected to provide full employment to 32,000 persons during the Fifth Plan period. The handicraft sector will be promoted through the provision of financial, marketing and other assistance. Financial help will include loans to handicraft co-operative societies and artisans for meeting their working capital requirement. Shares will also be purchased in the handicraft co-operative societies and in the Orissa Co-operative Handicraft Corporation to put it on a sound financial footing. Marketing assistance will be given through the opening of a handicraft emporium in New Delhi, by organising demonstration on techniques of packing of handicrafts, through market potential survey and other market studies and by extending financial help in order to enable the handicraft societies to give rebate on sale of handicraft goods. The handicraft co-operative societies will also be given grants for construction of buildings, for meeting their managerial and overhead expenses, for purchase of tools and equipments, for providing testing facilities, for introducing quality control and for popularising handicraft goods through publicity. For introducing new designs and improving the quality of handicraft goods, handicraft production and common facility centres will be organised and strengthened and the artisans will be given training in new designs and equipments.

COIR INDUSTRIES—

24. The development of coir industry will be promoted through the expansion of the coconut industrial complex at Sakhigopal set up during the Fourth Plan period. The expansion will consist of provision of sheds at convenient centres in and around Sakhigopal to ensure the growth of ancillary coir processing units. Besides separate units of the coir complex will be set up at Gopalpur in Ganjam district and Bhogra in Balasore district. Coir Co-operative societies will be given loan for meeting the requirements of working capital and share capital loans will be given to members. The coir co-operative societies will be given subsidy for meeting their managerial and overhead expenses, besides for purchase of improved tools and equipments, installation of machinery and construction of godowns etc. Training facilities will be provided to artisans and the administrative machinery for organising the coir industry will be strengthened.

SERICULTURE—

25. Development of sericulture will be emphasised as this will provide employment opportunities in the tribal areas of the State. It is expected that silk production will reach 2.15 lakh Kgs. in the Fifth Plan as against the achievement of 1.60 lakh Kgs. in the Fourth Plan. Nearly 25,000 additional persons will get employment during the Fifth Plan.

26. It is proposed to increase the production of tassar cocoons in the State by organising compact block tassar rearing in the unutilised forest patches. One unit of block plantation is under implementation since 1972-73 at Mangalpur in Cuttack district. Four such units will be operated in the districts of Koraput, Keonjhar and Sundargarh during the Fifth Plan period. This will provide employment to 400 tribal persons. Schemes for setting up cocoon testing station, for establishment of experimental mulberry garden and tassar reeling and spinning-centre will also be implemented. Eri seed sub-station and tassar seed sub-station will be organised to supply disease-free eri seed. In addition, financial assistance will be provided for organising and strengthening the tassar rearers' co-operative societies in order to bring more and more tribal rearers into the co-operative fold. These societies will be given assistance in marketing their products and also to strengthen the financial position of the apex State Tassar Co-operative Society the Government will invest in its share capital. Training facilities will be provided for educating the tribal adibasi boys in scientific tassar rearing and processing and also research will be undertaken in sericulture and for scientific rearing of tassar worms in controlled conditions.

27. Apart from these programmes, suitable schemes will be implemented for development of salt industries and for re-vitalising the industrial co-operatives and for organising such co-operatives in the State.

28. To implement the proposed schemes in the village and Small Industries Sector during the Fifth Plan period, an outlay of Rs. 722.79 lakhs is required in the States Fifth Plan. Programmewise and schemewise distribution of their outlay is shown in Annexures I & II. The physical achievements of the Fourth Plan and the targets for the Fifth Plan are shown in Annexure III.

Annexure I
VILLAGE AND SMALL INDUSTRIES
Programmewise outlay for the fifth Plan

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Fourth Plan				Fifth Plan Proposed 1974-79							
		Approved outlays	1969-73 Actual Expr.	1973-74 Anticipated Expr.	1969-74	Total	Capital	Foreign Exchange	74-75	75-76	76-77	77-78	78-79
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Small-Scale Industries ..	1,50.00	88.35	26.23	120.54	272.84	190.79	2.85	85.93	48.45	46.48	46.14	45.84
2	Industrial Estates ..	50.00	69.97	5.00	74.97	200.00	150.00	..	55.00	40.00	35.00	35.00	35.00
3	Handloom Industry ..	75.00	51.77	16.80	68.50	70.70	39.00	..	24.84	19.14	9.14	9.14	8.44
4	Powerloom Industry ..	3.00	5.05	3.20	8.25	60.50	55.25	..	31.50	19.00	10.00	..	..
5	Handicrafts ..	30.00	25.63	6.77	33.08	50.25	13.00	..	9.99	10.01	10.04	10.10	10.11
6	Coir Industry ..	2.00	4.50	2.00	6.50	13.50	7.83	..	2.65	2.83	2.60	2.67	2.75
7	Sericulture ..	12.00	6.32	6.99	14.10	55.00	22.00	0.30	10.00	15.20	14.25	8.75	6.80
8	Khadi & Village Industries ..	..	..	..	..	..	..	..	..	..	..	..	..
		3,22.00	2,51.59	66.99	3,25.94	7,22.79	4,77.87	3.15	2,19.91	1,54.63	1,27.51	1,11.80	1,08.94

Annexure II

Schemes proposed for Fifth Plan

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Fifth Plan proposed			1974-79				
		Total	Capital	Foreign Exchange	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10
SMALL-SCALE INDUSTRIES									
1	Loan under the State-Aid to Industries Act.	15.00	15.00	..	3.00	3.00	3.00	3.00	3.00
2	Subsidy for equalisation of power tariff.	1.00	..	..	0.20	0.20	0.20	0.20	0.20
3	Share Capital investment in Orissa Small Industries Corporation for opening a raw material bank.	20.00	20.00	..	10.00	2.50	2.50	2.50	2.50
4	Subsidy to Orissa Agro & Small Industries Corporation for service rendered (spill over of Fourth plan)	13.65	..	..	4.00	3.00	3.00	2.00	1.65
5	Subsidy to Central Financing agency	4.00	..	..	1.05	1.03	0.94	0.98	..
6	Exhibition and Fairs	5.00	..	..	1.00	1.00	1.00	1.00	1.00
7	Expansion of K. S. Pottery Development Centre.	0.50	0.50	..	0.50	..	..	..	..

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Fifth Plan proposed			1974-79				
		Total	Capital	Foreign Exchange					
					1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10
8	Share Capital investment in P. S. I. (ii) Pilot Project Company.	15.00	15.00	..	11.20	3.80	..	..	..
9	Interest subsidy to Small-Scale Industries through S. F. C.	5.00	..	..	0.70	0.80	1.00	1.00	1.50
10	Equity share investment in Small Industries Corporation through O. S. I. C. Ltd.	25.00	25.00	..	5.00	5.00	5.00	5.00	5.00
11	Hire purchase of machinery through O. S. I. C. Ltd.	53.00	53.00	..	10.00	10.00	11.00	11.00	11.00
12	Consultancy Services & Techno-Eco. feasibility Cell through O. S. I. C.	7.30	..	..	2.20	1.30	1.30	1.30	1.20
13	Marketing assistance through a cell in O. S. I. C. for Small-Scale Industries	10.00	..	..	6.00	1.00	1.00	1.00	1.00
14	Seed Capital through O.S.I.C.	30.00	30.00	..	6.00	6.00	6.00	6.00	6.00
15	Expansion of Industries Directorate	16.24	..	..	3.13	3.20	3.25	3.30	3.36
16	Information and Statistics and evaluation for the large, medium and Small-scale Industries.	6.31	..	..	1.21	1.18	1.21	1.33	1.38

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Fifth Plan proposed			1974—79				
		Total	Capital	Foreign Exchange	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10
17	Establishment of T. V. Project	5.00	5.00	..	5.00	..	..	..	..
18	Expansion and strengthening of Existing Laboratories.	18.75	13.75	2.85	4.73	2.92	3.41	3.66	4.03
19	Publication of Catalogues, Brouchures, and Bullatin for Export Promotion of products of local Industries.	1.00	..	..	0.20	0.20	0.20	0.20	0.20
20	Share Capital Investment in Export House.	5.00	5.00	..	1.00	1.00	1.00	1.00	1.00
21	Completion of Show House	8.54	8.54	..	8.54	..	..	..	..
22	Conclusion of Rate contract with Local Manufactures.	6.55	..	..	1.07	1.12	1.27	1.47	1.62
23	Award of State Recognition for outstanding Export performances.	1.00	..	..	0.20	0.20	0.20	0.20	0.20
		272.84	190.79	2.85	85.93	48.45	46.48	46.14	45.84
1	Industrial Estates	..	200.00	150.00	..	55.00	40.00	35.00	35.00

[3 P. & C.—99]

(Rs. in lakhs)										
Sl. No.	Name of the Scheme	Fifth Plan proposed			1974—79					
		Total	Capital	Foreign Exchange	1974-75	1975-76	1976-77	1977-78	1978-79	
1	2	3	4	5	6	7	8	9	10	
HANDLOOM										
1	Share capital loan to Weavers' Co-operative Societies.	5·00	5·00	..	1·00	1·00	1·00	1·00	1·00	
2	Rebate on sale of Handloom Cloth ..	7·00	..	..	1·40	1·40	1·40	1·40	1·40
3	Design and Service Centre ..	3·00	..	..	0·60	0·60	0·60	0·60	0·60
4	Managerial Subsidy ..	0·60	..	..	0·12	0·12	0·12	0·12	0·12
5	Share and working capital loan to Silk and Tassar W. C. S.	2·00	2·00	..	0·40	0·40	0·40	0·40	0·40	
6	Organisational Expenses ..	3·00	..	..	0·60	0·60	0·60	0·60	0·60
7	Publicity propaganda and Exhibition and Fairs.	2·00	..	..	0·40	0·40	0·40	0·40	0·40
8	Interest subsidy on Cess fund loan ..	2·60	..	..	0·52	0·52	0·52	0·52	0·52
9	Interest subsidy on R. B. I. loan ..	4·00	..	..	0·80	0·80	0·80	0·80	0·80
10	Export Promotion ..	1·00	..	..	0·20	0·20	0·20	0·20	0·20

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Fifth Plan proposed			1974-79				
		Total	Capital	Foreign Exchange	1974-75	1975-76	1976-77	1977-78	1978-79
11	Working capital loan to Cotton Weavers' Co-operative Societies.	6.00	6.00	..	0.20	1.20	1.20	1.20	1.20
12	Scheme for provision of loan and subsidy to W. C. S. for construction of godown.	2.00	1.00	..	0.40	0.40	0.40	0.40	0.40
13	Collection of Statistics ..	2.00	..	..	0.40	0.40	0.40	0.40	0.40
14	Scheme for share capital contribution in Orissa State Handloom Weavers' Co-operative Society.	15.00	15.00	..	10.00	5.00	..	..	..
15	Training of Handloom Weavers ..	2.00	..	..	0.40	0.40	0.40	0.40	0.40
16	Establishment of Regional Dye House and Printing Centre.	10.00	10.00	..	5.00	5.00	..	..	..
17	Common Service Centre ..	3.50	..	..	1.40	0.70	0.70	0.70	..
Total —Handlooms ..		70.70	39.00	..	24.84	19.14	9.14	9.14	8.44

(Rs. in lakhs)

Sl. No.	Name of the scheme	Fifth Plan proposed			1974-79				
		Total	Capital	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10
POWERLOOM									
1	Loan and subsidy to Central Servicing Organisation for construction of ware house.	2.50	1.25	..	2.50	..	..	..	..
2	Purchase of share by Government in Central Servicing Organisation.	20.00	20.00	..	10.00	5.00	5.00	..	..
3	Installation of Preparatory units ..	25.00	23.00	..	12.00	8.00	5.00	..	..
4	Scheme for fulfilled processing plant (Dyeing, Bleaching and Finishing).	13.00	11.00	..	7.00	6.00	..	..	..
Total ..		60.50	55.25	..	31.50	19.00	10.00	..	..

(Rs. in lakhs)

Sl. No.	Name of the scheme	Fifth Plan proposed			1974-79				
		Total	Capital	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10
HANDICRAFTS									
1	Loans for Development of Handicrafts	12.00	12.00	..	2.34	2.36	2.39	2.45	2.46
2	Grants to Handicrafts ..	16.75	..	..	3.35	3.35	3.35	3.35	3.35
3	Expansion of Handicrafts Design and Training Centre.	7.50	..	..	1.50	1.50	1.50	1.50	1.50
4	Handicraft Production Centre ..	2.00	..	..	0.40	0.40	0.40	0.40	0.40
5	Marketing Assistance for Development of Handicrafts.	5.00	..	..	1.00	1.00	1.00	1.00	1.00
6	Development of Salt Industries ..	5.00	1.00	..	1.00	1.00	1.00	1.00	1.00
7	Establishment of Co-operative Cell for revitalisation of Industrial Co-operatives.	2.00	0.40	0.40	0.40	0.40	0.40
	Total ..	50.25	13.00	..	9.99	10.01	10.04	10.10	10.11

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(Rs. in lakhs)

Sl. No.	Name of the Scheme	Fifth Plan proposed			1974-79					
		Total	Capital		1974-75	1975-76	1976-77	1977-78	1978-79	
			Foreign Exchange							
1	2	3	4	5	6	7	8	9	10	
COIR										
1	Loans for development of Coir ..	2.50	2.50	..	0.50	0.50	0.50	0.50	0.50	
2	Subsidy for development of Coir ..	2.50	..	..	0.50	0.50	0.50	0.50	0.50
3	Expansion of Coir Complex ..	4.00	4.00	..	0.70	0.75	0.80	0.85	0.90	
4	Training on Coir and Estt. of Training Centre.	3.50	1.33	..	0.80	0.90	0.60	0.60	0.60	
5	Administration and Supervision of Coir Industry.	1.00	..	..	0.15	0.18	0.20	0.22	0.25
Total ..		13.50	7.83	..	2.65	2.83	2.60	2.67	2.75	

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Fifth Plan proposed			1974-79				
		Total	Capital	Foreign Exchange					
					1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10
SERICULTURE									
1	Tassar Rearing and Spinning Centre ..	7.50	4.00	..	1.50	2.00	2.00	1.00	1.00
2	Tassar Seed Sub-station ..	1.50	..	..	0.30	0.60	0.20	0.20	0.20
3	Strengthening of Staff for Supervision of T. R. C. S.	3.50	..	..	0.40	0.70	0.75	0.80	0.85
4	Research in Sericulture ..	2.50	..	..	0.40	0.70	0.70	0.35	0.35
5	Establishment of experimental mulberry garden.	4.00	2.00	0.10	0.80	1.20	1.00	0.60	0.40
6	Organisation of Tassar Rearing in compact forest patches.	12.00	6.00	..	2.00	3.00	3.00	2.00	2.00
7	Headquarters staff for administration of Sericulture.	1.00	..	..	0.20	0.20	0.20	0.20	0.20
8	Share Capital contribution in State Tassar Co-operative Society.	3.00	3.00	..	1.00	1.00	1.00	..	..
9	Eri Seed Sub-station ..	1.00	..	..	0.20	0.30	0.30	0.10	0.10
10	Organisation of Tassar Rears' Co-operative Societies.	6.00	3.00	..	1.20	2.00	2.00	0.40	0.40
11	Training of Tribals in Tassar Rearing Reeling and Spinning.	8.00	3.00	..	1.00	2.00	2.00	2.00	1.00
12	Controlled rearing of Tassar cocoons..	2.00	..	..	0.40	0.50	0.50	0.50	0.10
13	Scheme for cocoons testing station ..	3.00	1.00	0.20	0.60	1.00	0.60	0.60	0.20
Total ..		55.00	22.00	0.30	10.00	15.20	14.25	8.75	6.80

Annexure III
Village and Small Industries

Serial No.	Items	Physical Target		
		Fourth Plan Target	Fourth Plan Likely achievement	Fifth Plan targets
1	2	3	4	5
1 Small-Scale Industries				
	No. of new units likely to be established	(Not fixed) (on the advice of Secretary, Industries).	1100 per annum	2,000 per annum (average)
	No. of additional employment likely to be created	.. 15,000 per annum	..	15,000 per annum
	(a) For technically qualified persons	.. 500 per annum	..	500 per annum
	(b) Others	.. 14,500 per annum	..	14,500 per annum
2 Industrial Estates/Areas				
	No. of new estates/areas proposed to be set up (along with No. of sheds).	100 sheds	110 sheds	664 sheds
	(a) Urban area	.. ..	..	200
	(d) Semi-urban areas	.. ..	..	100
	(e) Rural areas	.. ..	..	32

Serial No.	Name	Physical Target			
		Target	Fourth Plan		Fifth Plan targets
			Likely achievement		
1	2	3	4	5	
	Nos. of persons likely to be employed in—				
	(a) Construction activities	..	..	626
	(b) Industrial activities	..	..	2,000
	(i) Technically qualified persons	..	..	..
	(ii) Others	..	..	..
3	Coir Industries				
	Production	..	1.30	110	
	Sales through Emporia	..	1.30	110	
	Exports (Rs. in lakhs)	..	..	..
	No. of additional persons likely to be employed	..	800	2,660	
4	Handicrafts				
	Sales through emporia (In lakhs)	..	70.50	100.00	
	Exports (In lakhs)	..	28.30	150.00	
	No. of persons likely to be provided with—				
	(a) Full employments	..	5,000	32,000	
	(b) New employment	..	..	27,500

Serial No.	Items	Physical target		
		Fourth Plan Target	Likely achievement	Fifth Plan targets
1	2	3	4	5
1 HANDLOOM				
<i>Production (M. Metres)</i>				
	(a) Within the Co-operative fold	.. 22.5	25	30
	(b) Outside Co-operative fold	.. 300	300	300
	Sales through Emporia (Rs. in lakhs)	.. ..	..	..
	Exports (Rs. in lakhs)	.. ..	..	..
	No. of persons likely to be provided with			
	(a) Fuller employment	.. 1.20 lakhs (in Co-op. fold)	1.20 lakhs (in Co-op. fold)	1.30 lakhs fold
	(b) New employment	.. ..	..	0.20 lakhs
2 POWERLOOM				
	<i>Production (in M. Metres)</i>	.. 30.00	32.30	300
	No. of persons likely to be employed	.. 1,000	800	3,000

Serial No.	Items	Physical target		
		Fourth Plan Target	Fourth Plan Likely achievement	Fifth Plan target
1	2	3	4	5
SERICULTURE				
	Production (000 Kgs.)	.. 1.50 lakhs Kgs.	1.60 Lakhs Kg.	2.15 lakhs Kgs. (Tassar 40,000 Kgs) Mulberry—1,500 Kgs. Eri—1,500 Kgs.
				43,000Kgs. per year.
	No. of Adl. Persons Likely to be employed	.. 43,000 × 5 = 2.15 lakhs Kgs.	No. target of employment was fixed.	10,000 25,000
				The level of employment at the beginning of 4th plan—40,000 during 4th plan, additional 10,000 and 5th plan target 25,000 additional.
	Exports (Rs. in lakhs)	.. No. target for State was fixed.	2,00,00,000 30,000,000	(Note—An Annual export production of 40 lakhs rupees was made during 4th Plan which is likely to be increased to 60 lakhs a year).

CHAPTER 2·8

MINERAL DEVELOPMENT

Abundance of mineral deposits in Orissa is already recognised. The most important minerals ores of the State include ores of iron, manganese, vanadium, chrome, aluminium, lead-zinc-nickel, coal, limestone, dolomite, graphite, quartz, chinaclay, fireclay, monazite sand, beryl and rare atomic minerals, etc. The known reserves in million tonnes include iron ore (8,000); manganese (38); chrome (12), vanadiferrous magnetite (12); nickel ore (38); lead ore (5); bauxite (15); coal (9,000); chinaclay (4); fireclay (63); quartzite (20).

2. Mineral exploitation is done both in the private sector and in the public sector the later being through the Orissa Mining Corporation, a State undertaking. There are about 250 working mines in the State engaging about 70 to 80 thousand persons. The total annual mineral production of the State is about 13 million tonnes (constituting about 9 per cent of the total all-India out-put). The total annual mineral export is of the order of 2 million tonnes (constituting about 11·3 per cent of all-India total on exports of iron ore, manganese ore and chromite).

3. Out of the State's average annual mineral production of 13 million tonnes, about 2 million tonnes (Iron-Manganese and Chromite) is exported, and 5·6 million tonnes is consumed by industries outside the State. The balance of 4·5 million tonnes is consumed by industries located inside the State (i. e., 35—40 per cent of the total annual production).

4. The State has made considerable progress in the field of mineral-based industries including iron and steel, ferro-alloys, cement, refractories, glass and ceramics, etc., other industries which are likely to come up in the near future include a steel plant, coalbased fertilizers, ferrovanadium, rare earths, aluminium, nickel and lead smelters, titanium sponge iron and mineral-based chemicals industries among others.

Review of progress up to the end of the Fourth Plan

5. The foundation for systematic exploration and exploitation of minerals and administration of mines in the State was laid with the establishment of the Directorate of Mines and the Orissa Mining Corporation in the Second Plan. The achievement of the Directorate of Mines and the O. M. C. up to the end of 1968-69 are indicated in Annexure I.

6. During the fourth Plan 15 mines on iron ore, chromite and manganese ore were worked under the State Public Sector. Among others, the Daitari iron ore project with an estimated reserve of about 50 million tonnes of 60—62 per cent Fe grade ore was developed but due to a number of difficulties, the ore handling plant as such could not be completed but manual operations had yielded up to 6 lakh tons. During the 4th Plan period the total mineral production (ores of iron, manganese and chromite) under the State public sector is expected to stand at 4·8 million tonnes against the target of 5·5 and total mineral exports under the State public sector at 4·5 million tonnes.

7. In the field of mineral exploitation and mines administration etc., all the wings of exploration, mines administration and laboratories were strengthened and better equipped during the 4th Plan period about 7,000 sq. kms. of un-explored regions in the State against a target of 8,000 sq. kms. were reconnoitered and significant discovery of new mineral occurrences were made (gold, base metals, bauxite, chromite, beryl and associated rare atomic minerals) about 400 million tonnes of grade-wise resources of mineral occurrences a number of major mineral/ore deposits covering ores of iron, manganese, chromite, vanadium, aluminium, limestone and dolomite, quartzite, clays etc., were proved over an area of about 1,000 sq. kms. new techniques of exploration like geo-physical, geo-chemical and aerial photography etc., were initiated the total out-put of mineral/ore analysis work from the chemical laboratories was doubled up-additional weigh-bridges and check gates were installed various data on cost structure of mineral, infra-structure development were compiled and analysed against the total plan provision of nearly Rs. 99 lakhs including buildings. There would be no spill over for the Fifth Plan.

8. During the Fourth Plan the total mineral production would be 62.36 million tonnes as against the target of 60 million tonnes. The total mineral revenue will be Rs. 10.73 crores as against the target of Rs. 10 crores. The total number of working mines would exceed 250 employing about 70—80,000 persons.

Difficulties and bottle-necks

9. The greatest bottle-neck to mineral development programmes during all the previous plans has been lack of infrastructure facilities such as roads and railways. Absence of a direct rail link between Paradeep Port and the mineral rich hinterland spanning Banspani-Barbil and Rourkela and a net work of roads in and around mining areas of the State has impeded the growth of this sector of State's economy and reduced the export potential of Paradeep considerably. Cuttack-Paradeep railway link has already been taken up. But for all-rail transport from the rich mining areas of Keonjhar district to Paradeep, Banspani to Jakhapura railway link should be taken up via Gandhamardan and Daitari. This would reduce the cost of ore-transport and would prove thereby conducive to larger productions both in private and public sector.

Fifth Plan Schemes—Objectives

10. The main objectives of the State's mineral development programmes during the Fifth Plan area —

- (a) intensive mineral exploration following the mapping by G. S. I. for proving the mineral deposits ;
- (b) streamlining the mining administration for ensuring proper exploitation and analysis of minerals etc., which would add to the mining revenue and export earnings ;
- (c) encouraging public-sector participation in the exploration programme and completing the incomplete projects in hand ; and
- (d) encouraging private enterpreneurs for establishment of mineral-based industries

Intensive Mineral Exploration

11. Detailed proving of minerals in the areas mapped by G. S. I. will take precedence over reconnaissance.

12. Out of 1.55 lakhs sq. kms. occupied by the State Geological maps have been prepared by the Geological Survey of India for about 1.11 lakh sq. kms. which do not provide definite information on mineral occurrences. Nearly 50 per cent of these areas have not been reconnoitered for possible mineral occurrences. Therefore, an area of about 55,000 sq. kms. has to be covered by systematic mineral reconnaissance. Out of the above reconnoitered area about 10,000 sq. kms. have been found to be mineral bearing containing ores/minerals like iron, manganese, chromite, vanadium titanium, aluminium, lead, limestone and dolomite, coal, clays, graphite, beryl, monazite sands (along the coast). From these mineralised terrains only 50 per cent have been covered by preliminary and detailed exploration through private prospecting and departmental exploration (i. e. proving of grade wise reserves) by the end of the 4th Five-Year Plan. This leave, therefore, about 5,000 sq. kms. of mineralised tracts where mineral/ore deposits have been discovered but not explored in details. Hence one of the most important objectives of the fifth plan is to carry out detailed exploration in about an area of 2,000 sq. kms. out of 5,000 sq. kms. and on selected promising deposits so as to prove their grade wise reserves and assess their potential. Such areas include parts of the backward districts of Koraput, Kalahandi, Ganjam, Phulbani, Sambalpur, Bolangir, Dhenkanal, Sundargarh, Keonjhar and Mayurbhanj. Out of unexplored 55,000 sq. kms., about 7,000 sq. kms. have been covered by reconnaissance during 4th Plan. Another 10,000 sq. kms. is proposed to be traversed for reconnoitering during the 5th Plan period in search of minerals. This will leave 38,000 sq. kms. to be explored after the 5th Plan. It is also intended to locate in the above 10,000 sq. kms. possible occurrences of rare and valuable minerals/ore like gold, copper, nickel, lead, zinc silver, titanium, rare earths (monazite sands),

beryl and associated atomic minerals by means of modern techniques of exploration like geophysical, geochemical and aerial photography techniques etc. in the districts of Keonjhar, Mayurbhanj, Dhenkanal, Cuttack, Sambalpur, Bolangir, Ganjam and Phulbani. Exploration for ground-water resources in specific areas of large-scale industrial and mining activities by geophysical methods is another programme proposed to be taken up since such operations do not come within the purview of the Lift Irrigation Department (which is concerned with locating ground-water resources for lift irrigation purposes only). Departmental extraction of small but valuable mineral deposits located in interior areas or submersible future reservoir areas of the State, which are not amenable to regular mining and their direct sale to different State and Central.

Streamlining the mining administration

13. It is intended to strengthen and better equip the chemical laboratories, do pre-shipment analysis of ores, instal additional check-gates and weigh-bridges, take measures for leakage in mining revenue and for stoppage of wasteful mining and quality control, undertake studies on cost structure of minerals and infrastructure development.

14. An outlay of Rs. 175 lakhs is proposed under (a) and (b) for the 5th Plan.

Encouraging Public-Sector participation in exploitation of Minerals

15. Two major mineral projects namely Nickel Project in the Sukinda area and the Lead Project in the Sargipalli area have been taken up by Government of India to be executed through Public Sector. The State Government proposes to participate directly in the equity capital of these two projects. Since investment decisions are still awaited from Government of India a tentative provision of Rs. 4.46 crores has been made under the State Plan for equity participation under these two projects.

16. Malangtoli project has been taken up by the Government of India for execution through N. M. D. C. The State Government has already recommended to Government of India to include this project under the Central Sector.

17. In the public sector it is proposed to complete remaining stages of the Daitari Iron Ore Project including the Ore handling Plant so as to achieve the full rated production capacity of 1.6 million tonnes annually by 1976-77. The Gandhamardan Iron Ore Project in Keonjhar district (containing 124 million tonnes of high-grade iron ore including 15 million tonnes of float ore) is also proposed to be taken up through the Orissa Mining Corporation for exploitation. The objective is to produce 1 million tonne of iron ore from the "Float deposits" annually by manual operations and mechanical loading system from 1975 onwards and to work the "in situ ore" from 1977 onwards after investigation. The annual production and transport of ore would be of the order of 1.5 million tonnes from 1977-78 onwards. Feasibility study for a pelletisation/sponge iron plant will be also be taken up for operation during the Fifth Plan period to utilise about 1 million tonnes of fines that would be generated annually from 1977 onwards.

18. An outlay of Rs. 455 lakhs is proposed for assistance to O. M. C. under 5th Plan out of which Rs. 230 lakhs would be provided for completion of Daitari Project and the remaining amount of Rs. 225 lakhs would be utilised in Gandhamardan Project against the total outlay of Rs. 27.5 crores.

Encouraging private entrepreneurs for establishment of Mineral-based industries

19. Always it has been intended to encourage private entrepreneurs to establish mineral based industries in the State. A beginning has been made by the State's Mining Department towards the middle of the Fourth Five-Year Plan to encourage fresh entrepreneurship for large scale mining and establishment of mineral-based industries in the State. Various data relating to occurrence and utilisation prospects of mineral/ore deposits in the State are made available to public by the "Mineral Information and Development Cell" under the State's Mining Directorate.

20. The State Mining Department also renders assistance to mine owners and Public Sector Corporations by supplying Drilling and Survey equipments on hire, assessing gradewise reserves of mineral/ore deposits for exploitation in public sector and large scale chemical analysis of Minerals/Ores. It is proposed to expand these facilities considerably during the Fifth Plan.

Conclusion

21. Set against the above objective and targets for the Fifth Plan mineral development schemes of the State it can be anticipated that the annual mineral production of the State by the end of the Fifth Plan will be of the order of 20 million tonnes.

Specific Projects/Programmes/Schemes

There is no spill over project in the "Mineral Exploration—Administration—Research Building" Sector.

22. In the State public sector mining, the only spill over project is the Daitari Iron Ore Project. The total outlay of Rs. 1,423 lakhs is now revised to Rs. 1,930 lakhs out of which Rs. 1,700 lakhs would be spent by the end of Fourth Plan. Rs. 930.34 lakhs of plan assistance has been provided to this project by the end of the Fourth Plan and the rest has been met from borrowings. The provision required for the Fifth Plan is Rs. 230 lakhs to complete the project. The programme for the Fifth Plan includes 50 per cent of the rated production capacity during 1974-75 and achievement of full rated capacity of annual production of 1.6 million tonnes of lumpy ore from 1976-77 onwards. The total manpower potential of the project is 3,000 during and after construction. This includes about 27 skilled and unskilled workman and about 100 under the technical and non-technical administration.

New Projects and Schemes

23. Sukinda Nickel and Sargipalli Lead Projects will be taken up by the Government of India located in the districts of Cuttack and Sundargarh respectively. Direct participation by State Government in the equity capital of these two projects would be in the order of Rs. 4.46 crores. Malangtoli Iron Ore Project would be taken up in the Central Sector.

24. Under the State Public Sector mining the new project to be taken up during Fifth Plan is the Gandhamardan Iron Ore Project located in the district of Keonjhar as already explained above. The total estimated cost of the project is Rs. 32 crores out of which Rs. 450 lakhs is required in the Fifth Plan. Rs. 225 lakhs would be provided by way of plan assistance and the balance of Rs. 225 lakhs would be met from institutional finance, etc. The project would be completed during Sixth Five-Year Plan.

25. A total of 19 schemes have been envisaged for implementation during the Fifth Plan under "Mineral Exploration—Administration—Research Building" sector.

26. These schemes are divided into four groups. The first group comprises:—

1. Intensive mineral exploration and inventory
2. Expansion of drilling
3. Geo-physical prospecting
4. Geo-chemical prospecting
5. Photo interpretation cell
6. Investigation of gold occurrences.

Each scheme is explained below—

(1) The scheme aims at Mineral Reconnaissance and Inventory in 10,000 Sq. Kms. of un-explored regions following mapping by G. S. I. detailed exploration and proving of gradewise reserves of important minerals/ores deposits including laboratory analysis, etc. covering an area of 2,000 Sq. Kms. against a total outlay of Rs. 22.00 lakhs.

(2) The scheme aims at core drilling operations for about 12,000 metres as required under the scheme against Sl. I, on different minerals/ores prospected in details against a total outlay of Rs. 36.00 lakhs.

(3) The objective is to locate possible deposits of various minerals/ores through Geo-Physical techniques of exploration like Radio Matric, Magnetic, Resistivity and gravity with a total coverage of 1,000 Sq. Kms. in selected areas against a total outlay of Rs. 5.00 lakhs.

(4) The objective is to locate additional sparsely distributed Metalliferous deposits like Lead, Nickel, Chromite, Titanium, Galium and Sulphoid minerals by Geo-chemical techniques with a total coverage of about 750 sq. kms. in selected areas including Geo-chemical analysis, etc. against a total outlay of Rs. 2.50 lakhs.

(5) The scheme aims at formulation of additional guide lines of prospecting operations through interpretation of Geological structures represented in aerial photographs prepared by the Survey of India covering an area of nearly 2,000 sq. kms. in selected regions of the State. The other purposes is to prepare a Geological Photo Allum of the State. The total outlay is Rs. 2.00 lakhs.

(6) The objective is to conduct detailed exploration in the Telkoi area of Keonjhar district and to locate concentrations of natural gold and extend such operations to other promising areas in the State in due course. The total outlay is Rs. 5.00 lakhs.

27. These 6 schemes provided employment to about 80 technical qualified persons and generate indirect employment potential for about 10,000 persons during mining operations following systematic exploration.

28. The second group would have the following schemes :—

1. Departmental extraction of rare and valuable minerals.
2. Additional survey in mining areas
3. Geological assistance to other agencies
4. Training of officers and field staff.

Each scheme is explained below :—

(1) The objective is to extract valuable minerals like Graphite, Beryl, Automic Minerals and Chromite, etc. occurring in small deposits located in remote areas (not amendable to independent mining operations) during the course of prospecting operations especially in future reservoir areas, and direct sale of the same to Government of India Agencies and Industrialists. The scheme is remunerative. The total outlay is Rs. 5.00 lakhs.

(2) The objective is to create the additional survey reference stations in thickly forested areas (where details topo maps and reference points are not available) for quick demarcation of areas applied for mineral concession. Other purposes is to provide survey reference points in areas of long mining activities and inter State boundaries. This involves about 2,000 sq. kms. area and erection of about 500 concrete survey pillars. The total outlay is Rs. 2.00 lakhs.

(3) The objective is to provide Geological Assistance to the Irrigation and Power, Industry, Engineering (works) Forest Departments of the State Government besides Gopalpur Port authority, Mine owners and Industrialists of the State in the matters of reservoir areas, Forest Planning, Foundation studies, Mining property

evaluation, etc. The purpose is to provide drilling equipments and mining machineries on hire charges to handicapped mine owners and expedite pace of mining activities. The total outlay is Rs. 9.00 lakhs.

(4) The objective is to train up technical officers and field staff of the Directorate in the advanced know-how of exploration and exploitation under different Government of India Organisations as well as standardisation of field techniques through re-orientation training programme in the Department. The total outlay is Rs. 1.50 lakhs.

29. These 4 schemes would provide direct employment to about 46 persons under both technical and non-technical categories. About 1,000 persons would get indirect employment during field operations.

30. The third group would comprise of—

1. Intensive Mineral Exploitation and Administration
2. Installation and Maintenance of Weigh-Bridges
3. Mineral information and Development Cell
4. Expansion of Assaying and Analytical Laboratories
5. Pre-shipment Analysis on Mineral and Ores
6. Administration of Minor Minerals

Each scheme is explained below—

(1) The objective is to re-organise and expand the machinery (staff and equipment) for administration of about 300 working mines in the State and to bring about expeditious disposal of mineral concessions, expeditious checking of illegal mining and leakage of mineral revenue, etc. through the existing 9 Circle Mining Officers and 3 new ones proposed. The total outlay is Rs. 13.00 lakhs.

(2) The objective is to provide weighment facilities at additional key locations throughout the State for quicker and accurate weighment of minerals/ores on transit for right assessment purposes and to plug leakage in mining revenue through instalment of new weigh-bridges and expansion of the existing ones. The total outlay is Rs. 7.00 lakhs.

(3) The objective is to compile and analyse detailed data on mineral production, transport, infrastructure development problems of the Mining Industry and mineral based industries and the overall cost structure of minerals and find out remedial measures for the same and ensure optimum utilisation of minerals produced in the State. The total outlay is Rs. 4.00 lakhs.

(4) The objective is to expand the capacities of the existing Chemical Laboratories and establish new Laboratories for quicker and accurate chemical analysis of minerals/ores produced in the State for purposes of royalty assessment. The total outlay is Rs. 9.00 lakhs.

(5) The objective is to establish a chemical laboratory at Paradeep and conduct pre-shipment analysis of minerals/ores exported through the Paradeep Port as per recommendations of the Ministry of Foreign Trade Government of India. The total outlay is Rs. 5.00 lakhs.

(6) The objective is to bring the administration of "Minor Minerals" (like lime cell, road metals, decorative stones, murum and concrete, etc.) under the Mining Department and to ensure their systematic development and enhance the States mineral revenue. The total outlay is Rs. 3.00 lakhs.

31. The fourth group would have the following schemes:—

1. Mineral Research Projects
2. Departmental Buildings
3. Strengthening of Headquarters Organisation

Each scheme is explained below—

(1) The objective is to carry out systematic laboratory scale research work on selected low grade minerals/ores of the State and to ensure their utilisation in different industries enabling simultaneous conservation of the high grade minerals. The other purpose is to prepare a Rock Album for the State for Geological Reference and Research. The total outlay is Rs. 6'00 lakhs.

(2) The objective is to provide office and residential accommodation for about 20 subordinate offices under the Directorate including Circle Mining Officers, Zonal Survey Offices and Laboratories distributed throughout the State. The other purpose is to expedite civil works connected with Departmental weigh-bridges, building and laboratories, etc., through a small Departmental Civil Engineering Cell. The total outlay is Rs. 28'00 lakhs.

(3) The objective is to reorganise and strengthen the staff and equipment of the Directorate Headquarters commensurate with the introduction of several new Plan Schemes outlined earlier (mineral exploration-administration-research) and to ensure strict administrative supervision, expeditious disposal on mineral concessions, royalty assessment and collection of Audit Reports, etc. The total outlay is Rs. 10'00 lakhs.

(4) These three schemes will provide employment to about 63 persons under both technical and non-technical categories.

(5) The above schemes would require a Fifth Plan outlay of Rs. 175 lakhs. About 12,000 sq. kms. of backward areas would be covered by detailed mineral exploration for reconnaissance. The annual mineral production would reach 20 million tonnes, export 8 million tonnes and revenue earning Rs. 5 crores by the end of the Fifth Plan. The total employment is 311 persons under both technical and non-technical categories.

32. A total outlay of Rs. 10'76 crores has been proposed under Mineral Development Sector in the Fifth Plan vide Annexure II.

Institutional Finance

33. In the "Mineral Exploration—Administration—Building-Research" sector the entire requirements of Rs. 175 lakhs for the Fifth-Plan will be met from Plan provisions. Similarly in the "State's Public Sector Mining Projects" most of the requirement of Daitari Project (i. e., Rs. 230 lakhs) will be met from Fifth Plan provision with an attempt at institutional finance at a later date. However, out of the total Fifth Plan requirement of Rs. 450 lakhs for the Gandhamardan Iron-ore Project including investigation, Rs. 225 lakhs will be provided from the Fifth Plan provision. The balance will be met from institutional finance and O. M. C's. own resources.

Basic information about the proposed mineral development projects are given in Annexure III-A & B.

34. Under the public sector mineral development projects of the Government of India, the entire requirement of the Sukinda Nickel, Sargipalli Lead and Malangtoli Iron-ore Projects (about Rs. 62 crores) will be met by the Government of India except for Rs. 4'46 crores to be borne by the State Government.

Annexure I

Showing Achievements made by the State Directorate of Mines and Orissa Mining Corporation from their inception 1956-57 up to 1968-69

1. Organisation

- .. Both the Directorate and the Orissa Mining Corporation were organised at headquarters and field levels, starting with 3 Circle Mining Offices, 1 laboratory and 6 prospecting teams (Director of Mines); and about 2 mines producing annually about 50,000 tonnes iron-ore only (Orissa Mining Corporation).

By 1960 there were 8 Circle Mining Offices, 2 Zonal Survey Offices, 3 Chemical laboratories and one Research Laboratory under the Directorate of Mines and about 14 mines under O. M. C. producing Iron-ore, Manganese ore, Limestone and Chromite (about 1.28 million tonnes annually). The Orissa School of Mining Engineering was established at Keonjhar.

2. Exploration

- .. Selected unexplored areas were reconnoitered and a preliminary appraisal of the States known mineral potential was made. Preliminary and detailed exploration of promising mineral occurrences proved the existence of nearly 1,160 million tonnes of ores of Iron, Manganese, Chrome Vanadium, Aluminium, Coal, Limestone and Dolomite, Clays and Quartzite among others.

In the public mining sector (O. M. C.) detailed exploration of evaluation of property on Iron and Manganese Ore, Chromite, and Limestone was made by the O. M. C. and programmes on systematic exploitation and export were finalised. This provided the foundation for a wide range of mineral based industries (Iron and Steel, Cement, Ferro-Alloys, Refractories, Coal-based thermal power).

3. Exploitation and Mineral Administration.

The total number of working mines in the State increased from about 100 to more than 200. Annual mineral production increased from 7 million to 11 million tonnes and the annual mineral revenue from Rs. 66 lakhs to Rs. 172 lakhs. The employment potential in the State's mines increased from 30,000 to 60,000. More than 3,000 applications for mineral concessions were processed.

In the public sector mining (P. M. C.) a total number of mines increased from 2 to 14 with annual production of 1.28 million tonnes (Iron-ore, Manganese, Chromite) and annual export of about 0.5 million tonnes. The Daitari Iron-ore Project was started.

4. Mineral analysis and Research .. The annual analytical capacities of the 3 Laboratories and 1 Research Laboratory under the Directorate increased from 2,000 samples to more than 10,000 samples involving more than 20,000 determinations. Small Chemical Laboratory were introduced by the O. M. C. in selected mines on Iron ore and Research on lowgrade Limestone, Chinaclay and Bauxite etc., were initiated by the Director of Mines in the Research Laboratory.

Thus by 1969 more than 110 million tonnes of Minerals/Ores were produced in the State. Rs. 13.00 crores earned towards Mineral Revenue and more than 6 million tonnes of Minerals/Ores exported against total plan provision of Rs. 555.32 lakhs which included Rs. 124.94 lakhs for mineral Exploration—Administration etc under the Directorate of and Rs. 430.38 lakhs for Mineral Exploitation in the State Public Sector (O. M. C.).

Annexure II

(Rupees in lakhs)

Sl. No.	Name of the Scheme/ Project	Total cost revised	Foreign Exchange component	Fourth Plan		Proposed outlay for Fifth Plan		Phasing of outlay in the Fifth Plan				
				Approved outlay	Estimated expenditure	Total	F. E.	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10	11	12	13

MINERAL DEVELOPMENT

DIRECTORATE OF MINES

1	Intensive Mineral Inventory and Exploration.	16.05	Nil	8.26	16.05	22.00	1.00	4.00	5.00	5.00	4.00	4.00
2	Expansion of Drilling	25.50	Nil	15.73	25.50	36.00	Nil	7.00	8.00	8.00	7.00	6.00
3	Geophysical prospecting.	3.25	1.00	2.08	3.25	5.00	1.00	0.75	1.25	1.25	1.00	0.75
4	Geochemical prospecting.	1.15	Nil	2.31	1.15	2.50	Nil	0.50	0.70	0.70	0.30	0.30
5	Photo Interpretation Cell.	0.75	Nil	..	0.75	2.00	Nil	0.30	0.50	0.50	0.35	0.35

(Rupees in lakhs)

Sl. No.	Name of the Scheme/Project	Total cost revised	Foreign Exchange component	Fourth Plan		Proposed outlay for Fifth Plan		Phasing of outlay in the Fifth Plan				
				Approved outlay	Estimated expenditure	Total	F. E.	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10	11	12	13
6	Investigation of gold occurrences.	1.30	Nil	..	1.30	5.00	Nil	0.75	1.25	1.25	1.00	0.75
7	Departmental extraction of minerals.	3.10	..	..	3.10	5.00	..	0.75	1.25	1.25	1.00	0.75
8	Survey in Mining areas.	1.10	..	1.28	1.10	2.00	..	0.30	0.50	0.50	0.35	0.35
9	Geological Assistance to other Agencies.	..	..	..	..	9.00	..	1.50	2.00	2.00	2.00	1.50
10	Training of Officers and Staff.	..	..	..	..	1.50	..	0.20	0.35	0.35	0.30	0.30
11	Intensive Mineral Exploration and Administration.	2.46	..	1.57	2.46	13.00	..	2.50	3.00	3.00	2.50	2.00

12	Installation of Maintenance of Weigh bridge.	8:30	..	3.93	8:30	7:00	..	1.00	1.75	1.75	1.25	1.25
13	Mineral Development Cell.	2:20	..	1.94	2:20	4:00	..	0.75	1.00	1.00	0.75	0.50
14	Expansion of Assaying and Analytical Laboratory.	2.70	..	0.88	2.70	9.00	..	2.00	2.25	2.25	1.50	1.00
15	Pre shipment of Analysis of Mineral and Ore.	1.05	..	1.34	1.05	5.00	..	0.75	1.25	1.25	1.00	0.75
16	Administration of Minor Mineral.	..	..	..	..	3.00	..	0.50	0.75	0.75	0.50	0.50
17	Research Project ..	1.29	..	..	1.29	6.00	1.00	1.00	1.50	1.50	1.00	1.00
18	Building Project ..	20.23	..	5.38	20.23	28.00	..	9.00	6.50	6.50	3.00	3.00
19	Development of Roads in mining area.	3.09	19.00	3.09	..	..	..	..	..	..	..	..
20	Feasibility study on raw materials.	..	..	0.48	..	..	..	..	..	..	..	..
21	Strengthening of Headquarters Organization.	2.50	..	0.90	2.50	10.00	..	1.50	2.50	2.50	2.00	1.50
Total—(Directorate of Mines).		96.02	1.00	65.00	96.02	175.00	3.00	35.05	41.30	41.30	30.80	26.55

(Rupees in lakhs)

Sl. No.	Name of the Scheme/ Project	Total cost revised	Foreign Exchange component	Fourth Plan		Proposed outlay for Fifth Plan		Phasing of outlay in the Fifth Plan				
				Approved outlay	Estimated expenditure	Total	F. E.	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10	11	12	13
22	Sukinda Nickel ..	3,300.00*	..	..	..	267.60	..	20.00	67.20	57.20	57.20	66.00
23	Sargipalli Lead ..	2,200.00**	..	..	..	178.40	..	10	44.80	30.60	47.00	46.00
Orissa Mining Corporation												
24	Daitari Iron-ore Project.	1,930.00	213.00	450.00	†565.96	230.00	45.00	132.00	63.00	35.00	..	..
25	Gandhamardan Iron-ore Project.	3,200.00	..	..	..	225.00	..	26.50	45.00	110.00	32.00	11.80
Grand Total ..		10,726.02	214.00	515.00	661.98	1,076.00	48.00	223.55	261.30	274.10	167.00	150.53

* For Sukinda Nickel 26 per cent of equity requirement works out to Rs. 286.00 lakhs out of which Rs. 267.60 lakhs are proposed to be provided during Fifth Plan period. The balance of Rs. 18.40 lakhs will be provided during Sixth Plan period.

** For Sargipalli Lead 26 per cent of equity requirement works out to Rs. 190.58 lakhs out of which Rs. 178.40 lakhs are proposed to be provided during Fifth Plan and the balance of Rs. 12.18 lakhs will be provided during Sixth Plan period.

† Includes Rs. 60 lakhs spent on Dunguri Lime-stone Project.

Annexure III-A (O.M.C.)

*Basic information about Industrial and Mineral Projects***1. Name and Capacity of the Projects—**

(i) Name of the Projects	..	Completion of Daitari Iron Ore Project
(ii) Location (actual or likely)	..	Harichandanpur Block of Sadar sub-division of Keonjhar district, Orissa.
(iii) Nature of the Project	..	Machanised 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 ROM. ore 1.6 million tonnes of lumpy Saleable Iron Ore.
(a) Capacity	..	800 tonnes per hour

2. Schedule of Implementation—

(i) Whether feasibility study/DPR 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	.. March, 1973 for completion of the remaining portion of the work.
(iv) Date of commencement of production.	Phased production programme from 1973-74.
(v) Achievement of rated capacity	.. Likely date—Likely date 1976-77.

3. Project Expenditure—

(i) Land	..	Mining lease hold area
(ii) Building and Civil works	..	Rs. 0.42 crore
(iii) Machinery and Equipment	..	Rs. 2.11 crores
(iv) Others	..	Rs. 20.51 crores

4. Financing and Execution of the Projects—

(i) Name of the executing agency	.. ..
(ii) Arrangements for financing	.. Share Capital and Loan Capital by the State Government and borrowing from Financial institution.
(iii) Source and extent of institutional finance envisaged.	Rs. 0.190 crores envisaged from Commercial Banks.
(iv) To what extent, internal resources of the company/corporation are to be deployed.	Nil

5. Material Requirements—

(i) Steel	..	1,850 M. T.
(ii) Cement	..	1,000 M. T.

6. Employment Potential—

(i) During construction	..	2,400
(ii) After construction	..	400
(a) Managerial	..	5
(b) Technical Engineers and Super- visors.		45
(c) Clerical	..	45
(d) Skilled Workmen	..	225
(e) Unskilled Workmen	..	50

*Basic information about Industrial and Mineral Projects***1. Name and Capacity of the Projects—**

- | | |
|---------------------------------------|---|
| (i) Name of the Project | .. Gandhamardan Iron Ore Project |
| (ii) Location (actual or likely) | .. Suakati Block of the Sadar subdivision of Keonjhar district, Orissa. |
| (iii) Nature of the Project | .. Iron Ore Project |
| (a) New Project | .. Yes |
| (b) Expansion of an existing Project. | New Project |
| (iv) Products/Output | .. Lumpy Iron Ore |
| (a) Capacity | .. 1.5 million tonnes of lumpy saleable iron ore. |

2. Schedule of Implementation—

- | | |
|---|---|
| (i) Whether feasibility study/DPR prepared. | Pre- Preliminary feasibility report prepared |
| (a) By whom | .. Orissa Mining Corporation Ltd., Bhubaneswar. |
| (b) Present status | .. Submitted for approval |
| (ii) Nature of foreign collaboration required Technical or Financial. | No |
| (iii) Date of start of construction | .. 1973 |
| (iv) Date of commencement of production. | Stage I, 1977-78 (1 million tonnes) stage II, 1979-80 (0.5 million tonnes). |
| (v) Achievement of rated capacity | .. Likely date—6th Five-Year Plan |

3. Project Expenditure—

(Rupees in lakhs)

- | | |
|-------------------------------|--------|
| (i) Land | .. 2 |
| (ii) Building and Civil Works | .. 80 |
| (iii) Machinery and Equipment | .. 120 |
| (iv) Others | .. 248 |

4. Financing and Execution of the Projects—

- | | |
|--|--|
| (i) Name of the executing agency | .. Orissa Mining Corporation Ltd. |
| (ii) Arrangements for financing | .. Share capital by the State Government Loan capital from the Financing Institutions. |
| (iii) Source and extent of institutional finance envisaged | Equity capital from the State Government Loan capital from the Financing Institutions. |
| (iv) To what extent internal resources of the company/corporation are to be deployed:— | .. |

5. Material Requirements—

(i) Steel	..	1,000 M. T.
(ii) Cement	..	6,000 M. T.

6. Employment Potential—

(i) During Construction	..	7,500
(ii) After Construction	..	4,300
(a) Managerial	..	5
(b) Technical-Engineers and Supervisors.		95
(c) Clerical	..	50
(d) Skilled Workman	..	150
(e) Unskilled Workman	..	7,200

CHAPTER 2-9

POWER

1. Orissa had an installed capacity of 501 MW at the beginning of the Fourth Five-Year Plan. By the end of the plan the installed capacity would be of the order of 800 MW.

2. The State has vast mineral resources and to exploit this wealth more and more Power is necessary. A massive ground water survey has been undertaken to provide lift irrigation facilities particularly to areas where flow irrigation is not available. A comprehensive scheme of lift irrigation has been drawn up and to meet the load demands for agriculture it is necessary to step up power generation and build a net work of transmission lines in the State.

3. The State has vast natural resources for power generation and in view of the accelerated increase in the demand for power both within and outside the State, and particularly in the Eastern Region, it is necessary to step up investment in power projects. Power Schemes have to be taken up on a priority basis during the Fifth Plan to meet the immediate needs and to cater to the demands projected during the Sixth Plan period.

4. The allocation and utilisation of financial resources for the power sector during the first four Plans show that nearly 25 per cent of the State Plan (except in the Second Plan) has been for power development. It is necessary to keep up the tempo of power development in the State during the fifth Plan period.

5. Power shortage in the Country has retarded industrial and agricultural production and has brought development to a stage of stagnation. As power is a basic need for economic development an accelerated power programme is essential.

Review of Progress up to the end of 4th Plan

6. By the year 1972-73 the installed generation capacity was 560 MW. With the installation of 4 units in Balimela before the end of the 4th Plan period, the generation capacity would be 800 MW. as indicated below.

..	Hydro	Thermal	Others
(1)	(2)	(3)	(4)
Machkund ..	34 MW (Orissa share)	Talcher 250 MW	.. 6MW
Hirakud ..	270 MW		
Balimela ..	240 MW		
Total ..	544 MW	.. 250MW	6MW*

(*The small diesel stations are being gradually closed down with the extension of main transmission lines to the areas served by these stations).

7. The Talcher-Balimela Double Circuit 220 K. V. line has been completed up to Mohana (200 KMs. length and charged at 132 K V). The portion from Mohana-Thiruvelli (111 K M) is nearing completion. The second stage of the line from Thiruvelli to Balimela is under construction. There was some difficulty in procurement of steel but this has since been arranged. It is anticipated that this line would be completed before the end of Fourth Plan.

8. 6552 villages were electrified up to the end of 1972-73 in the Fourth Plan period bringing the total number of villages electrified both under Plan and Non-Plan to 7,373. It is programmed to electrify 3,000 villages in the last year of the Fourth Plan period bringing total number of villages electrified to 10,373.

9. In the meantime the Balimela-Sileru 220 KV Inter-State line, which is being executed as a Centrally Sponsored Scheme, has been completed and will provide a temporary outlet for the power generated by the first four units of the Balimela Power Station till the Balimela-Thiruvveli portion of the 220 KV line is completed.

10. The Joda (Orissa)—Chandil (Bihar) 220 KV Inter-State Transmission line is also under construction as a Centrally Sponsored Scheme by the Bihar State Electricity Board. It is anticipated that this line would be ready by the end of 1973-74.

11. The total energy sold at the beginning of the Fourth Plan is 1250 MKWH. By the end of 1972-73 it has reached 1969 MKWH level and it is expected to reach 2039 MKWH. by the end of the Fourth Plan period.

12. The only power project under execution is the Balimela Project.

13. The Balimela Dam Project envisages construction of a dam jointly by the Governments of Orissa and Andhra Pradesh. The Fourth Plan outlay was Rs. 1,375.25 lakhs. The cost of the project has increased to Rs. 4,630 lakhs against the original estimate of Rs. 2,400 lakhs. Leaving aside Rs. 1,200 lakhs towards the share of Andhra Pradesh Government, the anticipated expenditure till the end of Fourth Plan is Rs. 2,952 lakhs leaving a spill over of Rs. 529 lakhs for Fifth Plan. The Project was programmed to be completed during Fourth Plan, but due to inadequacy of funds, non-availability of spare parts for earth moving machinery, inadequacy of machines and due to poor performance of the earth moving machinery the Project could not be completed according to the schedule.

14. The main earth dam and all the dykes are likely to be completed during 1974-75. Diversion works have already been completed and water has been stored in the reservoir at the level of 1440' RL.

15. The present estimated cost of the Balimela Power Project is Rs. 3,236.83 lakhs against the original estimate of Rs. 2,183.00 lakhs. The anticipated expenditure till end of 1973-74 is Rs. 3,113 lakhs leaving a spill over of Rs. 123 lakhs.

16. All the civil works of the power project, except four penstock lines, are almost complete. Remaining penstock lines are likely to be completed by December, 1974. The electrical portion of the Power Project is also nearing completion except a few items of work. These could not be geared up according to Schedule as certain critical equipments are yet to be supplied by the U. S. S. R. Suppliers and due to the delay in the arrival of Specialists.

17. It was programmed to complete the project in all respects during the Fourth Plan but due to inadequacy of required funds, non-availability of steel in time, the Project could not be completed according to schedule. It is expected to be completed in all respects by 1975-76. The first unit of Balimela Power House is ready (May, 1973) for testing and commissioning, the 2nd Unit is expected to be ready for testing and commissioning by July, 1973. Two other Units are also expected to be commissioned during the year 1973-74. The fifth and sixth units would be commissioned thereafter during 1974-75.

18. The following main transmission lines which have been started during the Fourth Plan have to be completed during the 5th Plan.—

(i) Talcher-Rourkela	..	220 KV S. C.
(ii) Joda-Rairangpur	..	132 KV S. C.
(iii) Ganjam-Khurda	..	132 KV S. C.
(iv) Chainpal-Choudwar	..	132 KV S. C.
(v) Jajpur Road-Paradip	..	132 KV D. C.
(vi) Khurda-Bhubaneswar	..	132 KV D. C.

Objective and Target for the Fifth Plan

19. Based on the 6th Annual Load Survey of the Central Water and Power Commission load demand in Orissa indicates that even after commissioning the 6 Units of the Balimela Power Station, there would be shortage of power and energy by 1975-76. Forecast of load beyond 1973-74 has been made with an assumed annual load growth of 15 per cent on the following basis:—

- (i) The actual growth rate of power demand in Orissa from 1965-66 to 1969-70 works out to about 15 per cent per annum. Due to inadequate generation capacity available before the Talcher Thermal Power Station started generating also due to general economic recession in the past 3 years (1968-69 to 1970-71) there has been a set back in the growth rate of power demand in the State. Under these circumstances, an accelerated growth rate of over 15 per cent should be adopted for future planning.
- (ii) The Joint Planning Board of the Planning Commission have set up an Expert Committee on Power for the various regions in the Country. The Committee for South-East Region (of which Orissa forms a part) has considered the growth rate of power over a period of ten years from 1964-65 to 1973-74. While examining aggregate consumption of energy in the past, the Committee have arrived at an average growth rate of 15 per cent. The Committee has also observed that from the point of view of the envisaged economic activities during the fourth Plan period and beyond in the region, this rate of growth seems reasonable for forecasting the load demand in the future.
- (iii) The Decade Plan (1971—81) prepared by the C. W. & P. C. has emphasized that an accelerated growth rate in the Eastern Region should be adopted and has proposed adoption of a higher rate of growth over the national average rate of 12.5 per cent.

20. The future load demand in the State has also been worked out by considering sectoral growth of different categories of loads separately. Based on the anticipated loads of each category according to the load survey and other sources and also increase in demand due to expansion of the existing loads the future load figures have been arrived at. The aggregate demand of this sectoral load also shows a trend of growth rate of 15 per cent per year. Therefore, the above annual growth rate of 15 per cent for the Orissa Power system is considered quite reasonable and realistic. It is all the more justified because Orissa is a backward and under developed area, where more concentrated development work has to be undertaken to catch up with the level of development work has to be undertaken to catch up with the level of development in the neighbouring States and to provide for the basic needs and minimum necessities as envisaged in the Approach Paper.

21. With two Units of 110 MW each, i. e. 220 MW of the Talcher Thermal Expansion and one 50 MW of the Rengali Dam Project Power House to be commissioned in 1978-79, the last year of the 5th Five-Year Plan, without stand by or maintenance reserve, the peaking capability available can be anticipated to be 1017 MW as shown in the following Table I. This capability is calculated on the basis of what capacity for peaking would be available throughout the year. In other words, it is based on the availability of capacity in the pre-monsoon months in the low head power stations at Hirakud and Rengali. This capacity is likely to increase by another 66 MW to 97 MW in the other months of the year when the reservoir head is fairly high. The figures for capability during these months is likely to rise to 1083 MW or 1114 MW.

TABLE 1

Capabilities of Power Stations

Year	Installed capacity M. W.	Capability M. W.	Energy availability million K. W. H. per year	Remarks	
1	2	3	4	5	
1972-73	Hirakud, Burla $4 \times 37.5 = 150$	171	114	Hirakud 171 (pre-monsoon.) 215 2 months (August, September). 246 (8 months)	
	$2 \times 24 = 48$		1004		
	Chiplima $3 \times 24 = 72$				
	Total .. 270				
	Talcher $4 \times 62.5 = 250$		227		131
					1150
	Machkund $3 \times 17 = 51$		34		29
	(Orissa share)				
	$3 \times 21.25 = 63.75$				253
	Total .. 554		432		274
		2407			
1973-74	Balimela $4 \times 60 = 240$	238	135		
			1180		
	794	670	409		
			3587		
	Stand by small steam and diesel sets. 6	..	..
1974-75	Balimela $2 \times 60 = 120$	119	..		
		920	..		
1975-76	920	789	..		
1976-77	920	789	..		
1977-78	920	789	..		

Year	Installed capacity M. W.	Capability M. W.	Energy availability million K. W. M. per year	Remarks	
1	2	3	4	5	
1978-79	Talcher expansion	220	200	114	
				1100	
	Rengali	50	28	40	
				350	
	Total	1190	1017	563	
				5037	

22. The stand by and maintenance reserve is normally taken as 30 per cent for the first 1000 M. W. and 20 per cent thereafter. In this proposal, 25 per cent reserve for stand by and maintenance reserve has been assumed. Hence, with a 25 per cent reserve for stand by and maintenance reserve, our peaking capability effectively available at the end of the 5th Five-Year Plan, can be anticipated to be—

$$1017 - 254 = 763 \text{ Mw.}$$

23. The availability of energy as can be seen from the above Table would be 5037 Million KWH per year or 563 Mw (8760 units per year being equal to one Mw.)

24. The anticipated loads at the end of the 5th Five-Year Plan have been estimated at different times. A summary of the estimated possible loads which can be expected to materialise is given below.

TABLE 2

..	8th Survey		C. W. & P. C.		Approach Paper	
	Energy Million Units per year or MW.	Peak MW.	Energy Million Units per year or MW.	Peak MW.	Energy Million Units per year or MW.	Peak MW.
1	2	3	4	5	6	7
1 Anticipated sale in 1978-79.	6311 (720 MW)	1029 (70 % L. F.)	5354 (611 MW)	846 (72.5 % L. F.)	5506 (628 MW)	870
Generation necessary to meet above sale with 10 per cent line loss.	7012 (800 MW)	1143	5970 (681 MW)	940	6118 (698 MW.)	967

The load growths anticipated year by year in the Fifth Plan period is indicated in Annexure V.

25. The approach paper has assumed more or less the conservative figures indicated in the C. W. & P. C. review. It may be noted that the anticipated demand in 1972-73 was 321 MW and in spite of difficulties and restriction last year the grid demand was about 300 MW.

The above position would reveal that by the end of the Fifth Plan period there would be a short-fall as per the figures noted below :—

Capability of power system		Generation required for loads expected		Short-fall	
Peaking Capability MW.	Energy available MW.	Peaking capability MW.	Energy available MW.	Peaking MW	Energy MW.
1	2	3	4	5	6
764	563	967	698	303	135

27. Even if there are further drastic slips in the load from the conservative loads estimated, there would be short-fall in generation.

28. The above situation calls for immediate setting up the Super Thermal Station at Talcher as a Central Scheme and simultaneously taking up the hydro-stations at Rengali and Upper Kolab.

29. The above forecast of demand relates to Orissa alone. The Union Government are laying emphasis on inter-State and inter-Regional grids for transfer of Power from one State/Region to another. Since Orissa is surrounded by States deficit in Power, a higher demand forecast may be needed to cater to inter-State grids.

30. With this in view the Union Government have sanctioned transmission schemes linking Orissa system with the Bihar system and the Andhra Pradesh system in the Central sector. These two lines are capable of transferring about 300 MW to the neighbouring States. Besides, there is a suggestion from the Government of India to link Bodhghat in Madhya Pradesh with Balimela, Kolaghat or Kharagpur in West Bengal with Talcher and Brajrajnagar with Raigarh in Madhya Pradesh for exchange of power between States and Regions.

31. 15,000 additional villages including 2,312 of the Minimum Needs Programme and 70,000 L. I. points and wells are proposed to be energised during the 5th Plan period along with a net work of transmission lines to the load growth centres.

Specific Projects/Programmes/Schemes

32. Details of continuing schemes have been discussed in the section on review of progress in the Fourth Plan and at Annexure I and I (a).

EXPANSION OF EXISTING PROJECTS

33. To meet the anticipated power shortage from 1975-76, it is necessary to take up Projects, which would yield quick results. Any major Project either Thermal or hydro requires a minimum gestation period of 7-10 years. In view of this, it is necessary to take up an expansion scheme immediately.

TALCHER THERMAL EXPANSION

34. The existing Talcher Thermal Station has an installed capacity of 250 MW (62.5 MW X 4). The expansion scheme contemplates setting up of two more units of 110 MW each and thus adding an additional installed capacity of 220 MW. The Project has since been sanctioned by Government of India. It is proposed to take up the scheme on a priority basis for which a request for Central assistance of Rs. 200 lakhs has been made for 1973-74 outside the State Plan. It is proposed to complete this Project during the 5th Plan.

35. The financial requirements of the Scheme are as follows:—

(In lakhs of Rupees)			
1973-74	..	200.00	(Representing 10% advance against value of machinery)
1st year	..	75.00	
2nd year	..	265.00	
3rd year	..	1,010.00	
4th year	..	1,320.00	
5th year	..	930.00	

Total	..	3,600.00	
Interest	..	700.00	

Grand Total	..	4,300.00	

36. An amount of Rs. 290 lakhs will spill over to the Sixth Plan for settlement of accounts. The Units will be obtained from indigenous sources for which a letter of intent has been issued. The expansion programme will be undertaken by the Orissa State Electricity Board.

New Schemes :

37. The following hydro power schemes are proposed for execution during the Fifth Plan and beyond.

1. Rengali Project
2. Upper Kolab Project

Broad outlines of these projects are indicated below—

Rengali Project

38. It is proposed to build a dam across the river Brahmani near Rengali to effectively control the devastating floods caused by this river. The reservoir formed by this dam will have a capacity of about 3.91 lakhs HAM., with a live storage of 2.99 lakhs HAM., which will produce about 50 M.W., of firm power. The detailed report on this project is being recast for flood control, power and irrigation and will be finalised shortly. The plant equipment required for the project will be obtained from indigenous sources and executed departmentally.

39. The annual tentative break up of the expenditure for the power project is given below :—

Year		Lakhs of rupees
1st year	..	1,50.00
2nd year	..	35.00
3rd year	..	1,00.00
4th year	..	3,50.00
5th year	..	7,50.00

Total	..	13,85.00

6th year	..	5,85.00
7th year	..	5,65.00
8th year	..	3,15.00

Grand Total	..	28,50.00

Upper Kolab Project :—

40. The Upper Kolab Project envisages construction of a dam across the river Kolab (known as Sabari in the lower reaches in M.P.) near Jeypore town in Koraput district. The reservoir will be capable of yielding a regulated discharge of 1,500 cusecs which will be utilised to develop 89 M.W. of power at 100% load factor. It is proposed to instal 3 generating units of 80 M.W. capacity which would result in additional installed capacity of 240 M.W. The tail race water released by the power house will be picked up by a diversion weir from where 2 main canals will take off to irrigate 44,500 hectares. The project report has been sent to the C.W. & P.C. and is expected to be cleared shortly. The cost per unit generated is estimated at Rs. 4.27 paise. The financial outlay is indicated below :—

(a) Power Project & Appurtening Civil Works—		In lakhs of rupees
1st year	..	116.42
2nd year	..	416.22
3rd year	..	407.72
4th year	..	584.64
5th year	..	575.00

Sub-total for Fifth Plan	..	2,100.00

6th year	..	7,67.73
7th year	..	6,45.61
8th year	..	5,47.26

Total	..	4,509.60
(b) Irrigation	..	64.56

		55,24.16

41. This Project is proposed to be taken up as a Power Project during the Fifth Plan on priority basis to be developed for irrigation during the Fifth or Sixth Plan depending on the availability of resources.

42. To meet the shortage of power from 75.76 onwards after taking into account Talcher Stage-II and the first Unit of Rengali, it is necessary to take up a new Thermal Project during the Fifth Plan in addition to Talcher expansion. A Thermal Scheme is expected to yield results in 6 years as against a minimum period of 8 years required for Hydro Project.

43. In view of the availability of abundant quantity of low grade non-metallurgical coal at Talcher, sufficient water in the river Brahmani, extensive flat uncultivated land near Talcher 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 allround facilities for a large thermal station of any conceivable capacity.

44. The feasibility report for setting up of a 1000 MW (which can be expanded to 2000 MW) Thermal Station with 5 Units of 200 MW each at an estimated cost of Rs. 14 800 lakhs has been sent to the C. W. & P. C. and has received favourable response. Government of India have appointed a Committee for selection of sites for the establishment of large Thermal Power Stations in the Country and have circulated a questionnaire. Data available has already been furnished to the Committee and certain other details are being collected. This Project should be approved to be executed as a Central Sector Scheme.

45. Transmission and distribution Schemes are co-related with generation schemes and the Plans for extensive rural electrification. Rural electrification has not progressed much in Orissa and as such a larger outlay on transmission and distribution is necessary. In the 4th Plan the ratio of outlay between generation and distribution would be 53:35. According to the recommendations of the Energy Survey of India Committee (1964) investment on transmission and distribution should be at least 50 per cent of the total investment on power or equal to the investment on generation. Since many districts in Orissa are backward areas it is absolutely necessary to plan for a network of transmission and distribution lines so that the basic minimum needs of the majority of the population in the rural and tribal areas are served.

46. The following new Transmission lines linking the new Power Stations to be set up have also to be taken up during the 5th Plan for completion during the 5th Plan or early in the 6th Plan:—

- (1) Balimela—Talcher 220 KV. SC. line (3rd circuit)
- (2) Extension of 13 KV. line for supply to Railways in Koraput district
- (3) Hirakud II Chiplima—Jamkera 132 KV. S. C. 96 KM.
- (4) Talcher—Jajpur Road 132 KV. S. C. 100 KM.

- (5) Talcher—Rourkela 132 KV. S. C. 176 KM.
- (6) Upper Kolab Jeypore 220 KV. D. C. 5 KM.
- (7) Rengali—Talcher 220 KV. D. C. 50 KM.
- (8) Rengali—Rourkela 220 KV. D. C. 120 KM.

47. Besides the above transmission lines the Ministry of Irrigation and Power and the C. W. & P. C. Super-Grid Directorate have included the following new Inter-State and inter-regional links:—

- (i) Rourkela—Koaikar (Orissa—Bihar) 400 KV 28 KM. Orissa portion
- (ii) Talcher—Kolaghat (Orissa—West Bengal) 400 KV. S. C. 220 KM. Orissa portion.
- (iii) Balimela—Bodhghat 220 KV. S. C. 100 KM. Orissa portion
- (iv) Jharsuguda—Raipur 132 KV. line

These Schemes will be taken up as Centrally sponsored schemes outside the State Plan.

48. The particulars of the Transmission Schemes and the financial outlay are indicated in Annexure II.

In Orissa more than 90 per cent of the population is spread over 46,466 villages. Any development programme, if it is to reach the core of the problem and really bring benefit to the people, has got to reach the rural areas. Whereas, at the beginning of the 1st Plan not a single village was electrified, up to the end of the year 1972-73, 7,373 (including hamlets) villages have been electrified. Efforts are being made to electrify 10,373 villages by the end of the Fourth Plan. This in itself would be very low achievement when compared to the achievements in the other States of the Country in respect of rural electrification. Some of the States covered all the villages and some more propose to cover all villages by the end of the 5th Plan. It has been observed by the Ministry of Irrigation and Power in their programme for rural electrification for the decade plan 1971-81 that Orissa is among the backward States and programmes set for them for the Fifth Plan should provide a very substantial acceleration in their pace of work in rural electrification as well as energisation of pump sets. Efforts are also necessary to see that no part of a village where weaker sections of the society live is left out. Whereas attention has to be paid to provide electricity to industrial units as well the programme should be based primarily on energisation of irrigation pumps and electrification of villages. Assuming that 10,373 villages would be electrified by the end of the Fourth Plan as stated above 20% of the census villages and 36.40% of the rural population would be covered. It is necessary to programme to cover at least 50% of the villages and 40% of the population by the end of the Fifth Plan.

49. It is accordingly proposed to electrify 15,000 villages including 2,312 villages under the Minimum Needs Programme during the Fifth Five-Year Plan. Since most of the funds for rural electrification are coming from the Rural Electrification Corporation the schemes envisage energisation of pump sets as well as small industrial units. A target of energising 70,000 pump sets during the Fifth Plan has been fixed. This target is also necessary as a follow up action for the good work that is being done by the Ground Water Survey Organisation. The Ministry of Irrigation and Power in their power development plan for the Fifth Plan have envisaged electrification of 13,100 villages in the Fifth Plan period on the assumption that 3,400 villages will be electrified by the end of the Fifth Plan. We have already electrified 7,373 villages and hamlets up to 1972-73 and propose to electrify a total number of 10,373 villages by the end of the Fourth Plan. A target of 15,000 can therefore be achieved during the Fifth Plan. The plan drawn up by the Ministry also has envisaged energisation of 70,000 pump sets which has been taken as the target for the Fifth Plan.

50. The R. E. Corporation have a scheme for financing projects to electrify areas populated by the weaker sections of the society. The Electricity Board is formulating proposals under this Scheme. It is, therefore, proposed to pay special attention to villages and areas occupied by the backward sections of the society.

51. Rural Electrification schemes are not becoming viable as the anticipated demand for power is not growing appreciably when compared to the capital base. Whereas the investment is increasing at a good pace, returns do not show a comparative growth in order to make rural electrification programme economically viable and to derive optimum returns out of the investment. It is, therefore, necessary to co-ordinate the various Departmental programmes to achieve an integrated load development comprising of agriculture, industries, domestic and municipal areas. For this purpose, it is proposed to adopt one village in each subdivision as a model village and nucleus for co-ordinated and integrated development to serve as a model to other villages. A Diploma Holder or a Junior Engineer will be kept in charge of each such village. Under the special employment programme it is proposed to create cell for a group of 60 villages to be kept in charge of a Junior Engineer for the purpose of publicity, consultation to consumers and rendering such service as would expedite utilisation.

52. The programme for investigation during the Fifth Plan would cover the following Projects;—

(i) Lower Kolab (4 × 60)	..	240 MW
(ii) Lower Machkund (2 × 20 2 × 12)	..	64 MW
(iii) Projects on Brahmani Basin	..	..
(iv) Talcher Super Thermal	..	2000 MW
(v) Indravati Stage II		

53. The investigation programme will also cover survey and investigation of inter-connecting Transmission and Distribution lines, including Inter-State and Inter-Regional lines connected with the above projects as well as projects to be executed in the Fifth Plan.

54. To sum up, the Fifth Plan envisages :—

- (i) An addition of adequate generation capacity to the existing installed capacity in the State by taking up the following Power Projects according to priority:—
 - (1) Talcher Expansion
 - (2) Rengali Project
 - (3) Upper Kolab Hydro-Electric Project
- (ii) Linking up the generating stations and growth centres by transmission and distribution lines.
- (iii) Electrification of 15,000 villages including 2,312 under M N P and energisation of 70,000 pump sets.
- (iv) Investigation of schemes for execution in the Sixth Plan
- (v) To develop demand for power for the rural areas by creating cells for a group of villages with a Junior Engineer or Diploma holder in charge under the special employment programme and to select villages as rural growth centres in each subdivision to be in charge of a Diploma holder.

55. A total outlay of Rs. 21,510 lakhs is proposed for the power sector for the fifth Plan.

56. The anticipated outlay in Fourth Plan in the Power sector is Rs. 8,791.87 lakhs in view of the past performance and present needs and projections, an outlay of Rs. 21,510.00 lakhs in the fifth Plan is necessary for the economic development of the State.

Minimum Needs Programme

57. Rural electrification is a major instrument for developing our rural areas and bringing the benefits of development to persons living in those areas. The State of Orissa is much below the Indian average in rural electrification.

58. In Orissa by the end of fourth Plan period, five districts, viz., Cuttack, Dhenkanal, Ganjam, Puri and Sundergarh would have 40% or more of their rural population covered by rural electrification. It is proposed to cover 40% of the rural population in the remaining eight districts in the State during the fifth Plan under the minimum needs programme. This is necessary for ensuring that the benefits of rural electrification are spread over the State and not concentrated in a few districts only in the interest of removing regional imbalance which is one of the objectives of planned development. By the end of the fourth Plan period, the percentage of rural population covered for the State as a whole would be 36.40 per cent (villages covered being about 20 per cent), but because 5 districts would have achieved about 40 per cent coverage, the percentage of rural population covered in the remaining eight districts would be only 25.1 per cent. To bring each of them to the level of 40 per cent of the rural population, it has been estimated that 2,312 villages have to be electrified during the fifth Plan. The estimated cost is Rs. 14.54 crores for the 11 KV. lines and L. T. Distribution lines and sub-stations and Rs. 4.38 crores for 33 KV. lines which are required exclusively to feed these rural areas, making a total of Rs. 18.92 crores. The average cost works out to Rs. 80,200 per village. This is higher than the usual State average cost of rural electrification per village due to obvious reasons. The areas to be covered are far from the existing transmission network and therefore longer transmission lines will be necessary to extend electric supply to these villages.

59. 2,312 villages will be electrified at a cost of Rs. 18.92 crores under the minimum needs programme, these villages have been identified and the districtwise lists have been prepared.

60. For a clear exposition of the development programmes proposed in the power sector, additional data have been given in the Annexures as detailed below:—

Annexures III—Programmewise outlay and expenditure including that of Annual Plan, 1974-75.

Annexure IV—Physical Programmes—Targets and Achievements.

ANNEXURES

Annexure

Continuing and Spillover Schemes

(Power

Sl. No.	Name of the scheme	Approved estimated cost	Total physical target of the scheme	Expenditure likely to be incurred up to the end of Fourth Plan	Target anticipated to be achieved by end of Fourth Plan
1	2	3	4	5	6
General Scheme					
Continuing Scheme					
1	Balimela Dam Project	2,400·00 * 4,630·00	Completion of the work Dam, Dykes and Spill ways and other allied civil works in all respects.	4,152·00	Completion of substantial portion of the Project.
2	Balimela Power Project.	2,183·00 * 3,236·83	Commissioning of all the 6 units and completion of the Project.	3,113·00	Commissioning of 4 units with generation capacity of 240 M. W.
	Sub-Total	4,583·00 * 7,866·83		7,265·00	..
3	Transmission and Distribution Scheme. **	2,924·48	..	1,815·02	..
	Total— Continuing Scheme	4,583·00 10,791·61	..	9,000·02	..

*Revised Estimates. All figures are as per

** Orissa State Electricity

I
included in the Fifth Plan
Sector)

(Rs. in lakhs)

Spillover amount in any proposed to be provided in the fifth Plan	Capital component	Foreign Exchange component	Yearwise break up				
			1974-75	1975-76	1976-77	1977-78	1978-79
7	8	9	10	11	12	13	14

529.00 529.00 162.00 451.00 306.00 —(222.00) ..

+

+Includes
Rs. 51 lakhs for
maintenance
during 1974-
75.

123.00 123.00 Nil 134.00 —(11.00)

652.00 652.00 162.00 585.00 289.00 —(222.00)

1,109.00 1,109.00 .. 506.42 446.34 162.24

1,761.00 1,761.00 162.00 1,091.42 729.34 —(59.76)

revised estimates which are under scrutiny.

Board Scheme.

Annexure
Continuing and Spill-over Schemes
(Power

Sl. No.	Name of Scheme	Approved estimated cost	Total physical target of the scheme	Expenditure likely to be incurred up to the end of Fourth Plan	Target anticipated to be achieved by end of Fourth Plan
1	2	3	4	5	6

3 Transmission and Distribution Scheme.

Construction of—

(i) 132 K. V. Line ..	330.92	517 Kms.	97.00	..
(ii) 220 K. V. Line ..	421.93	549 Kms.	144.00	..
(iii) Sub-stations ..	422.93	..	98.00	..
(iv) <i>Add extra spill-over likely for delay in approval of World Bank loan.</i>	..	..	..	..

Total	—	—
-------	---	---	----	----	----

I(A)

included in the Fifth Plan

Sector)

(Rs. in lakhs)

Spill-over amount, if any proposed to be provided in the Fifth Plan	Capital component	Foreign Exchange component	Year-wise break-up				
			1974-75	1975-76	1976-77	1977-78	1978-79
7	8	9	10	11	12	13	14
233·92	233·92	..	113·65	105·00	15·27	..	..
277·93	277·93	..	144·49	110·00	23·44	..	..
327·61	327·61	..	158·28	135·34	33·99	..	—
269·54	269·54	..	90·00	90·00	89·54	..	..
1,109·00	1,109·00	..	506·42	440·34	162·24	..	..

Annexure II
New Schemes for the Fifth Five-Year Plan—Power Sector

(Rs. in lakhs)

Sl. No.	Name of the scheme with location	Estimated cost	5th Plan outlay (Tentative)	Capital Expenditure componen of the out l a y	Foreign Exchange component of the out l a y	Physical Targets		
						Item	Unit	Proposed Target
1	2	3	4	5	6	7	8	9
New Generation Scheme.—								
1.	Talcher Thermal Expansion,* district, Dhenkanal.	3840·00	4300·00	4300·00	1150·00	Both the units of 110 M. W. each will be installed during 1978-79. The outlay of Rs. 4300 lakhs includes Rs. 700 lakhs towards interest.		
2.	Rengali district Dhenkanal	2850·00	1385·00	1385·00	285·00	Making detail study of the hydrology of reservoir for arriving at the exact parameters for power station equipments, studying in detail the layout with refernce to the level of penstock and tail race channel, working out the Schedule of equipments and their layout, preparing specifications of equipments of Power house auxiliaries, switchyard etc., calling for quotations by open tender or by negotiation for indegenous equipments manufactured by the Government of India undertakings, study of tender documents and finalisation of equipment orders, co-ordination of equipments, transporting of equipments, testing of equipments, erecting, operational testing and commissioning of the first unit.		

3. Upper Kolab Dist. Koraput	4,543.60	2100.00	2100.00	454.36	Making detail study of the hydrology of the reservoir for arriving at the exact Parameters for power station equipments, studying in detail the layout with reference to the level of penstock and tail race channel, working out the schedule of equipments and their layout, preparing specifications of equipments of power house auxiliaries, switchyard, etc. calling for quotations by open tender or by negotiation for indigenous equipments manufactured by the Government of India Undertakings, study of tender documents and finalisation of equipment orders, co-ordination of equipments, transporting of equipments.
Sub-Total ..	11233.60	7785.00	7785.00	1,889.36	
4. Investigation (Irrigation & Power Project).	..	468.00	..	--	
5. Rural Electrification Scheme	5358.00	5300.00	5300.00	..	100 per cent work will be completed
6. Transmission and—Distribution Scheme*					
(i) Construction of 33 KV line (8000 Kms.) associated sub-station.	1600.00	1600.00	1600.00	..	Completion of 100% work
(ii) 132 KV line (813 Kms.) & associated sub-station.	1337.00	1307.00	1307.00	..	Completion of about 95% work
(iii) 220 K V line (471 Kms.) associated sub-station.	1229.00	1075.00	1075.00	..	Completion of about 85% work

*O. S. E. B. Scheme

(Rs. in lakhs)

Sl. No.	Name of the Scheme with location	Estimated cost	Fifth Plan outlay (Tentative)	Capital Expenditure component of the outlay	Foreign exchange component of the outlay	Physical Targets		
						Item	Unit	Proposed Target
1	2	3	4	5	6	7	8	9
(iv)	400 K.V. Line (1,157 Kms.) & associated sub-station.	4660.00	1164.00	1164.00	--	Completion of about 25% work		
(v)	Improvement to existing H. T. & L. T. Line and augmenting existing sub-station.	600.00	600.00	600.00	..	Completion of 100% work		
(vi)	Power Line Carrier Communication.	200.00	200.00	200.00	--	Completion of 100% work		
(vii)	Load despatch	250.00	250.00	250.00	..	Completion of 100% work		
	Sub-Total (i to vii)	9,876.00	6196.00	6196.00	..			
	Total 1 to 6	26467.00	19749.00	19,281.00		1889.36		
	Total continuing scheme—Annexure I.		1761.00	1761.00		162.00		
	Grand Total	26467.00	21510.00	21042.08		2051.36		

Annexure III

Draft Fifth Five-Year Plan

Programmewise Outlay and Expenditure

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely Expenditure 1973-74	Likely Expenditure during Fourth Plan	Fifth Plan total outlay	Annual Plan 1974-75 outlay
1	2	3	4	5	6	7	
	(ii) Power						
1	Generation						
	Balimela Dam Project (Orissa portion).	1375.25	516.15	516.15	2170.00	529.00	451.00
	Balimela Power Project ..	1713.59	344.35	344.35	2049.56	123.00	134.00
	Talcher Thermal ..	407.11	0.50	0.50	301.16	..	..
	Hirakud Stage II ..	21.02	1.00	1.00	9.12	..	..
	Talcher Thermal Expansion ..	..	..	..	..	4300.00	75.00
	Rengali ..	..	..	..	..	1385.00	150.00
	Upper Kolab ..	..	..	..	..	2100.00	116.42

Annexure III

Draft Fifth Five-Year Plan

Programmewise Outly and expenditure

Sl. No.	Programme	Fouth Plan approved outlay	Approved outlay for 1973-74	Likely Expenditure 1973-74	Likely Expenditure during Fourth Plan	Fifth Plan total outlay	Annual Plan 1974-75 outlay
1	2	3	4	5	6	7	8
2	Transmission and Distribution Scheme.						
	(i) Talcher Transmission ..	42.08	..	..	61.00	..	..
	(ii) Balimela Transmission ..	88.95	100.00	100.00	960.18	..	.
	(iii) T. & D. Scheme ..	1,408.00	694.00	694.00	1,815.02	1,305.00	1,181.42
	(a) Rural Electrification .	605.00	413.00	413.00	1,312.85	5,300.00	880.00
	(b) Investigation ..	100.00	8.00	8.00	71.98	468.00	100.00
	Total ..	6,657.00	2,077.00	2,077.00	8,791.87	2,15,10.00	3,087.84

Annexure IV
Draft Fifth Five-Year Plan

Physical Programmes—Targets and achievements

Sl. No.	Item	Unit	1968-69	Fourth Plan		Level during 1973-74	Fifth Plan Target	
				Target	Likely achievement		Total	1974-75
1	2	3	4	5	6	7	8	9
1	Power							
	(i) Installed Capacity.	(M. W.)	501.00	422.5	302.5	800	390.00	120.00
	(ii) Electricity generated.	M. Units.	1,420.00	9,595.00	9,595.00	2,308	17,336.00	2,921.00
	(iii) Electricity Sold	M. Units	1,250.00	8,524.00	8,524.00	2,039	15,219.00	2,548.00
	(iv) Rural Electrification.							
	(a) Villages Electrified.	No.	704 Census Vill. 117 hamlets	750 3,756 (Revised under Plan)	3,756 (Plan) 4,906 (Census Vill) 890 (Hamlets.)	9366 (Census Vill.) 1,007 (Hamlets)	15,000	3,000
	(b) Pump Sets and Tube wells energised by Electricity.	No.	477	1,800	1,367 (Plan) 1,225 (Non-Plan)	3,069	70,000	10,000

Annexure V
Anticipated load growth
Power Demand up to 1976-77

—	1972-73	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	Remarks
1	2	3	4	5	6	7	8	9
	Peak load M. W.	Peak load M. W.	Peak Load M. W.	Peak Load M. W.	Peak load M. W.			Top-Energy in MKWH
	Energy M. W.	Energy M. W.	Energy M. W.	Energy M. W.	Energy M. W.			Bottom Demand in M. W.
Domestic Light	52	52+10=62	62+16=78	78+12=90	90+9=99			Bottom Demand in M. W.
Domestic Power	16	16+3=19	19+4=23	23+4=27	27+3=30			
Commercial Light.	55	55+8=63	63+10=73	73+7=80	80+8=88			Bottom Demand in M. W.
Commercial Power.	16	16+3=19	19+3=22	22+2=24	24+2=26			
L. T. & Med. Industries	73	73+51=124	124+46=170	170+71=241	241+105=346			For the years 77-78 & 78-79 a 15 per cent load increase has been assumed.
	54	54+39=93	93+34=127	127+53=180	180+79=259			
Public Lighting	8	8+1=9	9+2=11	11+1=12	12+1=13			
Public Water Works.	5 28	5+1=6 28+6=34	6+1=7 34+6=40	7+1=8 40+5=45	8 45+4=49			
	7	7+2=9	9+2=11	11+1=12	12+1=13			

Irrigation ..	13	$13+10=23$	$23+48=71$	$71+61=132$	$132+35=167$		
	11	$11+4=15$	$15+49=64$	$64+20=84$	$84+19=103$		
Railway Traction.	60	60	$60+13=73$	$73+30=103$	103		
	6	6	$6+7=13$	13	13		
Back Supply.. (G. P. Tariff)	34	$34+30=64$	$64-19=45$	$45-23=22$	22		
	11	$11+10=21$	$21-6=15$	$15-8=7$	7		
E. T. Industries (M. D. less than 20 M-W)	481	$481+68=549$	$549+123=672$	$672+175=847$	$847+99=946$		
	100	$100+15=115$	$115+23=138$	$138+17=155$	$155+39=194$		
Special H. T. Industries (M.. D. 20M. W & above.)	1165	$1165+229=1394$	$1394+703=2097$	$2097+482=2579$	$2579+360=2939$	3380	3887
	154	$154+48=202$	$202+102=304$	$304+132=436$	436	501	576
Group diversity factor.	1.3	1.3	1.4	1.4	1.4		
Total energy sale	1969	$1969+413=2382$	$2382+948=3300$	$3330+321=4151$	$4151+621=4772$	5487	6310
Maximum demand	292	$292+96=388$	$388+158=546$	$546+130=676$	$676+102=776$	894	1028
Total energy regd. with peak load. 10% losses.	2166	$2166+454=2620$	$2620+1043=3663$	$3663+903=4566$	$4566+683=5249$	6036	6941
	321	$321+106=427$	$427+170=597$	$597+147=744$	$744+112=856$	984	1031
	2230	$2230+730=2960$	$2960+447=3407$	$3407+519=3926$	$3926+798=4724$	5432	6246
	332	$332+152=484$	$484+73=557$	$557+83=640$	$640+95=735$	845	971

CHAPTER 2·10

TRANSPORT AND COMMUNICATION

(i) ROADS

The State is poorly served by railways. As against the all-India average of 12 Kms. and 18 Kms. of railway line the State is having 9 Kms. and 11 Kms. of railway lines per lakh of population and per 100 square Kms. of area respectively. The State is also in backward condition in comparison with other States in road communication also.

Review of the progress up to the end of the Fourth Plan

2. There was an investment of Rs. 1·87 crores for improvement of 1,249 Kms. of existing roads, construction of 48 Kms. of new roads and 16 bridges in the First Plan.

3. In the Second Plan 1,600 Kms. of road was improved, 52 Kms. of new roads were constructed and 28 bridges were constructed with an investment of Rs. 5·4 crores.

4. During the Third Plan the investment was Rs. 8·48 crores. As regards physical achievements, 1,158 Kms. of existing roads were improved, 80 Kms. of new roads were constructed and 110 new bridges were completed.

5. The above would indicate that during these Plans, more emphasis was laid on construction of new bridges and cross drainage works to make the roads all-weather. In the subsequent three annual Plans from 1966-67, a sum of Rs. 3·00 crores was spent and the physical achievement thereof was 570 Kms. of surface improvement, 10·4 Kms. of new roads and 63 bridges.

Fourth Plan Review

(a) P. W. D. ROADS

9 . During the Fourth Five-Year Plan, the total allotment for road development programme under State Sector was Rs. 13 crores out of which allotment for the P. W. D. was Rs. 10·95 crores. With this outlay, 210 schemes were sanctioned for execution. Out of these schemes, 84 were carried over from the earlier Plans. From these 210 schemes, 84 are likely to be completed during the plan period. 16 schemes are proposed to be dropped. 44 in complete road projects will be carried-over to the next Plan. It would appear that about 20 per cent of the works are spilling over to the next Plan which would require Rs. 4·26 crores for completion during the Fifth Plan period. In respect of the balance 66 Nos. of Fourth Plan Projects, it may be stated that administrative approval has not either been accorded or revised administrative approval is required in view of change in the scope of original work. Therefore these 66 projects are considered as new projects of the Fifth Plan. The expenditure likely to be incurred in the Fourth Plan, that proposed for the Fifth Plan and that for 1974-75 have been indicated in Annexure I.

(b) R. E. O. ROADS

7. In regard to R. E. O. roads, for the first time 145 road projects were taken up during the Fourth Plan; out of which 4 projects are likely to be completed by the end of the Plan. Out of the remaining 141 projects, 96 projects will spill-over to the Fifth Plan for which Rs. 4·00 crores will be required. The rest 45 projects will be dropped.

Physical Progress

8. The physical progress and likely target in terms of surfacing to be achieved at the end of the current plan period is indicated in the Annexure II. It would reveal that the level of development during the Plan is not appreciable compared to other States because of the fact that a major portion of the Plan allocation has to be utilised for bridge works. The Annexure III will indicate the physical achievements in relation to the Projects in terms of metalling blacktopping, etc. for the Fourth Plan.

Fifth Plan Objective and Targets

9. Even at the end of the Fourth Plan, six subdivisional headquarters will remain unconnected with the respective District Headquarters. This however would involve heavy expenditure due to major bridges over the river Brahmani, Baitarani and Vansadhara. The projects have already been proposed for central assistance under "States Roads of Inter-State and Economic Importance" and hence taking up of these projects depends on availability of funds from Central resources. For connecting Nawapara with the headquarters of Kalahandi district, construction of bridges over river Tel and Sundar has already been taken up under the Plan.

As it stands at present, 95 Block headquarters, 85 Police-Stations and 16 Tahasils will not have all-weather roads by the end of Fourth Plan.

10. The existing crust of many roads is failing due to the impact of modern heavy traffic. The old bridges and culverts are also failing for this reason. Many weak and narrow bridges require immediate replacement and widening. To make up for all these deficiencies, it would require heavy investment.

11. Under the Minimum Needs Programme, villages having population of 1,500 and above will be connected by all-weather roads. Rural roads requiring improvement have been included in the programme. As these roads provide connection with markets and industrial and tourist centres through main roads, the main purpose of connecting important villages with marketing centres will be lost, unless the main roads are first improved to all-weather standard. For this purpose considerable allocation will be needed.

P. W. D. ROADS

12. The proposed outlay for P. W. D. roads during the 5th Plan period is Rs. 11.00 Crores. Out of this about Rs. 1.14 Crores would be required for *pro rata* shares etc. Thus the total outlay available for works is Rs. 9.86 Crores.

As indicated earlier, completion of incomplete works of the Fourth Plan would require an amount of Rs. 4.26 crores during the Fifth Plan as in Annexure IV. Besides during the fifth Plan, 66 road and bridge projects costing approximately Rs. 11.85 crores as in the Annexure V are proposed to be taken up keeping in view the objectives and guidelines. Out of 66 new projects, 43 projects will be completed during the Fifth Plan with an expenditure of Rs. 5.60 crores. The rest will spill over to the next Plan. The target fixed for the Fifth Plan is indicated in Annexure II. Out of the total allocation for P. W. D. Roads Rs. 1.25 crores will be spent on rural roads under P. W. D.

R. E. O. ROADS

13. An amount of Rs. 4.00 crores will be necessary for completing incomplete works of the Fourth Plan. As the Plan Outlay is not expected to be more than Rs. 4 crores, there is no scope to accommodate any new scheme.

MUNICIPAL ROADS

14. A sum of Rs. 30 lakhs was provided in the Fourth Plan for construction and development of Municipal Roads. The total mileage of these roads as on 31st of March 1972 was 2,914.69 Kms. of which surfaced roads covered 1,066.83 Kms. and unsurfaced roads 1,847.86 Kms. The length of roads by the end of the Fourth Plan, is estimated to be about 3114.69 Kms. of which the surfaced roads would be 1,080.83 Kms.

15. During the Fifth Plan, it is proposed to convert 480 Kms. of unsurfaced roads to surfaced roads including widening and improvement of some surfaced roads. Besides 480 Kms. of unsurfaced roads will be widened and improved and 240 Kms. of new roads would be constructed. The total estimated cost will be about Rs. 80 lakhs. Of this, 50 per cent will be provided in the State Plan to be given to the Local Bodies who will find the balance 50 per cent, out of their own resources. A sum of Rs. 40 lakhs is provided in the Fifth Plan for this purpose.

Contribution to the Plan

16. During the Fourth Plan period Government of India have approved construction of two bridges under "State Roads of Economic and Inter-State Importance". The loan assistance from Government of India is noted against each.

- | | | |
|--|----|-----------------|
| (a) Construction of bridge over the river Subarnarekha on Balasore-Khargapur road. | .. | Rs. 74.00 lakhs |
| (b) Constiuction of bridge over river Jonk on Arang-Nawapara road. | .. | Rs. 18.00 lakhs |

Administrative Approval has been accorded to the first project at a cost of Rs. 74.30 lakhs. During 1972-73 Rs. 10.00 lakhs has already been spent. The balance amount is expected to be released during the subsequent years. As the bridge will benefit the State of West Bengal, they have agreed to share 50 per cent of the cost of the bridge.

17. During the Fourth Plan labour-intensive programmes' were sponsored by Government of India to provide employment in the drought-affected areas of Kalahandi and Phulbani districts. Projects costing Rs. 51.00 lakhs and Rs. 56.19 lakhs respectively were administratively approved for implementation during the Plan in the above two districts. In Kalahandi district Rs. 0.50 lakh has been spent in excess of the administratively approved amount by the end of March 1973. As regards Phulbani district, little amount has been left for expenditure under this programme during the last year of the Fourth Plan.

C. R. F. Allocation

18. The free balance of C. R. F. allocation which is available to the State during the current Plan is Rs. 85.19 lakhs. To utilise this amount proposal in respect of the following schemes was sent to Government of India:—

Serial No.	Name of the scheme	Estimated amount (in rupees)
(1)	(2)	(3)
1	Construction of bridge over river Bhargavi at Chandanpur on S. H. 8.	.. 32,22,350
2	Bridge over river Kanchinulla near Malatipatpur on S. H. 8.	.. 8,98,000
3	Improvement to Bhubaneswar-Puri road	.. 30,00,000
4	Puri-Balighai Madhab road	.. 1,17,650
5	Biridihat-Sonepur road	.. 5,00,000
6	Jagatsinghpur-Raghunathpur road	.. 5,00,000
7	Balibhaunri-Sikharghat road	.. 1,00,000

19. Out of these schemes, Government of India have accorded approval to following schemes :—

1. Construction of bridge over Bhargavi at Chandanpur on S. H. 8
2. Bridge over Kanchinulla near Malatipatpur on S. H. 8
3. Improvement of S. H 8 from Bhubaneswar to Puri

These works are already under execution.

Annexure I

Outlay and Expenditure summary

Fourth Plan Expenditure and Fifth Plan Outlay

STATE—ORISSA
Fourth Plan Outlay

(Rs. in lakhs)

Serial No.	Head sub-head	Approved 4th Plan outlay	Approved outlay for 1973-74	Anticipated expenditure 1973-74	Anticipated expenditure during the 4th Plan	Total	Capital outlay	Foreign exchange	Annual Plan for 1974-75		
									Total	Capital outlay	Foreign exchange
1	2	3	4	5	6	7	8	9	10	11	12
IV Transport and communication.											
1	Roads: P. W. D.	1095.00	297.49	297.49	1142.45	1100.00	1160.00	Nil	400.00	400.00	Nil
	R. E. O.	175.00	59.51	59.51	275.87	400.00	400.00	Nil	127.00	127.00	Nil
	Municipal	30.00	9.00	9.00	30.00	40.00	40.00	Nil	8.00	8.00	Nil
	Total	1300.00	366.00	366.00	1448.32	1540.00	1540.00	Nil	535.00	535.00	Nil

Annexure II

Physical Programmes—Targets and Achievements

State—Orissa

(In K ms.)

Serial No.	Item	Unit	1968-69 Level	Fourth Plan		Level expected during 1973-74	Fifth Plan Target		REMARKS
				Target	Likely achievement		Total	1974-75	
1	2	3	4	5	6	7	8	9	10

IV. TRANSPORT AND COMMUNICATION—

1. ROADS

1. State Highways—

(a) Surfaced	..	Kms.	..	2,028	118	118	2,146	..	..
(b) Unsurfaced	..	Kms.	..	151	55	30	63	..	..

2. Expressways—

(a) Surfaced	..	Kms.	..	13	..	..	13	..	..
(b) Unsurfaced	..	Kms.	..	..	..	..	..	..	..

3. Minor District Roads—

(a) Surfaced	..	Kms.	..	4,102	508	352	4,454	..	..
(b) Unsurfaced	..	Kms.	..	1,082	576	759	1,489	..	..

4. Other District Roads—

(a) Surfaced	..	Kms.	..	955	156	171	1,126	..	..
(b) Unsurfaced	..	Kms.	..	1,344	1,202	1,194	2,367	..	..

5. Village Roads—

(a) Surfaced	..	Kms.	..	479	163	314	793	..	..
(b) Unsurfaced	..	Kms.	..	5,606	5,435	5,404	10,696	..	..

6. Total P. W. D. Roads—

(a) Surfaced	..	Kms.	..	7,577	937	955	8,532	9,382	8,676
(b) Unsurfaced	..	Kms.	..	8,183	7,268	7,387	14,615	6,587	8,906

R. E. O. Roads—

Unsurfaced	..	Kms.	..	--	220	220	220	3,500	350
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Annexure III

Statement Showing the Physical Target and Anticipated Achievement of Fourth Plan

Agency maintaining the road	Black tooping		Metalling		Moruming		New construction		Major bridge & Minor bridge		Causeway and culverts	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
1	2	3	4	5	6	7	8	9	10	11	12	13
P. W. D.	654.78 K. M.	579.70 K. M.	720.50 K. M.	787.70 K. M.	130.00 K. M.	128.40 K. M.	49.0 K. M.	39.2 K. M.	107 Nos.	105 Nos.	21 Nos.	21 Nos.
R. E. O.	Nil	Nil	220 K.M	220 K. M	300 K. M.	300 K. M.	210 K. M.	210 K. M.	78 Nos.	78 Nos.	595 Nos.	595 Nos.

Annexure IV

Statement showing the districtwise break-up of spillover project of the P. W. D. roads to Fifth Plan

(Rs. in lakhs)

Sl. No.	Name of the district	Total No. of spillover projects	Estimated cost	Amount spent during Fourth Plan	Amount required for completion during the Fifth Plan
1	2	3	4	5	6
1	Bolangir ..	7	1,97,49,199	1,07,24,363	99,86,000
2	Koraput ..	6	1,04,05,940	23,46,995	94,63,000
3	Ganjam ..	6	44,80,210	39,70,004	24,39,300
4	Phulbani ..	6	61,24,600	43,60,648	17,93,000
5	Sambalpur ..	1	12,98,600	2,72,000	1,13,000
6	Sundargarh ..	1	10,51,300	6,70,025	4,57,000
7	Keonjhar ..	1	9,20,000	2,00,000	3,24,000
8	Cuttack ..	6	83,76,860	33,14,828	33,28,000
9	Puri ..	2	12,40,100	6,66,671	14,07,000
10	Balasore ..	1	4,85,300	1,20,000	4,38,000
11	Dhenkanal ..	3	2,21,84,950	1,69,65,099	1,06,30,000
12	Kalahandi ..	4	61,26,500	50,05,212	22,50,000
	Total ..		8,24,43,559	4,96,28,264	4,26,33,000

Annexure V

*Statement showing the Districtwise Breakup new projects
of P. W. D. roads*

(Rs. in lakhs)

Serial No.	Name of district	Total No. of projects	Approximate estimated cost	Amount to be invested during Fifth Plan
(1)	(2)	(3)	(4)	(5)
1	Kalahandi	6	179.92	41.98
2	Koraput	7	82.90	44.33
3	Ganjam	2	28.80	23.40
4	Phulbani	3	42.17	21.02
5	Sambalpur	8	94.15	40.51
6	Sundergarh	7	106.43	37.64
7	Mayurbhanj	6	73.55	45.86
8	Dhenkanal	7	96.24	48.47
9	Puri	6	177.60	58.37
10	Balasore	3	68.45	63.05
11	Keonjhar	2	63.03	37.28
12	Bolangir	2	49.40	20.00
13	Cuttack	7	122.01	68.46
Total		66	1,184.65	560.37

(ii) ROAD TRANSPORT

In Orissa there are two public undertakings catering to passenger service, namely (i) the departmentally run State Transport Services and (ii) the Orissa Road Transport Company Ltd., which is run by a tripartite Company. The State Transport Services operate in 10 districts and the Orissa Road Transport Company in the 3 districts. The Orissa Road Transport Company is mostly outside the purview of the Plan as they find their own resources through institutional sources. Recently they have arranged a loan of Rs. 1 crore under the re-discounting scheme of the Industrial Development Bank of India and this amount will be sufficient for them during the Fifth Plan. The provision in the Fifth Plan is therefore, limited to schemes under the State Transport Services and those of the Transport Commissioner. An outlay of Rs. 260.00 lakhs is envisaged as in the Annexure.

2. During the Fourth Plan period, the expenditure is anticipated to be Rs. 136.31 lakhs, the breakup of which is indicated below:—

(1) Purchase of buses	..	Rs. 94.07 lakhs
(2) Lands and buildings	..	Rs. 24.00 lakhs
(3) Tools and Plants	..	Rs. 9.78 lakhs
(4) Share in the O. R. T. Co.	..	Rs. 5.00 lakhs
(5) Planning and Development Cell	..	Rs. 3.46 lakhs

Total	..	Rs. 136.31 lakhs

3. Share capital of Rs. 5 lakhs was purchased in the Orissa Road Transport Company. With the balance amount, the scheme under the Planning & Development Cell was implemented. The originally approved scheme of Truck Terminal has been deferred.

4. From the information available it is seen that there is regular trend of rise in the number of passengers at the rate of 10% every year and it is expected that by the end of the Fifth Plan an additional 198 lakhs of passengers will be transported. To cover up this pressure of passengers there is need of 903 buses. The private undertakings take charge of 30% of the passengers. Basing on this, the requirement of the State Transport Services, would come to Rs. 350 lakhs.

5. A minimum outlay of Rs. 244.00 lakhs is envisaged for the following schemes of the State Transport Services.—

(1) Purchase of new buses	..	Rs. 200 lakhs
(2) Provision of buildings for staff and passengers..		Rs. 30 lakhs
(3) Tools and plants	..	Rs. 14 lakhs

Total	..	Rs. 244 lakhs

6. While formulating the schemes for the fifth Plan the guide lines given by the Planning Commission have been kept in view. The main intention is to connect subdivisional headquarters to the State Capital by direct express services. During the fourth Plan all the district headquarters and 26 subdivisional headquarters have been so connected. The remaining 30 subdivisional headquarters are to be connected during the Fifth Plan. The schemes will provide for efficient operation of public undertaking and meet the necessity of the travelling public. Besides connecting the subdivisional headquarters, other places of importance will also be connected by new services and serious on the routes yielding high income will be intensified.

7. While preparing the detailed scheme of operation, emphasis will be laid on opening of new routes. The annual break up of the schemes is shown below:—

Year	No. of buses		Total	No. of routes		No. of routes for intensification.	Total routes
	New	Intensification		Subdivision Headquarters	New routes		
1	2	3	4	5	6	7	8
1974-75	38	2	40	10	8	2	20
1975-76	43	7	50	8	18	6	32
1976-77	41	9	50	6	12	9	27
1977-78	28	2	30	2	12		16
1978-79	24	6	30	4	10	6	20
	174	26	200	30	60	25	115

8. The statement will show that 90 new routes will be operated and 25 routes will be intensified with 200 vehicles available during the Fifth Plan. These vehicles will cover 21,514 route Kms. and the operational Km. will be 15,705,950.

Land and Buildings

8. The State Transport Services started working from 1948, but a lot of work has to be done for providing amenities for passenger and staff. In order to achieve this, it is proposed to construct new buildings and improve the existing ones. During the Fourth Plan the provision of Rs. 10.50 lakhs was inadequate. Even important towns like Cuttack could not have a bus stand for want of funds. Staff quarters, running rooms for staff and rest rooms for passengers have not been provided in many places. The overall requirement would be over a crore of rupees but the provision is to be made in a phased manner. During the Fifth Plan a provision of Rs. 30 lakhs may go some way to solve the difficulties. In the Fourth Plan improvement of garages and maintenance sheds was done, but adequate attention could not be given to bus stations and staff quarters which are being included in the Fifth Plan. The most important of these are bus stations at Cuttack and Bhubaneswar.

Tools and Plant

9. As the number of vehicles is on the increase and more routes are going to be covered there is need for check of these vehicles at different places and also for their proper maintenance. The requirement of tools and plants will be Rs. 14 lakhs during the Fifth Plan.

10. The State Transport Services decided to use two makes of vehicles, i. e., Tata (Telco) and Leyland in consideration of their good performance and road-worthiness. The period of life has been prescribed for 7 years of Tata vehicles and 8 years for Leyland vehicles. At the end of this period there is need for replacement of the buses and on an average 40 to 50 buses are being replaced annually and the replacement is made from the provision under the Depreciation Reserve Fund.

Weigh Bridges

11. The scheme is for installation of weigh bridges at the check gates of Jamsola, Girisola, Sohela and Biramitrapur. This will include installation of the machine, building for the same and quarters for the staff and their establishment. An outlay of Rs. 12.00 lakhs is envisaged for this scheme.

Planning and Development Cell

12. The cell was created during the Fourth Plan. It has not yet been made fulfilled. It is a spill over staff scheme and will be continued in the Fifth Plan to attend to the following items of work. The cost is Rs. 4 lakhs.

- (1) Collection and compilation of various reports and returns
- (2) Rationalisation of various reports and returns
- (3) Survey off-road vehicle to know the reason for declaring off-road and consequential decrease in motor vehicle revenue.
- (4) Sample survey of vehicles not paying tax.
- (5) Origin-destination survey to estimate the traffic potential in different routes in order to determine the number of permits that can be issued in a route.
- (6) Survey to estimate the volume of traffic
- (7) Survey to estimate the passenger tax evasion
- (8) Survey of goods traffic by road

13. Programme wise details are shown in the Annexure I.

Annexure I

State—Orissa Program wise Outlay and Expenditure

(Rs. in lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure during 1973-74	Likely expenditure during Fourth Plan	Fifth Plan		Annual Plan 1974-75 outlay
						Total	Capital	
1	2	3	4	5	6	7	8	9
ROAD TRANSPORT								
1	Purchase of Buses ...	94.50	21.55	21.55	94.07	200.00	200.00	40.00
2	Lands and Buildings ..	10.50	8.34	8.34	24.00	30.00	30.00	6.00
3	Tools and Plants ..	10.00	2.50	2.50	9.78	14.00	14.00	2.80
4	Planning and Development Cell.	2.00	1.61	1.61	3.46	4.00	..	0.80
5	Truck Terminal ..	5.00	..	..	..	..	..	..
6	Purchase of share in the O. R. T. Co.	..	..	..	5.00	..	..	..
7	Weigh Bridges ..	..	..	..	..	12.00	12.00	3.00
Total ..		122.00	34.00	34.00	136.31	260.00	256.00	52.60

(iii)—ORE TRANSPORT

The work of the Orissa State Commercial Transport Corporation during the Fifth Plan will be limited to transportation of Daitari Ore only for which there is specific agreement. The Cuttack-Paradeep Railway link is expected to be completed during the Fourth Plan. Therefore it is presumed that Daitari Ore may be discharged at Dhanmandal Railway siding during the Fifth Plan instead of being carried up to Paradeep Port by Expressway. The Ore Handling Plant of the OMC is also expected to be completed during Fourth Plan. Thus the vehicles of OSCTS will carry Daitari Ore from Baliparbat point (bottom of the Daitari Hills) to Dhanmandal. Each vehicle is supposed to make 2 trips a day.

Target —

2. The responsibility of the Orissa State Commercial Transport Corporation will therefore, remain confined to movement of ores from Daitari mines to Dhanmandal a distance of about 40 miles. The revised plan for augmenting the transport capacity of the Corporation during the Fifth Plan has been cast basing on this projection.

3. The Corporation would proceed on the movement target of about 8 lakhs tonnes annually during the first three years and about 16 lakhs tonnes annuals during the last two years of the Fifth Plan. The investment proposal basing on these assumptions has been worked out.

Requirement of funds for purchase of additional Vehicles

4. During the first two years there will be no requirement of additional funds as the existing vehicles will be adequate to meet the transportation target during subsequent years the requirement will be as follows:—

3rd year—

Cost of 20 vehicles and working capital	..	Rs. 18.5 lakhs
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4th year—

Cost of 147 vehicles and working capital	..	Rs. 140.00 lakhs
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5th year—

Total requirement during the Plan	..	Rs. 158.60 lakhs
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Source of Investment—

5. Total requirement of vehicles during the Fifth Plan will be 167. The total investment required will be Rs. 159 lakhs as calculated above. The following funds will be available from internal resources.

(a) From Depreciation Reserve Fund	..	Rs. 32 lakhs
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(b) From surplus profit	..	Rs. 27 lakhs
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Total	...	Rs. 59 lakhs
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The balance requirement of Rs. 102 lakhs will be met as follows:

(a) From institutional finance	..	Rs. 40 lakhs
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(b) From Government in share of share capital	..	Rs. 60 lakhs
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Total	..	Rs. 100 lakhs
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Hence an outlay of Rs. 60.00 lakhs from the Plan is proposed (Annexure D)

Annexure I**Programmewise outlay and expenditure**

(Rs. in lakhs)

Serial No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure during 1973-74	Likely expenditure Fourth Plan	Outlay Fifth Plan	Annual Plan outlay, 1974-75	
1	2	3	4	5	6	7	8	
III	Ore Transport	..	62.00	5.00	5.00	35.00	60.00	Nil

(iv) INLAND WATER TRANSPORT

The Government of India have been repeatedly emphasizing the need for constituting a separate organisation at State level to look after the problems of Inland Water Transport. Accordingly the State Government have formed an Inland Water Transport Directorate. The functions of Directorate are as follows :—

- (1) Investigation, survey, traffic studies and collection of all relevant data on Inland Water Transport.
- (2) Execution of various schemes for the development of Inland Waterways, maintenance and conservancy of this system of transport in the State.
- (3) Conducting feasibility study with the objects of running Commercial Water Transport Service in suitable Water Transport routes of the State.
- (4) Controlling of Water Transport achievements in the State through the administration of I. S. V. Act, Rules and Instructions issued there under and through further comprehensive statutory arrangements.
- (5) Rendering advice to public and private users of Inland Water Transport system and providing encouragement for increasing use of this system of transport by the community.

2. Thus, the function of the Directorate is mainly to execute the Inland Water Transport Schemes sanctioned by the Government of India from time to time. In this connection it may be stated that the Government of India have sanctioned a sum of Rs. 50.18 lakhs for the Inland Water Transport Schemes of Navigation in river Mahanadi from Dholpur to Cuttack to be spent during the Fourth Five-Year Plan. In the Fifth Plan also the following schemes have tentatively been approved by Government of India for execution.

(1) Navigation in river Mahanadi from Dholpur to Cuttack (Spillover)	Rs. 50 lakhs
(2) Services in Chilka lake, Hirakud lake and estuaries of tidal rivers.	Rs. 75 lakhs
(3) Revival of Ganjam Coast Canal ..	Rs. 80 lakhs

3. All these schemes are to be executed through the Inland Water Transport Directorate

4. The Government of India are not giving any financial assistance for strengthening of Inland Water Transport organization in the State. So State Government are to finance the organization.

5. During the Fifth Plan a sum of Rs. 10 lakhs is proposed to be spent towards strengthening of the Inland Water Transport Directorate. This amount will be spread over five year, at Rs. 2 lakhs per annum as per Annexure I.

A detailed list of the staff in the Directorate is given in Annexure II.

Annexure

(Rs. in lakhs)

Draft FifthFive-Year Plan Programmewise Outlay and Expenditure

Serial No.	Programme	Fourth Plan approved outly	Approved outly for 1973-74	Likely Expenditure 1973-74	Likely Expenditure during forth Plan	Fifth Plan Total outlay	Annual Plan 1974-75
1	2	3	4	5	6	7	8
IV (3)	Ports and Harbour (I. W. T.) ..	5.00	0.50	1.00	1.00	10.00	2.00

Annexure II

Staff under the Inland Water Transport Cell (Technical Posts)

Serial No.	Designation	No. of posts	Scale of pay
(1)	(2)	(3)	(4)
1	<i>Ex-Officio</i> Director of I. W. T. (Additional Chief Engineer, Irrigation, Orissa).	One	
2	Deputy Director of I. W. T. (An experienced Officer of a Senior Civil Executive Engineer).	One	Rs. 600—30—720—EB—40—1 000
3	Assistant Director, I. W. T. (of the Rank of Assistant Engineer one of whom will be a Civil Graduate Engineer, one Mechanical Graduate Engineer and another Civil Graduate Engineer, preferably with a post-Graduate diploma in Dock and Harbour Engineering).	Three	Rs. 300—25—450—EB—30—60—40—680—EB—50—780.
4	Investigators (Diploma in Civil Engineering).	Two	Rs. 185—10—235—15—250—EB—15—325.
5	Supervisors (two diploma in Civil Engineering and one in Mechanical Engineering).	Three	Rs. 185—10—235—15—250—EB—15—325.
6	Marine Foreman (with Mechanical Trade Certificate).	One	Rs. 215—10—265—EB—15—325—EB—20—425.
7	Draftsman	One	Rs. 115—5—120—6—160
8	Tracer (Certificate in Tracer's trade).	Two	Rs. 80—3—110—EB—3—116—4—120—5—135.
9	In addition, a number of clerical and other non-technical posts will be created in the office of the Director and Assistant Director for providing supporting services.		

(v) TOURISM

Brief resume of the achievements during the Fourth Plan

The Fourth Plan out lay was fixed at Rs. 32.00 lakhs. The total expenditure is anticipated to be Rs. 39.61 lakhs. The achievements made during the period from 1969-70 to 1972-73 are as follows :—

2. Construction of marine Drive from Konark to Puri was started in the year 1969-70. By the end of 1972-73, 3 Kms. of road from Konark side were completed at a cost of Rs. 14.87 lakhs. It has been decided to start this work from Puri side for which plan and estimates for Rs. 33.00 lakhs has been prepared for completion of 5 Kms. of road.

3. During the Fourth Plan two Tourist Counters one each at New Delhi and Bombay were opened. Besides two Tourist Reception Counters one each at Bhubaneswar Railway Station and Puri Railway Station were opened. The construction of boundary wall and staff quarters of the Tourist Bungalow at Konark and some addition and alteration to the Tourist Bungalows at Puri and Bhubaneswar were completed. A specific amount of Rs. 0.91 lakh was provided for expansion of the Tourist Bungalow at Rambha. A new Tourist Bungalow was started at Sambalpur in the year 1972-73. This building will not be completed during the Fourth Plan due to shortage of funds.

Specific Projects for the Fifth Plan**(1) Construction of Marine Drive from Konark to Puri— Rs. 300.00 lakhs.**

4. The object of this scheme is four fold. The Golden Triangle "Bhubaneswar-Konark-Puri" attracts a large number of tourists all the year round. With the introduction of a Boeing Service to Bhubaneswar it is expected that this traffic will increase. At present the tourists visiting Puri from Konark have to travel to Puri via Pipili, the distance from Konark to Puri via Pipili is 88 K. Ms. The proposed Konark-Puri marine drive (32 K. ms.) will reduce the distance and avoid a detour by 45 Kms. Secondly, it will provide a pleasant beach drive to a tourist and enable him to spend the evening at Konark before he reaches Puri which will take only 40 minutes. Thirdly, the Government of India are making arrangements for illuminating the Konark temple at an early date. The completion of this road has to be achieved in quickest possible time as the tourist traffic to this State is going to increase with the introduction of Boeing Service in early 1974. Lastly this road will open scope for trade and commerce in fish, dry fish and other local produces of about 250 villages which have so far no communication facilities.

5. Moreover, this is a continuing scheme for which we have already invested Rs. 14.87 lakhs. The estimated cost of the balance portion of the marine drive including bridges and culverts is as follow:—

(1) Road portion	..	Rs. 1.69 (Crores)
(2) Major Bridges (644 Meters)	}	Rs. 1.20 (Crores)
Minor Bridges (15 Metres)		
Culverts (150 Metres)		
(3) Work-charged establishment	..	Rs. 4.50 lakhs
(4) Survey, Investigation, Quality Control, Soil Testing, Exploratory Boaring etc.	}	Rs. 5.50 lakhs
(5) Construction of picnic spot, service road, temporary shed, storage and godown.		
		Rs. 1.50 lakhs.

6. It is proposed to be completed during the third year of the Fifth Plan.

(2) Transport and Conduct Package Tours (Rs. 5.00 lakhs)

7. The object of the scheme is to provide adequate and suitable transport facilities for the visiting tourists.

(3) Tourist Publicity (Rs. 3.00 lakhs)

8. A certain number of priced publications such as guide books, maps, picture post cards, coloured transparencies will have to be produced on good paper to be sold to tourists.

(4) Staff for Execution of Tourist Schemes (Rs. 2.00 lakhs)

9. The object of this scheme is to appoint necessary staff to run the bungalows which will be completed during Fifth Plan.

(5) Construction of Tourist Bungalow at Sambalpur (Rs. 10.00 lakhs)

10. The object of this scheme is to provide accommodation facilities to the tourists visiting northern Orissa. The Hirakud Dam and the Agricultural Complex of Burla are attracting a large number of tourists from all over the country. It will cater to the needs of tourists visiting Rourkela which is an important Industrial Centre of the State.

(6) Expansion and Modernisation of the Tourist Bungalows (Rs. 20.00 lakhs)

11. The aim of this scheme is to create more accommodation facilities to meet the requirement of tourist traffic which is going to increase with the introduction of Boeing Service in early 1974.

(7) Development of Minor Places of Tourist Interest (Rs. 15.00 lakhs)

12. The object of this scheme is to develop places around the main tourist spots of the State especially around the famous "Golden Triangle" to attract the tourists to spend more nights in the area. Orissa abounds in beauty spots and it is proposed to develop these places by providing minimum facilities so as to attract the tourists to visit them.

(8) Development of Chilka Lake (Rs. 25.00 lakhs)

13. The object of this scheme is to make the Chilka lake a recreational centre for the tourists. The Government of India have a proposal to set up a bird sanctuary in the lake. When it comes up the number of visitors to this lake will increase to a considerable extent. To cater to their needs it is proposed to build up an infrastructure by making provision for accommodation, snack bars and recreational facilities. This will form the nucleus for the Chilka Development Corporation which will take up the overall development of the lake.

(9) Cultural Tourism (Rs. 5.00 lakhs)

14. The object of this scheme is to beautify the area around the monuments which are frequented by the tourists.

15. The total provision for Tourism including the Konarak-Puri Road is Rs. 389 lakhs. Annexure I shows the schemewise expenditure in the Fourth Plan and outlay for the Fifth Plan.

Annexure I

TOURISM

Schemewise expenditure of the Fourth Plan and outlay for the Fifth Plan

(Rs. in Lakhs)

Sl. No.	Head/Sub-Head	Fourth Plan				Fifth Plan Outlays proposed					
		Approved Fourth Plan outlay.	Approved outlay for 1973-74.	Anticipated expenditure 1973-74.	Anticipated expenditure during Fourth Plan.	Total	Capital outlay	Foreign exchange	Annual Plan for 1974-75		
									Total	Capital	Foreign exchange
1	2	3	4	5	6	7	8	9	10	11	12
1	Staff for execution of Tourism Scheme.	3.05	..	0.55	1.37	2.00	..	..	0.50	..	..
2	Transport and conducted package of Tours.	2.95	..	..	1.17	5.00	..	..	1.00	..	..
3	Opening of Tourist Reception Centres at Bhubaneswar and Puri.	0.70	..	..	0.25	..	..	..	..	..	..
4	Recreational facilities in Chilika Lake.	1.20	..	0.50	0.60	..	..	..	..	..	..

5	Tourist publicity	..	1.30	..	0.40	1.98	3.00	..	..	..	..	..
6	Grants-in-aid to local bodies development and improvement of places of local importance.	1.60	..	..	0.15	..	..	..	..	..	..	..
7	Construction of Marine Drive from Puri to Konark.	11.00	..	3.10	17.82	300.00	..	..	150.00	150.00	..	..
8	Expansion of the Tourist Bungalow at Bhubaneswar, Puri, Chandipur and construction of Staff Quarters at these places.	3.00	..	2.00	6.98	25.00	..	..	4.00	4.00	..	..
9	Construction of Tourist Bungalow at Sambalpur.	3.00	..	2.00	2.00	10.00	..	..	2.50	2.50	..	..
10	Low income group rest-house at Puri and Bhubaneswar.	..	..	..	2.43	..	..	..	..	..	..	..
11	Development of Udayagiri and Lalitgiri Complex.	1.20	..	..	..	..	..	..	..	..	..	..
12	Light and Sound performances in Khandagiri and Udayagiri Caves.	..	..	..	3.50	..	..	..	..	..	..	..
13	Expansion of Tourist Bungalow at Rambha.	..	..	..	0.91	..	..	..	..	..	..	..

(Rupees in lakhs)

Serial No.	Head/Sub-head	Fourth Plan				Fifth Plan Out-lays Proposed						
		Approved Fourth Plan outlay.	Approved outlay for 1973-74.	Anticipated expenditure 1973-74.	Anticipated expenditure during Fourth Plan.	Total	Capital Outlay	Foreign exchange	Annual Plan for 1974-75			
									Total	Capital	Foreign exchange.	
1	2	3	4	5	6	7	8	9	10	11	12	
14	Construction of Tourist Bungalow at Gopalpur.	3.00	..	..	..	..	..	..	..	..	..
15	Purchase of developed lands at Baripada and Puri for construction of Youth Hostel, etc. by Government of India.	..	..	0.45	0.45	..	..	..	..	..	..
16	Cultural Tourism	..	..	..	..	5.00	..	..	1.00	1.00	..
17	Development of Minor Places of Tourist interest.	..	..	..	..	15.00	..	..	3.00	..	..
18	Development of Chilka Lake	..	..	..	..	20.00	..	..	4.00	..	..
	Total	..	32.00	..	9.00	39.61	385.00	335.00	..	166.00	157.50	..

CHAPTER 2-11

GENERAL EDUCATION AND CULTURAL PROGRAMMES

(i) GENERAL EDUCATION

Education is a long lead-time activity. Because of the absence of any long-term perspective of Educational Development, most of the changes made in the education system of this State since the beginning of socio-economic planning in 1950, have been in the nature of *ad hoc* adjustments, often under pressure of public demand. Most of the resources of the plans have been absorbed in the quantitative expansion of facilities. From the over-all point of view, the short-comings are mainly :—(a) multiplicity of sub-optimal institutions, (b) rigid and formal structure of education, (c) over emphasis on theoretical knowledge, (d) inadequate guidance and counselling of students, (e) lack of linkage with employment and productivity.

2. It is, therefore, necessary that all efforts at educational development must be related to a well-choosen perspective. It is necessary that socio-economic planning and educational planning should be co-related so that education becomes productive and relevant to the life of the people. Courses at all stages of education should be designed and commissioned according to the man-power needs of the economy, without lowering the moral and social values of education.

3. The State continues to be educationally backward and therefore, due care has to be taken to eliminate the short-falls in order to catch-up with the level of educational development in the advanced States of the country. It is also necessary to bring the educational standards of the backward and tribal areas of Orissa at least up to the State average. In spite of considerable expansion during the last four plans in almost all stages of education, the State, compared to the national norms, continues to be backward. While the all India percentage of literacy in 1971 was 29.34 in Orissa, it was 26.12. The backwardness becomes more glaring when one analyses the percentages of enrolments to the total population in the corresponding age-groups. While the all-India percentages are 80.5 for the age-group 6—11; 34.2 for the age-group 11—14; 20.7 for 14—17 and 4.0 at the Higher Education stage, the enrolment percentages in Orissa are 70.0, 24.5, 14.5 and 2.0 respectively. Similarly, the *per capita* expenditure in Orissa on education during 1971-72, was only Rs. 10.80 against the all-India average of Rs. 15.40.

Review of progress up to the end of the 4th Plan

4. In educational development, Orissa was one of the most backward States of the country till the dawn of Independence. The period following Independence has witnessed rapid expansion of general education at all levels. In the year 1947-48, there were 6814 primary schools with an enrolment of 3,69,387 children and the number of teachers was 16,529. There were 286 Middle Schools, 106 High Schools and 11 Arts and Science Colleges and one affiliating University. The enrolment at the Middle and High School stages were 31,514 and 14,650 respectively. The number of girls in the Middle and High Schools were 1,548 and 642 respectively. The total number of students in colleges were 3,885 out of which 219 were girls. Against this background, the First Plan on general education with an outlay of Rs. 146.88 lakhs was inaugurated. In the Second Plan the expenditure was raised to Rs. 566.35 lakhs and the outlay on the 3rd Plan was Rs. 1480.57 lakhs. At the beginning of the 4th Plan period the number of primary schools had risen to 26,361; Middle Schools to 3,881 and High Schools to 1,438. The percentages of enrolment of boys and girls which were 28 and 7 during 1950-51, rose to 88 and 47 respectively, in 1968-69. In the case of Middle Schools the percentage was only 7.00 for boys and 0.5 for girls during 1950-51. But in 1968-69, the enrolment rose to 40 per cent for boys and 8 per cent for girls. There were similar rises in the percentages of enrolment in the High Schools and Colleges (Vide Annexures I, II and III).

5. The Fourth Plan outlay on general education was fixed at Rs. 1,425.00 lakhs including Rs. 600 lakhs meant for cultural programmes. Out of Rs. 1,419.00 lakhs, a sum of Rs. 997.32 lakhs had been utilised by the end of 1972-73 and it is expected that Rs. 482.90 lakhs would be spent during 1973-74. Thus, there will be an excess expenditure of Rs. 60.32 lakhs over the original outlay due to the increase in rates of D.A. and increases in the costs of construction of buildings, furniture, equipments, etc. (Vide Annexure IV).

6. The overall impact of the Fourth Plan Programmes on the educational system has not been very significant. Qualitatively, the system has not changed much. The number of Primary Schools has risen from 26,381 to 28,300; Middle Schools from 3,881 to 4,760; High Schools from 1,438 to 1,800 and the number of general Colleges rose from 72 to 84. The number of Training Colleges rose from 4 to 5 and the number of Secondary Training Schools, from 67 to 102. The enrolments in the age-group 6—11 rose from 67.6% to 70% and in the age group 6—14, from 24 per cent to 24.5 per cent. In absolute numbers the enrolment in the age group 6—11 rose from 18.40 lakhs to 20.38 lakhs while in the age-group 11—14, the number rose from 3.28 lakhs to 3.80 lakhs. The enrolment in the High Schools rose from 1.50 lakhs to 2.10 lakhs, while in the sphere of higher education the number rose from 37,190 to 51,303 (Vide Annexure I). The percentage of trained teachers in Primary Schools increased from 70 to 85 and in Middle Schools from 20 to 32.

7. The short falls in the achievement of the targets pertaining to opening of new Primary Schools, expansion of enrolment in the age-group 6—14 and improvement of Primary School buildings, were mainly due to procedural and monitoring difficulties. For construction of Primary and Middle School buildings, reliance was placed on public contribution to the extent of the matching shares, which was not available on account of the general poverty of the villagers.

8. The total number of the Fourth Plan spillover projects are 112 and the financial requirement for completing these would be Rs.119.58 lakhs.

Objectives of the Fifth Plan

9. The main objectives of the programme of educational development in the State during the Fifth Plan period would be the following:—

- (i) As far as possible within the limits of financial resources, efforts will have to be directed towards making education a powerful tool of social transformation, economic growth, modernisation and national integration.
- (ii) Suitable measures would be adopted to bring about changes in the content of education at all levels accompanied by such related reforms as the adoption of improved methods of teaching, curriculum improvement, examination reforms and improvement of text-books.
- (iii) Improvement of the standards of all educational institution will receive high priority. This will include the upgrading of a fairly large number of Primary, Middle and High Schools and College to the best extent possible, with guidance and assistance from the State.
- (iv) programme of part-time education, continuation education and correspondence courses should be initiated for those who can not afford to attend full-time regular courses specially for the under-privileged social groups.
- (v) The objective of realising universal primary education in the age-group of 6—14 by about the year 1980-81 would be kept in view while framing the programmes of elementary education during the 5th Plan period.
- (vi) Work-experience and vocational education would be made a major ingredient of educational programmes at all levels.
- (vii) Concrete measures will be adopted to raise teacher competencies especially at the secondary and higher stages.
- (viii) Strengthening of the administrative, supervisory, planning and monitoring machinery would receive high priority in order to ensure efficient implementation of the 5th plan programmes of expansion, consolidation and qualitative improvement.

Elementary Sector

10. The main thrust of the Fifth Plan would be on universal elementary education. In this sector, keeping in view the limitations of the resources, the objective is to enroll 85 per cent of the children of the age-group 6—11 and 58·2 per cent of the children in the age-group 11—14. For achieving this, the total outlay proposed in this sector is Rs. 69·90 crores and of this, Rs. 59·90 would be spent under the Minimum Needs Programme.

11. In order to achieve the enrolment objective, it is proposed to open 5,400 new Primary Schools for the age-group 6—11, of which about 5,000 units will be set up in the hard-core areas predominantly inhabited by the weaker sections of the community. It would be necessary to appoint 21,700 regular primary school teachers and for attending to the educational needs of the small hamlets in the hilly tribal tracts, it is proposed to appoint 500 peripatetic teachers.

12. The present coverage in the age-group 11—14, is only 3·80 lakhs constituting 24·5 per cent of the age-group population. It is proposed to raise the enrolment percentage to 58·2—32·2 per cent by full-time schools, 20 per cent by part-time schools and 5 per cent by Continuation classes. The target calls for opening of 2,000 new middle schools, 2,600 additional classes in the existing schools, appointment of 12,600 regular teachers and 9,100 part-time teachers and organisation of continuation classes by payment of suitable allowances to the regular teachers.

13. Due emphasis has to be laid on (a) expansion of training facilities for teachers, (b) adequate strengthening of administration, supervision, audit and evaluation, planning and statistical machinery, (c) improved production and supply of text-books, (d) offer of incentives like free uniform, free mid-day meals and free reading and writing materials to girls and children of the poorest and backward communities, (e) construction of new school buildings and improvement of the existing buildings and (f) pre-school development in urban slums and backward rural pockets.

14. To achieve the aforesaid objectives and targets in the elementary education sector the plan prepared under the national Minimum Needs Programme with an outlay of Rs. 59·90 crores and that in the State Sector with an allocation of Rs. 10·00 crores, have been made complementary to each other.

Secondary Sector

15. The objectives in this sector are consolidation and controlled expansion in order to obviate the regional imbalances and qualitative improvement. The existing indiscriminate expansion of High Schools will be controlled, work-experience related to actual life conditions will be emphasised and as full-time secondary education tends to get limited, part-time education through correspondence courses would be started for those who cannot join schools but desire to study. Rules would be further liberalised to make it possible for candidates to appear privately at the examinations. Secondary classes have to cater to the needs of three types of students (a) those who after completing it desire to pursue higher academic education, (b) those who intend to pursue higher professional education and (c) those who would settle down in some profitable activity. The curriculum and the type of teaching in secondary classes will, therefore, have to be broadened and made elastic in order to give all these three types of candidates a fair start in the careers they choose. Expansion facilities in secondary education would be very selective and limited to the backward areas. In other areas, the aim is to utilise the un-utilised capacity of existing institutions. With a view to realise the above objectives appropriate schemes have been designed in the Draft Plan.

16. In order to realise qualitative improvement, suitable measures like provision of text-book libraries, training of teachers, improvement of facilities for games and sports, curriculum improvement, vocational orientation and examination reforms shall receive priority.

Higher Education Sector

17. With the low priority allotted to this sector, the most important question to be tackled here is the manner in which claims of expansion and qualitative improvement are to be reconciled with the limited resources available. At this stage, the Plan aims at consolidation of the existing institutions, expansion of facilities for part-time education correspondence courses and self-study with facilities to obtain university degrees and diplomas as private candidates. Qualitative improvement and introduction of job-oriented courses along with students' counselling and guidance, examination reforms and curriculum development, introduction of Semester system, development of research facilities at the Universities and higher centres of learning and improvement of teacher competencies are given an important place in the Draft Plan. A high priority is given to the schemes designed to remove, the physical deficiencies in the colleges.

Other Educational Programme

18. Under this category are included three essential programmes, namely (a) promotion of games and sports at all levels of education, including Scouts and guides, (b) improvement of the State Library and other public libraries and library facilities in the educational institutions and (c) expansion of adult literacy by opening 200 additional Adult Literacy Centres.

Schemes and Projects for the Fifth Plan (Vide Annexure VI)

19. A total provision of Rs. 8796.00 lakhs has been proposed in the Fifth Plan under General Education consisting of Rs. 2,806.00 lakhs in the State Sector and Rs. 5990.00 lakhs under the Minimum Needs Programme. Programme-wise Distribution of the total outlay of Rs. 8796.00 lakhs is shown in Annexure V and the Scheme-wise details both financial and physical are shown in Annexure VI.

20. Schemes have been formulated within the limits set by the resources constraints. The schemes proposed to be implemented under different sectors are indicated below :

ELEMENTARY EDUCATION

(i) Spillover Projects

21. There are 23 building projects which require Rs. 1.69 lakhs for their completion. These projects were started late during the Fourth Plan period and will be completed during the First year of the Fifth Plan. The unspent balances of the originally estimated costs have to be met from the Fifth Plan outlay. The total cost comes to Rs. 1.68 lakhs.

(ii) New Schemes

22. In order to support the Minimum Needs Programme the following new schemes have been proposed in the State's Plan.

(1) APPOINTMENT OF PERIPATETIC TEACHERS

23. Appointment of 500 peripatetic teachers for the age-group 6—11 with an outlay of Rs. 18.00 lakhs has been proposed. These teachers will be employed for imparting education to children in the remote hamlets which cannot be covered by regular viable schools, even by clustering them. These teachers will be remunerated at Rs. 100 per month each. Opening of 5,400 new Primary Schools will be taken up under the Minimum Needs Programme.

(2) ESTABLISHMENT OF DISTRICT SCHOOL BOARDS

24. Under Section 16 of the Orissa Education Act, 1969 (Act 15 of 1969) each district shall have a District School Board. The Board shall have powers and functions in respect of Primary Schools as laid down under section 21 of the Orissa Education Act. It shall have a District School Board Fund, to which all contributions received by the Board from the State Government, donations and grants, etc., are required to be credited. The fund shall be spent for the purposes of discharging the functions of the Board in accordance with the rules to be framed in that behalf. Among others, the functions of the Board would be to ensure that prescribed courses of instructions the quality and facility for instructions are improved;

distribution of stipends and scholarships is made in time, recommendations for sanction of money and other programmes of assistance out of the Orissa Education Development Fund constituted under Section 23 of the Education Act are made, etc. These District Boards are to be established during the Plan period. By the end of the Fifth Plan there would be 33,900 Primary Schools. Each district will therefore have on an average, 2,600 Primary Schools and a District School Board will have to take care of these schools. For this purpose adequate staff will have to be provided. For this the Boards will also have their own buildings. For each building Rs. 50,000 will be required. The total outlay on this scheme would come to Rs. 44.75 lakhs.

(3) STATE'S SHARE OF TEACHER COST

25. Under the Minimum Needs Programme it has been proposed to appoint 12,600 teachers in regular Middle Schools and 9,100 in part-time classes. Since the whole of this cost will not be borne out of the allocations under the Minimum Needs Programmes, the State Sector Plan has to provide for a sum of Rs. 212.99 lakhs. The cost of one teacher per month is Rs. 200.

(4) BUILDING COST

26. The State also will have to bear a share of the building cost proposed under Minimum Needs Programme. This will amount to Rs. 3.125 lakhs

(5) EXPANSION OF THE STATE INSTITUTE OF EDUCATION

27. The State Institute of Education will be strengthened for conducting research and improving curriculum and for opening of a Science Wing. The existing staff strength is proposed to be doubled. The research projects would include studies on wastage and stagnation, unit costs of education at different stages, efficiency co-efficients, cost of training, evaluation, improved curriculum etc. The total outlay on staff would be Rs. 4.60 lakhs and that on research will be Rs. 7.50 lakhs. Other costs would come to Rs. 1.90 lakhs. The total cost would come to Rs. 14.00 lakhs.

6. DEVELOPMENT OF EXISTING SCHOOLS

28. In order to upgrade the existing elementary schools as nearly as possible to an optimum level it is proposed to develop 2,850 Primary Schools and 320 middle schools with an outlay of Rs. 28.50 lakhs and Rs. 16.00 lakhs respectively. The cost per primary school will be Rs. 1,000 and the cost per middle school will come to Rs. 5,000. Under this scheme improved teaching aids, equipments, maps, charts, science instruments, etc., will be supplied. The 320 M. E. Schools selected will be at Panchayat Samiti Headquarters and at a few other deserving localities.

7. ADMINISTRATION AND SUPERVISIONS

29. In order to cope up with the massive programme of coverage, retention and expansion, large scale changes and reorientation in the organisational pattern will be necessary.

(i) Staff at headquarters

30. It is proposed to have one Additional Director who will remain mainly in charge of elementary education in the State. It is also proposed to introduce zonalisation with one Joint Director of Public Instruction at each of the three Revenue Divisions, whose primary work would be to look after the implementation of the programmes of elementary education in his zones.

(ii) Field and Inspecting Staff

(a) District Education Officers and Subdivisional Education Officers

31. The territorial jurisdictions of the educational circle and educational district are proposed to be made co-terminus, with those of the revenue district and the revenue subdivision respectively. The Revenue District is the unit of administration and planning. Therefore, it would be proper if it synchronises with the unit of educational planning also.

It is, therefore, proposed to have one District Education Officer for each Revenue District. In addition, in order to look after the special problems of the large number of Scheduled Tribes and Scheduled Castes children, some additional posts of Inspectors of Schools will also be necessary in the Scheduled districts and more backward areas. In all, 20 District Education Officers will be appointed. The present Inspector of Schools will be re-designated as the District Education Officer. The District Inspector of Schools would be re-designated as the Subdivisional Education Officer. Thus the pattern would be :—

- (i) 13 District Education Officers for 13 districts
- (ii) 7 Additional District Education Officers for Scheduled districts and backward areas ;
and
- (iii) 56 Subdivisional Education Officers.

32. For this purpose 8 posts of Additional District Education Officers and 16 posts of Subdivisional Education Officers will have to be created.

(b) Sub-Inspector of Schools

33. There are huge backlogs in inspection ranging from 15 per cent to 40 per cent. The time spent in para-academic and non-academic activities of the Inspecting Officers varies from 50 per cent to 75 per cent for different categories of institutions and the time actually devoted for academic activities is much less. It is, therefore, proposed to allot 40 primary schools (in terms of units) to one Sub-Inspector. At present there are 28,500 primary schools. During the Fifth Plan period 5,400 new schools will be opened bringing the total to 33,900. On the basis of one Sub-Inspector for every 40 schools, 848 Sub-Inspectors of Schools will be required. As against this there are at present 539 Sub-Inspectors. Thus 300 more Sub-Inspectors of Schools will be recruited during the Plan period.

(c) Deputy Inspector of Schools or Block Education Officers

34. Similarly it is proposed to allot 40 M. E. Schools to one Deputy Inspector of Schools. There are at present about 4,760 M. E. Schools in the State. During the Plan period 2,000 new M. E. Schools will be opened bringing the total to 6,760 M. E. Schools. At the rate of one Deputy Inspector for 40 M. E. Schools, 164 Deputy Inspectors of Schools will be required in all. As against this there are now only 36 Deputy Inspectors. The rest will have to be recruited during the Plan period. It is proposed to appoint 125 Deputy Inspector of Schools in all. There will be one Deputy Inspector at each Tahasil headquarters. 16 Deputy Inspectors will be attached to the offices of 16 District Inspectors (Subdivisional Education Officers) to be newly created. The rest 6 Deputy Inspectors will be posted in other important and/or backward places which require special attention and efforts.

(d) Attendance Officers

35. In order to relieve the Education Officers of the heavy burden of non-academic work it is proposed to attach one Attendance Officer to two District Inspector of Schools. Out of these, 13 will be located at District Headquarters. Altogether 28 Attendance Officers in the scale of Rs. 450—550 will be appointed. These officers will come from the higher grades of ministerial service under the Education Department, so that the benefits of their experience can be utilised. Their work will be to look to the enrolment drives and retention of pupils and to attend to other non-academic works such as relief and restoration operations and miscellaneous enquiries, etc.

(e) Office staff

36. Strengthening of staff at the Directorate of Public Instruction level as well as at the Secretariat level will also be required in order to cope with the increased work-load. At the Secretariat, one Officer with three Sections including a Planning Section is proposed. At the Directorate, 6 Sections with a separate organisation for planning and statistics is proposed.

37. The total cost on administration, supervision and planning and statistical organisation would come to Rs. 236.79 lakhs.

38. It is believed that by these measures effective supervision can be ensured and emphasis will be shifted from teacher-centred-inspection to learning-oriented inspection. Out of the total number of Sub-Inspectors of Schools to be recruited, some will be drafted as 'subject experts', whose duty would be among others, to build up school complexes.

(iii) Audit and Evaluation

39. Under Section 12 of the Orissa Education Act, the accounts of all aided educational institutions shall be subject to annual audit. Therefore, it is imperative that the audit organisation should be expanded and consolidated in order to ensure that the outlay of money is properly utilised. The number of days required by an auditor for auditing the accounts of one year in respect of an educational institution have been calculated as follows, namely: Primary School—2 days, M. E. Schools—4 days, High School—6 days and College—10 days. Apart from this, audit at the school level can be managed by a single experienced auditor while audit at the college stage will require a party of two auditors. The audit organisation will be kept under the administrative control of the Secretary, Education Department in order that there may be no possibility of collusion with the executing authority which is the Directorate. On the above yard-stick, 23 audit Superintendents, 218 Senior Auditors, 226 Junior Auditors, 34 Ministerial Assistants and 457 Class IV employees would be required for being attached to the audit parties at each level.

40. In addition to Accounts Audit it is also contemplated to introduce Efficiency of Audit and Evaluation. The total cost on these schemes would come to Rs. 106.43 lakhs.

(8) TEACHER'S TRAINING

41. In addition to the training of 41,900 teachers newly appointed under the Plan there will be a backlog of 21,779 teachers who are to be trained. For training of these teachers, apart from the 46 existing training schools with intake capacity proposed to be increased from 50 to 100 each under the special employment schemes, 50 new training institutions with a capacity of 100 each will be opened in the year 1973-74. The plan envisages continuance of these 50 new institutions in the year 1974-75. But from 1975-76, only 20 of these 50 new institutions will be retained. Besides, 56 summer courses per year with a capacity of 100 each are proposed to be introduced. The gap between the requirement and the institutional capacity thus created would finally be 11,380 teachers. It will not be possible to close this gap as adequate funds are not available. In order to give the teachers some type of training the possibility of introducing condensed courses and part-time training are being examined.

42. Apart from training of teachers in secondary training schools, the headmasters of the Middle Schools and Sub-Inspectors would require B. Ed. training in the Training Colleges. The backlog of these categories of personnel is 5,121. The intake capacity of the existing training colleges is proposed to be expanded to provide training facilities to these teachers and the new Headmasters and Sub-Inspectors to be appointed.

(9) TEXT BOOK PRESS

43. The State Government have nationalised text books for Class I to Class VII. It has a Text Book Press of its own with a wide network of departmental sale centres. The existing installed capacity of the press is geared to the production of 40.00 lakhs of text books per year in three shifts. Due to increase of enrolment and expansion of the scheme of providing free text books to the under-privileged, it is estimated that during the Fifth-Plan period, production of text books for Class I to Class VIII will reach the 60.00 lakhs mark. Apart from this, the requirement of text books at the Secondary stage would come to about 20.00 lakhs a year. The Board proposes to entrust the printing and distribution of these 20 lakhs books to the Text Book Press. Besides, 18 to 20 lakh copies of library books, children's magazines etc. will also be printed annually. Thus, the total capacity of the press has to be expanded for an out-turn of about 100 lakhs copies annually. The Press will, therefore have to be suitably expanded and equipped in the matter of high speed machines, staff, paper, ink and other equipments. At the current prices, the total cost of the required expansion would come to Rs. 100.00 lakhs.

44. An abstract of the outlays proposed under various components of the development programme for Elementary Education (state general sector) is given below :

Abstract of Costs

(Details vide Annexure VI)

(ELEMENTARY EDUCATION—STATE SECTOR)

(Rs. in lakhs)

Sl. No.	Schemes	Cost
(1)	(2)	(3)
1	Spillover Projects	1.68
2	Cost of 500 Peripetetic Teachers	18.00
3	Establishment of District School Boards	44.75
4	Cost on Development of Schools	44.50
5	Administration and Supervision	236.79
6	Audit and Evaluation	106.43
7	Teacher's Training—	
	(a) Under Graduates—191.35	} 217.735
	(b) Graduates (B. Ed.)—26.385	
8	Cost of Buildings—State's share	3.125
9	Text Book Press	100.00
10	State Institute of Education	14.00
11	State's share of Teacher Cost	212.99
	Total	1000.00

ELEMENTARY EDUCATION

(Minimum Needs Programme)

45. The "National Programme of Minimum Needs" is presented here as a sub-sector under Elementary Education. The total fourth plan likely expenditure on Elementary Education will be of the order of Rs. 759.84 lakhs, of which the expenditure during the year 1973-74 will be Rs. 264.41 lakhs. During the fifth plan period, over and above the State Governments outlay of Rs. 1,000.00 lakhs on Elementary Education a sum of Rs. 5,990.00 lakhs is proposed to be spent on the Minimum Needs Programmes of this sector (Vide Annexure VI).

46. The physical targets and outlays under the different schemes of the Minimum Needs Programmes are detailed below :—

A. For 6-11 Age-Group—(Primary Section)

(i) APPOINTMENT OF TEACHERS

47. It is proposed to open 5,400 new primary schools, upgrade 10,000 single teacher schools and open 900 additional class rooms. The number of additional teachers to be appointed for this purpose comes to 21,700. At the average annual salary of Rs. 2,400 per teacher, a sum of Rs. 1,361.00 lakhs will be spent towards the teacher cost out of the outlay on the Minimum Needs Programme. The total teacher cost would come to Rs. 1,546.08 lakhs.

(ii) NON-TEACHERS COST—

48. 15 per cent of the teacher cost will be spent on furniture, equipments, and teacher contingencies etc. and the total outlay on the different components of the non-teacher cost from out of the outlay on the Minimum Needs Programme would come to Rs. 264.00 lakhs. The total non-teacher cost would be Rs. 231.91 lakhs.

49. Additional enrolment of Rs. 6.50 lakhs will be achieved with breakup as follows :—

	Total	1974-75	1975-76	1976-77	1977-78	1978-79
Boys ..	4.14	0.765	0.830	0.895	0.830	0.830
Girls ..	2.35	0.435	0.470	0.505	0.470	0.470
Total ..	6.50	1.20	1.30	1.40	1.30	1.30

50. Each school will be given two teachers. The teacher-pupil ratio will be 1:30. For each upgraded class and additional class room one teacher will be provided.

51. The total teacher and non-teacher cost would come to Rs. 1,777.99 lakhs and Rs. 1,565.00 lakhs will be met from the outlay of Minimum Needs Programme. The balance amounting to Rs. 212.99 lakhs will be met out of State Budget.

(iii) FREE READING AND WRITING MATERIALS

52. Not only as an incentive measure but also to make it possible for the children of the under-privileged classes to receive primary education it has been proposed to supply free sets of text books and writing materials to 50 per cent of the additional enrolment i.e. 3.25 lakhs of children. At the rate of 5.00 per year per pupil the total outlay would come to Rs. 48.315 lakhs.

(iv) FREE UNIFORM FOR GIRLS

53. In this age-group 2.35 lakhs girl students would be supplied with free uniform at a cost of Rs. 10 each per year with a total outlay of Rs. 69.80 lakhs.

(v) WOMEN TEACHERS' QUARTERS

54. In order to encourage girls education and ensure that teachers should remain in the schools in the tribal areas, it is proposed to construct 3,650 women teacher quarters with an outlay of Rs. 365.00 lakhs. The cost per quarter is calculated at Rs. 10,000. It has been assumed that roughly 1/3rd of the teachers appointed will be women teachers and facilities for quarters would be provided to 50 per cent of the women teachers recruited.

(vi) PRE-SCHOOL DEVELOPMENTS

55. It is in the first six years of life that the child is most vulnerable. If the national potential of talent is to be fully utilised and developed, it is essential to provide adequate services for the pre-school children of the age groups 3-5.

(vii) PRE-SCHOOL CHILDREN OF THE AGE-GROUP 3-5—

56. While it is essential to pay adequate attention to the development of all pre-school children in major areas like health, nutrition and personality development, this need becomes, extremely urgent and compelling in respect of these from the disadvantaged sections of the community who are subject to the greatest socio-economics deprivations. The needs for State action is also more importative in their case. In the present programme, services are proposed to be limited to three groups of vulnerable children: (a) children in urban slums, (b) children of under-privileged groups in rural areas and (c) children in tribal areas.

57. It is proposed to revive the 'Infant class' in the primary schools in the selected areas. In the past, this class was an integral part of all primary schools in the State and used to serve the purpose of pre-registration and orientation. Since 'Primary-School based Centre' is a new recognised model of pre-school development, this class may be revived in the first phase of the programme, in the urban slums and backward and tribal areas. This class will admit children aged 4 plus who will become eligible for admission to class-I in the following year. The centre should be housed in the primary school and the duration of the class may be from one to three hours. The centre should adopt 'Play-way techniques' and serve the purpose of pre-registration. The work schedule should include supervised play and recreation and a planned programme of school readiness, with special emphasiss on the development of language and number concepts. The programme may be conducted by the teacher of class I who should receive special orientation for this purpose. A suitable honorarium should be paid to him where it involves an extra work-load for him. The teacher may be assisted by elder children in the School, part-time workers, volunteers, local High School and College students who should receive brief orientation and may be paid suitable honoraria. Other services such as medical check-up and feeding may be introduced wherever feasible.

58. Nutrition and Medical care should be left to the voluntary organisation and other appropriate agencies. Orientation training, supervision, supply of toys and play equipments, School-readiness-kits and other teaching materials and staff cost are covered under the present scheme of Education Department. A total sum of Rs. 59.80 lakhs is proposed to be allocated to this scheme.

(vii) MID-DAY MEALS—

59. For combating wastage in this age-group, It is proposed to give mid-day meals to 40.00 lakhs pupils over the Plan period at an estimated outlay of 200.00 lakhs at the rate of Rs. 5 per student per year. Roughly 1/3rd of the total enrolment will get this facility. The details are as follows :—

ENROLMENT

	1973-74	1974-75	1975-76	1976-77	1977-78	1978-79	Total
	20.00	1.30	1.30	1.40	1.30	1.30	26.50
Cumulative total	20.00	21.20	22.5	23.9	25.2	26.5	..
1/3rd	(Approx.)	7.10	7.50	8.00	8.50	8.90	40.00

(viii) OTHER INCENTIVES—

60. Among the other incentives provided for this age-group, it is proposed to spend Rs. 3.00 lakhs on advance increments to teachers who acquire proficiency in tribal languages and dialects, Rs. 47,825 lakhs to encourage sports and to sponsore athletic meets at Panchayat headquarters and to provide Rs. 10.00 lakhs for excursion of students of the backward communities.

(ix) TEACHER WELFARE

61. To promote Teacher Welfare Schemes for Primary School teachers through the District School Boards, a total outlay of Rs. 13.00 lakhs is earmarked.

(x) CONSTRUCTION OF NEW SCHOOL BUILDINGS

62. For construction of 3,400 new School buildings in the backward areas predominantly inhabited by tribal population an outlay of Rs. 313.125 lakhs has been provided as Government grants. As this grant would be given as a matching contribution ranging from 50 per cent to 75 per cent of the total requirement, it is estimated that this outlay would attract contributions valued at Rs. 286.875 lakhs in shape of land, materials or money. Out of this 313.125 lakhs, Rs. 3.125 lakhs will be met out of the State Budget. The cost of one school is estimated at Rs. 15,000.

(xi) CONSTRUCTION OF ADDITIONAL CLASS ROOMS

63. For construction of 3,600 additional class rooms required for this age-group, an outlay of Rs. 90.00 lakhs is proposed. As this grant would also go as matching contribution it is likely that this would attract another Rs. 270.00 lakhs as matching contribution in the shape of labour, materials or money. The cost of one additional room is estimated at Rs. 1,000.

B. For Age-group 11—14 (Middle Sections)**(i) NEW SCHOOLS****(a) Appointment of teachers**

64. For expansion of enrolment of boys and girls in the age-group 11—14, 2,000 new middle schools and 2,600 additional sections in the selected existing schools will be opened. This expansion calls for appointment of 12600 teachers. The total teachers cost as calculated at Government of India level would come to Rs. 1,043.00 lakhs at the average annual salary of Rs. 2,760 per teacher.

(b) Non-teacher cost

65. For provision of furniture, books, equipments, teacher contingencies, etc. an additional outlay of Rs. 208.00 lakhs calculated at 20 per cent of the teacher cost is provided in the Plan.

66. The teacher-pupil ratio would be 1:18. The additional enrolment to be achieved will be 2.27 lakhs with break-up as follows.—

	Total	1974-75	1975-76	1976-77	1977-78	1978-79
Boys	.. 1.468	0.419	0.350	0.233	0.233	0.233
Girls	.. 0.80	0.229	0.190	0.127	0.127	0.127
Total	.. 2.268	0.648	0.540	0.360	0.360	0.360

(ii) PART-TIME SCHOOLS—**(a) Appointment of Teachers**

67. The role and significance of the part-time schools has been explained in section 3 of this document. It is proposed to appoint part-time teachers in selected villages to prepare the drop-cuts and the non-attending boys and girls' for multi-point entry. For girls, separate classes have to be organised. The outlay on teacher cost would come to Rs. 759.00 lakhs, 20 per cent of the population in the age-group 11-14 will be covered under this category.

(b) Non-teacher cost

68. Towards books, furniture, equipments and contingencies, etc., an additional outlay of Rs. 38.00 lakhs, calculated at 5 per cent of the teacher cost is earmarked for running of the part-time classes.

(iii) Continuation classes

69. Where schooling facilities are not available or cannot be made available for some time to come, it is proposed to open continuation classes where at least 25 students can be enrolled for middle school education. These classes can either be opened in the village primary school or in any vacant room available in the village.

70. 5 per cent of the population in the age-group 11—14 will be covered under this category. In all 14,600 units each consisting of 25 students are proposed to be opened covering 3.66 lakhs students. The total cost on this would come to 146.00 lakhs at the rate of Rs. 1,000 per unit.

(iv) Free Text Books

71. It is proposed to supply free text books to 50 per cent of the additional enrolment to 1,13,400 poor and backward class children at an estimated cost of Rs. 37.94 lakhs, at the rate of Rs. 10 per year per student.

(v) Free uniform to girls

72. As an incentive measure and to provide such needed assistance it is proposed to supply free uniform to 80,000 poor and backward class girls of the middle schools at an outlay of Rs. 26.77 lakhs @ Rs. 10 per student per annum.

(vi) Attendance Bonus

73. To award attendance bonus to 80,000 girls students at the rate of Rs. 30 per student per year, an outlay of Rs. 80.00 lakhs is proposed.

(vii) Teacher quarters

74. 3,600 quarters for women teachers in the backward areas will be constructed at a cost of Rs. 360.00 lakhs at the rate of Rs. 10,000 per quarters. It has been assumed that roughly 1/3rd of the total number of teachers to be recruited will be woman teachers. It is proposed to provide quarters to 50 per cent of the women teachers.

(viii) Other Incentives

75. Rs. 2.00 lakhs for payment of advance increment to teachers who acquire proficiency in tribal dialects and languages, Rs. 9.42 lakhs for sports, games and athletic meets at Panchayat Samiti headquarters Rs. 6.25 lakhs for excursion grant for students of backward communities would be the outlay on other incentive.

(ix) Teacher Welfare Schemes

76. A sum of Rs. 6.50 lakhs will be spent on Teacher's Welfare Schemes through the District School Boards for the teachers of the middle schools.

(x) Construction of Middle School buildings

77. Construction of 26,000 School buildings on the same principle as these co-ennuciated for the schools meant for the age-group 6—11 is proposed at an estimated cost of Rs. 200.00 lakhs. This grant will attract matching contribution valued at about Rs. 300.00 lakhs. A part of this outlay will be allotted for construction and improvement of buildings of Government schools.

(xi) Book Banks

78. Since free text books cannot be supplied to all pupils it is proposed to set up book banks in deserving school at an outlay of Rs. 1.48 lakhs.

(xii) Establishment of Tribal Ashram Schools in Backward Areas—

79. To setup Ashram Schools in the tribal areas a total outlay of Rs. 374.00 lakhs is provided as per the calculation made at Government of India level. This amount would be utilised through the Tribal and Rural Welfare Department or through the Education Department in the event of take over of the administration of Tribal Ashram Schools.

80. An abstract of the outlay proposed under various items of the Minimum Needs Programme (Elementary Education) is given below:—

Abstract of Cost (Details vide Annexure vi)

Minimum Needs Programme

(Rupees lakhs)

Sl. No.	Schemes	Age-group	Cost
(1)	(2)	(3)	(4)
1	Text Book free supply to 50 per cent of additional enrolment.	(i) 6—11 (ii) 11—14	48·315 37·94
2	Free uniform for girls ..	(i) 6—11 (ii) 11—14	69·80 26·67
3	Attendance bonus to girls ..	(i) 11—14	80·00
4	Quarters for women teachers ..	(i) 6—11 (ii) 11—14	365 00 360 00
5	Pre-School Development ..	6—11	59·80
6	Proficiency in tribal languages ..	(i) 6—11 (ii) 11—14	3·00 2·00
7	Sports and athletic meets ..	(i) 6—11 (ii) 11—14	47·825 9·42
8	Excursion grants ..	(i) 6—11 (ii) 11—14	10·00 6 25
9	Teachers Welfare Schemes ..	(i) 6—11 (ii) 11—14	13·00 6·50
10	Mid-day meals	6—11	200·00
11	Book Bank ..	11—14	1·48
12	Tribal Ashram Schools ..	..	374·00
13	(a) Appointment of teachers ..	6—11	1,361·00
	(b) Non-teacher cost ..	6—11	204·00
14	(a) Appointment of teachers ..	11—14	1,043·00
	(b) Non-teacher cost ..	11—14	208·00
15	(a) Part-time school teachers cost ..	11—14	759·00
	(b) Part-time school non-teacher cost ..	11—14	38·00
16	Continuation classes ..	11—14	146·00
17	School buildings ..	..	510·00
	Total outlay ..		5990·00 lakhs or Rs. 59·90 crores

SECONDARY EDUCATION

(i) Vocational Secondary Schools in backward areas—

81. Expansion facilities will be selective. In backward areas, 10 new Vocational Secondary Schools would be opened to bring the enrolment up to the level of the State average and to impart a distinctly vocational bias to secondary education commensurate with the needs of the local and tribal people. Rs. 1.00 lakh will be provided towards building of each school and Rs. 2.00 lakhs towards staff, furniture, equipment etc., of a school on an average. The total outlay on this account would be Rs. 30.00 lakhs.

(ii) Opening of Girls' Schools in Backward areas—

82. In order to improve the enrolment of Girls students, Five Government Girls' High Schools will be opened in backward areas at a total cost of Rs. 15.00 lakhs. The school and hostel buildings, quarters for each school staff and other costs on an average would be Rs. 3.00 lakhs.

(iii) Introduction of vocational courses in Girls Schools—

83. It is proposed to introduce some vocational courses in selected Girls' Schools at a cost of Rs. 2.00 lakhs.

(iv) Opening of additional sections—

84. It is proposed to construct additional class rooms at an estimated cost of Rs. 5.00 lakhs. Besides, the teachers and other costs would be Rs. 4.00 lakhs for the additional class rooms during the plan period. The total outlay on the scheme would come to Rs. 9.00 lakhs.

(v) Hostel facilities—

85. During 1966, 21 per cent of the students on the roll in the Secondary Sections had hostel facilities. The students residing in hostels were 22,742. During the Fourth Plan, there has been marginal expansion of this facility. though enrolment has gone up to Rs. 2.05 lakhs hostel facilities have not correspondingly increased. In consequence, the net facilities in terms of percentage has decreased. It is proposed to augment this facility by constructing fifty hostels. The cost of one hostel would be Rs. 0.50 lakhs. These hostels would be located in subdivisional headquarters and in backward areas. The total cost would be Rs. 25.00 lakhs.

(vi) Experimental Comprehensive Residential School—

86. There will be one comprehensive Residential School at Bhubaneswar. This institution will lay out new innovations and experiments on educational technology before wider introduction. The building cost will be Rs. 5.00 lakhs and the other cost will be Rs. 10.00 lakhs.

(vii) Women Teacher's quarters—

87. 120 women teacher's quarters will be constructed in backward areas at a total cost of Rs. 24.00 lakhs. The cost of one quarters will be Rs. 20,000.

(viii) Incentive to women teacher's to serve in backward areas—

88. Incentive will be provided to women teacher's in backward areas by giving special allowance. An amount of Rs. 5.00 lakhs will be required for the purpose.

(ix) Text Book Libraries—

89. Text Book Library will be provided to 1,800 schools @ Rs. 1,500 per school. The total cost will be Rs. 27.00 lakhs.

(x) Improvement of Science Education—

90. Science teaching will be improved in 320 selected schools. The syllabus in the subjects will be suitably revised. Adequate funds be provided for improvement of laboratory facilities. Funds will also be provided for improvement of laboratory facilities. Funds will also be provided for inservice training course for science teachers in the secondary schools. The total cost of this programme would be Rs. 88·00 lakhs as given below—

(i) (a) Building of science laboratories with P. H. fittings in five teachers' training colleges.	Rs. 4·50 lakhs
(b) Furniture of item (a)	Rs. 1·50 lakhs
(c) Laboratory equipments	Rs. 1·50 lakhs
Total ..	Rs. 7·50 lakhs
(ii) (a) Construction of laboratories with P. H. fittings in 320 H. E. Schools @ Rs. 20,000 each.	Rs. 64·00 lakhs
(b) Furniture and equipments @ Rs. 5,000 for each school item No. (ii) (a).	Rs. 16·00 lakhs
(c) Inservice training cost of 320 High School Teachers.	Rs. 0·50 lakh
Grand Total ..	Rs. 88 00 lakhs

(xi) Work Experience—

91. Facilities for work experience will be provided as a compulsory subject. Guidance will be provided to school leavers regarding the employment opportunities and the facilities available for vocational training. Each secondary school will offer facilities for at least two practical courses related to the patterns of industrial, agricultural and commercial activities in the areas. Besides this, Agriculture will also be introduced in 320 schools. It is proposed to introduce work experience among 40,000 students which would be a little more than 10 per cent of the enrolment. The cost will be at the rate of Rs. 20 per year per student. The total cost would be Rs. 40·00 lakhs.

(xii) Curricular Revision, Examination Reforms, etc.—

92. Curricular revision and examination reforms will be taken up. Correspondence courses will also be introduced. Grant amounting to Rs. 2·00 lakhs for this purpose will be given to the Board of Secondary Education in a phased manner.

(xiii) Administration and Supervision—

93. Special staff would be appointed at the Directorate level for adequate supervision of the projects on work experience and vocational courses at a cost of Rs. 1·00 lakh.

(xiv) Teacher's Training—

94. (a) Provision of teacher's Training will be made by expansion of the existing training Colleges. The building and other costs would come to Rs. 10·00 lakhs.

(b) Expansion of one Training College—It is proposed to expand one Training College to offer courses in Science, New Mathematics and Technology. The appointment cost will be Rs. 10·00 lakhs.

(c) In order to acquaint the teachers imparting education in High Schools in modern Mathematics, it is necessary to provide them In-service Training for a period of one month during the Summer Vacation. This training will be organised by the State Institute of Education. During the Fifth Plan period, it is proposed to train up one teacher from each of the existing High Schools. The cost has been calculated at Rs. 500 per teacher approximately. The scheme will be implemented in a phased manner and the total expenditure on this account comes to Rs. 8.00 lakhs during the Plan period.

(xv) Spillover Projects—

95. The cost of spillover building projects will come to Rs. 24.12 lakhs.

(xvi) Grant-in-aid to recognised schools opened during Fourth Plan (Spillover)

96. The approximate cost under this item would be Rs. 4.88 lakhs

(xvii) Higher Secondary Institutions

97. There are now nearly 1,800 High Schools in the State. The High Schools broadly are of three categories. The first category contains classes from IV to XI. The second category contains classes from VI to XI and the third category contains classes from VIII to XI.

98. It is contemplated to introduce the 10+2+3 national pattern in a few selected schools as a measure of transforming the Secondary Education in order to give a new dimension to the present system. The objections are two fold, viz. (a) to make it terminal in order to reduce pressure on the Colleges and (b) to enhance the employability of the school leavers through introduction of vocational courses.

99. In the Fifth Plan, it is proposed to upgrade 30 existing High Schools to Higher Secondary institutions each of the Schools will have four streams viz. (i) Humanities stream (ii) Science Stream, (iii) Technology stream and (iv) Agriculture stream. All these schools will have built-in-flexibility to facilitate mobility between the streams and thereby provide wide choices to the students. The cost per unit would come to Rs. 6.50 lakhs and the total cost would come to Rs. 195.00 lakhs.

(xviii) Scholarships

100. At present 300 M. E. Merit Scholarships at the rate of Rs. 20 each per month are being awarded to the students on the result of M. E. Scholarship Examination. Similarly, 1,280 Merit-cum-Poverty Scholarship at the rate of Rs. 15 per month are being given. It is proposed to provide 750 new scholarships and to make it Rs. 20 per month uniformly. The total cost would come to Rs. 24.00 lakhs.

(xix) Development of Selected Schools

101. It is proposed to develop 320 schools to a higher standard. It has separately been proposed to develop Science Education in 320 Schools. These Schools will be developed to the optimum standard. For this purpose, Rs. 5,000 will be required for each school. The total cost would come to Rs. 16.00 lakhs.

(xx) Take-over of Tribal High Schools—

102. It is proposed to take over the administration and management of 59 High Schools of Tribal and Rural Welfare Department for which 17 High School buildings will be constructed at a cost of Rs. 1.20 lakhs each. A sum of Rs. 20.40 lakhs will be required for the purpose. Besides, additions and alterations in 22 school buildings at the rate of Rs. 7,500 each and 59 hostels at the rate of Rs. 5,000 will be made. The amount required for this purpose will be Rs. 4.00 lakhs. The total cost would thus come to Rs. 25.00 lakhs.

103. An abstract of the outlay proposed under various heads (Secondary Education) is given below :—

Abstract

(Details vide Annexure VI)

Name of the Scheme	Amount in lakhs
(i) Vocational Secondary schools in backward areas ..	30·00
(ii) Opening of Girls' High Schools in backward areas ..	15·00
(iii) Introduction of vocational causes in Girls' Schools ..	2·00
(iv) Opening of additional class rooms ..	9·00
(v) Additional Hostel facilities ..	25·00
(vi) Experimental Comprehensive Residential School ..	15·00
(vii) Women teacher's quarters ..	24·00
(viii) Incentives to women teachers ..	5·00
(ix) Text Book Libraries ..	27·00
(x) Improvement of Science Education ..	64·00
(xi) Work Experience ..	40·00
(xii) Curricular Revision, Examination reforms and Correspondence courses.	2·00
(xiii) Strengthening of administration and supervision ..	1·00
(xiv) (a) Training of teachers ..	10·00
(b) Expansion of one Training College to offer courses in Science, New Mathematics and Technology.	10·00
(c) Teacher Reorientation ..	8·00
(xv) Spillover projects ..	24·12
(xvi) Grant-in-aid to recognised Schools opened during the fourth Plan (Spillover).	4·88
(xvii) Higher Secondary Institutions ..	195·00
(xviii) Talent Scholarsips ..	23·00
(xix) Development of selected Schools to optimum standard ..	16·00
(xx) Taking over of Tribal High Schools ..	25·00
Total ..	600·00 lakhs

HIGHER EDUCATION

A. Spill over Projects

104. Building projects in twelve Government Colleges relating to construction of class rooms, laboratories and hostels for men and women students estimated at Rs. 2,06,95,698·00 were began late in the Fourth Plan period. Out of the total estimated cost indicated above a sum of Rs. 93,67,800·00 or Rs. 93·68 lakhs will have to be met from the Fifth Plan outlay.

B. New Schemes**(1) EXPANSION AND IMPROVEMENT OF GOVERNMENT COLLEGES****(i) Evening Shifts**

105. The proposed new Colleges can absorb a very small part of the demand for admission and for the rest, therefore, evening shifts and correspondence courses may be opened. It is proposed to open evening shifts in 3 selected Government Colleges. On the basis of the actual cost on staff and contingencies the total cost during the plan period would come to Rs. 6·00 lakhs.

(ii) Correspondence Courses

106. Correspondence courses will be opened in three centres. College teachers and other staff working on part-time basis in these centres shall be paid remuneration and the centres will be provided with equipments like type writers, duplicators and other contingent materials. It is estimated that the average cost on each centres over the Plan period would come to Rs. 1·00 lakh. Therefore, a total outlay of Rs. 3·00 lakhs may be earmarked for this scheme.

(iii) Provision of buildings to eliminate outstanding deficiencies in Government Colleges

107. Expansion of college and hostel buildings and increase in the number of residential quarters for the college teachers has not kept pace with the fast-rising size of enrolments in the Government Colleges. In 1969-70, the visiting team of the U. G. C. had pointed out the major building deficiencies in Government colleges the cost of which had been estimated in 1970-71, at about Rs. 6·00 crores. Some of these deficiencies have been removed during 1970—73. Recently, another survey was conducted to assess the backlog and the subsequent deficiencies and according to a rough estimate an outlay of nearly Rs. 15·00 crores (at the new scheduled rates) will be needed to wipe out these deficiencies. About Rs. 2·00 crores of this requirement is expected to be made available by the University Grants Commission during the Fifth Plan period. A sum of Rs. 450·00 lakhs may be provided in the State Plan for removing a part of these deficiencies.

(iv) Apparatus, equipments and library, etc.

108. There are also serious deficiencies in apparatus, furniture, equipments and library facilities in Government Colleges. The cost of these materials has been roughly estimated at Rs. 3·00 crores. A part of this cost can ordinarily be met from the University Grants Commission assistance. But it is proposed to utilise the entire U. G. C. funds in building projects. A sum of Rs. 60·00 lakhs may be provided in the State Plan to meet the expenditure on this scheme.

(v) Introduction of New Courses and Increase of seats to meet the noral growth in enrolment

109. Opening of next higher classes, introduction of Honours teaching in deserving Government colleges and marginal increase of seats to accommodate a part of the growth in enrolment size will call for appointment of additional teaching and non-teaching staff, provision of equipments, furniture and other academic facilities. On this scheme, a total outlay of Rs. 20·00 lakhs may be provided.

(vi) Introduction of Semester system and Exenination Reforms

110. The Education Commission, the C. A. B. E. and the U. G. C. have laid a major emphasis on Examination reforms. The Semester system is an important plank of examination reforms. One of the Universities in the State has already accepted this system and the two other Universities are expected to introduce the system during the Fifth Plan period. Its introduction in 35 Government colleges will call for additional staff, improvement in library and laboratory facilities and suitable measures for internal assessment. To ensure smooth working of the system, a sum of Rs. 50.00 lakhs may be allocated to the scheme.

(2) GRANT TO NON-GOVERNMENT COLLEGES FOR DEVELOPMENT

(i) General Improvement of Colleges

111. On account of the decline in the community contributions towards the development of non-Government Colleges, serious deficiencies have accumulated in physical and academic facilities in almost all such Colleges. The special U. G. C. visiting Team (1969), had pinpointed these deficiencies and recommended early action. The cost of the reconstruction programmes at the current rates and prices would come to about Rs. 5.00 crores. In order to assist them in their own developmental activities an outlay of Rs. 46.00 lakhs may be provided in the Fifth Plan.

(ii) Grants for Job-oriented Courses in selected non-Government Colleges

112. A large number of vocational and employment oriented subjects have been prescribed by the affiliating Universities in the State. The non-Government Colleges, on account of financial constraints, are not capable of introducing these subjects. Selected Colleges should be financially assisted to introduce such subjects in their curricula. The total cost of this scheme consisting of provision of staff, workshops, equipments, etc. over the plan period would be Rs. 73.00 lakhs. It is proposed to allocate Rs. 23.00 lakhs as special grant-in-aid for this scheme.

(iii) Additional Recurring Grant

113. The State Government are currently revising the grant-in-aid rules and the States liabilities are very likely to rise. Further, there will be additional classes and courses and examination reforms. Towards this, an outlay of Rs. 29.00 lakhs would be required.

(iv) Matching contribution towards University Grants Commission assisted projects

114. By and large, the non-Government Colleges in the State have failed to lift the University Grants Commission after of development assistance during the Fourth Plan period due to their inability to provide matching share. To assist and encourage these colleges to utilise the Commission's offer during the Fifth Plan period, an outlay of Rs. 46.00 lakhs is proposed.

(3) QUALITATIVE IMPROVEMENT IN GOVERNMENT COLLEGES

(i) Improvement of Teacher Competencies by probationer's Training, Refresher's Courses and provision of Scholarships for Higher Training and Research.

115. For Refresher's Courses, Summer Institute, Probationer's Training for the new recruits in a Training Centres to be specially set up and provision of 50 scholarships to college teachers for research, training and specialisation in sophisticated subjects in which manpower is not adequately available in the State, a total outlay of Rs. 20.00 lakhs is proposed.

(ii) Job-oriented Courses in Government Colleges

116. Introduction of Job-oriented Courses in Government Colleges will call for appointment of specialised staff, construction of work-shops for technical subjects and provision of appropriate equipments and fittings. The scheme, for successful implementation in all Government Colleges will need a large outlay and provision may be made for an outlay of Rs. 32.00 lakhs for introduction of such courses.

(iii) Student's Counselling and Guidance

117. For payment of allowances to teachers and other staff for their part-time work, for purchase of the required literature and reports and for deputation of college teachers for short-term orientation courses an outlay of Rs. 10.00 lakhs is provided.

(iv) Talent Scholarships

118. For subsidizing the higher education of the talented students the State Government have instituted scholarships. These, in the present context of expended enrolment, do not touch the fringe of the problem and, therefore, have to be augmented.

119. The value of scholarships in the existing rates was fixed at a time when the cost of living was very low and the students could any how manage their education with that amount. But now at the current prices, it has become impossible for a student to continue his education with this meagre amount even as a day scholarship. Hence it is proposed to raise the value of scholarships at the different stages, the average of which has been taken at Rs. 45 in Pre-degree stage, Rs. 50 at the Degree stage and Rs. 75 at the post-graduate stage.

120. The number of scholarships was fixed at a stage when the number of High Schools and Colleges in the State was less. Due to nushrow growth of High Schools and Colleges, many talented scholars who are coming out from these institutions are deprived of the facility of getting scholarships at the existing number of scholarships does not meet the demand. In addition to this, the number College-going children has increased enormously to enter to the needs of the meritorious and deserving students the number of scholarship should be increased by 500 in the Pre-degree stage, 100 in the Degree stage and 75 in the Post-graduate stage.

The total cost of the increased number at the enhanced rate would be Rs. 10.17 lakhs.

4. STRENGTHENING OF ADMINISTRATION AND SUPERVISION

121. To strengthen the administration at the Directorate level by appointment of additional Officers and staff a sum of Rs. 3.30 lakhs is proposed to be spent on pay and allowances.

5. GRANTS TO UNIVERSITIES

122. The development grant to be paid to the universities under the Plan should be programme-oriented. The programmes for which assistance should be given to the universities are: opening of correspondence courses, establishment of vocational training courses, research, library development, construction of building organisation of Refresher courses and Summer Institutes for College Teachers, Semester system, Internal Assessment, Syllable reforms keeping in view manpower needs and over-all examination reforms. An outlay of Rs. 115.00 lakhs may be earmarked for this purpose. Out of this Rs. 15.00 lakhs will be paid towards academic schemes and Rs. 97.85 lakhs, towards apprv. ved campus development projects.

6. GRANTS TO INSTITUTE OF PHYSICS

123. Following the advice of the University Grants Commission, the Institute of Physics has been registered under the Societies Registration Act. The Institute would be developed in accordance with a phased programme depending upon the resources available. The State Government have already provided a grant of Rs. 12.50 lakhs till the 1972-73, and there is a provision of Rs. 3.50 lakhs in the budget for the year 1973-74 for the purpose. The activities of the Institute will cover a wide area of Physical Science and Technology with special emphasis on the applied aspects. According to the present calculation the total recurring expenditure is estimated at Rs. 42.00 lakhs and non-recurring expenditure at Rs. 2.20 crores. It is proposed to pay a further grant of Rs. 50.00 lakhs to the Institute during the Plan period out of which Rs. 24.00 lakhs is meant for building grant.

124. An abstract of outlays proposed under various items included in the development programmes for higher Education is given below :

Abstract of cost (Rs. in lakhs)

[Details, vide Annexure VI]

Higher Education

(Rs. in lakhs)

1. Expansion and Improvement of Government Colleges—		
(i) Opening of Evening shifts in three colleges	..	6.00
(ii) Correspondence courses	..	3.00
(iii) Provision of buildings	..	450.00
(iv) Provision of apparatus, equipments, Library facilities etc.	..	60.00
(v) Introduction of new courses and additional classes	..	20.00
(vi) Introduction of Semester system Examination Reforms	..	50.00
(vii) Spillover Building Projects	..	93.68
2. Qualitative Improvement in Government Colleges—		
(i) Teacher competencies	..	20.00
(ii) Job-oriented courses	..	32.00
(iii) Students, Counselling and Guidance	..	10.00
(iv) Talent-cum-Poverty Scholarships	..	10.17
3. Grants to non-Government Colleges—		
(i) General Improvement of Colleges	..	46.00
(ii) Grants for Job-oriented courses	..	23.00
(iii) Additional requiring grants	..	29.00
(iv) Matching contribution towards U. G. C. Assisted Projects of non-Government Colleges		46.00
4. Strengthening of Administration and Supervision	..	3.30
5. Grants to Universities for Examination and syllable reforms and campus development.		112.85
6. Grants to Institute of physics	..	50.00
		<hr/>
Grand total	..	Rs. 1,065.00

OTHER EDUCATIONAL PROGRAMMES—NEW SCHEMES

125. It is proposed to actively assist all educational institutions in offering well-organised facilities for discovering and increasing sports talent right from the School stage. As part of this programme for encouraging sports talent, a general programme of scholarships and incentives should be offered to students who distinguish themselves in sports and games. Facilities for training and coaching in the various branches of sports and games should be considerably augmented in view of the serious shortfalls that are noticed in this regard in the educational institutions of this State.

126. In order to achieve the objective to the modest extent the following schemes are proposed to be implemented during the Fifth Plan period.

A. At the Elementary Stage

127. In the Syllabus for Elementary Schools, a rural pattern of physical education has been recommended but this recommendation has not yet been implemented due to paucity of funds. Another difficulty in this regard is that the elementary school teachers are not qualified to impart such training to the pupils. Therefore, the present scheme in the elementary sector should aim at imparting orientation training to at least one teacher in a school who should remain in charge of physical education. There are, at present, 28,500 primary schools and 4,760 Middle Schools in this State and these figures will come up to 33,900 and 6,760 respectively, at the end of the Fifth Plan. Since under the over-all financial constraints it is not feasible to impart regular training to one teacher of every school, it is proposed to achieve the aim through a orientation course to be organised at the Block level.

128. There are now 3,826 Grama Panchayats and 314 Blocks in the State. On an average, there would be about 10 schools in a Panchayat area. It will be necessary to place one Physical Education Teacher in charge of one Panchayat who will impart orientation training to the school teachers and supervise the Physical Education in the Elementary Schools in the Panchayat area. Besides this, there will be one Physical Education Supervisor in each Block who will remain in charge of supervision of work of the Physical Education Teachers and co-ordinate their work. He will also organise the Block level competitions and annual rallies.

129. In order to achieve the above objectives it will be necessary to impart training to 3,826 Physical Education Teachers and 314 Block Level Supervisors. It will be necessary to introduce condensed courses in the existing College of Physical Education at Cuttack. This manpower will be made ready during the year 1974-75.

130. The total cost of these schemes including training, orientation courses, pay, D. A. and T. A. of staff, equipments and contingencies would come to Rs. 29.43 lakhs for the plan period. With this allocation a sports movement, a modest scale, can be ushered at the Elementary stage.

B. At the Secondary and Higher Stages

(i) APPOINTMENT OF TRAINED P. E. T. IN SECONDARY SCHOOLS

131. The National Syllabus for Physical Education under N. F. C. has been accepted and introduced in all Secondary Schools of the State. The new syllabus provides that an additional P. E. T. should be appointed for a school having more than 300 school having more than 300 students. In our State, there are above 500 High Schools having student strength more than 300 and above 100 High Schools with student-strength more than 500. So it is necessary to provide 100 additional P. E. T. for the Secondary Schools having 500 or more students for successful implementation of the N. F. C. Scheme. During the Fifth Plan period, the scheme will be implemented in 100 such schools. These additional Physical Education Teachers will be appointed at the rate of 20 per year and over the plan period the pay and D. A. cost will come to Rs. 5.00 lakhs.

(ii) SUPPLY OF SPORTS EQUIPMENTS

132. The schools are to be supplied with the sports equipments on rotation basis. Games articles are necessary for training facilities for the young and up-coming talents in these games. The national syllabus for Physical Education has specified some materials for secondary schools and the funds for schools are quite inadequate to provide these articles. Government may provide a sum of Rs. 1,000 each to 1,800 schools at the rate of 360 schools per year. The total cost will come to Rs. 18.00 lakhs.

133. Similarly, each of the 82 general colleges may be given Rs. 5,600 each over the Plan period for purchase of sports equipments and the total allocation would come to Rs. 4,10,000. The total cost of the scheme for schools and colleges would be Rs. 22.10 lakhs.

(iii) DEVELOPMENT OF PLAY FIELDS IN HIGH SCHOOLS

134. The N. F. C. programme has been accepted as a compulsory curricular subject for all high schools throughout the country. The objective of this programme is to make the students physically strong. The syllabus of the N. F. C. programme envisages that each school must have a developed play ground. It is, therefore, necessary that State should provide funds to, at least 25) selected schools during the Fifth Plan period at the rate of Rs. 5,000 per school to 50 schools per year. The total cost for 5 years on 250 schools comes to Rs. 12.50 lakhs.

(iv) APPOINTMENT OF COACHES

135. In the present stage of national development when the task of reconstruction requires energy, stamina and discipline, plan for development of sports and games for the students of secondary schools assumes greater importance. It is, therefore, imperative that the up and coming sports talents should be given adequate facilities at the school level to improve their standard by way of regular coaching in various branches of games and sports. So it is necessary to appoint coaches in Football, Hockey, Volleyball, Gymnastics, Athletics and Basket ball. The total cost on account of pay and D. A. of 18 coaches, 6 in each of the 3 Revenue Divisions of the State in the scale of Rs. 230—540 comes to Rs. 3.60 lakhs.

(v) UPGADATION OF THE COLLEGE OF PHYSICAL EDUCATION TO A DIPLOMA COLLEGE

136. The Government College of Physical Education, Orissa is now imparting certificate course. The certificate holders can be appointed as P. E. T. in high schools. There is no provision of degree or diploma course that turn out people for appointment as P. E. T. in high schools. There is no provision of degree or diploma course that turn out people for appointment as P. E. T. in colleges. In order to get over the difficulties it is necessary to upgrade the College of Physical Education to a Diploma College. This will require appointment of qualified staff and provision of suitable equipments. The total outlay on this schemes is proposed to be kept at Rs. 10.00 lakhs.

(vi) SPORTS TALENT SCHOLARSHIP

137. In order to provide incentive and encouragement to the up-coming sports talents it is proposed to institute 130 Sports Talent Scholarships, 10 for each Revenue District, at the rate of Rs. 25 each for high school students. This scholarship will be tenable for a period of two years, i.e., in the last 2 years in the high school. Similarly, at the college stage, 130 such scholarships will be instituted of the value of Rs. 30 each. The scholarship will be tenable for a period of 3 years at the under-graduate stage. The total cost of the scheme would come to Rs. 7.37 lakhs over the Plan period.

138. In addition, Scout and Guides activities will be expanded with an outlay of Rs. 10·00 lakhs.

Total cost on games and sports—	(Rs. in lakhs)
A. Games and sports at elementary stage ..	29·43
B. Games and sports at Secondary and Higher Education stages—	
1. Appointment of P. E. T. in Secondary Schools ..	5·00
2. Supply of Sports Equipments to High Schools ..	22·10
3. Development of play fields in Secondary Schools ..	12·50
4. Appointment of Coacher ..	3·60
5. Upgradation of the College of Physical Education ..	10·00
6. Sports Talent Scholarship ..	7·37
7. Scouts and Guides ..	10·00
Total ..	100·00

Library Facilities

(a) HIGHER EDUCATION SECTOR

139. At present there are 40 Government Colleges including Evening Colleges and Training Colleges in the State. In the Ravenshaw College only there is a separate building for library. Besides, with the help of the assistance of the University Grants Commission, library buildings in the S. B. Women's College, Cuttack is being constructed. The remaining Government Colleges are accommodating libraries in portions of the college buildings, without reading room and sufficient stacking facilities.

140. It is proposed to construct library buildings for accommodation of libraries in 10 Government Colleges for which a sum of Rs. 10·00 lakhs would be required at the rate of Rs. 1·00 lakh each.

The existing recurring grants for purchase of books and Journals are given on an average, at the rate of Rs. 10,000 per annum to each Government Colleges and the non-Government Colleges meet this requirement from their recurring grants. In order to extend facilities of books and journals, at least a sum Rs 4·00 lakhs would be provided for giving grants to colleges. This under higher education the total proposed requirement would be Rs. 14·00 lakhs.

(b) SECONDARY SECTOR

141. The total number of High Schools existing in the State is 1,771. There is no specific provision for giving library grant to each school. In respect of Government Schools a non-recurring grant of Rs. 500 and a recurring expenditure of Rs. 200 per year is given to each schools for library requirements. Similarly in case of aided schools a recurring grant of Rs. 67 per annum is given for the above purpose which is quite insufficient. It is proposed to extend library facilities to 320 High Schools at the rate of Rs. 2,000 per school. The total requirement would be Rs. 6·40 lakhs out of 320 schools one school will be at each Block headquarters and the rest would be in important localities.

(c) STATE LIBRARY

142. There is a State Library located at Bhubaneswar. In order to equip the institution properly sufficient books, staff and furniture are to be provided. For this, a sum of Rs. 5.00 lakhs is proposed. The details are as follows :—

(i) Furniture and equipment	..	Rs. 1.00 lakh
(ii) Books	..	Rs. 3.50 lakhs
(iii) Staff including libraries	..	Rs. 0.50 lakh
		<hr/>
	Total	.. Rs. 5.00 lakhs
		<hr/>

(d) PUBLIC LIBRARIES

143. Besides the State Library, there are other public libraries which receive grants from Education Department. The libraries receiving grants from Rs. 500 to Rs. 1,000 are 25 in number and those receiving grants from Rs. 30 to Rs. 100 are about 200. These libraries are not well equipped and unable to cater to the needs of people. A sum of Rs. 1.00 lakh is proposed to be provided for these libraries.

GYANAMANDAL

144. The Gyanamandal is now preparing Oriya Children's Encyclopaedia which has become a book of national importance. This organisation has so far prepared 13 columns and the remaining 26 volumes are still to be prepared. The State Government have sanctioned grants to the extent of Rs. 1.26 lakhs to this organisation during the last three years and have purchased books from it. It is necessary to finance this organisation in the shape of purchasing books for distribution to school and college libraries. It is proposed to purchase at least 3,300 complete sets of books from this organisation for distribution among the schools and colleges. Each set would cost about Rs. 200. The total cost would come to Rs. 6.60 lakhs.

145. To sum up, the total requirement for library facilities under General Education would be as follows—

Higher Education	..	Rs. 14.00 lakhs
Secondary Education	..	Rs. 6.40 lakhs
State Library	..	Rs. 5.00 lakhs
Public Libraries	..	Rs. 1.00 lakh
Gyanamandal	..	Rs. 6.60 lakhs
		<hr/>

Total Rs. 33.00 lakhs

3. Eradication of Illiteracy—Adult Literacy

146. Eradication of adult illiteracy has been one of the major National concern and should be tackled with a sense of urgency. According to the 1971 computation, while the all-India percentage of literacy was 29—34, 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 considerably lagged behind. The total number of adult illiterates in the State is estimated to be 112.32 lakhs and the total number sensitive population in the age-group 11—30 will come to about 33.00 lakhs. Added the anticipated drop outs the total number illiterates will come to about 40.00 lakhs.

[3 P. & C. 124]

147. While it can be expected that a major impact on the problem of illiteracy will be made by effective provision of universal primary education to the children in the age-group 6—14, provision of part-time education and development of a youth movement it will be necessary to launch a concerted drive to tackle this problem. A rewarding strategy as recommended by the C. A. B. E. would be to direct efforts towards organised groups of illiterates like farmers and factory workers etc. High school, college and University students have a very vital role to play in this sphere and it would be ideal if every college and High school student considered it his duty to make at least one adult literate. Efforts have to be made to orient the high school and college students towards this national service.

148. The present activities relating to adult literacy and farmers' education have to be supplemented during the Fifth Plan period by organisation of literacy drive and opening of additional literacy Centres with a total outlay of Rs. 8.00 lakhs.

149. An abstract of the outlay proposed for various other Education Programmes is indicated below.

Abstract of cost

Other Educational Programmes (Rs. in laks)

[Details vide Annexure VI]

1. Promotion of games and sports	..	Rs. 100.00
2. Library facilities	—	Rs. 33.00
3. Adult literacy	..	Rs. 8.00
		<hr/>
Total	..	Rs. 141.00 lakhs
		<hr/>

150. To conclude, the total outlay proposed for implementing various development programmes under General Education comes to Rs. 8,796.00 lakhs as per the break up given below.

Total Fifth Plan Outlay on General Education

Sl. No.	Sector	(Rs. in Lakhs) Total Fifth Plan outlay
1	Elementary Education..	
	(a) Minimum Needs Programme ..	59,90.00
	(b) Elementary Education (State Plan) ..	10,00.000
2	Secondary Education ..	6,00.000
3	Higher Education ..	10,65.000
4	Other Educational Programmes ..	141.000
		<hr/>
	Total outlay in Fifth Plan ..	87,96.000

Regional Imbalances

151. There are wide variations in the field of education among the 13 districts of the State, in the number of schools of different categories, the population served per school, the percentage of enrolment of both boys and girls in the different age-groups and the teacher-pupil ratio. A number of districts have conspicuously lagged behind the State average. This certain lacunao in planning during the previous years. As a first step, the imbalance has to be removed, and the programme has to be designed to bring these areas at least up to the level of the State average.

152. There is disparity in the population served by the different categories of schools among the districts. A primary school in Puri district serves a population of 968 whereas in Phulbani it serves a population of 480. Similarly, in the matter of coverage of M. E. and H. E. Schools, Koraput is the most backward, the coverage being 13.4 and 37 thousands per M. E. Schools and High Schools respectively. The districts of Kalahandi, Phulbani, Ganjam and Bolangir are backward in the matter of coverage in High Schools. The districts of Ganjam, Kalahandi and Phulbani are similarly situated in the matter of number of M. E. Schools. It is noticed that in the district of Balasore, the coverage by M. E. Schools is about 3,300 per school.

153. The districts of Koraput, Mayurbhanj, Kalahandi, Bolangir and Keonjhar are poor in the matter of enrolment in Primary Schools. In the district of Balasore the enrolment in the primary stage is reported to be 93 per cent. In case of M. E. Schools, special attention will have to be paid to the districts of Kalahandi, Koraput, Phulbani and Bolangir. Similarly in case of high schools special attention is necessary in the districts of Koraput, Kalanandi and Keonjhar.

154. In the matter of enrolment of girls students, the districts of Koraput, Mayurbhanj, Bolangir and Keonjhar require special attention at the primary stage. In case of M. E. Schools, the percentage of enrolment is poor in the districts of Boudh-Khondmals (Phulbani), Kalahandi, Koraput, Bolangir, Ganjam, Keonjhar, Mayurbhanj and Dhenkanal. In case of high schools the enrolment is poor in all districts except Cuttack, Puri, Balasore and Sundargarh.

155. The average strength per school in the different districts reveals features which need be carefully looked into. The strength at Primary stage is low in the districts of Koraput, Mayurbhanj, Bolangir and Kalahandi and Keonjhar. This is because the villages with population of less than 200 are to a large extent not covered. In case of M. E. Schools, the average strength is poor in the districts of Kalahandi, Bolangir, Phulbani, Dhenkanal, Keonjhar and Mayurbhanj. In case of high schools the average strength is poor in the districts of Puri, Kalahandi, Balasore, Koraput and Mayurbhanj. In the advanced districts where the number of institutions is more, low average strength would indicate that there has been proliferation of institutions and under-utilisation of capacities. In such pockets the aim should be to utilise the existing facilities up to the optimum level before opening new institutions. In the backward areas, the low average is due to socio-economic factors which do not permit a child to devote in full-time attendance at schools which are situated at a long distance from his house. In such areas opening of new institutions is necessary.

156. During the Fourth Plan period about 60 per cent of the expenditure on educational development was diverted to the backward areas. The strategy of the Fifth Plan is primarily oriented towards removing the regional imbalances. The exact quantum of expenditure and location of institutions in the backward regions will depend on the findings of the Third Educational Survey which is scheduled to be completed by December 1973.

157. Since the percentage of literacy of the State is about 26 per cent, the majority of the people of this State deserve special programmes under Education. As detailed in the preceding paragraphs a pattern of imbalances has emerged. This pattern indicates that the areas predominantly inhabited by the Scheduled Caste and Scheduled Tribe population are also the areas where the literacy percentages are lower. This is due to a variety of reasons such as habitation in accessible hilly tracts, abject economic poverty, special prejudices, instruction through non-tribal medium, non-availability of local teachers, and general lack of appreciation of the values of education. Normally their enrolment at the primary and middle stages, at least, should have been in proportion to their total population but this is not the case. During the Fourth Plan, there was no well-thought and premeditated scheme tailored to the needs of this section. In the Fifth Plan, however, apart from reserving a sum of Rs. 3.74 crores for setting up of Ashram Schools from the general education budget schemes for revision of curriculum and writing of text books specially for girls and the children of the Scheduled Caste and Scheduled Tribe population and special incentive measures for teachers and pupils have also been proposed.

Improvement of Educational Planning Process and Evaluation

158. Since planning has come to stay as a permanent feature, it is necessary that the State should adopt new techniques and improved methodology of planning. In this regard guidance and training facilities offered by the National Staff College of Educational Planners and Administrators should be taken advantage of and techniques of scientific management like system analysis, input-output studies, operation research and programme budgeting should be introduced. Flow of statistical information is of basic importance to realistic planning and plan implementation. It is necessary to undertake periodic surveys of various educational problems to have the necessary feed-back for corrective action. Audit and evaluation which have received practically no attention will be emphasized to prevent distortion of plan priorities and help remove the bottlenecks. It is proposed to set up an effective Audit and Evaluation Organisation. Structural changes designed to assist plan implementation have also been proposed in the Plan.

Annexure I
Information on Enrolment

Item	Enrolment (in lakhs)				Enrolment as % of the age-group		
	1968-69 (position)	1973-74 (anticipated)	1978-79 (likely position)	1974-79 (target of Additional enrolment for Fifth Plan.)	1968-69 (position)	1973-74 (likely position)	1978-79 target
1	2	3	4	5	6	7	8
I. Classes I—V							
Boys ..	12.04	13.23	17.38	4.15	88%	90%	105%
Girls ..	6.36	7.15	9.50	2.35	47%	50%	65%
Total ..	18.40	20.38	26.88	6.50	67.6%	70%	85%
II. Classes VI-VIII							
Boys ..	2.61	2.71	4.18	1.47	40%	35%	
Girls ..	0.67	1.09	1.89	0.80	8%	14%	
Total ..	3.28	3.80	6.07	2.27	24%	24.5%	58.2%
III. Classes IX-XI							
Boys ..	1.30	1.70	2.40	0.70	19.8%	23%	30%
Girls ..	0.21	0.40	0.74	0.34	3.2	6.0	10%
Total ..	1.50	2.10	3.14	1.04	11.5%	15%	20%

Item	Enrolment (in lakhs)				Enrolment as % of the age-group		
	1968-69 (position)	1973-74 (anticipated)	1978-79 likely posi- tion)	1974-79 (target of Additional enrolment for Fifth Plan)	1968-69 (position)	1973-74 (likely position)	1978-79 target
1	2	3	4	5	6	7	8

IV. Enrolment in part-time

A. Middle Schools

Boys (No part-time in Vogue )	..	..	0.25	0.25	..	..	..
Girls	..	..	0.15	0.15	-	..	..
Total	..	..	0.40	0.40	..	..	..

B. Higher Secondary Schools

Boys .. (No teaching provision)

Girls

Total

V. College Stage

Enrolment (000'S)

(a) Arts, Science, Commerce and Law.	0.37	0.51	..	..	2%	2%	2.5%
(b) Science Courses	0.14	0.19	-	..	1%	1%	1.5%
(c) Correspondence Courses.	Nil	Nil	..	..	..	..	1%

Annexure II
Trained and Untrained Teachers in Institutions

Item	Total number of teachers				Percentage of trained teachers			
	1968-69 (position)	1973-74 (position)	1978-79 (target)	1974-79 additional for Fifth Plan	1968-69 (position)	1973-74 (likely position)	1978-79 (target)	1974-79 (Addl. for Fifth Plan)
1	2	3	4	5	6	7	8	9
(i) Primary Schools ..	54,125	68,900	90,200	22,200	70	85	95	15
(ii) Middle Schools ..	13,557	19,000	31,600	12,600	29	32	40	8
(iii) High Schools ..	14,005	20,000	20,800	800	50	60	72	12

Annexure III
Number of Institutions

Type of Institutions	1968-69 (position)	1973-74 (likely position)	1978-79 (target)	1974-79 (additional for the 5th Plan)
1	2	3	4	5
Institutions—				
(i) Primary Schools ..	26,381	28,500	33,900	5,400
(ii) Middle Schools ..	3,881	4,760	6,760	2,000
(iii) High/Higher Secondary Schools.	1,424	1,800	1,825	25
Teachers' Training—				
(i) Training Schools ..	67 (with E.T. Schools).	96 (30 for one 66 batch only) Existing 46+50 opened in 1973-74. The existing 46 do not include the E. T. Schools now abolished out of the new 50 opened in 1973-74 only 20 will be retained from 1974-75. (E. T. Schools abolished ).	..	..
(ii) Enrolment ..	4,692	4,307	13,000	8,693
(iii) Output ..	4,680	4,291	13,000	8,709
Teachers' Training Colleges—				
(i) Teachers' Training Colleges	5	6	6	..
(ii) Enrolment ..	606	833	960	127
(iii) Output ..	601	830	960	130

Annexure IV
Sub-head wise Progress of Expenditure in the Fourth Plan Education

(Rs. in lakhs)

Sub-head	1969-74		1969-70		1970-71		1971-72		1972-73		1973-74	
	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.	Outlay	Exp.
	Elementary	.. 712'00	759'84	20'04	25'74	65'43	73'14	140'93	163'92	198'60	232'21	264'41	264'41
Secondary	.. 295'00	348'11	10'89	20'87	43'11	45'02	29'45	53'39	22'56	117'98	111'02	111'02
Higher Education	.. 398'00	337'37	33'84	33'85	56'42	50'74	119'39	76'80	92'95	82'06	94'17	94'17
Other Programme	.. 14'00	34'00	..	0'04	..	..	3'11	9'73	5'55	11'82	13'30	13'30
Total	.. 1,419'00	1,479'32	64'77	80'50	164'96	168'90	292'88	303'84	319'66	444'07	482'90	482'90

Annexure V
Programme-wise outlay and expenditure
General Education

State—Orissa

(Rs. in lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during Fourth Plan	Fifth Plan total outlay	Annual Plan 1974-75 outlay	Remarks
1	2	3	4	5	6	7	8	9
(I) General Education								
1	Elementary Education—							
	(a) State sector	682.48	252.33	252.33	733.96	282.27	144.10	
	(b) Minimum Needs	..	..	..	..	5,990.00	1,887.965	
2	Secondary Education	284.97	105.73	105.73	336.34	572.00	136.64	
3	University Education	398.00	94.17	94.17	337.37	1,065.00	290.44	
4	Teachers' Training—							
	(a) Elementary	29.52	12.08	12.08	25.88	217.73	104.10	
	(b) Secondary	10.03	5.29	5.29	11.77	28.00	9.10	
5	Social Education	..	..	..	..	..	..
6	Other Educational Programme..	14.00	13.30	13.30	34.00	141.00	22.60	
	Total	1,419.00	482.90	482.90	1,475.32	8,796.00	2,594.945	

Annexure VI

*Physical and Financial targets for Fifth Plan Including
Minimum Needs Programme*

Annexure
Physical and financial targets for Fifth Plan

Sl. No.	Programme/ Schemes	1974-79				1974-75		
		Physical	Total outlay	Capital outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
ELEMENTARY EDUCATION—MINIMUM NEEDS PROGRAMME								
Age-group 6—11								
1 Opening of Schools—								
	(i) New Schools ..	5,400	..	..	..	1,080	..	..
	(ii) Upgradation of one teacher, three-class schools.	10,000	..	..	..	1660	..	..
	(iii) Additional class rooms.	900	..	..	..	180	..	..
2 Appointment of teachers—								
	i (a) Full-time teachers (teacher-pupil ratio 1:30).	21,700	1,546.08	..	..	4,000	480.00	..
	(b) Non-teacher cost at 15 per cent of the teacher cost.	..	231.91	..	..	..	72.00	..
3 INCENTIVES								
	(i) Text-Books (50 per cent of additional enrolment).	3.25 lakhs children	48.315	..	..	0.60	15.00	..
	(ii) Uniform for girls at Rs. 10 per girl per year.	2.35 lakhs children	69.80	..	..	0.435	21.75	..
	(iii) Quarters for women teachers at Rs. 10,000, (50 per cent of 1/3).	3650	365.00	365.00	..	680	68.00	68.00
	(iv) Pre-School Development.	..	59.80	..	..	..	11.96	..
	(v) Advance increment for acquiring proficiency in tribal language and dialects, etc.	..	3.00	..	..	..	0.60	..
	(vi) Athletic meets at Panchayat Headquarters at Rs. 250 per year.	3826	47.825	..	..	..	9.565	..
	(vii) Excursion	..	10.00	..	..	..	2.00	..

VI

including Minimum Needs Programme

1975-76			1976-77			1977-78			1978-79		
Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capital	Physi- cal	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
1,080	..	..	1,080	..	..	1,080	..	..	1,080	..	..
2,000	..	..	2,340	..	..	2,000	..	..	2,000	..	..
180	..	..	180	..	..	180	..	..	180	..	..
4,340	416.64	..	4,680	336.96	..	4,340	208.32	..	4,340	104.16	..
..	62.50	..	..	50.54	..	..	31.25	..	..	15.62	..
0.651 Children	13.02	..	0.702 Children	10.53	..	0.651 Children	6.51	..	0.651 Children	3.255	..
0.470 Children	18.80	..	0.505 Children	15.15	..	0.470 Children	9.40	..	0.470 Children	4.70	..
730	73.00	73.00	780	78.00	78.00	730	73.00	73.00	730	73.00	73.00
..	11.96	..	..	11.96	..	..	11.96	..	..	11.96	..
..	0.60	..	..	0.60	..	..	0.60	..	..	0.60	..
..	9.565	..	..	9.565	..	..	9.565	..	..	9.565	..
..	2.00	..	..	2.00	..	..	2.00	..	..	2.00	..

Sl. No.	Programme/Scheme	1974-79				1974-75		
		Physical	Total outlay	Capital outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
	(viii) Teachers Welfare at Rs. 20,000 for each District School Board.	..	13.00	..	..	..	2.60	..
	(ix) Mid-day meals to 1/3rd of enrolment at Rs. 5 per year per student.	40 lakh students.	200.00	..	..	7.10 students.	35.50	..
4	BUILDINGS							
	(i) For backward areas at 50 per cent grant to 75 per cent schools at Rs. 15,000 per one school building.	2,550	191.25	..	..	500	37.50	..
	(ii) 25 per cent grant to 25 per cent schools in backward areas at Rs. 15,000 per one school building.	850	31.875	..	..	170	6.375	..
	(iii) 25 per cent grant to 60 per cent additional class rooms in backward areas including upgraded schools at Rs. 10,000 per school for one class room.	3,600	90.00	..	..	720	18.00	..
	AGE-GROUP 11-14							
5	Opening of Schools—							
	(i) New school teachers Pupil ratio 1:18 at 5 teachers per school.	2,000	..	..	..	600	..	..
	(ii) Additional class rooms in more populous villages and urban areas.	2,600	..	..	..	600	..	..
6	Appointment of teachers.							
	(a) Teacher cost ..	12,600	1,043.00	..	..	3,600	463.60	..
	(b) Non-teacher cost at 20 per cent of the teacher cost.	..	208.00	..	..	..	92.30	..

1975-76			1976-77			1977-78			1978-79		
Physical	Outlay	Physical	Physical	Outlay	Capital	Physical	Outlay	Capital	Physical	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
..	2.60	..	..	2.60	..	..	2.60	..	..	2.60	..
7.50 students.	37.50	..	8.00 students.	40.00	..	8.50 students.	42.50	..	8.90 students.	44.50	..
5.50	41.25	..	500	37.50	..	500	37.50	..	500	37.50	..
1.70	6.375	..	1.70	6.375	..	1.70	6.375	..	1.70	6.375	..
720	18.00	..	720	18.00	..	720	18.00	..	720	18.00	..
500	..	..	300	..	..	300	..	..	300	..	..
500	..	..	500	..	..	500	..	..	500	..	..
3,000	303.60	..	2000	147.00	..	2000	92.00	..	2000	3680	..
..	60.20	..	..	29.50	..	..	18.50	..	..	7.50	..

Serial No.	Programme/Scheme	1974-79				1974-75		
		Physical	Total Outlay	Capital Outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
7	(a) Part-time class teacher (teacher pupil) ratio 1:40 for 20 per cent of the total age-group population.	9100	759.00	..	..	3000	336.00	..
	(b) Non-teacher cost at 5 per cent of the teachers cost.	..	38.00	..	..	..	16.80	..
8	Continuation classes education 5 per cent of the age group, Rs. 1,000 for unit. Each unit consisting of 6-7 student.	14600 Units	146.00	..	..	26.00	2600	..
9	Incentives—							
	(i) Text Book at Rs. 10, per student per year.	1.134 lakhs Children	37.94	..	..	0.324	16.20	..
	(ii) Uniform for girls at Rs. 10 per year per student.	80,000 Students	26.67	..	..	22900	11.45	..
	(iii) Attendance bonus at Rs. 30, per year, per student.	80000	80.00	..	..	22900	34.35	..
	(iv) Quarters of women teachers—							
	(a) Teachers quarters 50 per cent of 1/3rd at Rs. 10,000, per quarters.	2100	210.00	210.00	..	610	61.00	61.00
	(b) Quarters for teachers of continuation classes.	1500	150.00	150.00	..	500	50.00	50.00
	(v) Advance increment for acquiring proficiency in tribal languages and dialects.	..	2.00	..	..	..	0.40	..
	(vi) Athletic meets at Panchayat Samiti headquarters at Rs. 600, per year.	..	9.42	..	..	..	1.884	..
	(vii) Excursion	..	6.25	..	..	..	1.25	..

1975-76			1976-77			1977-78			1969-70		
Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capi- tal	Phy s cal	Outlay	Capi- tal
10	11	12	13	14	15	16	17	18	19	20	21
2500	220.00	..	2460	157.40	..	1140	45.60	..	..	..	..
..	11.00	..	..	7.90	..	..	2.30	..	..	..	..
2000	30.00	..	3000	30.00	..	3000	30.00	..	3000	30.00	..
0.27	10.80	..	0.18	5.54	..	0.18	3.60	..	0.18	1.80	..
19,000	7.60	..	12700	3.81	..	12700	2.54	..	12700	1.27	..
19,000	22.80	..	12700	11.44	..	12700	7.60	..	12700	3.81	..
500	50.00	50.00	330	33.00	33.00	330	33.00	33.00	330	33.00	33.00
420	42.00	42.00	400	40.00	40.00	180	18.00	18.00	..	..	..
..	0.40	..	..	0.40	..	..	0.40	..	..	0.40	..
..	1.884	..	..	1.884	..	..	1.884	..	..	1.884	..
..	1.25	..	..	1.25	..	..	1.25	..	..	1.25	..

Sl. No.	Programme/Scheme	1974-75				1974-75		
		Physical	Total outlay	Capital outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
	(viii) Teachers Welfare at Rs. 1,000 to 13 districts School Boards.	..	6.50	..	..	..	1.30	..
	(ix) Book bank at Rs. 22/per set for 20 sets to each School at Panchayat Samiti Headquarters.	..	1.48	..	..	..	0.296	..
	(x) Tribal Ashram Schools.	..	374.00	This amount will be transferred to the T. & R. W. Ashram Schools in the tribal pockets of 8				
10	Buildings							
	(i) 50 per cent of the grant to 75 per cent Schools in the backward areas at Rs. 25,000 per School.	1,200	150.00	..	..	240	30.00	..
	(ii) 25 per cent at the grants to 25 per cent of the School in backward areas.	400	25.00	..	..	80	5.00	..
	(iii) 25 per cent of the grant for extension of Class room in 1000 existing Schools.	1,000	25.00	..	..	80	5.00	..
	Total Minimum needs.	..	*5,990.00	725.00	..	..	1887.965	179.00
11	Elementary State Plan.							
	(1) Text Book Press.	..	100.00	..	..	..	31.50	..
	(ii) Institution of the District School Boards.	13 Boards	..	..	..	6 Boards	..	..
	(a) Staff	..	299	38.25	..	..	138	3.80
	(b) Buildings	..	13 Buildings	6.50	6.50	..	6 Buildings	3.00

* This includes Rs. 374.00 lakhs for Tribal Ashram Schools for which no

1975-76			1976-77			1977-78			1977-78		
Physi- cal	Outlay	Physi- cal	Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capital	Physi- cal	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
..	1.30	..	..	1.30	..	..	1.30	..	..	1.30	..
..	0.296	..	..	0.296	..	..	0.296	..	..	0.296	..

Department of the State Government for Establishment of
back-ward Districts.

240 30.00 .. 240 30.00 .. 240 30.00 .. 240 30.00 ..

80 5.00 .. 80 5.00 .. 80 5.00 .. 80 5.00 ..

80 5.00 .. 80 5.00 .. 80 5.00 .. 80 5.00 ..

.. 1,474.34 165.00 .. 1,087.90 151.00 .. 715.25 124.00 .. 450.545 106.00

.. 23.50 18.30 13.23 13.47 ..

7
Boards

161 835 8.51 8.70 8.89 ..

7
Buildings 3.50 3.50

year wise break up has been shown.

Sl. No.	Programme/Scheme	1974-79				1974-75		
		Physical	Total outlay	Capital outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
	(iii) State Institute of Education.—							
	(a) Pay of the Staff	..	4.60	..	..	..	0.86	..
	(b) Research	..	7.50	..	..	..	1.50	..
	(c) Contingencies	..	1.90	..	..	..	0.38	..
	(iv) Developed Schools—							
	(a) Primary (6—11) at Rs. 1,000.	0	2.580	..	..	570	5.70	..
	(b) Middle Schools 11—14 at Rs. 5,000.	320	16.00	..	..	64	3.20	..
	12. Organisation Administration and Supervision.							
	(i) Directorate							
	(a) Addl. Director	1	1.02	..	..	1	0.18	..
	(b) Ministerial and class IV staff.	31	4.63	..	..	22	0.66	..
	(c) Contingencies	..	0.90	..	..	..	0.10	..
	(d) T. A.	..	0.19	..	..	..	0.03	..
	(e) Furniture and equipments.	..	0.55	..	..	..	0.45	..
	(ii) Zonal level							
	(a) Joint Director ..	3	2.12	..	..	1	0.15	..
	(b) Ministerial and class IV staff.	78	8.04	..	..	26	0.59	..
	(c) Contingencies ..	..	0.44	..	..	..	0.04	..
	(d) Jeeps ..	3	0.75	..	..	1	0.25	..
	(e) Furnitures ..	..	0.30	..	..	..	0.10	..
	(f) Buildings ..	..	..	..	..	1	..	..
	Office ..	3	3.00	3.00	..	..	1.00	1.00
	Quarters ..	3	..	..	..	1	..	..

1975-76			1976-77			1977-78			1978-79		
Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capital	Physi- cal	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
..	0.89	..	..	0.92	..	..	0.95	..	..	0.98	..
..	1.50	..	..	1.50	..	..	1.50	..	..	1.50	..
..	0.38	..	..	0.38	..	..	0.38	..	..	0.38	..
570	5.70	..	570	5.70	..	570	5.70	..	570	5.70	..
64	3.20	..	64	3.20	..	64	3.20	..	64	3.20	..
..	0.19	..	..	0.20	..	..	0.22	..	..	0.23	..
9	0.97	..	..	0.98	..	..	1.00	..	..	1.02	..
..	0.20	..	..	0.20	..	..	0.20	..	..	0.20	..
..	0.04	..	..	0.04	..	..	0.04	..	..	0.04	..
..	0.10	..	..	..	..	..	..	..	..	..	..
2	0.46	..	..	0.48	..	..	0.51	..	..	0.52	..
52	1.79	..	..	1.84	..	..	1.88	..	..	1.94	..
..	0.10	..	..	0.10	..	..	0.10	..	..	0.10	..
2	0.50	..	..	..	..	..	..	..	..	..	..
..	0.20	..	..	..	..	..	..	..	..	..	..
2	} 2.00	2.00	..	..	..	..	..	..	..	..	..
..		
2			..	..	..	..	..	..	..	..	..

Sl. No.	Programme/Scheme	1974-79				1974-75		
		Physical	Total	Capital	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9

(iii) District level—

(a) Inspector of Schools.	8	3.55	..	..	4	0.37	..
(b) Ministerial and Class IV staff.	200	20.53	..	..	100	2.17	..
(c) Contingencies ..	..	0.36	..	..	..	0.04	..
(d) Furniture and type writer.	..	0.52	..	..	..	0.26	..
(e) T. A.	..	0.54	..	..	..	0.06	..
(f) Jeep	..	2.00	..	..	..	1.00	..
(g) Buildings—							
Office	8	8.00	8.00	..	4	4.00	4.00
Quarters	8				4		

(iv) Subdivisional level—

(a) District Inspector of Schools.	16	3.11	..	..	4	0.21	..
(b) Ministerial and Class IV staff including 28 attendance officers.	312	30.02	..	..	78	2.04	..
(c) Contingencies (recurring).	..	0.90	..	..	..	0.06	..
(d) T. A.	..	1.15	..	..	..	0.08	..
(e) Furniture and type writer.	..	1.45	..	..	..	0.34	..
(f) Jeep	..	4.00	..	..	..	1.00	..
(g) Buildings—							
Office	16	11.40	11.40	..	4	2.70	2.70
Quarters	40				10		

(v) Tahasil level—

(a) Dy. Inspector of Schools.	125	20.39	..	..	25	1.31	..
(b) Ministerial and Class IV staff.	500	27.26	..	..	100	1.80	..
(c) Contingencies (recurring).	..	3.75	..	..	..	0.25	..

1975-76			1976-77			1977-78			1978-79		
Physical	Outlay	Physical	Physical	Outlay	Capital	Physical	Outlay	Capital	Physical	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
4	0.75	..	..	0.78	..	..	0.81	..	..	0.84	..
100	4.40	..	..	4.52	..	..	4.65	..	..	4.79	..
..	0.08	..	..	0.08	..	..	0.08	..	..	0.08	..
..	0.26	..	..	..	..	..	..	..	..	..	..
..	0.12	..	..	0.12	..	..	0.12	..	..	0.12	..
..	1.00	..	..	..	..	..	..	..	..	..	..
4 4	} 4.00	4.00	..	..	..	..	..	..	..	..	..
4	0.43	..	4	0.66	..	4	0.89	..	..	0.92	..
78	4.11	..	78	6.26	..	78	8.49	..	..	9.12	..
..	0.12	..	..	0.18	..	..	0.24	..	..	0.30	..
..	0.16	..	..	0.24	..	..	0.32	..	..	0.35	..
..	0.34	..	..	0.34	..	..	0.34	..	..	0.10	..
..	1.00	..	..	1.00	..	..	1.00	..	..	..	..
4 10	} 2.70	2.70	4 10	} 2.70	2.70	4 10	} 2.70	2.70	..	0.60	0.60
25	2.66	..	25	4.04	..	25	5.46	..	25	6.92	..
100	3.61	..	100	5.44	..	100	7.28	..	100	9.13	..
..	0.50	..	..	0.75	..	..	1.00	..	..	1.25	..

Sl. No.	Programme Scheme	1974-79				1974-75		
		Physical	Total Outlay	Capital Outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
	(d) T. A. .. ..	..	3.00	..	..	..	0.20	..
	(e) Furniture and typewriter.	..	2.50	..	..	..	0.50	..
	(f) Buildings (office-cum-quarters.)	24	6.00	6.00	..	4	1.00	1.00
	(vi) Sub-Inspector of Schools.							
	(a) Pay of S.-I.	300	38.63	..	..	60	2.48	..
	(b) T. A. .. ..	..	2.70	..	..	..	0.18	..
	(vii) State Level							
	(a) Spl. Officer	1	0.54	..	..	1	0.10	..
	(b) Staff for 3 Sections.	28	4.14	..	..	11	0.36	..
13	Statistical Organisation.							
	(a) Directorate Level.							
	(i) Officers ..	1	0.28	..	..	1	0.05	..
	(ii) Staff ..	7	1.83	..	..	7	0.19	..
	(b) Zonal Level							
	(i) Officers ..	3	0.70	..	..	1	0.05	..
	(ii) Staff ..	12	1.83	..	..	4	0.15	..
	(c) District Level Staff	60	8.59	..	..	42	1.25	..
	(d) Sub-div. Level Staff	36	5.17	..	..	24	0.76	..
14	Audit Organisation							
	(a) Audit Supdt. ..	23	6.03	..	..	4	0.34	..
	(b) Sr. Auditor ..	218	37.34	..	..	40	2.24	..
	(c) Jr. Auditor ..	226	28.32	..	..	45	1.96	..
	(d) L. D. Clerk ..	34	2.69	..	..	7	0.18	..
	(e) Peon ..	457	30.30	..	..	91	2.04	..
	(f) Staff for Audit Estt.							
	(One) Section in the Deptt.	1 Sec.	1.75	..	..	1 Sec.	0.31	..

1975-76			1976-77			1977-78			1978-79		
Physical	Outlay	Capital	Physical	Outlay	Capital	Physical	Outlay	Capital	Physical	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
..	0.40	..	..	0.60	..	..	0.80	..	..	1.00	..
..	0.50	..	..	0.50	..	..	0.50	..	..	0.50	..
4	1.00	1.00	4	1.00	1.00	4	1.00	1.00	8	2.00	2.00
60	5.03	..	60	7.65	..	60	10.35	..	60	13.12	..
..	0.36	..	..	0.54	..	..	0.72	..	..	0.90	..
..	0.10	..	..	0.11	..	..	0.11	..	..	0.12	..
2	0.68	..	8	1.00	..	..	1.03	..	..	1.07	..
..	0.05	..	..	0.06	..	..	0.06	..	..	0.06	..
..	0.39	..	..	0.40	..	..	0.42	..	..	0.43	..
1	0.11	..	1	0.17	..	..	0.18	..	..	0.19	..
4	0.30	..	4	0.45	..	..	0.46	..	..	0.47	..
9	1.55	..	9	1.86	..	..	1.93	..	..	2.00	..
4	0.91	..	4	1.06	..	4	1.21	..	..	1.23	..
5	0.77	..	5	1.20	..	5	1.69	..	4	2.03	..
46	4.70	..	46	7.37	..	46	10.19	..	40	12.84	..
46	3.83	..	45	5.69	..	45	7.51	..	45	9.33	..
7	0.36	..	7	0.54	..	7	0.72	..	6	0.89	..
92	3.48	..	92	6.20	..	91	8.25	..	91	10.33	..
..	0.33	..	..	0.35	..	..	0.37	..	..	0.39	..

Serial No.	Programme Scheme	1974-79				1974-75		
		Physical	Total Outlay	Capital Outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
15	Training Programme							
	(a) (i) C. T. School expansion increase of intake capacity.	36	37.80	..	..	36	7.56	..
	(ii) Continuance of training Institutions opened under Special Scheme of Educated unemployed.	180	79.00	..	..	50	33.63	..
	Stipend for 2nd Year students.	5,300 students	60.00	..	..	5,000 students	60.00	..
	(iii) Summer course in 56 Units with capacity of 100 trainees.	56	14.55	..	..	56	2.91	..
	(b) Training for B. Ed.	..	26.385	..	..	..	5.185	..
16	(c) Spill over Projects.	..	1.68	1.68	..	..	1.68	1.68
17	Peripatetic teachers ..	500	18.00	..	..	100	6.00	..
18	State Share of Teacher cost.	..	212.99	..	..	..	42.59	..
19	State Share of building cost.	..	3.125	..	..	..	3.125	..
Total—Elementary (State Plan)		..	1,000.00	36.58	..	..	248.20	13.38
Total—Elementary		* ..	6,990.00	761.58	..	..	2,136.165	192.38

* This includes Rs. 374.00 lakhs under Minimum Needs Programme for Tribal

1975-76			1976-77			1977-78			1969-70		
Physical	Outlay	Capital	Physical	Outlay	Capital	Physical	Outlay	Capital	Physical	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
..	7.56	..	..	7.56	..	..	7.56	..	..	7.56	..
20	10.78	..	20	11.22	..	20	11.44	..	20	11.93	..
..
..	2.91	..	..	2.91	..	..	2.91	..	..	2.91	..
..	5.30	..	..	5.30	..	..	5.30	..	..	5.30	..
..
100	4.80	..	100	3.60	..	100	2.40	..	100	1.20	..
..	42.60	..	..	42.60	..	..	42.60	..	..	42.60	..
..
..	178.61	13.20	..	179.40	3.70	..	190.70	3.70	..	203.09	2.60
..	1,652.95	178.20	..	1,267.30	154.70	..	905.95	127.70	..	653.635	108.60

Ashram Schools for which no yearwise break up has been shown.

Serial No.	Programme/Scheme	1974-79				1974-75		
		Physical	Total outlay	Capital outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
1	SECTOR—SECONDARY EDUCATION SCHEME							
1	Expansion and improvement of Secondary Schools							
	(i) Opening of vocational High Schools in backward areas.	10	30.00	10.00	..	2	5.50	2.00
	(ii) Opening of Girls High Schools in backward pockets.		15.00	5.00	..	1	2.60	1.00
	(iii) Additional sections in existing high schools.	..	9.00	5.00	..	..	1.25	1.00
	(iv) Additional hostel facilities in backward areas and subdivision headquarters.	50 Hostels	25.00	25.00	..	10	5.00	5.00
	(v) Vocational courses in Girls High School.	..	2.00	..	..	..	0.40	..
2	Qualitative Improvement—							
	(i) Experimental comprehensive residential school.	..	15.00	5.00	..	..	2.00	2.00
	(ii) Construction of quarters for teachers in Girls Schools in backward areas.	120 Qrs.	24.00	24.00	..	24	4.80	4.80
	(iii) Provision of Text Books libraries at Rs. 1,000 per School for the Plan period.	1,800 Schools	27.00	..	..	360	5.40	..
	(iv) Incentive to women teachers.	..	5.00	..	..	..	1.00	..
	(v) Improvement of Social Education at 10,000 per School for the Plan period.	1,800 Schools	88.00	68.50	..	..	23.60	17.30
	(vi) Work experience in Agricultural and other crafts at Rs. 20 per pupil per year in selected Schools.	4,000 Students	40.00	..	..	..	8.00	..

1975-76			1976-77			1977-78			1978-79		
Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capital	Physi- cal	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
2	5.75	2.00	2	6.00	2.00	2	6.25	2.00	2	6.50	2.00
1	2.80	1.00	1	3.00	1.00	1	3.20	1.00	1	3.40	1.00
..	2.00	1.50	..	2.50	2.00	..	1.75	0.50	..	1.50	..
10	5.00	5.00	10	5.00	5.00	10	5.00	5.00	10	5.00	5.00
..	0.40	..	..	0.40	..	..	0.40	..	..	0.40	..
..	3.00	3.00	..	2.50	..	..	3.50	..	..	4.00	..
24	4.80	4.80	24	4.80	4.80	24	4.80	4.80	24	4.80	4.80
360	5.40	..	360	5.40	..	360	5.40	..	360	5.40	..
..	1.00	..	..	1.00	..	..	1.00	..	..	1.00	..
..	16.10	12.80	..	16.10	12.80	..	16.10	12.80	..	16.10	12.80
..	8.00	..	..	8.00	..	..	8.00	..	..	8.00	..

Sl. No.	Programme/ Schemes	1974-79				1974-75		
		Physical	Total outlay	Capital outlay	Foreign exchange	Physical	Outlay	Capital
1	2	3	4	5	6	7	8	9
	(vii) Promotion of curricular revision and examination reform and correspondence courses—Grants to Board of Secondary Education.	..	2.00	..	..	..	0.40	..
3	Strengthening of Administrative machinery in the Directorate level.	..	1.00	..	..	..	0.22	..
	(i) Appointment of an Deputy Director, Tech. and supporting staff.							
	One Assistant D. P. I. (Tech.).							
	4 Class III ..							
	2 Class IV ..							
4	Training of teachers							
	(1) Expansion and improvement of Existing Training Colleges.	5 Colleges	28.00	5.00	..	..	9.10	5.00
5	Spill over building projects.	..	24.12	24.12	..	..	9.12	9.12
6	Grants to Schools—							
	(i) Recognised High Schools.	..	4.88	..	..	..	0.70	..
	(ii) Higher Secondary Schools.	30 Schools	195.00	150.00	..	..	37.00	30.00
7	Talent Scholarships ..	750	24.00	..	..	..	1.45	..
8	Development of selected Schools.	..	16.00	..	..	..	3.20	..
9	Taking over of Tribal Schools.	59	25.00	25.00	..	..	25.00	25.00
	Total Secondary ..	..	600.00	346.62	..	..	145.74	102.22

1975-76			1976-77			1977-78			1978-79		
Physical	Outlay	Capital	Physical	Outlay	Capital	Physical	Outlay	Capital	Physical	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21
..	0.40	..	..	0.40	..	..	0.40	..	..	0.40	..
..	0.17	..	..	0.18	..	..	0.20	..	..	0.23	..
..	4.35	..	..	4.60	..	..	4.85	..	..	5.10	..
..	7.00	7.00	..	7.25	7.25	..	0.75	0.75	..	..	..
..	0.80	..	..	1.00	..	..	1.10	..	..	1.28	..
..	38.00	30.00	..	39.00	30.00	..	40.00	30.00	..	41.00	30.00
..	3.25	..	..	5.10	..	..	6.90	..	..	7.30	..
..	3.20	..	..	3.20	..	..	3.20	..	..	3.20	..
..
..	111.42	67.10	..	115.43	64.85	..	112.80	56.85	..	114.61	55.60

Sl. No.	Programme/Scheme	1974-79				1974-75		
		Physical	Total	Capital Expenditure	Foreign Exchange	Physical target	Outlay	Capital
1	2	3	4	5	6	7	8	9

HIGHER EDUCATION

1. Expansion and Improvement of Government Colleges--								
	(i) Opening of Evening Shifts in 3 Government Colleges at Rs. 50,000 per College per year.	3 Colleges	6.00	..	..	..	0.50	..
	(ii) Correspondence courses in Arts and Commerce in Government Colleges.	3 Centres	3.00	..	..	3	0.60	..
	(iii) Provision in buildings to eliminate outstanding deficiencies in Government Colleges.	35 Colleges.	450.00	450.00	..	35	150.00	150.00
	(iv) Provision of apparatus equipments and library facilities to eliminate accumulated deficiencies in Government Colleges.	35 Colleges.	60.00	..	..	35	12.00	..
	(v) Introduction of new courses and additional classes to meet the normal growth of enrolment.	35 Colleges.	25.00	..	..	35	2.00	..
	(vi) Introduction of Semester system and Examination Reforms.	35 Colleges.	50.00	..	..	35	10.00	..
	(vii) Spillover building projects.	12 Colleges.	93.68	93.68	..	..	39.15	39.15
2 Grants to non-Govt. Colleges for Development.								
	(i) General improvement of non-Government College.	46 Colleges.	46.00	..	..	46	9.00	..

1975-76			1976-77			1977-78			1978-79		
Physical target	Outlay	Capital	Physical	Outlay	Capital	Physical target	Outlay	Capital	Physical target	Outlay	Capital
10	11	12	13	14	15	16	17	18	19	20	21

1	1'00	--	1	1'50	..	..	1'50	..	..	1'50	..
..	0'60	..	..	0'60	..	..	0'60	..	--	0'60	..
..	150'00	150'00	..	100'00	100'00	..	50'00	50'00	..	..	..
..	12'00	..	..	12'00	..	..	12'00	..	..	12'00	..
..	3'00	..	..	4'00	..	..	5'00	..	..	6'00	..
..	10'00	..	..	10'00	..	..	10'00	..	..	10'00	..
..	30'00	30'00	..	24'53	24'53	..	..	..	..	..	..
..	9'00	..	..	9'00	..	..	9'00	..	..	10'00	..

Sl. No.	Programme/Scheme	1974-79				1974-75		
		Physical	Total outlay	Capital Expenditure	Foreign exchange	Physical target	Outlay	Capital
1	2	3	4	5	6	7	8	9
	(ii) Grants for job-oriented courses in selected Colleges.	46 Colleges.	23.00	..	..	10	5.00	..
	(iii) Recurring addl. grants due to recognition of new classes and new courses.	46 Colleges.	29.00	..	..	46	5.80	..
	(iv) Matching contribution towards U. G. C. assisted projects in non-Government Colleges.	46 Colleges.	46.00	46.00	..	46	9.20	9.20
3	Qualitative Improvement in Government Colleges.							
	(i) Improving teacher competencies by probationers' Training Refreshers Courses.	1 Training Centre.	12.85	5.00	..	1	3.50	3.00
	Provision of scholarship for Higher Training & research.	50 Scholarships.	7.15	..	..	..	1.00	..
	(ii) Job-oriented courses in Government Colleges.	35 Colleges.	32.00	12.00	..	10	6.00	4.00
	(iii) Students. Counselling and Guidance.	35	10.00	..	..	..	2.00	..
	(iv) Talent scholarships.	675 Scholarships.	10.17	..	..	135	1.13	..
4	Strengthening of administration and supervision (One Addl. D. P. I., one Joint D. P. I., with supporting Addl. staff in the Directorate.	14 Posts.	3.30	..	..	14	0.56	..

1975-76			1976-77			1977-78			1978-79		
Physi- cal	Outlay	Capi- tal	Physi- cal	Outlay	Capi- tal target	Physi- cal	Outlay	Capital	Physi- cal.	Outlay target	Capital
10	11	12	13	14		16	17	18	19	20	21
10	5.00	..	10	5.00	..	10	5.00	..	6	3.00	..
..	5.80	..	..	5.80	..	..	5.80	..	..	5.80	..
..	9.20	9.20	..	9.20	9.20	..	9.20	9.20	..	9.20	9.20
..	3.00	2.00	..	1.50	..	..	2.00	..	..	.85	..
..	1.00	..	..	1.15	..	..	2.00	..	..	2.00	..
10	5.00	2.00	10	6.00	2.00	5	7.00	2.00	..	8.00	..
..	2.00	..	..	2.00	..	..	2.00	..	..	2.00	..
135	2.26	..	135	2.26	..	135	2.26	..	135	2.26	..
..	0.61	..	..	0.66	..	..	0.71	..	..	0.76	..

Sl. No.	Programme/Scheme	1974-79				1974-75		
		Physical	Total outlay	Capital outlay	Foreign exchange	Physical target	Outlay	Capital
1	2	3	4	5	6	7	8	9
5 Grants to the Universities—								
	(i) For examination Reforms introduction of Semester system and syllabus reforms & other development projects approved by Government.	3 Universities	15.00	..	..	3	3.00	..
	(ii) Campus development projects approved by Government.	3 Universities.	97.85	97.85	..	3	20.00	20.00
6	Grants to the Institute of Physics.	..	50.00	24.00	..	..	10.00	4.00
Total—Higher Education		..	1065.00	728.53	..	..	290.44	229.35
Other Educational Programme.								
1	Promotion of games and sports (direct expenditure and grants).	..	100.00	..	..	..	15.00	..
2	Library Development	Expansion of State Library at Bhubaneswar.						
	Staff, books, furniture and equipment.	5 posts	23.00	..	..	..	6.60	..
	Building	.. 10	10.00	10.00	..	..	..	..
3	Adult Literacy	.. ..	8.00	..	..	..	1.00	..
Total—Other Educational Programmes.		..	141.00	10.00	..	..	22.60	..
Grand Total for the 5th Plan.		..	8796.00	1846.73	..	..	2594.945	523.95

1975-76			1976-77			1977-78			1978-79		
Physical target	Outlay	Capital	Physical	Outlay	Capital	Physical target	Outlay	Capital	Physical target	Outlay	Capital
	11	12	13	14	15	16	17	18	19	20	21
..	3.00	..	..	3.00	..	..	3.00	..	..	3.00	..
..	20.00	20.00	..	20.00	20.00	..	20.00	20.00	..	17.85	17.85
..	10.00	5.00	..	10.00	5.00	..	10.00	5.00	..	10.00	5.00
..	282.47	218.20	..	228.20	160.73	..	157.07	86.20	..	106.82	34.05
..	20.00	..	..	20.00	..	..	20.00	..	..	25.00	..
..	3.60	..	..	3.60	..	..	4.60	..	..	4.60	..
..	3.00	3.00	..	3.00	3.00	..	2.00	2.00	..	2.00	2.00
..	1.50	..	..	1.50	..	..	2.00	..	..	2.00	..
..	28.10	3.00	..	28.10	3.00	..	28.60	2.00	..	33.60	2.00
..	2074.94	466.50	..	1639.03	383.28	..	1204.42	272.75	..	908.665	200.25

(ii) CULTURAL PROGRAMMES

The activities of the Cultural Affairs Department covered the development schemes of Museum, Archives, Archaeology, Dance, Drama, Music, Art, Literature, Sports and Games.

2. During the Fifth Plan an outlay of Rs. 123.50 lakhs has been proposed for implementation of developmental schemes on Museology, Archaeology, Archives, Sports and Games in the State. The entire programme is one of expansion of existing schemes.

Review of progress up to the end of the 4th Plan

3. The outlay for the Fourth Plan schemes of this Department was originally fixed at Rs. 46.00 lakhs. But in the progress of implementation of the Plan, additional commitments grew and the expenditure is expected to reach Rs. 53.40 lakhs.

DIRECTORATE OF CULTURAL AFFAIRS

4. Apart from other duties, the Directorate has edited and published six books. Seven more books have been edited and are under print. It is expected that a total number of 13 books will be released by the end of the Fourth Plan.

EXPANSION OF THE ORISSA STATE MUSEUM

5. New galleries were opened in the State Museum during the Fourth Plan. These are Godavarish, Gopabandhu and Madhusudan Galleries, Art and Craft Gallery, Pre-history Gallery, Birds Gallery, and Samant Chandra Sekhar Gallery. Collections made during this period have enriched the Orissa State Museum. Want of space has prevented their proper display.

EXPANSION OF THE ORISSA STATE ARCHAEOLOGY

6. Conservation work of the following monument was taken up and completed:—

- (1) Swapneswar group of temples in the district of Dhenkanal
- (2) Sahi Mosque of Barabati Fort in Cuttack Town
- (3) Ganjam Fort
- (4) Chandi Temple at Kenduli
- (5) Buddhanath temple at Garadipanchan
- (6) Somanath temple at Bishnupur
- (7) Amareswar temple at Nimapara

7. Besides the above, a large number of temples have been protected, watchmen appointed and preliminaries for conservation taken up.

EXPANSION OF THE STATE ARCHIVES

8. The construction work of the State Archives building has been completed. Due to want of accommodation it was not possible to give attention for collection of records from various parts of the State during the Fourth Plan period and this deficiency has been removed.

GRANTS TO CULTURAL ASSOCIATIONS

9. Government have been giving financial assistance to encourage cultural institutions and Associations. Three Akademies, namely, Orissa Sahitya Akademi, Orissa Sangeet Natak Akademi and the Orissa Lalit Kala Akademi are given grants for their various activities in the field of development of dance, drama, music, art and literature. Memorials have been built up in the names of eminent writers and poets.

DEVELOPMENT OF MODERN INDIAN LANGUAGES

10. The publication of Sarala Mahabharat taken up as far back as 1960, has been completed. The deluxe edition of the works of Kavi Samrat Upendara Bhanja is expected to be released to the market by end of Fourth Plan period. Important publications like "The Way We Live In" and "History of Freedom Movement in India" have been translated into regional languages. A small Oriya encyclopaedia has already been compiled and published. The work of compilation of the larger one is in progress. The State Government has been giving grant to the Utkal University to continue scheme.

PROMOTION OF PHYSICAL EDUCATION AND SPORTS

11. The Orissa Council of Sports which has been constituted by Government to advise in the matter of development of sports and games in the State, has taken up execution of various schemes sponsored by the Ministry of Education. The schemes like construction of stadiums, establishment of rural sports centres, development of play fields, flood lighting of playgrounds, appointment of coaches, etc. are, some projects where some slight achievement is noticeable.

OBJECTIVES AND TARGETS OF THE 5TH PLAN

12. There is a large collection of rare and valuable palm leaf and other manuscripts which are to be published through the publication wing of the Directorate. To start with it is proposed to take up publication of about 40 such manuscripts at a total cost of Rs. 2 lakhs during the 5th Five-Year Plan.

13. Two important public halls—Rabindra Mandap and Kala Mandap need further improvement and proper maintenance with modern amenities. It is estimated that Rs. 2 lakhs will be necessary for the purpose.

14. To cope up with the additional volume of work that will arise in implementing different plan schemes it is necessary to strengthen the staff both in the Department and the Directorate of Cultural Affairs at a total cost of Rs. 2 lakhs.

GRANTS FOR DEVELOPMENT OF CULTURAL ACTIVITIES

15. The proposals in the 5th Plan period envisage provision of Rs. 24 lakhs to promote cultural activities by giving grants to Cultural Organisations in the State, Rs. 3 lakhs for Modern Indian Languages, Rs. 6 lakhs to the State Museum, Rs. 40 lakhs for expansion of Archaeology and Rs. 5 lakhs for Archives and Rs. 39.50 lakhs for Sports. The total proposed outlay is Rs. 123.50 lakhs. Schemewise details of Fourth Plan expenditure and Fifth Plan outlay are shown in Annexure I.

16. The present administrative set-up of this sector, comprises a Department, Heads of Department and few subordinate offices located at State headquarters. The schemes proposed to be implemented for the development of different activities under the Cultural Programme, Modern Indian Language, Physical Education and Sports need administrative support at the regional and district level.

Annexure I

(Rs. in lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during Fourth Plan	Fifth Plan total outlay	Annual Plan 1974-75 outlay	
1	2	3	4	5	6	7	8	
V (i) Physical Education Sports M. I. L.								
1	Development of Modern Indian Language.	2.50	0.35	0.35	1.96	3.00	0.60	
2	Physical Education & Sports ..	3.50	2.60	2.60	7.92	39.50	5.00	
	Total	6.00	2.95	2.95	9.88	42.50	5.60	
(ii) Cultural Programme								
1	Expansion of the Department and Directorate of Cultural Affairs.	3.00	1.32	1.32	2.18	6.00	0.75	
2	Expansion of the State Museum ..	4.50	0.65	0.65	3.45	6.00	0.75	
3	Expansion of the State Archaeology	3.00	0.55	0.55	2.40	40.00	6.00	
4	Expansion of the State Archives ..	7.00	1.32	1.32	14.01	5.00	0.50	
5	Grants to Cultural Association ..	15.00	4.31	4.31	20.87	24.00	5.00	
6	District Gazetteer ..	7.50	Scheme was transferred to Central Sector from 1970-71 Expenditure of Rs. 0.61 lakhs was incurred under Plan in 1969-71					
	Total—Cultural Programme ..	40.00	8.15	8.15	43.52	81.00	13.00	
	Grant Total—	46.00	11.10	11.10	53.40	128.50	18.60	

CHAPTER 212

TECHNICAL EDUCATION AND CRAFTSMAN TRAINING

(i) TECHNICAL EDUCATION

The recession faced by the Technical Education in the country from 1967-68 necessitated closure of the Polytechnic at Bhadrak and Kendrapara and a reduction in the annual admission figures in all the conventional courses in the other five State Polytechnics. The trend of admissions, however, picked up very fast during 1971-72 and 1972-73 with the introduction of diversification programme and conversion of both conventional as well as diversified courses into the sandwich pattern under semester system as recommended by the All-India Council. The following table would give an indication of this trend over last six years.

	Annual admission strength	Actual admission figures
6 Polytechnics ..	580	..
Trend 1967-68	407
1968-69	260
1969-70	287
1970-71	343
1971-72	509
1972-73	606

2. The figures of actual admission in 1967-68 excludes S. K. D. A. V. Womens, Polytechnics.

3. The Fourth Plan outlay for the schemes of Technical Education in the State sector is Rs. 116.00 lakhs and 15 schemes were envisaged for consolidation, improvement, development and creation of new avenues for the development of Technical Education. The detailed schemewise outlay and the annual achievement is given in the Annexure I.

4. During the Fourth Five-Year Plan, the following new courses in Engineering and Accountancy and Management Science have been started.

(i) Diploma in Engineering in various diversified fields	80 seats
(ii) Diploma in Taxation Laws ..	32 seats

Further the Eastern Regional Committee approved the introduction of an under graduate course in Electronics and Tele-communication Engineering in Burla Engineering College with an intake capacity of 30. The most notable achievement during the fourth year is, however, the successful launching of programme of diversification at the level of Polytechnics, under which six new diversified courses as recommended by the All-India Council of Technical Education and Eastern Regional Committee were started in the State Polytechnics. Besides, the D. A. V. Trust started a Womens' Polytechnic at Rourkela which received regular grants-in-aid from Government. The proposal of Government taking over this Womens' Polytechnic from next year is under active consideration of Government.

The newly diversified courses are :—

- (i) Automobile Engineering
- (ii) Electronics and Tele-Communication Engineering

(iii) Refrigeration and Air-conditioning Engineering

(iv) Instrument Technology

(v) Mines Survey

(vi) Drilling Engineering.

These courses have been started with 15 students in each course. Orissa happens to be the only State in the Eastern Region where all the State Polytechnic have switched over to the sandwich pattern under Semester system during the Fourth Plan period. This measure has been taken to improve the quality and employability of technicians passing out. The exact impact of this procedure will be felt during the Fifth Plan. Nine teachers of the State Polytechnic have also been trained at T. T. T. I., Calcutta and seven more would be sent for training during the current year for women in these diversified courses. Special provision has been made during the current year of the Fourth Plan for developing book banks in the State Polytechnic. Action has been taken to provide new and modern machinery in the Laboratories and Workshops of the State Polytechnic as a step towards consolidation and improvement of technical Education in the State. As an advance action for Fifth Plan Programme, provisions have been made for creating a Curriculum Development Cell and Man Power Development Cell.

Objectives and Strategy for the Fifth Plan

5. On the basis of the forecast reports of the Institute of Applied Manpower Research the All-India Council of Technical Education has taken the approach that there will be short-fall in the availability of Graduates and Diploma holders in the generalised field of civil, electrical and mechanical engineering due to low intake trend in the Fourth Plan. There is likelihood of over production in the specialised branches like Metallurgy and Chemical Engineering etc. The strategy of the State for the Fifth Plan has, therefore, been on creation of additional facilities for training of Orissa students outside the State in fully applied branches like Plastic Technology, Paper Technology, Ceramic and Refractory Technology, Food Technology Chemical Technology and Leather Technology besides opening new diversified courses in the State Institutions both at Degree and Diploma level and also reintroduction of some additional diploma seats in Civil Engineering. The Fifth Plan proposals aim at creating additional facilities in Technical Education for Orissa students and to ultimately produce 100 Degree Engineers, 115 Diploma Engineers and 64 Management Science personnel per annum by the end of the Fifth Plan period. The detailed strategy for reaching this objective is given in Annexure II.

6. The proposals also aim at generation of maximum employment consistent with industrial growth and construction activities, absorption of educated unemployed and alleviation of distress in backward areas of the State. It has been proposed to consolidate, improve and expand Technical Education by 17 schemes proposed under the State Sector and one scheme under Central Sector as enumerated below. A minimum outlay of Rs. 151.00 lakhs under the State Sector would have to be provided during the Fifth Five-Year Plan and Rs. 353.16 lakhs under the Central Sector will have to be provided exclusively for consolidation and expansion of facilities in the Post-Graduate level in the existing two Engineering Colleges in the State. It is expected that there will be inflow of resources from the University Grants Commission for the Technical Institutions. Statement at Annexure III gives a picture of the various schemes along with the tentative outlay required for these schemes during the Fifth Plan.

Specific Schemes

(1) Diversification of Courses in Existing Polytechnics

7. In order to meet the Man Power need in the diversified fields of engineering, it has been tentatively decided to start the new courses like Power System Engineering in Jharsuguda Engineering School, Public Health Engineering in Berhampur Engineering School and Tools Engineering at S. T. I., Rourkela. An amount of Rs. 15.00 lakhs has been proposed in the Fifth Plan both for recurring and non-recurring items of expenditure.

(2) Introduction of New Courses and Consolidation of Existing Facilities in the College of Accountancy and Management Studies, Cuttack.

8. It is proposed to start new courses like Diploma in Management and Accountancy and Diploma in Management studies in the above College for which the provision on account of recurring and non-recurring expenditure would come to Rs. 6.00 lakhs.

(3) Consolidation and Expansion of Existing Facilities in the Existing Engineering School and School of Mining Engineering.

9. In order to make up deficit equipment for the Laboratories and Workshop, to provide modern equipment and to take up construction of new buildings as required under the new semester pattern of course, as also to provide for necessary sandwich stipends, a tentative provision of Rs. 25.00 lakhs will have to be kept for the existing Engineering Schools at Cuttack, Berhampur and Jharsuguda as well as for the Orissa School of Mining Engineering at Keonjhar.

(4) Consolidation and Expansion of Existing Facilities in the State Technological Institute at Rourkela.

10. To meet the deficit equipment and building space as recommended by the Eastern Regional Committee and also to strengthen the teaching and workshop staff it has been proposed to provide a sum of Rs. 8.00 lakhs for the above institution.

(5) Consolidation and Expansion of Existing Facilities of the Existing Technical Schools at Aska and Choudwar.

11. In order to upgrade the existing posts at par with public schools and to meet the deficit equipments and buildings under both of these schools, it has been proposed to provide a sum of Rs. 3.00 lakhs.

(6) Quality Improvement Programme—Training of Polytechnic Teachers

12. In order to train the teachers of Polytechnic at T. T. T. I., there will be need of training reserve posts of six Assistant Lecturers and six Lecturers in the State. A sum of Rs. 5.00 lakhs has been provided to meet the salaries and other allowance of the staff.

(7) Creation of Physical Facilities for the S. K. D. A. V. Women's Polytechnic at Rourkela.

13. In order to meet the deficit towards building and equipment as per the revised scheme of Women's Polytechnic as well as to meet the recurring expenditure, a sum of Rs. 18.00 lakhs has been provided in the Fifth Plan.

(8) Grant-in-aid to University College of Engineering, Burla—Consolidation and introduction of Ceramic Engineering and Industrial Engineering Courses.

14. With a view to introduce these new courses at the under-graduate level, as well as to further consolidate and expand the existing facilities, a sum of Rs. 20.00 lakhs has been provided. The E. R. C. has already approved introduction of Electronics and Tele-communication Engineering and Matching grant will be available from the University Grants Commission.

(9) Grant-in-aid to Regional Engineering College, Rourkela—Introduction of Production Engineering Courses.

15. To meet the 50 per cent share of the State Government and to introduce the new courses, it has been proposed to provide a sum of Rs. 10.00 lakhs both for recurring and non-recurring expenditure of this College.

(10) Establishment of a Directorate of Technical Education and Training in Orissa

16. In order to establish a separate Directorate to develop and supervise Technical Education in the State, it has been proposed to provide a sum of Rs. 10·00 lakhs for recurring and non-recurring expenditure.

(11) Organisation of the State Council of Technical Education and Training in Orissa

17. For appointment of full-time staff and creation of essential physical facilities for this Council, it has been proposed to provide a sum of Rs. 3·00 lakhs both for recurring and non-recurring expenditure.

(12) Councelling Cell in the State Polytechnics

18. In order to equip the Diploma holders passing out of polytechnics with practical knowledge for self-employment in the State, it is proposed to set up Industrial Councelling Cell in each of the four Polytechnics in the State, for which a sum of Rs. 5·00 lakhs has been provided.

(13) Government Polytechnic at Rajgangpur—Ceramic and Refractory

19. Orissa does not have a technical institution for training in Ceramic and Refractory although it accounts for over two-third of country's production in refractories. It is, therefore, proposed to start a Polytechnic under the sand which pattern at Rajgangpur near Rourkela for which the provision of Rs. 20·00 lakhs has been made both for recurring and non-recurring items.

(14) Training of Technologists outside the State—Stipends thereof

20. In order to facilitate deserving students of the State to undergo Degree Courses in specialised Technologies like Plastic Technology, Paper Technology and Leather Technology etc., it has been proposed to locate specific seats for these faculties in the Engineering Institutes outside the State. A sum of Rs. 3·00 lakhs for favour of stipend to these selected students at the rate of Rs. 150 per month per student for a total of 40 students per annum has been provided in the Fifth Plan.

21. For all the above schemes a total outlay of Rs. 151·00 lakhs has been proposed in the Fifth Plan. The details of the schemewise outlay and target for the Fifth Plan are given in Annexure III.

Annexure I

Details of Plan schemes of the Fourth Five-Year Plan with Annual allocations

(Rs. lakhs)

Serial No.	Head of Development	Fourth Plan outlay	Expenditure		Budget for 1973-74	Total Fourth Plan
	Name of the Scheme		1969-72	1972-73		
1	2	3	4	5	6	7
Technical Education						
1	Staff quarters	6.00	1.71	1.50	1.89	5.10
2	Burla Engineering College	10.00	4.75	4.00	3.00	11.75
3	Orissa School of Engineering, Cuttack	10.00	1.87	1.25	3.37	6.49
4	Berhampur Engineering School	5.00	2.67	1.79	1.70	6.16
5	Jharsuguda Engineering School	5.00	0.69	0.90	3.10	4.69
6	Polytechnic, Rourkela	15.00	7.39	2.00	4.30	13.69
7	Technical Schools	20.00	4.16	1.20	1.00	6.36
8	Women Polytechnic, Rourkela	18.00	9.91	6.00	2.00	17.91
9	College of Accountancy & Management Studies, Cuttack,	5.00	1.62	0.54	0.90	3.06
10	Training of Technical Teachers	2.00	0.69	0.50	1.01	2.20

(Rs. in lakhs)

Serial No.	Head of Development	Fourth Plan outlay	Expenditure		Budget for 1973-74	Total Fourth Plan
	Name of the Scheme		1969-72	1972-73		
1	2	3	4	5	6	7
11	Diversification of courses of studies and students amenities.	20.00	5.94	5.32	6.29	17.55
12	Book Bank .. ..	..	..	..	0.50	0.50
13	Expansion—Directorate of Technical Education.	..	..	..	0.51	0.51
14	Curriculum Development Cell	..	..	..	0.16	0.16
15	Man Power Development Cell .. ..	..	..	..	0.16	0.16
16	Kendrapara Engineering School .. ..	..	0.22	..	..	0.22
17	Bhadrak Engineering School .. ..	..	0.01	..	..	0.01
	Total	116.00	41.63	25.00	30.00	96.63

530

Annexure II

Production of Degree Engineers, Diploma Engineers and Management Science personnel per annum by the end of Fifth Plan.

(a) University College of Engineering, Burla.	30	Electronic Degree.
(Additional seat) ..	15	Industrial Engineering.
	45	
(b) Regional Engineering College, Rourkela (Additional seat.).	15	Production Engineering
(c) Training of Technologists outside the State.		
Plastic Technology ..	10	
Paper Technology ..	10	
Food Technology ..	5	
Ceramic & Refractory Technology ..	5	
Chemical Technology ..	5	
Leather Technology ..	5	
	40	
Total—Engineering Graduates ..	100	

Engineering Diplome Course (Diplomates)

(i) Diversification ..	$3 \times 15 =$	45 Diploma Seats
(ii) Introduction of Civil Engineering in Berhampur Engineering School and Jharsuguda Engineering School.	$20 \times 2 =$	40
(iii) Government Polytechnic at Rajgang- pur.	$15 \times 2 =$	30

Total Diploma Seats 115

Management Courses (Diplomates)

College of Accountancy and Management Studies, Cuttack.	32	Diploma in Management Accountancy.
	32	Diploma in Management Science.
Total	64	

Annexure III

(Rupees in lakhs)

Sl. No.	Name of the scheme with location	Estimated cost	Fifth Plan outlay	Capital component	Foreign exchange com-potent.	Fifth Plan Physical target			Annual break up of Fifth Plan outlay					
						Item	Units	Proposed target	1974-75	1975-76	1976-77	1977-78	1978-79	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1	Diversification of courses in existing Polytechnics at Berhampur, Jharsuguda Engineering School and S. T. I., Rourkela.	30.00	15.00	11.00	Nil	Starting 3 diversified courses in the State Polytechnic during the Fifth Five-Year Plan period.				3.75	3.75	3.75	2.25	1.50
2	College of Accountancy and Management Studies, Cuttack Introduction of new courses and consolidation of existing facilities.	15.00	6.00	4.00	Nil	Starting of D. M. A. and D. M. S. courses during the Fifth Five-Year Plan period.				1.50	1.50	1.50	0.90	0.60
3	O. S. E., Cuttack—Consolidation and expansion of existing facilities.	15.00	7.00	4.00	Nil	Consolidation and expansion of existing facilities.				1.75	1.75	1.75	1.05	0.70

4	Berhampur Engineering School Berhampur consolidation and expansion of existing facilities.	12·00	6·00	3·00	Nil	Consolidation and expansion of existing facilities.	1·50	1·50	1·50	0·90	0·60
5	Jharsuguda Engineering School, Jharsuguda—Consolidation and expansion of existing facilities.	12·00	6·00	3·00	Nil	Consolidation and expansion of existing facilities.	1·50	1·50	1·50	0·90	0·60
6	O. S. M. E., Keonjhar— Consolidation and expansion of existing facilities.	12·00	6·00	3·00	Nil	Ditto	1·50	1·50	1·50	0·90	0·60
7	S. T. I. Rourkela—Consolidation and expansion of existing facilities.	18·00	8·00	4·00	Nil	Ditto	2·00	2·00	2·00	1·20	0·80
8	Technical Schools (existing) Aska/Choudwar—Consolida- tion and expansion of existing facilities.	5·00	3·00	2·00	Nil	Ditto	0·75	0·75	0·75	0·50	0·25
9	Quality Improvement Programme Training of Polytechnic Teachers in T. T. T. I., Calcutta.	5·00	5·00	..	Nil	Pay and allowance of the training reserve staff during the period training of the staff at T. T. T. I., Calcutta.	1·00	1·00	1·00	1·00	1·00
10	Grants-in-aid to S. K. D. A. V. Womens, Polytechnic at Rourkela Creation of physical facilities.	20·00	18·00	8·00	Nil	Grant-in-aid for Creation of physical facilities.	5·00	5·00	4·00	2·00	2·00
11	Grants-in-aid to University College of Engineering, Burla— Consolidation and introduction of Electronic Engineering Industrial Engineering Courses.	30·00	20·00	14·00	Nil	Grant-in-aid for introduction of two diversified under graduate courses in Electronics and Industrial Engineering.	5·00	5·00	5·00	3·00	2·00

(Rupees in lakhs)

Sl. No.	Name of the Scheme with location	Estimated cost	Fifth Plan outlay	Capital component	Foreign Exchange component.	Fifth Plan Physical Target			Annual break up to 5th Plan outlay					
						Item	Units	Proposed Target	1974-75	1975-76	1976-77	1977-78	1978-79	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
12	Grants-in-aid to Regional Engineering College, Rourkela— Introduction of production Engineering Courses.	15.00	10.00	7.00	Nil	Grant-in-aid for introduction of under-graduate Courses in Production Engineering.				2.50	2.50	2.50	1.50	1.00
13	Establishment of a Directorate of Technical Training, Orissa.	30.00	10.00	4.50	Nil	As per the decision of the A. I. C. T. E. a separate Directorate will be established shortly with a Curriculum Development Cell and a Man Power Cell.				2.50	2.50	2.50	1.50	1.00
14	Reorganisation of the State Council of Technical Education and Training, Orissa.	8.00	3.00	1.00	Nil	Strengthening the present State Council of Technical Education by creating the post of full-time Secretary and Deputy Secretary.				0.75	0.75	0.75	0.50	0.25

15	Industrial Counselling Cell in the State Polytechnics.	15.00	5.00	0.50	Nil	Setting up 4 Industrial Counselling cells in each of the polytechnic at Berhampur, Cuttack, Jharsuguda and Rourkela, it envisaged to make the future diploma Engineers more self employed.	1.25	1.25	1.25	0.75	0.50
16	Government Poly technic Rajgangpur (Ceramics, Glass and Refractory).	50.00	20.00	15.00	Nil	Starting a new Polytechnic at Rajgangpur for ceramics glass and refractories.	5.00	5.00	5.00	3.00	2.00
17	Training of Technologists out side the State—Stipends, thereof.	5.00	3.00	..	Nil	Payment of stipend to the students who will be deputed for training out-side State.	0.72	0.72	0.72	0.72	0.72

151.00

84.00

37.97 37.97 36.97 22.57 16.12

(ii) CRAFTSMAN TRAINING

Training of Craftsman is one of the most important activities to be taken up in the State in order to provide necessary man-power base for development of industries, construction of projects, rural electrification and other Agro-Industrial developments. By the end of the Third plan, ten Craftsman Training Centres, styled as Industrial Training Institutes with a total intake capacity of 3,744 in various engineering and non-engineering trades had been established. During the Fourth Plan period, a number of traditional trades become unpopular and it was strongly felt to reorganise these trades by abolishing unpopular ones, expanding the intake capacity in more popular trades and introduction of new trades in which demands for Craftsman were growing in the State. Besides, efforts were also made to consolidate the existing training institutes which were hurriedly started during the Third Plan by providing the deficits under buildings, equipment and trained instructors, as per the pattern laid down by the Director-General of Employment and Training. The total deficits under the reorganisation and consolidation programme could not be met within the available resources during the Fourth Plan.

2. Ten schemes were originally envisaged with a total outlay of Rs. 52.00 lakhs for the Fourth Plan.

3. The details of itemwise Fourth Plan outlay and expenditure are given in Annexure I and the details of the target achieved during Fourth Plan and the target for Fifth Plan are given in Annexure II. The position regarding tradewise reorganisation of the I. T. Is. proposed in the Fifth Plan is indicated in Annexure III. As a result of this reorganisation admission of trainees to these institutes increased from 2,438 during 1969 to 3,853 during 1972. Craft Instructors including Supervisors had to undergo training courses organised by Government of India in various Central Training Institutes. Altogether 185 personnel will be trained during the Fourth Plan. Courses in business management and refresher courses for passed out trainees have been organised to increase the employability and scope for self-employment avenues. A scheme for training limited number of ex-I. T. I. boys in self-employment programmes has been introduced at one of the I. T. Is. Institute for imparting training in stenography to women candidates is being organised during the Fourth Plan. The Apprenticeship Training Programme has made noticeable headway. The placement position has increased from 399 during 1969 to 1,209 during 1972 and will reach the Fourth Plan target of 1,300 by the end of 1973-74. Construction of two Apprentice hostels at Brajarajnagar and Rourkela would be completed during the current year. A society has been registered to set up a Food Craft Institute at Bhubaneswar which will start functioning from August 1973. The Fourth Plan Programme for Craftsman Training has been on the whole aimed at reorganising the trades in various I. T. Is., removing the deficits and deficiencies in physical facilities so as to train craftsman required for the industries in the State.

Objectives and targets for the Fifth Plan

4. The main objectives of the Craftsman Training Programme in the Fifth Plan is to consolidate and reorganise the existing I. T. I. by making up the deficits in building, equipment and some marginal staff to bring these up to the standards laid down by the Director-General of Employment and Training. Besides, establishment of a Food Craft Institute at Bhubaneswar and a scheme for training of rural artisans in short courses has been envisaged. Provision has also been made for construction of hostels and other related expenditure for implementation of National Apprenticeship Programme throughout the State. A minimum outlay of Rs. 100.00 lakhs will be required for this programme in the Fifth Plan.

5. During the Fifth Plan, it is contemplated to augment organised Craftsman training capacity from 3,864 to 4,150. The rural artisan training would cover 3,200 youngmen. It is envisaged that the placement position under National Apprenticeship Programme will steadily rise and reach the figure of 2,500 Apprentices per annum by the end of the Fifth Plan.

Specific Schemes and Programme

(1) Reorganisation and Consolidation of existing I. T. Is.

6. The present gap and deficiencies in physical facilities like workshop building, equipment and supporting staff is estimated at about Rs. 70-80 lakhs. For essential buildings equipments and staff, an amount of Rs. 30.32 lakhs would be required during the Fifth Plan.

The tentative break up of this outlay is as follows :—

		Rs. in lakhs
(a) Institute building	..	10.72
(b) Machineries and Equipments	..	17.60
(c) Recurring expenditure	..	2.00
		<hr/>
Total	..	30.32
		<hr/>

(2) Construction of Additional Hostel Building and staff quarters for existing I. T. Is.

7. Due to increased admission in all the I. T. Is. acute difficulties are faced for hostel Accommodation of trainees who come from rural areas. Besides, residential accommodation to staff has to be provided at each of the I. T. Is. most of which are located either in outlying areas or in industrial complex where hired accommodation is not available. Hence provision for construction of four hostel buildings at Rs. 9.50 lakhs and 83 staff quarters at seven different I. T. Is. at a cost of Rs. 19.00 lakhs have been provided.

(3) Expansion of the Leave Reserve and Training Reserve Scheme

8. After introduction of the revised staffing pattern as recommended by P. G. A. ante, number of training reserve and leave reserve staff are to be reinforced. This need will be more pronounced when existing instructors will be deputed for training in more popular trades. An expenditure of Rs. 2.73 lakhs has to be provided.

(4) Training and Retraining of I. T. I. Instructors

9. For training of 289 personnel, an expenditure of Rs. 1.65 lakhs is anticipated. This will meet the compensatory allowance to be paid to the Instructors.

(5) Implementation of the Apprenticeship Programme

10. To support the Apprenticeship placement of 2,500 per annum by the end of the Fifth Plan, construction of hostel buildings, strengthening of supervisory staff and other related costs of training would require an outlay of Rs. 13.00 lakhs during the Fifth Plan.

(6) Grant-in-aid to Food Craft Institute at Bhubaneswar

11. Expenditure on this Institute which will be started in a rented accommodation by the end of the Fourth Plan to be met entirely by the State Government, towards the latter part of the fifth Plan period. The State Government have also to provide for land and building of the Institute as well as some balancing equipment.

12. Recurring expenditure of the institute for the last one year period has to be provided. Accordingly a provision of Rs. 8.50 lakhs has been made in the Fifth Plan.

(7) Expansion of Headquarters staff

13. For effective supervision of Craftsman Training Programme and for opening a Library with up-to-date Lecture on Craftsman Training for various Centres of the country as well as for strengthening the Headquarters Staff, a total expenditure of Rs. 5.30 lakhs is anticipated.

(8) Training of Rural Artisans

14. This scheme aims at providing short-term course training on a peripatetic basis at Subdivisional or Block Headquarters. This scheme will operate from five different Centres for the State and will provide accelerated training to nearly 3,200 Rural Artisans during the Plan period. The total provision under the scheme has been kept at Rs. 10.00 lakhs.

15. For all these programmes an outlay of Rs. 100.00 lakhs is proposed during the Fifth Plan. The schemewise details of the outlay are given in Annexure IV.

Annexure I

Outlay and expenditure statement of I. T. I. Schemes (1969—74)

(Rupees in lakhs)

Sl. No.	Name of scheme	Total outlay for 4th Plan	Actual expenditure 1969-72	1972-73 Provisional expenditure	Budget estimate for 1972-73	Likely expdr. in 4th Plan
1	2	3	4	5	6	7
1	Reorganisa tion of existing I. T. Is. and diversification of courses.	30.00	20.69	8.67	6.39	35.75
2	Training of Crafts Industries.	3.00	0.07	0.25	0.50	0.82
3	Maintenance Sec. ..	1.93	0.90	0.58	0.65	2.13
4	Production Unit ..	8.00	0.35	..	..	0.35
5	Composite co urse in business management.	0.42	0.02	0.05	0.10	1.17
6	I. T. I., Takatpur ..	0.65	..	..	..	..
7	Apprenticeship Training Scheme.	8.00	2.09	1.40	2.93	6.42
8	Refresher's co urse for I. T. I. Trainees.	..	..	0.07	0.13	0.20
9	Self-employment Scheme	..	..	1.71	2.00	3.71
10	Expansion of Women Training Institute at Cuttack.	..	..	0.27	0.32	0.59
Total ..		52.00	24.12	13.00	13.02	50.14

Annexure II

Physical Programme—Targets and Achievements

Sl. No.	Item	Unit	1968-69 level	Fourth Plan Target	Likely achievement	Level expected during 1973-74	Fifth Plan Target	
							Total	1974-75
1	2	3	4	5	6	7	8	9

Training of Craftsman Institutions :

(a) Existing Institutes	...	No	..	10	Nil	..	..	10	..	..
(b) New Institute	..	No	..	..	Nil	..	Nil	..	1	1
Intake				<u>3,744</u>	<u>120 (Addl.)</u>			<u>3,864</u>	<u>286 (Addl.)</u>	<u>36</u>
Outturn				<u>1,078</u>	<u>1,422 (Addl.)</u>			<u>2,200</u>	<u>800 (Addl.)</u>	<u>40</u>

Appendix III

Tradewise Reorganisation in various I.T.Is.

I. T. I., Rourkela

Creation (Popular)		Abolition (Unpopular)	
Stenography	.. 16	Plumber	.. 32
Instrument Mechanic	.. 32	Moulder	.. 32
Refr., A.C. Mechanic	.. 16	Patternmaker	.. 16
Radio Mechanic	.. 32	Carpentry	.. 32
Welding	.. 12	Blacksmith	.. 32
Diesel Mecchanic	.. 32	D/M. (Mechanic)	.. 16
Grinder	.. 12		---
Tractor Mechanic	.. 32		160
	---		---
	184		

I. T. I., Barbil

Stenography	.. 32	P/Making	.. 32
Grinder	.. 12	Moulding	.. 32
	---	Turner	.. 24
	44		---
	---		88

I. T. I., Talcher

Stenography	.. 32	Moulder	.. 16
		P/Maker	.. 16
	---		---
	32		32
	---		---

I. T. I., Cuttack

Stenography	.. 32	Junior Instructor (B/S & Moulding)	48
Refr. & A.C. Mechanic	.. 16	D/M (Mechanic)	.. 32
Instrument Mechanic	.. 32	D/M (Civil)	.. 16
Wireman	.. 32	P/Making	.. 16
Grinder	.. 12	Carpentry	.. 32
	---		---
	124		144
	---		---

I. T. I., Bhawanipatna

Diesel Mech.	..	32	Plumber	..	16
Tractor Mech.	..	32			16
		<u>64</u>			<u>16</u>

I. T. I., Puri

Stenography	..	32	Patternmaking	..	32
			Moulding	..	32
		<u>32</u>			<u>64</u>

I. T. I., Berhampur

Tractor Mech.	..	32	Blacksmith	..	32
Radio Mech.	..	32	Surveyor	..	16
Electroplating	..	32			48
		<u>96</u>			<u>48</u>

I. T. I., Balasore

Stenography	..	32	Sheetmetal	..	16
Tractor Mech.	..	32	P/Making	..	16
Diesel Mech.	..	32	Moulding	..	16
		<u>96</u>	D/M (Mech.)	..	16
					<u>64</u>

I. T. I., Hirakud

Instrument Mech.	..	32	Diesel Mech.	..	16
Refr. and A. C. Mech.	..	32	Moulder	..	32
Tractor Mech.	..	32	D/M (Mech.)	..	16
		<u>96</u>	D/M (Civil)	..	32
					<u>96</u>

Total seats created—768

Total seats abolished—712

Annexure IV

Schemewise details for the Fifth Plan

(Rs. in lakhs)

Sl. No.	Name of the scheme with allocation	Estimated cost	Fifth Plan outlay (Tentative)	Capital expenditure component of the outlay	Foreign exchange component of outlay	Physical targets		
						Item	Unit	Proposed target
1	2	3	4	5	6	7	8	9
1	Reorganisation of existing I. T. Is.	77.82	30.32	28.32	..	Construction of additional workshop buildings for Rs. 10.72 lakhs, purchases of deficit and additional equipment for Rs. 17.60 lakhs and engagement of deficit staff covering Rs. 2 lakhs.		
2	Construction of Additional hostel buildings and staff quarters for existing I. T. Is.	28.50	28.50	28.50	..	Construction of hostels for 300 additional seats and 83 Nos. of staff quarters for I. T. I. trainees, and staff respectively.		
3	Expansion of L. R. T. R. Scheme	2.73	2.73	..	..	For appointment of 12 Institutional staff under the scheme.		
4	Training and Retraining of I. T. I. Instructional staff.	1.65	1.65	..	..	Training of 80 Instructions retraining of 289 Instructor and 2 foreman of I. T. Is.		
5	Implementation of the Apprenticeship programme.	13.00	13.00	3.50	..	For giving apprentices to 1,100 trainees and for construction of hostel building for 100 seats and appointment of 5 supervisory staff.		

Sl. No.	Name of the scheme with allocation	Estimated cost	Fifth Plan outlay (Tentative)	Capital expenditure component of the outlay	Foreign exchange component of outlay	Physical targets		
						Item	Unit	Proposed target
1	2	3	4	5	6	7	8	9
6	Grants-in-aid to Food Craft Institute	8.50	8.50	7.40	..	To arrange basic training facilities for hostel and catering G. P. of trades designated under Apprenticeship Act.		
7	Expansion of Headquarters staff	5.30	5.30	1.00	..	For appointment of 24 technical skilled, unskilled personnels in the headquarters.		
8	Training of Rural Artisans ..	10.00	10.00	2.00	..	For imparting training to 2,400 trainees in 9 trades to get readily employment in rural areas.		
			100	70.72				

CHAPTER 2-13

HEALTH

Demographic and other Features

Demographically Orissa occupies a special position in the country. Its tribal population is approximately 24 per cent of the total population of the State and they are dispersed in tiny little villages in the extensive hilly tracts of the Eastern Ghats, with the population of the villages varying from 20 to 250. The second important demographic feature is the general small size of the villages. Of the 47,000 villages in the State, nearly 72 per cent have a population less than 500 per village and about 40 per cent a population of less than 200 per village. Thirdly, the preponderance of hills and dense forests in the Eastern Ghats and the net work of deltaic rivers in the coastal belt present a very difficult terrain which hampers the flow of health facilities to the interior. The urban population accounts for only 8.41 per cent. By the end of the Fourth Plan, there will be one Doctor for a population of 1,565 and 13,150 for urban and rural areas respectively. The average works out at one Doctor for 9,200 population against an optimum of one Doctor for 3,000. Similarly, there is one bed for a population of 6,480 against the optimum of 1 bed for 1,000 Population. The birth and death rates as per 1951 and 1961 Census and the sample registrations of 1968-69 and 1970 are indicated in the table below along with *per capita* expenditure on health.

Year	Birth rate	Infant mortality rate	Death rate	Growth rate in 3 Census		<i>Per capita</i> expenditure on Health (in Rs.)
				Per decade	Per annum	
1	2	3	4	5	6	7
1951	..	188.76	21.59	6.38	0.64	0.46
1961	..	124.12	13.39	+19.82	1.98	1.43
1968	35.60	119.00	14.01	..	..	4.32
1969	36.38	131.69	14.89	..	..	4.39
1970	36.45	120.01	15.17	..	..	4.70
1971	34.11	116.43	13.92	+25.05	+2.5	5.08

Low level of literacy and the high concentration of population below poverty line are the other important features which have to be taken into account in framing sectoral plan on health.

Fourth Plan

2. During the Fourth Plan target and actual expenditure as expected will be as follows:—

Total allocation—Rs. 1606.22 lakhs

Expenditure up to 1973-74—Rs. 1611.78 lakhs.

3. During the Fourth Plan, the building programme in the rural areas could not progress as desired. In many rural dispensaries and hospitals staff quarters will not be available even by the end of the Fourth Plan and the Fifth Plan takes up this task as a priority item. The overall low allocation on the Health Sector did not permit reasonable allocation on Medicine Grant to the Primary Health Centres and Dispensaries as also the equipments and appliances for Medical Colleges. Due to limited expansion of employment opportunities there has been a surplus of nearly 1,000 Doctors. Similarly, we had to reduce the training programme for Nurses, Pharmacists Laboratory Technicians etc. for lack of available opportunity for employment.

4. The building programme which is one of the most vital necessity in rural areas of the State could not come up to expectation. In most of rural dispensaries and Hospitals even after the Fourth Plan, no staff quarters have been provided and it is difficult for Doctors and other para medicals to be accommodated and adopt. Possibilities of rented house in rural areas limited.

5. The limited expansion of job potentialities of Fourth Plan so far as health is concerned, resulted in surplus Doctors who were available for fruitful employment in Government. We had to reduce or abandon training programme for Nurses, Pharmacists, Laboratory Technicians, Radiographers etc.

6. The Central Plan ceilings for individual building were much below the local prevalent rates resulting in inadequate progress in many of the central sector schemes for quite a time. Due to inadequate allocation, the buildings, equipments of medical colleges and hospitals as also district subdivisional hospitals and dispensaries could not be given due share.

7. Most of the communicable diseases control measures were treated as central sector schemes and this has resulted in considerable reduction in death rates due to mass approach.

Fifth Five-Year Plan Objectives :

8. The communicable diseases control which has resulted in the reduction of death rate may continue as such. For successful implementation of such measures, the health education, vital statistics and provision of personnel by intensifying training programme have been kept in view in the Fifth Plan.

9. Family Planning simultaneously reduced the birth rate and this should continue as priority scheme.

10. Training programmes particularly for para medical personnel are specially kept in view since their services both in community health and individual medical care are very much essential as much as the doctor. But employment potentialities will ultimately influence the bulk of training.

11. Rural area require higher attention, but the development of the medical facilities in the subdivisional and district level also much below the desired level and have been given attention. The 3 Medical Colleges producing roughly 300 doctors every year have many efficiencies in buildings, equipments and para medical staff. The 3 medical colleges also have provision for post-graduate medical education in 18 subjects (18 degrees and 9 diplomas) with an annual intake of more than 200 candidates the objective being to provide specialist services upto the level of subdivisional Unit and upgraded P. H. Cs. Proper equipment for such post-graduate department have been kept in view. We have six higher specialities in Cardiology, Neurology, Cardio-theracic surgery, Neuro surgery, Genito urinary surgery, plastic sargery. Personnel are receiving higher training in Hematoly Nephrology, Endocrinology, Gastroenterology etc. There is proposal to open atleast four higher specialities in each of the other two medical colleges of the State at Burla and Berhampur. The other aspects like special measures for cancer treatment, management of paediatric problems, the intensification of rural health services under S. P. M. to induce rural bias in the young doctors from the very training period requires further improvement of facilities and has been specifically taken up. The standards are fast changing and I. M. C. lays down requirements from time to time by way of inspection.

12. It has been planned to increase bed strength in the district hospitals to a minimum of 200 beds with specialist services in Medicines, Surgery, Gynaecology, Eye, Paediatrics, Radiology, Pathology, Anaesthesiology. Dentistry with suitable addition in the structural organisation of the district medical services by introduction of various supervisory posts for immunization health education, maternity supervision and other details. It is hoped that this will considerably reduce the pressures in the 3 medical colleges which are always overcrowded. Further, the impact of programme like medical termination of pregnancy and paediatric care, health, education health statistics are special factors for such improvement. The possibility of aid from other sources like UNICEF and criteria fixed for such aid have also a bearing on the structural organisation.

13. The existing subdivisional hospitals and 63-30 bedded P. H. Cs. will function as referral hospitals. Each of these upgraded P. H. Cs. and the subdivisional hospital will serve 3 to 4 P. H. Cs. There are already 14 subdivisional hospitals with 50 beds. It is proposed to upgrade 13 P. H. Cs. in 1973-74 and the rest 50 (which includes some of the subdivisional hospitals also) will be upgraded by addition of 30 beds, extra doctors para-Medicals and equipments.

14. All these have the implications that the buildings have to be provided for such hospitals with their staff quarters and adequate provision for drugs at the rate of 6.50, Rs. 3 for diet and Rs. 1.50 for out-door treatment and investigation are to be provided. Buildings so far as staff quarter are concerned, is a must since experience shows that the staff are very reluctant to go to rural areas where basic amenities are not available.

15. The other special aspects like the provision of a Cancer Institute, provision of cancer treatment facilities in the other two medical colleges, are special schemes. The existing cancer wing of the S. C. B. Medical College hospital has already been provided with a nucleus for a full-fledged Cancer Institute. The Wahi Committee has already looked into this question. The expansion particularly buildings poses problems and it is hoped that apart from the allocation by the State Government suggests in the plan, liberal Central aid will be available. The expected State expenditure under the buildings have already been included in the spill-over amount.

16. Provision has also been made for cancer detection and treatment in the other two medical colleges at Burla and Berhampur with addition of 50 beds in each institution along with space and equipment necessary.

17. Most of the communicable diseases are included in the Central sector but the drugs and food adulteration is a special problem which is gradually on the increase. Provisions have been made for drugs laboratory both central and regional 3 regional laboratories are existing in the State.

18. The School Health Services, the district organisations for health education, vital statistics and expansion of facilities as also provision of multipurpose basic health Worker/sanitary Inspector in each of the hospital and dispensaries in the rural areas (multipurpose basic health worker training scheme has been taken up separately in the special employment scheme) and addition of special supervisory officers for immunisation scheme under the Minimum Needs Programme have been envisaged in the Fifth Plan to have sound infrastructure for intensification of health and medical facilities particularly in the rural areas.

19. Up-to-date, the hospitals and dispensaries do not have the component of preventive health personnel and each of the dispensaries/rural hospital will be fortified with either a Sanitary Inspector or a multipurpose basic health worker to have a net work for effective action.

20. A multipurpose basic health worker, trained, will be attached to selected P. H. Cs. in difficult areas during 1973-74 to intensify preventive measures against communicable diseases.

Schemes and Programmes of Health Care Development during Fifth Five-Year Plan (Outlay figures as in lakhs.

Total Outlay Rs. 6,341.28 lakhs, Building Rs. 1,372.64 lakhs, Foreign exchange Rs. 34.00 lakhs.

(Vide Appendix I)

Minimum Needs Programmes

21. A provision of Rs. 1,400.00 lakhs has been made on this programme. This amount does not include the provision separately proposed for Immunisation Programme for which no indication has yet been received from the Centre.

(Vide Appendix II)

PRIMARY HEALTH CENTRE, COMPLEX

Total Outlay Rs. 572.70 lakhs

Capital Outlay Rs. 208.50 lakhs

22. There are 314 blocks in the State and each has a functioning P. H. C. by end of 1973-74. The building programme in 20 such P. H. Cs. and Sub-Centres will not be completed by end of 1973-74. Rs. 40.00 lakhs will be required for completing the construction.

Backlog of construction of 380 Sub-Centres will be taken up. A sum of Rs. 76.00 lakhs will be required.

SUB-CENTRES

23. 187 Sub-Centres will be required in the hilly tract at the rate of one per 7,000 population for which Rs. 74.80 lakhs will be required.

24. At present the drugs supply for each P. H. C. and Sub-Centre is inadequate and a provision of Rs. 125.60 lakhs and Rs. 201.20 lakhs respectively has been made for the same.

UPGRADATION OF P. H. C.

Total Outlay Rs. 827.30 lakhs, Capital Outlay Rs. 578.00 lakhs.

25. Provision has been made for upgrading 77 P. H. Cs./Hospitals under this scheme. This will provide 1,560 additional beds in the rural areas and will supplement the existing 1,365 beds in the Subdivisional Hospitals.

Centrally Sponsored Schemes

(Vide details in Appendix II)

26. Most of the schemes in the Fourth Plan were Centrally Sponsored Schemes. Communicable diseases control programme like NMEP, TB., Leprosy with their ancillary items like strengthening of State Epidemiological Bureau, establishment of VD clinics, T. B. isolation beds have been suggested in addition to establishment of psychiatry clinics in each of the districts, upgradation of post-graduate medical education and basic health services in the Malaria, maintenance areas.

NATIONAL MALARIA ERADICATION PROGRAMME

27. The NMEP had its set back due to various administrative and natural causes. The maintenance phase units had exposure to epidemics of malaria soon after 1971 cyclone. Active control measure as in attack phase was undertaken from famine relief funds in 1972-73. Reorganisation of the consolidation phase (6.2 units) and attack phase have been taken up (provision of extra surveillance workers, surveillance Inspectors, laboratory technicians, etc.).

28. Enhanced staff pattern as suggested by the Central organisation have been provided. The coastal areas (2.9) which were previously in maintenance Phase, have been exposed to malaria epidemic and thus calculated to be in attack phase for the next three years. The total outlay is Rs. 12,96.64 lakhs and the capital outlay is nil. For urban malaria units a total outlay Rs. 171.35 lakhs is proposed.

NATIONAL FILARIA CONTROL PROGRAMME

29. Under NFPC 9 units have been established by reorganisation by end of 1972-73. Further 2 survey units will be established in 1973-74.

30. Besides the urban areas, the rural areas of Orissa have high endemicity with preponderance of W. Malai. This is because of preponderance of tanks with pistia infestation 56 filaria control units in urban areas and coverage of at least 2,800 Grama Panchayats in phased manner have been suggested. 18 filaria clinics in towns and 50 clinics in rural areas as part of medical care programme and also new schemes included in the Fifth Plan. Besides, the continuance of 8 urban units and two survey units expected to in operation by end of the Fifth Plan. The total allocation is Rs. 16,59.37 lakhs and capital outlay is nil. It is estimated that out of 22 millions in our State 9 millions live in endemic areas.

LEPROSY CONTROL PROGRAMME.

31. By the end of the Fourth Plan 19 leprosy control units and 20 S. E. T. centres will be functioning besides 9 leprosy control units and 64 S.E.T. centres, 4 leprosy pilot projects and 50 NKNS centres under the non-plan side affording coverage to 8.5 million population living in endemic areas (10.2 millions in high incidence group 4.6 mlns. in moderate incidence group).

32. For the coverage of 6.5 mlns. population opening of 210 S.E.T. centres and upgradation of 12 subsidiary centres have been kept in the Plan. Special units for health education also finds a place in the programme. Besides, one statistical cell and 3 zonal supervisory units have been included for proper analysis of the data and better supervision. The total outlay is Rs. 1,71.15 lakhs.

NATIONAL T. B. CONTROL PROGRAMME

33. Under the National T. B. Control Programme there are seven district T. B. control centres, out of this 6 have already been upgraded with 3 B. C. G. teams. The 7th one as Koraput has been provided with staff components and one B. C. G. team, but the buildings for the control centres is to be taken up in 1973-74. Against target of 75 isolation beds we have already provided 75, but the building components have not yet been availed of from the central grant. In 1973-74 the district T. B. centre building at Koraput and isolation bedded ward is expected to be completed.

34. The domiciliary treatment through district T. B. centres have been taken up as stated earlier. With the available resources in the district T. B. centres and reluctance of cases requiring hospitalisation to avail facilities in the 3 T. B. hospitals in the State, it is proposed to provide 25 isolation beds in each of the district hospitals during the Fifth Plan in Dhenkanal, Keonjhar, Capital Hospital, Puri district, Cuttack, Balasore and Mayurbhanj. The omission of Kalahandi is because of the availability of 65 bedded T. B. hospital within ten miles of the district headquarters hospital.

35. During the Fourth Plan we have had only 75 isolation beds without availing any funds for building. The addition of 300 beds suggested in the different districts will meet one of the most urgent and essential requirements. Thus a total allocation of Rs. 1,12.22 lakhs inclusive of capital outlay of Rs. 35.01 lakhs has been proposed.

NATIONAL SMALLPOX ERADICATION PROGRAMME

36. At present under this programme there is one supervisory office, one para medical worker for 7 blocks. In view of the distance and density of population, they will be reinforced by providing one para medical assistant for five blocks. For proper supervision

a medical officer in each of the district to supervise the operation which is time bound, programme is planned to be intensified. Zonal publicity units in Berhampur, Sambalpur and Cuttack to facilitate the acceptability to vaccination has been suggested.

37. Augmentation of vaccinators at the rate of one for 20,000 population in rural areas and 25,000 population in urban areas in view of negative attitude of rural and urban population to accept vaccination, besides the low density and difficult terrain has been planned. In urban areas one vaccinator for 25,000 population appears to be need. The total outlay is Rs. 171.92 lakhs.

BASIC HEALTH SERVICE

38. This is only continuance of the basic health services. The services are now being utilised in surveillance of malaria and residual spray in view of severe epidemic of malaria after cyclone. The laboratory technician attached to the P. H. C. will be utilised for both malaria and other purposes. The total outlay is Rs. 4.30 lakhs and capital outlay is Rs. nil.

ESTABLISHMENT OF V. D. CLINICS

39. Some of the important subdivisions have population more than the standard districts in the State. It has been proposed to open V. D. clinics in subdivisional hospitals in the Fifth Plan. Already there is open V. D. clinic in each of the district hospitals and the Medical College Hospitals. Total outlay Rs. 244.68 lakhs (Capital outlay Rs. 60.70 lakhs).

CHOLERA CONTROL PROGRAMME

40. The four coastal districts of Cuttack, Puri, Balasore and Ganjam have only been included. Contiguous areas of the districts Keonjhar, Dhenkanal and Mayurbhanj are endemic zones and 24 blocks in these districts are proposed to be covered under the cholera control scheme. Besides a supervisory post A. D. P. H. is a necessity and has been included. All the 119 blocks in Cuttack, Puri, Ganjam and Balasore districts are expected to be started as per pattern by end of Fourth Plan total outlay is Rs. 112.55 lakhs. State Sector Schemes (Vide details in Appendix II).

IMPROVEMENT OF DISTRICT HEAD QUARTERS HOSPITALS

41. At present there are only 1,420 beds in the district hospitals. It is proposed to provide specialists service in the districts and to increase the bed strength in each of the district hospital to a minimum of 200 beds. Specialists service have been provided in hospitals and also at the Capital Hospital. 870 extra beds will be provided. Total outlay is Rs. 323.21 lakhs. Capital outlay is Rs. 215.94 lakhs.

IMPROVEMENT OF LABORATORY SERVICE IN DISTRICT HOSPITALS

42. Provision of well-equipped laboratories with proper facilities capable of undertaking all sorts of pathological examinations and investigations in the district hospitals is very much essential and the same has been provided with a total outlay of Rs. 19.50 lakhs (capital outlay Rs. 9.49 lakhs).

IMPROVEMENT OF SUBDIVISIONAL HOSPITALS/T. R. W. DISPENSARIES

43. As has been indicated earlier, 304 extra beds have been provided in the different subdivisional hospitals of the State in fourth plan. Out of 42 such hospitals, 14 subdivisional hospitals have been provided with 50 beds. But no provision has been made for extension of buildings to accommodate these 304 extra beds causing extremely congestion in the wards. The 42 S. D. hospitals have got a total of 1,365 beds. The expenditure of Rs. 22.00 lakhs will be met from funds placed for district headquarters hospital. A sum of Rs. 7.00 lakhs has been earmarked for completion of building and staff quarters of T. R. W. Dispensaries.

IMPROVEMENT OF S. C. B. MEDICAL COLLEGE HOSPITAL

44. The Medical College hospital, Cuttack has 1,060 beds with an annual admission of 150 students. The college also provides post-graduate training in 18 subjects i.e. Degree course in 18 subjects and Diploma course in 9 subjects with an annual intake of 117 candidates. Six higher specialities in Cardiology, Neurology, Cardiotheracic Surgery, Neuro-Surgery, Plastic Surgery and Genito-urinary Surgery are available there.

45. But this college was established in the buildings of the old medical school and thus the expansions are hampered by inadequate building, inadequacy of staff quarters within the premises for emergency service, para-medical staff particularly equipments which are mostly to be imported.

46. A total outlay of Rs. 90.00 lakhs inclusive of Rs. 50.00 lakhs of capital outlay and foreign exchange of Rs. 10.00 lakhs has been made provision of building to replace some of the delapidated units of School days and due attention to para-medicals has been kept in view. A sum of Rs. 10.00 lakhs has been earmarked for Cancer equipments.

IMPROVEMENT OF V. S. S. MEDICAL COLLEGE HOSPITAL

47. This is the second medical college which was established in the year 1956 with a bed strength of 702. The annual admission is 160. There is provision for post-graduate study in 14 subjects (degree course in 12 and diploma in 4). The annual intake capacity of P. G. students of this college is 55.

48. Due to paucity of funds the college remained incomplete in many constituents and components. It is located in a small town and staff accommodation is a very great problem here which is to be solved. Further the hospital was started on an emergency measure in some of the abandoned buildings of Hirakud Dam Project. With the expansions and increasing demand of service, the hospital components of the college and other have to receive priority.

A total outlay of Rs. 150.00 lakhs (including Capital outlay of Rs 100.00 lakhs) is proposed.

49. A lot of equipment to meet the needs of the specialists and higher specialities is necessary for which foreign currency provision is essential.

50. The staff quarters problem are acute since Burla has no rented accommodation Besides the need for para-medical particularly nurses has been kept in view.

IMPROVEMENT OF M.K.C.G., MEDICAL COLLEGE HOSPITAL

51. This medical college started functioning from 1961 in the existing District Head quarters Hospital at Berhampur. It has now expanded with a bed strength of 700 and annual intake of student is 100. It provides P. G. in 14 subjects (degree in 13 and diploma in 5). The annual intake of P. G. students of this college is 53.

52. Various components of this college and hospital are yet to be completed and there is need for 150 extra beds in the indoor secn., of the hospital. There is a proposal to open four higher specialities in this college for which a Committee has already been set up to examine the same. Completion of a lot of deficiencies, so far as buildings, provision of para-medical staff, equipment etc., is very much essential

A total outlay of Rs. 70.00 lakhs (Capital outlay of Rs. 40.00 lakhs) has been proposed

IMPROVEMENT OF RURAL HEALTH CENTRES

53. The necessity of proper rural bais in the basic doctors under training has all along been stressed by Government and T.M.C. The rural health centres attached to the 2 medical colleges at Burla and Berhampur are yet to be completed so far as hostel accommodation, proper class room facilities, laboratory and other components are concerned. This being the basic need for medical education as per I.M.C., has been given priority. A total capital outlay of Rs. 18.13 has been proposed on this account.

IMPROVEMENT OF CANCER TREATMENT

54. The existing cancer wing of the S. C. B. Medical College Hospital with 100 beds is provided with two cobalt units and two deep X-Ray therapy units. The nucleus staff for a proper cancer detection unit with specialists in Surgery, gynaecology, Pathology etc., have already been provided. The need for increasing indoor facilities in the cancer wing and also a proper cancer institute in the State is very much necessary. The Wahi Committee have already agreed to consider this cancer with as a regional cancer institute at a future date. Rs. 10.00 lakhs has been earmarked for Cancer equipments under the Improvement of S. C. B. Medical College Hospital.

55. The need for cancer detection and treatment in the two medical colleges. V. S. S. Med. College, Burla and M. K. C. G. Medical College, Berhampur has become the absolute necessity. Provision has been kept for Cobalt unit in each of these medical colleges in the Radio Therapy Departments with 50 beds for early detection, proper and better treatment—surgical, radio and chemo therapy.

TRAINING OF PARAMEDICALS

56. As will be seen in the man-power analysis we shall be requiring minimum of 79 Radiographers by the end of 5th Plan. Up to the S. D. hospital level, provision will be made for X-Ray facilities and also the upgraded P. H. Cs. A total outlay of Rs. 0.90 lakh has been proposed on this account. Annual intake of 20 candidates is proposed.

57. The laboratory technician course is planned to meet deficiency. Lab. technicians are proposed to be proposed up to P. H. C. level. There is need for minimum of 505 technicians by end of the fifth Plan and it is proposed to train 100 per year. Total outlay of Rs. 0.50 lakh has been proposed.

58. The Nurses training programme to take up 200 nurses every year for two years, i.e. with a total outlay of Rs. 22.42 lakhs has been kept.

Other Programmes**IMPROVEMENT OF P. H. LABORATORY**

Total outlay Rs. 5.00 lakhs.

59. The Central P. H. Laboratory was also 3 regional P. H. Laboratories which will be equipped with proper appliances for detection of adulteration and pollution in food and water. A total capital outlay of Rs. 5.00 lakhs has been proposed.

REGIONAL WORK SHOP

60. Regional Work Shop—As per existing arrangement the staff and recurring expenditure will be borne by the State Government whereas building expenditure and major equipments will be borne by Centre. Keeping in view the staff suggested by centre and also equipments that are available in the State a total outlay of Rs. 9.92 lakhs has been made.

TESTING LABORATORY

61. For needful analysis of drugs, a Drugs Testing Laboratory with a total outlay of Rs. 15.00 lakhs and capital outlay of Rs. 3.00 lakhs has been proposed and provided.

VITAL AND HEALTH STATISTICS

62. Collection of vital statistics and morbidity statistics are very poor. The entire statistics of the State more based on sample, registration that has been taken from year to year in fixed villages and towns as indicated by the Central organisation. Staff have been proposed at police-station level in the inter-departmental committee equivalent of a statistical clerk (A.S.-I.). The staff suggested at subdivision, zone, district level and State level as also for the medical colleges and urban areas above one lakh of population are summarised in the scheme. The total outlay is Rs. 30.00 lakhs.

STRENGTHENING OF EPIDEMIOLOGICAL BUREAU

63. Nucleus of the State Bureau is expected to be only possible by end of the Fourth Plan. The addition of a supervisory staff in the rank of A. D. P. H., laboratory technicians field assistants, sample collectors one medical officer and other ancillary

staff have been proposed to make it effective for proper investigation of epidemic problems. Total outlay of Rs. 4.30 lakhs has been proposed.

ESTABLISHMENT OF PSYCHIATRIC CLINIC

64. By end of the Fourth Plan, 3 such clinics in districts of Koraput, Mayurbhanj and Sundergarh will be completed. 7 clinics in district headquarters Hospitals has been proposed. Due to paucity of Psychiatrists it has been phased with a total outlay of Rs. 5.05 lakhs. This is expected to be borne in the Central sector.

SCHOOL HEALTH

65. This is one of the neglected programmes. A proper check up of all the school population is very much necessary and 40 units with one doctor, one laboratory technician, a vehicle and some assistance have been proposed. A total outlay of Rs. 43.00 lakhs has been proposed. There are 40 Education districts in the State.

FAMILY PLANNING

66. The growth rate in the last census has been of the order of 2.5 per cent per annum due to drastic reduction of death rates. To balance the growth rate and bring down the birth rate to 25 per 1000 it requires special attention. A separate and complete plan for the same is attached. Total outlay is Rs. 2217.07 lakhs.

INDIGENOUS SYSTEM OF MEDICINE

67. The Ayurved and Homoeopathy system of medicine is developing side by side with concentration as Medical care and research. During the Fourth Plan it has been functioning and developing separately.

68. Besides expansion of hospital and dispensaries attention is being given for development of P.-G. studies and research, which forms a separate entity and is dealt with separately. Total outlay Rs. 130.00 lakhs.

INDIAN SYSTEM OF MEDICINES

69. The Directorate of Health Services was administering the Schemes relating to the Indian System of Medicine and Homoeopathy during the 1st three Plan periods.

70. 92 per cent of the population in Orissa live in villages and most of them are under the poverty line. Not being educated they still cherish and have implicit faith in the ancient system of Ayurvedic treatment that was in vogue in the villages from the past. Being unable to pay for costly allopathic treatment, they are naturally attracted towards the cheaper system of Ayurvedic and Homoeopathic Science. In view of the growing demands for the Ayurvedic and Homoeopathic systems of treatment in the State, a separate organisation was set up from 1968 and a separate Directorate of Ayurvedic and Homoeopathic Medicines was formed from the dated 1st September 1972 to look after planned arrangement to cater to the needs of the rural population in these systems of treatment.

71. During the Fourth Plan period the provisions and expenditures incurred are mentioned below—

Year		Provision in lakhs	Expenditure in lakhs
		Rs.	Rs.
1969-70	..	3.16	1.58
1970-71	..	9.00	5.78
1971-72	..	15.99	10.82
1972-73	..	13.00	13.00
1973-74	..	23.00	23.00 (anticipated)
Total	..	64.15	54.18

72. The above table reveals that there has been appreciable increase in expenditure and revision during the last 2 years of the Fourth Plan period under Indigenous System of medicines.

Physical target of achievement during the Fourth Plan period along with proposed outlay and target for the Fifth Five Years Plan period in respect of some important schemes.

(1) IMPROVEMENT OF GOPABANDHU AYURVEDA MAHAVIDYALAYA, PURI

73. The Gopabandhu Ayurveda Mahavidyalaya, Puri is the only teaching institution in Ayurveda in the State, with a capacity of 30 admission in the 1st year. During the Fourth Plan period Rs. 3.59 lakhs have been spent in strengthening its staff and buildings.

74. Since the existing staff quarters and hostel buildings are quite inadequate, it is proposed to provide a sum of Rs. 6.60 lakhs for construction of hostel buildings and staff quarters, besides additional teaching staff are to be entertained to make the College a full fledged one for which a sum of Rs. 6.93 lakhs will be required.

(2) IMPROVEMENT OF THE EXISTING 3 AYURVEDIC HOSPITALS AT BHUBANESWAR, BOLANGIR AND PURI.

75. During the Fourth Plan a 30 bedded Ayurvedic Hospital at Bhubaneswar has been opened and 12 additional beds provided at the Ayurvedic Hospital, Bolangir. The staff quarters for both the hospitals have not been adequately provided.

76. To meet the pressing demand of the public for Ayurvedic treatment, it is proposed to augment the bed strength from 130 to 180 in three existing hospitals at Bhubaneswar (20 beds), Puri (20 beds) and Bolangir (10 beds) during the Fifth Plan period for which a sum of Rs. 13.30 lakhs is required for the purpose.

(3) IMPROVEMENT OF THE EXISTING AYURVEDIC AND HOMOEOPATHIC DISPENSARIES IN THE STATE.

77. During the Fourth Plan period till 1972-73, 71 Ayurvedic Dispensaries have been established in rural areas of the State out of which 18 dispensaries have been established in tribal areas of Sundargarh, Ganjam, Keonjhar, Phulbani, Kalahandi and Bolangir districts and 10 more Ayurvedic Dispensaries have been opened during 1973-74. Although 182 Ayurvedic Dispensaries are functioning in the entire State both under Plan and con-Plan, the construction of buildings in respect of 15 Ayurvedic Dispensaries will be completed by the end of the Fourth Plan period. Most of the Ayurvedic Dispensaries are functioning in rented or donated buildings. The rented or donated buildings are not at all suitable for functioning of Government institutions. The dispensaries functioning in thatched houses without sanitary facilities gives a very poor show to the eye of public to have separate buildings of their own and also to provide quarters to the staff it is proposed to provide a sum of Rs. 10.00 lakhs for construction of 50 Ayurvedic Dispensaries in rural areas.

78. Besides the above each dispensary is to be provided with one Pharmacist and one Dhai and also to provide adequate supply of medicines for the interest of the rural patients for which a sum of Rs. 7.22 lakhs is required for the purpose during Fifth Plan period.

79. Similarly for improvement of the existing 118 Homoeopathic Dispensaries towards construction of buildings, staff quarters and to provide Pharmacists and other ancillary staff it is proposed to provide a sum of Rs. 6.70 lakhs out of which Rs. 5.00 lakhs has been earmarked for construction of buildings. These improvements are considered essential for the interest of the patients and also to make the institutions standardised one in par with other Government institutions.

(4) TRAINING PROGRAMME BOTH UNDER AYURVEDIC AND HOMOEOPATHIC WINGS

80. To impart training to the Pharmacists and Dhais under Homoeopathic and Ayurvedic Departments to man the dispensaries and hospitals it is proposed to give training to 200 candidates in the Gopabandhu Ayurveda Mahavidyalaya, Puri and the Government Homoeopathic Medical College at Bhubaneswar. Besides it is proposed to depute 20 candidates outside the State for Post Graduate study in Ayurveda to facilitate introduction of Post Graduate Course at Gopabandhu Ayurveda Mahavidyalaya, Puri. A sum of Rs. 7.25 lakhs is proposed to be provided during the Fifth Plan period for this.

(5) IMPROVEMENT AND STRENGTHENING THE GOVERNMENT AYURVEDIC PHARMACY AT BOLANGIR AND HERBAL GARDEN AT HARISHANKAR AND ESTABLISHMENT OF A CENTRAL PHARMACY AT BHUBANESWAR.

81. The Ayurvedic Pharmacy at Bolangir is the only manufacturing agency of Ayurvedic medicines managed by the State Government. This Pharmacy is to supply medicines to the existing 203 Ayurvedic Dispensaries and 3 Hospitals in the State. Although a sum of Rs. 2.94 lakhs have been provided in the Fourth Plan period towards construction of Pharmacy building a sum Rs. 0.75 lakhs is likely to be incurred by the end of 1973-74. Since the estimated cost of the building Rs. 6.83 lakhs it is proposed to provide a sum of Rs. 6.06 lakhs during the Fifth Plan period. Besides for additional staff Rs. 2.14 lakhs will be required. It is proposed to establish another Pharmacy at Bhubaneswar at the total cost of Rs. 11.00 lakhs during the Fifth Plan period for manufacture of sufficient quantity of Ayurvedic medicines for timely and regular supply to the existing Hospitals and Dispensaries.

(6) IMPROVEMENT OF HOMOEOPATHIC COLLEGE AT BHUBANESWAR

82. Government Homeopathic College at Bhubaneswar is the only teaching institution having 4 Years Diploma Course with an admission capacity of 25 students. A college building at a cost of Rs. 6.20 lakhs has been completed during the 4th Plan period but no staff quarters and hostel building has been taken up. The staff in position are not at all adequate for teaching purposes. It is proposed to provide a sum of Rs. 9.80 lakhs for improvement of the College during the 5th Plan period out of which Rs. 4.80 lakhs has been proposed for Building project and Rs. 5.00 lakhs has been proposed for strengthening the staff and other recurring and non-recurring expenditure to make the College a fullfledged one.

(7) HOMOEOPATHIC HOSPITALS AT THE STATE HEADQUARTERS

83. Only one Homoeopathic Hospital with 24 beds has been established at State Headquarter at Bhubaneswar. To increase the indoor facilities and to facilitate introduction of Post Graduate Course at the Homoeopathic College it is proposed to augment the bed strength from 24 to 100 during the Fifth Plan period at a total cost of Rs. 8.50 lakhs out of which Rs. 4.00 lakhs has been earmarked for building projects.

(8) ADMINISTRATION

84. For improvement of administrative efficiency both under Ayurvedic and Homoeopathic Wings including Colleges, a separate Directorate functioning from 1-9-1972 is to be strengthened with additional staff. Besides the existing administrative set up in the subordinate offices are to be geared up for better control over the field staff for successful implementation of the Fifth Five-Year Plan Scheme. A sum of Rs. 9.50 lakhs is proposed to be provided on this account.

(9) UPGRADING OF DEPARTMENTS FOR POST-GRADUATE TRAINING AND RESEARCH IN INDIAN SYSTEM OF MEDICINES AT GOPABANDHU AYURVEDA MOHAVIDYALAYA, PURI.

85. The Gopabandhu Ayurveda Mahavidyalaya, Puri is the only teaching institution in this State in Ayurveda. Established in 1949 and is about to complete 24 years of its existence. During this period the other State Government have been able to upgrade the Post-Graduate Department in their own States. Since Gopabandhu Ayurveda Mahavidyalaya, Puri provides adequate facilities for introductions of Post-Graduate Course it is proposed to upgrade Departments into Post-Graduate Course for which a sum of Rs. 15.00 lakhs will be required for the entire Fifth Five-Year Plan period.

(10) INTRODUCTION OF DEGREE COURSE AND RESEARCH IN HOMOEOPATHY IN THE GOVERNMENT HOMOEOPATHIC MEDICAL COLLEGE AT BHUBANESWAR.

86. In the Government Homoeopathic College at Bhubaneswar Diploma Course of four years duration has already been introduced during the Fourth Plan Period. It is proposed to introduce a Degree Course so as to have better qualified persons. A sum of Rs. 6.00 lakhs is proposed to be provided in the Fifth Plan period for the purpose.

Appendix I

Fifth Five-year Plan—Financial outlays—Health Programme

(Rs. in lakhs)

Serial No.	Programme	Fourth Five-Year Plan			Fifth Five-Year Plan			Phasing of outlays				
		Approved outlay	Estimated expenditure	Shortfall	Total	Capital	Foreign Exchange	1974-75	1975-76	1976-77	1977-78	1978-79
1	2	3	4	5	6	7	8	9	10	11	12	13

I. STATE SECTOR

1	Hospitals and Dispensaries.	118.50	133.02	..	399.63	232.43	..	47.69	100.71	107.41	82.09	61.73
2	Medical Education and Research.	311.46	389.36	3.53	310.00	190.00	34.00	148.83	69.40	49.32	20.90	21.55
3	Training Programme	17.51	12.10	..	23.82	..	..	4.28	6.28	7.28	3.28	2.70
4	Other Programme ..	43.02	37.98	1.15	110.00	18.00	..	15.16	23.62	21.86	25.31	24.05
5	P. H. C. Programme	159.51	159.51	..	..	..	..	..	..	..	..	..
6	Indigenous System of Medicines.	50.00	54.18	7.66	130.00	50.00	..	31.11	30.31	24.78	21.90	21.90
Total under State Sector.		700.00	786.15	12.34	973.45	490.43	34.00	247.07	230.32	210.65	153.48	131.93

II. Minimum Needs Programmes.	..	..	..	1400.00	786.50	..	345.16	318.51	314.24	247.96	174.13
III. Communicable Diseases.	906.22	825.63	106.62	3963.53	95.71	..	458.37	641.41	829.94	947.19	1086.62	
Grand Total	..	1606.22	1611.78	118.96	6336.98	1372.64	34.00	1050.60	1190.24	1354.83	1348.63	1396.98

Appendix
Health
FINANCIAL

Sl. No.	Programme	Fourth Five-Year Plan		
		Approved outlay	Estimated Expd.	Short falls
1	2	3	4	5

MINIMUM NEED PROGRAMME

1 Primary Health Centre—

(a) Continuance of P. H. C. buildings and staff Qrs. (20 P. H. Cs. and 60 Sub-centres).	159·51	159·51	..
(b) 187 new Sub-Centres at 7,000 population ..	..	..	..
(c) Backlog of construction of 380 Sub-centres ..	..	..	..
(d) Staff quarters for Health Assts., Laboratory Technicians and 2nd S. I. in P. H. C. (551).	..	..	..
(e) Augmentation of Medicine to 314 P. H. C. at Rs. 8,000.	..	..	..
(f) Augmentation of Medicine to 942 Sub-centres at Rs. 2,000.

Total ..	159·51	159·51	..
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2 Upgradation of 77 P. H. Cs. 30-bedded Hospital
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Grand Total ..	159·51	159·51	..
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II

OUTLAYS

(Rs. in lakhs)

Fifth Five-Year Plan			Phasing Total				
Total	Capital	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
6	7	8	9	10	11	12	13
40·00	40·00	..	40·00	..	..	..	..
74·80	37·40	..	18·60	23·45	9·48	11·00	12·27
76·00	76·00	..	20·00	30·60	25·40	..	..
55·10	55·10	..	13·70	11·60	11·00	10·40	8·40
125·60	..	..	25·12	25·12	25·12	25·12	25·12
201·20	..	..	40·24	40·24	40·24	40·24	40·24
572·70	208·50	..	157·66	131·01	111·24	86·76	86·03
827·316	578·00	..	187·50	187·50	5198·70	161·20	92·40
1400·00	786·50	..	345·16	318·51	309·94	247·96	178·43

Sl. No.	Programme	4th Five-Year Plan		
		Approved outlay	Estimated Expd.	Short falls
1	2	3	4	5

II COMMUNICABLE DISEASES

3	N. M. E. P. (for attack and consolidation phase)	..	620.00	572.97	47.03	
						(This is due to retrenchment of staff).
4	Malaria Maintenance Phase (BF)	..	35.00	20.02	14.98	
						(1st and 2nd year almost no expenditure).
5	Urban Malaria	..	..	5.41	..	
6	Cholera Control Programme	..	17.00	14.57	2.43	
						(Due to late implementation of the Scheme and vacancy in the post of Cholera Supervisor. (SI))
7	N. T. B. C. Programme	..	50.00	27.00 (5.60)	23.00B	
8	(a) Urban Filaria Units	..	} 27.88	} 19.35	} 8.53	
	(b) State Bureau of Filariasis	..				
	(c) Survey Unit	..				

Rs. in lakhs

5th Five Year Plan			Phasing Total				
Total	Capital	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
6	7	8	9	10	11	12	13
64	251.91	251.47	253.41	255.29	257.56
41.30	8.13	8.17	8.25	8.33	8.42
171.35	15.87	25.07	34.27	43.47	52.67
112.55	19.60	21.50	22.65	23.95	24.85
112.22	35.01	..	18.25 (B. 9.76)	20.74 (11.65 B)	31.09 (6.80 B)	24.47 (6.80 B)	17.67
98.91	7.66	14.04	19.58	26.49	31.14
5.68	1.10	1.12	1.14	1.15	1.17
12.96	1.44	2.88	2.86	2.88	2.88

Sl. No.	Programme	Fourth Five-year Plan		
		Approved outlay	Estimated expd.	Short falls
(1)	(2)	(3)	(4)	(5)
	(d) Filariasis Clinics	..	..	..
	(e) Detection component	..	..	..
	(f) Treatment component	..	..	..
	(g) Rural Research-cum-Training Centre	..	..	..
	(h) Rural Filariasis Units	..	..	..
	Total	..	27.88	19.35
9	Leprosy—			
	(a) Leprosy Control Unit	..	28.60	27.39
	(b) Upgradation of Subsidiary Centres	..	9.47	8.67
	(c) S. E. T. Centres (20)	..	2.84	2.52
	(d) Leprosy Hospital and Shoe Making Section	..	1.96	1.56
	(e) Strengthening of LCU	..	..	..
	(f) Establishment of Statistical Cell	..	..	..
	(g) Mobile Mass Education Unit	..	..	..
	(h) Zonal Supervisory Unit	..	..	..
	Total	..	42.27	40.14
10	Establishment of V. D. Clinic	..	..	..
11	National Small Pox Eradication Programme	..	94.95	86.84
12	Establishment of State Epidemiology Bureau	..	..	..
13	Establishment of Psychiatric Clinics	..	1.20	0.79

Fifth Five-Year Plan			Phasing Total			Rs. in lakhs	
Total	Capital	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
6	7	8	9	10	11	12	13
132.20	5.00	15.05	25.05	35.05	52.05
61.19	2.70	6.58	13.42	20.64	27.85
71.19	2.70	6.58	13.42	20.64	27.85
4.68	0.52	1.04	1.04	1.04	1.04
1,262.56	45.70	144.40	250.76	359.90	461.80
1,659.37	66.82	191.69	327.29	467.79	605.78
73.44	14.49	14.52	14.69	14.80	14.94
29.49	5.04	5.58	6.18	6.27	6.42
39.78	3.36	5.67	8.61	101.41	11.73
7.24	1.42	1.44	1.44	1.46	1.48
13.95	1.00	2.82	2.88	3.31	3.34
1.00	0.22	0.18	0.19	0.20	0.21
2.13	0.85	0.30	0.31	0.33	0.34
4.72	1.70	0.70	0.74	0.77	0.81
171.15	28.08	31.21	35.04	37.55	39.27
244.68	60.70	..	11.52	58.08	83.04	49.64	42.40
171.92	(B.E.11.52) 30.84	(23.04) 32.23	12.57	12.57	35.25
			N.Re.5.70		33.35	34.55	
			Tr.35.54				
4.30	1.40	0.70	0.70	0.75	0.75
5.05	0.25	0.55	0.85	1.40	2.00

Sl. No.	Programme	Fourth Five-Year Plan		
		Approved outlay	Estimated expd.	Short falls
1	2	3	4	5

HOSPITALS AND DISPENSARIES

14	Improvement of District Headquarters Hospitals ..	35.58 (28.65)	35.58 (17.58)	.. ..
14	(a) Improvement of T. R. W. Dispensaries ..	..	..	..
15	Improvement of Laboratory Services ..	2.30	2.42	..
16	Employment of Nurses ..	..	..	..
17	Establishment of Regional Workshop ..	..	1.88	..

MEDICAL EDUCATION AND RESEARCH

18	Improvement of S. C. B. Medical College Hospital, Cuttack.	13.69 (B. 12.29)	33.10 (B 26.47)	..
19	Improvement of M. K. C. G. Medical College and Hospital, Berhampur.	236.41 (364.00)	300.25 (B 98.61)	.. ..
20	Improvement of V.S.S. Medical College and Hospital, Burla.	36.50 (B 25.50)	32.97 (12.94 B)	3.53

TRAINING PROGRAMME

21	Training of Laboratory Technicians ..	..	..	..
22	Training of Nurses ..	..	2.60	..
23	Training of Radiographers ..	..	..	..

(Rs. in lakhs)

5th Five-Year Plan			Phasing Total				
Total	Capital	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
6	7	8	9	10	11	12	13
323.21	215.94	..	40.26 (31.50)	81.26 (73.18)	82.28 (54.00)	53.00 (48.50)	42.73
7.00	7.00	..	2.00	5.00	..	..	..
19.50	9.49	..	1.90 (1.90)	3.91 (1.90)	4.85 (2.85)	5.84 (2.84)	3.00
40.00	..	..	1.65	4.93	8.30	11.22	13.90
9.92	..	..	0.88	1.93	1.98	2.03	2.10
90.00	50.00	10.00	7.00 8.78(B) +(SB)29.22	9.50 +7.00(B)	10.00 +5.00(B)	6.50	7.00
			45.00 (B)38.00	16.50 (7.00)	15.00 (15.00)	6.50	7.00
70.00	40.00	12.00	36.50 (B)31.80	18.05 (B)8.20	5.00 ..	5.15 ..	5.30 ..
150.00	100.00	12.00	13.60 +28.22(B) +25.51(SOB)	8.85 +26.00(B)	9.05 +20.27	9.25	9.25
			67.33 B 28.27 (SOB)25.51	34.85 (B)26.00	29.32 (B)20.27	9.25	9.25
0.90	..	..	0.18	0.18	0.18	0.18	0.18
22.42	..	..	4.00	6.00	7.00	3.00	2.42
0.50	..	..	0.10	0.10	0.10	0.10	0.10

Sl. No.	Programme	4th Five-Year Plan		
		Approved outlay	Estimated expd.	Short falls
1	2	3	4	5

OTHER PROGRAMMES

24	Appointment of Multipurpose Basic Health Workers	..	..	..
25	School Health Programme	..	..	..
26	Improvement of Vital and Health Statistics	1.00	0.55	0.45
27	Improvement of Regional Public Health Laboratories	..	..	..
28	Drugs Testing Laboratories	3.20	2.50	0.70

INDIGENOUS SYSTEM OF MEDICINES

(AYURVEDIC SCHEMES)

1	Improvement of Gopabandhu Ayurvedic Mahavidyalaya, Puri.	2.80	3.59	..
2	Improvement of existing 3 Ayurvedic Hospitals at Bolangir, Bhubaneswar and Puri.	8.60	22.61	..
3	Improvement of existing 182 Ayurvedic Dispensaries in the State.	8.40		..
4	Post Graduate Training in Ayurved	0.80	0.48	..
5	Improvement and strengthening of existing Ayurvedic Pharmacy at Bolangir and Herbal garden at Harisankar.	2.00	1.19	..
6	Up gradation of department of P. G. T. and Research in I. S. M. at G. A. M., Puri.	..	..	..
7	Training of Ayurvedic Pharmacists	..	..	..

(Rs. in lakhs)

Fifth Five-Year Plan			Phasing Total				
Total	Capital	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
6	7	8	9	10	11	12	13
17·00	..	..	1·65	3·79	3·82	3·86	3·88
43·00	10·00	..	2·00B	7·68 2·00B	9·67 3·00B	12·53 3·00B	11·12
30·00	Nil	Nil	2·77	6·48	6·87	6·93	6·95
5·00	5·00	..	2·00	3·00	—	..	..
15·00	3·00	..	6·74	2·67	1·50	1·00	2·10
13·53	6·60	..	4·60	4·27	1·91	1·35	1·40
13·30	8·60	..	4·35	4·18	3·06	0·84	0·87
17·22	10·00	..	2·00	2·00	3·16	4·84	5·22
1·25	..	..	0·25	0·25	0·25	0·25	0·25
8·20	6·06	..	3·72	2·40	1·34	0·36	0·38
15·00	..	..	2·77	2·70	3·00	3·20	3·33
2·00	—	..	0·40	0·40	0·40	0·40	0·40

Sl. No.	Programme	Fourth Five-Year Plan		
		Approved outlay	Estimated expd.	Short falls
1	2	3	4	5
8	Training of Dais in Ayurved at G. A. M. Puri ..	--	..	--
9	Esttablishment of Central Ayurved Pharmacy at Bhubaneswar. ..	..	..	..
10	Grant-in-aid to Ayurvedic practitioners in State. ..	0.15	..	..
(HOMOEOPATHIC SCHEMES)				
11	Improvement of Homœopathic College at Bhubaneswar	8.38	10.85	..
12	Improvement of Homœopathic Hospital at State Head quarter, Bhubaneswar.	6.16	3.18	..
13	Improvement of existing 118 Homœopathic Dispensaries in State.	10.46	11.87	..
14	Grant-in-aid to Co-operative Homœopathic College, at Berhampur.	..	..	..
15	Administrative set up for reorganisation of subordinate offices in respect of Ayurvedic and Homeo wing.	0.60	0.41	..
16	Degree Course and Reserch in Homeopathic at Homœopathic College, Bhubaneswar,	..	..	..
17	Training of Homœopathic Pharmacists at Homœopathic College, Bhubaneswar.	..	..	..
18	Strengthening of Administrative Mechinery to the newly created Director of Ayurved and Homœo Orissa.	1.65	..	..
19	Establishment of Reserve Medical Store for Ayurved and Homœopathic Medicines at State Head-quarter attached to office of D. A. and H. M. Orissa.	..	..	..
Total—I. S. M.		--	50.00	54.18

(Rs. in lakhs)

Fifth Five-Year Plan			Phasing Total				
Total	Capital	Foreign exchange	1974-75	1975-76	1976-77	1977-78	1978-79
6	7	8	9	10	11	12	13
2.00	..	..	0.40	0.40	0.40	0.40	0.40
11.00	5.00	..	3.50	3.05	2.10	1.15	1.20
..
9.80	4.80	..	1.98	1.91	2.94	1.97	1.00
8.50	4.00	..	2.00	3.57	0.95	0.98	1.00
6.70	4.94	..	1.00	1.00	1.00	1.78	1.92
4.00	..	..	0.80	0.80	0.80	0.80	0.80
4.00	..	..	0.82	0.75	0.78	0.81	0.84
6.00	..	..	1.10	1.16	1.20	1.24	1.30
2.00	..	..	0.40	0.40	0.40	0.40	0.40
3.00	..	..	0.50	0.60	0.61	0.63	0.66
2.50	..	..	0.52	0.47	0.48	0.50	0.53
130.00	50.00	..	31.11	30.31	27.28	21.90	21.90

APPENDIX
Health
PHYSICAL TARGETS

Sl. No.	Item	Fourth Plan Targets	1973-74 Sanctioned Position	Targets for 5th Plan (Addition)
1	2	3	4	5

MINIMUM NEED PROGRAMME

1 Primary Health Centre

(a) Construction of P. H. C. & staff Qrs. ..	314	294	20
a. c. 942 staff Qrs.		882	60
<hr/>			
Total ..	1256	1176	80
<hr/>			
(b) 187 New Sub-centre at 7000 population ..	..	..	187
(c) 380 Sub-centres ..	..	..	380
(d) Staff Qrs. for Health Assistant Laboratory Technician & 2nd S. I. for P. H. Cs.	..	..	551
(e) Augmentation of M.S.I. to P. H. Cs. ..	..	..	314
(f) Augmentation of M.S.I. to P. H. Cs. Sub-Centres.	..	..	942
2 Upgradation of 77 P. H. C. to 30 beded rural hospitals.	..	..	77

COMMUNICABLE DISEASES

3 N. M. E. P.—

(a) Attack Phase ..	5·966	5·966	2·120
(b) Consolidation Phase ..	6·154	6·1521	10·000
<hr/>			
Total ..	12·120	12·120	12·120

Sl. No.	Item	Fourth Plan Targets	1973-74 Sanctioned Position	Targets for 5th Plan (Addition)
1	2	3	4	5
4	Malaria Maintenance Phase (B. H. C.)	2880	2880	2880
5	Urban Malaria	..	6 towns	50 towns
6	Cholera Control Programme	..	<p>1. Coverage of all the 118 Blocks in 4 coastal Blocks are districts viz., Cuttack, Puri, Balasore and Ganjam as per the target to be covered.</p> <p>2. Establishment of one Mobile Medical Unit. Mobile Unit Esttd.</p> <p>3. Establishment of head quarters. Headquarters Cell Establishment.</p>	
7	National T. B. Control Programmes	..	<p>1. Upgradation of one District T. B. Control Centres. 189</p> <p>2. Establishment of 25 insolation beds</p>	
8	(1) Urban Filariasis Units	9	9	56
	(2) State Bureau of Filariasis	1	..	..
	(3) Survey Unit	2	2	..
	(4) Filariasis Clinics	..	..	50
	(5) Detection component	..	..	18
	(6) Treatment camp	..	..	18
	(7) Rural Research-cum-Training Centre	..	..	1
	(8) Rural Filariasis Unit	..	..	2,800

Phasing/Addition					1978-79
1974-75	1975-76	1976-77	1977-78	1978-79	Anticipated position
6	7	8	9	10	11
2·880 old 6 +new 10 towns	2·880 old 16 +new 10 towns	2·880 old 26 +new 10 towns	2·880 old 36 +new 10 towns	2·880 old 46 +new 10 towns	2·880 units 56 towns
16	26	36	46	56	
..	..	..	..	..	Continuance
..	..	..	..	..	Continuance
Coverage 12 Blocks of additional 24 to be Cholera covered Endimic Block in the districts of Dhenkanal, Keonjhar and Mayurbhanj.	12 blocks to be covered.	12 blocks to be covered.	12 blocks to be covered.	12 blocks to be covered.	Same as col. 5
Creation of post of A. D. P. H. (Cholera)	Post to be crea- ted.	Continuance	Continuance	..	Ditto
..	30	75	42	42	279
12	12	12	12	12	65
..	..	..	..	..	1
..	..	..	..	..	2
10	10	10	10	10	50
2	4	4	4	4	18
2	4	4	4	4	18
1	..	..	..	..	1
500	500	600	600	500	2,800

Sl. No.	Item	Fourth Plan Target	1973-74 Sanctioned Position	Targets for 5th Plan (Addition)
1	2	3	4	5
9.	(a) Leprosy Control Units ..	7	7+4	..
	(b) Upgradation of subsidiary centres to Leprosy Control Units.	8	8	4
	(c) S. E. T. Centre ...	20	20	200
	(d) Leprosy Hospital and shoe making section ...	..	1	..
	(e) Strengthening of Leprosy Control Unit ..	..	..	8
	(f) Statistical Cell ..	..	..	1
	(g) Mobile Mass Education Unit ..	..	..	1
	(h) Zonal Supervisory Units ..	..	..	3
10.	Estt. of V. D. Clinics ..	..	3	42
11.	National Small pox Eradication Programme ..	PV-7-98	13-45	PV-67-25
		RV-214-87	RV-44-75	RV-223-75
12.	Estt. of State Epidemiology Bureau ..	..	..	Estt. of one State Epidemiology Bureau.
13.	Estt. of Psychiatric Clinic ..	2	3	7
HOSPITALS AND DISPENSARIES				
14.	Improvement of District Head. Qrs. Hospital ..	135	1,420	870 Bed
15.	Impvt. of T.R.W. Dispensaries ..	..	..	..

* Against Danish L. C. Project

Phasing/Addition					1978-79
1974-75	1975-76	1976-77	1977-78	1978-79	Anticipated position
6	7	8	9	10	11
..	..	..	..	..	7+4=11+8
2	1	1	..	..	12
49	45	56	36	24	230+64=296
..	..	..	..	..	1
2	5	..	1	..	8
1	..	..	..	..	1
1	..	..	..	..	1
3	..	..	..	..	3
..	8	16	9	9	55
23·45	PV-23·45	PV-13·45	PV-13·45	PV-13·45	
RV-44·75	RV-44·75	RV-44·75	RV-44·75	RV-44·45	
Establishment of State Epidemiology Bureau	Continuance of the scheme	Continuance of the scheme	Continuance scheme	Continuance scheme	Establishment of one Epidemiology Bureau
1	1	1	2	2	10
Building	110	330	220	210	2,290
Building	4	10	..	..	..

Sl. No.	Item	Fourth Plan Targets	1973-74 Sanctioned Position	Targets for 5th Plan (Addition)	
1	2	3	4	5	
16	Improvement of Lab. Services	..	2	..	10
17	Employment of Nurses	..	..	850	457
18	Establishment Regional Workshop	..	..	1	Continuance
19	Improvement of the S. C. B. M. C. H., Cuttack.	Conts. of administrative block, 50 bedded Medl. ward, staff qrs. and T.B. wards, completion of surgical blocks, Orthopaedic ward.	Ground floor of surgical block completed and staff qrs. to be completed 2. 50 bedded Medl. wards (u/c) 3. Completion of Orthopaedic ward.	Cont. of staff qrs., T. B. wards and staff qrs. Central Animal house I. D. ward (I.P.C.H.) central workshop, ladies hostel including P.G. & completion of surgical blocks, medicine ward.	
		2. Provision of addl. staff			Provision of addl. staff.
		3. Provision of special equipt.			Provision of special equipment cancer equipment.
19	Improvement of M.K.C.G. M.C.H., Berhampur	Continuance of M. C. & Hospital, Berhampur, construction of Hospital building.	Animal House staff qrs. construction of O.P.D. & Hospitals.	Continuance of M.C. & Hospital, Berhampur. Consts. of Indoor ward of the Hospital, building.	

Phasing/Addition					1978-79
1974-75	1975-76	1976-77	1977-78	1978-79	Anticipated position
6	7	8	9	10	11
Building	2	2	3	3	12
100	100	100	100	57	1,307

Continuance

774-75	1. Staff qrs. & D. D. ward (IPCH)	1. Control workshop B. ladies hostel including P. G.	Continued	Continued	..
1. Staff qrs.	1. Addl. staff	Continued			
2. T. B. ward and staff qrs.	2. Special Equipment				
3. Central Animal house,					
4. Completion of Medical ward & Surgical block.					
1. Addl. staff					
2. Special equipment.					

Completion of hospital building, Radiotherapy Block, school building, compound wall, staff qrs., 50 seats Hostel of P. H. C. Digapahandi.	1. Hospital building 2. School building 3. Staff qrs. 4. Compound wall 5. Radiotherapy block.	Staff qrs. compound wall
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Sl. No.	Item	Fourth Plan Targets	1973-74 Sanctioned Position	Targets for Fifth Plan (Addition)
1	2	3	4	5

20	Improvement of V.S.S. Medical College, and Hospital, Burla.	100-bedded O. & G. Ward, Auditorium, Library and exhibition hall, garage & compound wall, I. D. Ward, Animal house staff quarters, roads, etc.	1. Construction completed— (i) Garage (ii) Compound wall. (iii) Animal house & Mortury. (iv) Central store. (v) Staff qrs. 2. Under construction—	Construction of auditorium, 50-bedded T.B. Ward, Radiotherapy Block, compound wall, road, etc., staff qrs., swimming pool. 2. Provision of addl. staff. 3. Purchase of equipment, etc.
			(a) 100-bedded O.&G. Ward.	
			(b) Staff quarters	
				3. Some addl. staff created as per I.M.C.
				4. Addl. equipment provided.

Phasing/Addition					1978-79
1974-75	1975-76	1976-77	1977-78	1978-79	Anticipated Position
6	7	8	9	10	11

- | | | | | |
|--------------------------------|--------------------------------|---|-----------------------------|-------|
| 1. Staff qrs. | 1. Staff qrs. | 30-bedded T.B. Ward, staff qrs., swimming pool, continuance of addl. staff, purchase of equipments. | Continuance of addl. staff. | Cont. |
| 2. Additorium | 2. Compound wall. | | | |
| 3. Radio Therapy. | 3. Roads, etc. | | | |
| 4. Swimming pool. | 4. Swimming pool. | | | |
| 5. Creation of addl. staff. | 5. Continuance of addl. staff. | | | |
| 6. Purchase of equipment, etc. | 6. Purchase of equipments. | | | |

Sl. No.	Item	Fourth Plan Targets	1973-74 Sanctioned Position	Targets for Fifth Plan (Addition)
1	2	3	4	5

TRAINING PROGRAMME

21	Training of Laboratory Technician .. ..	..	..	500
22	Training of Nurses—Increase of annual admission.	..	200	400
23	Training of Radiographers .. ..	..	..	100

OTHER PROGRAMME

24	Appointment of Multipurpose Basic Health worker & their employment.	..	100	Employment of 100 basic health workers.
25	School Health Services .. ..	..	..	Establishment of 40 units & Const. of building.
26	Vital & Health Statistics ..	..	Total 52	1. To set up 110 new statistical cells in the Zonal level M. C. H. Sub-office of the major towns and State district headquarters and will function towns.
				2. To strengthen existing statistical cells in the quarters C. H. Sub-office of the major towns and State district headquarters and to set up 13 statistical cells in Registrar of Birth and Death of the 13 major towns.

Phasing/Addition					1978-79
1974-75	1975-76	1976-77	1977-78	1978-79	Anticipated position
6	7	8	9	10	11

100 100 100 100 100 ..

200 200

20 20 20 20 20 ..

100

Construction of building. 8 units and construction of building. 7 units and construction of building. 12 units and construction of building. 12 units and construction of building. 40 units

As in col. 5. As in col. 5. As in col. 5 As in col. 5 As in col. 5

Total 162 statistical cells for vital statistics and Registration birth & death Hospital & morbidity statistics will function. Three zones will be established and 56 writers will be provided to the office of 56 registrars of Birth and Deaths (Rural located at subdivision headquarters police-station.

Sl. No.	Item	Fourth Plan Targets	1973-74 Sanctioned Position	Targets for Fifth Plan (Addition)
1	2	3	4	5

2. To strengthen existing 38 statistical cells of State headquarters, district headquarters, cities and major towns.

3. To provide 56 writers to the offices of 56 registrars of birth & death (Rural located at subdivisional headquarters, police-station.

27 Improvement of Regional Public Health Laboratories. 2

28 Drugs Testing Laboratory .. Establishment of Drugs Testing Laboratory. Construction of building. Provision of staff and purchase of equipment.

Phasing/Addition					1978-79
1974-75	1975-76	1976-77	1977-78	1978-79	Anticipated position
6	7	8	9	10	11

1 1

Provision of staff and purchase of equipment.

..

..

Provision of additional staff and purchase of equipment.

..

Continuance of the staff.



CHAPTER 2-14

WATER-SUPPLY

The State of Orissa has 80 towns and about 47,000 villages. The objective in the Fifth Plan is to provide adequate drinking water-supply to all these communities.

2. In the Fourth Plan a sum of Rs. 5.14 crores was provided for urban water-supply, sewerage, drainage, sanitary latrines and Capital (Bhubaneswar) water-supply and sewerage. A sum of Rs. 468.55 lakhs is likely to be spent by the end of 1973-74. Thirty water-supply schemes were under execution in the Fourth Plan out of which 12 will be completed during the Plan. The remaining 18 schemes will spill over into the Fifth Plan. The Cuttack sewerage scheme was begun during the Second Plan. Due to paucity of funds it has not been possible to complete this project. A scheme worth Rs. 1.10 crores is under execution in that city and the estimated amount likely to be spent by the end of the Fourth Plan under this scheme.

3. As regards water-supply in villages it has been estimated that nearly 20,000 villages go without any source of potable water-supply and in 14,000 villages the sources are inadequate.

Urban Water-Supply, Sewerage and Drainage

4. Eighteen Water-Supply Schemes in different towns of the State which were under execution during the Fourth plan Period will be continued and completed in the Fifth Plan. The total requirement of funds for these 18 schemes is Rs. 6.05 crores.

5. In the Cuttack City a part of the sanitary sewerage system which has been under execution since the Second Plan will be completed and for this a sum of Rs. 0.77 crores will be provided in the Fifth Plan.

6. Thus the total provision for these spill over projects comes to Rs. 6.82 crores.

Capital (Bhubaneswar) Water-Supply and Sewerage System

7. The population of Bhubaneswar N. A. C. is 1,50,000 as per the 1971 Census. The size of the town is increasing and it being a planned town, provision is being made for suitable water-supply and sewerage. It has been estimated that by 1986, the requirement of water for this town would be 15 million gallons per day. The capacity of the filtration plant, the pumping main, etc. to cater to this demand should be of 20 M. G. D. It is expected that by the end of 1973-74 the filtration capacity would increase from 4 M. G. D. to 7.5 M. G. D. In the Fifth Plan, it is proposed to increase it by another 5.8 M. G. D. A sum of Rs. 2.50 crores is being provided in the Fifth Plan for the capital water supply including the intake work, filtration plant, feeder-mains, reservoir, the distribution system, etc.

8. It is also proposed to provide central sewerage system with complete sewerage treatment plant, trunk-sewers connecting the various neighbourhood units in the Bhubaneswar planned town and doing away with the individual disposal units located in isolated places in the Capital area. It is estimated that the cost for a central sewerage treatment plant and trunks sewer lines would be Rs. 1.42 crores. A further sum of Rs. 58 lakhs is needed for laying sewer lines. Thus a total provision of Rs. 2 crores has been made for the sewerage system for Bhubaneswar town.

9. Apart from these schemes piped water-supply will be provided in 6 small towns (Gunupur, Umerkote Khariar, Khalikote, Sonapur and Jaleswar) each with a population of less than 20,000. A sum of Rs. 0.76 crore is provided for this purpose.

Sanitary Latrines

10. In the interest of sanitation of towns and for ameliorating the living conditions of scavengers it is necessary to convert the existing surfaced latrines into flush latrines in the areas covered by urban local bodies. Under the schemes, incentives will be provided by the Government for conversion of surfaced latrines into flush latrines. A provision of Rs. 24 lakhs is made for this purpose.

Rural Water-Supply

11. Provision for water supply in the villages in Orissa will be taken up as a part of the Minimum Needs Programme. Detailed proposals under this programme have been prepared and submitted to the Planning Commission separately. Out of the total number of 46,992 villages in the State so far 10,295 villages have been identified as problem villages after investigation by the State Public Health Engineering Organisation of the Government. This is in addition to 1,592 identified villages which have already been covered under the accelerated water supply programme. The identification of these problem villages has been done on the basis of the norms laid down by the Government of India as indicated below:—

- (a) Difficulty and scarcity villages where water is found at more than 50ft. below the ground level or the sources are more than 1.5 K. ms. away;
- (b) endemic areas such as cholera or guinea worm infected area;
- (c) saline and excess chloride/iron and brackish area

12. Under the Minimum Needs Programme it is proposed to spend a sum of Rs. 25 crores during the Fifth Plan for providing protected drinking water facilities to 8,141 problem village out of those which have already been identified as such. This will cover a population of about 4.52 millions. Under the programme, deep wells would be dug in 8,047 problem villages and 74 bigger villages will be covered with pipe water supply. In 20 villages, mostly in hilly areas, cisterns will be provided.

13. Apart from these proposals for protected water supply under the Minimum Needs Programme) provision is also being provided for construction of open pucca wells in some of the villages not covered under the Minimum Needs Programme. Under this programme open wells would be dug in 8,824 villages where adequate drinking water facilities are not available. For constructing these wells Rs. 3,09,78,500 would be needed, A further sum of Rs. 1,24,75,000 would be needed for completing incomplete wells which have been taken up in some of these villages. Against this a sum of Rs. 4 crores has been provided in the Fifth Plan.

Annexure
Provision and Expenditure

Fourth Plan

	Fourth Plan provision	1969-70	1970-71	1971-72	1972-73 (Dept.)	1973-74 as approved	Total five years
1	2	3	4	5	6	7	8
1. Urban		52.00	36.26	47.50	64.20	131.00	330.96
(a) Water Supply	514	3.00	0.50	6.00	7.00	10.00	26.50
(b) Sewerage							
(c) Drainage		..	..	7.31	..	10.00	17.31
(d) Capital Project		5.00	9.76	25.12	16.90	20.00	76.78
Total	514	60.00	46.52	85.93	88.10	171.00	451.55
2. Rural							
(a) Piped W/S.	136.00	5.00	25.80	23.70	33.20	19.50	107.20
(b) Tube well	..	..	1.00	25.60	6.00	9.30	41.90
	136.00	5.00	26.80	49.30	39.20	28.80	149.10
3. Others							
T. & P. Conversion of Dry latrines to wet latrine.	..	..	1.00	6.00	5.00	5.00	17.00
Total of +2+3	650.00	65.00	74.32	141.23	132.30	204.80	617.65
4. Well Construction Programme (Rural).	150.00	2.00	18.30	39.21	50.50	50.20	160.21
Grand Total	800.00	67.00	92.62	180.44	182.80	255.00	777.86

* Excludes provision of Rs. 25 crores Made

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Water Supply and Sanitation

(Rs. in lakhs)

Fifth Plan provision	1974-75	1975-76	1976-77	1977-78	1978-79
9	10	11	12	13	14
681·00	247·56	209·98	125·36	61·01	37·09
77·00	17·00	15·00	15·00	15·00	15·00
..
450·00	90·00	90·00	90·00	90·00	90·00
1,208·00	354·56	314·98	230·36	166·01	142·09
..
..
..
24·00	5·00	5·00	5·00	5·00	4·00
1,232·00	359·56	319·98	235·36	171·01	146·09
400·00	80·00	80·00	80·00	80·00	80·00
*1,632·00	439·56	399·98	315·36	251·01	226·09

under Minimum Needs Programme

CHAPTER 2·15

HOUSING

Review of Housing

The emphasis on housing has been limited by the paucity of funds which had mostly to be drawn from L. I. C.

2. During the Fourth Plan there was a provision of Rs. 7·75 crores. Against this the expenditure is anticipated to be Rs. 656·91 lakhs. Physical achievements of some of the main housing schemes during the Fourth Plan are given below—

Village Housing Project Scheme	..	1,443 houses
Subsidised Industrial Housing Scheme	..	571 houses
Rental Housing Scheme	..	899 houses
Low Income Group Housing Scheme	..	579 houses
Middle Income Group Housing Scheme	..	477 houses

3. The Housing schemes are being executed through various agencies. The village Housing Project is being executed through the Block agency under the overall supervision of the Collector. The Low Income Group Housing and the Middle Income Group Housing Schemes are being put through the Collectors of the Districts. The Subsidised Industrial Housing Scheme is in some cases given over to the respective Industrial Establishments but more often it is executed through the P. W. D. the Rental Housing Scheme is in the care of the P. W. D. the agencies and the working procedures will be rationalised gradually.

4. Within the available means the targets for the fourth Plan will be achieved. Generally a view can be taken that there has been uneven growth of development in the State. Some districts have, relatively speaking, gone forward in the field of housing while others have lagged behind. Examples of the latter category are Koraput, Phulbani and Kalahandi. It is being proposed that an allocation of Rs. 2 crores should be made for the Village Housing Project; allocations for other schemes are also being suggested. In the course of the Fifth Plan period, a larger proportion of the allocations should be utilised for the six districts, Koraput, Kalahandi, Phulabani, Keonjhar, Bolangir and Dhenkanal. 60 per cent of the resources for Village Housing Project may be earmarked for utilisation in these districts, thereby adding there a stock of 2,000 houses. Slum improvement and clearance in some of the towns, where the problem is very acute, will receive attention in the Fifth Plan. Necessary provision is also required to be made in the plan for construction of residential and non-residential buildings in the State Capital.

5. It is proposed to provide Rs. 10·20 crores for all Housing programmes in the State during the Fifth Plan. The *inter se* distribution of this amount has been shown in the Annexure.

Housing Board

6. At present, the Housing Board undertakes only two Housing Schemes, the Low Income Group Housing Scheme and the Middle Income Group Housing Scheme, and its activities are mostly confined to urban areas. The housing problem in the urban sectors of the State, particularly Bhubaneswar, Rourkela, Berhampur and Sambalpur is so great that any effort by the Board would be worthwhile.

7. Rs. 50 lacs have been earmarked to be utilised for acquisition of land as well as for levelling and development of undeveloped land Rs. 20 lakhs may be made over to the Housing Board out of this for becoming seed capital for acquisition purposes. This money should be recouped by it after sale of buildings constructed on it. It will then become a sort of revolving capital. The other Rs. 30 lakhs may be kept in the Department.

8. It has been suggested that block allocations be made to the Board to allow its flexibility in their utilisation.

Impementation

9. The diversity of executing agencies in the field of housing will have to be avoided in the Fifth Plan while the field of activity of the State Housing Board may continue in the urban sector, in the rural areas the programmes may be executed through a new body which might be called Rural Housing Corporation.

10. In executing the schemes, a useful guideline will be that voluntary agencies should be associated with the programmes to the maximum extent possible. They will lessen the burden on the State administrative structure to the extent of their participation. Secondly, again wherever possible, the concerned authorities should seek and avail of institutional finance to minimise strain on the public exchequer.

11. There is already a Cuttack City Improvement Trust. The creation of Bhubaneswar Development Authority as envisaged. It will be advantageous to form such Development Authorities for other towns e.g. Rourkela, Sambalpur, Berhampur, enabling institutional finance to be attracted.

12. There is only one Co-operative Society called the Orissa State Co-operative Housing Corporation Ltd. having primary societies affiliated to it. Efforts will be made to increase the number of Co-operative societies so that institutional finance becomes available and housing effort is more widespread.

Slum Clearance and Improvement

13. A sum of Rs. 20 lakhs has been provided for undertaking slum-improvement and clearance in some of the towns where the problem is very acute.

14. Annexure I indicates the details of the financial provisions for each of the schemes. Annexure II gives other relevant details.

[3 P & 150]

Annexure I

Programmewise Outlay and Expenditure

(Rupees in Lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay for 1973-74	Likely expenditure 1973-74	Likely expenditure during Fourth Plan	Fifth Plan total outlay	Annual Plan 1974-75 outlay
1	2	3	4	5	6	7	8

HOUSING

1	V. H. P. Scheme						40·00
	(a) Loan ..	48·00	18·50	18·50	} 52·18	} 20·00	40·00
	(b) Rural Housing Cell ..	5·95	5·50	5·50			
	(c) New Organisation for Housing Schemes.	..	..	..	..	20·00	5·00
2.	S. I. H. Scheme ..	49·05	8·12	8·12	24·74	70·00	14·00
3.	Rental Housing Scheme	1,17·00	20·00	20·00	1,32·17	350·00	50·00
4.	Loan to Housing Board .	..	..	..	..	1,00·00	20·00
5.	L. I. G. H. Scheme ..	92·00	26·00	26·00	80·04	50·00	10·00

6. M. I. G. H. Scheme ..	1,20·00	27·50	27·50	1,13·73	50·00	10·00
7. L. A. & Development Scheme	23·00	8·00	8·00	24·39	50·00	7·50
8 Grant to State Housing Board	5·00	1·00	1·00	6·01	10·00	2·00
Total	4,60·00	1,14·62	1,14·62	4,33·26	9,06·00	1,59·66
9 Housing in State Capital ..	3,00·00	66·38	66·38	1,76·65	94·00	20·00
10 Slum clearance ..	15·00	15·00	15·00	47·00	20·00	4·00
Grand Total ..	7,75·00	1,96·00	1,96·00	6,56·91	10,20·00	1,83·66

Annexure II

Physical Programme—Targets and achievements

Sl. No.	Item	Unit	1968-69 level	Fourth Plan		Level expected during 1973-74	Fifth-Plan Target	
				Target	Likely achievement		Total	1974-75
1	2	3	4	5	6	7	8	9
1	V. H. P. Scheme	.. House ..	2,328	1,600	1,443	3,771 @Rs. 4,000 per house.	5,000	1,000
2	S. I. H. Scheme	.. Tenements	2,292	676	571	2,863 @Rs. 6,000 per house.	2,500	500
3	Rental Housing Scheme	.. House	3,353	837	899	4,252 @Rs.20,000 per house.	1,750	250
4	Loan to Housing Board	.. Do.	..	..	..	..	535	107
5	L. I. G. H. Scheme	.. Do.	2,560	739	579	3,139 @Rs.15,000 per house.	335	61
6	M. I. G. H. Scheme	.. Do.	460	436	477	937 @Rs 25,000 per house.	200	40
7	Land Acquisition & Development Scheme.		27,861 acres acquired 3,667 acres of land developed.	Acquisition of 3 acres of land and development of 235 acres of land.	Acquisition of 2 acres of land and development of 234 acres of land.	Acquisition of 29 acres of land and development of 3,901 acres of land.		Not finalised

CHAPTER 2-16

URBAN DEVELOPMENT

The programmes under Urban Development include town planning in different towns of the State, development works by the urban local bodies, slum clearance and construction/improvement of municipal roads.

2. During the Fourth Plan period, 23 towns were taken up for preparation of master plans out of which 14 schemes were carried over from the previous plan period. By the end of the 4th Plan master plans for 20 towns will be prepared and those for the other 3 towns will be carried over into the 5th Plan. A sum of Rs. 25 lakhs has been provided for the purpose in the 4th Plan.

3. In the Fourth Plan, a sum of Rs. 73.14 lakhs was provided for giving loan and grant-in-aid to municipalities and N. A. Cs. for undertaking development works like construction of market buildings, show-rooms, renovation of tank for pisciculture, extension of street lights, construction of children's parks, libraries. Under the remunerative schemes the municipalities have been given loans whereas for non-remunerative schemes, they are given grant-in-aid up to 50% of the estimated cost of the schemes and the balance 50% being provided by the local bodies as matching contribution.

Schemes for the Fifth Plan

4. Town Planning—The town planning schemes will have four components :—

- (i) Preparation of Master Plan for towns
- (ii) Development plans for 4 Sub-Regional complexes
- (iii) District Development Plan for Koraput district and establishment of improvement trusts.
- (iv) Establishment of improvement trusts. The preparation of Master Plan for 3 towns would remain incomplete during the Fourth Plan period. These will be completed in the Fifth Plan and for this provision of Rs. 6 lakhs has been made. Besides, 18 more individual towns would be covered under the schemes for preparation of Master Plan.

5. Besides, preparation of Master Plan for individual towns. Development Plan for 4 Sub-Regional complexes will be prepared at an estimated cost of Rs. 10 lakhs. The District Development Plan for Koraput would be prepared at an estimated cost of Rs. 6 lakhs. A sum of Rs. 5 lakhs has been provided for setting up improvement trusts for 5 towns.

6. The total outlay for various town planning schemes is Rs. 60 lakhs during the Fifth Plan period.

Financial Assistance to Local Bodies

7. A sum of Rs. 25 lakhs has been provided for giving loans to urban local bodies under the remunerative schemes. Similarly, Rs. 15 lakhs has been provided to give grant-in-aid to the local bodies for their non-remunerative projects.

Annexure I

Size of the 5th Plan and outlay under Town Planning and Local Bodies

Projects	Outlay in Lakhs of Rs.
TOWN PLANNING :	
Planning	
.. 1. Preparation of Master Plans for 21 individual towns including 3 spilled over towns as in Table II.	39.00
2. Development Plans for Sub-regional Complexes.	
(a) Cuttack, Bhubaneswar, Choudwar complex.	
(b) Berhampur, Chhatrapur, Gopalpur complex.	
(c) Rourkella, Kansbahal complex	
(d) Sambalpur, Hirakud, Burla complex	
3. District Development plan for Koraput	6.00
Sub-Total ..	55.00
Implementation	
4. Funds for developmental activities of 5 proposed Improvement Trust, viz., Bhubaneswar, Sambalpur, Puri, Berhampur and Jeypore.	5.00
Sub—Total ..	60.00
Local Bodies	
Loans for Remunerative Projects ..	25.00
Grants for Non-Remunerative Projects ..	15.00
Sub—Total ..	40.00
Grand Total ..	100.00

CHAPTER 2-17

WELFARE OF BACKWARD CLASSES

Apart from the fact that over 65 per cent of the population of Orissa, are below subsistence level, the tribal and Schedule Caste population accounting for 38 per cent of the total population is in a State worse than that of subsistence level. A survey conducted by the Research Wing of the State Tribal and Harijan Research Training Institute during 1967-68 revealed that the *per capita* income of the primitive tribal people of the State is as low as Rs. 158.40 at current prices as compared to State average of Rs. 433.76. There is however, no systematic data available as to the progress achieved by the tribals in the fields of Health and Education and other minimum needs. Constant attempts are always made through the meagre State resources and Central assistance to alleviate their disadvantageous status.

Review of progress up to end of the Fourth Plan

2. The following statement would indicate the outlay and expenditure during the 1st 2nd, 3rd and 4th Plans:—

(In crores of rupees)

Total State outlay	Outlay for the Backward Classes Welfare Sector		Expendi- ture against Col. 1	Expenditure against		Remarks
	State Sector	Central Sector		Col. 2	Col. 3	
1	2	3	4	5	6	7
First Plan 20.07	N. A.	N. A.	18.42	N. A.	2.28	
Second Plan 99.99.	3.80	3.37	86.59	3.32	3.12	
Third Plan 227.58.	3.89	3.70	224.98	3.71	3.74	** Including provisional figures of expenditure of 1972-73 and outlay of 1973-74.
Annual Plans (1966—69) 126.06.	1.63	3.56	124.94	1.46	3.29	
Fourth Plan 222.60.	4.31	5.88	256.00	**4.31	5.81**	
696.30	13.63	16.60	710.93	12.86	18.24	

3. Annexures I, II and III will show the achievements during Fourth Plan under this Sector. The expenditure is higher than the original ceiling. The physical targets achieved are also fairly satisfactory ; in some cases such as distribution of scholarships and stipends and opening of High Schools etc., the targets have actually been exceeded. A sizeable section of the tribals such as Santals of Mayurbhanj and Orams of Sundargarh have probably availed of the opportunities substantially. The net effect of the departmental effort, however, seems to be marginal. Isolated schemes such as payment of subsidy to cottage industries, supply of bullocks and seeds etc., construction of Minor Irrigation Projects, subsidy for housing grant of legal aid etc., have proved ineffectual, mainly due to the meagreness of the outlays, and the need for their wide dispersal. Some schemes have been utilised by certain tribals and their status *inter se* is better than that of Juangs in Keonjhar, Lanjia Sauras in Ganjam and Koraput, Bonda Parajas in Koraput district who still remain in their primitive conditions.

Objective and strategy in the Fifth Plan

4. The primary objective of the Fifth Plan should be to make a determined effort to remove the disparities and regional imbalances in the foreseeable future of two or three plan periods. In the light of experience gained during the past Plans a new strategy has to be adopted in order to achieve the objective. The new strategy will consist of integrated area development programmes taking a limited number of families for personalised attention. Secondly, much greater allocation of time and money from all Sectors is being made. The development of backward areas/backward classes will be primarily the responsibility of the general sector and different Development Departments will formulate their schemes and orient their minimum needs programmes suitably fixing definite targets in the sectoral Plan with a view to accelerate the pace of development of the backward classes so as to reduce the disparities. This is not an entirely new concept but greater care in the implementation will be taken in the Fifth Plan. The allocations of the backward classes welfare sector will only be supplemental, and the main function of the Department in-charge, i. e., T. & R. W. Department would be to effect necessary co-ordination. The Department is associated not only in shaping of the programmes of various Development Departments but also during its implementation.

5. Composite and integrated schemes primarily of economic nature to develop the backward tribal areas and pockets such as the Juangs and Bhuyans of Keonjhar, Lanjia Sauras of Ganjam Agency, Pauri-Bhuyan of Bonai and Pallahara, Bondas of Koraput and Kotia Kondhs of Phulbani district have to be taken up on the line of T. D. As. now under operation in Parlakhemundi and Gunupur-Rayagada areas. Besides, smaller but composite schemes of the nature of Saura Development Scheme have to be taken up in isolated pockets with concentration of backward classes. The emphasis will, as per guide lines of Planning Commission and as recommended by the Expert Committee, be on special area development approach.

6. To protect the tribals from exploitation by various money-lenders and unscrupulous private traders, the Orissa State Tribal Development Co-operative Society has to be suitably strengthened to expand its coverage and activity. In order to divert the podu cultivators to settle down to better agricultural practices a number of employment oriented schemes such as plantation of trees and processing of the forest produce are also to be provided, both as a transitory measure as also for the long-term objective.

7. The resources of the backward classes welfare sector are being used for a number of Supplemental Specialised Schemes such as, opening of special educational institutions construction of hostels, distribution of scholarships and stipends, provision of housing facilities, cottage industries, integrated area development, marketing and processing of tribal produce and grant of legal aid etc. The spread of education in general will be left to the Education Department who will give due attention to the backward pockets and decide location of new institutions. The Departments incharge of schemes such as rural water

supply, communication, irrigation and health etc. for which no specific provision is made in the sectoral plan of welfare of Backward classes, will orient their programmes to suit the needs of the backward communities. The administrative machinery to implement the programmes for the welfare of the backward classes either of the general sector or of the backward classes welfare sector is being suitably strengthened.

Specific Projects/Programmes/Schemes (State Sector)

Scheduled Tribes

Economic Uplift

(1) Intensive and integrated area development scheme for the Most Primitive Tribes :

8. It is Proposed to take up few more projects in the nature of Saura Development Scheme for the development of (1) Juangs of Keonjhar district, (2) Paudi-Bhuyans in Pallahara Subdivision of Dhenkanal district (3) Paudi-Bhuyans of Bonai Subdivision of Sundargarh district, (4) Bondas of Malkangiri of Koraput district, (5) Kotia Kondhas of Bclgarh of Phulbani district, and (6) Kondhas of Thuamul-Rampur in Kalahandi district. The objective is micro-level. It is anticipated that the micro-level attention as in the Tribal Development Agencies will be taken up in the Central Sector. It is proposed where possible, to evolve a smaller scheme to settle about 500 families, who are actually engaged in podu cultivation and to ensure that they will lead better standards of life. To that end, houses and lands have to be provided, subsidies have to be given for cultivation purposes and irrigation has to be assured. The feasibility of finding out any alternative and supplementary employment for these tribals in cottage industries will also be explored.

9. The cost of each such composite scheme would be about Rs. 25'00 lakhs to be utilised for the provision of;—

- (1) Housing facilities
- (2) Reclamation and development of land
- (3) Subsidy for bullocks, agricultural implements and inputs etc.
- (4) Irrigation facilities
- (5) Community recreation, communication and drinking water facilities
- (6) Plantation of fruit bearing trees
- (7) Co-operatives
- (8) Cottage industries utilising mainly indigenous minor forest produce locally available.

10. The schemes are to be implemented with a separate administrative set up for each scheme, consisting of one Administrative Officer, one Agricultural Supervisor, one Engineering Overseer, one Soil Conservation Assistant, one Welfare Extension Officer and ancilliary Class III and Class IV staff. The total provision for taking up six such integrated schemes during the Fifth Plan would be of the order of Rs. 150'00 lakhs.

(2) Saura Development Scheme:

11. The success of the Indo-Swiss Projects for settlement of Tibetan refugees in Chandragiri had provided a contrast to the socio-economic condition of the local Sauras inhabiting in 18 villages. As such, a special scheme for the all round development of the Sauras has been taken up during 1972-73 with an estimated cost of Rs. 16 lakhs. A sum of Rs. 3.75 lakhs has been sanctioned. There is also provision of Rs. 6 lakhs during the current

year's budget. It appears that further revision of the scheme is necessary and the total cost is likely to go up to about Rs. 25.00 lakhs. After taking into account the provision made during the Fourth Plan, a sum of Rs. 16.00 lakhs will be required to be spent during the Fifth Plan.

(3) Area Development—Reclamation and development of land:

12. The tribal lands are not properly shaped for cultivation and the inputs are marginal. The Revenue Department have also launched a special programme for assigning 2 lakhs of acres of waste lands to the landless especially from the Scheduled Tribes and Scheduled Castes during the Silver Jubilee Year of Independence. The new leasees have to be given necessary aid to reclaim and cultivate the same. It is proposed to make some provision for giving subsidy to the tribals for reclamation of land preferably in the ayacuts of Irrigation Projects. The subsidy for land reclamation may be kept at Rs. 250 (i. e., about 50 per cent of actual cost) per acre. A provision of Rs. 15.00 lakhs is made with a target for reclaiming 6,000 acres of land.

(4) Scheme or subsidy for Bullocks and Equipments etc.

13. In order to assist the agricultural inputs to the tribals who can be encouraged as agriculturists under the Area Development Project it is proposed to provide for subsidy for purchase of bullocks, and equipments etc. The rate of subsidy for bullocks and equipments is proposed to be about Rs. 500 per family. The provision under this head is Rs. 3.50 lakhs with the target to benefit about 700 families.

(5) Housing:

14. A sum of Rs. 15.00 lakhs is provided for grant of subsidy to the Scheduled Tribes for construction of houses during the Fifth Plan. The target is to benefit about 1,250 families.

(6) Poultry Rearing Scheme :

15. Poultry rearing is a very favourite occupation of Scheduled Tribe and Scheduled Caste people. In the Fourth Plan a small beginning has been made for introducing improved methods of poultry rearing amongst the Scheduled Tribe people in Rourkela, 50 units have been sanctioned for 50 families at a cost of Rs. 610 per unit consisting of 25 birds. It is proposed to expand the scheme so as to cover about 500 Scheduled Tribe families during the Fifth Plan at a total cost of Rs. 3.05 or say Rs. 3.00 lakhs.

(7) Subsidy for Craft and Cottage Industries:

16. It is proposed to continue this scheme during the Fifth Plan by enlarging its coverage. A sum of Rs. 5.00 lakhs is proposed to be provided under this head to benefit about 1,000 persons:

(8) Industrial Training including training in Shorthand and Typewriting etc:

17. It is proposed to give stipend to 1,800 Scheduled Tribe students during the Fifth Plan and the requirement will be Rs. 9.00 lakhs under this head.

(9) Follow-up action programme for Self-employment:

18. The Scheduled Tribe Scheduled Caste candidates passing out from the Industrial Training Institutes and Production-cum-Training Centres etc. often remain unemployed and this gives rise to a sense of frustration. Hence during 1972-73 a special scheme has been formulated to help the Scheduled Tribe Scheduled Caste candidates to establish themselves in the trades, in which they had received training from the

Industrial Training Institutes or Production-cum-Training Centres etc. Aid is given in shape of tools, equipments and working capital. There were as many as 342 Industrial Training Institutes passed Scheduled Tribe trainees in the Live Registers of the Employment Exchanges at the end of November, 1972. The number of trained candidates seeking employment will increase to a considerable extent during the Fifth Plan on account of expanded training scheme of the Industries Department and the stipends provided by the T. & R. W. Department. A sum of Rs. 6.00 lakhs is provided for establishing about 300 trained Scheduled Tribe candidates under this self-employment scheme during the Fifth Plan.

(10) Drinking Water-Supply for Institutions :

19. Provision of protected drinking water-supply to Scheduled Tribe/Scheduled Caste villages has been made in the Minimum Needs Programme. Provision has also been made to dig wells in the tribal villages. A small provision of Rs. 5.00 lakhs only is made in the Backward Classes Welfare Sector for provision of drinking water-supply to the institutions.

(11) Electrification of Scheduled Tribe villages :

20. The Irrigation & Power Department have an extensive programme of rural electrification which would continue during the Fifth Plan. Most of the Scheduled Tribe villages are not in a position to pay recurring cost such as energy consumption charges and replacement of bulbs and tubes etc. due to paucity of funds at the Panchayat level. It is proposed to grant subsidy towards the recurring cost of illumination of about 75 Scheduled Tribe villages for which a provision of Rs. 0.75 lakhs is made in the Plan.

(12) Grant of Legal Aid :

21. The need for such aid will increase during the Fifth Plan because of the extensive survey and settlement operations and various land reform measures undertaken. With weightage on agriculture, land hunger will increase leading to litigations and land disputes against which tribals interests have to be protected. A sum of Rs. 3.00 lakhs is provided under this head in the Fifth Plan.

(13) Grant-in-aid to Non-official Organisations :

22. Participation or active association of the voluntary organisations has a great bearing on successful implementation of the various programmes/schemes for the betterment of backward classes. A sum of Rs. 3.00 lakhs is provided for giving grants-in-aid to such useful organisations in the Fifth Plan.

(14) Restructurisation of Administration :

23. As has been observed by the Expert Committee it is not financial resources which prove critical in tribal development, administrative structure and personnel hold the key to the success of planning. With the change of perspective and new strategy to be adopted during the Fifth Five-Year Plan, the responsibility devolving on the State T. & R. W. Department will increase multifold. It has not only to see that the few schemes taken up out of its resources are implemented effectively so as to leave a real impact, it has also to be involved in the programmes of other sectors by way of effecting necessary co-ordination and integration of the various sectoral Plans. To enable the Department to shoulder this increased responsibility its administrative machinery will have to be suitably strengthened both at the State and field levels. A provision of Rs. 7.50 lakhs is made in the State Sector for reorganisation of the administrative machinery.

(15) Construction of Residential Quarters for the field Staff :

24. Posting of officers in Tribal Areas does involve an element of hardship and, therefore, it is necessary to compensate adequately by providing minimum physical facilities like living accommodation by way of incentives to those working in the

difficult tribal areas. Unfortunately, however, it has not been possible to provide all the Field Staff with residential accommodation due to paucity of funds. Out of 285 sanctioned posts of District Welfare Officers, Assistant District Welfare Officers and Extension Officers, only 46 have been provided quarters so far. Lack of living accommodation in the difficult areas tells upon the efficiency of the Field Staff considerably. A sum of Rs. 7.00 lakhs is provided in the State Sector for construction of quarters for Field Officers during the Fifth Plan.

EDUCATION

(16) Completion of Madhyamik Bidyalays (Ashram Schools):

25. Against the target of opening 9 schools during the Fourth Plan, 29 Ashram Schools have actually been opened during this period and 14 Schools have been completed. For completion of the buildings of the Ashram Schools where part construction has already been taken up a sum of Rs. 10.00 lakhs is provided in the Fifth Plan. The institutions where no building construction has actually started will be taken up as new schemes for the Fifth Plan.

(17) Completion of High School (Conversion of Madhyamik Bidyalaya):

26. For completion of the High Schools opened by way of conversion of Madhyamik Bidyalayas during the Fourth Plan a sum of Rs. 2.00 lakhs only is provided. Buildings not yet started, and High Schools where only two new classes have been opened by the end of Fourth Plan will be taken up by the Education Department as new schemes under the Plan.

(18) Opening of Residential Sevashrams:

27. It is proposed to open 30 new Residential Sevashrams in the tribal concentrated pockets at a total cost of Rs. 134.00 lakhs of which Rs. 79.00 lakhs will be necessary for construction of buildings and Rs. 55 lakhs towards pay, dearness allowance and contingencies.

(19) Construction of Teachers' and Attendants' Quarters:

28. It is proposed to construct about 300 residential quarters for the Teachers of Sevashrams and Ashram Schools and for the attendants of such Schools with a provision of Rs. 25.00 lakhs in the Fifth Plan. Due to the want of these facilities the positioning of suitable teachers has become very difficult.

(20) Upgradation of Sevashrams:

29. It is proposed to upgrade 200 Sevashrams out of the existing 929 Lower Primary Sevashrams during the Fifth Plan at a total cost of Rs. 50.00 lakhs of which Rs. 25.00 lakhs will be spent on building construction and Rs. 25.00 lakhs towards pay, dearness allowance and contingencies.

(21) Scholarships and other grants:

30. A provision of Rs. 85.00 lakhs is made for grant of Scholarships and distribution of reading and writing materials during the Fifth Plan. This will be in addition to the committed expenditure under this head.

(22) Hostels:

31. It is proposed to construct during the Fifth Plan 15 College Hostels, 40 High Schools Hostels and 40 M. E. School Hostels at a total cost of Rs. 25.00 lakhs.

(23) Opening of New Ashram Schools:

32. It is proposed to open 10 Ashram Schools during the Fifth Plan at a total cost of Rs. 40.00 lakhs.

(24) Provision and Replacement of Furnitures, Beds and Utensils etc. :

33. There is no separate scheme under Plan for supply of necessary equipments such as beds, utensils and furniture etc., for the Ashram Schools and this has often led to difficulties in making adequate provision for which most of these institutions are not properly furnished. A specific provision of Rs. 15.00 lakhs has been made in the Fifth Plan for supply of such equipments and for replacement of old ones.

(25) Admission into Public School and Sainik School:

34. A sum of Rs. 1.00 lakh is provided under the Fifth Plan for financing the study of Scheduled Tribe/Scheduled Caste boys admitted to the Sainik School and other Public Schools.

(26) Annual Day Celebration

35. In order to enlighten the parents of the Ashram School students about the utility of the Institutions for betterment of their children the Annual Day Celebration to which the parents were invited were useful. It is felt necessary to revive the celebrations during the Fifth Plan. A sum of Rs. 2.50 lakhs is provided for expenditure on this account during the 5 years of the Fifth Plan.

(27) Training Schools:

36. A sum of Rs. 2.50 lakhs is provided for expenditure under this scheme in the Fifth Plan.

Scheduled Caste**Economic Uplift****(28) Area Development:**

37. A sum of Rs. 10.00 lakhs is provided for giving subsidy for reclamation and development of lands of the Scheduled Caste people preferably in the Ayacuts of Irrigation Projects/Schemes. The target will be to cover about 4,000 acres belonging to about 2,000 persons.

(29) Housing:

38. A sum of Rs. 5.00 lakhs is provided for grant of subsidy for housing facility to about 400 Scheduled Caste families.

(30) Scheme for subsidy for Bullocks and Equipments etc.

39. A provision of Rs. 1.50 lakhs is made for grant of subsidy to the Scheduled Caste cultivators under this head, the target being to benefit about 300 families.

(31) Poultry Rearing Scheme:

40. Poultry rearing is a favourable occupation among the Scheduled Caste people. It is proposed to introduce improved methods of poultry rearing among the Scheduled Caste people near about industrial areas giving them subsidy in shape of pedigree birds and equipments. A provision of Rs. 2.00 lakhs is made to benefit about 300 Scheduled Caste families during the Fifth Plan.

(32) Subsidy for Cottage Industries:

41. A sum of Rs. 2.50 lakhs is provided for grant of subsidy to the Scheduled Caste people for setting up small scale cottage industries such as tailoring, carpentry, smithy and foot wear etc.

(33) Industrial Training:

42. A sum of Rs. 9.00 lakhs is provided for grant of stipend to about 1,800 Scheduled Caste for industrial training during the Fifth Plan.

(34) Follow up action Programme and Self-Employment Scheme:

43. According to the Live Register of the Employment Exchange the number of Scheduled Caste, I. T. I. Trained boys at the end of November, 1972 was as high as 302 and this is likely to go up further because of the programme of expansion of industrial training scheme. A sum of Rs. 4.00 lakhs is provided for establishing 200 trained Scheduled Caste candidates during the Fifth Plan by giving them subsidy at an average rate of Rs. 2,000/- in shape of equipments and working capital.

(35) Grant of Legal Aid:

44. A sum of Rs. 2.0 lakhs is provided for grant of legal aid during the Fifth Plan.

(36) Electrification of S. C. Villages:

45. It is proposed to provide for a sum of Rs. 0.25 lakhs for grant of subsidy towards the recurring cost of needy Scheduled Caste villages which can not get the benefits of street lights after coverage of their villages under the Rural Electrification Scheme.

EDUCATION:

(37) Scholarships and other Grants:

46. A provision of Rs. 40.00 lakhs is made in the Fifth Plan for grant of scholarships and distribution of reading and writing materials among the Scheduled Caste students.

(38) Hostels:

47. It is proposed to construct 20 High School hostels and 30 M. E. School hostels for the Scheduled Caste students at a total cost of Rs. 8.00 lakhs.

48. The targets and outlays proposed under individual schemes are indicated in Annexures IV and V.

PLAN IMPLEMENTATION

Administrative reorganisation, organisational Planning appraisal and monitoring:

49. In the context of priority given in Fifth Plan to removal of regional imbalances and disparities the Department of Social Welfare/Tribal Welfare should take special initiative in shaping the programmes of the general Sector to the advantage of Backward Classes. This will be possible only by making pre-consultation with T. & R. W. Department binding on all other development Departments as a prerequisite for implementation of their programmes in the Backward Areas. The State T. & R. W. Department so long has been entrusted with expenditure of a few crores of rupees during a Plan by way of distributing stipends/subsidy and for running a few Ashram Schools etc. In view of the change in perspectives and strategy for the 5th Plan, this Department has to play a very important role for effecting co-ordination between different Departments so far as their programmes or Sub-Plans for the backward areas or backward classes are concerned. In order to be able to shoulder this increased responsibility the Department has to be suitably strengthened both at the top and in the field as well.

50. At present the field staff of the T. & R. W. Department consists of 14 D. W. Os. in the scale of Rs. 260—540, 16 A. D. W. Os. in the scale of Rs. 215—425, 57 A. D. W. O. (non-gazetted) in the scale of Rs. 185—300, 75 S. W. E. Os. and 120 J. W. E. Os. in the scale of Rs. 155—250 and Rs. 110—195 respectively. Hence there is need for restructurising administration for effective implementation of the programmes of tribal development at field and the State level. At the district level provision is made for D. W. Os. in the Senior Scale to remain incharge of welfare administration in place of Junior D. W. Os. At the subdivisional level stationing of Gazetted A. D. W. Os. in all Subdivisions is contemplated.

Annexure 1

Development of Backward Classes

Profile of levels of development at the end of Fourth Plan and targets in the Fifth Plan

	Position at the end of 1968-69		Achievement at the end of Fourth Plan		Fifth Plan Target	
	Scheduled Tribe	Scheduled Caste	Scheduled Tribe	Scheduled Caste	Scheduled Tribe	Scheduled Caste
	1	2	3	4	5	6

EDUCATION: NUMBER OF SCHEDULED CASTES/SCHEDULED TRIBES

(a) Primary level	..	253047	273267						
(b) Middle level	..	22983	26129	340008	301928	6300	12000	} Only for T. & R. W. Schools	
(c) Secondary level and High School		13367 (during 1968-69)	14782 (during 1968-69)	(1971-72)	(1971-72)	5800	900		
POST-MATRIC						2640	2250		
(a) Graduate	..	693	888	6753	8198	7428	[9018		
(b) Post-Graduate	..	2	9	150	190	165	209		

(during 1968-69)

SCHOOL GOING CHILDREN

No. of school-going children among
Scheduled Caste/Scheduled Tribe in
THE AGE-GROUP OF

(a) 4—6	—	N. A.	N. A.	..	..	..	..
(b) 6—11	..	..	..	..	..	..	..
(c) 11—14	..	..	..	..	..	..	..
(d) 15—20	..	..	..	..	..	..	..

509

HOSTEL FACILITIES

(a) No. of hostels now being run for Scheduled Castes/Scheduled Tribes.	734	for Scheduled Caste and Scheduled Tribes	..	..	887	125	60
					Scheduled Caste and Scheduled Tribes (1972-73)		

(b) Percentage of Scheduled Castes/Scheduled Tribes now in these general hostels. All most all students belong to Scheduled Caste and Scheduled Tribe in T. & R. W. Hostels. In general hostels under the Education Department 10 per cent of the seats are reserved for Scheduled Castes and Scheduled Tribes.

(c) No. of Backward Class hostels providing coaching facilities. There is no hostel for backward classes

	Position at the end of 1968-69		Achievement at the end of Fourth Plan		Fifth Plan Target	
	Scheduled Tribe	Scheduled Caste	Scheduled Tribe	Scheduled Caste	Scheduled Tribe	Scheduled Caste
	1	2	3	4	5	6

(d) No. of hostels for Backward Classes located—

..

(i) Number in cities and large town.

(ii) Number at district-level ..

Does not arise

(iii) Number at Block level ..

GIRLS' EDUCATION

No. of Scheduled Caste and Scheduled Tribe girls passed Matric/Secondary School as compared to other girls and entered colleges for—

	61 (In Annual Examination only 1969)	5 (In Annual Examination only 1969)	5 (In Annual Examination only 1969)	95 (Both Annual & Supplementary)	16 (Both Annual & Supplementary.)	N. A.
(a) Graduate degree
(b) Post-graduate degree

TECHNICAL TRAINING

(a) No. of boys and girls of Scheduled Caste/Scheduled Tribe enrolled in							
(i) Polytechnics	..	Diploma Engineering	41 during 1969	22 during 1969	N. A.	..	..
(ii) I. I. T.	..	..	..	..	..	..	..
(iii) Crafts/Vocational Schools	..	..	..	..	..	..	..
(b) Scheduled Caste/Scheduled Tribe students entered collegiate education and completed (Pre-University Arts and Science only)							
	331 during 1969	447 during 1969	N. A.	..	..	..	..

*No. of students receiving P. M. S. in Degree in Medicine, Engineering, Agricultural Veterinary.

(i) Graduate degree course	..	440	80*	N. A.	N. A.	..	..
(ii) Post-graduate degree course	..	..	..	..	..	..	..
(iii) Polytechnic course (Diploma in Engineering)	..	41	22	..	..	..	..

PRE-EXAMINATION TRAINING

No. of Sch. Caste/Sch. Tribe graduates enrolled in pre-examination training centres for—

(i) All-India competitive examination.	}	8 S. C. & S. T.	19 S. C. & 100 S. T.	150	..	..
(ii) State Services examinations.		..	Nil	..	..	..
(iii) No. of how many ultimately getting absorbed in		..	Nil	..	:	..

	Position at the end of 1968-69		Achievement at the end of Fourth Plan		Fifth Plan Target	
	Scheduled Tribe	Scheduled Caste	Scheduled Tribe	Scheduled Caste	Scheduled Tribe	Scheduled Caste
	1	2	3	4	5	6

(a) Reserved posts in I. A. S./ I. P. S. Does not arise

Does not arise

(b) In State services.

EMPLOYMENT—

No. of Sch. Castes/Sch. Tribes graduates secured jobs in

(i) Reserved Posts

(ii) Non-reserved posts in Central/State Services in the last five years.

(b) No. of Sch. Castes/Sch. Tribes graduates got jobs in public sector enterprises at & public Sector.

(i) Clerical level	..	} 7 during 1969.. 5 during 1969.. 2019 as on 1971.	20 as on 1971.	..
(ii) Managerial level and including item No. (c)	..			
(c) No. of Sch. Castes/Sch. Tribes graduates obtained employment in private sector.				

ECONOMIC DEVELOPMENT
AGRICULTURAL LAND AND
AGRICULTURAL LABOURERS

(i) No. of Sch. Castes/Sch. Tribes who	..	..	..	..	..
(a) Cultivate their land	..				
(b) Are agricultural labourers..					
(c) Landless labourers	..				
(ii) No. of Sch. Castes/Sch. Tribes who have benefited from redistribution of land.	7,738 during 1968-69.		2,916 during 1968-69.		N. A.
(iii) Area under jhum (shifting) cultivation in the State and number of Sch. Tribes families practising jhum cultivation.	About 1/5 of the total area of the State i. e. 12,000 square miles.		Same as previous column.		..

	Position at the end of 1968-69		Achiev. ment at the end of Fourth Plan		Fifth Plan target	
	Scheduled Tribe	Scheduled Caste	Scheduled Tribe	Scheduled Caste	Scheduled Tribe	Scheduled Caste
	1	2	3	4	5	6

(a) Roads—Communication facilities available per 10000 of population.

(i) highways	..	No. and mileage	..	..	..	..
(ii) district P. W. D.	..	Ditto	..	..	..	..
(iii) forest roads	..	Ditto	..	..	..	..
(iv) village link road with block and District headquarters.	..	No.	..	..	..	..
(b) bridge/culverts	..					
(c) post and telegraph offices	..					

**HOUSING FOR SCHEDULED CASTES/
SCHEDULED TRIBES.**

House/House-sites owned :

(i) in rural areas	..	16 taken up during 1968-69.	124 taken up during 1968-69.	..	..	..
(ii) in urban areas	..					

(iii) No. of Housing colonies ..

(iv) No. of Co-op. Housing facilities ..

(v) No. of Scheduled Castes/
Scheduled Tribes benefits
under.

(a) subsidised housing ..

(b) low income housing ..

(c) village housing --

MEDICAL AND PUBLIC HEALTH :

(i) No. of T. & R. W. hospitals 7 six-bedded 19 six bedded-
tribal areas and No. of Hospitals, 1 11 Hospital
beds per 1000 population Ayur bed ic Ayur ved ic
of tribals. Hospital and Hospitals
14 Mobile
Health Units.

(ii) No. of P. H. C., E. P. C., 110 maternity & 14. Mobile Health
W. C. located in tribal child welfare
areas. centres. Units & one
Homeopath ic
Dispensary &
67 Maternity
& Child
Welfare Centres.
(1970-71.)

	Position at the end of 1968-69		Achievement at the end of Fourth Plan		Fifth Plan Target	
	Scheduled Tribes	Scheduled Castes	Scheduled Tribes	Scheduled Castes	Scheduled Tribes	Scheduled Castes
	1	2	3	4	5	6

WATER SUPPLY :

(a) (i) No. of drinking water sources in tribal areas.	13 wells sunk during 1968-69.	..	..	N. A.	..	..
(ii) No. of sources required	..	..	..	..	..	..
(b) (i) No. of Harijan Bastis having access to potable water.	..	..	..	..	..	..
(ii) No. of Harijans Bastis without (drinking water)	..	..	..	..	..	..

RURAL ELECTRIFICATION :

(a) No. of tribal villages electrified.	..	..	..	..	..	..
(b) No. of Harijan Bastis electrified.	..	..	..	..	..	..

Annexure II
Development of Backward Classes
Fourth Plan Physical Programme

Category	Scheme	Unit	Achievement										Remarks	
			1969-70		1970-71		1971-72		1972-73		1973-74			
			S. T.	S. C.	S. T.	S. C.	S. T.	S. C.	S. C.	S. T.	S. C.	S. T.		
	1. Tuition and Examination fee.	No	..	..	..	..	..	..	..	..	..	..	..
	2. Scholarship and Stipends.	No	14,400	9,100	28,000	15,000	28,000	28,500	27,000	27,500	30,500	29,000		
	3. Ashram Schools ..	No	9	..	5	..	3	..	6	..	3	..		
	4. S c h o o l s (High Schools).	No	3	..	6	..	..	..	8	..	5	..		
	5. Hostels ..	No	6	1	3	..	2	2	29	10	(Not decided)			
	6. Boarding Grants..	No	..	..	..	..	..	..	..	..	..	..
	7. Social Education Centres.	..	..	..	..	..	..	..	..	..	..	..
	8. Aid to Voluntary Agencies for Educational Schemes.	..	..	..	..	..	..	..	..	..	..	..

Category	Scheme	Unit	Achievement										Remarks
			1969-70		1970-71		1971-72		1972-73		1973-74		
			S. T.	S. C.	S. T.	S. C.	S. T.	S. C.	S. T.	S. C.	S. T.	S. C.	
	9 Mid-day Meals..	..	..	..	..	..	..	..	..	..	..	..	Being implemented by C. D. Department.
	10 Other Educational Schemes (Up-gradation of Sevashrams).	No.	47	--	..	..	142	..	..	..	..	..	..
	11 Agriculture (Supply of seeds, beneficiaries, manure, etc.).	No. of	--	..	600	210	332	..	N. A.	..	..	..	..
	12 Shifting cultivation.	..	..	..	..	--	..	..	..	..	..	..	..
	13 Soil Conservation.	..	..	..	..	..	..	..	..	..	..	..	..
	14 Minor Irrigation.	..	..	..	1 M. I. P	..	..	--	..	..	..	..	..
	15 Animal Husbandry.	..	..	..	..	..	..	..	..	..	..	..	..
	16 Cottage Industries.	No	..	..	..	29	..	..	N. A.	..	N. A.	..	..

17	Co-operation	..	..	..	..	..	..	..	..	..	..	..
18	Rehabilitation and colonisation.	..	..	..	..	..	..	..	..	..	..	..
19	Communication	..	..	..	10 miles	..	..	..	..	..	..	..
Health, Housing and others												
20	Housing	..	No. of unit	31 units,	27 houses— 25 sites.	27	24 sites	8 units	34 units	32 units	50 houses 40 sites	Not decided
21	Drinking water-supply	No.	9 wells.	11	15	14	53	34	47 wells 1 tank.	50 wells		Ditto
22	Medical and Public Health (Homoeopathy Dispensary).	No.	..	..	1	..	..	..	..	..	..	..
23	Social and Cultural activities.	..	..	..	..	..	..	..	..	..	..	..
24	Aid to voluntary agencies.	No.	11	13	13	11	16	11	25	29		Not decided
25	Progress and status, co-ordination cell and field staff.	..	..	..	..	..	..	..	..	..	..	..
26	Legal aid	..	No. of beneficiaries	120	251	143	214	294	203	N. A.	..	Not decided
27	Miscellaneous	..	..	..	..	..	..	..	..	..	..	..

Annexure III
Development of Backward Classes, Fourth Plan Outlay and Expenditure
Expenditure

(Rs. in lakhs)

Serial No.	Programme	Fourth Plan outlay (1969—74)	1969-70	1970-71	1971-72	1972-73	1973-74	Total
1	2	3	4	5	6	7	8	9
State Sector—Scheduled Tribes Education.								
1	Madhyamik Bidyalayas ..	66·80	10·11	5·76	14·64	20·80	26·50	77·81
2	Pre-Matric Scholarship ..	70·00	8·41	13·61	18·69	15·75	18·97	75·43
3	Hostels ..	12·00	0·11	0·39	2·12	4·50	3·00	10·12
4	Teachers' quarters in Primary Schools.	10·00	0·44	1·00	5·07	1·00	3·42	10·93
5	Upgraded Sevashrams ..	8·00	0·51	0·60	..	3·00	3·00	7·11
6	High School (conversion) of Madhyamik Bidyalayas).	40·00	3·95	11·17	6·51	8·00	13·60	43·23
7	Residential Primary Schools.	3·20	..	..	Including in item No. 4 and 5.	1·50	1·50	3·00
8	Stipend for Industrial trainees.	7·00	1·99	1·84	2·38	2·50	2·50	11·21
9	Post-Matric Scholarships ..	13·00	..	3·21	..	2·00	2·00	7·21

10	Lending Library	--	..	0.05	..	..	..	..	0.05
11	Stipend to S. C. & S. T. candidates for learning shorthand and typewriting.	..	..	..	..	..	1.00	1.00	2.00
12	Special repairs to Sevashramas	..	--	1.00	..	..	1.50	1.50	4.00
13	Training Institute	..	..	--	..	--	1.00	1.00	2.00
Total Education		..	230.00	25.57	38.58	49.41	62.55	77.99	254.10

ECONOMIC UPLIFT

14	Subsidies for cottage Industries.	2.50	..	..	--	..	1.00	0.50	1.50
15	Improvement of Approach roads to T. & R. W. Institutions.	4.20	..	0.30	1.30	..	..	0.50	2.10
16	Prevention of Podu cultivation.	10.00	..	..	2.13	16.70	..	5.53	24.36
17	Saura Development of Chandragiri.	..	..	..	..	..	..	6.00	6.00
18	Supply of seeds, bullocks and agricultural implements and poultry development.	0.80	..	0.24	0.20	--	..	1.50	1.94
19	Minor Irrigation Projects in colonies of T & R. W. Department.	4.00	..	0.20	1.50	1.50	..	0.80	4.00

(Rs. in lakhs)

Serial No.	Programme	Fourth Plan (1969—74)	1969-70	1970-71	1971-72	1972-73	1973-74	Total
1	2	3	4	5	6	7	8	9
20	Follow-up action for I. T. I. passed trainees.	2.61	..	..	0.60	1.00	1.00	2.60
21	P. S. F. S. Schemes ..	8.39	..	6.17	..	7.30	2.00	15.47
Total— Economic Uplift ..		32.50	..	6.91	5.73	27.50	17.83	57.97
HEALTH, HOUSING & OTHER SCHEMES								
22	Drinking Water Supply	4.95	0.3)	0.45	1.60	1.50	1.10	4.95
23	Aid to non-official organisations.	3.00	0.18	1.03	0.82	0.40	0.56	2.99
24	Anti-yaws campaign ..	2.04	..	2.08	..	..	..	2.08
25	Legal Aid ..	1.17	0.10	0.15	0.29	0.50	0.50	1.54
26	Strengthening of field organisation.	5.00	0.75	0.64	0.20	0.20	0.60	2.39

27	Establishment of Homeopathic dispensaries.	0.75	..	0.10	0.23	0.20	0.22	0.75
28	Housing subsidies ..	0.81	0.10	0.20	0.53	0.20	1.00	2.03
Total—Health Housing and other Schemes.		19.00	1.43	4.65	3.67	3.00	3.98	16.73
Total—Scheduled Tribes ..		231.00	27.00	50.14	58.81	93.05	99.80	328.80
SCHEDULED CASTES — EDUCATION								
29	Pre-matric Scholarship ..	55.00	4.31	7.80	10.82	15.85	18.50	57.28
30	Stipend for Industrial trainees	6.00	1.58	1.85	2.49	2.50	2.50	10.92
31	Hostels ..	5.50	0.04	1.00	1.41	2.00	0.91	5.36
32	Post-matric Scholarships ..	15.00	..	3.72	..	3.00	3.00	19.72
Total—Education ..		81.50	5.93	14.37	14.72	23.35	24.91	83.20
ECONOMIC UPLIFT								
33	Subsidies to Scheduled Caste Agriculturists for permanent improvement of land.	0.20	..	0.18	..	..	0.50	0.68
34	Subsidies for Cottage Industries	0.20	..	0.19	..	..	..	0.19
35	Follow-up action for I. T. I. passed candidates.	2.10	..	..	..	0.70	1.00	1.70
Total—Economic Uplift ..		2.50	..	0.37	..	0.70	1.50	2.57

(Rs. in lakhs)

Serial No.	Programme	Fourth Plan (1969—74)	1969-70	1970-71	1971-72	1972-73	1973-74	Total
1	2	3	4	5	6	7	8	9
HEALTH, HOUSING & OTHER SCHEMES								
36	Drinking water-supply ..	5.00	0.25	0.41	1.50	1.50	1.34	5.00
73	Housing and house sites for S. C. in rural areas.	4.00	0.30	0.25	1.11	1.00	1.10	3.76
38	Legal Aid ..	1.50	0.10	0.13	0.24	0.40	0.47	1.34
39	Grant to non-official organisations.	9.00	1.80	1.93	0.65	1.00	0.90	6.29
Total—Health, Housing and other schemes.		19.50	2.45	2.72	3.51	3.90	3.81	16.39
Total—Scheduled Castes ..		103.50	8.38	17.46	18.23	27.95	30.22	102.24
Total—State Sector ..		385.00	35.38	67.60	77.04	121.00	130.02	431.04

Annexure IV

Development of Backward Classes—Fifth Plan Physical Targets

Serial No.	Programme	Unit	Fifth Plan targets	Phasing					Remarks
				1974-75	1975-76	1976-77	1977-78	1978-79	
1	2	3	4	5	6	7	8	9	10
SCHEDULED TRIBE ECONOMIC UPLIFT									
1	Intensive and integrated Area Development Schemes of the most backward tribes.	..	3,000 families	400 families	550 families	700 families	750 families	600 families	
2	Saura Development Scheme.	..	400 families	100 families	85 families	80 families	75 families	60 families	
3	Area Development reclamation and development of land.	..	6,000 acres	1,000 acres	1,200 acres	1,300 acres	1,300 acres	1,200 acres	
4	Scheme for subsidy for bullocks and equipments, etc.	..	500 families	75 families	100 families	125 families	125 families	75 families	
5	Housing	..	1,250 houses	200 houses	300 houses	300 houses	250 houses	200 houses	

Serial No.	Programme	Unit	Fifth Plan targets	Phasing					Remarks
				1974-75	1975-76	1976-77	1977-78	1978-79	
1	2	3	4	5	6	7	8	9	10
6	Poultry Rearing Scheme	..	500 families	75 families	100 families	125 families	125 families	75 families	
7	Subsidy for Crafts and Cottage Industries.	..	1,000 families	150 families	200 families	250 families	250 families	150 families	
8	Industrial Training including training in shorthand/typewriting, etc.	-	1,800 trainees	250 trainees	300 trainees	350 trainees	400 trainees	500 trainees	
9	Follow-up action programme Self-Employment Scheme.	..	300 persons	50 persons	64 persons	62 persons	62 persons	62 persons	
10	Drinking Water Supply for Institutions.	..	125 wells	25 wells	25 wells	25 wells	25 wells	25 wells	
11	Electrification of S. T; villages.	..	75 villages	15 villages	15 villages	15 villages	15 villages	15 villages	
12	Grant to Legal Aid	-	1,500 persons	300 persons	300 persons	300 persons	300 persons	300 persons	
13	Grant-in-aid to non-official organisation.	..	..	..	..	-	..	..

14	Restructurisation of administration.	..	..	..	..	..	..	..
15	Construction of Residential quarters.	..	70 quarters	10 quarters	20 quarters	20 quarters	10 quarters	10 quarters
EDUCATION								
16	Completion of Ashram Schools.	..	..	..	..	..	..	..
17	Completion of High Schools.	..	..	..	..	..	..	..
18	Opening of Residential Sevashrams.	..	30 new	5 new	7 new	7 new	7 new	4 new and continuance of 26 already opened earlier.
19	Construction of Teachers and Attendant's quarters.	..	300	50	75	75	75	25
20	Up-gradation of Sevashrams.	..	200	40	40	40	40	40
21	Scholarship and other grants.	..	Rs. 4,25,000	Rs. 60,000	Rs. 75,000	Rs. 85,000	Rs. 95,000	Rs. 1,10,000
22	Construction of hostels	..	55 hostels	11 hostels	11 hostels	11 hostels	11 hostels	11 hostels
23	Opening of new Ashram Schools.	..	10	2	2	2	2	2
24	Provision and replacement of furniture, beds and utensils, etc.	..	10,000 students	2,000	2,000	2,000	2,000	2,000

Serial No.	Programme	Unit	Fifth Plan target	Phasing					Remarks
				1974-75	1975-76	1976-77	1977-78	1978-79	
1	2	3	4	5	6	7	8	9	10
25	Admission of S. T. & S. C. boys in public school and Sainik School.	..	100 boys	15	17	20	23	25	
26	Annual Day Celebration	..	525 Schools	105	105	105	105	105	
27	Training School ..	..	1	..	..	..	..	..
SCHEDULED CASTES ECONOMIC UPLIFT									
28	Area Development reclamation and development of land.	..	4,000 Ac.	500 Ac.	600 Ac.	750 Ac.	1,000 Ac.	1,150 Ac.	
29	Housing ..	..	400 houses	75 houses	100 houses	100 houses	75 houses	50 houses	..
30	Subsidy for bullocks equipments and etc.	..	200 families	40 families	40 families	40 families	40 families	40 families	

31	Poultry rearing Scheme	--	300 families	30 families	50 families	75 families	75 families	70 families
32	Subsidy for crafts and cottage industries.	..	500 families	75 families	85 families	100 families	115 families	125 families
33	Industrial Training including training in shorthand and type writing, etc.	..	1,800 persons	300 persons	350 persons	375 persons	375 persons	400 persons
34	Follow-up action programme—Self Employment Scheme.	..	200 persons	40 persons	40 persons	40 persons	40 persons	40 persons
35	Grant of legal aid	..	1,000 persons	200 persons	200 persons	200 persons	200 persons	200 persons
36	Electrification of S. C. villages.	--	25 villages	5 villages	5 villages	5 villages	5 villages	5 villages
37	Scholarship and other grants	..	2,64,000	40,200	46,000	52,400	59,400	66,000
38	Construction of hostels		40	12	7	7	7	7

Annexure V

Development of Backward Classes—Fifth Plan Outlays Programmewise—State Sector

PHASING

Serial No.	Programme	Fifth Plan outlay (1974—79) (Rs. in lakhs)	1974-75	1975-76	1976-77	1977-78	1978-79	REMARKS
1	2	3	4	5	6	7	8	9

SCHEDULED TRIBE ECONOMIC UPLIFT

1	Intensive and Integrated Area Development Schemes for the most backward tribes.	150·00	20·00	27·50	35·00	37·50	30·00	
2	Saura Development Scheme ..	16·00	4·00	3·40	3·20	3·00	2·40	Spill over scheme
3	Area Development reclamation and Development of land.	15·00	2·00	2·50	3·00	4·00	3·50	
4	Scheme for subsidy for bullocks and equipments, etc.	3·50	0·50	0·50	0·90	0·90	0·70	
5	Housing ..	15·00	2·40	3·60	3·60	3·00	2·40	
6	Poultry Rearing Scheme ..	3·00	0·45	0·60	0·75	0·75	0·45	

7	Subsidy for Crafts and Cottage Industries.	5.00	0.75	1.00	1.25	1.25	0.75
8	Industrial Training including training in shorthand and typewriting, etc.	9.00	1.25	1.50	1.75	2.00	2.50
9	Follow up action programme self employment scheme.	6.00	1.00	1.25	1.25	1.25	1.25
10	Drinking Water-Supply for Institutions.	5.00	1.00	1.00	1.00	1.00	1.00
11	Electification of Schedule Tribe villages.	0.75	0.15	0.15	0.15	0.15	0.15
12	Grant of legal aid ..	3.00	0.60	0.60	0.60	0.60	0.60
13	Grant-in-aid to non-official organisation.	3.00	0.60	0.60	0.60	0.60	0.60
14	Restructurisation of administration.	7.50	1.00	1.50	1.50	1.50	2.00
15	Costruction of residential quarters	7.00	1.00	2.00	2.00	1.00	1.00
Total—S. T.—Economic Uplift ..		248.75	36.70	47.70	56.55	58.50	49.30

Serial No.	Programme	Fifth Plan outlay (1974-79) (Rs. in lakhs)	1974-75	1975-76	1976-77	1977-78	1978-79	REMARKS
1	2	3	4	5	6	7	8	9
EDUCATION—								
16	Completion of Ashram Schools	10·00	3·00	3·00	2·00	2·00	..	Spill over scheme
17	Completion of High School ..	2·00	0·75	0·75	0·50	..	..
18	Opening of residential Sevashramas	134·00	25·00	28·00	28·00	28·00	25·00	
19	Construction of Teachers & Attendance Quarters.	25·00	5·00	6·00	6·00	6·00	2·00	
20	Upgradation of Sevashramas ..	50·00	10·00	10·00	10·00	10·00	10·00	
21	Scholarship and other grants ..	85·00	12·00	15·00	17·00	19·00	22·00	
22	Construction of hostels ..	25·00	5·00	5·00	5·00	5·00	5·00	
23	Opening of new Ashram Schools	40·00	8·00	8·00	8·00	8·00	8·00	
24	Provision and replacement of furniture, beds and utensils.	15·00	3·00	3·00	3·00	3·00	3·00	
25	Admission of Sch. Tribe boys and Sch. Caste boys in public school and Sainik School.	1·00	0·15	0·17	·20	0·23	0·25	

26	Annual Day Celebration	..	2.50	0.50	0.50	0.30	0.50	0.50
27	Training school	..	2.50	0.75	1.00	0.25	0.25	0.25
Total—S. T. Education			392.00	73.15	80.42	80.45	81.98	76.00

**SCHEDULED CASTES
ECONOMIC UPLIFT, ETC.**

28	Area Development reclamation and Development of land.		10.00	1.25	1.50	1.88	2.50	2.87
29	Housing	..	5.00	0.94	1.25	1.25	0.94	0.62
30	Subsidy for bullocks, equipments, etc.		1.50	0.30	0.30	0.30	0.30	0.30
31	Poultry rearing scheme	..	2.00	0.20	0.33	0.50	0.50	0.47
32	Subsidy for Crafts and Cottage Industries.		2.50	0.38	0.43	0	0.57	0.62
33	Industrial Training including training in shorthand and type-writing, etc.		9.00	1.50	1.75	1.87	1.88	2.00
34	Follow up action programme—Self Employment Scheme.		4.00	0.80	0.80	0.80	0.80	0.80

Serial No.	Programme	Fifth Plan outlay (1974-73) (Rs. in lakhs)	1974-75	1975-76	1976-77	1977-78	1978-79	REMARKS
1	2	3	4	5	6	7	8	9
35	Grant of Legal aid ..	2.00	0.40	0.40	0.40	0.40	0.40	
36	Electrification of Sch. Caste villages.	0.25	0.05	0.05	0.05	0.05	0.05	
Total S.C. Economic Uplift..		36.25	5.82	6.81	7.55	7.94	8.13	
EDUCATION								
37	Scholarship and other grants ..	40.00	6.00	7.00	8.00	9.00	10.00	
38	Hostel ..	8.00	2.00	1.50	1.50	1.50	1.50	
Total S.C. Education ..		48.00	8.00	8.50	9.50	10.50	11.50	
Total State Sector ..		725.00	123.67	143.43	154.05	158.92	144.93	

CHAPTER 2:18

SOCIAL WELFARE

The Fourth Plan expenditure is anticipated to be Rs. 12.48 lakhs. Under the Social Defence Schemes, namely, Probation Services, Welfare Services and After Care Services, 1,678 Probationers would be under supervision of District Probation Officers, 1194 inmates would be admitted in District Selters and Central Homes and 910 inmates would be rehabilitated during Fourth Plan period. Under the scheme for rehabilitation of handicapped children, two institutions—one at Bhubaneswar and the other at Burla exist. The school at Bhubaneswar has been completed in its academic side. It is imparting education up to High School standard to the blind and up to M. E. standard to the deaf with training in some crafts like cane works, weaving, cycle repairing, tailoring, masonry and carpentry. This year 6 blind students have appeared at the High School Certificate Examination for the first time. The school at Burla will complete its 3 academic sessions this year. Three classes will be opened during the Fifth Plan period. Under the Voluntary Organisation Programme, Rs. 2.51 lakhs have been sanctioned as non-recurring grants-in-aid to different Mahila Samitis, Yubak Sanghs, etc. which are largely devoted to social welfare work.

2. During the Fifth Five-Year Plan schemes like Probation Services, Remand Home and Probation Hotel etc., under Social Defence Programme are proposed to be implemented with the provisionally allotted amount of Rs. 10.00 lakhs.

3. Rs. 9.00 lakhs is earmarked for construction of buildings for the school for the blind, deaf and dumb at Burla alongwith a scheme to start a training centre for the blind, deaf and dumb where they will get training in cane, plastic, coir works, candle making and type-writing. etc. This will help them to rehabilitate themselves in society. Due attention will also be given for women welfare, child welfare through the various Mahila Samitis, voluntary institutions for which Rs. 3.00 lakhs is provided in the Plan.

4. An outlay of Rs. 3 lakhs is also provided for giving grants-in-aid to Mahila Samitis, Yubak Sanghs for social welfare work.

5. The programmewise outlay for Fifth Plan comes to Rs. 25 lakhs as in the Annexure I.

Annexure I

Social Welfare

(Rs. in lakhs)

Name of the scheme	Total proposed Fifth Plan outlay	Proposed expenditure during 1974-75
1	2	3
1. Social Defence	10.00	2.00
(i) Probation services	3.00	60
(ii) Remand Home at Berhampur	2.80	1.40

(Rs. in lakhs)

Name of the scheme	Total proposed Fifth Plan outlay	Proposed expenditure during 1974-75
1	2	3
(iii) Probation Hostel at Angul ..	3.00	0.60
(iv) Orientation of Trainina Programme ..	0.95	0.19
(v) Financial assistance to inmates of aftercare and probationers.	0.25	0.05
	<u>10.00</u>	<u>2.84</u>
2 Rehabilitation of handicapped children ..	9.00	1.80
3 Grants to voluntary organisations --	3.00	0.60
4 Women and child welfare ..	3.00	0.60
	<u>25.00</u>	<u>5.84</u>
Total ..	25.00	5.84

CHAPTER 2·19

LABOUR WELFARE

(A) Labour Administration

A number of social and legislative measures have been undertaken to subserve the interests of the working class. They are important not only from the humanitarian point of view but also otherwise since they tend to contribute to enhanced productivity.

Review of Progress

2. In the Fourth Plan the achievements have been as follows.
3. 4 Multi-purpose Labour Welfare Centres and 4 Reading Room-cum-Recreational Centres have been opened to promote educational, recreational and cultural activities of the working class.
4. Labour seminars and refresher courses for Labour Officers, Factory Managers have been conducted.
5. Labour Intelligence Gazette has been published.
6. Cash awards for best safety measures and best research paper on industrial relations have been given.
7. For proper enforcement of legislative measures, collection and compilation of labour statistics, a limited number of posts were created and some vehicles purchased so that prompt action could be taken in situations of strike, lay-off, lock-outs, etc.

Objective and Targets for the Fifth Plan

- 8.2 New Multi-purpose Labour Welfare Centres and 5 Reading Room-cum-Recreational Centres will be opened.
9. Seminars and refresher courses for Labour Officers, Factory Managers and Trade Union Workers will be organised.
10. Cash awards for best safety measures and best research paper on industrial relations will be paid.
11. Training courses for Boiler Attendants will be organised.
12. Some posts of field executive officers along with ancillary staff will be created for strengthening the enforcement machinery for Labour Laws, Factory Laws and Boilers Laws. A special post of Safety Inspector will be created to implement safety measures. One post of Law Officer will be created in the Directorate for legal advice.
13. Buildings will be constructed for office accommodation.
14. The outlay proposed for the Fifth Plan is estimated to be Rs. 33 lakhs. Schemewise allocations of this outlay are shown in the following table :—

TABLE

	(Rs. in lakhs)
1. Opening of M. L. W. C.	.. 2·50
2. Opening of Reading Room-cum-Recreation Centre	.. 1·50
3. Enforcement of M. W. Act, M. T. Workers, Act, Bidi and Cigar Workers' (Condition of Employment Act).	2·70
4. Purchase of vehicles	.. 2·50

	(Rupees in lakhs)
5. Labour seminars	.. 0.20
6. Improvement of collection of labour statistics	.. 0.40
7. Refreshers course of Labour Officers, Factory Managers to Trade Union workers.	0.30
8. Case study of Industrial Relations	.. 0.25
9. Grant of safety award	.. 0.15
10. Strenthening Labour Law enforcement machinery	.. 5.70
11. Strenthening of Factory and Boiler Law enforcent machinery	.. 2.00
12. Creation of Legal Cell	.. 0.60
13. Creation of Safty Cell	.. 0.50
14. Training of Boiler attendant	.. 0.10
15. Office accommodation	.. 13.60

Total	.. 33.00

(B) Employment Service

15. The Employment Organisation in the State has not covered its services to all the areas of the State intensively. All the 13 districts of the State have at their Headquarters Employment Exchanges. But, out of the 56 subdivisional headquarters, sub-employment offices have been located at the headquarters of 39 which number includes the 13 districts employment exchange. Out of the 4 Universities in the State, 2 have been covered by University Employment Information and Guidance Bureaus. The interior areas, particularly the predominantly tribal areas, require closer net-work of Rural Employment Bureaus. In order to ensures service of the Employment Organisation to the increasing number of unemployed persons 2,71,000 are enrolled in the Live Register at present, the Fifth Plan should provide for adequate net-work of the services.

Review of Progress in the Fourth Plan

16. 21 Employment sub-offices would have been opened at the subdivisional headquarters in the State by the end of the Fourth Plan period. The Colliery Employment Exchange at Talcher would have been upgraded.

17. 2 University Employment Information and Guidance Bureaus have been opened in the Universities of Berhampur and Sambalpur.

18. The Employment Marketing Information Units have been strengthened at Rourkela, Koraput and Bhubaneswar.

Objective and Target for the Fifth Plan

19. All the subdivisional headquarters in the State will be provided with sub-employment offices. This means that 17 new sub-employment offices will be established at a cost of Rs. 7.52 lakhs.

20. Since the bulk of the population is in the rural areas and more attention has to be paid to the backward sections of the community, 10 Rural Employment Bureaus will be set up at a cost of Rs. 4.64 lakhs. Their special assignment will be to reach the interior backward areas and register the Scheduled Caste and Scheduled Tribe population by holding mobile offices.

21. A State Employment Exchange will be established for persons having higher education particularly on the scientific and technical side at a cost of Rs. 3.01 lakhs.

22. One Career Study Centre will be established at a cost of Rs. 1.72 lakhs. Career Masters will be appointed in schools at a cost of Rs. 0.46 lakh. Vocational Guidance Officers will be trained at a cost of Rs. 0.30 lakh.

23. 15 E. M. I. Officers will be trained at a cost of Rs. 0.18 lakh and books and periodicals will be purchased at a cost of Rs. 0.50 lakh.

24. In accordance with the suggestions of the Director-General of Employment and Training, decentralisation in administration will be effected by having 3 regional offices each headed by an Assistant Director with their jurisdictions co-terminus with those of the Revenue Divisional Commissioners. The expenditure is likely to be Rs. 5 lakhs.

25. For the efficient running of the services, buildings for offices are becoming indispensable. A sum of Rs. 20 lakhs has been provided under this head. A notional sum of Rs. 1.01 lakhs is being provided for vehicles.

26. The total outlay in the Fifth Plan is projected to be of the order of Rs. 44.34 lakhs.

(C) Employees State Insurance Schemes

27. The Employees' State Insurance Scheme started functioning in this State from 30th January 1960 when 7 E. S. I. Dispensaries were opened in different industrial areas in the State.

28. The Scheme provides 6 benefits viz. (i) medical, (ii) sickness, (iii) disablement (iv) dependant, (v) maternity, (vi) funeral benefits to industrial workers under the provisions of E. S. I. Act and Regulations made thereunder. Out of the above six benefits, medical benefit is provided through the agency of the State Government while the other 5 benefits are provided by the Employees' State Insurance Corporation through its Regional Office at Cuttack. Expenditure on medical benefit is shared between the State Government and the Corporation in the proportion of 1:7.

29. Medical benefit is of three kinds (i) Full medical care, (ii) Expanded Medical care and (iii) Restricted medical care. In this State, only expanded medical care is being administered. Under this system full medical care is given to the insured persons whereas to the family members of the insured persons only outdoor treatment is offered. The E. S. I. Corporation have prescribed a ceiling of Rs. 67 per employees' unit to be spent on expanded medical care within the shareable pool system.

Review of Progress in Fourth Plan

30. Out of the anticipated 10 dispensaries and 3 hospitals, it is expected that 7 dispensaries and 2 hospitals would have been set up and two existing dispensaries upgraded, at an expenditure of Rs. 25.63 lakhs of which the shares of the State Government and the Corporation amount to Rs. 3.2 lakhs and Rs. 23.43 lakhs respectively. 42,300 workers would have been covered out of a total of 76,000 in the State.

Obejctive and Targets for the Fifth Plan

31. Ten dispensaries at the rate of 2 per year at the following places as at a cost of Rs. 19.5 lakhs will be established.

- (i) Sambalpur
- (ii) Lathikata
- (iii) Balasore
- (iv) Jajpur Road
- (v) Talcher
- (vi) Thiruveli
- (vii) Paradeep
- (viii) Sukinda
- (ix) Sargipali
- (x) Belpahar

32. The following dispensaries will be upgraded by providing more medical officers and staff because of the increase in the number of insured persons attached to them at a cost of Rs. 7.65 lakhs calculated according to the yardstick:—

- (i) Two-doctored dispensaries to three-doctored dispensaries at Jaykaypur.
- (ii) One-doctored dispensary to two-doctored dispensaries at Badbil.
- (iii) Four-doctored dispensaries to five-doctored dispensaries at Rajgangpur.
- (iv) 6 more dispensaries (names to be finalised later)

33. One 10-bedded hospital will be established at Jaykaypur at a total cost of Rs. 4 lakhs during the 5 year period and one 30-bedded fully equipped hospital to serve referral needs will be set up at Cuttack with an estimated expenditure of Rs. 5 lakhs. Thus the total cost on medical equipment, medicines and staff will be Rs. 9 lakhs.

34. For specialised treatment E. S. I. wards of 20 beds each will be added to the Medical College Hospitals at Berhampur and Burla at a cost of Rs. 6 lakhs to be spent on medical equipments, medicines and staff.

35. In pursuance of the E. S. I. Corporation's circular the services of specialists will be broad-based by providing part-time specialists in 13 subjects as per Annexure I at Cuttack, Burla and Berhampur Medical Colleges on Zonal basis. Besides State level part-time specialists in 9 subjects will be appointed at Cuttack Medical College. The cost is estimated at Rs. 4.35 lakhs.

36. For the purpose of annual medical check-up of insured persons, 2 Mobile Units each consisting of a Medical Officer, a Laboratory Technician etc. will be located in suitable zones and they will move to different hospitals and dispensaries. The cost will be Rs. 6 lakhs.

37. X-Ray Plants need be provided for Brajarajaagar and Kanshabahal Hospitals which are already existing as well as for the proposed Referral Hospital at Cuttack at a total cost of Rs. 2.65 lakhs.

38. Two existing Ambulance Vans now at Rajgangpur and Rajabagicha will be replaced and 2 new ones will be purchased for hospitals at a total cost of Rs. 1.7 lakhs.

39. Since paucity of technical personnel has constituted one of the Chief bottlenecks, training courses will be organised for pharmacists, nurses, A. N. Ms., laboratory technicians, X-Ray technicians, etc. and medical officers will be sent out for training courses. A provision of Rs. 1.5 lakhs is made for this purpose.

40. To undertake the increased responsibilities and expanded programme in the Fifth Plan, the Administrative organisation will be strengthened at a cost of Rs. 3.15 lakhs.

Finance

41. The total cost on the above schemes comes to Rs. 61.5 lakhs. This expenditure is sharable and the cost to the State would be Rs. 7.7 lakhs, the balance accountable to the E. S. I. Corporation. In addition to Rs. 7.7 lakhs, Rs. 9.96 lakhs will be spent on construction programme since the consolidation of the E. S. I. programme and its expansion have been suffering a serious set-back due to want of accommodation for the dispensaries, hospitals, staff quarters, etc. Efforts will also be made to obtain a higher quantum of funds from the E. S. I. corporation for this purpose.

42. An outlay of Rs. 95 lakhs has been made in the Fifth Plan for all the Schemes in the Labour and Labour Welfare Sector. The programmewise details are shown in Annexure II.

Annexure 1

Part-time Specialists to be appointed in 3 Medical Colleges on Zonal basis.—

Medicine	..	1
Surgery	..	1
T. B.	..	1
Obstetrics & Gynaecology	..	1
Pathology	..	1
Paediatrics	..	1
Eye	..	1
E. N. T.	..	1
Skin & V. D.	..	1
Radiology	..	1
Orthopaedics	..	1
Physiotherapy	..	1
Dental	..	1

Part-time Specialists to be appointed at S. C. B. Medical College on State Level Basis.—

Psychiatry	..	1
Cardiology	..	1
Malignant Disease	..	1
Neuro Surgery	..	1
Thoracic Surgery	..	1
Plastic Surgery	..	1
Leprosy	..	1
Cardio Surgery	..	1
Nevrology	..	1

Annexure II

Draft Fifth Five-Year Plan

Programmewise outlay and expenditure

(Rs. in lakhs)

Sl. No.	Programme	Fourth Plan approved outlay	Approved outlay 1973-74	Likely expenditure 1973-74	Likely expenditure during Fourth Plan	Fifth Plan total outlay	Annual Plan 1974-75 outlay
1	2	3	4	5	6	7	8
	Labour & Labour Welfare—						
	(A) Labour Administration ...	7.50	2.91	2.87	6.93	33.00	5.16
	(B) Employment Service ..	4.84	4.07	4.67	6.68	44.34	7.72
	(C) E. S. I. Schemes—State share	5.66	3.00	2.40	3.20	17.66 (b)	4.12 (c)
	Total ..	18.00	9.98	9.94	16.81	95.00	17.00

(b) Includes 1/8th State share and 100% cost of construction of building i. e. (7.70+9.96).

(c) 1/8th State share and 100% cost of construction of building (0.99+3.13).

CHAPTER 2·20

PUBLIC CO-OPERATION—GRANTS TO ORGANISATION OF PLANNING FORUMS

With a view to creating plan consciousness among the teaching staff and the students of Universities and Colleges by organising lectures, talks, seminars, symposium essay and debate competitions, exhibitions and also to undertake socio-economic survey the grants for organisations of Planning Forums have been continued as a scheme of the 4th Plan.

2. During the Fourth Plan the scheme came over to the state sector with an outlay of Rs. 1·00 lakh for the entire plan period. It is expected to utilise the entire amount for fostering plan consciousness and developing constructive views on planning, including research and study.

3. It is proposed to revitalise the Forums to be more effective and purposeful during the 5th Plan period with the above programme and therefore an outlay of Rs. 3 lakhs is envisaged. During 1974-75 Rs. 0·60 lakhs will be required.

CHAPTER 2·21

MISCELLANEOUS

(i) STATISTICS

Review of the Progress of the Fourth Plan

The Bureau of Statistics and Economics which is the major statistical functionary at the State level, in consultation with Central Statistical Organisation in the Fourth Plan, tried to meet the requirements of various Departments but due to the meagre provision of Rs. 35 lakhs this could not be done.

2. The list of schemes which were undertaken during the Fourth Plan is given below:—

- (i) Creation of Statistical Training Institute
- (ii) Strengthening of State Income Unit
- (iii) Economic Survey Scheme
- (iv) Improvement of Irrigation Statistics
- (v) Agronomic & Agro-Economic Studies
- (vi) Survey of goods traffic by roads
- (vii) Benchmark Survey in S. F. D. A. and M. F. A. L. districts
- (viii) Benchmark to Assessment Survey in I. A. D. P. districts (Central Scheme)
- (ix) Assessment of High Yielding Varieties Programme in selected districts (Central Scheme).

3. The first three schemes of the Fourth Plan envisaged important work of permanent nature and therefore these will be continued in the committed side in the Fifth Plan.

The scheme on Benchmark Survey on S. F. D. A. and M. F. A. L. district (No. vii) has already been completed and the survey reports have been submitted to Government. The Scheme on Benchmark and Assessment Survey in I. A. D. P. district (No. viii) is a Central Scheme on Agricultural Budget and the Scheme on Assessment of High Yielding Variety Programme (No. ix) is also a Central Scheme on the I. A. R. S. budget. The Schemes on 'Improvement of Irrigation Statistics' and "Survey on Goods Traffic by Roads" are proposed to be operated by the concerned Departments and they will be technically assisted by the Bureau in taking up the work in these fields.

4. Only one incomplete scheme of the Bureau of Statistics viz. schemes on Agronomic and Agro-economic studies will be carried over to the Fifth Plan with a small spill over of 3·3 lakhs objective for the Fifth Plan.

5. The Fifth Plan has laid great emphasis on removal of poverty and attainment of economic selfreliance though accelerated growth with reduced inequalities, creation of massive employment opportunities to absorb all idle manpower, provision for a national programme of minimum needs, regional development with emphasis on upliftment of backward classes, and special treatment for backward regions and evolution of an efficient public procurement and distribution system for essential consumption goods. The statistics machinery has to be geared up to meet the needs of planners in the various fields and areas of importance to fulfill the objective. Under basic Minimum Needs programme, Plans such as provision of a minimum level of consumption standard, not only involves income generation, full employment, price stabilisation, but also such aspects as income distribution etc. are to be worked out for which adequate statistical materials are essential. It is, therefore, imperative that during the Fifth Plan attempt should be made to make available statistics relating to important socio-economic indicators at the district level and in some cases at still lower levels. For this purpose a set of new schemes as briefly described below have been formulated.

Programmes for Statistical Development during the Fifth Plan

AGRICULTURAL STATISTICS :

6. Orissa is one among the three States which do not have any primary reporting agency for collection & reporting basic agricultural statistics such as land utilisation, area, yield rate and production of crops, area irrigated and etc. In view of the need for more reliable information at lower levels it has been desired to strengthen the crop survey agency now working under Bureau of Statistics and Economics. The additional funds for this purpose have been provided under the sectoral Plan of 'agriculture'.

(2) STORING AND SUPPLY OF DIFFERENT TYPES OF STATISTICAL DATA :

7. It is proposed to instal a computer unit with a data bank during the Fifth Plan period. The computer with its facility for permanent storage of large columns of data in readily accessible form and its capacity for rapid processing will ensure free flow of information with little time lag.

(3) STATISTICS ON ECONOMIC ACTIVITIES IN UNORGANISED SECTORS :

8. More than 40 per cent of the State income is derived from unorganised sectors such as trade, transport, profession and services and small unorganised industries, the data in respect of which have been very scarce and unreliable in the context of employment potential, *per capita* earnings, and the magnitude of economic activities involved in it. It has been desired to make a complete list of population involved in these pursuits and to undertake sample surveys covering different occupational groups in a phased manner over different years of the Fifth Plan.

(4) ESTIMATION OF CAPITAL FORMATION AND SAVING IN THE STATE :

9. Only global estimates of capital formation at State level covering the household sector alone are available through Reserve Bank of India Surveys. The institutional and industrial sectors covering Government, commercial, corporate and central sectors have not been included. It has therefore, been proposed to make a complete survey and study of capital formation and savings in the State to measure the rate of economic progress.

(5) STATISTICS ON INDUSTRIAL PRODUCTION :

10. The Bureau is now conducting Annual Survey of Industries. But for construction of Index of Industrial Production it is desired that required surveys and analysis in the industrial sector should be undertaken under the sectoral Plan of industries.

(6) PRICE STATISTICS :

11. Of late there has been consistent demand on the data on producer's prices especially in the context of evaluation of gross national products, studying the share of producers in the prices paid by the consumers, examining the profit margin of wholesalers and retailers and constructing wholesale, retail and producers price indices, parity indices between prices received and paid by the farmers and their prosperity indices. It is therefore, considered a priority programme for the State to set up an agency for regular price collection and construction of all types of price indices.

(7) COMPUTATION OF STATE INCOME ESTIMATES :

12. For refining the State Income Estimates and for correct assessment and evaluation of gross national product, it is essential to conduct *ad hoc* field surveys, type studies etc., for collecting data, not available at present. It is necessary that for this purpose the existing unit should be strengthened and streamlined and emphasis is to be laid on construction of regional income estimates necessary in the context of regional planning.

(8) SOCIO-ECONOMIC DATA

13. A large mass of data which are collected through the State sample of N. S. S. as well as by the Central N. S. S. are available after tabulation for the last 10 to 12 rounds. But due to limited resources of the N. S. S. section these practically remain unused. It is now proposed to set-up a small analytical for analysis and preparation of reports based on N. S. S. data.

(9) EMPLOYMENT AND UN-EMPLOYMENT STATISTICS :

14. It is necessary to undertake various surveys and studies on causes of un-employment magnitude of employment (both educated and uneducated) multiplier effect of projects for additional employment and co-ordination between education, training and employment and, etc.

(10) FAMILY LIVING SURVEYS AND CONSTRUCTION OF COST OF LIVING INDICES

15. In accordance with minimum needs programme advocated by the Fifth Plan, it is imperative to make an assessment of the minimum needs of the people by sample surveys on their consumption level and pattern. It is desired to introduce family budget enquiries for formulation of weighting diagram on consumption pattern and to construct consumer price indices for various sections of people. The consumer expenditure surveys coupled with price indicators will serve well to cater to the needs of this programme.

(11) VILLAGE STATISTICS :

16. It is essential that villagewise information especially on some key items of social, economic and infrastructural importance are collected, maintained and made available with sufficient ease and quickness to the planners. It is proposed to collect basic villagewise information on some 50 key items during the early part of the Fifth Plan.

(12) STATISTICAL TRAINING :

17. The statistical personnel are to be given in-service training in statistical methods (basic course) and field survey methodologies so that they will be able to discharge their duties properly. The Statistical Training Institute is to be suitably strengthened to meet these requirements.

(13) GENERAL STRENGTHENING OF STATE STATISTICAL MACHINERY :—

18. Suitable strengthening of the existing Statistical machinery is to be made at State Headquarters, at range, district and subdivisional levels with a view to ensuring adequate technical guidance. Besides, an Economic Division at State Headquarters is to be organised for assisting the Planning Department and Planning Board in evolution of economic norms and technological co-efficients required for planning, in deriving functional statistics and operational yardsticks. Some building construction work also is involved.

(14) AGRONOMIC AND AGRO-ECONOMIC ENQUIRIES :

19. This scheme was started during the last year of the Fourth Plan to cover only paddy crop in two districts. It will be continued with a total outlay of about 3.30 lakhs. Besides, this scheme will have to be adequately strengthened to undertake surveys on other important crops phased over district and years. The details are given in Annexure I.

(15) OTHERS :

20. The following statistical schemes are to be implemented under the sectoral plans of concerned departments—

- (i) Improvement of Agricultural Statistics.
- (ii) Industrial statistics in the unorganised sectors and construction of Industrial Production Indices.
- (iii) Improvement of Educational Statistics
- (iv) Statistics on rural housing conditions
- (v) Economic conditions of tribal and backward class population and surveys for identification of backward areas

21. The total estimated cost of the spill-over schemes and new schemes under the head of development 'Statistics' is Rs. 173.80 lakhs which has been provided in the Fifth Plan. The schemewise details are indicated in Annexure II.

Annexure I

Continuing or Spill-over Schemes included in the Fifth Plan Statistics (Misc. Programme) Sector

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Approved estimated cost	Total Physical Target of the Scheme	Expenditure likely to be incurred up to the end of 4th Plan	Target anticipated to be achieved by end of 4th Plan
1	2	3	4	5	6
1.	Agronomic & Agro-economic studies (cost of cultivation of different crops) (Started only during last year of the Fourth Plan and to be continued in the 5th Plan).	1.29	Undertaking cost of cultivation studies in phases covering almost all the major crops in different holding sizes in all the districts. A series of surveys to be conducted and data obtained by cost accounting method from cultivators holdings and analysed.	1.00	The scheme started only in 1973-74 and it is expected to cover the cost studies on paddy crop in two districts only.
Total ..		1.29		1.00	

(Rupees in lakhs)

Sl. No.	Name of the Scheme	Spill-over amount if any proposed to be provided in the Fifth Plan	Capital component	Foreign exchange component	Yearwise break up				
					1974-75	1975-76	1976-77	1977-78	1978-79
1	2	7	8	9	10	11	12	13	14
1	Agronomic & Agro-Economic studies. (Started only during last year of 4th Plan this also requires expansion with larger statistical base.)	3.30	..	..	0.62	0.63	0.65	0.68	0.72
<hr/>									
	Total	3.30	..	..	0.62	0.63	0.65	0.68	0.72

Annexure II

(Rs. in lakhs)

Name of the scheme	Outlay proposed for Fifth Plan (Rs. '000) break up of outlay on									
	Total 1974-75 to 1978-79	1974-75	1975-76	1976-77	1977-78	1978-79	Additional new staff	Equipment		Other Expendi- ture
								Total	Foreign Exchange element	
1	2	3	4	5	6	7	8	9	10	11
1. Core Schemes of National Importance.										
1.1. Setting up of a computer centre & data bank.	50.00	5.70	34.00	3.40	3.43	3.47	8.69	36.61	30.00	4.70
1.2. Scheme for economic census & survey for non-household un-organised sector of economic activities.	30.00	7.40	5.50	5.60	5.70	5.80	20.08	6.00	..	3.92
1.3. Estimation of capital formation and savings in the State.	5.00	0.90	0.95	1.00	1.05	1.10	4.20	0.18	..	0.62
2. Core Schemes in the State Sector.										
2.1. Introduction of a Price collection machinery for collection of products price, and construction of cost of living indices.	10.00	1.80	1.90	2.00	2.10	2.20	9.21	0.31	..	0.48

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2.2. State Income Estimation unit (<i>ad hoc</i> surveys and type studies).	5.00	0.90	0.95	1.00	1.05	1.10	4.68	0.32
2.3. Setting up of a research Cell for analysis of N. S. S. Data.	2.50	0.51	0.48	0.49	0.50	0.52	2.40	..	..	0.10
2.4. Unemployment Surveys & studies.	5.00	0.90	0.95	1.00	1.05	1.10	4.61	..	..	0.39
2.5. Construction of buildings for Bureau Headquarters, districts and ranges & provision of vehicles.	17.00	5.00	3.00	3.00	3.00	3.00	..	5.00	..	12.00
2.6. Training of district and lower level field staff in statistics & survey methodology.	4.00	1.50	0.55	0.63	0.65	0.67	2.50	1.20	..	0.30
2.7. Collection of village information and preparation of village index card.	10.00	1.80	1.90	2.00	2.10	2.20	9.50	..	..	0.50
2.8. Strengthening of State Statistical machinery.	17.00	4.00	3.15	3.25	3.25	3.35	13.40	..	..	3.60
2.9. Setting up of a nuclear economic division.	5.00	0.90	0.95	1.00	1.05	1.10	4.30	0.20	..	0.50
2.10. Strengthening of Agro-economic and Agro-economic studies cost of cultivation studies.	5.00	0.90	0.95	1.00	1.05	1.10	4.10	0.20	..	0.70

(Rs. in lakhs)

Name of the scheme	Outlay proposed for Fifth Plan (Rs. 000) break up of outlay on									
	Total 1974-75 to 1978-79	1974-75	1975-76	1976-77	1977-78	1978-79	Additional new staff	Equipment		Other- Expendi- ture
								Total	Element Engineering Foreign	
1	2	3	4	5	6	7	8	9	10	11
3. Other schemes of State Importance.										
3.1 Family living surveys and construction of cost of living indices.	5.00	2.10	1.91	0.31	0.33	0.35	4.45	0.30	..	0.25
Total New Schemes ..	170.50	34.31	57.14	25.68	26.31	27.06	92.12	50.00	30.00	28.38
4. Spill over Schemes (Core schemes of State Sector)										
4.1. Agronomic & Agro-Economic enquiries.	3.30	0.65	0.61	0.66	0.68	0.70	3.10	0.07	..	0.13
Grand Total ..	173.80	34.96	57.75	26.34	26.99	27.76	95.22	50.07	30.00	28.51

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(ii) PUBLICITY

The Fourth Plan outlay on 'publicity' is Rs. 25 lakhs. It is anticipated that about 27.61 lakhs would be spent by the end of the Fourth Plan.

2. By the end of 1972-73, Information Centres at Dhenkanal, Koraput and Chhatrapur were opened. It is proposed to open one Information Centre at Sunabeda during 1973-74. Twelve Information Centres were strengthened during 1969-70 to 1972-73. Four Information Centres are proposed to be strengthened during 1973-74 under the scheme 'Mobile Units for Audio Visual Publicity'. Eight vehicles and other *Audio Visual* equipments such as projectors, generators, amplifiers, microphones, etc., were purchased. Four new vehicles are proposed to be purchased during 1973-74. By the end of 1972-73 25 copies of 15 Oriya feature films were purchased. Only eight copies of five feature films are proposed to be purchased during 1973-74.

3. During the Fourth-Plan, an amount of Rs. 5.56 lakhs was provided for construction of a building for the State Information Centre at Bhubaneswar. The construction of the building was started in the year 1972-73. An amount of Rs. 11.82 lakhs will be required to complete the project. The building will be completed by the end of 1973-74.

4. Under the Community Listening Scheme, the workshop of the State Headquarters had taken steps for modification of old type dry battery operated valve sets to transistor sets and A. C. main sets to supply those to the non-electrified and electrified villages respectively. Special attention was given for Rural and Tribal publicity through organised cinema shows in the villages and towns where there are no Cinema Houses.

Specific Projects for the Fifth Plan within an outlay of Rs. 50.00 lakhs

(i) *Audio Visual* publicity .. Rs. 12.00 lakhs

5. It relates to publicity in rural areas which includes vehicles, speech, film equipments, etc. *Audio Visual* equipments have already been supplied to all subdivisions. During the Fourth Five-Year Plan, vehicles were purchased only for replacement of old vehicles. Mobile units are required exclusively to cover tribal areas in Koraput, Kalahandi districts etc.

6. It is proposed to purchase six vehicles amounting Rs. 2 lakhs and replacement of equipments with Rs. 0.40 lakh in each year of the Fifth Plan.

7. This department owned 64 projector sets. Twenty units are required to be replaced during the Fifth Five-Year Plan.

(ii) Construction of building for State Information Centre—Rs. 11.82 lakhs at Bhubaneswar.

8. The object of the centre is to focus to the public the achievements of the development programmes of the State through literature, exhibition, models, charts etc. The estimates of this building is Rs. 17.38 lakhs. During the Fifth Plan period Rs. 5.56 lakhs has been spent. Since the building is expected to be completed during 1974-75, the balance amount of Rs. 11.82 lakhs is required during the 1st year of the Fifth Plan.

(iii) Display advertisement on plan and development—Rs. 3.00 lakhs activities.

9. The object of this scheme is to highlight the State's achievements in all fields through newspapers and periodicals published in the State and outside. Normal advertisements of the Departments which do not relate to plan are provided in the committed budget. But it

is necessary to issue display advertisements relating to the success and progress of development schemes not only in the local newspapers but also in all India papers including small newspapers and magazines.

(iv) Opening of 4 major information centres at Cuttack, Sambalpur, Berhampur and Rourkela. Rs. 10.00 lakhs

10. This is a new scheme to open centres in the important cities in the State. This Scheme includes construction of Building, furnishing of the building, books, radio, Teleprinter, appointment of staff.

(v) Extension and improvement of Photo publicity Rs. 2.00 lakhs

11. The question of scientifically preserving the Photo negatives for future reference has been the real problem of the Photo Section for many years past. Staff are to be appointed for documentation of these negatives. Besides, it is required to expand the dark room Laboratory to cope with the increased work load by purchasing new equipments.

(vi) Production and purchase of films for rural publicity Rs. 5.00 lakhs

12. Publicity through the organised cinema shows is considered as an important medium. During the Fourth Plan period about 25 copies of the different full length Oriya films had been purchased and circulated to the hilly districts. Steps will be taken to extend this facilities to all districts during the 5th Plan period.

(vii) Creation of Folk art Publicity Unit for the Rural areas. Rs. 4.00 lakhs

13. Although the cultural groups now existing in the rural areas, such as 'Pala' 'Daskathia', 'Karama dance' etc., have been proved to be effective media of Mass communication, still they are not so effective for the purpose. It is proposed to organise drama unit to communicate the Government activities to the mass more effectively through this popular media.

(viii) Opening of research and reference division at State headquarters. Rs. 1.00 lakhs

14. The Research and Reference Division is to function on the model of the Research and Reference Division already existing under the Ministry of Information and Broadcasting, Government of India.

(ix) Project Orissa Exhibition Unit .. Rs. 1.18 lakhs

15. The aim of this scheme is to organise exhibitions by the Headquarters unit and Small exhibitions by the district units to project the State's development, progress and potentialities.

16. Scheme-wise Expenditure during the Fourth Plan period and outlay for the Fifth Plan are shown in the Annexure I.

ANNEXURE I

Sl. No.	Head of Developments	Approved Fourth Plan out-lay	Approved out-lay for 1973-74	Anticipated expenditure 1973-74	Anticipated expenditure during the Fourth Plan	Anticipated expenditure during the Fourth Plan
1	2	3	4	5	6	
1	Maintenance of Community Listening Sets.	0.99	..	0.20	0.92	2
2	Management of Radio Rural Forums.	0.96	..	0.15	0.70	0
3	Mobile Units for Audio Visual & Audio Visual Publicity.	4.25	..	2.33	10.28	8
4	Information Centre and Opening of new Information Centre.	1.70	..	0.40	1.42	2
5	Publicity through Song and Drama.	1.16	..	0.20	0.71	1
6	Production of Informative Literatures.	1.00	..	0.20	0.64	4
7	Display Advertisement on Plan and Development Activities.	1.90	..	0.60	2.66	6
8	Conducted Tour of Journalists.	0.39	..	0.05	0.19	9
9	Community Listening Scheme	0.60	..	0.20	0.46	6
10	Purchase of Oriya Films ..	0.85	..	0.40	1.18	8
11	Opening of Research and Reference Division at State Headquarters.

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CITY

Fourth Plan and Outlay for Fifth-Plan

(Rs. in lakhs)

Fifth Plan out-lay proposed			Annual Plan for 1974-75		
Total	Capital outlay	Foreign exchange	Total	Capital outlay	Foreign exchange
7	8	9	10	11	12
..
..
2.00	2.40	..	..
..
..
..
3.00	0.60	..
..
..
5.00	1.00	..
1.00	0.20	..

Sl. No.	Head of Developments	Approved Fourth Plan outlay	Approved outlay for 1973-74	Anticipated expenditure 1973-74	Anticipated expenditure during the Fourth Plan	
1	2	3	4	5	6	
12	Opening of two repairing centres at Sambpur and Berhampur.	..	..	..	..
13	Opening of Laboratory for processing coloured photographs.	2.00	..	..	1.08
14	Intensive Publicity in Rural Areas.	..	..	0.15	0.39
15	Extension and improvement of Photo Publicity.	..	..	0.20	0.30
16	Construction of building for State Information Centre.	3.00	..	2.80	5.56	
17	Zonal Scheme for Photographic Productions.	2.20	..	..	..
18	Appointment of Block level Publicity Organisers for Intensive Publicity in Tribal and Rural Areas.	..	..	1.12	1.12
19	Opening of four Major Information Centres at Cuttack, Sambalpur, Berhampur and Rourkela.	3.00	..	..	..
20	Creation of Folk and Publicity Unit.	..	..	..	..
21	Project Orissa Exhibition Unit.	1.00	..	..	..
	Total	..	25.00	9.00	9.00	27.61

(Rs. in lakhs)

Fifth Plan outlay proposed			Annual Plan for 1974-75		
Total	Capital outlay	Foreign exchange	Total	Capital outlay	Foreign exchange
7	8	9	10	11	12
..
..
..
2.00	0.40	..	..
11.82	10.82	10.82	..
..
..
10.00	2.50	..	..
4.00	1.50	..	..
1.18	0.25	..	..
50.00	10.82	..	19.67	10.82	..

**(iii) STRENGTHENING OF THE PLANNING MACHINERY IN THE STATE
(INCLUDING EVALUATION AND MONITORING)**

During the Fifth Plan the Planning machinery will be strengthened and multi-level planning will be organised. On the suggestion of the Planning Commission a detailed proposal on re-organisation of the Planning machinery has been prepared and submitted to the Commission. According to this proposal the machinery will consist of the following three bodies.

- (1) The Planning Board which is the apex planning body ;
- (2) Steering groups covering different sectors of the economy to assist the Board in its work ;
- (3) A functionally oriented Planning Department of the State Government which will also provide Secretariate assistance to the Board.

2. The State Planning Board has already been reconstituted by taking in it economists and other experts. Working groups were constituted for formulating draft sectoral programmes for the Fifth Plan. A detailed proposal for stream-lining the State Planning Department has already been submitted to the Planning Commission in January, 1973. According to this proposal there will be five functional cells in the Planning Department, namely (a) perspective planning cell (b) plan information, monitoring and evaluation cell (c) project appraisal cell (d) regional and district planning cell and (e) Plan formulation and co-ordination cell. Details regarding functions of each of the cells and the personnel for these cells have been indicated in the proposal submitted to the Planning Commission. Each of the cells will be headed by a Director to be assisted by Research Officers, Investigators and other supporting staff.

3. Evaluation of Projects, programmes and schemes is necessary for better formulation of plans and their implementation. In the Planning Department there exists an evaluation unit headed by the Director of Evaluation which undertakes post-project evaluation. The unit has six Research Officers and a supporting staff of Economic Investigators. There is a State Level Evaluation Advisory Committee under the Chairmanship of the Development Commissioner which selects schemes and programmes for undertaking evaluation studies, finalises the evaluation report for publication and also periodically reviews the progress of evaluation in the State. So far the evaluation unit has prepared 25 evaluation studies covering different sectors of the economy. Thirteen more studies are under different stages of preparation and a list of programmes and schemes is being drawn up in consultation with the operating departments for undertaking new evaluation studies during the Fifth Plan.

4. When the State Planning machinery is fully re-organised the existing evaluation unit will form a part of the "Plan Information, Monitoring and Evaluation Cell." The emphasis will continue to be on post-implementation evaluation so that the conclusions from these studies will be utilised for better formulation and implementation of plans. In the Fifth Plan the entire emphasis will be on strengthening the central unit of evaluation in the Planning Department under the re-organised set up by recruiting experts in Economics, Statistics and project evaluation. The modern techniques of evaluation will be applied with suitable modifications to suit to the local conditions and an attempt will be made to bring about qualitative improvement in evaluation studies.

5. In the Planning Department there is already a progress, reporting system by which information on the progress of various schemes, programmes and projects included in the Plan is reviewed periodically and on the basis of this information monthly and quarterly reviews of performance are conducted. However, in the reorganised set up a functional central monitoring unit will be organised in the Planning Department as part of the State Planning Machinery. This unit will form a part of the "Plan Information, Monitoring and Evaluation Cell" to be headed by a Director. This unit will carry on quantitative and qualitative assessment of the various Programmes and projects in order to assess if the financial, physical and other objectives have been achieved. It will also carry on concurrent evaluation of programmes and schemes so that the conclusions derived therefrom would

help in better implementation of the Plan. In the Proposals submitted to the Planning Commission for reorganisation of the planning machinery a suggested staffing pattern for the monitoring unit has been indicated. The unit will consist of officers having skills in economics, statistics, system analysis, etc. Since these units will be in charge of the monitoring of the development programmes in the entire economy of the State, adequate arrangements would be made for processing and storage of data through the use of modern equipment like the Punch Card System, calculating machines and computers, etc. and also by the use of modern methods of appraisals of projects and schemes.

6. At this stage it has not been possible to organise monitoring units either in the technical departments or at the district level as these levels yet do not have full-fledged planning cells for formulation of plans and reviewing progress in the implementation. However during the Fifth Plan initial measures will be undertaken for organising Planning Cells with monitoring units in the Departments as well as at the district level.

7. The reorganised planning set up will have a regional and district planning unit. This unit will provide technical guidance to District Planning Cells and Regional Planning Cells to be set up in different areas of the State. During the Fourth Plan District Plans have been prepared for the districts of Ganjam and Sambalpur. In the Fifth Plan, Planning Cells will be organised in the district offices under the overall supervision of Collectors. The Planning Cell will be headed by a Planning Officer with basic qualification in economics. There will be Research Officers with qualification in statistics, geography and other relevant disciplines to help in the formulation of district and other area plans. The constitution of such cells will be carried on simultaneously with the reorganisation of the State Planning Machinery after getting the approval of the Planning Commission.

8. The total estimated cost of the scheme for reorganising the State Planning Machinery comes to Rs. 60 lakhs for the Fifth Plan. The Planning Commission have already indicated that 2/3rd of the additional expenditure on reorganising the Planning Machinery will be met by the Government of India and the balance 1/3rd will be provided in the State Plan. Accordingly a provision of Rs.20 lakhs has been made towards the States share for reorganising the Planning Machinery. In addition a provision of Rs. 5 lakhs has been made for organising District Planning units. Thus the total outlay on account of strengthening of the Planning Machinery including organisation of the district Planning units comes to Rs. 25 lakhs. For 1974-75, an outlay of Rs. 5.00 lakhs has been proposed.

(iv) GOVERNMENT PRINTING

The expenditure during the Fourth Plan period is likely to be of the order of Rs. 65 lakhs. The necessity for construction of a building for the Forms Press at Madhupatna was keenly felt since this press is at present housed in a rented building at Cuttack which is in a most dilapidated condition. An amount of Rs. 48.43 lakhs would be spent on this building and the construction will be completed during the Fourth Plan. With the balance amount of Rs. 16.57 lakhs, printing, composing and allied machines for the main Government Press have been purchased. As a result of the installation of the new machines and necessary expansion the productivity capacity of the press in terms of impressions have increased from 98,062,308 in the year 1960-61 to 129,178,853 in the year 1972-73. The impressions from December, 1972 onwards are in an increasing trend.

2. Due to all-round expansion of the activities of the various departments, the work-load in the Government Press has considerably been increased. Therefore, during the Fifth Plan period it is proposed to keep a provision of Rs. 115 lakh to reorganise, modernise and expand the main Government Press and its Branches.

3. The programme will comprise the following main items of work :

(A) Equipping the new Forms Press building with Proper Machines and Accessories

4. As mentioned above the construction of the new Forms Press building at Madhupatna will be completed by the end of the Fourth Plan. Most of the machines and equipments in the existing Forms Press are pretty old and obsolete. The new Forms Press building will, therefore, have to be equipped with appropriate machines, equipments and accessories to cope with the demand of printing and supply of standard and non-standard forms. An outlay of Rs. 43.23 lakhs is proposed out of which Rs. 34.37 lakhs will be utilised for purchasing machines and equipments and Rs. 8.86 lakhs for strengthening the staff.

(B) Modernisation and expansion of the Main Government Press at Madhupatna including the Secretariat Branch Press at Bhubaneswar :

5. There will be heavy demand on the main press to execute printing of jobs during the Fifth Plan period. The full requirement of machines, equipments and accessories of the press has not been fulfilled. The composing, printing and binding sections absolutely need expansion, modernisation in terms of men, machines and equipments. Similarly, the Branch Press at Bhubaneswar which has at present only one Treadle machine and a few Hand-presses need expansion to cope with the increased work-load. Considering these requirements a provision of Rs. 26.30 lakhs is proposed during the Fifth Plan. Out of this Rs. 2.50 lakhs is required for construction of a factory building, Rs. 17.42 lakhs for purchase of machines and equipments and Rs. 6.38 lakhs for augmentation of staff strength.

(C) Setting up New Branch Presses and reorganising the existing ones :

6. At present all the districts are depending upon the main Government Press at Madhupatna, Cuttack for supply of Forms, Stationeries, repair of Typewriters and printing of various jobs. In order to make these facilities available to the districts, it is proposed to suitably strengthen the existing Branch Presses at Bolangir, Deogarh, Keonjhar, Khandapara, and Sundargarh in the Fifth Plan period and also to establish two new full-fledged regional units at Berhampur and Sambalpur which will have mainly a stationery and forms store and a typewriter repairing section. A provision of Rs. 15.52 lakhs is proposed for this scheme out of which Rs. 3.50 lakhs is meant for construction of branch press building, Rs. 7.85 lakhs for machines and equipments and Rs. 4.17 lakhs for staff.

(D) Reorganisation of School of Printing and Allied Trades :

7. The existing School of Printing and Allied Trades which is catering to the needs of Government Presses and private presses also has to be equipped with required machines and equipments as per the syllabus prescribed by the Director-General of Training and Education. Necessary provision will also have to be made for in-service training of the workers

and supervisors already employed in the press. A provision of Rs. 2.95 lakhs is proposed for the Fifth Plan of which Rs. 2 lakhs to be utilised for purchasing machines and equipments and stores and Rs. 95,000 for staff.

(E) Construction of Staff Quarters :

8. Only 8 per cent of the total employees of the Government Press have been provided with staff quarters. There is discontentment among the workers on this account. A provision of Rs. 27 lakhs is proposed in the Fifth Plan for construction of staff quarters for the employees of the main Government Press at Madhupatna and the Branch Presses.

9. The schemewise outlay and targets for the Fifth Plan are shown in the Annexure I.

Annexure
New Schemes for the

State Sector

Sl. No.	Name of the Scheme with location	Estimated cost	5th Plan outlay (Tentative)	Capital Expenditure component of the outlay	
1	2	3	4	5	
1	Equipping the new Forms Press with appropriate machines, etc.	..	43.23	27.57	
2	Modernisation and expansion of main Press at .. Madhupatna including the Secretariat Branch Press at Bhubaneswar.	..	26.30	17.62	
3	Setting up new Branches and reorganisation of the existing Branches.	..	15.52	9.20	
4	Reorganisation of School of Printing and Allied Trades.	..	2.95	1.00	
5	Labour welfare measures (Construction of staff quarters).	..	27.00	27.00	
Total		115.00	82.39

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 Fifth-Five Year Plan

(Rupees in lakhs)

Foreign Exchange component of the outlay	Outlay for 1974-75	Physical Targets		
		Item	Unit	Proposed target
6	7	8	9	10
10.00	7.70	1	Forms to be supplied ..	36 Crores approximately.
		2	Supply of stationery articles ..	26 lakhs approximately.
6.00	4.40	3	Number of repairs to typewriters and duplicators.	12,000 numbers
4.00	0.90	4	Production in composing of ens anticipated.	62 crores approximately.
..	1.00	5	Production in terms of impressions.	22 Crores
..	5.00	6	Transaction in regard to gazette and other publications in terms of numbers of copies.	9 lakhs approximately in respect of other publication and 7 lakhs in respect of gazettes.
20.00	19.00			

**(v) DEVELOPMENT OF INFRASTRUCTURE—STRENGTHENING OF
ADMINISTRATION OF REVENUE & POLICE
DEPARTMENTS**

The sixth Finance Commission are of the view that all asset-forming capital outlays, which hitherto used to be classified as non-plan outlays, would be treated as Plan outlays in future. Similar indication was also given by the representatives of the Government of India during the resources discussions in 1972-73 and 1973-74. The Approach Document also postulates the same principle.

2. Non-plan capital outlay mainly consists of provisions for construction of buildings of the various non-plan Departments, mainly the Revenue and Home (Police) Departments. The problem of providing accommodation both residential and non-residential under the Revenue Department has become very acute. As a matter of fact there is serious dislocation of work at field levels mainly for this reason. In many cases, even the records can not be accommodated in the office due to want of space. Therefore it is essentially required to provide funds under the Fifth Plan for expansion and improvement of the existing office buildings and for construction of the absolute minimum number of staff quarters. In the Fifth Plan, new units of offices will be established to cope with the Revenue and General Administration and for such new units, buildings have to be constructed. Similar is the case with the Home (Police) Department. In order to improve the efficiency of the Police staff, it is most essential to provide funds in the Fifth Plan for construction of non-residential buildings like Thanas etc. and residential quarters for the Gazetted and Non-gazetted Officers of the Police Department. The existing buildings under the Police Department are in dilapidated condition in many places and as such, expansion and improvement of these buildings is also badly needed. The building requirements of other Department also need urgent attention.

3. The requirement of funds for these type of construction works is expected to be very high. Steps are being taken to prepare an estimate for the same. However, on account of these buildings a lump provision of Rs. 32.00 Crores has been made in the State's Fifth Plan. The expenditure during 1974-75 is estimated to be Rs. 4.00 Crores.

CHAPTER 2-22

CONTINGENCY PLAN FOR NATURAL CALAMITIES

Orissa is often visited by natural calamities like floods, cyclone and drought. Post-monsoon cyclone has become a regular phenomenon in the coastal region of the State and the western parts of Orissa suffer from drought almost every year. It is, therefore, necessary that alternate programmes and stand-by works should be get ready for implementation as and when such natural calamities occur.

2. The usual approach in case of natural calamities is to provide relief to the affected persons by distributing food-stuffs and also by providing some employment in the shape of labour-intensive works. In the past, the approach has been *ad hoc* in nature designed to meet specific situations created by these natural calamities. It is proposed that during the Fifth Plan, a list of alternate programmes and "stand-by" works will be kept ready so that development works would be executed in a planned manner in order to provide opportunities of employment to the affected persons and also to create productive assets for the economy.

3. The economy of Orissa is rural in nature and a very large segment of working force number on agriculture. Natural calamities like cyclone, flood and drought affect agricultural and agriculturists adversely and during the occurrence of these disasters agricultural operations are practically suspended. Most of the persons affected lack in skills required for other occupations. Primarily, therefore, they can only be employed on works which will require simple manual labour like digging of earth, plantations, construction of roads and such other labour-intensive works. It is, therefore, necessary that suitable schemes mostly in Minor Irrigation, soil conservation, plantations, construction of roads, Khadi and village Industries should be kept ready for providing employment opportunities to these categories of persons.

4. As part of the programme for meeting the situations following natural calamities, programmes of flood control have been prepared and presented as a part of the State Plan. There will be other normal programmes in sectors like Agriculture, Irrigation, Transport and Communications, Soil Conservation, small and village Industries, Community Development, etc. which will also provide employment to persons affected by natural calamities. Some of these normal programmes may have to be suspended in the event of such a disaster. The Departments have to prepare lists of stand by works which can be implemented in the affected areas. These works will include schemes for reclamation and management of saline land in coastal areas, raising of shelter belts in the coastal districts, construction of rural roads and roads inside forest areas, plantation both as part of soil conservation programme and the scheme for plantation of economic specie in forests, mining, irrigation, digging of tanks, setting up of village industries by artisans in the affected areas and the like.

5. Steps are also been taken to indentify the specific areas in the State which are often visited by natural calamities. The schemes will be prepared area-wise in respect of each of the districts of the State. The lists of stand by works will be made available to the Collectors of the districts, as also the Departmental officers concerned for implementation. These programmes would be dovetailed with the normal schemes and programmes of the Fifth Plan so that these can be implemented with the least possible deviation from the Plan. Details of the schemes will be ready during the year 1973-74 so that there will be no difficulty in taking up these programmes in the event of a natural calamity.

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