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**THIRD FIVE YEAR PLAN  
ORISSA**

**A DRAFT OUTLINE**

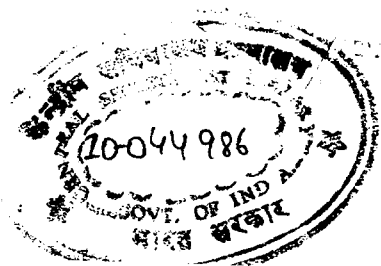
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## CHAPTER I

### THE THIRD PLAN IN OUTLINE

#### FIRST AND SECOND PLANS

It is now a decade since Orissa along with other States began to draw up Plans for the Social and Economic development of its people. The First Five-Year Plan of the State like that of the rest of the country was largely designed to repair the damages caused by war and was in the main confined to continuing the programmes taken up during the post-war period. Nevertheless it represented the first step in planned development and prepared the ground for a larger effort in the Second Five-Year Plan. The most noteworthy programmes undertaken during this period were the Hirakud Dam Project and the introduction of the National Extension Service. The Second Plan was conceived on a somewhat bigger scale. The above two major programmes were continued. Considerable emphasis was laid on agricultural production, particularly the production of foodgrains. Besides the plan provided for development and utilisation of potentialities created in the sphere of power and aimed at creating conditions favourable to the setting up of industries in the public as well as in the private sectors. In the sphere of Social Services and Transport and Communications a much larger programme than in the First Plan was undertaken. For building up an adequate executive machinery and for meeting the increased demands for skilled personnel various programmes of training and education were started.

2. The table below shows the outlay under different heads of development under the First and Second Plans :—

—	[ Rupees in lakhs ]		
	First Plan Expenditure	[Second Plan	
		Plan outlay	Anticipated Expenditure
1. Agricultural Production : (Agriculture, Minor Irrigation, Land Development, Forest, Soil Conservation, Agricultural Marketing).	440·43	490·22	553·64
2. Allied subjects ..	91·73 <u>532·16</u>	475·26 965·48	397·55 <u>951·19</u>
3. Community Development..	<u>215·96</u>	<u>598·50</u>	<u>997·32</u>

		[ Rupees in lakhs ]		
		First Plan Expenditure	Second Plan	
			Plan outlay	Anticipated Expenditure
4. Multipurpose Project :				
(Stage I)	..	4799.20	} 2799.65	(Stage I 24699.02 and II)
(Stage II)	..	175.00		
5. Irrigation	..	4.40	Delta) 1235.00	11043.72
			(Medium) 510.00	1888.23
6. Power	..	481.55	602.30	6333.81
		5460.15	5146.95	41334.78
7. Industries	..	108.13	631.14	3837.75
8. Mineral Development	..	..	83.12	226.08
		108.13	714.26	4113.83
9. Transport	..	271.24	650.90	5559.99
10. Education	..	146.88	(General) 554.29	5777.94
			(Technical) 83.83	836.98
		146.88	638.12	6634.92
11. Health (Medical, Public Health, Rural and Urban Water Supply).		151.78	(Health) 332.50 (Rural Water- 47.50 Supply).	3005.72 770.95
		151.78	380.00	3776.67
12. Welfare of Backward Classes.		145.11	380.00	3555.72
13. Others (Housing, Social Welfare, Labour and Labour Welfare and Craftsman Training).		2.22	190.00	170.19
			(Labour Welfare only).	
14. Miscellaneous (Publicity, Statistics, Local Bodies Development Works, Town Planning, New Capital and others).		2.75	334.10	186.04
			(Expenditure connected with Planning only).	
15. Development Expenditure outside the Plan (other schemes).		278.42	Nil	Nil
Grand Total	-	7314.80	9998.91	9110.65

NOTE—Expenditure against items 3, 4, 5 and 15 amounting to Rs. 5472.98 lakhs was outside the State's First Plan.

3.0. The progress achieved in some of the more important sectors of the economy during the past decade is briefly reviewed below :—

3.1. *Agriculture*—Agricultural production has recorded an upward trend and the production of foodgrains is expected to rise to about 40 lakh tons in 1961 from about 21 lakh tons in 1951. According to the sample survey conducted by the State Bureau of Statistics and Economics in 1959-60, the production of rice, the principal crop of the State, amounted to 36.50 lakh tons. The increased production is mainly due to the higher rate of yield per acre the crop-cutting experiments of the survey brought out. The average yield of winter paddy per acre has been shown to be 15.55 maunds as against 9—11 maunds of previous year. 1959-60 was of course a good year with favourable seasonal conditions and it cannot be assumed that every subsequent year will be its exact replica. Moreover, some allowance may have to be made for the fact that the survey and sampling technique for crop estimation in Orissa is but an year old and one may not generalise on just one year's figures. However, it can be stated confidently that through the process of development of the irrigation potential created under Hirakud, Delta Irrigation and Minor Irrigation Projects and adoption of improved agricultural practices the level of production of foodgrains at the end of the Second Plan will have exceeded the target set, viz., 32.86 lakh tons. Under cash crops, jute is expected to reach 2.65 lakh bales by end of 1960-61, sugarcane 1.00 lakh tons (Gur) and oil seeds would have gone up to 90,000 tons.

3.2. Under Animal Husbandry 25 new dispensaries and 152 new Stockman Centres were added during the First Plan to the existing 79 Veterinary dispensaries and 222 Stockman Centres. By the end of Second Plan 76 more dispensaries and 395 more Stockman Centres would have been established. Better breeding techniques have been introduced by establishing 5 Key Village Centres with 4 units under each during the First Plan and 5 more such Centres with 6 units under each during the Second Plan.

3.3. Among other programmes in this sector reference may be made to the reclamation of about 2,000 acres of waste land and application of soil conservation practices such as contour bunding, plantation and gully control to more than a lakh acres. Besides, more than 3 lakh acres of eroded lands will have been surveyed. Under Forests about 1,000 miles of forest roads will have been constructed and 10,000 miles of boundaries demarcated during the past 10 years besides survey of 2,900 miles. The forest revenue has risen from Rs. 99.82 lakhs in 1950-51 to 255.52 lakhs in 1960-61.



Afforestation on a large scale has also made considerable progress. It is expected that 1,150 acres will be covered with soft wood species and 9,326 acres with teak. About 18,000 acres of coastal sand dunes will have been planted with casuarina. Sabai-grass, Khair and cashew-nut plantations will have covered over 4,000 acres.

3.4. Considerable progress has also been made in the sphere of co-operative movement. While 12.6 per cent of the rural population was covered by co-operatives by the beginning of the Second Plan it is expected that 50 per cent will be served by Co-operative Societies by end of 1960-61. The amount of agricultural credit is expected to rise from Rs. 1.55 crores in 1955-56 to 7.70 crores in 1960-61. The Central Banks have been strengthened and a large number of small Societies have been revitalised. 30 Marketing Societies have been brought into being with a view to linking credit with marketing.

3.5. Under the Community Development Programme 52 National Extension Service Blocks were set up by the end of First Plan. The State has been divided into 307 Blocks with an average coverage of population of 66,000 in the plains and 25,000 to 30,000 in tribal areas. 178 Blocks comprising 31,367 villages and a population of about 10 million would be in operation by the end of Second Plan. The Panchayat programme enters the 10th year in 1960-61. The entire State except for a population of 4 lakhs in resettled areas of Hirakud and Duduma and inaccessible hilly areas have now been covered by Grama Panchayats. The next higher tiers of Panchayati Raj, the Panchayat Samitis and Zilla Parisads, will be constituted by March, 1961.

3.6. *Irrigation*—During the First Plan work on the Multipurpose Project of Hirakud was started and preliminary work of Delta Irrigation taken in hand. No medium irrigation project was included and the irrigation programme was confined to minor irrigation, flood control and drainage. The culturable command of the minor irrigation projects completed during the first plan period is roughly placed at 7.53 lakh acres. During the Second Plan Stage I of the Hirakud Project was completed and the gross irrigation potential of 4.60 lakh acres created. This includes 80,000 acres for Rabi intensity. Work on Delta Irrigation Project made satisfactory progress during the Second Plan and about 2.50 lakh acres are likely to be provided with irrigation by the end of this Plan. 7 out of 13 medium irrigation projects included in the Second Plan have been taken up out of which the Salki Project is likely to provide irrigation to

10,000 acres by the end of the current plan. Including 2 lakh acres under Minor Irrigation the total gross irrigated area will have increased by 9.20 lakh acres during the Second Plan.

**3.7. Power**—Prior to First Plan the power available in the State was 4,620 K.W. The installed capacity of 1,23,000 K.W. from Hirakud Stage I has been achieved out of which 71,000 K.W. has been made available for supply to industries and for electrification of towns and villages. Stage II of the Hirakud Project comprising generation of 1,47,000 K.W. of power out of which one set of 37,500 K.W. is expected to be installed during 1960-61, will be commissioned in the early part of the Third Plan. The Machkund Project has developed its full installed capacity out of which Orissa's share would be 34,425 K.W. This would be in addition to 6,085 K. W. of power available from Thermal and diesel stations set up in the First Plan. Under the Rural Electrification 131 towns would have been electrified by the end of current Plan. The increase in installed capacity in the First and Second Plan periods is 16,285 K.W. and 1,84,725 K.W. respectively.

**3.8. Mineral Development**—A beginning has been made in the field of exploitation of mineral resources through State agency. A Corporation has been set up in collaboration with the Centre and it is proposed to strengthen this Corporation. As a result of the survey operations undertaken during the First and Second Plan periods it is estimated that about 1/10th of the total area of the State will have been surveyed by end of 1960-61.

**3.9. Industries**—Apart from the industrial development in the private sector, special measures were initiated for promotion of village and small industries during the past decade. A co-operative sugar mill has been licensed to be started at Aska, 5 Industrial Estates have been established and under what is known as the Pilot Projects State Government have started Limited Liability Companies in collaboration with private entrepreneurs in the field of small scale industries. 37 enterprises have already come up in this field and 12 of them have gone into production.

**3.10. Roads and Road Transport**—During the past ten years 3,035 miles of roads were either improved or constructed and 46 bridges would have been completed. During the First Plan period State Transport Services operated on 1,273 miles of route and the Orissa Road Transport Company covered 917 miles of route. These services were consolidated during the Second Plan and further expansion brought about with the help of reserve funds.

3.11. *Education*—In the sphere of Primary Education 36.5 per cent of the children of the age-group of 6—11 years were covered by the end of the First Plan and this will go up to 50 per cent i.e. 75 per cent in case of boys and 25 per cent in case of girls by the end of Second Plan. In respect of the school-going children of the age-groups of 11—14 and 14—17 the percentage of enrolment will go up from 5.4 and 2.3 at the end of First Plan to 8.3 and 3.7 respectively by the end of Second Plan. The following table will show the position regarding M. E. and Secondary Education at the end of the First and Second Plans.

	At the end of the First Plan.	At the end of the Second Plan.
(1)	(2)	(3)
Number of M. E. Schools ..	672	960
Average enrolment per School ..	48	52
Number of High schools ..	257	400 (including 35 for girls)
Output of Matriculates ..	4,547	9,000

In the sphere of Collegiate Education, 7 more I. Sc. Colleges, 3 Arts Colleges for women and 5 Arts Colleges for men have been opened besides providing for increased seats in Arts and Science subjects and post-graduate classes in existing colleges. At the end of the Second Plan there will be 11 Arts Colleges, 8 Science Colleges and 10 Arts and Science Colleges.

3.12. *Health*—In the field of Health, the number of hospitals and dispensaries of all kinds will increase from 456 in 1951 to 548 in 1960-61 and hospital beds from 1,384 to 2,329. As regards doctors the number which was 958 in 1949 rose to 1,266 by the end of First Plan. As a result of expansion of medical education during Second Plan, 1,470 doctors will be in position by the end of current Plan. The number of annual admission to the Medical College at Cuttack was increased from 35 to 50 and the bed strength of the attached hospital from 429 to 565 during the First Plan. During the Second Plan the seat capacity of the College has been raised to 150 and a 200 bedded hospital has been established in this College. The total bed strength of the College is likely to go up to 900 by the end of the Second Plan. Another Medical College was established at Burla with 50 admissions in July 1959. 11 Primary Health centres were opened during the First Plan and the number will go up to 169 by the end of the Second Plan. 88 Family Planning Centres will also have been set up.

3.13. *Technical Education*—Technical education facilities were considerably augmented. One Engineering College at Burla and one Mining School at Keonjhar have been opened during the Second Plan with an admission strength of 120 and 40 seats respectively. There were 3 Engineering Schools at the commencement of the Second Plan period at Cuttack, Jharsuguda and Berhampur. Two more schools have been started during the Second Plan and the total seat capacity will be 720 by the end of the current plan period. Besides a large number of students are studying in higher Engineering outside the State with financial assistance given to them in the shape of loan. The annual intake of Agricultural and Veterinary Colleges will have gone up to 128 and 120 respectively by 1960-61.

## 2. ECONOMIC BACKGROUND

4. The overall effect of the two plans and the above-said achievements on the economy may now be assessed. For, such an assessment will help in indentifying the defects if any in the planning of past years and pin-pointing the aspects to which the third and fourth plans should give attention. It will also bring out in bold relief how far the widely accepted national goals of raising this backward State in the level of the sister states and of achieving balanced regional growth have in fact been achieved. The State Government thought that it would be useful if such an assessment could be made by an independent expert organisation. They therefore requested the National Council and Applied Economic Research to undertake a techno-economic survey of the State. The Council has not yet submitted its final report. However, the preliminary economic report and the technical appraisal reports of individual sectors that have come to hand have revealed certain significant facts and considerations that are set out below :—

Firstly, “ the *per capita* income in the State was Rs. 190 in 1951 as compared with Rs. 248\* in India as a whole. In 1961, the *per capita* income in Orissa and India are expected to be Rs. 237 and Rs. 312\* respectively. The rate of growth in both cases would be roughly the same (2.5 per cent per year)”. The lesson to be drawn from these figures is that if Orissa is not to remain a backward State all the time and is to catch up with other States, the rate of growth must be higher than the All-India average. It has to be considered how much higher it should be and what should be the level of investment for bringing about the desired rate of growth.

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\* All-India *per capita* incomes are at 1952-53 prices while Orissa *per capita* incomes are at 1956-57 prices.

Secondly, the relative poverty of the people of Orissa is mainly due to the preponderance of the agriculture sector in the economy of the State. Agriculture contributes nearly 50 per cent of the total net output in Orissa and this is more than its share in the national net product (43 per cent). The productivity per acre of land is lower in Orissa than in India and the main reasons are low yield of most crops and low harvest price of the principal crop, rice, which accounts for 63 per cent of the cropped area. The yield of rice is about 30 per cent lower than the Indian average. These factors emphasise the need for diversification of crops, introduction of better techniques of production, provision of improved transport and marketing facilities and the adoption of price support measures. With so much leeway to make up and so much potential to be exploited, Orissa given the facilities, can play a crucial role in achieving the national targets of agricultural production in general and foodgrains in particular.

Thirdly, there is a large volume of unutilised natural resources in the State. It is often said that Orissa is as rich in its natural resources as its people are poor. Till recently the mineral wealth of the State was practically untouched and the little that was exploited was exported or taken outside the State for industrial processing. It is only with the establishment of the steel plant at Rourkela and the recent drive for export of iron ore that the exploitation of the mineral deposits of the State has come to receive some attention. Similarly forests which cover 42 per cent of the total area of the State as against 17 per cent in the case of India and which are a large potential source of industrial raw materials, have not been exploited to the full largely due to difficulties of transport and communications. The rivers of the State provide great scope for development of hydro-electric power. There is also a large quantity of low grade coal deposits that can be used for generation of power. It is no exaggeration to say that inadequacy of power is responsible more than any other single factor for the slow growth of industries in the State and the consequent under-utilisation of other natural resources. The demand for power has already outstripped supply.

Fourthly, productivity of labour in Orissa is low in every sector even in comparison with the average for India. In agriculture, the net output per worker is about 83 per cent and in factory and non-factory industry about 70 per cent of the All-India averages. Steps to raise the productivity of labour should therefore find an important place in the proposals for the Third and the Fourth Plans. Apart from introducing better techniques and mechanisation wherever possible, the skill and health of labour have to be

improved through schemes of education, technical training and eradication and prevention of diseases.

Fifthly, the transport facilities are inadequate and would become even more so if the developments in the field of industry and minerals that are in sight materialise. The economic centre of gravity would shift from the coastal plains to the northern and southern plateaus and would necessitate not only considerable increase in the existing transport facilities but also in their reorientation towards the interior of the State. 82 per cent of the roads are now unsurfaced and the absence of bridges and culverts on several roads leads to serious interruption in transport and raises costs. The inland waterways which have a vital part to play in maximising export of ore require to be improved to a considerable extent. Improvement of roads and transport facilities in the rural areas is important even for agricultural production. In the words of the National Council of Applied Economic Research, 'an important factor hindering the development of agriculture is the existence of numerous pockets in the rural areas where the harvest season gluts caused by the inadequate transport and marketing facilities, depress prices and remove any incentive the agriculturist may have for improved techniques and increasing production'.

### 3. APPROACH TO THE THIRD PLAN

5. It would be clear from the above summary of facts that for raising the *per capita* income in Orissa three things are essential: (a) large investment in agriculture, (b) a more capital intensive industrial development and (c) strengthening the infra structure, i.e., power, transport, health, technical education, etc. The first step is inherent in the predominant share of agriculture in the economy of the State. The second would be obvious from the quantum and nature of unutilised resources and the present industrial policy of the Government of India which gives priority to the establishment of heavy metallurgical industry. The third is but the corollary of the first two steps. On the basis of a techno-economic appraisal, the National Council of Applied Economic Research has suggested an investment outlay of Rs. 13,750 millions for the next decade (1961-71). "The programme for development, if fully implemented, the Council adds, 'would raise the State income from Rs. 3,839 million in 1960-61 to Rs. 8,872 million in 1970-71, or at an average annual rate of 13.1 per cent'. *Per capita* income during the period would increase from Rs. 237 to Rs. 444, or at 9 per cent a year. These rates of growth are much higher than those expected to obtain for the country as a whole during the Third and Fourth Plans, but would bring the State *per capita*

income at par with that in India". The output and growth rates envisaged by the Council in each sector of the economy are given in the table below :—

OUTPUT AND GROWTH RATES BY SECTORS 1961—71

	Net output 1961 (Rs. million)	Net output 1971 (Rs. million)	Increment of output 1961—71 (Rs. million)	Average annual growth rate (1961—71)
1. Agriculture ..	1,965.7	2,997.2	1,031.5	5 per cent
2. Factory industry ..	221.0	1,695.0	1,474.0	66 per cent
3. Non-factory industry	228.9	330.0	151.1	6.6 per cent
4. Mining, Power and Construction.	210.9	999.8	788.9	37 per cent
5. Total—(1—4) ..	2,626.5	6,072.0	3,445.5	13.1 per cent
6. Tertiary ..	1,212.7	2,800.0	1,587.3	13.1 per cent
Grand Total ..	3,839.2	8,872.0	5,032.8	13.1 per cent

As a result of differential growth rates of different sectors, the structure of the economy will be transformed radically. The share of agriculture in the State income will fall from 51.2 per cent to 33.8 per cent and that of factories will rise from 5.8 per cent to 19.1 per cent. Detailed break-up is as follows :—

SECTORAL DISTRIBUTION OF OUTPUT AND EMPLOYMENT 1961—71

	Output		Employment	
	1961 per cent	1971 per cent	1961 per cent	1971 per cent
Agriculture ..	51.2	33.8	72.7	60.2
Factory industry ..	5.8	19.1	1.2	2.2
Non-factory industry ..	6.0	4.3	6.6	6.6
Mining ..	2.3	4.8	1.3	3.5
Power ..	0.9	2.4	0.1	0.5
Construction ..	2.2	4.0	2.3	5.7
Tertiary ..	31.6	31.6	15.8	21.3
Total ..	100.0	100.0	100.0	100.0

6. Out of Rs. 1,375 crores of investment indicated as necessary for the next decade, the Council has estimated on a rough basis that about Rs. 650 crores may fall within the State sector. Assuming that the Fourth Plan will be 50 per cent larger than the Third, the State will have to plan for an investment of about Rs. 260 crores during the quinquennium 1961—66. The total Plan expenditure will be still higher as some amount has to be added for current outlay. This estimate will, of course, have to be considered from various angles. In the first place, will the State be able to find the necessary financial resources and what will be the volume of assistance that the Centre can devote to the task of developing this under-developed State? Secondly, can the organisational problems and the demand for man-power that the investment of the proposed magnitude will throw up, be satisfactorily tackled and solved in time? Indeed, these are very important questions, and the Council appears to have felt that they are better left for consideration by the State Government in consultation with the appropriate Central authorities. The State Government have since considered them very carefully and their conclusions are described in the paragraphs below :—

7. As regards financial resources, the State Government is fully conscious of the need to maximise its receipts, both from taxes and from non-tax sources and to adopt a balanced policy of borrowing in consonance with the required magnitude of investment. They have accordingly appointed a Taxation Enquiry Committee under the chairmanship of Dr. P. S. Lokanathan, Director-General, National Council of Applied Economic Research to review the entire structure of tax and non-tax revenues and the policy of borrowing in the light of developmental needs and recommend measures. The report of this committee which will be complementary to the Techno-Economic Survey Report referred to above, is expected to be in the hands of Government before the end of October 1960. Pending the receipt and consideration of this report, it has been estimated that during the next five years the State will be able to raise Rs. 32 crores. On present estimates, the revenue account is showing a deficit of Rs. 3 crores. This is mainly due to the rise in committed expenditure on account of the completed schemes of the Second Five-Year Plan and the strengthening of the law and order arrangements in connection with national projects, such as Steel Plant at Rourkella and the Dandakaranya scheme in Koraput district. Besides, the burden of increased emoluments to low-paid employees will fall entirely on the State revenues with the stoppage of Central assistance on the 31st March 1961. Interest charges on Hirakud project have also the effect of accentuating the revenue deficit. All these



and other disabilities will no doubt be considered by the Third Finance Commission. It is not unreasonable to hope that like its immediate predecessor, the Third Commission will help the State in squaring up its revenue account as well as make an honourable contribution towards the Third Plan. No credit has, however, been taken on this account while arriving at the amount of State's contribution referred to above. This apart, the State Government have decided to raise an additional tax revenue of Rs. 22 crores and push through a borrowing and saving programme of Rs. 34 crores. The former is more than four times the achievement during the Second Plan while in the latter case it is nearly double. These decisions, pending the receipt of the recommendations of the Taxation Enquiry Committee, would show the determination of the State Government to put forth the maximum possible effort to raise resources. In fact, the additional taxation effort of Rs. 22 crores represent 4 per cent of Rs. 550 crores that the National Development Council approved as the target for all States. Considering that the *per capita* income in the State is low, the above percentage, which is about the same as the percentage of State's population to that of the country, can indeed, be described as more than its legitimate share. It may well be the upper limit of the State's capacity.

8. To find out the total resources available, the likely allocation by way of Central assistance will have to be added. While it is difficult to state precisely what the Centre is likely to allocate, it may not be incorrect or unsafe to assume that the Centre will not be less liberal than hitherto. For one thing, the considerations that had impelled the Central Planning authorities to meet a substantial percentage of the plan expenditure from Central funds—it is 71 per cent in the Second Plan—continue with equal force and validity. The Planning Commission have, in fact, assured the country that the measures taken in the Second Plan with a view to balanced regional development will be continued during the Third Plan (Page 75, para. 41 of the Draft Outline). They have estimated total Central assistance to States in the Third Plan to be of the order of Rs. 2,500 crores. The State Government hopes that Orissa will be given its due share.

9. On the organisational and man-power aspects the State Government have reviewed the availability of various kinds of personnel at the beginning of the Third Plan and throughout its course. Admittedly, Agricultural graduates, doctors, engineers and craftsmen of certain trades will be in short supply. With some additions and alterations to the existing training and educational facilities during the first few years, it may be

possible to make up the shortages to a considerable extent and find the numbers and categories necessary for a much larger programme than the Second Plan. However it is doubtful if technical personnel of the required kind will be available in the required numbers for putting through an investment outlay of the order of Rs. 260 crores. Moreover, organisational problems that an investment outlay of that order would throw up, may prove to be more than what the administrative machinery of the State can cope with. A great deal of improvement by way of decentralisation of crucial decisions, removal of procedural bottlenecks, introduction of efficiency, audit and above all a much larger degree of public co-operation than hitherto will be essential. These cannot be brought about except through patient and persistent endeavours of all concerned and will necessarily take time.

9.1. Two main conclusions emerge from the above discussion : firstly, an investment outlay of a very much higher order than in the past decade will be necessary for raising Orissa even to the average level of the country; and secondly, the said outlay may have to be spread over a longer period than a decade. So the Third Plan if it is to be a realistic one, has to take cognisance of the needs that have been thrown up and the importance of fulfilling them in a given period of time and relate them to the capacities that have been developed on the one hand and the financial resources that are available on the other. In other words, we must strike a balance between what is necessary on techno-economic considerations and what is possible on financial and organisational facts. In this process the important thing to remember is that there is a grave risk of a 'slip-back' unless the more pressing demands of the economy are met in adequate measure and conditions of self-sustained growth are created in the State during the forthcoming Plan.

#### 4. SIZE AND SECTORAL OUTLAYS OF THE THIRD PLAN

10. We now come to the consideration of the size of the Third Plan for the State. According to the 'Third Five-Year Plan—A Draft Outline' (page 72, para. 34) the following considerations used to be and will be taken into account in determining the size of a State Plan :

- (a) State's own resources ;
- (b) The size of the unfinished programme carried over from the previous Plan ;
- (c) The possibilities of increasing production ;

- (d) The administrative and technical personnel at the disposal of the State ;
- (e) Pace of development actually achieved.

Items (a), (d) and (e) in their application to Orissa have been discussed in the foregoing paras. It now remains to consider items (b) and (c). Unfinished programmes carried over from the Second Plan are estimated to require Rs. 38.94 crores for their completion. The spill-over under irrigation and power alone accounts for Rs. 29.57 crores. There are important Road Programmes, Health Schemes and the Community Development Programme, to mention only a few, that have to be completed in accordance with national policy and all-India targets. Now, as regards increase in production, Orissa has tremendous possibilities. Details are given in the notes on relevant sectors. Here it is sufficient to notice one or two aspects. Orissa's potential particularly in regard to agriculture and minerals will have to be exploited to the maximum if the national targets are to be achieved. Given the facilities the State can augment the production of foodgrains considerably and help in reducing the overall deficit of the country. The national plan envisages an increase of about 33 to 40 per cent under foodgrains. On present calculations, the State can raise its own production by about 38 per cent. Even as it is, Orissa is supplying a substantial quantity towards making up the deficiency of the eastern zone. Obviously, any further increase in Orissa's production will be to the national advantage. Similarly, Orissa's mineral deposits which are among the richest in the country should be intensively worked for ensuring that the wheels of industry, particularly the iron and steel industry, do turn smoothly and to the national tune and the level of exports do rise substantially. In view of these important advantages the State Government would urge that no undue emphasis should be laid on State's own resources in determining the size of the State Plan. They would further submit that population too will not be a satisfactory criterion for fixing the size of the State Plan. After all, regional development has been accepted as a national objective and has accordingly been made an integral part of the Third Plan. The size of a State Plan, the amount of Central assistance to be given to a State and other allied decisions will have to be attuned to the attainment of the national objective. If on the other hand criteria such as, population ratio and matching resources that a State can provide are adopted and applied mechanically to all States, a poor and backward State with potential resources like Orissa will for all time be left behind and the national wealth of natural resources occurring in the State will

remain un-utilised resulting in great loss to the nation. The State Government would therefore urge that the size of the Orissa Plan should be determined by a realistic appreciation of the needs of the national economy as a whole and the part that the State can and should play in the achievement of national targets of production.

11. On the basis of the above considerations and in accordance with the directive that unlike in the Second Plan all development schemes executed by the State Government should, as a general principle, form part of the State Plan, we have planned for an outlay of Rs. 182·21 crores for the five-year period 1961—66. This may be compared to the outlay of Rs. 110·38 crores of the Second Plan ( Rs. 99·98 crores of the State Plan plus extra allotment of Rs. 4·99 crores under C. D. and Rs. 5·41 crores of the Central share of the Centrally sponsored schemes and other Central schemes which are now included in the State Plan ).

12. The total outlay is distributed among different sectors of development as follows :

( Rs. in crores )		
	Outlay for Third Plan	Percentage distribution
I. Agriculture and Minor Irrigation	17·25	9·5
II. Community Development and Co-operation.	21·94	12·0
III. Major and Medium Irrigation ..	23·21	12·7
Total—I, II and III ..	62·40	34·2
IV. Power ..	53·02	29·1
V. Village and Small-scale Industries.	5·96	3·3
VI. Industries and Minerals ..	2·54	1·4
VII. Transport and Communication	11·02	6·0
Total—IV, V, VI and VII ..	72·54	39·8
VIII. Social Services ..	42·40	23·3
IX. Miscellaneous ..	4·87	2·7
Grand Total ..	182·21	100·0

In making the above distribution, an attempt has been made to follow as closely as possible the priorities and considerations set out in the draft outline of the country's Plan. At the same time fullest possible consideration has been given to the lessons drawn from the assessment of the current economic trends, the future potentialities and the present state of social services. The first priority, as envisaged in the country's draft Plan and as indicated by the Techno-economic Survey, has been given to agricultural production. The second set of priorities relate to Power, Industry and Communications. Social Services and allied subjects have been given due importance for ensuring development of human resources and a fair balance between economic and social development. While determining the allocations to heads of development and groups thereunder (Annexure I) emphasis has been laid on completion of projects which have been carried over and on maximum utilisation of assets created during the Second Plan, thereby ensuring increased outputs from previous investments. Side by side, provision has been made for projects which will be executed during the Third Plan period but which will yield benefits in the early years of the Fourth Plan. In formulating individual programmes care has been taken to effect a balance between such projects and those promising quicker returns. The emphasis throughout the Plan is on continuous co-ordination and adjustment between the activities envisaged in different spheres. In working out the relative priorities in different sectors care has been taken to provide adequately for agricultural production while accommodating to the maximum extent possible the requirements arising out of the policy directives in the sphere of co-operative development, coverage of the entire area by community development programme by 1963, introduction of Panchyati Raj, free and compulsory primary education for the age-group of 6—11 and the amelioration of the backward classes. Increased allocation has been given to Irrigation and Power with the object of not only providing larger supplies during the Third Plan but also creating conditions for substantial augmentation in the Fourth Plan. Similarly under Technical training adequate provision has been included and although the trained personnel from the fresh sources will not be available during the Third Plan period, they will be in position at the beginning of the Fourth Plan to carry through the still bigger programme that would inevitably follow.

#### PRINCIPAL TARGETS

13.0 The principal targets in the Third Plan along with information of progress made during the first two Plans are set out in Annexure II.

Details of schemes under the various heads of development are described in subsequent chapters. Some of the important aspects are briefly outlined below. The targets envisaged in the draft Plan are in the nature of broad dimensions. The programmes particularly in the spheres of Agriculture, Small Industries, Roads and Social Services will be reviewed in the light of local plans which would be drawn up in the blocks and districts and on the basis of further studies.

**13.1. Food Production**—As against the All-India target of stepping up food production to the level of 100 to 105 million tons at the end of Third Plan period, an additional production of 15·06 lakh tons over the level of 40 lakh tons expected to be achieved during the current year is envisaged. This constitutes increase of 38 per cent for Orissa as against 33 to 40 per cent aimed at in the Draft Plan of the country. Under other agricultural commodities, production of jute will go up to 4·65 lakh bales from 2·65 lakh bales; of cotton to 100,000 bales from 1,000 bales; of oil seeds to 2 lakh tons from 90,000 tons and of sugarcane to 2·00 lakh tons, Gur from 1·00 lakh tons. One district is proposed to be selected for intensive agricultural development under the package programme. But the cost of the programme has not been included in the present allocation to agricultural production on the assumption that the programme will be financed entirely from the Central Sector.

**13.2. Forest**—The Forest Plan of the State includes a commercial scheme for departmental working of coupes with a net nil provision. It is meant to augment the non-tax revenues of the State. On the basis of the encouraging results obtained from a similar scheme taken up in Bonai subdivision in the Second Plan, it is proposed to undertake departmental working of selected coupes of teak and casuarina. Sleeper Supply Scheme presently under operation will be expanded and supplies made from departmentally worked areas instead of from contractors' coupes. A treatment and seasoning plant will be set up for utilising miscellaneous timber which is now being put to less economic uses. Some Depots for supplying firewood and small timber to people will also be set up as a corollary of the scheme of the departmental exploitation of selected forests. With an initial investment of Rs. 30 lakhs it is proposed to make a net profit of Rs. 7·00 lakhs a year. The total profit for the Plan period is estimated to be Rs. 36 lakhs.

**13.3. Community Development**—The State will be covered by Pre-Extension Blocks by October 1963.

13.4. *Co-operation*—By the end of the Third Plan 75 per cent of the State's agricultural population will be covered and *per capita* loan will be raised to Rs. 110. 2,000 existing Primary Credit Co-operative Societies will be revitalised to function as service co-operatives covering 800,000 members. Agricultural credit to the tune of Rs. 22.50 crores will be advanced.

13.5. *Irrigation*—Delta Irrigation and Medium Irrigation Projects which would be in progress at the beginning of the Third Plan have been given high priority for ensuring their completion in the early part of the Third Plan period. Under the new Projects, Bhimkund Multi-purpose Project has been included with a part provision of Rs. 2.50 crores as against the estimated cost of Rs. 61.73 crores for the project as a whole. This part provision is meant mainly for feeding the Salandi Project and making full use of the latter system. A special programme will be undertaken for providing lift irrigation facilities through tube-wells and filter points where flow irrigation is not possible or costly. The aim is to provide irrigation in all for an additional area of about 13 lakh acres.

13.6. *Power*—The aim is to generate 353 M. W. of additional power by the end of the Third Plan and to prepare the ground for augmenting the power supply substantially in the Fourth Plan. The Chiplima scheme will be completed. A new Thermal Station will be established at Talcher with a capacity of 240 M. W. and the low-grade coal deposits in the area will be utilised. Work on the generating station at the Balimela Hydro-electric project will be started in consultation with the Andhra Government and the transmission lines will be constructed in advance so that the power from Balimela can be utilised as soon as it is generated. Balimela is being planned for a capacity of 240 M. W.

13.7. *Road Transport*—A Road Transport Corporation will be set up in the State and the passenger transport services will be extended to all parts of the State with increased amenities for passengers. Out of the total provision of Rs. 120 lakhs proposed under this programme it is assumed that 50 per cent of it will come from the Railways the balance being provided by the State.

13.8. *Mineral Development and Paradip*—The Orissa Mining Corporation in which the State and Central Governments hold equal shares is proposed to be strengthened. More areas will be placed at the disposal of the Corporation so that it can play an important part in

supplying ore to the steel factories and for export via Paradip. The Corporation is expected to increase its production to one million tons a year from the existing level of 1 to 2 lakh tons a year. Port facilities are being developed at Paradip for handling an export of 5 lakh tons of iron ore per annum. Accordingly arrangement is being made for transporting a minimum of five lakh tons of iron ore from Tomka-Daitari Iron Ore deposits in Sukinda. It is proposed to bring the ore from the hill-tops to the loading station at the base either by bicable rope ways or gravity-fed inclines for which a provision of Rs. 20 lakhs has been made. From the base of the hills to the canal-head or rail-head near Jenapur, it is proposed to carry the ore either by rope way or by rail for which Rs. 80 lakhs is being provided. The details of the scheme are being worked out. From Jenapur the ore will be carried either to Cuttack by rail and from there onwards by canal to Paradip or directly by canal to Paradip. Provision has been made for the development of Inland Waterways including the construction of a new dock at Cuttack and improvement of Taladanda canal.

13.9. *Industries*—Five areas will be selected in different parts of the State and developed for location of medium and large scale industries. The scheme of industrial estates for small scale industries will be further intensified. Raw material depots are proposed to be set up to aid small scale industries. Besides a co-operative spinning mill and a co-operative sugar factory are being planned.

13.10. *Education*—The main programme is Free and Compulsory Primary Education and the target is to increase the enrolment of school going children in the age-group 6—11 from 50 per cent by the end of Second Plan to 70 per cent. by the end of Third Plan.

13.11. *Technical Education*—Besides raising the admission capacity of Burla Medical College from 50 to 100, another College at Berhampur with 50 admissions is proposed in the Third Plan. The total number of doctors likely to be available from the Cuttack and Burla Colleges during the Third Plan would roughly be 620. The output from the expansion and the new college will be available in the Fourth Plan. Similarly in the sphere of Engineering a new Engineering College with 250 admissions in addition to a regional college at Rourkela is proposed. The intake capacity of the Burla College will also be raised from 120 to 200. Provision has also been made for deputing students outside the State for study in higher Engineering. Taking into account two Engineering



Schools with 180 seats each and expansion of Kendrapara and Bhadrak Schools there will be a total of 600 new seats created in the Third Plan in addition to 720 existing seats at the different Engineering Schools at the end of the Second Plan. Under Craftsmen Training total number of 1,472 seats would be in existence at the end of Second Plan. In the Third Plan it is proposed to create 1,000 more seats by expanding the existing institutions and opening 5 new institutions with 100 seats each.

13.12. *Health*—Emphasis has been laid on improving amenities in the existing hospitals and dispensaries by adequate provision for equipment, beds, supply of medicine and treatment by Specialists. With the establishment of 138 more Primary Health Centres in the Third Plan there will be as many Primary Health Centres as Community Development Blocks. With a view to provide treatment of cases referred to it by the Primary Health Centres it is proposed to bring up the existing hospitals at district and subdivisional headquarters to a minimum standard of a referral hospital by provision of additional beds and equipment etc.

#### PHASING OF PROJECTS

14. The need for a careful phasing of projects on the lines laid down in the draft outline of the country's Plan has been closely kept in mind. In the Power sector, for instance, attempt has been made to so phase the programmes that while during the Third Plan there will be adequate accrual of benefits within the financial limitations, works on projects of long duration such as Balimela Project would be carried through so as to yield the power generation in the early part of the Fourth Plan. While the power requirements for the Third Plan will to the extent possible be met from the Talcher Thermal Scheme, work on the Balimela Project will be staggered so as to allow for the first generation plant to be completed at the end of the first year of the Fourth Plan. Similarly under the scheme of connecting the Balimela power transmission with the Hirakud grid, it is proposed that pending complete connection with the Hirakud grid, initial power production from Balimela will be absorbed between Balimela and Bolangir by providing transmission in these areas. Under the Multi-purpose project at Bhimkund in the irrigation sector part provision of Rs. 2.50 crores as against the estimated cost of Rs. 61.73 crores has been included mainly for feeding the Salandi Project and thereby ensuring fuller use of the Salandi system. In these and other projects particularly involving construction works such as Delta and Medium Irrigation, New Capital construction etc., care will be taken to prevent

inordinately high demands made by such projects on the annual ceiling through a process of careful phasing. In all spheres the phasing will be carried out through the annual plans consistent with the resources available and increase in the development in the man-power resources. The main test in every field, as emphasised in the draft outline will be that the assets created and the services developed should yield their fullest benefits as early as possible.

### BALANCED REGIONAL GROWTH

15. As in the Second Plan, so also for the Third Plan of the country, stress has been laid on diversification of the economy and on a wide dispersal of benefits to under-developed regions. As already stated, such a consideration has special significance to Orissa. The magnitudes contemplated in the draft Plan of the State will have to be substantially supplemented by including a wider range of programmes in the Central Sector. In respect of projects as are of All-India character and involve national interest and constitutional liabilities, there is a case for the Centre's assuming full responsibility. A reference to this aspect of the problem was made in the Planning Commission's memorandum on Third Plan which was considered by the National Development Council in March last. The State Government had also brought to the notice of the Planning Commission the need for fixation of principles governing the determination of categories of schemes which could with advantage be taken charge of by the Centre while the execution of such schemes will be through State agency.

16. Within the State itself, the needs of the undeveloped and backward areas have been receiving adequate attention. Though in Orissa, excluding the three coastal districts of Cuttack, Puri and Balasore the rest of the areas are more or less under-developed in all respects, a further distinction can be made in regard to the scheduled area comprising the whole of Koraput, Sundergarh, Mayurbhanj, Phulbani excluding Boud subdivision and the Ganjam Agency, and other tribal areas in parts of districts of Sambalpur, Kalahandi, Dhenkanal and Keonjhar. Apart from extending the benefits of common programmes of development to the population of these areas, special programmes are being executed for improving the living condition of the tribals. Larger programmes have been included in the Plan for welfare of Backward Classes with increased emphasis on co-ordination and adjustment in the activities of the Departments in charge of general

programmes. In the Third Plan, it is proposed to cover the entire tribal area by Special Multi-purpose Blocks with a provision of Rs. 22 lakhs for each Block which will be shared between the Ministries of Home and Community Development and Co-operation. It may be mentioned in this connection that in the Koraput area, the Dandakaranya Development Authority have taken up a comprehensive programme of development which will benefit the local people to a large extent. Out of the areas reclaimed by the Dandakaranya Development Authority for the displaced persons, 25,000 acres are being made available to the local people for settlement, and further amenities in the form of houses, irrigation sources, wells, tanks, roads, etc. will also be made available to the tribal families. The Rourkela Steel Project in the scheduled district of Sundergarh has opened up vast scope and opportunities to the local population. Large number of industries are coming up in this area and the State Government on their part are also intensifying their efforts in pushing through supplementary programmes in allied spheres. Mention may also be made in this context of the vast employment opportunities provided by these as well as the major projects at Bhimkund and Balimela sited in the inaccessible and interior parts of the State. With the progress of these projects communications will develop and in due course a chain of schemes and organisations will grow up in and around these projects both in the private and public sectors.

#### SPECIAL PROBLEM OF ORISSA

17. Apart from the general backward nature of the economy, Orissa suffers from the special problem of flood. Every year large areas are inundated by the flood waters of the rivers Mahanadi, Brahmani, Baitarani, Budhabalang and Subarnarekha. It is well-known how in 1955 the flood in Mahanadi laid waste large areas of good paddy lands, destroyed houses and cattle and necessitated huge relief expenditure. The floods of August 1960 in the rivers Brahmani, Baitarani, Budhabalang and Subarnarekha have reached an all-time record and have caused devastation several times more than the floods of 1955. The current floods have affected an area of 5,400 Sq. miles with a population of 20.75 lakhs. More than half of this area with a population of 16 lakhs is situated in Cuttack and Balasore districts. This disaster has high-lighted the urgent need for adopting permanent measures of control and protection. It has been estimated that a sum of about Rs. 42 crores will be necessary for protecting the deltaic tracts of these two districts

from the disastrous floods. The main items on which this amount is to be spent have been described in a memorandum separately submitted to the Union Minister of Irrigation and Power on the occasion of his visit to Orissa in August 1960 to survey the flooded areas. This sum is many times more than what the State Government have proposed for a few specific items in the Draft Third Plan (Rs. 1.5 crores). The items mentioned in the memorandum to the Union Minister of Irrigation and Power will be additional and the sum of Rs. 42 crores estimated to be the cost will have to be found in addition. It can hardly be accommodated inside the State Plan. In view of the special nature of the problem the Planning Commission, it is hoped, will agree to provide the said sum as an addition to the State Plan. This will be but in accordance with the declaration in paras. 35 and 36 of page 73 of the Draft Outline. It has been said that special programmes of permanent improvements were sanctioned outside the State Plans for alleviating endemic distress in scarcity areas in certain States. Distress on account of flood is endemic in Orissa and permanent improvements for the alleviation of such distress deserve as much consideration as a programme of permanent improvements in scarcity areas referred to in the above paras. The State Government would, therefore, urge that the need and urgency of giving special help to Orissa in regard to flood control should be accepted in principle. The actual amount, the details of works their phasing, etc., can be settled in due course in consultation with the Central Water and Power Commission.

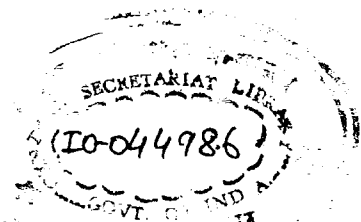
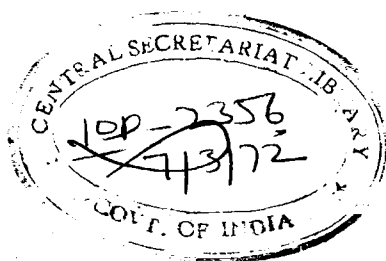
### EMPLOYMENT

18. Before the general account of the Draft Plan is finalised, it is necessary to consider the impact it will have on the employment situation in the State. The Labour and Employment Division of the Planning Commission has estimated that the back-log of unemployed at the beginning of the Third Plan is likely to be of the order of 1.8 lakhs and that the new entrants into the labour force during the Plan period will amount to about 3.9 lakhs. According to these estimates, the total job requirements during the period of the Third Plan will be 5.7 lakhs, if full employment is to be the objective. But, the Planning Commission have suggested in the Draft Outline that we could, at the most, aim at not allowing the employment situation become worse at the end of the Third Plan than at the beginning. In other words, at the end of the Third Plan, the back-log may remain the same as at the beginning, and sufficient job

opportunities should be created for absorbing a number equivalent to new entrants. In the case of Orissa, it will mean that work opportunities should be provided for 3.9 lakh persons. With the increasing emphasis on the transfer of a portion of the working force from the agricultural to the non-agricultural sector and in accordance with the pattern of investment suggested for the Plan, a greater part of the new work opportunities will occur in the non-agricultural sector. It has been estimated that about 3.12 lakh jobs will be in the non-agricultural sector and 0.78 lakh only in the agricultural sector. According to the analysis of the Labour and Employment Division, the State Government will not be called upon to plan for all the 3.12 lakh jobs in the non-agricultural sector, but only for 2 lakh jobs as the inevitable expansion of the tertiary sector, for which no direct planned effort is required, will provide a good number of jobs. The question, therefore, to be considered is whether the programmes of the State Plan, the schemes of the Central Ministries executed in this State and expansion of the private sector in the State, will together generate employment opportunities of the above magnitude. It has again been said that the responsibility of the State Government will be reduced to ensuring achievement of targets in the field of employment to the extent that the Central Ministries and the private sector do not provide. In this analysis of the matter, the State Government will have to know at the outset what the others are planning to do and what the residue will be.

19. As yet, the State Government are in no position either to confirm or suggest modifications to the above analysis. The statistical data, on which the above analysis is based, are admittedly meagre and unsatisfactory. The National Sample Survey Report, 1955 has been taken as the basis in the absence of any later report for calculating the rate of participation and the volume of labour force in the rural and urban areas. The National Sample Survey considered every person, who worked even for a day during the year, as qualified for inclusion in the working force. Such a definition may sometimes lead to misleading results. Persons, who offered themselves as family help only for a few days during the year, say harvesting operations, and who may not be available for longer duration, will go to swell the number of job opportunities that will have to be created, although they will not be available for taking those opportunities. There is another aspect of the matter. While calculating the strength of the working force at a future date in an advancing economy the effect of rise in the level of income on the composition of the force will have to be considered. It is a common experience that a higher

level of family income discourages the female members of the family from seeking work. The ratio of female participation may thus go down in certain circumstances. At any rate, we will have to wait till the completion of the 1961 Census and the tabulation of its data before we can venture on a more accurate estimate of the labour force and the number of job opportunities necessary during the period of the Third Plan. This apart, a study may have to be undertaken for the purpose of determining the percentage of the working force in the rural areas for which the State must plan opportunities of continuous employment. Such a survey will also indicate the types of opportunities that are required. As regards the urban sector, there does not appear to be much of a problem.



## ANNEXURE I

## DRAFT THIRD FIVE-YEAR PLAN, ORISSA

Head of Development

Outlay proposed

(Rs. in lakhs)

## I. Agriculture and Community Development--

Agricultural Production	..	518.65
Minor Irrigation	..	304.40
Land Development	..	45.00
Animal Husbandry, Dairying and Milk Supply	..	375.95
Forests	..	175.00
Soil Conservation	..	150.00
Fisheries	..	156.00
Ware-housing and Marketing	..	45.00
Co-operation	..	232.22
Community Projects and National Extension Service	..	1,750.00
Village Panchayats	..	166.44

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Total—I	..	3,918.66
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## II. Irrigation and Power—

Irrigation and Flood Control	..	2,321.00
Power Projects	..	5,301.86

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Total—II	..	7,622.86
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## III. Industries and Mining —

Mineral Development	..	198.91
Large and Medium Industries	..	55.00
Village and Small Industries	..	596.68

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Total—III	..	850.59
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Head of Development	Outlay proposed Rs. in lakhs
<b>IV. Transport and Communication—</b>	
P. W. D. Roads ..	770·00
Saline Embankment Roads ..	100·00
Anchal Roads ..	30·00
Municipal Roads ..	35·00
Road Transport ..	120·00
Inland Water Transport ..	40·00
Tourism ..	7·00
Total—IV ..	<u>1,102·00</u>
<b>V. Social Services—</b>	
Education (General) ..	1,924·22
Technical Education ..	502·21
Health ..	729·30
Rural Water-Supply ..	105·00
Welfare of Backward Classes ..	525·55
Social Welfare ..	66·67
Labour and Labour Welfare ..	46·82
Craftsman Training ..	113·49
Housing ..	226·75
Total—V ..	<u>4,240·01</u>
<b>VI. Miscellaneous —</b>	
Statistics ..	29·00
Publicity ..	51·90
Municipal Development Works ..	25·00
Town Planning ..	50·00
New Capital ..	301·00
Government Press ..	30·00
Total—VI ..	<u>486·90</u>
Grand Total ..	<u>18,221·02</u>



**ANNEXURE II**  
Selected Physical Targets

Item	Unit	1955-56	1960-61 (anticipated)	1965-66 (targets)	Remarks
1	2	3	4	5	6
Agricultural production—					
Production of foodgrains	.. Lakh tons	25.00	40.00*	55.06	*Represents preliminary estimate of production during 1959-60 based on the crop survey undertaken during that year. It is apprehended that production during 1960-61 may be substantially less on account of floods.
Production of jute	.. Lakh bales	2.45	2.65	4.65	
Production of sugarcane (Gur)	Lakh tons	0.92	1.00	2.00	
Production of oilseeds	.. 000 tons	68.00	90.00	200.00	
Production of cotton	.. No. of bales	500	1,000	1,00,000	
Production of coconut	.. Nuts in million	..	31.9	40.7	Annual

Veterinary and Animal Husbandry—

Veterinary dispensaries	..	Numbers	..	104	180	275	Progressive
Veterinary Stockman Centres	..	Do.	..	374	769	1,067	Do.
Key Village Centres	..	Do.	..	5	10	15	Do.
Veterinary College	..	Admissions	..	80	120	120	Do.

Forests—

Forest Roads	..	Miles	}	Construc-	402	783	850	Plan-wise
				tion.				
				Improve-	57	142	400	Do.
				ment.				
Demarcation and survey	..	Miles		2987*	9846	7500	Plan wise	*Demarcation only
Area planted with Casuarina, Teak, Simul, Khair, Sabai- grass, Cashewnut.		Acres		801	33 480	1,23,000	Do.	
Soil Conservation measures	..	Acres		3390	1,06,000	5,31,000	Do.	

Fisheries—

Production of fingerlings	..	Lakhs		124	322.43	400	Do.
Production of fish	..	000 tons		1.0	2.5	3.0	Do.

Item	Unit	1955-56	1960-61 (anticipated)	1965-66 (targets)	Remarks
1	2	3	4	5	6
<b>Co-operation and Warehousing—</b>					
Credit investment ..	Rs. in crores	1.55	7.70	22.5	
Coverage of Agricultural- population.	Percentage	12.6	50	75	
Agricultural Credit Co-operatives established.	Nos.	7244	8356* (including 744 societies revitalised)	8356 out of which 2000 addl. existing societies to be revitalised.	*Up to 30-6-1959
Warehouses opened ..	No.	..	19	25	Plan-wise
<b>C. P. and N. E. S.—</b>					
Blocks opened ..	Nos.	52	178	307	Progressive
<b>Village Panchayats—</b>					
Panchayats established ..	Nos.	2261	2347	8000	Do.
<b>Irrigation :</b>					
Major & Medium ..	Lakh acres	..	7.20	10.06	Plan-wise.
Minor Irrigation ..	Ditto	7.53*	2.00	3.00	*Gross potential including Rabi intensity.
<b>Flood Control :</b>					
(a) Embankments constructed..	Miles	1,125	1,215	..	Progressive. Position in
(b) Embankments strengthened	Miles	160	30	..	Third Plan will depend on allocation.

<b>Power :</b>						
Installed capacity	..	K. W.	16,285	1,84,725	3,53,500	Plan-wise
Small towns and villages electrified.	..	Number	54	131	250	Do.
<b>Industries :</b>						
Industrial Estates.	..	Number	..	5	19	Do.
Industrial Units established	..	Number	..	149	283	Do.
<b>Handlooms :</b>						
Co-operative Societies organised.	..	Number	335	501	250	Do.
Weaver Population covered by Co-operative Societies.	..	000 Number	25.96	50.0	25.0	Do.
Production in Co-operative fold.	..	Million Yds.	6	33	50	Do.
<b>Transport and Communications :</b>						
Roads (P. W. D.)	..	Miles	{ Improvement 781 Construction 30	980	1,237	Do.
				30	20	32
Construction of bridges.	..	Number	16	30	138	Do.
<b>Education :—</b>						
<b>(a) General Education—</b>						
Teachers in Primary Schools	..	Number	17,633	35,750	47,750	Progressive
<b>Institutions—</b>						
High Schools	..	Do.	257	400	520	Do.
M. E. Schools	..	Do.	672	960	1,460	Do.
Colleges	..	Do.	14	29	41	Do.

Item	Unit	1955-56	1960-61 (anticipated)	1965-66 (Targets)	Remarks
		3	4	5	
1	2	3	4	5	6
School-going children as percentage of children in the respective age groups—					
(i) Primary Stage : 6—11 Years	Percentage	36.5	50	70	Progressive
(ii) Middle stage : 11—14 Years	Do.	5.4	8.3	16	Do.
(iii) Higher Secondary Stage 14—17 Years.	Do.	2.3	3.7	7.1	Do.
Technical Education—					
Engineering Schools	.. Number of Institutions / Admissions.	3/120*	5/720	8/1320	Progressive. *Represents admission capacity for Orissa School of Engineering only.
Engineering Colleges	.. Do.	..	1/120	2/450	Progressive.
Regional Engineering College, Rourkella.	Do.	..	..	1/260	
Industrial Technical Institutes	Do.	1/284*	6/1472	11/2472	Progressive. *Industrial Training Institute attached to Orissa School of Engineering, Cuttack. Admission capacity reduced from 284 in 1955-56 to 272 in 1956-57.

Housing:—

Tenements provided under—

	Number	160	951	1,364	Plan-wise
(i) Industrial Labour (Subsidised Industrial) Housing Scheme.					
(ii) Low Income Group Housing	Number	..	1,102	2,000	Do.

Welfare Extension Projects.	Number	{ Original pattern 13 { Integrated pattern..	13	17	..	Progressive
			23	75	Plan-wise	

Health—

Medical Colleges	..	No. of seats	50	150	300	Progressive
Primary Health Centres	..	No.	11	169	307	Do.
Family Planning Centres	..	No.	2	88	138	Do.
Beds	..	No.	1,384	2,329	3,679	Do.

Water Supply—

Tube-wells	..	No.	..	1,043	1,000	Plan-wise
Wells	..	No.	3,787	3,687	3,800	Do.
Tanks	..	No.	645	150	750	Do.

Welfare of Backward Classes—

(a) Ashram Schools	..	No.	48	68	78	Progressive	{ Includes benefits from Central Sector Programmes.
(b) Sevashrams	..	No.	1,035	1,191	..	Do.	
(c) Number of students in :—							
(i) Ashram Schools	..	No.	3,000	5,600	6,780	Do.	
(ii) Sevashrams	..	No.	28,000	44,200	..	Do.	
(d) Colonies	..	No.	81	151	..	Do.	

## CHAPTER II

### AGRICULTURE AND COMMUNITY DEVELOPMENT

#### AGRICULTURAL PRODUCTION

In any long-term view, the prospects of agricultural development are intimately connected with the success achieved in providing irrigation, supply of improved seeds, fertilizers and manures, bringing about the adoption of scientific agricultural practices, improved implements and other equipment, fuller utilisation of local resources and effort, besides provision of services, credit, marketing and processing facilities, soil conservation, conservation farming and reclamation. The above factors have been kept in view while preparing the Third Five-Year Plan for agricultural development in Orissa. It has also been borne in mind that Orissa, although primarily an agricultural State, is still deficit in various cash crops, including fruits and vegetables and in foodgrains except paddy and certain millets.

2. It is roughly estimated that by the end of the Second Plan period, about 33.45 lakh acres of land will be under irrigation through major, minor and lift irrigation projects. Special priority will be given during the Third Plan period to complete all incomplete irrigation projects and to exploit existing sources of lift and tube-well irrigation. In areas where exploratory trials for tube-well irrigation have been successful, double or triple cropping will be introduced through tube-well irrigation. It is expected that about 13 lakh acres of additional area will be brought under irrigation during the Third Plan through Major, Medium and Minor Irrigation Projects.

3. During the Second Plan period, maximum emphasis was laid on increased production of foodgrains—chiefly, paddy and to some extent, wheat and pulses. 100 units of State Farms of 25 acres each were programmed to be laid out for production of nucleus paddy seeds, the ultimate aim being to

produce 80,000 mds. of nucleus paddy seeds each year for saturation of the paddy area in the State with improved seeds with the assistance of Grama Panchayats and progressive cultivators. By the end of the Second Plan though the entire area of State Farms is expected to be laid out, the production of nucleus seeds is likely to be only 36,400 mds. It has, however, been estimated that the State Farms can yield about 84,000 mds. of nucleus seeds each year in case these are improved by provision of full irrigation facilities, reclamation and lay-out and accommodation for the permanent staff. It is therefore intended that during the Third Plan period, these farms would be further improved, with an additional expenditure of Rs. 52.72 lakhs. Further, in order to provide some demonstration farms in the ayacut areas of new irrigation projects to be executed during the Third Plan period, 10 more farms would be laid out and developed at an estimated cost of Rs. 11.72 lakhs. Supply and consumption of nitrogenous fertilizers is estimated to be increased from 30,000 tons in 1960-61 to 80,000 tons in 1965-66, of Superphosphate including bonemeal from 8,500 tons to 26,500 tons, of Potassic fertilizers to 2,300 tons and of compost from 12.36 million tons to 21.1 million tons. The extension of green manuring is likely to go up from 1 million acres in 1960-61 to about 6 million acres in 1965-66. Further, to achieve self-sufficiency in deficit items of all agricultural commodities, special emphasis is to be given during the Third Plan period on supply of improved seeds, including seeds and planting materials for vegetables, fruits and plantation crops.

4. Proper research for evolving suitable cropping techniques and patterns is an essential adjunct of a plan for agricultural development. It is also necessary that improved agricultural implements and other equipment should be introduced among cultivators to enable them to achieve the maximum results from their efforts. Orissa has still to make up considerable leeway in these fields. The Third Five-Year Plan, therefore, gives requisite attention to these aspects.

5. To enable the cultivators to fully utilise local resources, preference has been given in the Plan to schemes such as green manuring, production of manures from local resources etc., which are within the easy reach of cultivators and which do not cost much. Due notice has also been taken of the cultivators' needs of credit for services for which they are unable to pay before they derive financial benefits therefrom. Need for provision of marketing and processing facilities has also been given due attention.



6. Soil erosion being an important problem of Orissa, requisite emphasis has been laid in the Plan to take up soil conservation measures on a large scale on the basis of mass participation of the communities concerned. It is estimated that about 5.31 lakh acres will be covered under soil conservation measures during the Third Plan period, as against the total coverage of 1.06 lakh acres during the Second Plan period.

7. As indicated above, special emphasis would be given, during the Third Plan period, to increase the production of oilseeds, cash crops, fruits and vegetables. Steps will be taken for production of improved oilseeds and sugarcane setts in selected farms and, if necessary, some more farms will be laid out for this purpose. The existing State Farms, without sacrificing seed production, will be utilised for production of grafts and seedlings etc., of fruit-bearing trees and vegetable seeds. Progeny orchards and fruit nurseries will be developed in all districts to supply planting materials and special attention will be given to extend cultivation of short term fruit crops like Banana, Papaya, Pine-apple etc. Improved seeds of wheat, gram, pluses, millets will be produced in greater quantities in the State Farms. Annual production and supply of coconut and arecanut seedlings will be increased from about 1.5 lakhs in 1960-61 to 5.5 lakhs in 1965-66 by starting more nurseries, by extension of existing nurseries and by raising seedlings in some of the existing State Farms. Production of oilseeds will go up to 2 lakh tons in 1965-66 from 90 thousand tons in 1960-61 ( besides Niger which will increase by 17,000 tons ), of sugarcane from 1 lakh tons to 2 lakh tons ( in terms of gur ), of cotton from 1,000 bales to 1,00,000 bales, and of jute from 2.65 lakh bales to 4.65 lakh bales. Basing the foodgrains production in 1955-56 at 25 lakh tons, the target of additional production at the end of Second Plan period was fixed at 7.86 lakh tons. The random sample survey of paddy growing areas carried out by the Bureau of Statistics in 1959 assessed the production of rice at 36.50 lakh tons. Though this assessment is tentative and will need further scrutiny by a few more similar surveys, the level of production of food grains, on the basis of the above survey, may be placed at 40 lakh tons during 1960-61.

8. As against the All-India target of stopping up of food production to the level of 100—105 million tons at the end of Third Five-Year Plan period, an additional production of 15.06 lakh tons over the above level of 40 lakh tons is expected to be achieved by the end of the Third Plan.

The various factors comprising the additional food production in the Second Plan and the Third Plan are as follows:—

Items	Additional Production (lakh tons)	
	Second Plan	Third Plan
1	2	3
(a) Major and Minor irrigation including lift and tube-well irrigation.	2.20	2.43
(b) Land Development including Soil Conservation.	0.10	0.40
(c) Manures and fertilizers ..	4.06	9.48
(d) Improved seeds ..	1.00	2.00
(e) Plant Protection and improved agricultural practices.	0.50	0.75
Total ..	7.86	15.06

The additional production will constitute an increase of 38 per cent as against 33—40 per cent aimed at in the Draft Plan of the country.

9. In formulating the Plan, apart from the resources allocated for agricultural development, possibilities of increased production and the pace actually achieved, another consideration has been the administrative and technical personnel at the disposal of the State. Due emphasis has been given on expansion of facilities for education and training. To the extent possible, the Organisation is proposed to be strengthened at the Directorate, Range, District and Block levels. The recommendations of the Nalgarh Committee have been kept in view in formulating these proposals.

There are as many as 73 schemes under Agricultural Production. They have been described in detail in the brochure brought out by the Development Department. Here it is sufficient to give a brief resume of the more important schemes.

## STATE FARMS

10. It is expected that 202 units of farms, in terms of 25 acres each would have been established by the end of Second Plan period for purposes of seed production. In these farms, about 3,200 acres would be under paddy. If all these farms are developed to the fullest extent, particularly by provision of irrigation facilities, fencing and lay-out, it would be possible to produce our requirements of nucleus seeds therefrom. This is proposed to be done during the Third Plan period to make fullest possible use of the farms.

11. In addition to the existing farms, there would be need of farms for demonstration purposes in the ayacut of irrigation projects now under execution and those planned for the Third Plan period. It is, therefore, proposed to establish 10 farms for this purpose during the Third Plan period. These farms will also multiply foundation seeds so as to meet the increased need of nucleus seeds on account of extension of paddy area in the ayacut of new irrigation projects. Provision has also been made for production of planting materials in a number of farms for purposes of Horticulture development. An outlay of Rs. 71 lakhs has been proposed under the following heads—

1. Development of existing Farms	..	Rs. 52.72 lakhs
2. New Farms	..	Rs. 11.72 lakhs
3. Graft making and production of vegetable seeds.		Rs. 6.56 lakhs

## SUPPLY OF IMPROVED SEEDS AND OTHER PLANTING MATERIALS

12. *Paddy seeds*—The Agriculture Directorate has evolved a number of varieties of improved strains of paddy suitable for different paddy growing areas of the State. During the Second Plan period, such seeds, obtained from the Research Farms were being multiplied in the State Farms and these nucleus seeds were being supplied to the cultivators through the Grama Panchayats as per the indents received from the Grama Panchayats through the Block Development Officers. As per the Paddy Seed Multiplication Scheme the Grama Panchayats and the extension staff are to ensure that the nucleus seeds are multiplied by progressive cultivators and distributed to others as 'A' and 'B' class (improved) seeds. The Agriculture Directorate have been meeting the cost of transit of the nucleus seeds from the State Farms to the Grama Panchayats to the extent of Rs. 2 per maund. This subsidy will

be continued during the Third Five-Year Plan period, and the production and supply of nucleus seeds will be further increased as indicated below :

As exchange of 'A' and 'B' class seeds among the cultivators could not be organised to the desired extent, it is estimated that only about 12 lakh acres will be brought under improved strains of paddy by the end of the Second Plan period, with a supply ( in 1960-61 ) of about 1,300 tons of nucleus seeds to the Grama Panchayats from the State Farms. By increasing production in the State Farms and better organisation of exchange of improved seeds among the villagers, it is programmed to saturate about one-third of the total paddy area with improved strains of paddy seeds by 1965-66. By the end of the Third Five-Year Plan period, the additional yield of rice on account of use of improved paddy seeds will be 1.8 lakh tons at the rate of 0.1 ton per acre under improved seeds over the level achieved at the end of Second Plan.

13. *Gram, Millets and Pulses*—Gram, millets and pulses are cultivated in about 9.5 per cent of the total cropped area, and considerable quantities of pulses are being imported. During the Second Plan steps were taken to provide improved strains of these seeds and transit charges, shortages, etc. on account of the same were subsidised to the extent of Rs. 2 per maund. The same subsidy will be continued during the Third Plan period and efforts will be made to increase the area under the above crops by 2.95 lakh acres during the Third Plan period. The nucleus seeds required for the purpose will be produced in the State Farms. Besides, steps will also be taken to organise mutual exchange of the improved varieties among the cultivators.

14. *Multiplication and distribution of wheat seeds*—Similarly, it is proposed to increase the area under wheat from about 15,000 acres in 1960-61 to 70,350 acres in 1965-66. Improved varieties of wheat will be procured from the I. A. R. I. and will be multiplied in the State Farms whereafter they will be supplied to the Grama Panchayats, who in their turn, through a system of registered growers, will carry on further multiplication and ultimate distribution amongst cultivators. The growers will also be persuaded to mutually exchange the improved varieties amongst themselves. The cost on account of transit, etc., at Rs. 70 per ton or Rs. 2.50 nP. per maund will be provided as subsidy by the State. The total subsidy thus required will be Rs. 1.93 lakhs.

15. *Vegetable cultivation* - Orissa has to make up considerable leeway in the matter of vegetable production. During the Second Plan period vegetable seeds worth Rs. 40,000 are being distributed every year at all-in-cost price. The seeds are mostly obtained from nurseries within the State as well as outside it. During the Third Plan efforts will be made to produce the major quantity of vegetable seeds (except the species that cannot be produced under Orissa conditions) in the State Farms, the stock seeds being procured from high altitude regions like Kashmir and Darjeeling. The volume of distribution will be stepped up by about 2½ times. Accordingly a sum of Rs. 1 lakh will be provided in each year of the Third Plan for purchase and sale of vegetable seeds which will cover a total area of 10,000 acres per annum during the Third Plan period.

16. *Potato seeds*—The importance of potato as a potential food crop cannot be overemphasised. The acreage under this crop in Orissa is very small indeed at the moment. It is proposed that stock seeds of potatoes will be imported from Darjeeling and Simla hills and grown in selected State Farms. The seeds obtained from these farms will be multiplied in 500 acres of cultivators' fields which will produce about 15,000 maunds of seed potatoes every year. These 15,000 maunds will be kept in the Government cold storages for supply to growers during the planting season. There are two Government cold storages now operating and another is proposed to be set up during the Third Plan period. The capacity of these three cold storages will be about 15,000 maunds.

In order to obtain disease-free seeds it will be necessary to undertake prophylactic spraying in the cultivators' fields at Government cost. A sum of Rs. 2 per maund will also be paid to the growers as premium while purchasing the seed potatoes from them. The total cost on account of the scheme over the period of the Third Plan is estimated at Rs. 2.86 lakhs.

17. *Planting materials for fruit production*—Under the Horticulture Development Programme provision has been made for setting up of progeny orchards and fruit nurseries. The planting materials produced will be sold to cultivators at cost price and a sum of Rs. 30,000 will be required annually to meet the transit charges of the same.

#### *Supply of manures and fertilisers*

18. *Green manure*—By 1960-61 about 1 million acres of paddy lands would have been brought under green manuring. It is programmed to bring 6 million acres of paddy land under green manuring by the end of the

Third Plan. The seeds required for the purpose are proposed to be grown on the periphery of about 4 million acres of such lands as well as in the waste lands of Grama Panchayats, school compounds and also in the available lands of cultivators. As the seeds will be supplied at all-in-cost price, the net expenditure on this programme will be nil.

19. *Local manurial resources*—If the total cropped area of Orissa of about 14 million acres is to receive a basal dose of organic manures such as compost, Farm yard manures, green manures, etc., at the rate of two tons per acre of low and medium land and remaining area at the rate of one ton per acre, the quantity of compost, etc., required would work out to about 20 million tons. It is necessary to have at least 10 million pits of the size of 10' × 5' × 3'. The organisation for the development of compost production will be required to ensure that every farmer digs and maintains a pit of the required size for every acre of his land. In addition it will be necessary for them to see that the dung and urine of the livestock are conserved and the compost made out of them. Further the work at the 52 Urban centres for the production of night soil compost going on at present will be intensified so as to step up the production. The total production of compost under the aforesaid 3 items of the programme is estimated to be about 20·1 million tons.

20. *Phosphatic fertilisers*—The level of consumption of superphosphate in the State is in the neighbourhood of about 4,000 tons at present. Effort to popularise its use further through demonstration and propaganda will have to be continued during the Third Plan period. It is proposed to raise the distribution gradually to about 20,000 tons by the year 1965-66. The fertiliser will be supplied to cultivators through Co-operative Societies at all-in-cost price.

The production and distribution of bonemeal will be continued through Grama Panchayats (bone digesters scheme) and Agriculture Department (bone crusher) as during the Second Plan. A subsidy of Rs. 20 per ton is proposed to be given for transit, etc., of the bonemeal. The cost on account of the scheme is estimated at Rs. 5·50 lakhs over the Third Plan period.

21. *Nitrogenous fertilisers* :—The distribution of nitrogenous fertilisers such as Ammonium Sulphate, Calcium Ammonium Nitrate and Ammonium Sulphate Nitrate is in the neighbourhood of about 30,000 tons now. It is proposed to increase it gradually to 80,000 tons by 1965-66.

22. *Potassic fertilisers* :—It is proposed to introduce the use of potassic fertilisers like Muriate of Potash and Sulphate of Potash during the Third Plan period. The target of distribution in the last year of the Third Plan is 2,000 tons of the former and 300 tons of the latter. The fertiliser, will be distributed at all-in-cost price.

#### PRODUCTION, DEMONSTRATION AND SUPPLY OF IMPROVED AGRICULTURAL IMPLEMENTS TO THE CULTIVATORS

23. The utility of improved agricultural implements which can reduce the cost of cultivation and accomplish the cultivation work with less effort cannot be over emphasised. During the First and Second Five-Year Plan periods the Directorate of Agriculture has been giving loans to the cultivators for purchase of tractors and pumping sets. During the Third Plan period, it is proposed to extend efforts to make available other useful and cheap agricultural implements to the cultivators. Survey will be undertaken in the year 1960-61 (last year of the Second Plan) of different implements of proved utility which are likely to be suitable for agricultural practices in Orissa, for example, different types of improved and cheap ploughs (including bullock driven implements, puddler, seed driller, winnowers, cultivators and harrows, etc. These will be purchased and tried in State Farms, representative of different zones in the State and the best among them will be selected, after actual use in the farms for different Zones in Orissa and recommended for use to the cultivators. Simultaneously research work will also be done in the Engineering Section of the Utkal Krushi Mahavidyalaya to modify, if necessary, the available improved implements to suit Orissa conditions. It is expected that it should be possible for the Directorate to thus evolve suitable agricultural implements for different zones in the State by the middle of the year 1961-62, when demonstrations of the use of the same will be organised throughout the State in different State Farms. Further, supply of such implements at all-in-cost price, will be arranged for the cultivators with the help of the extension staff in the Extension Blocks. The Agricultural Extension Sub-headquarters started in the Blocks, and the Grama Panchayats and Grama Sevaks' centres will also be associated for organising demonstrations and supply of improved implements to the cultivators. It is expected that through these measures, improved implements worth Rs. 50.00 lakhs will be supplied at full cost to the cultivators during the Third Plan period. Loans for purchase of the improved implements will be made available to the cultivators from Community Development budget of the respective Blocks. Arrangement

for repairs of the improved implements in the districts by the Industries and Community Development Departments and in the four zonal service stations of the Agriculture Directorate. Besides, loans to the extent of Rs. 8 lakhs will be advanced to the cultivators during the Plan period for purchase of agricultural machinery such as tractors, pumping sets, etc.

**24. Zonal Service Stations**—The training-cum-Zonal Service Stations to train operators of agricultural machinery and to provide repairs and servicing of agricultural implements will be operating in the State by 1960-61. In view of the increased volume of supply of agricultural machinery and implements during the Third Plan another station is proposed to be started in the State. These Zonal Service Stations will also train local men in repairing and servicing agricultural implements and machinery. The total cost of the scheme during the Third Plan is estimated at Rs. 2.1 lakhs.

**25. Plant protection**—The target of coverage by plant protection measures during the last year of the Second Plan is 1.6 lakh acres. The target will be increased to 3.80 lakh acres by the end of the Third Plan. As during the Second Plan, pesticides and fungicides will be supplied at 50 per cent subsidy over the all-in-cost price to cultivators. In order to control epidemics and to introduce crop protection measures in backward areas a small provision has also been made for demonstration of plant protection measures. In view of the increased target correspondingly increased provision has been made for the purchase of insecticides fungicides and equipment.

#### DEVELOPMENT OF COMMERCIAL CROPS AND HORTICULTURE

**26. Jute**—Covering about 1.1 lakh acres, jute is an important cash crop of Orissa. With the increase in the irrigable area the acreage under jute is proposed to be increased to about 1.55 lakh acres by the year 1965-66. The production of jute from this area is estimated at 4.65 lakh bales as against an annual production of 2.65 lakh bales at present. In order to achieve the target it is proposed to continue the supply of improved seeds from the State Farms at a subsidy of 50 per cent over the all-in-cost price. Improved agricultural implements will be supplied also with a similar subsidy and 1,000 field demonstrations on improved agricultural practices will be undertaken every year during the Third Plan period. Subsidies have also been provided for the excavation of new retting tanks and for the renovation of old tanks. Efforts will also be made to step up the production of Mesta and Sisal fibre in the State under this scheme.



27. *Cotton*—The area under cotton in the State is very low at present. With the increase of irrigation facilities as a result of the Hirakud and Delta Irrigation Projects much larger areas can conveniently be brought under this crop. The target of acreage under cotton, therefore, has been put at 3 lakh acres and the production in terms of ginned cotton at 1 lakh bales. The increase in the area and production is sought to be achieved through demonstration of improved practices, supply of seeds at a subsidy of Rs. 5 per maund and through the provision of ginning facilities to growers.

28. *Oil Seeds*—By the end of Second Plan it is expected that there will be about 0.85 lakh acres under Groundnut, 0.49 lakh acres under Linseed, 1.49 lakh acres under Rape and Mustard, 3.24 lakh acres under Sesamum, 0.59 lakh acres under Castor and 1.28 lakhs acres under Niger. Through intensive demonstration, subsidy and propaganda it is proposed to increase the acreage under the various oil seeds so as to increase the yield to about 2.00 lakh tons from 90,000 tons obtaining in the year 1960-61. The supply of seeds will be subsidised at Rs. 5 per maund and 1,200 demonstrations will be laid every year in cultivators' fields. The total outlay on the Oilseeds Development Programme will be Rs. 10.45 lakhs.

29. *Sugarcane*—Over the past 4 or 5 years the acreage under sugarcane in Orissa has remained almost static around 60,000 acres in spite of the natural advantages that the State possesses for cane production. As a matter of fact the average production of cane in Orissa is amongst the highest in India. With the establishment of the proposed Sugarcane Factories it will be necessary to increase the area considerably under the crop. The target of area under sugarcane during the Third Plan is proposed at 1 lakh acres to produce about 2 lakh tons of gur as against 1 lakh ton of gur produced at present. It is proposed to multiply disease free-improved sugarcane sets in the State Farms and through registered growers and to distribute annually 50,000 maunds during the Third Plan period at a subsidy of 75 n.p. per maund. Improved implements worth Rs. 1 lakh will also be supplied to cultivators at subsidised rates and 300 field demonstrations will be laid in cultivators' fields. The total cost on account of the scheme is estimated at Rs. 7.59 lakhs.

30. *Coconut and arecanut*—The coastal areas of Orissa are eminently suitable for cultivation of coconut and arecanut. During the Second Plan period the acreage under coconut is likely to be about 12,000

acres and that under arecanut about 200 acres. It is proposed to increase the area under coconut and arecanut to 30,500 acres and 1,000 acres respectively by the end of the Third Plan. The production of quality coconut seedlings for supply to growers is proposed to be raised from about 1 lakh seedlings during 1960-61 to about 4 lakh seedlings in 1965-66. The production of arecanut seedling will also be increased substantially. Field demonstrations on manuring and cultural practices will be undertaken and loans will be advanced to cultivators for providing irrigation to their crops. Manures and fertilisers will be supplied at subsidised rates.

31. *Other crops*—The Plan includes schemes for development of cultivation of tobacco, turmeric, ginger, arrowroot, coffee, cocoa, cashewnut, etc.

32. *Horticulture*—Orissa provides all necessary conditions for producing various tropical and sub-tropical fruits. Yes, considerable quantities of fruits like Bananas and fruit products like squashes, chutneys, jams and jellies are imported into the State. A comprehensive Horticultural Development Programme has therefore been envisaged. This includes production of planting materials in progeny orchards and fruit nurseries, training of gardeners, establishment of garden colonies and private orchards and production of vegetables. It is proposed to develop progeny orchards and fruit nurseries and produce vegetable seeds in the existing State Farms. The planting materials produced in the progeny orchard and fruit nurseries will be distributed to cultivators through the Extension Organisation, the transit cost being met from subsidy provided under the relevant schemes.

Around industrial areas like Rourkela, Cuttack, Sambalpur etc. where irrigation facilities are available garden colonies will be established. The participating farmers will be given technical guidance and financial assistance for growing fruits and vegetables on a co-operative basis. Each family will be given about 15 to 20 acres of land and each colony will consist of about 200 to 500 acres depending on the availability of land and the number of families agreeing to participate in the enterprise. In due course it will be possible in these colonies to take up dairying, poultry farming, piggyery etc.

In order to meet the demand for trained gardeners, it is proposed to train 60 gardeners every year during the Third Plan period. The cost included on account of development of horticulture and vegetable cultivation is Rs. 17.89 lakhs besides a sum of Rs. 8.00 lakhs provided as loans under the garden colonies.

**33. Agricultural Education and Training**—The State College of Agriculture, ( Utkal Krushi Mahavidyalaya ) established in the year 1954, is now admitting 128 students in the first year. To meet the increased demand under the Third Plan for agricultural graduates it is necessary to expand the college so as to admit 256 students every year. Accordingly additional lecture halls, laboratories, equipment and hostel accommodation, besides the requisite increases in the teaching staff have been proposed at a cost of Rs. 31.39 lakhs excluding the cost of staff quarters.

Provision of Rs. 22.44 lakhs has also been made for developing post-graduate education in Agricultural Chemistry, Horticulture, Entomology, Mycology in addition to the existing facilities in Agricultural Botany, Agronomy and Agricultural Economics at the College. 70 students will be admitted annually as against 30 students admitted at present. In order to enable students to go abroad and also institutes to outside the State for acquiring higher qualifications in subjects for which requisite facilities are not available in the State a sum of Rs. 3.70 lakhs has been provided with which 23 candidates can be deputed outside India and 46 candidates to I. A. R. I. and other institutes in India.

The necessity for a refresher's course for the Junior Field staff in the field of extension has been felt for sometime. A sum of Rs. 3.75 lakhs has been included for organising refresher's course training at the Utkal Krushi Mahavidyalaya.

During the Second Plan 3 Training Centres to train 80 Field Man Demonstrators annually have been established. To meet the increased demand for them during the Third Plan it is proposed to strengthen the existing Training Institutes and also to train fieldmen in 20 selected departmental farms every year. The cost on account of this will come to Rs. 3.46 lakhs.

The training institutions for training of Grama Sevakas and Grama Sevikas will be continued during the Third Plan period. New schemes proposed include training of selected women from Mahila Samities, refresher's course for Grama Sevikas and for Grama Sevakas and other Extension Officers. A Provision of Rs. 61.20 lakhs has been proposed under the programme.

The Second Plan outlay for these training schemes was originally fixed at Rs. 18.03 lakhs which later on proved to be inadequate, mainly on account of revision in the programme. The anticipated expenditure for the 2nd Plan period is Rs 25.16 lakhs. By the end of the Second Plan 2319 Grama Sevakas and 247 Grama Sevikas would have been trained and

the programme is to train 1733 Grama Sevaks and 700 Grama Sevikas during the 3rd Plan period. In addition, 6,000 women leaders will also be trained and 750 Grama Sevaks, 450 Grama Sevikas and 1,000 Extension Officers will receive refresher training.

**34. Agricultural Research**—The Agricultural Research Organisation in the State at present consists of the following Sections—

1. Agronomy
2. Agricultural Botany
3. Agricultural Chemistry
4. Agricultural Entomology
5. Mycology
6. Horticulture

All the Research Sections have been attached to the Agriculture College with a farm of about 560 acres. During the Third Plan, it is proposed to further develop the farm by providing irrigation facilities, laboratory buildings, green houses, drainage etc. The work in the aforesaid sections will be intensified with suitable expansion in the facilities available at present. In addition, two more sections namely Agricultural Engineering and Agricultural Economics and Statistics will also be provided.

The research activities which at present are mainly confined to Bhubaneswar are proposed to be extended to other parts of the State. Accordingly four Zonal Research Stations are proposed to be established at suitable places in the State.

The only soil testing laboratory at Sambalpur taken over from the Government of India is too inadequate to meet the demands of the cultivators. It is therefore proposed to set up 3 more soil testing laboratories in different places. A Botanical Garden is also proposed to be established during the Third Plan.

Special research schemes on crops like jute, sugarcane, cotton, oilseeds, coconut, arecanut, pepper and cardamum, tobacco, and tubers will be continued. The scheme for co-ordinated fertiliser trials sponsored by the Indian Council of Agricultural Research which is now in operation in 9 districts will be extended to the remaining 4 districts, while the existing scheme on model agronomic experiments will be continued.

Besides, the *ad hoc* schemes sponsored by the I. C. A. R. and various Commodity Committees will also be taken up from time to time as they are sanctioned. The total outlay on agricultural research during the Third Plan will be Rs. 109.68 lakhs.

35. *Administration*—The implementation of the programme envisaged under the Third Plan will naturally entail a larger work-load. To cope with it, the administrative machinery has to be suitably strengthened at various levels. It is accordingly proposed to provide more staff at the Block level and also in irrigated Grama Panchayats. Every Grama Panchayat having 500 acres or more land under irrigation will be given one Fieldman to look after agricultural demonstration work and to pursue the programmes connected with cropping patterns, use of fertilisers and diversification of agriculture etc. To ensure better supervision the district staff will be suitably strengthened. The staff borne under different development schemes will be integrated at the district level so as to bring about proper co-ordination and to avoid duplication of work. One more Agricultura Range will be set up under the charge of a Deputy Director of Agriculture. In the Directorate of Agriculture provision has been made for strengthening the ministerial staff and also for adding one more Deputy Director of Agriculture for work connected with Planning.

## 2. MINOR IRRIGATION

36. The programme of Minor Irrigation mainly constituting provision of reservoirs and diversion weirs has been given increased support in the First Plan and the Second. Out of a total number of 6,486 projects taken up during this period, 689 projects will remain incomplete at the end of Second Plan and will be carried over to the Third Plan for their completion.

37. On an earlier estimate it was expected that over 7 lakh acres from projects completed by the end of First Plan and about 2 lakh acres more under Second Plan projects would have been brought under irrigable command. In order to assess the actual position a comprehensive survey has been undertaken and project-wise data are expected shortly. The expectation that field channels would be provided by the beneficiaries themselves has not materialised to the desired extent and in such cases steps are being taken to construct these channels through State agency with the stipulation that the cost incurred thereon will be realised from the beneficiaries under the provisions of the Orissa Irrigation Act, 1959. A systematic assessment in regard to the requirement of field channels and for proper maintenance of

the projects has been undertaken and on that basis funds are made available on priority basis, with the object of ensuring maximum utilisation of irrigation potential already created.

38. The cost of completing incomplete projects to be carried over to the Third Plan is estimated at Rs. 194.40 lakhs. In addition, new projects which have been fully investigated involving an outlay of Rs. 50 lakhs has been included under the G. M. F. Programme. This is exclusive of the provision available under the C. D. Programme.

39. Lift irrigation is a later addition to the programme. Till 1958-59 diesel pumping sets were being hired out for irrigation purposes. In 1959-60, installation of electrical pumping sets was taken up in the Rushikulya basin of Ganjam. The results have been encouraging and extension of the programme to other areas has been proposed for which detailed investigation has been undertaken. It is proposed to set up 4 Lift Irrigation Divisions in the Third Plan to deal effectively with investigation and execution of projects. A provision of Rs. 30 lakhs is included in the estimates on this account.

40. As regards irrigation tube-wells the experimental borings in Balasore and Cuttack areas have proved successful. It is expected that 34 tube-wells would have been installed by end of Second Plan. In the Third Plan 30 large sized tube-wells are proposed at a cost of Rs. 30,000 for each. Installation of small sized tube-wells by private parties at all-in-cost is also contemplated for which a provision of Rs 4 lakhs has been made for giving loan to the parties. A total number of 120 Tube-wells both by Government and private agency is programmed for the Third Plan. Rs. 30 lakhs has been proposed under the programme including Rs. 10.20 lakhs for purchase of rigs and accessories.

41. An outlay of Rs. 304.40 lakhs under the G. M. F. and of Rs. 374.13 lakhs under C. D. Programme have been proposed for Minor Irrigation in Third Plan from which a net addition of 3 lakh acres is roughly expected.

### 3. LAND DEVELOPMENT

#### LAND REFORMS

42. The Orissa Land Reforms Bill, 1959 has been reserved for President's assent and is expected to be on the Statute Book very shortly. For effective implementation of land reforms measures as envisaged in the law, survey and settlement operations are essentially

necessary and records of rights should be brought up-to-date. In most parts of this State, revision settlements are overdue and some parts of the State are still unsurveyed. It has been estimated that an expenditure of Rs. 3.75 crores will be incurred during the Third Plan period on survey and settlement operations. Out of this, it has been at the most possible to provide a sum of Rs. 1 crore in the normal budget. The State Government intend to provide the balance in the Plan under 'Land Reforms. At this stage a provision of Rs. 30 lakhs has been tentatively provided towards the cost of the administrative organisation to be set up for land reforms work. The balance of cost on survey and settlement operations is proposed to be provided later at the time of finalisation of the Third Plan Programmes or afterwards within the Annual Plan ceilings by adjustment.

43. A further provision of Rs. 15 lakhs has been proposed under other 'Land Development' schemes viz. Land Reclamation and Development with a net nil provision, Tractor Hiring (Rs. 2 lakhs), formation of Land Utilisation and Plantation Boards (Rs. 8 lakhs) and consolidation of holdings (Rs. 5 lakhs).

#### 4. ANIMAL HUSBANDRY, DAIRYING AND MILK SUPPLY

##### ANIMAL HUSBANDRY

44. Animal Husbandry programme in the Third Plan constitutes in main intensification of efforts initiated in the preceding Plans for improvement of livestock, particularly in the fields of better breeding, better nutrition and control of diseases. Prior to First Plan the activities centred around 79 Veterinary Dispensaries, 222 Stockman Centres and 6 Breeding Farms. In the First Plan were added 25 Veterinary Dispensaries, 152 Stockman Centres, 6 main and 27 sub-stations for Artificial Insemination, 1 Poultry Farm, 42 Poultry Units, 20 Artificial Hatching Centres and 5 Key Village Blocks with 4 units under each. During the last year of the First Plan, the College of Veterinary Science and Animal Husbandry was started.

45. The outlay on Animal Husbandry and Dairying and Milk Supply was stepped up from Rs. 45.75 lakhs in the First Plan to Rs. 166.78 lakhs (anticipated) in the Second Plan. The provision for Third Plan has been placed at Rs. 375.95 lakhs. Considerable progress has been made during the Second Plan in the control of incidence and spread of diseases, breeding of cattle and poultry development. 76 new Veterinary Dispensaries, 395 Stockman Centres, 2 main and 55 Artificial Insemination Sub-Centres

5 Key Village Blocks with 40 units, 2 Poultry Farms and 60 Poultry Units would have been established by the end of the Second Plan. The Veterinary College has been expanded and the buildings together with hostels have been put up at Bhubaneswar and the College with admission capacity of 120 is now in full swing.

46. In the Third Plan it is proposed to establish Intensive Breeding Zones in compact areas with improved bulls and Small Scale Livestock Breeding Farms in each of the 13 districts. The State Livestock Breeding Farm will be shifted to Chiplima where sufficient land with irrigation facilities are available. New Key Village Blocks with larger number of units to cover areas with 5,000 cow population in each such block are proposed to be started while the old blocks will be expanded. Additional contributions are proposed to be given to the non-official bodies like Gomangal Samiti to open stud centres. A number of new Gosalas will be developed and establishment of one more Gosadan with a Charnalaya is also proposed. Poultry development activities will be expanded with increased number of layers. 95 new Veterinary Dispensaries and 298 Stockman centres are proposed to be set up. The campaign for mass eradication of rinderpest will be extended to the entire State. To meet the needs of biological products, provision has been made to expand the activities of the existing Serum Institute of the State. Fast moving propaganda-cum-disease control units have also been provided for. In the field of education and research, facilities are proposed for higher training both in India and abroad. The Veterinary College will be raised to the post-graduate standard and a Livestock Research Station has also been proposed to be opened at Bhubaneswar. The goat multiplication farm which could not be started during the Second Plan on account of certain climatic reasons is proposed to be set up at another place having more congenial climatic conditions. Under the programme of Dairying and Milk Supply a milk collection and processing centre with pasteurisation Plant at Bhubaneswar will have been established by the end of Second Plan. Third Plan includes a Dairy Plant for collection, processing and distribution of milk, a Creamery and a pilot scheme for collection and marketing of milk.

#### BREEDING

47. The cattle of the State are non-descript and poor in performance, the cows are low yielders and the bullocks are of poor draught capacity. The effort is, therefore, directed to upgrading the indigenous cows with the help of Red Sindhi and Haryana bulls and buffaloes with the help of Murrah



Buffalo bulls. Due to limited number of bulls available, and also due to heavy maintenance cost, breeding is done by Artificial Insemination method in some areas where facilities are available.

48. The main programme for better breeding is that undertaken under the Key Village Scheme. The All-India Key Village Scheme aiming at improvement of cattle with limited superior germ-plasm was initiated during the 1st Plan and intensified during the Second Plan period.

49. During the Second Plan, there has been considerable expansion of activities in this sphere. To each old Key Village Block having 4 Units, 2 more units have been added, raising the number of breeding cows in each block from 2,000 to 5,000. Five new Key Village Blocks were started. The method of breeding adopted in Key Village Blocks is by Artificial Insemination. Besides, one Key Village Extension Centre with 50 improved bulls has been started in Bari area where breeding is being done by natural service. One more such centre will be started during 1960-61. Two Artificial Insemination Centres were started in urban areas. 1,000 male and female calves in Key Village areas are being subsidised. For identification, all the cows in Key Village areas have been tattooed.

50. In the Third Plan, it is proposed to start 5 new Key Village Blocks with 10 Key Village Units in each as per the new pattern laid down by the Government of India. Out of the 10 Key Village Blocks opened upto the end of the Second Plan, 7 Blocks will have 4 more units each conforming to the pattern, the rest 3 Blocks will, however, have only 2 more units each. In addition to the 2 Key Village Extension Centres, it is proposed to set up 4 new Extension Centres. In the sphere of calf subsidy, 1,000 calves will be subsidised. 20 new Artificial Insemination Centres in rural areas and 5 new Artificial Insemination Centres in urban areas will be added. Besides, the following new activities will be undertaken.

1. Centralised Semen Collection Centre
2. Inservice Training of Personnel
3. Establishment of a Livestock Marketing Unit
4. Establishment of a Bull Rearing Farm
5. Upgrading of Indigenous Goats
6. Mass Castration of Scrub Bulls

## FEED AND FODDER DEVELOPMENT IN KEY VILLAGE AREA

51. Five Pasture Plots have been started during the Second Plan period. Another 10 such plots will be opened during the Third Plan. These Plots serving as demonstration plots will induce the cultivators to grow fodder on their own lands. They will be supplied with roots and slips free of cost. The progenies born of Artificial Insemination will be fed with greens produced from these plots.

52. *Goshala Development and Gosadans*—In Orissa, there are 20 Goshalas with a cattle population of about 4,000 animals having potentialities for being converted into breeding and dairying centres. But due to lack of management and aversion to adopt modern Animal Husbandry practices, they were neglected. With the financial assistance from Central Council of Gosambardhan, 5 Goshalas were taken up for development during the Second Plan. It is observed that these Goshalas have since improved in the production of milk and bull calves.

The Goshalas were congested with old, uneconomic and diseased animals who are competing with economic and useful ones in matters of feed and accommodation. In order to house these animals and also stray bulls of Key Village areas, a Gosadan has been established in Hindol area with financial assistance from the Central Council of Gosambardhan.

During the Third Plan period, 5 more Goshalas will be taken up for development and one more Gosadan with a model Charmalaya for flaying and curing of hides will be established. It is also proposed to form a State Council of Gosambardhan as a counterpart to the Central Council of Gosambardhan. All these activities will remain under the control of the Goshala Development Officer who will be provided with necessary additional staff.

53. *Pig Breeding*—Pigs are prolific breeders and are reared generally by Harijans and Adibasis. In order to improve the indigenous stock and thereby to increase the income of these classes of people, improved breeds are being introduced during 1960-61. During the Third Plan, it is proposed to establish one Piggery unit and two Piggery development blocks.

54. *Contribution to the Utkal Gomangal Samiti*—The Utkal Gomangal Samiti with financial assistance from the Government is devoted to cattle welfare true to its name. It is now maintaining 250 cow Bulls, 58 buffalo bulls, 6 Banur rams, 9 Middle White Boars and 86 Bucks which are scattered all over the State. The Samiti is purchasing bull calves from Government farms as well as from the breeding tracts and stationing them in stud centres. During the

Third Plan, the Utkal Gomangal Samiti, will buy bull-calves from Government Farms and will maintain 204 cow bulls, 21 buffalo bulls and 45 Bucks in addition to the existing number of animals. Hence additional contribution has been proposed under the Third Plan.

#### DISEASE CONTROL

55. *Veterinary Dispensaries*—The existing pattern is to have a Veterinary dispensary in each National Extension Service Block with an average Livestock population of 0.46 lakh. There are now 182 Veterinary dispensaries and it is proposed to open 95 Veterinary dispensaries during the Third Five-Year Plan.

It has been decided by Government that double Blocks (31 Nos.) will be split up into single blocks. Veterinary Extension Officers employed in the double blocks will have to be utilised in opening Veterinary dispensaries in these split up blocks. Provision has, therefore, been made during the Third Plan to meet the non-recurring and recurring expenditure for opening these Veterinary Dispensaries including pay and allowances of Veterinary Extension Officers.

Many of the Veterinary dispensaries are now housed in rented buildings which are unsuitable for proper functioning of these institutions. There are no inpatient sheds in most of the dispensaries which are essential for giving proper treatment to the animals. It is proposed to provide buildings for 15 dispensaries and inpatient sheds to 50 dispensaries at Subdivisional headquarters during the Third Plan. Dog kennels are necessary for at least District head-quarters Veterinary hospitals and it is proposed to construct eleven kennels in the hospitals where they are wanting at present.

Existing Veterinary hospitals at District headquarters should have the desired facilities to meet the needs of proper treatment. It should be of a standard befitting one of the most important institutions of the district. The Field Diagnostic Laboratory should also be of such type as to handle all intricate and difficult cases coming from the district. During the Third Plan, it is therefore proposed to strengthen the District Headquarters Veterinary Hospitals and District field diagnostic Laboratories.

56. *Stockman Centres*—It is not possible to open the required number of Veterinary Dispensaries partly due to non-availability of adequate number

of Veterinary graduates and partly due to heavy expenditure involved. At the same time, adequate arrangements are required to be made for remedial and prophylactic measures and these are being provided through Stockman Centres in the rural areas which are much less expensive. The aim is to have one Stockman centre for every 10,000 livestock population. At this rate, the State should have 1,200 centres against which there will be 793 centres by the end of Second Plan period. 298 more centres are proposed in the Third Plan.

It is also proposed to provide buildings for 150 Stockman centres most of which are now put up in kutcha insanitary houses.

57. *Propaganda and Mobile Units*—In place of the existing propaganda vans which are driven by bullock carts, it is proposed to have quick moving conveyances to be used as propaganda-cum-disease control units, one for every two districts. A Jeep fitted with a small laboratory will serve as a Mobile Veterinary Dispensary as well as Propaganda Unit.

58. *Expansion of Biological Products Section*—The existing Biological Products Section is manufacturing biological materials to meet the needs of the field staff in protecting livestock from diseases. Some expansion was made during the Second Plan. Further expansion of the section has been proposed in the Third Plan.

59. *Eradication of Rinderpest*—The scheme for eradication of Rinderpest which is responsible for more than 50 per cent of cattle mortality, has been undertaken during the Second Plan. As the entire State cannot be covered by the end of the Second Plan this scheme will be continued during the Third Plan.

#### POULTRY DEVELOPMENT

60. Poultry keeping is a very profitable cottage industry in the State and it also helps in providing a balanced diet. As a result of schemes undertaken in the First and Second Five-Year Plans, people have become poultry minded and there is demand for birds and eggs from all parts of the State. Steps are being taken to keep up this improvement and to undertake further expansion during the Third Plan.

61. The existing Poultry Farms at Angul, Sundergarh and Koraput will be provided with additional facilities. Out of 14 All-India Poultry Development Centres 5 centres will be strengthened by increasing the number of layers from 100 to 500. In order to increase the production

of eggs and also to encourage people in duck rearing which is a very profitable concern with a very small capital outlay, 3 Duck Rearing Centres will be started. Meat-meal is a very potential diet for poultry and feeding the birds with meat meal will highly improve their performances. Two meat meal manufacturing centres are proposed to be established at Gosadans. This will be a purely Government concern and will run on commercial lines.

The activities in regard to poultry improvement need adequate guidance and supervision and hence provision has been made for supervisory staff.

#### VETERINARY EDUCATION AND RESEARCH

62. Expansion of the College of Veterinary Science and Animal Husbandry with provision for post-graduate classes is proposed in the Third Plan. The College is now properly equipped and buildings for accommodating post-graduate classes are also ready. A Livestock Research Station and a Livestock Breeding Farm are considered essentially necessary for a first grade teaching College and provision has been included for these institutions. The Livestock Research Station will afford facility for conducting research on problems relating to livestock improvement and the results of research will be extended to the field workers. The Livestock Breeding Farm will provide scope for demonstration of animal husbandry activities and for research experiments while affording facilities in the teaching side both at the undergraduate and post-graduate level.

63. One C. D. Block is attached to the College and the extension work is done through ambulatory clinic which is a part of the study. Expansion of this extension work is included in the Third Plan with provision for equipment like audio visual apparatus, loud speakers, vehicles etc. Provision has also been made to undertake useful research schemes with the collaboration of the I. C. A. R. There will be a Statistical Section attached to the Directorate as also to the College for assessing progress of work in the fields of research and extension and this Statistical Section will also teach the students of the College, Statistics being a part of the curriculum. Due provision has been made to strengthen the teaching Department and the Laboratory staff and for higher specialised training both in India and abroad.

## REORGANISATION AND ADMINISTRATION

64. In order to cope with the increased demand made on the Department as a result of expansion and intensification of activities under the Programme, necessary attention has been given to re-organisation and strengthening of the machinery. This includes creation of 2 Joint Directors—One to remain in charge of Disease Control and Research and the other in charge of Extension ; of an Engineering Section in the Directorate consisting of an Assistant Engineer, 3 Overseers and other staff ; and an Audit and Accounts Wing for ensuring proper maintenance of accounts etc. and setting up of a Planning Section in the Directorate which will exclusively remain in charge of formulation of schemes and their implementation through a process of constant review and co-ordination with other allied Departments.

65. Provision has also been proposed for a slaughter house Superintendent for proper supervision of the slaughter houses which are now being indifferently managed by the Municipalities, and for a small animals Development Officer to remain in charge of development of pigs, goats and other small animals ; a Class II Officer to remain in charge of purchase of medicines and technical instruments and for scrutiny of indents etc. besides for upgrading the posts of Extension Officers, such as Diary Development Officer, Gosala Development Officer, Artificial Insemination Officer, Animal Nutritionist and Officer in charge of Biological Production Section in view of their increased responsibility. For ensuring quicker and efficient inspection of institutions and works purchase of 5 jeeps for the Extension Officers have also been included. It is proposed to have a Section in the Directorate consisting of a Refrigeration Engineer with 3 Refrigerator Mechanics which will remain responsible for proper maintenance of the refrigerators given to dispensaries and hospitals both in Block and non-Block areas for storage of biological products and also for artificial insemination work. The present practice of getting the units attended to by local and outside firms involves not merely delay but exorbitant charges also.

## DAIRYING AND MILK SUPPLY

66. The need for integration between Animal Husbandry and Milk supply has been duly taken into account in the programme in this sphere. The *per capita* consumption of milk in Orissa is the lowest in the country. Milk Supply in urban areas is far too poor and there is no market for milk produced in rural areas. In absence of any organised Dairy Industry

based on rural milk production the supply of milk in towns is inefficient and unhygienic. Organisation of dairy industry based on a system of rural milk production and urban marketing is therefore a necessity.

67. During the Second Plan, as stated earlier, a milk collection and processing centre with pasteurisation plant will be established at Phulnakhara. This will ensure supply of pure milk to Cuttack and Bhubaneswar. There are two other milk pockets in Kujang and Bari-Angalo areas of Cuttack district. A Creamery is proposed to be set up at Kujang and a Pilot Scheme will be worked in Bari Sujanpur area for milk collection and marketing. In addition, a Dairy Plant is proposed to be set up at Berhampur for collection, processing and distribution of milk in urban areas. In order to find out the extent of production in some possible surplus milk areas, a survey will also be undertaken. Provision has been made for sending out candidates for training in Dairying and a course of in-farm training has also been included in which the producers will be given training for a period of 1 month at the State Farms.

## 5. FORESTS

68. Orissa has about 25,000 sq. miles of forests which constitute about 42 per cent of the total land area of the State. Of this, only about 8,600 sq. miles are reserved forests and about 2,000 sq. miles are demarcated protected forests, reserve lands or forests demarcated for reservation. The balance which constitutes about 60 per cent of the total forest area has little productive value. Large tracts in these types of forests are barren or subject to shifting cultivation. It is estimated that the present yield of timber and firewood is about 50 per cent of the estimated optimum potential.

69. Many of the reserve forests contain very poor growth and in many cases rocks have been exposed due to erosion. Rehabilitation of these areas by means of afforestation and other measures as have been taken during the preceding plans have to be stepped up. In the protected forests, fellings are done in an unsystematic and irregular manner by the local tenants. Unless these forests are placed under scientific management by proper demarcation and survey and gradually rehabilitated, a stage will come when it will be a problem to meet the demand of the people for small timber and firewood for their domestic requirement and agricultural implements.

70. There are vast areas which contain mainly timber of miscellaneous species having no market. This growth has to be replaced by teak and other valuable species in suitable localities. Growth of teak has been remarkable in certain localities. Large scale replacement of other species by teak in suitable conditions has to be followed. There are again large tracts of forests which have not yet been opened up. Dragging of material by manual labour is very expensive and if the coupes are to fetch proper price it should be opened up by providing communications. Similarly there are vast areas without any proper survey on account of which compilation of working plans or schemes for these areas is not possible. It is desirable that proper topographical survey of these areas should be undertaken so that the forests could be brought under scientific management.

71. In the coastal districts of Cuttack, Puri and Balasore where forest area is very low, supply of timber and firewood at reasonable rate for agricultural implements and house building purposes is essential. A beginning has already been made, but it is essential to step up the afforestation work in these areas. These plantations will not only supply small timber and firewood but will also prevent inland drift of sand dunes and erosion of good cultivated lands.

72. Experience has shown that with proper management, forests will yield higher dividends. From a level of Rs. 99.82 lakhs in 1950-51 the revenue has risen to Rs. 255.52 lakhs in 1960-61. At present the contribution from forests to the general revenue of the State is over 11 per cent which is the second highest among the States, the first being Madhya Pradesh with 12 per cent. Even so, the revenue per acre is only Rs. 1.70 n.P. which is very low compared to other States like Kerala where the revenue per acre is over Rs. 13.

73. The first step in the development of forest resources is to survey the entire forest area of the State. This will provide a basis for drawing up working plans for the various Forest Divisions. Secondly a long-term plantation policy should have to be followed and only the species more suitable for each area should be planted there. Rate of extraction from forests should be stepped up by improving transport facilities and adopting better felling methods. The efforts made during the first two Plans have been too modest viewed against the problems that have to be tackled. An outlay of Rs. 13.29 lakhs allocated under forests in the First Plan was stepped up to Rs. 48.91 lakhs (anticipated) in the Second Plan. The programmes in the first two Plans included plantation, survey and



demarcation of forest areas, rehabilitation of degraded forests and construction of forest roads. The programme under Forests in the Third Plan has been drawn up with an outlay of Rs. 175.00 lakhs and it provides for intensification of efforts already made in the various directions.

74. Under economic plantations, it is proposed to plant up 35,000 acres with teak as against 9,326 acres likely to be planted up by the end of the Second Plan. In addition, 15,000 acres will be planted up with Semul, 6,000 acres with Khair, 1,000 acres with Kurum and Rosewood, 2,250 acres with Pine and Wattle and 20,000 acres with Casuarina and other species besides 25,000 acres of Casuarina under Soil Conservation Scheme. In order to tackle the afforestation problems, there will be two Forest Divisions each in charge of Western and Eastern Zones. It is also proposed to have 5 to 6 regional research gardens to undertake research on the best method of raising various economic species.

75. With a view to rehabilitating the degraded forests and waste lands, compact areas of over 50 acres each will be planted up with fast growing species like eucalyptus, bamboo and cashewnuts. Survey of the areas available for afforestation will also be undertaken in the Third Plan period. During the 1st and 2nd Plan periods an area of about 9,941 miles have been demarcated and there are still vast areas that have to be demarcated. In the Third Plan period it is proposed to demarcate and survey 7,500 miles. Provision for necessary staff has been included in the proposal.

76. At the end of the Second Plan, the total length of forest roads will be about 2,700 miles which works out to about 0.09 mile for each square mile of forest. This is quite inadequate. The aim is to have at least one mile of road for every square mile of forests. Provision has been made to construct 850 miles of new roads and to improve 400 miles of existing roads in the Third Plan period.

77. In the Second Plan period, a modest beginning has been made in the departmental working of coupes. This work was taken up in Bonai subdivision in the district of Sundergarh with a view mainly to feed the saw mill at Rourkela. The results have been very encouraging and it is proposed to expand the scope of the scheme in the Third Plan period. Trees will be felled departmentally and converted into logs or sawn into different sizes. The logs will be sold by public auction and the requirement of sleepers of railways will be met departmentally. Against an expenditure of Rs. 1.06 crores, a return of Rs. 1.93 crores is anticipated from the scheme. Besides, firewood depots will be opened in scarcity areas.

78. Provision has also been made to increase minor Forest produce like sabai grass, cane, patal garud and occimum in suitable areas on commercial basis.

79. Under the scheme for extension of forestry, it is proposed to supply seedlings and seeds to the community development blocks, so that the existing village waste lands of less than 50 acres in extent can be afforested-gradually.

80. The training programmes will be suitably augmented in order to meet the need for technical staff required for implementing the programmes.

## 6. SOIL CONSERVATION

81. In Orissa, the problem of soil erosion is most acute and soil conservation is of supreme importance. More than 1/5th of the total land surface in the State suffers from serious soil loss due to the practice of shifting cultivation. If adequate steps are not taken speedily to protect the lands under shifting cultivation, vast areas may deteriorate beyond repair. The catchment areas of river valley projects like the Hirakud and Machkund are badly eroded and execution of anti-erosion measures is essential for protection of the dams from rapid silting. Agricultural yield in Orissa is low and a very important cause of the low yield is rapid deterioration of the land due to soil erosion. At present, the idle lands (village gochar, anabadi, etc.) are mostly foci of soil erosion. Under proper land use programmes, they could be made productive. It is estimated that in all 15.5 million acres of cropped area, forest and idle lands in the State would need intensive soil conservation measures.

82. Soil Conservation Programme was initiated in the last two years of the First Five-Year Plan. The work constituted establishment of soil conservation demonstration centres in problem areas of the State viz. Koraput, Rajgangpur, Angul and Larambha. Soil erosion and land capability survey of a few problem areas was undertaken and a laboratory to undertake soil studies was established. Also a Training School was started in the Rajgangpur Demonstration Centre to train students for appointment as Soil Conservation Sub-Assistants. For demonstration purposes contour bunding, tree planting and gully reclamation were done in 3,390 acres in private and Government lands at a total cost of Rs. 3,29,656. A special scheme for Soil Conservation work in Machkund catchment area was initiated towards the close of First Plan period.

83. While continuing these schemes, the following new schemes were initiated in the Second Plan, (a) Soil Conservation in the Ib catchment, (b) Soil Conservation scheme for control of stream bank erosion and (c) Soil Conservation in the coastal sand dunes. Further, under the Programme of Welfare of Backward Classes, three more schemes, viz., scheme for control of shifting cultivation in Koraput-Sunabeda areas, scheme for Watershed Management Units and scheme for organising another Training School for training of Soil Conservation field staff were also taken up. It is expected that by end of Second Plan, 77,327 acres will have been contour bunded, 25,165 acres planted with trees, and gully reclamation done in 3,390 acres. Further, terracing will have been completed in 118 acres, plantation of Agave in 1.37 miles as fire line, 135 acres as concentrated plantation and 264 field staff would have been trained in the above two Training Schools. Survey work would have been completed in about 3,27,078 acres.

84. During the Third Plan, it is proposed to survey about 5 lakh acres of problem areas, in addition to the survey work to be done by the Government of India, Soil Survey Organisation. Further, it is intended to cover 5.31 lakh acres of eroded land under different soil conservation measures at a total cost of Rs. 321.90 lakhs to be incurred from funds of Agriculture, Backward Classes and Community Development Programmes. Of the 5.31 lakh acres to be brought under soil conservation practices, about 3 lakh acres will be contour bunded. The remaining area will be planted with trees for fuel and fruits, and with grass and legume for pasture development. Conservation farming practices will be introduced by the Agricultural Extension staff in the contour bunded areas and according to the prescribed yard-stick of additional food production at the rate of 1 ton per acre, 30,000 tons of additional food-grains will be produced in the last year of the Third Plan in the contour bunded areas.

85. To administer and supervise soil conservation work taken up in the State, three soil conservation divisions have already been organised and one more is likely to be added before the end of the Second Plan. To cope with the increase in work during the Third Plan period, it is intended to organise one more division in the year 1961-62, another in the year 1962-63 and the third in the year 1964-65. The schemes included in the Third Plan provide for requisite training to meet the requirement of field staff at different levels.

86. *Soil Erosion and Land Capability Survey*—By end of 1960-61, 342,983 acres are expected to be surveyed in the Ningra Catchment in Dhenkanal district, Nikiti catchment in Sundergarh, Gogra and Baitarani catchments in Keonjhar district, Kakalbaki catchment in Boudh-Phulbani district, Kollab catchment in Koraput district and Inderabati Sub-catchment in Kallahandi district and land capability maps for the above areas will have been completed.

87. The Government of India Soil Survey Organisation included survey of the Hirakud and Machkund Dam catchment in their survey programme which they expect to complete during the Third Plan period. During the same period, it is proposed to survey 5,00,000 acres of problem areas by the State Survey parties, where soil conservation work will be initiated. During the Second Plan period, survey work was managed by one Assistant Soil Conservation Officer with one Unit of Survey staff consisting of one Soil Conservation Assistant and two Surveyors. To achieve the increased target, it is proposed to provide one more unit of staff during the Third Plan period. The above survey work is estimated to cost Rs. 2,67,000. Survey in other areas will be taken up in collaboration with the Government of India Soil Survey Organisation.

88. *Soil Conservation, and Research Laboratory*—In the year 1954, the Soil Conservation Research and Laboratory was started to undertake research studies on soil conservation problems and to analyse soil samples collected by the Soil Erosion and Land Capability Survey Party. During this period, 2,300 soil samples have been analysed and the data have been used for preparation of land capability maps. In addition to the above, soil survey of the Balimela area was undertaken at the request of the Dandakaranya Development Authority. The mortality problem in casuarina plantation at Puri was investigated with financial assistance from the Board of Scientific and Industrial Research, Orissa. Soil samples from eroded lands are being investigated in regard to their fertility status. In the Third Plan, it is proposed to continue the laboratory studies of eroded soils. Further, studies on pasture and grasses will be undertaken. Also, it is proposed to undertake testing of soil samples for cultivated land in Cuttack, Puri and Dhenkanal districts to advise cultivators regarding manurial and fertiliser requirements of soils.

89. *Establishment of Soil Conservation Demonstration Centres*—In the year 1953, three Soil Conservation Demonstration Centres were started at (i) Rajgangpur area in Sundergarh district, (ii) Angul area in

Dhenkanal district and Koraput area in Koraput district. In the above centres, different soil conservation measures have been demonstrated. Further, experimental studies on local problems have been undertaken to find out suitable trees and grasses for eroded lands and to evolve techniques for pasture development. A number of grasses and legumes have been maintained for their multiplication. The progress made in the above centres is as follows—

				( In acres )
		Contour Bunding	Tree Planting	Gully Control.
Angul	..	1,012	437	18
Rajgangpur.	..	2,396	1,384	808
Koraput.	..	1,121	300	327
Total		.. 4,529	2,121	1,153

In the Third Five-Year Plan, it is proposed to continue the above said three centres and to establish ten new centres in the representative problem areas in the State. Preliminary work for the above will be taken up in 1960-61, namely, establishment of nursery and 120 acres of contour bunding in each centre. During the Third Plan period, the work in all the above centres will be extended, and in each centre, 10,000 acres under contour bunding, 2,500 acres under tree planting, 2,500 acres under gully control and 5,000 acres under conservation farming will be demonstrated.

90. *Soil Conservation Scheme for the Machkund Dam Catchment*— The total catchment area of the Machkund Dam Project is 858 sq. miles. Of the above, 290 sq. miles are in Orissa and the remaining 568 sq. miles in Andhra Pradesh. In Orissa, out of the 290 sq. miles, 29 sq. miles are submerged under water, 184 sq. miles have very steep slopes (above 10 per cent) mostly unsuitable for cultivation, and 137 sq. miles are below 10 per cent. Cultivated lands occur in the latter area. Due to practice of shifting cultivation, the above catchment is very badly denuded and it requires soil conservation measures for protection of the Dam from rapid silting. With this object in view, soil conservation work in Orissa portion

of the Machkund Dam catchment was initiated in the year 1956. Till June, 1960, 26,938 acres have been contour bunded, 10,137 acres have been planted with Suitable Trees and about 100 acres have been planted with Agave. Also, conservation farming has been demonstrated in about 50 acres of contour-bunded lands in 14 different centres. During the remaining part of Second Plan period, it is proposed to cover 1,000 acres more under contour-bunding, and 900 acres under tree planting. During the Third Plan period, it is proposed to contour-bund 1,000 acres and to plant trees over 10,400 acres in addition to maintenance work on 17,000 acres planted during the Second Plan.

91. *Soil Conservation in Hirakud Dam Catchment*—The catchment area of the Hirakud Dam project is 32,200 sq. miles. Of the above, 3,200 sq. miles area is in Orissa, and the balance in Madhya Pradesh. Part of this catchment area is badly denuded and soil conservation measures are urgently required to protect the Dam from rapid silting. From the survey data, it is estimated that out of 3,200 sq. miles of Orissa portion, 279 sq. miles will require contour-bunding and 153 sq. miles will need tree planting. The above estimates roughly indicate that 10 per cent of the area requires contour-bunding and 5 per cent. of the area needs tree planting. To this end, soil conservation work in the Hirakud Dam catchment was initiated during the year 1957 in a selected catchment of the river Safai. Till the end of June, 1960, 13,427 acres have been contour-bunded and 2,514 acres have been planted with suitable trees besides 1,710 acres of gully reclamation and development of 299 acres of pasture land. It is proposed to cover 3,260 acres under different soil conservation measures by the end of 1960-61. The targets proposed for the Third Plan are contour-bunding on 50,000 acres, and Tree Planting on 15,000 acres. The balance area will be covered in the Fourth Plan.

92. *Soil Conservation in Medium and Minor Irrigation Projects*—The catchment areas of the Medium and Minor Irrigation Projects are badly in need of Soil Conservation measures. It is proposed to start soil conservation work in six projects in the Third Plan period and in each project, 2,000 acres will be treated under different soil conservation measures, like contour-bunding, tree planting, pasture development and reclamation of gullied lands. This will be taken up as pilot projects with the object of making the people conscious of the need of soil conservation. In the next phase, people will be persuaded to take up similar work in their lands at their cost.

93. *Development of Pastures in eroded lands*—In Orissa, the 'gochar' 'village grazing grounds' and idle lands adjoining them are mostly barren and are foci of soil erosion. Under proper land management programme, these lands could be made highly productive and soil erosion controlled. It is proposed to select denuded pasture lands and to grow selected fodder grasses and/or legumes. Fodder produced from the above centres will be sold either as greens or as silaged material. During the first year of the Third Plan it is proposed to open ten pilot centres of thirty acres each. In each subsequent year some more will be added till 38 such farms are developed by the end of Third Plan period.

The above centres will be opened in areas where there is demand for fodder and eroded lands are available for reclamation. After the usefulness of the project is demonstrated, it is proposed to extend the programme through the Grama Panchayat Organization. In view of the special nature of work, it is proposed to keep two centres under a Soil Conservation Surveyor and the work of 4-5 surveyors will be supervised by a Soil Conservation Assistant. The estimated cost of the scheme is Rs. 7.06 lakhs and income from sale of grass will be Rs. 1.05 lakhs during the Plan period.

94. *Soil Conservation in Mine Spoils*—Erosion from mine spoils makes the adjoining land unproductive. Planting of suitable grasses and tree species would check soil erosion in the mine spoils and would result in additional production of fodder and timber. In the Third Five-Year Plan, it is proposed to initiate pilot work for reclamation of mine spoils. In the pilot centre, different grasses and trees will be tried and their performance will be observed. It is estimated to cover an area of 500 acres during the Plan period at the rate of 100 acres per year.

95. *Pilot Scheme for Control of Stream Bank Erosion*—Due to stream bank erosion, valuable crop lands, homes and properties are being affected each year. The problem is fairly widespread and requires urgent attention. During the Second Five-Year Plan, three pilot centres were started in Cuttack, Boudh-Phulbani and Sambalpur districts to evolve anti-erosion measures. Suitable techniques have been evolved in the above centres, and anti-erosion measures have been executed over 190 acres. During the Third Plan period, it is proposed to maintain this work at the above centres and to start two new centres in Ganjam and Balasore districts. An area of about 750 acres is estimated to be covered during Third Plan period.

96. *Soil Conservation in coastal sand-dunes*—There is vast acreage of waste lands adjoining the sea coast. Movement of sand makes the adjoining crop land unproductive. Plantation of trees like casuarina, cashewnut, eucalyptus (selected species) stabilises the movement of sand, and protects the adjoining crop lands from sand casting. Thus soil conservation in coastal area results in increase in food, fuel and timber production. During the Second Plan period, the scheme at a cost of Rs. 5.95 lakhs was executed under Forest programme. In the Third Plan, it is proposed to cover 10,000 acres at a cost of Rs. 10.0 lakhs. This scheme will, as before, be executed by the Forest Department.

97. *Establishment of Watershed Management Units for Control of Shifting Cultivation*—More than 12,000 sq. miles of land surface suffers from shifting cultivation and this affects the lives of about one million of tribal people. To rationalise shifting cultivation and to introduce proper land use programme, 10 Watershed Management Units have been established during the last part of the Second Five-Year Plan—five in Koraput district, one in Kalahandi district, three in Phulbani district and one in Keonjhar district. The total area covered by different anti-erosion measures under the above programme is 5,608 acres (up to June 1960) and it is proposed to cover 12,862 acres more during the remaining period of the Second Plan. In the Third Plan, the scheme will be continued in the central sector programme of Backward Classes. A portion of the provision will be utilised for lay-out and development of progeny orchards and fruit nurseries for supply of grafts to the tribal population and also for lay-out of pilot projects for propagation of coffee and cocoa plantations.

98. *Pilot Demonstration for Control of shifting cultivation*—It is proposed to set up two demonstration farms in South Kalahandi and West Keonjhar, where shifting cultivation is very widely practised and soil conservation work has not yet been started. Proper land use will be demonstrated and different experiments will be conducted to find out suitable grasses, legumes, fruit trees and plantation crops that would be suitable for the locality and accepted by the Adibasis. The selected species will be multiplied in the above centres and seeds and seedlings will be made available for soil conservation work in the locality. Each farm will include about 250 acres, and will be managed by one Senior Soil Conservation Assistant and 2 Surveyors. A sum of Rs. 1.06 lakhs has been provided for layout and maintenance of the farms and the total estimated cost under the scheme is Rs. 2.00 lakhs during the Third Plan period.



The problem of shifting cultivation and proper land husbandry in the tribal area will receive more comprehensive attention in the Special Multipurpose Blocks which will be set up under the Central Sector of the Backward Classes Programme in the Third Plan.

99. *Establishment of Soil Conservation Training School*—At present, there are 2 Soil Conservation Training Schools—one at Rajgangpur and the other at Koraput. The Soil Conservation Training School admits Matriculates or candidates having equivalent qualification and trains them in soil conservation techniques for appointment as Surveyors and Soil Conservation Sub-Assistants. The duration of the training is six months. It is proposed to extend the duration of the training to 11 months as it is not possible to cover the entire syllabus in less time. The total requirement of surveyors and Sub-Assistants during the Third Plan period is 497. The above requirement also includes the staff that will be required for execution of the Soil Conservation Programme under Community Development and Backward Classes. It is proposed to increase the number of students to be trained both at Koraput and Rajgangpur from 25 to 50 each from the beginning of the Third Five-Year Plan period. Thus, 100 students will be trained annually in the Soil Conservation Training Schools.

100. *Training of personnel in Soil Conservation*—During the Third Plan period, it is estimated that three Soil Conservation Officers, seventeen Assistant Soil Conservation Officers and 117 Soil Conservation Assistants will be required. It is proposed that the existing scheme will continue in the Third Plan period and fifteen officers, and eighty Soil Conservation Assistants will be trained.

## 7. FISHERIES

101. Although complete survey of fisheries resources has not been possible till now the State has approximately the following water areas capable of development. :—

Off-shore fishing areas 200 × 15 miles	..	3,000	Square miles
Deep water fishing area	.. ..	3,000	Ditto
Estuarine fishing area including Chilka lake.	..	1,150	Ditto
Reservoirs and river pools	..	890	Ditto
		<hr/>	
Total	..	8,040	square miles
		<hr/>	

In addition, culturable water area is approximately estimated at —

Swamps	..	1,00,000	acres
Small tanks	..	4,00,000	do.
Marine swamps	..	50,000	do.
		<hr/>	
		5,50,000	acres
		<hr/>	

102. *Problems facing the State prior to the First Plan*—Investigation into the conditions of the fishing industry clearly brought out the fact that prior to First Plan the yield of fish from culturable water areas was only in the region of 100 lbs. per acre which did not make the industry economical except in the coastal areas where on account of availability of fish seed the yield was higher and some tanks were used for fish culture. In all the districts in the interior, culture of major Indian carps was unknown. In the marine areas the industry was financed by petty money-lenders and improved methods of capture were not known. The estuarine area, except Chillka lake, which had a well developed fishery suffered from want of communication and refrigeration facilities.

103. *Achievement during the First Plan*—Considering the natural handicaps of Orissa about harbour facilities for plying of improved marine craft, emphasis was laid on the development of inland fisheries in the First Plan. Out of a plan provision of Rs. 31·20 lakhs, a sum of Rs. 25·2 lakhs was spent on collection of fish seed, rearing in nurseries up to fingerling stage and supplying the same to fish farmers. It was soon found that the mortality of fish seed in nurseries was very heavy and number of them also died in transit. Until the problems of the technique of rearing the spawn and transport could be tackled it was visualised that the fish seed industry could not be placed on sound footing. The average yield of fingerlings was only 15,000 per acre and as this yield was valued at Rs. 100 only, the industry could not be economical. Intensive research work both in the laboratory and in the field was taken up jointly by the Central and State Fisheries and towards the end of the Plan it was possible to raise the average yield per acre from 15,000 fingerlings to 30,000 fingerlings per acre. This was on the basis of natural food available in the pond as a suitable artificial food for the minute fish fry had not been evolved.

It was realised that the unproductive swamps should be attempted for utilisation as fish farms and experiments were started in reclaiming deeply silted water areas. The problem was one of construction of dykes from silt without using piles which would make the operation very expensive. The problem was satisfactorily solved towards the end of the First Plan.

104. *Achievement in the Second Plan and approach to the Third Plan*—In the Second Plan special stress was laid on increasing production per acre by

- (i) improved farm practices and evolving suitable artificial food,
- (ii) Evolving suitable container for transport, and
- (iii) Eliminating unwanted species from the river collections.

Considerable success was achieved on all the 3 aspects and the yield per acre has gone up to one lakh making the fish seed industry more paying than the fish production industry, the yield being in the region of Rs. 750 gross and Rs. 400 net per acre. Rs 16.75 lakhs on actual fish seed production and Rs. 1.90 lakhs on research are estimated to be spent during the Second Plan.

105. With the development of the technique of construction of silt dykes and reclaiming deeply silted swamps 5 Demonstration fish farms using these technique were to be established in the Second Plan to train students in fish culture out of which 3 have already been established. It was found that dewatering in large swamps could not be done by manual labour and experiments were taken up to evolve power dewaterers. This has been successful and power dewaterers are now in routine use in the department. Towards the middle of the Second Plan the major problems facing the fish farmers had been solved to a great extent particularly in the spheres of—

Economic fish seed production,  
Economic fish seed transport,  
Dewatering, and  
Construction of fish farms.

106. The problem of exploitation with simpler type of nets has also been tackled and it has been found that Gill nets of a special type are likely to be useful in netting operations and this will also ensure a saving in man-power. With this background both fish seed production and fish culture have reached a level of technical development to be treated as a profitable industry in the Third Plan period.

107. During the Second Plan these technical developments have made fish culture possible in small tanks by the Grama Panchayats. On account of wide spread fish culture by Grama Panchayats their resources are estimated to have increased by Rs. 14 lakhs.

108. A pilot scale ice plant located in the Mahanadi estuary about 52 miles away from the Railhead has led to expansion of fresh fish trade and greater earnings of the fishermen indicating that provision of pilot ice plants on the fishing grounds will go a long way in rapidly improving the fishing industry. Even in the Inland Section, pockets of production have been formed requiring preservation facilities.

109. In other spheres the work was mainly experimental. Power Fishing from small boats was carried out in the sea which has indicated that the Orissa coast will require medium size boats for commercial exploitation of the off-shore waters. Power fishing was taken up in the Hirakud Reservoir leading to successful fishing with nylon gill nets. Power fishing in the estuary indicated that the fish population is spread out and it will not be economical to use power boats with the present level of our technical knowledge. Research on by-products led to a private Agar-Agar-cum-Liver Oil Factory being set up with financial assistance from State Government.

110. The programmes in the Third Plan are outlined below :—

Inland pisciculture should be expanded rapidly and more capital invested. To this end Rs. 1 crore has been provided under the C. D. and Grama Panchayat Programmes. The Fisheries Department will arrange increased supply of spawn and fingerlings of improved varieties. This has been included in the Fisheries plan providing for 9,500 cups of spawn (1 cup=50,000) and 4 crores fingerlings which will lead ultimately to 3,000 tons of fish.

Improved methods of fishing evolved will be introduced in reservoirs and stocking taken up in unproductive ones. A scheme has been included under which reservoirs will be stocked and fishermen will be assisted with improved gears. The Production of 100 tons is expected from these operations.

Need for small ice factories has been felt for preservation and marketing of inland fish. Four pilot ice factories will be established and will produce 560 tons of ice.

There has been considerable demand for improved gear and this need will be met where fishermen will be assisted with various equipment and a production of 100 tons has been estimated.

Proper development of off-shore fishing is now possible by introducing larger power boats. Thirty boats will operate to land 5,000 tons of fish during the Third Plan.

Suitable techniques have been evolved in the Second Plan to establish a pilot factory for manufacture of fisheries by-products such as frozen fish, canned fish, fish meal, etc. 1,000 tons of fish are estimated to be available as finished products during the Third Plan.

Pilot experiments having shown the need for assistance to marine fishermen, a scheme has been formulated under which assistance will be provided with capital and improved equipment to produce 1,000 tons of fish over the present level.

Sufficient experience has been gained in reclaiming the foreshore of Chilika lake to proceed with reclamation of 8,000 acres for paddy and fish, part of which will be done with the help of dredger. This will produce 6,400 acres of paddy land and about 100 tons of fish during the Plan period.

Ten fish farms will be rendered suitable for training purposes.

Research will be undertaken on methods of higher fish production per acre. Conservation of fisheries in Chilika lake, deep water fishing and utilisation of by-products have been provided for.

Pisciculture programme in the Blocks has led to demand for technical advice and Extension workers have been provided in the district level to guide the Block Development Officers.

The major scheme on survey will be the Hydrographic survey of the Chilka lake which has been provided for.

For ensuring efficient supervision of the working of all these schemes due provision has been made for additional staff.

111. Necessary co-ordination has been carried out with the efforts provided for in other allied programmes in formulating the Fisheries Plan. In the C. D. Programme provision has been made for stipend for training and for renovation of tanks for fry and fish culture in Blocks to the

extent of Rs. 50 lakhs. The Grama Panchayat Department will take similar action to provide another Rs. 50 lakhs. This will bring under additional fish culture approximately 10,000 acres of water area. The Tribal and Rural Welfare Department will establish subsidised fish seed centres in backward areas and arrange for training of students, while under the programme for Co-operation subsidy and staff for management of Fishermen Co-operatives and also capital, wherever possible, have been duly accounted for.

## 8. WAREHOUSING AND MARKETING

112. The developmental activities relating to 'Marketing' are mainly confined to (1) Regulation of Markets, (2) Establishment of licensed warehouses, (3) Integrated scheme of market intelligence, (4) Grading and Standardisation, (5) Training of personnel and (6) Marketing survey and extension. Schemes for the above were introduced in the Second Plan period and it is proposed to continue the activities with greater emphasis in the Third Plan by bringing almost all the important market centres under the purview of regulation, establishing 20 licensed warehouses in important assembling and distributing centres, undertaking grading of commodities under 'Agmark', disseminating up-to-date market intelligence, conducting marketing survey and undertaking marketing extension work particularly in the block areas.

113. The object of market regulation is to standardise the existing market charges and practices so as to secure orderly marketing and fair price by open competition to the primary producers. Besides, proper facilities for grading and auction will be provided in the market yards which will be specially set up for the purpose. These yards will work under the direct supervision and management of Market Committee consisting of representatives from the growers, traders, etc. In addition, correct weighing, prompt payment of sale-proceeds and arbitration in case of disputes will be ensured in the regulated markets to the best advantage of all users of the market. The different warehouses to be set up in the State will provide scientific storage facilities. The depositors can also obtain cheap credit from the Banks to meet their immediate needs on pledge of the Warehouse Receipt against the produce stored. Grading of produce under Agmark will also be undertaken intensively in the market yards and for this purpose laboratories will be set up at convenient centres. Agmark Emporia will be opened in important consuming centres in order to create consumers preference for graded products.

114. The Market Intelligence Scheme envisages collection of up-to-date market information relating to arrivals, stocks, despatches and prices of important agricultural commodities as well as market sentiment and dissemination of the same in the regulated markets and other important markets of the State so that the producer will be in a stronger position to bargain for his produce. A market bulletin will be prepared for broadcasting through the A. I. R., Cuttack, and publication in the local newspapers. Under the Marketing Survey Research and Extension Scheme the primary producer will be acquainted with the benefits of market regulations, warehouses, grading of produce, etc.

115. In order to undertake various marketing development programmes, suitable candidates will be deputed to undergo training in market regulation, grading of produce, market study and research, etc. imparted by the Agricultural Marketing Adviser, Economic and Statistical Adviser to Government of India and others.

#### 9—CO-OPERATION

116. The National Development Council in its meeting on the 9th November 1958, considered the role of the co-operative movement and recommended that it should be developed so as to bring within its fold all the rural families before the end of the Third Five-Year Plan. With that objective in view, the State Governments were advised to make special efforts to revitalise the existing small-sized credit societies. The chief features of the policy recommendations of the National Development Council have been kept in view by the State Government while formulating the schemes for the years 1959-60 and 1960-61.

117. So far as this State is concerned, it is considered that it will not be possible to achieve the above target laid down by National Development Council, in view of the various difficulties like non-availability of non-official leadership, want of trained personnel, inadequate credit facilities and administrative difficulties. It is, therefore, proposed that about 75 per cent of the agricultural population of the State will be brought under Co-operative fold by end of the Third Plan period. At present, there are 8,356 Agricultural Credit Societies in this State. 500 of these are moribund societies which may have to be liquidated. 500 more societies may be eliminated by the process of amalgamation of small societies. So, there will remain about 7,000 societies to cover up all the Grama Panchayat areas of the State. There is no need for organising new agricultural credit co-

operative society as such and many of the existing societies need be revitalised. 744 Societies have been taken up for revitalisation during the Second Plan. It is proposed to revitalise 2,000 societies during the Third Plan period.

118. *Per capita Credit Investment*—The *per capita* credit investment of short and medium term loans was Rs. 43 by end of the year 1958-59. By end of the Second plan Period, it is expected to rise up to Rs. 55. The Third Plan provides for more intensive development in this regard and the *per capita* investment is expected to rise up to Rs. 100. This is exclusive of the average *per capita* paddy loan of 3 maunds valued at Rs. 30 which is provided in most areas of the State.

119. The following schemes have been proposed under the Third Five-Year Plan :—

*Revitalisation of small-sized credit societies*—In the Third Five-Year Plan period it is proposed to revitalise 2,000 small sized societies at the rate of 400 every year, so as to ultimately convert them into Service Co-operatives. These societies will have a membership of 7½ lakhs. Each society is proposed to be given a subsidy of Rs. 900 over a period of five years to meet its managerial cost. The total requirement on account of payment of subsidy during the Third Plan period would come to Rs. 12.80 lakhs. Godown facilities for small sized societies are not available at present. It is proposed to construct 500 godowns for 500 revitalised societies during the Third Plan period and the cost on this account comes to Rs. 25 lakhs.

*Reorganisation of Central Co-operative Banks*—During the Second Plan period the Central Co-operative Banks of the State have been reorganised and the number of central Banks has been reduced from 25 to 17.

To enable the Central Banks to cope with the increased volume of work during the Third Plan period when the total investment will be more than doubled, it is necessary to give subsidy to them to meet the cost of additional supervisory staff. Subsidy will be given for 3 years. 490 more supervisors are required to be appointed by the Central Banks and the total requirement of subsidy on this account will be Rs. 5.65 lakhs. Besides, there will be a spill over expenditure of Rs. 0.36 lakhs on account of 90 Supervisors provided for in the Second Plan period. Thus the total out-lay for the Third Plan on this account has been proposed at Rs. 6.01 lakhs.



*Opening of Branches of Central Banks*—In order to enable the Central Banks to work efficiently for catering to the credit needs of their affiliated societies, it is proposed to open some branches for some Central Banks. There are at present 17 Central Co-operative Banks with 10 branches. During the Third Plan period 28 more branch offices are proposed to be opened and subsidy of Rs. 6,000 will be given to the Central Banks for opening each branch office, which will be phased over a period of 3 years. So, the total outlay provided on this account is Rs. 1.24 lakhs.

*Co-operative Land Mortgage Bank*—The State Co-operative Land Mortgage Bank has been reorganised during the Second Plan period with financial assistance from Government in shape of share capital contribution and staff subsidy. This Bank has opened branches and agencies and has extended its jurisdiction, but it is found that such agencies are not efficient enough to cater to the growing demand of long-term credit. During 1960-61, 10 Primary Land Mortgage Banks are expected to be organised under the State Co-operative Land Mortgage Bank. During the Third Plan period, the activities of the Bank will be strengthened further by additional Government share capital contribution.

During the Third Plan period, it is proposed to organise 10 more Primary Land Mortgage Banks at important Subdivisional Headquarters. Each Primary Land Mortgage Bank will be given a subsidy of Rs. 5,000 phased over a period of 3 years to meet its managerial cost. The total requirement on this account comes to Rs. 0.50 lakhs.

*Establishment of Regional Marketing Co-operative Societies*—During the Second Plan period 30 Regional Marketing Societies have been organised. The business of the Regional Marketing Co-operative Societies is being gradually expanded. Monopoly in distribution of chemical fertiliser has been given by Government to the State Co-operative Marketing Society, which handles the fertiliser business through the Regional Marketing Co-operative Societies. It is proposed to organise 30 more Regional Marketing Co-operative Societies during the Third Plan period. Each Regional Marketing Society will be given a staff subsidy of Rs. 7,000 in a sliding scale for 3 years, a loan of Rs. 25,000 for construction of a main godown and a loan of Rs. 10,000 for construction of subsidiary godown. Besides, share capital of Rs. 25,000 is proposed to be contributed by Government in each Regional Marketing Society. The total outlay under the scheme for the Third Plan period is Rs. 26.10 lakhs.

*Organisation of Fishery Societies*—A lump provision of Rs. 10 lakhs has been made for giving financial aid to the Fisheries Societies. The details of the scheme are under examination.

*Establishment of House Building Societies*—The Orissa State Co-operative Housing Corporation will increase its activities in the Third Plan period and in view of the small margin obtained by the Corporation over its investments, which are of a long-term nature, it is proposed to give a subsidy of Rs. 15,000 every year during the Third Plan period and the total outlay on this account comes to Rs. 75,000.

*Jute Baling Plant*—The Second Plan provided for organisation of three Jute Baling Plants, which are expected to be set up during the year 1960-61. In the Third Five-Year Plan period, it is proposed to set up 20 such plants. Each such unit will be given financial assistance of Rs. 85,000 covering subsidy for staff, share capital, godown etc. The total cost on account of 20 Jute Baling Plants proposed during the Third Plan period will come to Rs. 16.73 lakhs leaving a balance of Rs. 27,000 to be spent after the Third Plan period.

*Cotton Ginning and Pressing Factories*—During the Third Plan period it is proposed to set up 5 cotton ginning and pressing factories in the irrigated areas under Hirakud Dam. Each Unit will be given a subsidy of Rs. 10,000 spread over 3 years for maintenance of staff, Rs. 25,000 as share capital and Rs. 25,000 as loan for construction of godown. The total outlay under the Scheme for the Third Plan period comes to Rs. 3 lakhs.

*Rice Huller Units*—These units have been taken up in the Second Plan period to meet the problem of lack of adequate milling facility in the Regional Marketing Co-operative Societies in the State. During the Third Plan period, it is proposed to set up 50 Rice Huller Units in addition to 30 already sanctioned in the Second Plan period. In conformity with the approved pattern of Central assistance, each unit will be given a subsidy of Rs. 2,500 approximately during the first 3 years for maintenance of staff and a share capital of Rs. 20,000 only. Thus a total provision of Rs. 11.25 lakhs will be required in the Third Plan period. In addition, provision has been made to the extent of Rs. 0.30 lakhs on account of spill over expenditure of the Second Plan.

*Cold Storage Plants*—It is proposed to set up 6 Cold Storage Plants on Co-operative basis during the Third Five-Year Plan period. Each Cold Storage Plant would be provided with financial assistance of Rs. 3 lakhs covering staff, land, building, machinery etc., and other requirements.

The total provision proposed on account of the 6 Cold Storage Plants calculated on the above basis comes to Rs. 18.75 lakhs.

*Co-operative farming and experiment*—Little progress has been made in the Second Plan period in this direction and intensive work is proposed to be done in the Third Plan period. It is proposed to organise 230 Co-operative Farming Societies. Each Farming Society is proposed to be given financial assistance to the extent of Rs. 8,800 covering share capital loans and subsidy for godowns and staff subsidy etc.

The total provision proposed under the scheme for 230 Co-operative Farming Societies comes to Rs. 19.82 lakhs, leaving a balance of Rs. 42,000 to be spent after the Third Plan Period. Necessary provision for appointment of technical staff to supervise the work of Co-operative Farming Societies has been made under the departmental re-organisation scheme. It is presumed that the credit requirements of these societies will be met by the normal banking channels.

*Co-operative Training*—Nearly 600 Inspectors will have to be trained in the Third Plan Period and a large number of supervisors of Central Co-operative Banks will also have to undergo this training course. The existing capacity of the two training institutes, run by the State Government, is 80 candidates per session of 9 months duration, at the rate of 40 candidates per School. To cope with the increasing needs of the situation, it is proposed to establish a new training institute, the details of which are under examination in consultation with the Reserve Bank of India.

The training programme for non-officials which is organised by the Orissa State Co-operative Union will also have to be intensified during the Third Plan. It is proposed that all Secretaries and Members of the new Societies to be organised during the Third Plan will have to be trained. Besides, the Secretaries and Members of the old Societies who have not been trained so far, will also have to be trained. It is proposed that at least 1,000 Societies will be covered under the training programme annually. As the existing 13 Units of peripatetic training

centers are not sufficient, it is proposed to set up 13 additional training units for non-official members during Third Plan Period. The cost of organising additional 13 units will come to Rs. 7.67 lakhs, which will be given to the Orissa State Co-operative Union as subsidy. Besides, provision of Rs. 8.45 lakhs will have to be made for the purpose of giving subsidy to State Co-operative Union for running the existing 13 training units. In addition, provision of Rs. 15,000 is proposed for purchase of a Station Wagon, to enable the Co-operative Union to supervise all the training units. The total provision under this programme is proposed therefore at Rs. 28.48 lakhs.

*Publicity and Propaganda*—Provision has been made in the following scale for giving subsidy to the Orissa State Co-operative Union for carrying on publicity and propaganda to popularise the Co-operative movement :—

	Rs.
(i) Celebration of Co-operative week at the rate of Rs. 10,000 per year.	50,000
(ii) Meetings and Conferences at the rate of Rs. 10,000 per year.	50,000
(iii) Publication of Magazines and propaganda literature at the rate of Rs. 20,000 per year	1,00,000
(iv) Films at the rate of Rs. 20,000 per year,	1,00,000
(v) (a) 2 Vehicles and 2 Projector Units in addition to the existing Unit in order to have 3 sets in the 3 Revenue Divisions.	50,000
(b) Cost of running expenses including staff and petrol.	1,00,000
<b>Total</b>	<b>Rs. 4,50,000</b>

*Departmental Reorganisation*—It is expected that the work-load, of the Co-operative Department during the Third Five-Year Plan will increase considerably, as the total number of Co-operative Societies of all kinds will be increased to 15,000 approximately. Taking 800 Societies to be the work-load for each Assistant Registrar's Circle it is estimated that there will be 19 such circles. As the present number of circles is 16 only, 3 additional Assistant Registrars' Circles will be needed. Calculated at the rate of 1 Inspector for 40 Societies, 375 additional Inspectors will be required during the Third Plan period. The Audit Circles will also have to be increased by 2, so as to make a total number of 8 Audit Circles. Besides, 250 additional Auditors will have to be appointed during the Third Plan Period, of whom about 62 should be Sub-Assistant Registrars and Senior Inspectors. For organising Co-operative Farming Societies, there should be 1 Sub-Assistant Registrar, 1 Agricultural Supervisor, 1 Agricultural Overseer and 2 Fieldman Demonstrators in each District. 3 Regional Officers in the rank of Assistant Registrar will also be necessary to supervise the work. The additional staff will be appointed in a phased manner. The total expenditure on account of the scheme would come to Rs. 42.80 lakhs.

## 10. COMMUNITY DEVELOPMENT

120. The whole State is ultimately to be covered by 307 Blocks. Of these, 178 blocks have been opened in the First and Second Plans. These are now in various stages—Pre-extension, Stage I and Stage II. The existing Stage II Blocks will become Stage III during the Third Plan period. Stage III will have a provision of Rs. 5 lakhs as in the case of Stage II.

121. The Planning Commission has not found it possible to allot the full amount required and has limited the allocation to Rs. 300 crores. The question of adjusting the Community Development programme of the plan within the reduced ceiling was discussed at length in the National Conference of Development Commissioners held at Srinagar in June 1960. The consensus of opinion in the Conference was that greater control than hitherto should be exercised on the release of funds to each block and that the release of funds should be linked to performance. Certain concrete tests are proposed to be furnished in consultation with State Governments for converting Pre-extension blocks into Stage I blocks and for allotting funds year after year to the Stage I Blocks. Such a procedure, it was felt, would not only help in keeping the expenditure

within the Plan ceiling but also ensure better utilisation of available funds and better attainment of the objectives of Community Development by neulocating healthier spirit of competition among the Blocks.

122. The Plan proposals of Orissa have been calculated keeping the above decisions in view. A sum of Rs. 26.68 crores will be required if the full cost of all the Blocks is to be provided on the basis of the Schematic Budget. But it is felt that Rs. 17.50 crores would be sufficient if the availability of trained personnel of various categories and the stricter scrutiny on the basis of the proposed tests are taken into account. The entire State will be covered by Blocks by October, 1963.

### 11. VILLAGE PANCHAYATS

123. The beginning of the Third Five Year Plan in Orissa synchronises with the introduction of democratic institutions at the District and Block levels in addition to Panchayats which function at the village level. For the smooth working of the new system, it has been decided to reorganise the Panchayats with reduced population. After reorganisation, the number of Panchayats in the State is likely to be 8,000 in place of 2,347 at present functioning. The Third Five Year Plan will be formulated against the background of this development and the achievements of the Second Plan.

124. The Second Plan allocation for the Panchayats excluding pisciculture is Rs.70 lakhs against which the expenditure by the end of 1960-61 will be of the order of Rs. 53.67 lakhs. The shortfall is due to a subsequent decision of Government to reduce the rate of subsidy to be given to the Panchayats for appointment of Secretaries.

125. Five broad objectives have been kept in view for the Third Plan—

- (1) Organisation of Panchayati Raj,
- (2) Reorganisation of Panchayats,
- (3) Augmenting the resources of the Panchayats
- (4) Training for the members of the Panchayats and the Panchayat Samitis and the employees of the Panchayats, and
- (5) Provision for amenity programme.

(1) *Organisation of Panchayati Raj*—This is a new Scheme. Zilla Parishads and Panchayat Samitis will be set up under the Orissa Zilla Parishad Act, 1959. Provision has to be made for office buildings and

staff, etc. for the Zilla Parishads. Office buildings are available in six districts which have got District Boards. In the remaining districts, Office buildings will have to be constructed at a cost of Rs. 20,000 each. Every Zilla Parishad will have to be provided with a nucleus staff consisting of a Senior Deputy Collector who will function as the Executive Officer of the Zilla Parishad with necessary clerical and Class IV staff. In order to enable the Chairman, the Vice-Chairman and the Executive Officer of the Zilla Parishad to supervise and guide the working of the Panchayat Samitis and the Grama Panchayats, it will be necessary to provide a motor vehicle to each Zilla Parishad. A sum of Rs. 15 lakhs has been provided in the Third Plan for the establishment and organisation of Panchayati Raj as against an anticipated requirement of Rs. 18,68,660.

(2) *Reorganisation of Panchayats*—Reorganisation of Panchayats requires provision of two types :—

(i) *Initial Grants*—The system of giving initial grants to Panchayats has been in existence in the State since 1952. The provision is meant to enable a Panchayat when it comes into existence to have the barest minimum of wherewithal for setting up an office, having a few furniture and purchasing some stationery. Considering the number of Panchayats it has been decided to reduce the quantum of initial grant from Rs. 150 to Rs. 100 per Panchayat. An amount of Rs. 5.60 lakhs is needed for 5,600 new Panchayats which will come into being as a result of forming Panchayats with reduced population coverage.

(ii) *Organisation and supervision of Panchayats*—With the number of panchayats increasing almost four times on reorganisation, considerable expansion of the staff is needed for inspection and supervision. A very modest provision of funds for organisation and supervision of Panchayats at a cost of Rs. 22.91 lakhs during the Third Plan has been made. There will be two Deputy Directors, six Regional Assistant Directors and 40 Grama Panchayat Organisers as against the present strength of one Deputy Director, three Regional Assistant Directors and 18 Gram Panchayat Organisers.

There are at present 112 numbers of field staff who have been attending to audit in addition to extension work. It is proposed to separate audit from administration. The existing field staff will be solely devoted to audit. For extension work, it is proposed to appoint 340 Extension Officers (including leave reserve) at the rate of one per Block. 50 per

cent of the expenditure on account of the pay and allowances of the Extension Officers will be borne by the Community Development Department. The appointment of the staff will be phased according to the programme of opening of Blocks in the State.

(3) *Augmenting the income of Panchayats* :—

(i) *Pisciculture*—It is a continuing scheme. Out of a provision of Rs. 25 lakhs made in the Second Plan, Rs. 20.59 lakhs has been given as financial assistance to the Panchayats on half-loan and half-grant basis upto the end of 1959-60. There is a provision of Rs. 2 lakhs for 1960-61. About 40,000 tanks have so far been transferred to the Panchayats. The acreage at present under pisciculture by Panchayats has been assessed at 8,500 acres. 953 Panchayats have till now received assistance leaving 7,047 Panchayats to be helped during the Third Plan.

Pisciculture being one of the most lucrative schemes for developing internal resources of Panchayats, a sum of Rs. 40 lakhs has been provided in the Plan for this purpose. The target is to renovate and bring under pisciculture 3,200 acres of additional water area out of which 200 acres will be utilised as nurseries. The scale of expenditure per acre will be Rs. 1,250 which will be given to the Panchayats on half-grant and half-loan basis, as at present. The subsidy will be subject to the condition that half of it is utilised by the Panchayats for initial manuring, stocking and pay of trained staff. Loans will be sanctioned after proper technical survey. Expenses required for maintaining technical personnel will be met out of the Block budget and the budget of the Development (Fishery) Department. 40 acres of nursery will be put up every year which will go into production from the succeeding year and will yield 40 lakhs of fingerlings every year at the rate of 1 lakh fingerlings per acre.

(ii) *Other Remunerative Schemes*—It is a continuing scheme. There is a provision of Rs. 10 lakhs during the Second Plan. A loan of Rs. 8,37,000 has been sanctioned up to the end of 1959-60. There is a provision of Rs. 4 lakhs for 1960-61. By the end of the Second Plan period 1,350 Panchayats will have received loans under this scheme and improvement to 250 markets and 150 cattle pounds effected.

The State Government have transferred public properties, like hats, markets, ferries, fisheries, cattle-pounds etc. to the control and management of the Panchayats. It has been the policy to enable every Panchayat to derive a substantial income from these sources. In order



that the Panchayats can be lawfully enabled to collect fees, rates, etc. by rendering specific services and at the same time, the income from these sources may progressively increase, Panchayats are required to maintain these public properties in good condition and in respect of each, to provide amenities and to effect improvements. There are other remunerative enterprises like Poultry farming and Composting which Panchayats can easily undertake. Development of waste land through afforestation and growing of orchard and fodder crop will receive special emphasis during the Third Plan.

Panchayats are required to participate in the agricultural schemes for stepping up of food production, for which they have to find initial capital. Certain amount out of this provision has to be given to them as loan for this purpose.

The total outlay which will be required for all these schemes will be too much for the State Government to muster and so only a modest amount of Rs. 10 lakhs has been provided in the Third Plan at the rate of Rs. 2 lakhs per year.

(4) *Training for Members of Panchayats, Panchayat Samitis and employees of the Panchayats :—*

(i) *Training of Panchayat Secretaries*—There was a provision of Rs. 5 lakhs in the Second Plan for training of the members and Secretaries of the Panchayats. The training was imparted through seminars and Seasonal Training Camps organised by the Orissa State Co-operative Union. An amount of Rs. 2,95,474 has been expended up to the end of 1959-60 and there is a provision of Rs. 4 lakhs for the current year. In order to make training of Panchayat Secretaries comprehensive, 5 Departmental Institutions were started during the last quarter of 1959-60. The training Institutions run throughout the year and are managed by Departmental Officers. There will be six such institutions during the Third-Plan. Each institution will train up 200 trainees a year. There will be four sessions of three months duration each. The number of Secretaries to be trained during the Third Plan period will be of the order of 6,000. The annual cost will be Rs. 3,54,500. A total outlay of Rs. 17.73 lakhs has been proposed for the Third Plan.

(ii) *Training of Non-officials*—In order to prepare non-officials for the responsibilities they will have to shoulder under the new set up, it is proposed to organise a course of training for them during the Third Plan

The training will be of a seminar type lasting for about 7 days. There will be 24,000 non-officials to receive such training during the Third Plan period. Rs. 2 per head per day will be required. Rs. 1.50nP. per head per day except for the Naib Sarpanches will come from the Block budget. The total cost of the scheme has been estimated at Rs. 7 lakhs during the Third Plan period against which a provision of Rs. 5 lakhs only has been made.

(5) *Provision for Amenity Programme—*

(i) *Panchayat Grain Golas:—*This is a continuing scheme. Against the Second Plan provision of Rs. 16 lakhs there has been an expenditure of Rs. 15,76,012 upto the end of 1959-60. There is a provision of Rs. 4,12,500 for 1960-61. The excess has been found by diversion from the overall plan ceiling. Besides funds have been obtained from other Departments. 3,000 Grain Golas would be constructed by the end of the Second Five Year Plan. Since the policy of Government is to construct a Grain Gola building at the headquarters of each Panchayat and there will be about 8,000 Panchayats during the Third Plan, there is need for providing for 5,000 additional Grain Gola buildings. As against this requirement, provision has been made for construction of only 500 Grain Golas at a cost of Rs. 30 lakhs during the Third Plan period.

(ii) *Construction of Panchayat Roads—*There was a provision of Rs. 10 lakhs in the Second Plan. But the scheme was discontinued from 1957-58 after an expenditure of Rs. 1,38,100, because urgent need for construction of Grain Golas was felt and the balance provision under the scheme was diverted for construction of Grain Golas.

This State is very backward in the matter of communications particularly in rural areas. There is an insistent demand from the people for linking up bigger villages in a Panchayat with each other and with the headquarters and connecting the headquarters with market places, business centres and all-weather roads. A sum of Rs. 5 lakhs has been provided in the Third Plan to meet more urgent needs. The cost of laying new roads has been estimated at Rs. 1,000 per mile out of which Rs. 500 only will be met by Government in the shape of subsidy, the balance being met by Panchayats.

(iii) *Construction of Panchayat Ghars—*There are no office buildings for Panchayats. Some of them are using one of the rooms of the Grain Gola for their office while others have taken houses on rent. With the growth

of functions of Grain Gola, no space will be available in the Grain Gola building. It has therefore been decided that at least Panchayats of tribal and backward areas should be given some financial assistance for construction of office buildings. The minimum cost of such a building will be Rs. 3,000. A sum of Rs. 10 lakhs is provided for the purpose during the Third Plan. It will provide 333 Panchayats of backward areas with office accommodation.

126. *Quarters for Grama Panchayat Organisers*—Gazetted Officers generally of the Orissa Subordinate Civil Service have been posted to district headquarters and to Subdivisional headquarters as Grama Panchayat Organisers in order to help Collectors and Subdivisional Officers in Panchayat administration. No quarters have been provided for these Officers. There will be 40 such officers during the Third Plan. A total amount of Rs. 3,20,000 has been provided for constructing quarters for them during the Third Plan at the rate of Rs. 8,000 each.

127. *A Printing Press for the Grama Panchayat Department*—Grama Panchayats are required to maintain various forms and registers prescribed under the Grama Panchayat Act and the rules made thereunder and instructions issued to them from time to time. With 8,000 Panchayats operating in the State, a huge quantity of such forms will be required to be printed. Under the Local Authorities Loans Act and the rules made thereunder all applications for loans received from Panchayats are required to be published by Government for the information of the public and for inviting objections, if any, before any such loan is sanctioned. The number of such loan applications under various heads runs into thousands. The Government Press finds it difficult to cope with it. Besides any circular meant for Panchayats will have to be made into 8,000 copies and cyclostyling will be costlier than printing. The Department has its magazine, Annual Administration Reports and Annual Audit Reports to print. With the formation of the Panchayat Samities, many more circulars, forms and other publications will have to be printed. It has, therefore, been decided to have a separate printing press. A sum of Rs. 2 lakhs has been provided for the purpose.

## CHAPTER III

### IRRIGATION AND POWER

An underdeveloped State like Orissa with impressive potential for development both in the field of agriculture and industry has necessarily to devote a large chunk of its resources to irrigation and power. Water for the field and electricity for industry are the two prerequisite economic overheads without which appreciable progress either in the field of agriculture or in that of industry is not possible. In recognition of these factors both the First and Second Plans have placed considerable emphasis on projects designed to ensure rapid development of irrigation facilities and power generation. The process is ought to be intensified during the Third Plan.

#### IRRIGATION

2. The State Irrigation Department has estimated that the irrigation potential of Orissa that can be covered through Major and Medium Projects is 8.542 million acres. Prior to 1951 the existing irrigation under Major and Medium projects was in the order of 0.380 million acres. As a result of projects executed in First and Second Plan periods, it is estimated that by the end of 1960-61 an additional potential of 1.00 million acres would be created at outlets. During the Third Plan period an additional potential of 1.377 million acres is expected to be created at outlets. By 1965-66, therefore, the total potential at outlets is expected to be of the order of 2.757 million acres against the ultimate possible potential estimated at 8.542 million acre which constitutes a proportion of about 32.2 per cent. This slightly falls short of the All-India average of 35-36 per cent of irrigation potential aimed at in the Draft Third Five-Year Plan.

#### FIRST AND SECOND PLAN SCHEMES

3. At the beginning of the First Plan period i.e., in 1951, the area that was under major and medium irrigation is estimated to be 0.38 million acres. During the First Plan period under major irrigation, Hirakud Dam Project ( Stage I ) and Delta Irrigation Project were taken up for execution at an estimated cost of Rs. 68.34 crores (revised upto-date) and Rs. 25 crores (revised up-to-date) respectively aiming at an ultimate potential of 4.60 lakh acres in respect of Hirakud and 15.58 lakh acres in respect of the Delta Irrigation Project. These projects were kept outside the State's First Plan ceiling. In the second Plan both Hirakud and Delta Irrigation Projects were included in the State Plan and in addition a

number of medium irrigation projects were taken up. By the end of Second Plan the expenditure on Hirakud Stage I Project is expected to be Rs. 63.16 crores. On the Delta Irrigation project a sum of Rs. 10.44 crores is expected to be spent in the period 1956—61. In respect of the seven medium irrigation projects which were actually taken up for execution during the Second Plan period, a sum of Rs. 1.71 crores will have been spent by 1956—61. Hirakud Stage I Project will be completed in the Second Plan period. As such there will be no spillover into the Third Plan. In respect of Delta Irrigation Project, the original estimate was Rs. 14.92 crores which has now been revised to Rs. 25 crores. The spillover expenditure on this project from the Second to Third Plan is estimated at Rs. 15.06 crores against which an outlay of Rs. 11.30 crores is proposed for the Third Plan period, leaving a balance of Rs. 3.76 crores to be carried over to the Fourth Plan. In respect of the Medium Irrigation Projects, work on seven projects was taken up during the Second Plan period at an estimated cost of Rs. 7.79 crores. The spillover in respect of these projects is estimated to be of the order of Rs. 6.46 crores against which a sum of Rs. 6.41 crores is proposed for the Third Plan and the balance of Rs. 0.05 crore will be carried over to the Fourth Plan. While calculating the spillover expenditure, wherever possible, the actuals of the first four years of the Second Plan period and the budget estimates for 1960-61 have been taken into account.

4. In respect of irrigation benefits by the end of the Second Plan period Hirakud is expected to irrigate 4.60 lakh acres (3.80 in respect of Kharif and 0.80 in respect of second crop), Delta 2.50 lakh acres and of the 7 medium irrigation projects, only Salki is expected to irrigate 0.10 lakh acres. The additional area under irrigation as a result of projects executed during the First and Second Plan periods is, therefore, estimated to be 7.20 lakh acres. The following statement will explain :

Name of the Project	Ultimate potential	Potential to be created at outlets by the end of 1960-61	(in lakh acres)
			Anticipated utilisation by the end of 1960-61
1	2	3	4
Hirakud Stage I	4.60	4.60	4.60
Delta	15.58	5.288	2.500
Medium (Salki)	0.45	0.112	0.100
		<u>10.000</u>	<u>7.200</u>

## PROGRAMME FOR THE THIRD PLAN

5. Planning Commission in their draft outline of the Third Five-Year Plan have emphasised the need to secure the maximum benefits from the large investments that have been made on irrigation projects. As regards projects already completed and those in the process of completion and also in respect of new projects included in the State's Third Plan, effective measures are being taken to bridge the gap between completion of head works and distribution system and in the utilisation of water made available at channel outlets. Measures in this regard include: (i) synchronisation in the programme for construction of headworks, canals, distributaries, water courses and field channels so as to ensure that, as far as possible, the irrigation water can be passed down to the cultivators' fields about the same time as they become available at the head works, (ii) in order to eliminate delay in construction of water courses and field channels, their alignment should be marked by the project authorities in village maps and on the basis of these maps district and block authorities should get the field channels excavated by the beneficiaries in good time. The Orissa Irrigation Act contemplates this. (iii) A large number of other development activities like soil survey, setting up of experimental farms for evolving new cropping patterns etc, will also be taken up simultaneously for demonstrating scientific irrigation practices, particularly the economic use of water. The question of imposing water rates and betterment levy is also under active consideration of the State Government.

6. It is in the context of this background that the programme for the Third Plan has been drawn up. The irrigation programme for the Third Plan period under major and medium projects together with provision for investigation and flood control has been drawn up with a total provision of Rs. 23.21 crores out of which Rs. 17.71 crores is for continuing schemes, Rs. 3.50 crores for new schemes, Rs. 0.50 crore for investigation and Rs. 1.50 crores for flood control schemes. The details are briefly explained below:—

1. *Continuing Schemes*—Out of a total amount of Rs. 6.46 crores required for completing the spill-over works in respect of medium irrigation projects, a sum of Rs. 6.41 crores is provided for in the Third plan, carrying over a balance of Rs. 0.05 crore to the Fourth Plan. While doing so care has been taken to see that physical benefits accruing from the schemes become available by the end

of Third Plan period itself. In respect of Delta Irrigation Project against a spill-over of Rs. 15.06 crores, an outlay of Rs. 11.30 crores is proposed for the Third Plan. With the total outlay of Rs. 17.71 crores for continuing schemes, an additional irrigation potential of about 12.87 lakh acres will be created and the corresponding additional utilisation will be 9.46 lakh acres.

#### NEW SCHEMES

8. Six new Medium Irrigation Projects and one Major Irrigation Project viz. Bhimkund have been included in the State Plan with a financial provision of Rs. 3.50 crores. No irrigation benefit is expected to come from the Medium Irrigation Projects in the Third Plan period while the Bhimkund Project is expected to create an additional potential of 0.90 lakh acres at outlets and irrigate about 0.60 lakh acres during the Third Plan period. Annexure III will explain the benefits that will accrue at the end of the Third Plan from the continuing and new schemes.

#### INVESTIGATION

9. In order to ensure continuity for the development of water resources, prepare master Plans for long-term development of irrigation, to bring out clearly the ultimate potentialities and identify the possible irrigation and multipurpose schemes, to eliminate the uneconomic from economic projects and take up only the most economic ones for execution, a special investigation unit has been set up in the State during the Second Plan period which will continue to function during the Third Plan period. For purposes of investigation, a sum of Rs. 50 lakhs has been set apart in the Third Plan.

#### FLOOD CONTROL, DRAINAGE ETC.

10. Associated with Irrigation Schemes there are also relevant schemes concerned with flood control and measures to prevent deterioration of irrigated areas because of inadequate draining and waterlogging. Planning Commission in their Draft Outline have emphasised the importance of ensuring that the benefits which accrue from the irrigation projects are not "vitiated by any deterioration of land due to water logging and inadequate drainage and other causes". The problem of water logging in Hirakud area is at present, under active examination of Government. A total provision of Rs. 1.50 crores has been made in the Third Plan for flood control, drainage, anti-water logging and anti-sea erosion schemes.

11. *The Effect of Floods of August 1960* — It may be mentioned here that the above provision of Rs. 1.50 crores for flood control, drainage, anti-water logging schemes etc. is only a token provision. The huge amount required for constructing permanent works of flood control can hardly be accommodated in the State Plan without sacrificing important and urgent lines of development in other spheres. The State Government have always been of the view that these works should more appropriately be provided for in the Central Sector. They have also informed the Planning Commission accordingly in their letter No. 3032-P, dated the 29th April, 1960. The devastating floods of August 1960 have lent some urgency and poignancy to this problem. The State Engineers have estimated that about R. 42.10 crores will be necessary for making permanent improvements to the flood embankments and taking other allied measures. A memorandum to this effect has already been submitted to the Union Ministry of Irrigation and Power. The break-up of this estimate is given below :

1. Raising and strengthening the existing embankments and protecting the scoures along with the banks of the rivers to protect the embankments already constructed. .. Rs. 9.75 crores
2. To provide high level pitched or masonry escapes to act as spill way for the safety of the embankments situated adjacent to these spill ways (This will act as a safety valve against the abnormal rise of the level which creates unexpected conditions and causes breaches. These escapes will be provided at pre-determined places to drain away the spill water quickly without causing any damage to the life and property protected by the so-called capital embankments). .. Rs. 4.5 crores
3. Providing adequate drainage facilities and channel improvements in lower reaches to drain out accumulated water into the sea. .. Rs. 2.50 crores
4. Flood portion of multipurpose reservoirs in the upper reaches of these rivers. Though this has not been worked out in detail cost will approximately come to .. Rs. 11.00 crores



5. Transvalley diversions, for instance Doultola cut. These drainage schemes are under investigation (some of them have already reached their final stages of investigation. Yet a large number still remains to be investigated.) .. Rs. 9.00 crores
6. Raised mounds for the important village sites within the area adjacent to or protected by embankments. It is also desirable to raise the village sites in the area where the embankments are in a threatening condition by their collapse or breach. (The figure is quite inadequate but will set an example to the people who live within the protected embankments). .. Rs. 2.00 crores
7. Resettling the villages situated in between the flood plains of the river where flood plains have been seriously affected. A lot of compensation will have to be paid for removing the existing structures and the trees. .. Rs. 1.00 crores
8. Afforestation in the upper catchment of the rivers for soil conservation as well as retarding the adverse effects of concentrated torrential rain fall. .. Rs. 0.25 crores
9. For immediate restoration of the breached embankments and canals with masonry structures. .. Rs. 2.00 crores
- 
- Rs. 42.10 crores

12. Obviously the projects and the estimates mentioned above are tentative and have to be considered in the light of further studies and discussions with the Central Water and Power Commission. The recommendations of the Flood Enquiry Committee appointed by Government of Orissa in 1959 will also have to be considered. For the present, the State Government would urge that the problem of floods in Orissa be accepted as a special problem requiring a special programme of action in addition to the usual State plan.

## POWER

13. The total installed capacity in Orissa at the beginning of the First Plan was only 4,620 K. W. with *per capita* consumption as low as 0.35 KWHRS. against an All India average of 13.25 KWHRS. In the year 1951 the *per capita* consumption in some of the leading States of India is estimated to be as follows :

West Bengal	..	41.68
Bombay	..	43.95
Bihar	..	2.95
Madras	..	10.69

Orissa's *per capita* consumption of 0.35 KWHRS. as compared to the corresponding figures given above in respect of some of the leading States of India will bring out the state of backwardness in Orissa as it was in the year 1951 in the field of power consumption. As a result of the schemes executed in the First and Second Plan periods there has been an appreciable progress in the field of power generation. The *per capita* consumption of power at the end of First Plan and Second Plan is estimated to be 1.1 KWHRS and 2.17 KWHRS respectively. The additional increase in installed capacity in the First and Second Plan periods is estimated to be 16,285 K. W. and 1,84,724 K.W respectively. By the end of the Second Plan the total installed capacity of the electric supply undertakings of the State Government is estimated at 2,05,630 K. W. Its break-up is as follows :

Hirakud	..	1,60,500	(excluding Chiplima and 6th unit at Burla)
Maohkund	..	34,425	(Orissa's share)
Thermal and Diesel	..	10,705	

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2,05,630

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14. The expenditure on power schemes included in the First Plan is estimated at Rs. 481.55 lakhs excluding the expenditure incurred on the Hirakud Multipurpose Project. The corresponding figure in the Second Plan is expected to be Rs. 614.28 lakhs. In respect of investigation an

expenditure of Rs. 0.91 lakhs was incurred in the First Plan and a sum of Rs. 19.53 lakhs is expected to be spent by the end of Second Plan period.

### GROWTH OF INSTALLED CAPACITY AND DEMAND FOR POWER.

15. Although there has been appreciable increase in respect of installed capacity of Government installations from 21,000 K.W. in 1955-56 to 2,05,630 K.W. by the end of the Second Plan, simultaneously, there has also been tremendous increase in the demand for power as a result of rapid industrialisation, particularly in the northern districts of Orissa. The demand for power is estimated to have risen from 27,000 KW in 1955-56 to about 1,70,000 K W by 1960-61. On the threshold of the Third Plan the net position in regard to power generation and demand will be as follows :

16. Against an installed capacity of about 2,05,630 K W. anticipated in 1961, the firm power is estimated at 1,46,500 K W. It is expected that the above anticipated demand at the end of Second Plan period can be just met if the load factor is around 0.8 leaving some, though not adequate, stand-by generating capacity to meet emergencies. The pace of industrialisation will get intensified during the Third Plan period and maximum demand by 1965-66 is estimated to be 5,76,500 KW. During the Third Plan period, the second plan schemes in progress on full completion are likely to create an additional installed capacity of 1,09,500 KW. raising the firm power by 55,000 KW. After completion of all the continuing schemes, the total installed capacity will be of the order of 3,15,130 KW. with a firm capacity of 2,52,000 K.W. against the expected maximum demand of 5,76,500 K W. by 1965-66. This leaves a net deficit of 3,24,500 KW. of power demand on the basis of 0.8 Load factor which it should be the aim of Third Plan to make up as, otherwise, industrial development of Orissa will suffer a serious set back and many prospective industries will drift away from this to adjoining States. The State Government is firmly of the opinion that with a view to honour the commitments already made and ensure that the pace of industrialization in the State does not suffer a set back, massive expenditure on power Projects which will yield benefits during the Third Plan itself is inescapable. At the same time, provision should also be made to obtain additional installed capacity in the early years of the Fourth plan period. Other sectors of the economy like agriculture,

transport and communications, social services etc. are, no doubt, important but it is on the development of power potential during the Third Plan, that the future of Orissa depends. The utilization of vast hidden resources of the State and the immense possibilities for industrialization that exist vitally depend on power generation during the Third Plan period. It is in this context and appraisal of the situation that the Third Plan programme for power has been drawn up.

#### PROGRAMME FOR THIRD PLAN

17. The State Third Five-Year Plan for power envisages an outlay of Rs. 53·02 crores of which Rs. 756·51 lakhs is for continuing schemes and Rs. 4,545·35 lakhs for new Projects. The most important of the continuing schemes are the Hirakud Power Utilization Scheme and Duduma Transmission Scheme with an outlay of Rs. 39·00 lakhs and Rs. 85·00 lakhs respectively. Hirakud Power Utilization Scheme envisages construction of 11 and 33 K. V. lines with necessary switchgear for supply to industries and H. T. consumers still to be catered to in the areas served by the Hirakud Project where demand for power has not been fully met. The estimate is under revision and it is likely to be of the order of Rs. 225·59 lakhs. A sum of Rs. 39 lakhs is required for the completion of this scheme which has been provided for in the Third Plan. The Duduma Transmission Scheme provides for completion of the 132 KV. transmission line now under construction from Rayagada, further extensions at Rayagada Sub-station, the new sub-station to be constructed at Berhampur, increasing the transformer capacities at Rayagada and Jeypore and for paying the outstanding dues of the suppliers of materials equipment etc. connected with the second stage of the Duduma Transmission Scheme. A sum of Rs. 85 lakhs is required for full completion of this scheme which has been provided for in the Third Plan.

18. In addition to the continuing schemes a few new schemes have also been included with a view to achieving rapid expansion in the field of power generation and utilization. The scope of the new schemes is briefly explained below.

18·1. *Talcher Thermal Scheme*—With a view to meet the large demand for power from the industries fast springing up in the northern and north-western districts of Orissa, it is proposed to establish a Thermal Station at Talcher with an installed capacity of 240 MW. comprising 4 numbers of 60 MW. Turbo Alternator Sets. The scheme also envisages

construction of 132 K. V. D. C. Transmission lines to Joda and Chainpal and a single circuit line to Jajpur Road with 132 KV., Sub-station at Joda, Sukinda and Jajpur Road and extension of the existing station at Chainpal. A sum of Rs. 23.50 crores is proposed to be provided for this scheme in the Third Five-Year Plan.

18.2. *Balimela Hydro-Electric Scheme*—To meet the growing demand for power in the State, particularly in the Southern region from large electro-chemical and electro-metallurgical industries and other heavy and medium industries, it is necessary to build a large hydro-electric station which will augment the generating capacity available from the Machkund Power Scheme. The Madhya Pradesh Electricity Board has requested supply of a large block of power at different points in the State including Jagadapur which is near Nowarangpur in Koraput district. The Balimela Hydro-Electric Scheme has been drawn up to cater to these needs and will comprise the building of a Hydro-power Station of 240 MW. installed capacity utilising the tail water of Machkund Power Station and the intervening extensive catchment area. Under this Scheme, it is also proposed to interlink the Balimela Power Station with the Chiplima Power House of the Hirakud Project by a D. C. 220 KV. line with intervening sub-stations at Kesinga and Bolangir and extension of existing sub-stations at Rayagada and Chiplima so as to utilise the surplus power from the Balimela Power House in the Hirakud system in the northern part of the State where the demand for power is very heavy. The estimated cost of the entire scheme including the civil portion of works comes to Rs. 29.68 crores. A sum of Rs. 17.00 crores is proposed to be provided for this scheme in the Third Plan, out of which approximately Rs. 8.70 crores will be spent on the electrical portion and the balance on civil works under the control of the Irrigation Department.

18.3 *Investigation of New Projects*—A sum of Rs. 20 lakhs is proposed for provision in the Third Five-Year Plan for investigation of preliminary works in respect of Hydro and Thermal Schemes to be taken up in the Fourth Five-Year Plan.

18.4 *Low Head Turbines Scheme*—This scheme contemplates installation of Low Head hydro power stations at two out of the three Barboria, Kendupatna, and Biribati canal sites on the Mahanadi canals, for which a sum of Rs. 35 lakhs is proposed to be provided in the Third Five-Year Plan.

18.5 *Balimela Talcher and Machkund Utilisation Scheme*—This envisages construction of 132 KV, 66KV, 33 KV and 11 KV lines with necessary switchgear to make bulk power available from the Balimela, Talcher and Machkund projects for various industries and H. T. consumers. The provision proposed for this Scheme in the Third Five-Year Plan is Rs. 178 lakhs.

18.6 *Rural Electrification*—This scheme provides for construction of H. T. and L. T. lines and installation of some diesel stations for distribution of power to small towns and villages in the areas to be served by the Balimela and Talcher Power Stations. The provision proposed for this Scheme is Rs. 178 lakhs inclusive of the spill over amount from the Second Plan.

86. The foreign exchange component of the power programme included in the Third Plan is estimated at Rs. 1,916 lakhs. Annexure IV explains the benefits expected from continuing and new schemes included in the power programme for the Third Plan.

## ANNEXURE III

## Statement of benefits from Major and Medium Irrigation Projects

(Lakh acres)

Sl. No.	Name of project	Ultimate Potential	End of second Plan		End of 3rd Plan	
			Potential at outlets	Utilisation	Potential at outlets	Utilisation
1	2	3	4	5	6	7
<b>I</b>	<b>Continuing Major and Medium Irrigation Schemes</b>					
1	Hirakud Stage I ..	4·600	4·600	4·600	4·600	4·600
2	Delta ..	15·580	5·288	2·500	13·721	8·770
3	<b>Medium Irrigation Projects</b>					
	(a) Salki ..	0·450	0·112	0·100	0·450	0·450
	(b) Salandi ..	3·270	..	..	3·270	2·250
	(c) Salia ..	0·268	..	..	0·268	0·200
	(d) Budhabudhiani	0·087	..	..	0·087	0·060
	(e) Dhanei ..	0·125	..	..	0·125	0·095
	(f) Godahado ..	0·109	..	..	0·109	0·075
	(g) Darjang ..	0·240	..	..	0·240	0·160
	<b>Total (continuing)</b>	<b>24·729</b>	<b>10·000</b>	<b>7·200</b>	<b>22·870</b>	<b>16·660</b>

Sl. No.	Name of Project	Ultimate Potential	End of second Plan		End of 3rd Plan	
			Potential at Outlets	Utilisation	Potential of Outlets	Utilisation
1	2	3	4	5	6	7
II.	New Major and Medium irrigation Schemes					
1	Bhimkund	2.760	..	..	0.900	0.600
2	Medium Irrigation Schemes					
	(a) Pipalpankha	0.454	..	..	..	..
	(b) Uttei	0.386	..	..	..	..
	(c) Saltua Tangana	0.758	..	..	..	..
	(d) Siaria	0.044	..	..	..	..
	(e) Bahuda	0.370	..	..	..	..
	(f) Lower Lant	0.240	..	..	..	..
	Total (New)	4.922	..	..	0.900	0.600
	Grand Total	29.651	10.000	7.200	23.770	17.260



ANNEXURE IV

Statement of benefits from the continuing and new Power Projects included in the State Third Plan

Serial No.	Name of the Scheme	Installed capacity generated in M. W.		Length of transmission lines in miles	Number of towns and villages electrified	Remarks
		In 3rd Plan	In 4th Plan			
1	2	3	4	5	6	7
1	Schemes carried over from Second Plan to Third Plan.					
	(a) Hirakud Power Utilisation Scheme.	..	..	..	..	
	(b) D u d u m a Transmission Scheme.	..	..	100	..	100 miles of 132 K. V. (Single Circuit).
	(c) R u r a l Electrification Scheme.	..	..	..	..	
	(d) Hirakud Stage II ..	109.50	..	..	..	On the assumption that the 5th unit would be installed in Burla during Second Plan period.

2.	New schemes which will yield benefits in Third Plan.					
	(a) Talcher Thermal Scheme	240	..	144	..	62 miles of Single Circuit and 82 miles of Double Circuit of 132 K. V. lines.
	(b) Low Head Turbines ..	4	..	..	..	25 miles of 132 K.V. single circuit.
	(c) Balimela, Talcher Machkund Power Utilisation Scheme.	..	..	507	..	32 miles of 66 K.V. line 250 miles of 33 K.V. line 200 miles of 11 K.V. line
	(d) Investigation of New Projects.	..	..	..	..	
	(e) Rural Electrification Scheme.	..	..	247	250 town	100 miles of 33 K.V. line 147 miles of 33 K.V. line
	(f) Hirakud Stage III ..	..	..	..	..	
3.	New Projects which will yield benefits in the 1st year of the 4th Plan and subsequent years.					
	(a) Balimela Hydro-Electric Project.	..	240	280	..	280 miles of 220 K.V. line (double circuit).

## CHAPTER IV

### INDUSTRIES AND MINERALS

The proposals for the State's Third Five-Year Plan under the sector Industries and Minerals have been presented under three major heads of development, namely, Major and Medium Industries, Village and Small Industries and Mineral Development. The total outlay proposed for Industries and Minerals is Rs. 850.59 lakhs. Of this Rs. 55 lakhs has been allotted to Large and Medium Industries, Rs. 596.68 lakhs to Village and Small Industries and Rs. 198.91 lakhs for Mineral Development.

#### 1. LARGE AND MEDIUM INDUSTRIES

2. The responsibility of the State Government in the field of large and medium industries is mainly to create necessary conditions for the large and medium industries to flourish without directly undertaking these industries. Apart from the basic industries of strategic importance which are established in the public sector, there are a number of heavy industries which offer scope for private enterprise. Orissa with its vast mineral resources has immense potentialities for industrial development. In the last decade there has been impressive progress in the field of heavy industries in Orissa. Although in 1949-50 there was not any large scale industry worth the name, by 1951-52 among the heavy industries in the State could be counted a paper mill at Brajrajnagar, a spinning and weaving mill at Mayurbhanj, a sugar mill at Rayagada and a number of other units like a rolling mill, a glass factory, a textile mill and refrigerator manufacturing unit in and outside Cuttack. During the First and Second Plan periods a steel plant at Rourkela, two ferro-manganese plants one at Joda and the other at Rayagada, two refractory plants—one at Rajgangpur and the other at Belpahar, a cement factory at Rajgangpur, the Kalinga Textile Mills, a Low shaft furnace at Barbil, a unit to manufacture steel tubes, two aluminium industries and a paper mill at Chowdwar have gone into production. Licences have also been issued for a number of new units like foundries, refractories, ferro-chrome plant, a factory for manufacture of nuts and bolts, a sulphuric acid plant, a cycle chain manufacturing unit etc. In the Third Plan period all these units are likely to go into production, a number of existing units are expected to expand and new units licensed. The aim of the State Government in the Third Plan will be the same as it was

in the First and Second Plans, i.e., to assist the entrepreneurs to establish their industries by providing necessary facilities. These facilities include lease of Government lands, acquisition of private lands, supply of electricity and water, developed areas for establishment of factory units, loans through the medium of the State Finance Corporation, assistance to prospective industries in obtaining individual licenses, import of capital goods and in appropriate cases finance from the institutional agencies. Apart from these, the main strategy and design of the State's Third Five-year Plan is to ensure that substantial investment is made to build up and improve the road system, to generate adequate electricity to meet the demand for power, to turn out skilled workers by suitable training programmes and increase technical know how by expansion of technical education. Substantial investment is contemplated on these programmes which have a direct effect on the development of large and medium industries. All these factors should be kept in mind while appreciating the provision of Rs. 55 lakhs made under the head Large and Medium Industries.

3. The total provision of Rs. 55 lakhs is distributed over 3 schemes. The first scheme relates to the paid-up capital of the State Finance Corporation. In the First Plan the State's contribution towards the share capital of the Corporation was Rs. 20 lakhs. In the Second Plan it was Rs. 15.25 lakhs. The paid-up capital of the Corporation in 1961 will be Rs. 50 lakhs. In the Third Plan period it is proposed to increase this by another Rs. 16 lakhs. Against this the State's share will be Rs. 10 lakhs which has been provided for. The increased paid-up capital together with the reserve fund to be built up out of profits will enable the Corporation to cater more liberally to the fixed capital needs of new industries.

4. The Second scheme is for creation of developed areas covering an outlay of Rs. 25 lakhs. The object of the scheme is to develop suitable land in large blocks in comparatively under-developed regions. The lands will be leased out mostly to medium industrial units.

5. The third scheme relates to the share capital of the second Co-operative Sugar Factory which is proposed to be set up at Bargarh. A provision of Rs. 20 lakhs has been made in the Third Plan as the State's share towards the share capital of this factory. The factory is situated in the area commanded by the Hirakud Canal System where sugarcane can be grown to support an unit with a crushing capacity of 1,000 tons of cane per day.

## VILLAGE AND SMALL INDUSTRIES

6. The main object of the schemes for development of Village and Small Industries included in the State Plan is to help in bringing about a broad and decentralised base to the national economy besides expanding employment opportunities. In the general strategy of economic development envisaged for the country the small and village industries have a place of major importance. Properly organised they are capable of meeting a substantial portion of the demand for common consumer goods. To enable them to do so, the approach in the First and Second Plans has been to assist the small units to improve their organisation and technical efficiency and to help the artisans and craftsmen to organise themselves on co-operative lines. A number of suitable schemes were executed to achieve the objectives mentioned above. In the Third Plan all these schemes will continue with broadened scope.

7. The total provision for Village and Small Industries in the State's Third Five-Year Plan is Rs. 596.68 lakhs. This provision has been distributed in the following manner :

	(Rs. lakhs)
Handlooms ..	130.00
Small Scale Industries ..	242.00
Industrial Estates ..	150.00
Handicrafts ..	30.00
Coir ..	3.00
Sericulture ..	16.68
Grants to Orissa Khadi and Village Industries Board ..	25.00
<b>Total</b> ..	<b>Rs. 596.68</b>

The details are as follows :

8. *Handlooms*—As a result of the schemes implemented in the First and Second Plans, production of handloom cloth in the Co-operative sector has increased from about 6 million yards in 1955-56 to about 33 million yards in 1960-61. The total number of looms in the

co-operative sector has increased from 25,000 in 1955-56 to 50,000 in 1960-61. Fuller employment has been provided to 23,000 handloom weavers.

9. Among the main schemes which were implemented in the Second Plan for the development of handlooms may be mentioned organisation of Co-operative Societies for the weavers, grant of share capital and working capital loans, assistance to improve techniques and quality of production, invention and application of new designs and establishment of housing colonies. The target for the Second Plan was to bring 50 per cent of the total strength of 1,29,000 weavers within the Co-operative fold. By the end of Second Plan 50,000 cotton weavers and 640 silk weavers will have been brought into the Co-operative fold through 501 Societies which have been organised. 973 framelooms have been supplied to the weavers. For provision of marketing facilities 60 sale depots have been established within and outside the State. Besides one Housing Colony with 50 houses and another with 40 houses have been set up and work on a third colony has been taken up. A co-operative spinning mill with 12,000 spindles is being organised to supply the handlooms with yarn. By 1960-61 a sum of Rs. 83.43 lakhs will have been spent on the schemes included in the Second Plan for development of handlooms.

10. In the Third Plan an outlay of Rs. 130 lakhs has been proposed for development of handlooms. The principal targets for achievement during the Third Plan period will be to bring 25,000 additional weavers into the co-operative fold by organising about 250 Societies and to grant them as well as to the old members financial assistance, improved housing accommodation, improved appliances and provide them with new designs and facilities for efficient marketing of handloom products. The Plan includes purchase of shares in an additional spinning mill to be established in the Co-operative Sector to ensure supply of yarn to the Societies. The scheme for publicity and propaganda will be continued and one new calendering and bleaching plant will be established. Provision has also been made to give share capital loans to 20,000 existing and 25,000 new cotton weavers and 1,000 new silk weavers. Establishment of 25 new sales depots, 7 new central depots and 5 new inter-State depots is envisaged. It is also proposed to supply 1,000 Framelooms, 5,000 Dobbies and 53,000 Sleys. For housing accommodation to the weavers, the Plan provides for establishment of 5 housing colonies with 50 houses in each. Provision has also been made for renovation of the existing weavers houses.

11. *Small Scale Industries*—In the Second Plan the principal schemes for development of Small Scale Industries in the State were (1) Pilot Projects under which Industrial units were started in collaboration with private entrepreneurs and (2) grant of loans under the State Aid to Industries Act. By the end of the Second Plan period a total investment of Rs. 53-55 lakhs is likely to be made under the Pilot Project Scheme. So far, as many as 37 new companies have been started to manufacture various types of goods. These range over manufacture of phenyle, inks and other chemicals, furniture and building materials, electrical accessories, cycle parts cutlery, manufacture of bolts and nuts, trunks, aluminium wares, pre-stressed concrete poles, collapsible gates and shutters, storage batteries, tin containers and drugs. Five cast iron Foundaries have also been sponsored under the scheme for establishment in various parts of the State. The total disbursement of loan to Small Scale Industries under the State Aid to Industries Act by the end of the Second Plan is expected to amount to Rs. 22-72 lakhs.

12. The existing departmental commercial schemes consisting of two tanneries and a Shoe Factory have been expanded. Three Raniganj pattern roofing tile manufacturing units and a production centre on ceramics were taken up in the fourth year of the plan to be run as commercial units. The self-employment training schemes such as training-cum-production centre for Small Scale Industries, Blacksmithy, Carpentry etc. have been continued and expanded. Industrial schools existing from the First Five-Year Plan have been continued and some of them have been modernised to provide for training in modern trades where there is greater demand for technicians. Under the scheme training of private entrepreneurs 59 persons have undergone training in industrial management and manufacturing techniques in the established industrial concerns. Common service facilities to artisans in the villages have been attempted by starting a number of centres to benefit blacksmiths, carpenters, leather workers and filigree workers. Under the scheme "Survey, Evaluation and Publicity" a team of Industrial Supervisors under the direction of an officer of the Directorate of Industries has carried out a survey of raw material resources, availability of power, communication etc., in a few districts of the State. The most important survey programme taken up is that of Techno Economic Survey conducted through the agency of National Council of Applied Economics Research a complete report of which is expected to be available by the end of 1960.

13. The provision in the State Third Plan for development of small industries is Rs. 242 lakhs. As in the Second Plan emphasis will continue to be on grant of finance on liberal terms to Small Scale Industries in the form of loans under State Aid to Industries Act as well as by purchase of shares in the Companies to be started under the Pilot Projects Scheme. During the Second Five-Year Plan period, sufficient attention has not been paid to organisation of Industrial Co-operatives and grant of assistance to such Co-operatives. In order to assist the Small Scale Industries to be started by the Co-operatives which will eventually take over the Common Service Centres started by the Government, provision of a sum of Rs. 10 lakhs has been suggested. For equalisation of power rates a sum of Rs. 5 lakhs has been proposed.

14. Of the 12 Industrial Schools existing at present 6 were taken up for modernization during the Second Plan. In the Third Plan period the remaining 6 will be taken up and 6 more new schools will be established. In addition it is proposed to establish in each district a centre for tile making with capacity to manufacture 6 lakh tiles and train 20 apprentices. The cost of each centre is Rs. 2 lakhs. The plan also carries provision of a sum of Rs. 10 lakhs for purposes of publicity and Rs. 14 lakhs for establishment of 5 raw material depots.

15. *Industrial Estates*—One important aspect of the programme for Small Scale Industries is the establishment of Industrial Estates with a view to providing built up factory units on hire to industrialists to save them from heavy initial capital investment and in the process to effect dispersal of industries in rural and semi-urban areas. In the Second Plan the target was to establish four standard and one rural Industrial Estate at Cuttack, Rourkela, Jharsuguda, Berhampur and Kendrapara. Together they would provide 149 built-up factory units. To date 108 factory units have been completed at Jharsuguda, Cuttack and Rourkela. The remaining are under construction. 48 units have been occupied so far. The total estimated cost of all the Industrial Estates taken up during the Second Plan is Rs. 73.69 lakhs. Till 1961 an expenditure of Rs. 61.69 lakhs will have been incurred on this Project. A sum of Rs. 12 lakhs is expected to spill over into the Third Plan.

16. According to the recommendations of the All-India Small Scale Industries Board, 300 Industrial Estates in towns with a population between 5,000 to 20,000 costing Rs. 5 lakhs each, 100 Estates costing



Rs. 10 lakhs each in towns having a population of 20,000 to 50,000, 80 Estates costing Rs. 15 lakhs each in towns having a population of 50,000 to 1 lakh and 25 Estates costing Rs. 35 lakhs each in towns with a population of more than 1 lakh, should be set up in the country during the Third Plan period. In conformity with these recommendations and giving weightage for development of backward areas of the State, it has been proposed to provide funds for 14 Estates costing Rs. 5 lakhs each, 5 Estates costing Rs. 10 lakhs each besides expanding the Berhampur and Rourkela Industrial Estates and providing for carry over expenditure of Rs. 12 lakhs for completion of the Industrial Estates started during the Second Plan period. Altogether this accounts for an outlay of Rs. 150 lakhs. With this outlay it will be possible to provide Small Industrial Estates in 14 out of the 33 towns in Orissa having a population between 5,00 to 20,000. The Estates will be located at places which have facility of hydro-electric supply and are situated close to railheads and/or principal marketing centres. Five towns namely, Balasore, Parlakimedi, Jeypore, Puri and Sambalpur having population between 20,000 to 50,000 are proposed to be provided with Industrial Estates costing Rs. 10 lakhs each. The implementation of this programme will bring to each under-developed district at least one Rural Industrial Estate. The total number of factory units to be provided under this scheme is estimated to be 283 of different sizes as indicated below :

Fourteen Small Estates each with 12 units	..	168
Five Medium Estates each with 15 units	..	75
Expansion of Berhampur and Rourkela Estates	..	40
		---
Total	..	283
		---

17. *Handicrafts*—A total amount of Rs. 20 lakhs was allotted for development of handicrafts during the Second Five-Year Plan. During this period, various classes of artisans have been grouped into 60 Co-operative Societies. Thirty-six Societies have been given financial assistance to run their business. Use of improved appliances was taught through technical personnel and subsidy was given for purchase of implements. Godown facilities have also been provided to a few of them. Training-cum-production centres have been set up for stone and horn industry and for

cane, bamboo and golden grass products. Handicrafts schools have been established and run in interior villages to make use of waste materials. Stress has been given for purchase of handicrafts products from the artisans and their marketing. Procurement-cum-sale depots and emporia have been set up at Cuttack, Bhubaneswar, Rourkela and Puri. Efforts made during the Second Plan have shown definite improvement of the economic condition of the artisans and have afforded part-time work to villagers, specially to women folk. An expenditure of Rs. 17.52 lakhs will have been incurred during the Second Plan on the schemes included for development of handicrafts.

18. An outlay of Rs. 30 lakhs has been proposed for development of handicrafts in the Third Five Year Plan. The pattern of development will be the same as it was in the Second Plan. More artisans will be brought into the co-operative fold and financial assistance and technical assistance will continue to be given. Emphasis will continue to be on providing the artisans with modern and up-to-date equipment and help them to improve the quality of their products by evolving suitable designs and imposing standardization etc. All the schemes implemented during the Second Plan period will continue in the Third Plan.

19. *Coir*—During the Second Five Year Plan period steps were taken for development of coir industry in the State through Co-operative Societies. Six Co-operative Societies are now working for development of coir industry. One of them is exclusively dealing with coir products and the remaining five are Women Co-operative Societies which have taken up coir development as one of their main occupations. By the end of Second Plan an expenditure of Rs. 1.65 lakhs will have been incurred on Coir Development Schemes. Steps are being taken to construct two production-cum-training centres.

20. In the Third Five-Year Plan, it is proposed to set up at least one Co-operative Society in each of the main coconut producing centres. The members will be given necessary financial assistance to establish the industry on co-operative lines. The total outlay proposed for the Third Plan period is Rs. 3 lakhs.

21. *Sericulture*—During the Second Plan period a Tassar seed station, an Eri seed station and a research centre for sericulture have been established. Three peripatetic demonstration parties have been appointed and

204 sets of improved appliances have been supplied to weavers. Thirty persons have been trained in improved methods of sericulture and 6,000 weavers have been brought into the co-operative fold. A sum of Rs. 6.79 lakhs will have been spent on these schemes by 1961.

22. In the Third Plan an outlay of Rs. 16.68 lakhs has been proposed for development of sericulture. The principal object is to bring 3,000 tassar rearers and 400 Eri rearers into co-operative fold and to grant them financial assistance in accordance with the present pattern. This will involve establishment of 10 additional sub-stations for supply of disease free tassar and eri seeds, and supply of 500 reeling and spinning charkhas for distribution. It is proposed to continue the schemes of research in sericulture, and Central Tassar Depots and to include a new scheme for tassar rearing.

23. Grants to Khadi Board : A sum of Rs. 25 lakhs has been provided for this purpose.

### 3. MINERAL DEVELOPMENT

24. That Orissa is very richly endowed with minerals is a recognized fact. Among known deposits may be mentioned iron ore, manganese, limestone, dolomite, coal, chromite, and bauxite. The estimates of proved reserves in respect of these minerals are as follows :—

Iron ore	..	8,000 million tons
Manganese	..	10 million tons
Limestone	..	50 to 60 million tons. Possible reserves are estimated at over 300 million tons.
Dolomite	..	250 million tons
Coal	..	800 million tons
Chromite	..	0.32 million tons
Bauxite	..	0.20 million tons

Besides, reserves of china clay and fire clay are also considerable. Among other known occurrences which are yet to be prospected and properly investigated may be mentioned vanadium, graphite, kyanite, titanium, gold, mica, diamonds, ochres, ilmenite, lead, garnet, beryl, quartzite, sand (silica) and steatite. While the known occurrences are considerable and diverse, the fact that about a third of the State still remains to be covered by Geological Survey of India throws up the promise that in the years to come Orissa may come to be known as containing the largest mineral resources among all the mineral bearing States of India.

25. Despite its potential richness, actual exploitation of minerals has been poor. Until 1956-57 there has been no organised exploitation of minerals. In a sense it is fortunate that it has been so as the minerals of Orissa provided a virgin field for development at a time when the needs of industrialisation of the country were increasing. In the last decade of planning, particularly during the Second plan period, there has been considerable development of mineral industries in Orissa. The net output of minerals increased from Rs. 45.2 millions in 1950-51 to 64.0 millions in 1956-57, showing an annual average increase of about 7 per cent. The rate of increase in respect of iron ore and manganese mining is expected to be higher from 1956-57 as a result of large scale demand by Rourkela and Bhilai Steel Plants, the ferromanganese plants at Joda and Rayagada and increased export of iron ore to Japan. By 1960-61 the net output is expected to increase to Rs. 89.8 millions (at 1957 prices) an annual increase of about 10 per cent over the 1956-57 level (Figures taken from the study made by the Techno-Economic Survey Team). In view of the increased tempo of industrialisation in the country as a whole and the number of industries that have sprung up in Orissa and are likely to come up during the Third Plan period, the pace of mineral development in Orissa during the Third Plan period will get considerably quickened. The State's Third Five Year Plan for mineral development has been framed to facilitate such a process and in the light of the experience gained during the Second Plan period.

#### PROGRESS IN THE FIRST AND SECOND PLAN PERIOD

26. There was practically no specific scheme for mineral development in the First Plan. In the Second Plan the main emphasis was on bringing about the necessary administrative organisation to formulate and execute mineral development schemes and also protect and enhance the revenues for the State from mineral exploitations. A general Service Scheme for the establishment of assaying and analytical laboratory was also included. Another feature was contribution to the share capital of Orissa Mining Corporation. The progress achieved in respect of Second plan Schemes is as follows :

27. *Reorganisation of the Directorate of Mines*—Till 1955, mining was a subsidiary subject under Revenue Department. The main task, then, was only collection of revenue that accrued from mineral resources. No attempt was made to assess the mineral wealth of the State. At the beginning of

the Second Plan, there was, therefore, the need for setting up a regular administrative machinery to plan, formulate and execute the schemes for the mineral development of the State. A scheme with this object in view was included in the Second Plan. Its main features were : (i) organisation of the headquarters establishment of the Directorate of Mines with full complement of technical and non-technical staff, (ii) creation of additional survey parties to undertake geological investigation and mapping of the entire mineral bearing areas of the State, (iii) establishment of new circle offices to check working of the mines, movement of ores and to prevent smuggling of ores and (iv) appointment of full complement of staff at the district headquarters for processing applications for mineral concessions and collection of revenue from the mining resources. A sum of Rs. 16.95 lakhs will have been spent on this scheme by 1960-61. The headquarters organisation of the Directorate of Mines has been provided with the posts of technically qualified supervisory and other ministerial staff. Five new survey parties have been created, each consisting of a Geologist, an Assistant Geologist, Supervisors, etc. These parties have undertaken and completed investigation of iron ore deposits at Daitari Hill, Limestone deposits at Dungri and Manganese and Chrome deposits at Kalahandi. They have also undertaken preliminary investigations in the other districts of the State. As regards the other items two circle offices have been established at Sukinda and Rayagada and the staff at district headquarters has been strengthened. As a result of these schemes there was better supervision and collection of mining revenue. From Rs. 11 lakhs at the beginning of the Second Plan mining revenue has gone up to Rs. 46 lakhs at the close of the fourth year of the Second Plan period.

28. *Assaying and Analytical Laboratory*—The assessment of royalty charged on minerals removed from the mines is dependant on the mineral content of the ores. Previously the private mine owners used to get their ores analysed at the established private firms and Government had to accept such analysis reports for the determination of royalty. This system was highly unsatisfactory. A scheme for establishment of a Government Assaying and Analytical Laboratory was, therefore, taken up in the Second Plan. The Laboratory has since been established at Joda in Keonjhar district. This has had a salutary effect. By 1960-61 a sum of Rs. 1.63 lakhs will have been spent on this scheme.

29. *Purchase of shares of Orissa Mining Corporation*—According to the Industrial policy Resolution of 1956 iron ore, manganese, chromite and other minerals included in Schedule 'A' should be worked in the public

sector. With this end in view the Orissa Mining Corporation was established in 1956. The Corporation is a joint venture between the State Government and the Government of India who own equal shares. The total share capital of the Corporation is Rs. 50 lakhs to be contributed equally by the participating Governments. During the Second Plan period a sum of Rs. 7.50 lakhs has been contributed by the State Government as share capital to the Corporation. The Corporation is at present working the following mines in the State :—

- (i) Tungeisuni, Sukinda in Cuttack district.
- (ii) Maharajpur in Mayurbhanj district.
- (iii) Satradihi and Gandhbera in Mayurbhanj district.

#### PROGRAMME FOR THIRD PLAN

30. The total provision for mineral development in the Third Plan is Rs. 198.91 lakhs. The plan provides for continuance of the schemes included in the Second Plan and their further expansion. It also provides for a new scheme, namely, Construction of Railway lines and Installation of ropeway in the Sukinda Mining areas. The scope of the Third Plan proposals is briefly explained below :

31. *Reorganisation of the Directorate of Mines*—A sum of Rs. 1.75 lakhs is earmarked for further strengthening the headquarters organisation of the Directorate of Mines. A sum of Rs. 17.50 lakhs has been provided for undertaking systematic survey and mineral exploration of the State by creation of more survey, geophysical and drilling parties. Considering that out of the total area of 60,136 sq. miles of the State less than 1/10th has been investigated during the Second plan period this provision is justified. A sum of Rs. 3.92 lakhs has been provided for the creation of an Engineering Geology Section which will provide authentic information regarding surface conditions for projects which involve large foundation work. In order to help the work of the prospecting division, a research section is necessary to assess the value of new findings. A sum of Rs. 1.75 lakhs has been provided for this purpose. To strengthen the Executive machinery two more Circle Offices will be established during the Third Plan at an estimated cost of Rs. 5.56 lakhs. For reorganising the existing Accounts Section of the Directorate of Mines a sum of Rs. 3.03 lakhs has been provided.

32. *Assaying and Analytical Laboratory*—Although the establishment of an Assaying and Analytical Laboratory at Joda in the Second Plan period has had a salutary effect it is not able to cope with the demand and as a result of its location the area it caters to is small. To meet the likely increase in mineral activity during the Third Plan period it is proposed to expand the existing facilities at Joda and establish 2 new laboratories at Titlagarh and Jajpur Road. The total estimated cost of the Scheme would be Rs. 15 lakhs.

33. *Purchase of shares of Orissa Mining Corporation*—The Orissa Mining Corporation is proposing to expand its activities considerably during the Third Plan period. It has applied for grant of more areas under Mineral Concessions. To expand their existing structure to cope with large-scale mining the Corporation requires a large amount of share capital. The share of Orissa for purchase of share capital is Rs. 17.50 lakhs. Provision has been made for this amount in the Third Plan.

34. *Construction of railway lines and installation of ropeway in the Sukinda Mining Areas*—To ensure steady and economic movement of ores from the Sukinda Mining areas to the port heads, specially to the Paradip Port, it was considered necessary to lay new railway lines from the Sukinda Khas areas to convenient point on the South-Eastern Railway Line. The proposal, however, could not materialise in the Second Plan period. All the same, the urgency and importance of constructing at least an assisted siding and installation of ropeway for large movement of ores to feed the Paradip Port is there. It is proposed to take up this project in the Third Plan period. A draft outline of the scheme is enclosed in Annexure V. It is estimated that a sum of Rs. 100.00 lakhs will be required for the scheme. The details of the scheme are being worked out.

35. Another associated scheme in respect of transport of iron ore is construction of canal boats. Paradip Port is being developed to export a minimum of five lakh tons of iron ore per annum. Arrangements will, therefore, have to be made to transport about 2,000 tons of iron ore per day through the existing canals. For this purpose it would be necessary to construct 100 barges each capable of carrying 100 tons of ore, and 9 tugs each capable of towing at least three loaded barges at a time. A provision of Rs. 30 lakhs has been made for this purpose in the Third Plan.

## ANNEXURE V

A SCHEME FOR THE DEVELOPMENT OF SUKINDA  
MINING BELT IN ORISSA

The Sukinda Anchal in Jajpur sub-division of Cuttack district is very rich in mineral ores, such as Iron and Chromite. The Daitari hills of Sukinda alone contain 83 million tons of Iron ore of very high grade varying from 60 to 67 per cent. The Tomka belt within a distance of 10 miles has got another good deposit of 29 million tons of Iron ore. The distance from this area to Paradeep Port by road, rail and water ways would be about 140 miles. A co-ordinated plan for working the mineral deposits of this area will not only open up this backward area but will also contribute substantially to the development of the Paradeep Port and thereby add a substantial amount of revenue to the State. The Daitari area has been ear-marked for working only in the public sector and it is planned to work the Mine through the Orissa Mining Corporation which is a public sector project.

2. At present the nearest rail-head to this area is Jajpur Railway Station. The distance between Daitari Mines and this Railway Station is 29 miles. It is possible to take a railway line from Jajpur railway Station to a point called Raighati at the foot-hill of the Daitari hills. The remaining 5 miles from Raighati to the mines head at the top of the Daitari Hill traverse the mountain side and, as such, the haulage of Iron ore will have to be made either by Ropeway or by conveyer system or by gravity incline. It has been estimated that the cost of either of these systems to cover this distance of 5 miles along the mountain will be about Rs. 20 lakhs. The cost of a broad gauge railway line from Jajpura to Raighati would cost about Rs. 2 crores. It would not be possible for the State Government to find all that money from their own resources. But fortunately, the Railways have got a system under which they undertake laying of railway tracks, which is known as 'Assisted Railway Siding'. Under this scheme the Railway Board would be prepared to lay this line provided the State Government make a contribution of 40 percent of the capital cost. In other words, it would be possible to have this railway if the State Government contribute to the extent of Rs. 80 lakhs. The State Government have decided to make this amount available to the Railway Board. The total cost of the scheme would come to Rs. 80 lakhs for the 'Assisted Railway Siding' and Rs. 20 lakhs for the Ropeway, Conveyer system or Gravity incline.

3. It has been decided that during the Third Five-Year Plan period the Paradeep Port should be developed to handle an annual load of 5 lakh



tons. To achieve this objective it is necessary to transport 5 lakh tons of Iron ore every year from Daitari Mines Head to Paradeep port for the purpose of export.

4. The other alternative scheme is to transport annually 5 lakh tons of Iron ore from the Daitari Mines head to Jenapur Canal head by Ropeway. This is being suggested in case the Railway authorities find it not possible to undertake the laying of this new railway line from Jajpur to Raighati. This Ropeway will cover a distance of 26 miles. The cost of such a Ropeway would be approximately Rs. 1.80 crores. In the Plan we are at present providing Rs. 1 crore. The balance some of Rs. 80 lakhs will have to be found out later. Of the two schemes the one that would move the Iron ore by Rail appears to be more attractive because of the following reasons :—

(i) The railway line will be used not only for moving Iron ores from Daitari Mines but it can also bring Iron ores from nearby Tomka Mines since it will touch Tomka.

(ii) The ores of the nearby Chromite Mines of Cuttack and Dhenkanal districts can be easily moved over this railway ;

(iii) The railway line can also meet the passenger traffic demand to some extent though admittedly, at the beginning such traffic will be small;

(iv) It would be far easier to expand the haulage along the railway without undertaking any additional expenditure;

(v) This line can be progressively extended to link up with Banspant opening up a vast hinterland of one of the richest mineral bearing areas of the country, and

(vi) The scheme related to Railway can operate independently of the Paradeep Port. In case some bottleneck occurs regarding the development of Paradeep Port the Iron ore can be easily moved to Calcutta Port along the main Calcutta-Madras Railway line.

5. The comparative economics of the two schemes are as follows:—

#### I. 5 LAKHS TONS FROM DAITARI BY ROPEWAY AND RAILWAY

	Rs. np.
1. Cost of Iron ore at Pits mouth ..	11.75
2. Cost of transport upto Railhead (Raighati). ..	0.94
3. Railway freight from Raighati to Jajpur (24 miles) ..	6.50
4. Freight from Jajpur to Cuttack ..	5.13

	Rs. nP.
5. (i) cost of transport by canal from Cuttack to Paradeep Port.	3·40
(ii) canal tollage charges ..	2·75
(iii) loading and unloading charges ..	1·03
6. Port Charges ..	9·00
Total cost at Paradeep ..	<u>41·00</u>
F. O. B. Price of 60 per cent ore at Paradeep Port.	45·00
Deduct S. T. C's charges ..	2·00
F. O. B. Sale price to S. T. C. ..	43·00
Profit per ton ..	2·00
Annual profit on 5 lakhs tons	10,00,000·00
N. B.—Item No. 2 above will cover the following charges	
1. 5 per cent interest on Rs. 20 lakhs ..	1,00,000·00
2. 5 per cent towards amortisation charges ..	1,00,000·00
3. 5 per cent towards depreciation ..	1,00,000·00
4. 7½ per cent towards running cost and administrative charges.	1,50,000·00
Total ..	<u>4,50,000·00</u>

## II—FIVE LAKH TONS OF IRON ORE MOVED BY ROPEWAY

1. Cost of iron ore at pits mouth ..	11·75
2. Transport by Ropeway (26 miles) ..	<u>9·00</u>
Cost at Jenapur ..	20·75
3. (i) Cost of transport by canal upto Paradeep port ..	5·50
(ii) Canal tollage charges ..	5·00
(iii) Loading and unloading charges ..	1·00
4. Port charges ..	<u>9·00</u>
Total cost at Paradeep ..	41·25
F. O. B. price of 60 per cent ore at Paradeep port ..	45·00
Deduct S. T. C's charges ..	2·00
F. O. B. sale price to S. T. C. ..	<u>43·00</u>

	Rs.	nP.
Profit per ton ..		11.75
Annual profit on 5 lakh tons ..	8,75,000.00	
N. B.—Item No. 2 will cover the following charges :—		
1. 5 per cent interest on Rs. 1.80 crores ..	9,00,000.00	
2. 5 per cent towards depreciation ..	9,00,000.00	
3. 5 per cent towards Amortisation charges ..	9,00,000.00	
4. 7 ½ per cent towards running cost and administrative charges.	13,50,000.00	
Total ..	40,50,000.00	

### III—DETAILS OF RAILWAY FREIGHT

1. Cost of railway siding from Jajpur to Raighati ..	2,00,00,000.00
2. Cost to be borne by the Railways (60 per cent) ..	1,20,00,000.00
3. Cost to be borne by the State Government (40 per cent).	80,00,000.00
4. Annual recurring cost to Railways for maintenance (8½ per cent of the total outlay by Railways).	10,00,000.00
5. Interest charges at 5 per cent of Rs. 80 lakhs ..	4,00,000.00
Total fixed charges ..	18,00,000.00
For a traffic of 5 lakhs tons fixed charges is calculated at	3.60 (per ton.)
Add operational cost per ton	2.85
Total ..	6.45 or say 6.50

## CHAPTER V

### TRANSPORT AND COMMUNICATIONS

The heads of development, included in this Sector are P. W. D. Roads, Anchal Roads, Municipal Roads, Inland Water Transport, Road Transport and Tourism. In respect of P. W. D. Roads, Anchal Roads and Municipal Roads the programme has been drawn up in the same manner as it was in the Second Plan. The assistance to be received from Central Road Reserve Fund and grant-in-aid in respect of road development is kept outside the Plan. The schemes undertaken for development of Inland Water Transport were outside the Plan ceiling in the Second Plan period. In the Third Plan the entire outlay for Inland Water Transport is shown within the State Plan ceiling. In respect of Road Transport no provision was kept in the Plan from the third year of the Second Plan. In the Third Plan Government are considering the question of setting up a Road Transport Corporation and the entire outlay for development of Road Transport including the contribution from the Railways is shown in the Third Plan ceiling. Under Tourism a number of schemes in the Second Plan were treated as Centrally sponsored and only the State's share in respect of these schemes was shown in the Plan ceiling. In the Third Plan the Centre's share in respect of these schemes is also shown within the Plan ceiling. All these re-adjustments have been made in consonance with the indication of the Planning Commission that "as a general principle all development schemes executed by State Governments will form part of the plans of States" (p. 28 Third Five-Year Plan—A Draft Outline). The following statement will explain the general break-up of the provision under "Transport and Communications".

	..	Rupees in crores
1. P. W. D. Roads	..	8·700
2. Municipal Roads	..	0·350
3. Anchal Roads	..	0·300
4. Inland Water Transport	..	0·400
5. Road Transport	..	1·200
6. Tourism	..	0·070
Total	..	11·020

### 1. ROADS ( P. W. D. )

2. One of the main reasons responsible for the economic backwardness of Orissa is its inadequacy of rail facilities unrelieved by an adequate net-work of roads. In 1957 there were only 838 miles of railways in the State and the ratio of track mileage to land area was 13.9 miles per 1,000 square miles or about half of that for India as a whole (27.3 miles per 1,000 square miles). Had this deficiency in rail facilities been compensated by an adequate net-work of roads many areas in Orissa would not have remained as backward as they are to-day. It is unfortunate that historically the road system in Orissa has remained backward and neglected. In 1958 there were only 14,815 miles of roads in Orissa or 246 miles of roads per thousand square miles as compared to 292 miles in the country. The adverse effects of the low road mileage were intensified by their poor quality. In 1958, 82 per cent of the roads in Orissa were unsurfaced as against 62 per cent in India. This means that there were 44 miles of surfaced roads per 1,000 square miles in the State or two fifths of that of India (113 miles). (Figures adopted from the study made by the Techno-Economic Survey of Orissa conducted by National Council of Applied Economic Research, New Delhi). Another defect of the road system of Orissa is the relative concentration of road net work in the coastal districts, the interior of the State being relatively isolated. The existing system also suffers from a major weakness because of the existence of a large number of breaks or gaps in the absence of connecting links. It has been estimated that there are about 180 points where interruptions occur on account of absence of bridges or culverts. These interruptions are a vital handicap to movement of goods and diminish to a great extent the utility of the existing system. A survey of the existing transport facilities in Orissa, therefore, reveals (i) tremendous inadequacy, (ii) poor quality in the existing system and (iii) its ill distribution both from the territorial point of view and from the point of view of exploitation of the natural resources of the State.

### FIRST AND SECOND PLAN SCHEMES

3. The road plan in the First, Second and Third plans has to be and has been drawn up in the context of what has been said above. The main emphasis of the First and Second Plans was on the improvement of existing facilities. With a total investment of Rs. 187.21 lakhs on roads maintained by the State P. W. D. during the First Plan period it has been possible to improve 781 miles of roads and construct 30 miles of new roads and 16 bridges.

4. During the Second Plan period the target in terms of mileage was construction of 20 miles of new roads, improvement of 1000 miles of existing roads and construction of 61 bridges, including 21 bridges carried over from the first plan. By 1961 a total sum of Rs. 495.57 lakhs will have been spent on P. W. D. Roads. The physical target that will be achieved by the end of Second Plan will be as follows: 980 miles of existing roads will be improved, 20 miles of new roads will be constructed and construction of 30 bridges is expected to be completed and construction of 10 bridges (which are in progress) plus 21 bridges (not yet taken up) will be carried over to the Third Five Year Plan.

### THIRD PLAN PROGRAMME

5. The Third Plan programme for P. W. D. roads has been drawn up in the context of the achievements of the First and Second Plans and the magnitude of the job which remains to be done. While appreciating the Third Plan for roads in Orissa one important factor has to be borne in mind. At the beginning of the First Plan although the existing road system was poor, the economy of Orissa was also comparatively backward and the pressure of the economy on the transport system was, therefore, relatively small. But during the First and Second Plans the economy has undergone a rapid change. What with the establishment of a Steel Plant at Rourkela, Cement and Refractory Factories at Rajgangpur, the Paper Mill and refractories at Brajrajnagar and Belpahad, the Aluminium Factory at Hirakud, the Dandakaranya Project at Koraput and a number of major and medium industries, irrigation, power and other projects in the rest of Orissa there has been a good deal of pressure on the transport system of Orissa. The pace of industrial and agricultural development will get quicker during the Third Plan period and without corresponding relief in the expansion of rail facilities unless the road system meets the challenge there will be considerable retrogression.

6. The Third Plan for P. W. D. roads has been drawn up with a provision of Rs. 870 lakhs out of which a sum of Rs. 430.31 lakhs is earmarked for continuing schemes and Rs. 439.69 lakhs for new schemes. With this provision, 1,237 miles of existing roads including 90 miles of saline embankments are expected to be improved, 32 miles of new roads will be constructed and 138 bridges, i. e., continuing 44 bridges (31 independent continuing bridges plus

13 bridges included in road projects) and 94 new bridges will be taken up during the Third Plan period. While distributing the allocation care will be taken to see that the relatively backward areas of the State, from the point of view of communication, get their due share.

7. Mention may be made that in addition to Rs. 8.70 crores the programme for which has been given above, substantial amount is also expected from Central Road Reserve Fund Allocations and Grant-in-aid. During the Second Plan period funds made available from these sources amounted to Rs. 193.98 lakhs. During the Third Plan period, in view of the magnitude of the problem, increased allocations are expected from these sources. Planning Commission have observed in the Draft outline that while the broad order of priorities envisaged in the 20-year plan (1961—81) drawn by the Chief Engineers of the State and Central Governments will be observed during the Third Plan period, owing to limitation of resources, it will not be possible to achieve the rate envisaged in the 20-year plan. In the case of Orissa the rate of development is not only poor but the leeway which has to be made up in road averages as compared to All-India figures is very heavy. It is hoped that while making allocations from Central Road Reserve Fund and Grants-in-aid the needs of the State, its backwardness and its fast pace of industrialisation and consequent pressure on the road system which is unrelieved by corresponding expansion in rail facilities will be given due consideration. The following statement gives the position of road mileage at the beginning of First and Second Plan, the position at the end of Second plan, the anticipated mileage likely to be achieved at the end of Third Plan, mileage that should be at the end of Third Plan and in 1981 according to the Road Plan drawn up by Chief Engineers.

	Position at the beginning of 1st Plan	Position at the beginning of II Plan	Position at the end of II Plan	Anticipa- ted mileage at the end of III Plan	Mileage at as it should be at the end of III Plan	Mileage that should be in 1981
	(1)	(2)	(3)	(4)	(5)	(6)
National Highway ..	851	852	852	876	1,050	1,642
State Highway ..	1,321	1,343	1,415	1,431	1,797	2,753
Major District Roads	1,893	2,588	3,129	3,145	3,389	4,613
Other District Roads..	823	823	886	886	3,203	6,741

## 2. MUNICIPAL ROADS

8. A provision of Rs. 35 lakhs has been kept in the Third Plan for Municipal roads. The scheme envisages improvement of Municipal roads including road-side drains. With rapid improvement in the field of agriculture and industry and consequent growth in the field of trade and commerce the urban areas of Orissa have been developing quickly with sharp increase in population. To keep pace with this trend the need for improving the Municipal Roads has been increasingly felt to ease the pressure of vehicular traffic. The Municipalities and Notified Area Councils numbering 42 are maintaining some 704 miles of roads of the following categories :—

Blacktopped	..	165
Metalled	..	237
Unmetalled	..	302
		-----
Total	..	704
		-----

The local bodies with their existing limited resources are not capable of bringing about the desired improvement to their roads to suit present day conditions. To assist them in doing so a scheme has been drawn up in the Second Plan by which the State Government offers financial assistance to the local bodies on condition that they bear one-third of the estimated cost of the schemes as their matching contribution. By the end of Second Plan an expenditure of Rs. 22.90 lakhs will have been incurred on this scheme excluding the matching contribution of local bodies. The achievement will be blacktopping of 76 miles and metalling of 142 miles of municipal roads. The scheme will continue in the Third Plan with a provision of Rs. 35 lakhs. The physical target aimed at is blacktopping of 150 miles of roads, metalling of 12 miles of roads and construction of 30 miles of road-side drains.

## 3. ANCHAL ROADS

9. Mention has been made in the earlier portion of this chapter about the inadequacy of the road system of Orissa. What is true of the main P. W. D. roads is true still in the case of village roads. The problem of maintenance of existing rural roads, improving them to fair weather standards and expanding the network of rural communication is one of staggering magnitude. As has been pointed out by the Planning Commission in their Draft Outline " the first task in regard to rural roads should be their



improvement to fair-weather standard". With the increased tempo of agricultural and industrial development and consequent opening up of large areas of the country-side there has been a steadily increasing demand for improvement of rural roads and large-scale agricultural and industrial development has no meaning if the system of rural roads does not carry the benefits to the villages of the country. One of the main tasks of the Third Plan will, therefore, be to improve the quality and expand the net work of rural roads. The scheme "Anchal Roads" is a continuing scheme from Second Plan which has the purpose mentioned above as its objective. By the end of Second Plan a sum of Rs. 15.15 lakhs will have been spent on this scheme. With this amount 307 miles of new roads will have been constructed and 699 miles of existing roads improved. The provision for Third Plan is Rs. 30 lakhs and the physical target aimed to is construction of approximately 500 miles of earthen roads with necessary cross drainages spanned by small culverts and wooden bridges. In addition to this provision under "Anchal Roads" considerable amount is also expected to be made available for rural communication under the Community Development Programme and the programme for welfare of backward classes.

#### 4. INLAND WATER TRANSPORT

10. Orissa has 652 miles of inland water-ways. The three main rivers, the Mahanadi, Brahmani and Baitarani have been used to develop a canal system. The more important of these are the North Orissa and the Rusikulya canals, each of which is 269 miles long. The Inland Water-ways act as feeders to the railways and the roads in the region and also provide a link with the sea. The importance of inland water transport has increased in recent years as a result of tremendous pressure on the inadequate road system and general inadequacy of rail facilities. Improvements to the inland water-ways have become urgently necessary as a result of silting up and lack of proper maintenance of locks and banks. In the Second Plan inland water transport was outside the Plan. In the period 1956-61 an expenditure of Rs. 10.98 lakhs is expected to have been incurred on schemes for development of inland water transport. In the Third Plan the provision for Inland Water Transport is Rs. 40 lakhs. The entire amount is shown inside the plan ceiling. With this provision it is proposed to improve and extend the Taldandá Canal, purchase a suction dredger and take up work on construction of a new Dock at Cuttack and on making Daya West and Machgaon canals navigable.

## 5. ROAD TRANSPORT

11. For the proper utilisation of the existing road system a scheme for nationalisation of road transport was started in 1947-48. Orissa was divided into 5 zones—three zones ear-marked for State owned transport and the other two for the Orissa Road Transport Co., Ltd. established in 1951 with the joint participation of the State Government, the Central Government, ex-operators and employees of the Company. Prior to First Plan (i. e. 1951) the investment, total route mileage and the total number of vehicles in respect of State Transport Services and Orissa Road Transport Co. Ltd., was as follows :—

	Total investment in 1951 (in lakhs)	Total route mileage in 1951	Total number of vehicles in 1951
Orissa State Transport Services.	16.14	1,610	100
Orissa Road Transport Co., Ltd.	7.65	1,095	55

12. During the First Plan period the expenditure on State Transport Services was Rs. 34.54 lakhs and on Orissa Road Transport Company, Ltd., Rs. 15.69 lakhs. With this investment it was possible to achieve an additional route mileage of 1,273 in State Transport Services and 917 miles in Orissa Road Transport Co., Ltd. and the fleet of vehicles was increased by 73 in State Transport Services and 52 in Orissa Road Transport Co., Ltd. During the Second Plan period the original provision was Rs. 95 lakhs for Road Transport Services. During the first two years of the Second Plan a sum of Rs. 24.45 lakhs was spent. But from the third year of the Second Plan no provision has been made in the State plan pending formation of a Road Transport Corporation. Whatever expenditure has been incurred on this scheme from the third year of the plan has, therefore, been incurred outside the Second Plan. During the Second Plan period the approximate expenditure on this scheme is estimated to be Rs. 39.74 lakhs in respect of State Transport Services and Rs. 0.015 lakhs in respect of the Orissa Road Transport Co. With this investment, in respect of State Transport Services, the achievement with regard to additional route mileage will be 1,997 miles and the additional increase in the number of vehicles will be 172. In respect of Orissa Road Transport Company the achievement during the Second Plan period with regard to additional

route mileage will be 1,885 and additional increase in the number of vehicles will be nil. The total investment of the State Government, total route mileage and the total number of vehicles in 1961 in respect of State Transport Service and Orissa Road Transport Company is given in the statement below :—

	Likely total investment in 1961 (in lakhs)	Likely total route mileage in 1961	Likely total number of vehi- cles in 1961
	(1)	(2)	(3)
State Transport Service ..	90.42	4,880	345
Orissa Road Transport Co. ..	23.36	3,897	107

13. To meet the growing demand, further development of Transport Services and expansion of workshop facilities during the Third Plan period is absolutely essential. In order to raise fresh capital and include the scheme in the State's Third Five-Year Plan the question of setting up a Road Transport Corporation is at present under the active consideration of Government. A scheme for the Third Plan has been drawn up involving an additional investment of Rs. 120 lakhs out of which Rs. 60 lakhs will be the State's contribution. A corresponding amount is expected to come from the Railways. The entire outlay for the scheme is shown in the State's Third Plan ceiling. With this investment it is proposed to achieve considerable expansion of workshop facilities, increase route mileage by 5,113 miles and increase the fleet of vehicles by 190. Considering that the pressure on the Road Transport system has been rapidly increasing and will become heavier still in the Third Plan period, an investment of the magnitude envisaged is absolutely essential for the expansion of road transport services. The problem is particularly acute in Orissa because of abnormally low railway facilities.

## 6. TOURISM

14. In the Second Plan, schemes for development of tourism carried a total provision of Rs. 6 lakhs out of which Rs. 3 lakhs was in the State Plan ceiling and Rs. 3 lakhs outside the plan. The total expenditure by 1961 will be Rs. 3.86 lakhs (including the Central share of Rs. 1.94 lakhs). With this amount four Tourist Information Bureaus, one each at Bhubaneswar, Puri, Hirakud and Rourkela have been opened and construction of two rest houses, one at Puri and the other at Bhubaneswar has been taken up. These two rest houses will be opened before the end of the Second Plan.

In the Third Plan a sum of Rs. 7 lakhs has been provided for development of tourism. This includes the Centre's share in respect of Centrally Sponsored Schemes. The provision is distributed on the following schemes :

	Rupees in lakhs
1. Maintenance of Tourist Information Bureaus at Puri, Bhubaneswar, Hirakud and Rourkela.	1.60
2. Low-Income Group Rest Houses at Konark, Gopalpur, Hirakud and Balugaon.	4.00
3. Appointment of Guide-cum-Caretaker for Rest Houses.	0.30
4. Staff for execution of tourist schemes.	0.45
5. Appointment of staff for rest houses at Puri and Bhubaneswar.	0.42
6. Tourist Publicity.	0.23
Total ..	7.00

15. In addition, Government of India have tentatively decided to execute the following schemes in the Central sector:--

1. Expansion of the Rest House at Bhubaneswar	2.00
2. Gardens around Rajarani and Mukteswar temples	1.00
3. Two observatory posts at Lingaraj temple and one at Puri temple.	0.30
4. Cloak room facilities on the sea beach at Konark	0.50
5. Shelter and drinking water facilities at Konark	0.50
6. Garden around Konark temple	2.00
7. Cloak room facilities on the sea-beach at Puri	0.50
Total ..	6.80

## CHAPTER VI

### SOCIAL SERVICES

#### 1. GENERAL EDUCATION

THE programme for education in the State Plan consists of both general and technical education. The programme for the former consists of specific schemes for Elementary, Secondary and University education. The schemes concerning these are considered in this section and those relating to technical education are considered in the next.

2. Although there has been considerable expansion in facilities for education at all levels in the last decade of planning, Orissa still remains educationally backward. In respect of enrolment of the children in the age group of 6—17 Orissa is far below the All-India averages. Similarly, in respect of university education the enrolment of students is much smaller than what it should be. The main effort in the Third Plan will, therefore, be to remove, to the extent possible, the educational backwardness of Orissa. Particularly in respect of children belonging to the age group 6—11 it has been decided that the main emphasis will be for provision of facilities for universal education. This together with the size of the problem in respect of secondary and university education necessitates considerable outlay for the education programme.

3. As against the anticipated outlay under the Second Plan of Rs. 630·88 lakhs on programmes included under General Education, a provision of Rs. 1,924·22 lakhs has been made in the Third Plan. This includes Rs. 1,110·28 lakhs for primary education, Rs. 464·29 lakhs for Secondary education, Rs. 274·56 lakhs for university education and Rs. 75·09 lakhs for other educational schemes compared to the anticipated outlay of Rs. 330·21 lakhs, Rs. 120·56 lakhs, Rs. 135·73 lakhs and Rs. 44·38 lakhs respectively in the Second Plan. The figures quoted above in respect of Second Plan expenditure are inclusive of the Centre's share in respect of certain Centrally sponsored schemes which was kept outside the Second Plan ceiling. In the Third Plan however, the centre's share in respect of Centrally sponsored schemes is included within the plan ceiling,

4. The following statement will explain the progress made in elementary and secondary education during the First two plans and the targets for the Third Plan. For drawing a comparison, the All-India figures as given by Planning Commission, are also quoted alongside the statement. The percentages in the statement refer to the proportion of the estimated population in each age group enrolled at the appropriate stage.

### ENROLMENT OF PUPILS

Year	Enrolment in lakhs in Orissa (Age groups)			Percentage			All-India enrolment in lakhs			All-India percentage		
	6-11	11-14	14-17	6-11	11-14	14-17	6-11	11-14	14-17	6-11	11-14	14-17
1	2	3	4	5	6	7	8	9	10	11	12	13
1950-51.	4.85	0.39	0.16	26.9	4.09	1.9	192	31	12	43.31	12.9	5.4
1955-56.	6.81	0.535	0.239	36.5	5.4	2.3	252	43	20	51.0	16.3	8.1
1960-61. (Estimated)	10.00	0.85	0.40	50.0	8.3	3.7	330	61	30	60.0	22.6	12.0
1965-66 (Estimated)	16.00	1.70	0.80	70.0	16.0	7.1	504	100	44	80.0	30.0	15.0

### ELEMENTARY EDUCATION

5. Elementary education can be broadly divided into two groups, namely (a) primary, for the age group 6-11, and (b) middle, for the age group 11-14. In respect of primary education the main emphasis of the All-India Plan is for provision of facilities for universal education for the age group 6-11. At the All-India level enrolment of pupils in the age group 6-11 is estimated to have gone up from 43.1 per cent in 1950-51 to 60 per cent in 1960-61 and it is further expected to go up to 80 per cent in 1965-66. During this period the proportion of boys

attending schools has increased from 60 to 80 per cent and of girls from 20 to 40 per cent. Orissa is one of the six States of India whose proportion of pupils in the age group 6—11 attending schools is markedly lower than the All-India average. Planning Commission in their Draft outline have pointed out that in respect of these six backward States, primary education programme will be given the resources and facilities needed, so that the All-India figures may reach about 80 per cent at the end of Third Plan. As a result of the drive for expansion of primary education in the I and II Plan periods the enrolment of pupils in the age-group 6—11 has gone up from 26·9 per cent in 1950-51 to 50 per cent in 1960-61. By the end of Second Plan 75 per cent of boys in the age group 6-11 and 25 per cent of girls is expected to have been enrolled. The disparity in education between boys and girls, thus, becomes obvious. The target for the III Plan for boys and girls has been kept, on practical grounds, at 90 per cent for boys and 50 per cent for girls, the overall target being 70 per cent. The following statement gives the trend of progress :

Year	Enrolment in lakhs 6—11 age group	Percentage
1950-51	4·85	26·9
1955-56	6·81	36·5
1960-61 (Estimated)	10·0	50·0
1965-66 (Estimated)	16·0	70·0

6. A programme of this magnitude involves considerable outlay not only to achieve the additional target but to stabilise the existing position and attend to necessary administrative aspect like strengthening the departmental administration, increased amenities to teachers, provision for their training, special incentives to draw children to schools, orientation of primary schools to basic pattern etc. The total outlay under Primary Education during the Third Plan is contemplated to be Rs. 1,110·28 lakhs.

7. The provision suggested above includes the Centre's share in respect a number of Centrally sponsored schemes, which, in the Second Plan period was outside the Plan. It has been calculated that a sum of Rs. 50·80 lakh

will be required for fulfilling the commitments already made in respect of construction of buildings of E. T. Schools ( Rs. 6.0 lakhs ) and expansion of E. T. Schools ( Rs. 44.80 lakhs ). In the Third Plan period, a sum of Rs. 371.83 lakhs will be required to enforce the targeted enrolment of 70 per cent of children in the age group 6—11. The scheme regarding provision of mid-day meals is proposed to be continued. With local participation it is proposed to provide mid-day meals in primary schools as a measure of offering incentives for accelerated enrolment. The beneficiaries are estimated to be 5 lakhs per year and the cost of the scheme in the Third Plan period is estimated to be Rs. 100 lakhs. In respect of orientation of primary schools to basic pattern a sum of Rs. 10.00 lakhs has been provided. By way of amenities to primary school teachers, it is proposed to increase their salaries substantially (Rs. 410.00 lakhs ) and construct quarters for men teachers in backward areas (Rs. 3.00 lakhs). The training programme for teachers is estimated to cost Rs. 31.80 lakhs Under the special programme for girls' education a number of schemes which were implemented in Second Plan will continue to be operated in the Third Plan also. Schemes in this regard include attendance scholarships (Rs. 30.00 lakhs) quarters for women teachers ( Rs. 75.00 lakhs ), appointment and training of school mothers (Rs. 13.20 lakhs), organisation of enrolment drives (Rs. 6.00 lakhs), etc. The total cost of the special schemes for girls' education is estimated at Rs. 132.85 lakhs for which full provision has been made.

8. In respect of Middle School education for the age-group 11—14 the target in the Third Plan is to double the number of school going children in the age-group at the end of Second Plan. This objective is sought to be achieved by a two-fold process (i) by increasing the number of schools and (ii) by increasing the enrolment per school. The following table will explain :—

	1955-56	1960-61	1965-66
Number of M. E. Schools	672	960	1,460
Average enrolment per M. E. School	48	52	76

The enrolment of students in the age group 11—14 is estimated to be 5,000 at the end of 1960-61. The target in the Third Plan is to raise this



figure to 1,70,000. The trend of progress in respect of enrolment in regard to the children belonging to the age group 11—14 is as follows :—

Year	Enrolment in lakhs 11—14 age-group	Percentage
1950-51	0.390	4.09
1955-56	0.535	5.4
1960-61 (Estimated)	0.850	8.3
1965-66 (Estimated)	1.700	16.0

9. The details of the schemes for middle school education are included in the Plan for Secondary Education. The main schemes in this regard are : opening of new schools, improvement of buildings, equipment and libraries, construction of quarters for teachers, introduction of crafts, improvement in salaries of teachers, provision of scholarships and award of maintenance stipends.

#### SECONDARY EDUCATION

10. The trend of progress in respect of enrolment of children belonging to the age group 14—17 is given below :—

Year	Enrolment in lakhs 14—17 age group	Percentage
1950-51	0.160	1.9
1955-56	0.239	2.3
1960-61 ( Estimated )	0.400	3.7
1965-66 ( Estimated )	0.800	7.1

As can be seen from the statement given above the proportion of pupils in the age group 14—17 receiving secondary education will have increased from about 1.9% in 1950-51 to 3.7% in 1960-61. By the end of the Third Plan, it is expected to rise to 7.1%. This should be compared to the All-India percentage of 15% expected to be realised by 1965-66. Orissa is much below the All-India average and dearth of matrioulates has particularly been a handicap from the point of view of technical and general man-power for developmental purposes. The estimated

output of 9,000 Matriculates by the end of 1960-61 is, therefore, proposed to be doubled to 18,000 by 1965-66. In terms of enrolment, it is expected to go up from 40,000 at the end of 1960-61 to 80,000 by 1965-66. This is sought to be achieved by a two-fold process—(i) by increasing the number of schools and (ii) by increasing the enrolment per school. The following statement will explain :—

	1955-56	1960-61	1965-66
Number of High Schools	257	400	520
Average enrolment in the higher classes per school.	150	170	240
Out-put of Matriculates	4,547	9,000	18,000

11. The main schemes in the field of high school education are opening of high schools, conversion of high schools into higher secondary schools, improvement in buildings, library equipment and staff of high schools introduction of crafts, construction of hostels, provision of maintenance stipends and scholarships and improvements in the pay scale of teachers. To support a programme of this size provision has also been made for strengthening the inspectorial staff and to provide them with transport.

12. The total outlay contemplated for Secondary Education (including middle education) is Rs. 464.29 lakhs. This includes a sum of Rs. 16 lakhs required for fulfilling the commitments made in the Second Plan period in respect of Higher Secondary Schools (Rs. 3 lakhs), buildings for Girl's High Schools (Rs. 10 lakhs) and buildings for Secondary Training Schools (Rs. 3 lakhs). The balance amount of Rs. 448.29 lakhs is meant for new programmes contemplated in the Third Plan period. Mention may be made that unlike in the Second Plan, which contained a number of centrally sponsored schemes the Centre's share of which was outside the State plan, in the Third Plan, the entire outlay contemplated under Secondary education is shown within the Plan ceiling.

#### UNIVERSITY EDUCATION

13. Orissa has only one University and by the end of Second Plan period there will be 29 colleges. The number of students in these institutions will have increased from 5,600 in 1955-56 to 11,000 in 1960-61. The number of Science students will have increased from 944 in 1955-56 to 2,448 in 1960-61. Both in respect of general enrolment and in respect of enrolment of Science students there is a large leeway

to be made up in Orissa. On the basis of population the recruitment at the College level should be at least 30,000 as against which the recruitment by the end of Second Plan will be only 11,000. To remove the leeway it is necessary to push through a vigorous programme for expansion of collegiate education during the Third Plan period. The target for enrolment is, therefore, proposed to be kept at 23,000. To supply qualified candidates for the technical institutions, it is proposed to expand the number of seats in Science classes at a rate higher than the average rate aimed at for expansion in total enrolment. The expansion in enrolment is proposed to be brought about by opening twelve new colleges and by upgrading existing colleges providing Two-Year courses to degree colleges providing Pre-University class and Three-Year degree course.

14. The pattern of University education that is envisaged now has no place for a Second grade or Intermediate college. All colleges must be degree colleges teaching the Three-year degree course and the Pre-University classes will be attached to these colleges until all high schools are upgraded to Higher Secondary Schools, and ultimately the Pre-University class will cease to exist. It is, therefore, necessary that all the colleges that have been started during the Second Plan period should be upgraded to degree colleges. There will be 11 such colleges in the faculty of Arts and 11 in the faculty of Science. The first priority in the Third Plan should be to upgrade these Colleges. The need for expansion of collegiate education will still continue and this can be achieved more economically and more efficiently by consolidating the large number of colleges that have come into existence already, than by opening new colleges. This, however, does not mean that no new colleges should be started. As a matter of fact, according to a rough estimate, about 12 new colleges may come into existence during the Third Plan and most of these will be private colleges. As such, a correct estimate of this cannot be made at this stage. The general policy that will be followed during the Third Plan is to encourage consolidation of existing colleges and to discourage opening of new colleges as far as practicable. In addition to making provision for the starting of new colleges and for upgrading of Intermediate colleges, it is proposed to provide for improvement in the buildings, library and laboratory facilities of existing colleges, improvement in the scales of pay of non-government college teachers and also to award scholarships to needy and meritorious students. It is proposed to provide for special scholarships and construction of hostels for girls.

15. The total outlay contemplated under University education is Rs. 274.56 lakhs. In addition to the proposals mentioned above for which requisite provision has been made, the programme under University education also consists of a provision of Rs. 83 lakhs for grant-in-aid to Utkal University. The University which was purely an affiliating university upto the end of First Plan period has opened post-graduate classes in a number of subjects during the Second Plan period. The University has acquired new site at Bhubaneswar for construction of its campus and has undertaken construction of buildings. After the completion of the buildings for its teaching Departments it is proposed to make over the existing post-graduate classes which are now run by Government to the control of the University. Besides taking over the entire postgraduate teaching, the university has also proposals to open courses of study in a number of new subjects like library science, ceramics, applied chemistry, fine arts, etc. In addition, the annual intake capacity of the University College of Engineering at Burla is proposed to be increased from 120 to 200. This expansion has to be financed by Utkal University. The University depends for its funds mainly on the University Grants Commission and the State Government. The State Government propose to give Rs. 83 lakhs to the University to enable it to pay its matching share of the grants expected to be sanctioned in its favour by the University Grants Commission. This provision also includes assistance by State Government in respect of certain specific schemes of development approved by the State Government.

#### OTHER EDUCATIONAL SCHEMES

16. Besides the general programme mentioned above, there are certain other groups of schemes allied to educational programme. These include physical education and youth welfare, Social Education and certain miscellaneous schemes like staff schemes, education of handicapped improvement of Sanskrit studies, State and City Library, etc. The total provision for these 'other Education Schemes' is Rs. 75.09 lakhs. Of this, a sum of Rs. 6 lakhs is required for fulfilling the commitments made during the Second Plan period. The balance amount of Rs. 69.09 lakhs constitutes provision for fresh programmes contemplated in the Third Plan period. The distribution of this provision over the different schemes are explained below :—

16.1 *Physical Education and Youth Welfare*—A sum of Rs. 16 lakhs has been provided for the three schemes—Expansion of N. C. C. (Rs. 8 lakhs), Youth Welfare (Rs. 5 lakhs) and grant to associations promoting Physical Education and sports (Rs. 3 lakhs).

16.2 *Social Education*—The programme for the Third Plan under Social Education contemplates further expansion of the scheme for production of literature for neo-literates. New village libraries are proposed to be given grants-in-aid. 10 mobile library units in Block areas will be started. For removal of illiteracy in non-block areas a scheme has been drawn up to benefit 1,30,000 people. The Third Plan provision for Social Education is proposed to be Rs. 18 lakhs.

16.3 *Miscellaneous Schemes*—In respect of the miscellaneous schemes which are contemplated in the Third Plan, a provision of Rs. 35.09 lakhs has been made. The programme provides for strengthening the administrative staff in the Education Department and Directorate (Rs. 7.16 lakhs) establishment and expansion of State and City libraries (Rs. 16.43 lakhs), Improvement of Sanskrit studies (Rs. 5 lakhs), Education of the handicapped (Rs. 2.50 lakhs), promotion of Hindi (Rs. 3.50 lakhs) and opening of a branch of Stewart School (Rs. 0.50 lakhs).

#### TRAINING OF TEACHERS AND GIRLS' EDUCATION

17. Before the general account of the Educational programme is concluded particular mention may be made of two important aspects of the programme, namely, Training of teachers and Girls' Education. The progress achieved so far and the lines of further development envisaged in respect of these are set out below.

18. *Training of teachers*—The percentage of trained teachers at the primary level was about 40 per cent at the beginning of the Second Plan. To reduce the backlog of untrained teachers and to train the new teachers who were to be appointed during the Second Plan period, 50 new Elementary Training Schools with an annual intake capacity of 1,500 trainees, were opened in the period 1956—61. This will bring the total number of Training schools at the Elementary level to 79. In spite of the quick expansion thus provided in training facilities, due to an estimated appointment of about 10,000 new teachers during the Second Plan period, the percentage of trained teachers is estimated to stand at only 45 per cent of the total number of teachers by the end of the Second Plan period. The State, therefore, took advantage of the offer of the Central Government to expand 65 of the existing Elementary Training Schools by increasing their intake capacity by about 66 per cent. As a result of this Expansion the annual intake capacity of the Elementary Training

Schools will go up from 2,860 by the end of Second Plan to 3,660 by the end of Third Plan. The existing number of Elementary Training Schools will eventually be enough to take care of the annual replacement of trained teachers. Accordingly, it is not proposed to open any new Elementary Training Schools in the Third Plan period. To provide additional training facilities to remove the present backlog, it is proposed to provide 25 units condensed course Elementary Training Classes offering training of one year's duration with an annual output of 1,000 trainees. These units will have to continue for some years during the Fourth Plan period as the backlog of untrained teachers will not be entirely wiped out by the end of the Third Plan period. It is estimated that with the full output of trained teachers from the Elementary Training Schools started during the Second Plan period, the increased output due to increase in the intake capacity of the existing Elementary Training Schools and the output of the condensed course training centres, about 90 per cent of the primary teachers in existence by the end of the Third Plan period will be trained teachers.

19. At the Secondary level also, there will be a heavy backlog of untrained teachers by the end of the Second Plan. The percentage of Secondary Trained teachers to the total number of the matriculate and Intermediate passed teachers and that of trained graduate teachers to the total number of graduate teachers is estimated to be 38 and 65 by the end of the Second Plan period. There will be 5 secondary training Schools with an intake capacity of 220 and 2 training colleges with an intake capacity of 200 by the end of the Second Plan period but these will be insufficient to wipe out the backlog and train the new teachers that will be required for High, Middle Elementary and Elementary Training and Schools, for filling up the posts of Inspecting Officers and for meeting the requirements of other departments. It is, therefore, proposed to open 8 new Secondary Training Schools and 2 new Training Colleges during the Third Plan period with an intake capacity of 320 and 240 respectively. It is also proposed to open M. Ed. class in one of the Training Colleges and to increase the intake capacity at the M. Ed. stage from the existing 10 seats to 40 seats.

20. *Girls' Education*—It is estimated that 50 per cent of the children of the age-group 6—11 will have been enrolled in schools by the end of the Second Plan period. This percentage is estimated to be 25 for girls and 75 for boys. The target for Third Plan is to raise the overall enrolment from 50 per cent in 1960-61 to 70 per cent

in 1965-66. In this effort the enrolment of girls will have to be raised from 25 per cent to 50 per cent i.e. from 2.5 lakhs to 5.5 lakhs. In other words, the programme for introduction of universal Primary Education in the Third Plan period is largely a programme for promotion of Girls' Education. The problem of achieving a cent per cent increase in the enrolment of girls in a quinquennial period is a formidable problem and has been taken as a challenge. The special schemes for promotion of Girls' Education executed in the Second Plan period with full Central assistance will continue in the Third Plan period. Unlike in the Second Plan, the estimated quantum of full Central assistance has been accommodated within the plan ceiling in the Third Plan. In the programme for promotion of Girls' education in the Third Plan, provision has been made for award of attendance scholarships, quarters for women teachers, appointment and training of School mothers, condensed course for adult women, provision of sanitary blocks in primary schools, enrolment drives and refresher courses for women teachers. At the Secondary stage it is proposed to open girls, M. E. and High Schools at a proportionately quicker pace than schools for boys and to lessen the disparity between enrolment of boys and girls. The enrolment ratio of girls to boys is estimated at 1 : 7 at the middle stage and 1 : 9 at the High School stage by the end of the Second Plan period. The target for the Third plan is to improve these figures to 1 : 4 and 1 : 5 respectively. The following statement will explain.

Schools and enrolment	Estimated at the end of Second Plan		Additional provision proposed during the Third Plan	
	Total	For Girls	Total	For Girls
M. E. Schools ..	960	89	500	184
High Schools ..	400	35	120	24
Enrolment in M. E. Schools	85,000	10,625	85,000	23,000
Enrolment in High Schools	40,000	4,000	40,000	9,000

## 2. TECHNICAL EDUCATION

21. Under technical education two groups of schemes are included in the State plan—one under the head Education and the other under the head Labour and Labour Welfare. The schemes included in the former group are considered in this Section.

22. The State's Third Plan provides a sum of Rs. 502.21 lakhs for Technical Education. Unlike in the Second Plan, the Centre's share in respect of a number of centrally sponsored schemes has been included in the plan ceiling. The provision of Rs. 502.21 lakhs may be compared to the anticipated expenditure of Rs. 143.19 lakhs in the period 1956—61.

23. *Engineering Schools*—In the first Plan period there were 3 Engineering Schools in Orissa, namely, Orissa School of Engineering, Cuttack, Jharsuguda Engineering School and Berhampur Engineering School. The Orissa School of Engineering provided training in Civil, Mechanical and Electrical Engineering upto diploma standard. In the Engineering School at Berhampur training was given only in Sub-Overseers course of 1 year's duration. The Engineering School at Jharsuguda was started in 1956-57 providing training in Mechanical and Electrical engineering. In respect of diploma seats, only Orissa School of Engineering, Cuttack, had an admission capacity of 120 in the First Plan period.

24. The Second Plan for Engineering Schools consisted of expansion of the existing schools and establishment of new ones. From the academic session of 1957-58 the admission capacity of each of the existing Engineering Schools was raised to 180. A fourth Engineering School at Bhadrak, was set up in the private sector with an admission capacity of 120 students per year. Arrangements have also been made to start a fifth Engineering School at Kendrapara with an intake of 60 admissions from July, 1960. A scheme has also been prepared to start a sixth Engineering School at Bolangir in the Second Plan period in the private sector. The School, however, will start functioning only in the Third Plan period. The total admission capacity of all the five Engineering Schools by the end of Second Plan will be 720.

25. The programme for the Third Five-Year Plan in respect of starting of new Engineering Schools has been drawn up on the basis of a study of the demand and supply position of man-power requirements in respect of Engineering Diploma-holders. The total requirement of the State Government agencies during the Third Plan period is estimated at 1,600 Civil, 120 Mechanical and 200 Electrical Diploma holders. Making allowance for meeting the requirements of the private



sector and also of Central Government agencies the total demand during the Third Plan period will be 2,400 Civil Overseers, 300 Mechanical Overseers and 400 Electrical Overseers, or, in other words, 3,100 Diploma Holders. As against this, the total number of candidates that will appear in the Final Examination from the existing institutions will be 3,333. Assuming that 75 per cent of candidates will come out successful, about 2,500 Engineering Diploma Holders will be available in the Third Plan period, as against the estimated demand of 3,100. The net shortage will, therefore, be in the order of 600 Overseers during the Third Plan period.

26. To the extent possible, this shortage is expected to be covered by opening new Schools. The proposals in the Third Plan for Engineering Schools include opening of one new Engineering School at Khurda (Rs. 36.33 lakhs) and one Polytechnic Institute (Rs. 49.40 lakhs) with an admission capacity of 120 and 180 respectively. The Polytechnic institute will be on the model of Jayachamarajendra Occupational Institute, Mysore or the Bhavanagar Institute. It will provide the following courses:—

- (1) Sanitary Engineering
- (2) Ceramic
- (3) Mechanical Engineering
- (4) Electrical Engineering
- (5) Radio Engineering
- (6) Textile Technology

In addition, the Engineering School at Bolangir, the work on which has been started in the last year of the Second Plan period, will formally come into operation in the first year of the Third Plan period. A provision of Rs. 36.33 lakhs has been made for this purpose. In addition to these three institutions, the Kendrapara Engineering School and the Bhadrak Engineering School will expand to their full capacity and will admit 180 students a year. As a result of the proposals mentioned above additional seating capacity in the Third Plan period will be as follows:—

(1) One new Engineering School at Khurda	120
(2) One new Polytechnic Institute	180
(3) Bolangir School of Engineering	120
(4) Further expansion of Kendrapara Engineering School	120
(5) Further expansion of Bhadrak Engineering School	60

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600

27. In addition to the provision made for starting new Schools as explained above, the Plan also contains provision for expansion of existing Schools. Additional funds required for these Schools for additions and alterations to the buildings, replacement of machines, for additional staff etc. have been provided for. The details are as follows :

( Rs. in lakhs )

(1) Expansion of Orissa School of Engineering, Cuttack	11.99
(2) Berhampur Engineering School	9.10
(3) Jharsuguda Engineering School	9.10
(4) Bhadrak Engineering School	5.00
(5) Kendrapara Engineering School	32.05

28. *Orissa School of Mining Engineering*—This School came into existence in the year 1956-57 and has a seat capacity of 40 students. By 1960-61 an expenditure of Rs. 12.47 lakhs is expected to be incurred on the School. The entire expenditure in the Second Plan period has been kept outside the State Plan ceiling. In the Third Plan it is proposed to expand the School, for which a provision of Rs. 13.73 lakhs has been made. The admission capacity is proposed to be increased to 80. Although the entire requirement for financing the expansion of the School is expected to come from Government of India, the scheme is proposed to be admitted in the State Plan and the entire provision taken within the ceiling.

29. *Junior Technical Schools*—The proposal for establishment of two Junior Technical Schools could not materialise in the Second Plan period. The Schools will, therefore, be established during the Third Plan period for which a provision of Rs. 7.20 lakhs has been made.

30. *Engineering Colleges*—At present there is an Engineering College at Burla managed by the Utkal University. It has 120 seats in Civil, Mechanical and Electrical Engineering. As the demand for Engineers is considerably more than the out-put in Orissa, it is proposed to expand the admission capacity of the Burla Engineering College from 120 to 200 during the Third Plan period. In addition, two more Engineering Colleges are proposed to be established. One of these will be a Regional College to be started by the Government of India with facility for training in Civil, Mechanical, Electrical, Metallurgical and Chemical Engineering. The College will be established at Rourkela in considera-

tion of the facilities available there for practical training. The scheme for Regional Engineering College envisages an outlay of Rs. 180.52 lakhs. The College will have an admission capacity of 250 students distributed as follows :—

Civil	.. 70
Electrical	.. 60
Mechanical	.. 60
Metallurgy	.. 30
Chemical Engineering	.. 30
Total	<u>.. 250</u>

The State share of expenditure for establishment of the Regional Engineering College is estimated at Rs. 23.25 lakhs. The remaining amount of Rs. 157.27 lakhs will come from the Centre as Centre's share. In view of the urgency for and the keen interest of the State Government in setting up this College, the entire scheme of Rs. 180.52 lakhs has been accommodated within the State Plan ceiling.

31. The establishment of the Regional Engineering College will not, however, fully solve the problem of shortage of Engineers. Advance planning is necessary to meet the further shortage expected in the Fourth Plan period. Provision has, therefore, been made to start one more Engineering College towards the fourth year of the Third Plan period. A provision of Rs. 63.00 lakhs in the Third Plan period has, therefore, been made for the purpose.

32. *State Council of Technical Education*—The State Council of Technical Education and Training has been set up to advise the Government on co-ordinated development of Technical Education in the State at all levels, to affiliate and recognise institutions not conducting University courses, conduct examinations upto diploma standard, prescribe syllabus etc. The Council has already been started. Since the activities of the Council will expand during the Third Plan period, a provision of Rs. 3.00 lakhs has been made.

33. *Higher Training in Engineering* :—To meet the growing demand for trained engineering and technical personnel, the State Government is giving interest-free loans to poor but meritorious students. By 1960-61 a sum of Rs. 15.20 lakhs is expected to be spent on this score. 749 candidates have been given loan assistance. Out of them, 190 have already

completed their studies. For the remaining students a sum of Rs. 11.25 lakhs will be required for loan assistance in the Third Plan period. In addition, to meet the growing demand for engineers—a profession in which there is pronounced shortage both in the country as a whole and in Orissa in particular—the programme for loan assistance to meritorious students required considerable expansion. Keeping this in view as well as the commitments already made, a provision Rs. 30 lakhs has been made in the State's Third Plan for higher training in Engineering.

34. *Other Schemes under Technical Education* :—A provision of Rs. 13.44 lakhs for four specific schemes has been made: Grants to cultural associations (Rs. 4.00 lakhs), Expansion of the State Museum (Rs. 5.00 lakhs), Development of Modern Indian Languages (Rs. 3.00 lakhs) and revision of Orissa Gazetteers (Rs. 1.44 lakhs). All these are continuing schemes.

### HEALTH

35. Health conditions in Orissa are poorer than in most other States in the Union. Death rate during the period 1941—50 was estimated at 33.3 which was over 16 per cent higher than the all-India rate of 28.5. This declined to 30 in 1951-56—a fall of 9.9 per cent from 1941-50 rate where as during the same period the all-India rate declined by 12.3 per cent. It is stated that Orissa has the highest recorded death rate from all the major diseases taken together.

36. Efforts made in the first two Plans to improve the conditions are modest viewed against the needs that exist in this sphere. The *per capita* allocation which was Rs.1.45 NP. in the First Plan improved to Rs. 2.45 in the Second Plan while the all-India rate during the Second plan is placed at about Rs. 7.

37. In the field of medical personnel the position is far from adequate. At the beginning of Second plan there were 8 doctors to a lakh of population as against 19 on all-India basis, 78 in West Bengal and 33 in Bombay. Though as a result of expansion of medical education the number of doctors will go up from 1266 by the end of First Plan to 1470 by the end of Second Plan, there will still remain a wide gap, even on the modest estimate of 1 doctor to 5,000 population. It is worthwhile mentioning that as against 2 Medical colleges in this State including the Burla college recently opened there are 7 colleges in Andhra, 4 in Madhya Pradesh and 5 in West Bengal. The average admission to the Colleges in this State works out to 9.8 seats per million population as against the all-India average of 12.

38. A very much larger effort is therefore called for under the different programmes in the Health Plan of the State. Considering all aspects financial and physical—a provision of Rs. 834·30 lakhs is proposed in the Third Plan for Health including Rs. 105·00 lakhs for Rural Water:Supply. This may be compared to the outlay of Rs. 132·50 lakhs including Rs. 62·42 lakhs under Rural Water:Supply programme taken up in the First Plan and outside it and Rs. 485·62 lakhs in Second Plan including Rs. 47·5 lakhs under Rural Water Supply. Centre's share in respect of Centrally sponsored programmes which was kept outside the State's Second Plan is included in these estimates for facility of comparison.

39. In the Health Plan, while continuing the programmes introduced in the first two Plans, greater emphasis has been laid on the preventive Public Health Services and on the control and eradication of communicable diseases. The Health needs of the people in the rural areas will be catered for through Primary Health Centres. Due attention has been given for expansion of training facilities for Health personnel of all categories. Improvement and expansion of institutional curative facilities of both general and specialised types have been suitably provided for. The programme of family planning has been given increased support. Due consideration has been given to the indigenous system of medicine. While provision of safe drinking water in the villages has been suitably accounted for in the State Plan, Urban Water-Supply Programme is being shown in the Central Sector as in the Second Plan.

#### CONTROL / ERADICATION OF COMMUNICABLE DISEASES

40. 1. *National Malaria Eradication Programme*—The State launched the National Malaria Control Programme in 1953-54 and by end of First Plan period six units were established. In the Second Plan period by 1958-59, 10½ units were established as per the target. The State launched Eradication Programme from 1-4-1958 with reinforcement as recommended by the Director, National Malaria Eradication Programme. The field staff were increased by 50 and 100 per cent in the plains and hilly areas respectively to ensure complete two rounds coverage in a population of 12·5 million (85 per cent) in an area of 56,000 sq. miles (92 per cent). The whole State was covered by a total of 14½ units allotted and established. The surveillance staff has already been sanctioned and 13·5 units will start surveillance shortly. One Problem Unit has been allocated to the State. The supervisory staff has also been

suitably reinforced. The Eradication Programme has two or rather three phases. The attack phase consists of spraying alone with 100 per cent coverage as target. The consolidation phase consists of surveillance. A house to house visit every fortnight by surveillance staff to detect, spot and collect blood slides for Malaria parasite, is envisaged. All cases proved to be positive for Malaria parasite will be radically treated to wipe out the reservoir of infection in the community. The third phase or maintenance will be carried out as one of the routine health measures. The Third Plan programme is a phased combination of the attack and consolidation phases. The spraying will be withdrawn as per phasing recommended by the Director, Malaria Eradication Programme.

Functional integration with the Malaria Organisation of the Dandakaranya Development Authority who are operating in the Koraput district, will be carried out. It is proposed to hand over six sub-units or  $1\frac{1}{2}$  units to the Dandakaranya Development Authority. The stage for withdrawal of spraying (Spleen rate in children less than 5 per cent, parasite rate less than 1 per cent and infant parasite nil) has been reached in the meso-endemic coastal belt of the State. In the hilly Zones although the spleen rate has reduced to about 25—40 per cent there are pockets of high endemicity. Hospital figures are showing a steady decline so far as malaria morbidity is concerned.

*40·2 National Filaria Control Programme*—The State has the highest incidence of Filariasis in the Union. The first enquiry to find out ways to control the disease was undertaken as a joint enquiry in 1949 by the State Government and the I. C. M. R. The filaricidal-drug Hetrazan was given field trial to find out the effective dosage and application for control of the disease. Other measures e.g. spraying, residual insecticides were also tried.

In 1954-55 a Pilot Project at Ranpur was introduced to expand the field trial of the drug (Hetrazan). In 1955-56 the State launched its first National Filaria Control Programme Unit and four survey units were sent out to find out the epidemiology of the disease. The survey revealed that both *W. Malayi* and *W. Bancrofti* infections were prevalent in the State though *Bancrofti* was the most prevalent infection. Approximately 3·5 million people were living in the Filaria Zone. The coastal belt had the highest infection rate being 10-12 per cent and a disease rate of 8-12 per cent. Filariasis in the animals was also common in the State.

By 1957 the State had established five Control Units and covered 16 lakhs of population in the coastal belt of which 2.42 lakhs were urban population. A population of 5.05 lakhs or 53 per cent of the people (excluding those absent and exempted) was covered in the first round of mass therapy. At present the operations are restricted to observation of results both in man and the mosquitoes. The Municipalities and Notified Area Councils in the Filaria Control Zones are being helped with larvicidal oils to control mosquito nuisance in the urban areas. The five units will continue to operate in the Third Plan to follow up the results. Though no provision for the second round of mass therapy has been made it may be found necessary at a later stage. A provision of Rs. 12.48 lakhs is proposed under the programme.

*40.3 National Leprosy Pilot Project*—Leprosy is one of the Major Public Health problems in the State. The endemicity of the disease is high in the Coastal districts. The over-all incidence of the disease is 1.5 per cent. In order to effectively control the disease intensive survey, treatment and followup in the pockets of high endemicity are essential. The treatment of cases with Domiciliary approach viz. 'village to village', 'home to home' and 'patient to patient' was instituted in the State and the State Government availed of the assistance of the Government of India and started subsidiary centres under Leprosy Control Scheme from the year 1954-55 in the highly endemic areas of the State.

3 Projects were set up during the First Plan, covering a population of 2,30,938. Under the scheme the patients were treated at their home with followup of contacts. The target was achieved. 12 projects were allotted and established during the Second Plan period. A population of 9,33,931 has been covered in the endemic areas of the State. In order to effectively control the disease it is planned to carry on these intensive measures in the areas of high incidence and hence 20 subsidiary centres have been proposed in the Third Plan, 5 centres each year from 1962-63 onwards at a total cost of Rs. 12.87 lakhs.

The coastal districts which are endemic would be saturated with the maximum number of projects.

*40.4 Smallpox Eradication Programme*—Smallpox is rather endemic in this State and the average incidence of the last decade works out to 11,212 per year. At present there are 301 vaccinators for the rural areas but this staff is not able to cope with the demand. A large number

of vulnerable groups of population are left out and this number goes on increasing year after year. To tackle this problem systematic effort has been made from 1958-59. Each district was divided into 5 zones and all the vaccinators in the zones were required to make a thorough census of unprotected persons and to vaccinate them. This scheme which was operated outside the Second Plan has been included in the Third Plan in view of its great importance with a provision of Rs. 2.41 lakhs.

40.5. *Mass B. C. G. Vaccination Scheme*—Tuberculosis is a major Public Health Problem and the incidence of the disease is fairly high in Orissa. In order to control the spreading menace it is felt necessary to continue the Mass B. C. G. Vaccination Scheme in the Third Plan. The original target was to complete at least one round of vaccination by the end of the Second Five Year Plan but only 37 per cent of the population of the State has been covered up to June 1960. The coverage in the first round could not be possible for unapproachability of many of the areas during all seasons of the year. During the later half of the scheme new testings were confined to the dry months of the year, the wet season being utilised for the second round in approachable areas. The first round of vaccination has yet to be completed. The second round which has been taken up in some districts will also continue. Protection of the vulnerable group of population, industrial workers, school and college students, staff of hospitals etc. has to be maintained.

It is proposed to continue the programme for a period of one year at a cost of Rs. 2.97 lakhs to cover the entire State.

40.6. *Anti-tuberculosis demonstration and training centre*—With a view to provide training facility to the medical and para-medical personnel for control of tuberculosis, anti-tuberculosis demonstration and training centre is proposed to be set up in 1960-61. In addition to training facilities, other functions of the centre constitute demonstration of the technique of the model control measures and promotion of Research in Clinical and Sosio-economic problems connected with the disease. Provision of Rs. 3.07 lakhs is proposed in Third Plan for continuance of the Projects.

40.7. *T. B. Isolation Centre*—For segregation of highly infectious T. B. patients living in crowded localities and having no facility for isolation or domicilliary treatment, it is necessary to provide isolation



beds at certain District Headquarters to prevent risk of infection. 6 isolation centres with 90 beds at District Headquarters Hospitals of Bhawanipatna, Berhampur, Balasore, Baripada, Burla Hospital-Hirakud and S. C. B. Medical College Hospital, Cuttack were proposed in the Second Plan. So far no centres could be established due to want of accommodation facilities. Construction of buildings is under progress. A sum of Rs. 7.17 lakhs has been provided for these centres in the Third Plan.

40.8. *Establishment of Tuberculosis Clinics*— Only one clinic was established at Cuttack under the auspices of Provincial Tuberculosis Association prior to the Second Plan period, which was subsequently provincialised. Another clinic was started at headquarters hospital, Sambalpur under the normal programme. In the Second Plan, 5 clinics at district Headquarters Hospitals, Puri, Balasore, Baripada Berhampur and Koraput have been established. Construction of buildings at district headquarters of Dhenkanal, Sundargarh, Keonjhar, Bolangir, Phulbani and Bhawanipatna for establishing the clinics is in progress. Provision of Rs. 7.46 lakhs is proposed in the Third Plan for establishment of six clinics.

40.9. *Provision of additional 120 beds in T. B. Hospitals*— Prior to First Five-Year Plan there was one Tuberculosis Hospital at Uditnarayanpur with 25 beds. The State reserved 15 beds in the Sanatoria outside the State. During the First Plan, the bed strength of the Tuberculosis Hospital was raised to 35 and 8 beds were reserved outside the State. During the Second Plan another Tuberculosis Hospital was established at Chandpur with 150 beds. 30 additional beds are being provided during 1960-61.

As the present number of beds are not sufficient to meet the requirements, it is proposed to increase the bed strength of the T. B. Hospitals by 120 beds more at a cost of Rs. 4.37 lakhs. Of the 120 beds, 90 beds will be provided in T. B. Hospital, Chandpur and 30 at T. B. Hospital, Uditnarayanpur.

#### PRIMARY HEALTH CENTRES

41.1. During the First Plan, rural health services were expanded by establishment of Primary Health Centres in the Community Developmen

areas and National Extension Service areas. 11 such Centres were established. During the Second Plan, in addition to these 11, it was proposed to establish 158 Primary Health Centres, out of which 76 have already been opened and 82 are likely to be opened by the end of the Plan. Delay has been due to non-availability of Medical Officers and accommodation in various places. In the Third Plan the entire State will be covered by 307 Blocks. By the end of the Second Plan the total number of Primary Health Centres will be 169. The balance 138 centers are proposed to be established during the Third Plan including 9 Centres in Stage II Blocks.

A total provision of Rs. 91.94 lakhs has been included in the estimates, Rs. 72.04 lakhs for buildings for main and sub-centres and staff quarters for 129 Public Health Centres in Stage I Blocks according to approved estimates. Rs. 12.62 lakhs for Centres in 9 stage II Blocks and Rs. 7.28 lakhs for completing buildings according to revised patterns in certain other Blocks entering Stage II phase. With the establishment of these 307 Primary Health Centres there will be one Primary Health Centre for each 50,000 population.

#### FAMILY PLANNING

41. 2. 2 Family Planning Centres were opened during First Plan period and during Second Plan, 26 Urban and 59 Rural Centres have already been established and one more will be established during 1960-61. The Urban Centres have been attached to the District headquarters and Subdivisional headquarters and the Rural Centres to the Primary Health Centres and some Maternity and Child Welfare Centres. At the beginning there was resistance in both urban and rural areas. Later experience shows that they are gradually becoming popular. 10 Lady Doctors and 14 Lady Health Visitors and one Social Worker have been given short course training in Bombay. During Third Plan it is proposed to open 10 additional urban centres and 40 Rural Centres at a total cost of Rs. 5.00 lakhs.

One Regional Family Planning Centre has been established at Sriram Chandra Bhanja Medical College, Cuttack during Second Plan for imparting knowledge in Family Planning to Medical students. This will continue during Third Plan in the normal side.

#### TRAINING FACILITIES

42. Prior to First Plan there was only one Medical College at Cuttack with 35 annual admissions. The annual admissions were increased to 50 during First Plan period and to 100 by 1958. A Medical College has been opened at Burla with 50 annual

admissions from 1959, and 60 more candidates have been taken to S. C. B. Medical College in 1959-60 session and 50 candidates in 1960-61 session:

43. The requirement of doctors for the State will be 3,600 by the end of Third Plan on the basis of one doctor to 5,000 population. 958 doctors were available in 1949 and 1,266 by the end of First Plan. As a result of expansion of the medical education, 1,470 doctors will be in position by the end of Second Plan and 2,085 by the end of Third Plan taking into account 5 per cent casualties, etc. There will be, therefore, a net deficit of 1,515 doctors (3,600—2,085).

44. In order to make up the leeway it is proposed to establish a new medical college at Berhampur with 100 admissions, 50 from 1962-63 and additional 50 from 1964-65. The existing District Headquarters Hospital, Berhampur will be upgraded to serve as a teaching hospital. The Burla Medical College will be expanded with substantial improvement to the teaching hospital and admission raised to 100 in 1961-62.

45. Post-graduate training in Surgery, Medicine, Physiology, Bio-Chemistry, Pathology, Pharmacology and Anatomy has been introduced during 1960-61 at the Sriram Chandra Bhanj Medical College, Cuttack. During the Third Plan it is proposed to arrange post-graduate training in the college for 60 candidates at the rate of 12 candidates annually. A provision of Rs. 6.31 lakhs is included on this account.

46. *Training of Nurses*—The need for nurses will become more acute during the Third Plan period. There are 419 registered nurses in the State. Of them a fairly large number are not available for employment in Government services. The total bed strength of the Medical Institutions in the State will be 2329 by the end of the Second Plan period and this will go up to 3,679 by the end of the Third Plan. For providing nursing service to hospitals and Public Health Nurses for Public Health duties, the training programme has to be suitably augmented. At present, provision exists for training of nurses in 5 centres, of which Government arrange for training of 42 nurses annually on stipendiary basis. It is proposed to arrange for training of 500 nurses, 100 nurses annually at different Centres, where hostel accommodation, nursery and other facilities exist. The existing provisions will have to be further improved by providing additional

building accommodation, equipment, staff and contingencies. The nurses will have to be trained on stipendiary basis on execution of bond to serve the State Government for 3 years. The total provision on this account is Rs. 10.88 lakhs.

47. *Training of Auxiliary Nurse Midwives*—The Indian Nursing Council decided on abolition of Midwifery Training Course with the view that the nurses will have Midwifery training also. They introduced the Auxiliary Nurse-cum-Midwife Training course. This is a shorter and simpler course than the full course in Nursing and Midwifery. This is to meet the urgent need of Nurse-cum-Midwives. The course provides for preparing the trainees in both institutional and domiciliary nursing and also meets the requirements of the Midwives' training prescribed by the Council. The training course has been introduced in the State since 1956, and arrangements have been made for training of a total number of 185 candidates annually by the end of the Second Plan mainly to meet the requirements of Primary Health Centres. With the gradual increase in the number of Primary Health Centres during the Third Plan period the demand for this category of personnel will rise. It is proposed to continue the programme for training of 120 candidates annually with a provision of Rs. 8.81 lakhs.

48. Other programmes in this sphere include Training of Dais Public Health Nurses, B. Sc. Nursing, Pharmacists, Technicians and Health Inspectors. Training of 50 Dais annually in addition to the normal Programme of training 96 Dais annually has been provided for.

49. Training of Public Health Nurses has been taken up in the Shri Rama Chandra Bhanja Medical College Hospital under the supervision of two International Agency Nurses and general Nursing Tutors. It is proposed to continue this training programme by increasing the annual admission to 30 during the Third Plan. For training in B. Sc. Nursing it is proposed to arrange training of 20 candidates possessing intermediate qualifications in B. Sc. (Hons) Nursing degree course in the college of Nursing, New Delhi and to train 10 Nurses in Sister Tutors Course by providing stipends and other connected expenditure.

50. During the Second Plan period, a Pharmacy School attached to the Shri Rama Chandra Bhanja Medical College, Cuttack has been started with annual admission of 32 students. The first batch of students passed during 1960-61. The number has been found too inadequate to

meet the growing demands of the Pharmacists. Annual admissions to the Pharmacy School will be raised from 32 to 60 with view to train 300 Pharmacists during the Third Plan period.

51. Training of 100 technicians at the rate of 20 annully at the Shri Rama Chandra Bhanja Medical College Hospital has also been provided for. The Medical Officers working in the Laboratories and the Radiologists will be assigned the responsibility for training these candidates in laboratory and X-ray techniques.

52. The Training programme of Health Inspectors will be continued with admission of 50 candidates annually at the existing training intitute at Cuttack,

53. *Improvement of Rural Health Centre*—With the establishment of the Department of Social and Preventive Medicine at the Shri Rama Candra Bhanja Medical College, Cuttack, a Rural Health Centre was established at Jagatsingpur, 40 miles from Cuttack. Prior to the first plan, there was no arrangement for Public Health Orientation training in the State. This centre provides facilities for practical training in problems oonnected with Community Health. Medical students before being admitted to the degree of Bachelor of Medicine and Surgery are under the Regulations of the University required to undergo practical training in Rural Health practice for a period of 3 months after final M. B., B. S. examination.

54. During the Second Plan period, the Centre has been developed with UNICEF assistance. Nurses with Midwifery qualifications are being sent for practical training. It has been found necessary to develop this Rural Health Centre in the pattern of Orientation Training Centres at Singur with a view to provide adequate facilities for Orientation Training of medical and para-medical personnel. At present such personnel are being sent to Singur at considerable inconvenience and expenses. With the expansion of medical education and training of para-medical personnel, Singur will be unable to cope with the demand. Even now seats there are limited.

55. With this in view it is proposed to develop this Centre on the lines of Singur providing additional buildings and staff. A provision of Rs. 5.54 akhs is proposed on this accout.

## PUBLIC HEALTH SERVICES

56. *School Health Services*—Prior to First Plan there was only one School Medical Officer. During the First Plan one more School Medical Officer and one Lady School Medical Officer were appointed from normal side. During the Second Plan 3 Dental Units under School Health Services will have been established.

57. It is proposed in the Third Plan to appoint 3 School Medical Officers including one Lady School Medical Officer and to continue the 3 Dental Units established during the Second Plan.

58. As the above School Medical Officer will not be able to conduct medical examination of all school-going children, the School Medical Officers will be entrusted with the examination of the students in High Schools only. The Medical examination of the students of Primary and M. E. Schools in rural areas will be taken up by all Medical Officers in charge of Primary Health Centres and Rural Hospitals and Dispensaries and that of the urban areas by the respective Health Officers.

A provision of Rs. 7.15 lakhs is proposed on this account.

*Nutrition*—Before the First Plan sample surveys were carried out in the State. During the First Plan Milk Feeding Programme was taken up by distributing milk powder in certain schools, hospitals and Maternity and Child Welfare Centres. In the Second Plan the programme was expanded. In addition to distribution of milk powder, Fish Oil Capsules and vitamin tablets are being distributed. Expanded Nutrition programme has been taken up in 52 Community Development Blocks from 1959-60 and it envisages the following :—

(a) Nutritional assessment

(b) Diet Survey

(c) Training of Health personnel, Village Level Workers and Member of Mahila Samitis.

It is proposed to continue the above programme during Third Plan at a cost of Rs. 3.00 lakhs.

## HOSPITAL SERVICES

*Improvement of District headquarters hospitals and Upgrading of Subdivisional Hospitals to the standard of Referral Hospitals*—Most hospitals in Orissa excluding the Medical College Hospital had a very small number of beds and inadequate provision for X-Ray and Laboratory

facilities. The total number of available beds for treatment before First Plan was 1218. By the end of First Plan it could be raised only to 1384, which amounted to one bed for 10,600 population. In the Second Plan, addition of 945 beds are to be provided making a total number of 2329 beds, that is, one bed for 7,097 persons. Now due to establishment of more Primary Health Centres, pressure on District Headquarters hospitals and Subdivisional hospitals for referral services has increased. It is proposed to increase the bed strength of the District headquarters hospitals by 180 more and of the Subdivisional Hospitals by 320 more at a cost of Rs. 25.50 lakhs. This provision includes the amount required for completion of the buildings taken up during 1960-61 for the District headquarters hospital, Baripada.

63. Besides the provision of above beds, additional beds have been provided in other medical institutions as follows—

Burla Medical College	..	375
Berhampur Medical College	..	300
Tuberculosis Hospital	..	120
Isolation Centres	..	30
Cancer Ward	..	25

64. In the Third Plan there will, therefore, be 1,350 beds in all medical institutions, increasing the bed strength to 3,679 with 1 bed for every 5,000 population approximately.

65. *Additional Medical Stores*—The daily average attendance of both in and out patients in all hospitals and dispensaries is increasing day by day. Besides, the cost of drugs is on its increase and people are becoming more hospital-minded. To meet this increased demands provision of Rs. 12.50 lakhs was made in the Second Health Plan. It is proposed to provide a sum of Rs. 15.00 lakhs during the Third Plan for the above purpose.

66. *Laboratory Services*—No improvement could be made in the First Plan period. In the Second Plan 4 laboratories are being upgraded by appointment of additional staff and supply of equipment by UNICEF. It is proposed to strengthen 7 such laboratories during the Third Plan in the district headquarters hospitals in Puri, Balasore, Kalahandi, Phulbani, Sundergarh, Keonjhar and Dhenkanal.

67. *Establishment of Blood Bank*—Prior to First Plan one Blood Transfusion centre was existing at S. C. B. Medical College Hospital, Cuttack. In the Second Plan one such centre was established at Balasore from normal side. Under the auspices of Indian Red Cross Society a Central Blood Bank has also been established at Cuttack. It is proposed to open 4 Blood Transfusion centres at the District Headquarters Hospitals, Bolangir, Baripada, Puri and New-Capital during Third Plan at a cost of Rs. 2.95 lakhs.

68. *Establishment of Dental Clinic*—Dental services were available at Cuttack and Baripada in the pre-plan period. No improvement could be made during First and Second Plan period. In the Third Plan it is proposed to establish 3 such units at district headquarters hospitals with a provision of Rs. 2.08 lakhs.

69. *Specialist Services*—It is only available at the S. C. B. Medical College, Cuttack. No improvement could be made during First and Second Plan. In the Third Plan it is proposed to post specialists in surgery, medicine and gynaecology in 4 district headquarters hospitals including Capital Hospital, Bhubaneswar, with a provision of Rs. 3.75 lakhs.

70. *Ambulance Services*—No such facility exists in any of the subdivisional hospitals at present. In the Third Plan it is proposed to provide ambulance cars to 12 hospitals (the bed strength of which is 35 or more) at a cost of Rs. 4.62 lakhs.

71. *Improvement of Ex-District Board hospitals and dispensaries*—During 1958, Government took over 116 Allopathic dispensaries and hospitals run by local bodies. As these had inadequate accommodation and equipment, a provision of Rs. 12.07 lakhs has been made to bring them to the standard of other hospitals and dispensaries in the State.

72. *Provision of diet for the Primary Health Centres*—The Primary Health Centres established in Stage I Blocks have no provision for diet under Community Development Budget. Since each Primary Health Centre has got 6 emergency beds including 2 Maternity beds, it is necessary to provide diet under Health Plan to the Primary Health Centres on a phased basis. A provision of Rs. 10.98 lakhs is proposed on this account.



73. *Cancer Ward in S. C. B. Medical College, Cuttack*—As there was very inadequate provision for treatment of Cancer in the S. C. B. Medical College Hospital, provision has been made for 25 bedded Cancer Ward. The institution is likely to get a cobalt unit under the Colombo Plan Capital Aid Programme.

74. *Establishment of Mass Miniature Radiography Unit*—A Mass Miniature Radiography Unit is proposed to be set up for which a provision of Rs. 2.40 lakhs has been included. The non-recurring expenditure has not been included as it is expected to receive a X-Ray machine and other equipment from some philanthropic Organisation free of cost.

#### INDIGENOUS SYSTEM OF MEDICINE

75. *Ayurvedic*—During the pre-Plan period one Ayurvedic Vidyapitha was functioning at Puri with 30 annual admissions and a teaching hospital of 20 beds. During the First and Second Plans the bed strength was raised to 60—20 in each Plan.

76. Prior to First Plan 63 Ayurvedic dispensaries were functioning in the State. During the First Plan period 36 such dispensaries were opened. In the Second Plan provision for opening of 15 Ayurvedic dispensaries was made besides 10 dispensaries under Tribal and Rural Welfare programme. Of the above, 22 dispensaries have been opened and the remaining 3 dispensaries are to be opened by the end of the Second Plan. During the Third Plan it is proposed to re-organise the Ayurvedic system by—

- (1) Establishment of 12 Ayurvedic dispensaries.
- (2) Improvement of Pharmacy at Bolangir to enable it to manufacture Ayurvedic drugs for the dispensaries.
- (3) Development of harborium at Bolangir to enable it to supply raw materials to the above Pharmacy.
- (4) Introducing research in Ayurveda at the Gopabandhu Ayurveda Vidyapitha, Puri, and
- (5) Giving Aid to the Ayurvedic Board.

77. *Homeopathic*—In Third Plan it is proposed to establish 12 Homeopathic dispensaries, besides providing for stipends to the Homeo Trainees.

#### ADMINISTRATION

78. Shortage of Medical Officers is more keenly felt in the Public Health Cadre of the State than in the Medical. The question of integration of both Medical and Health personnel into one unified cadre is a present under active consideration of State Government.

79. It is also considered desirable that the health activities will be co-ordinated and unified all through from the periphery to the centre under a unified health cadre by making all the posts non-practising and providing non-practising allowances for better implementation of developmental projects. Suitable provision has been included to bring about the reorganisation on the above lines.

#### RURAL WATER-SUPPLY

80. Provision of drinking water in villages continues to be a serious problem in the State. The problem is more acute in the populated coastal areas which are subject to heavy saline intrusion during the summer months of the year. In the First Plan there was a provision of only Rs. 62.42 lakhs under National Water-Supply (Rural) including some schemes taken up outside the Plan while the provisions available under Local Development Works, Welfare of Backward Classes and National Extension Blocks were very limited. In the Second Plan when the Block pattern was established steps were taken to prepare Master Plan for drinking water for the villages pooling together the provision made under National Water-Supply (Rural) which was continued as a State Plan scheme and under other programmes mentioned above. The main emphasis in the Master Plan was to try to provide a source of drinking water for every village with more than 30 houses. For villages with 200 houses or more provision of tank was contemplated. The National Water-Supply Scheme in the Second Plan was supplemented by special programme for water-supply in areas affected by drought in 1957 and an additional provision of Rs. 27.54 lakhs was made by adjustment in the Plan. It is estimated that by the end of the Second Plan a total number of 3,687 wells, 150 tanks and 1,043 tube-wells would have been provided. Taking all efforts put in under different programmes into account the over-all position is that only about 16 to 17 per cent of the total number of villages would have been covered.

81. Though a very much larger effort in this sphere is called for a provision of Rs. 1.05 crores under the National Water-Supply Programme (Rural) has been proposed in the Third Plan keeping the financial limitations in view. This includes provision of Rs. 15 lakhs estimated to be carried over to Third Plan for completing incomplete schemes taken up during the Second Plan. This programme under the National Water-Supply pattern will be extended to groups of villages suffering from water scarcity and will include in particular installation of tube-wells in the coastal areas basing on the results of

borings undertaken by the ground Water Survey Team. The physical, target of this programme in the Third Plan will consist of 3,800 wells 750 tanks and 1,000 tube-wells. This will be supplemented by simpler types of water sources provided under the programmes of Community Development, welfare of Backward Classes and Local Development works with full stress on local initiative and local contribution. The details of an integrated programme to be undertaken with provisions available from different sources will be worked out at the stage of preparation of Block Plans and will form part of the State Plan.

### 3. HOUSING

82. In the State Plan the provision for housing involving public outlays relate to four specific programmes : Subsidized Industrial Housing Scheme, Low Income Group Housing Scheme, Slum clearance and Rural Housing Cell. The progress achieved in the Second Plan period and the proposals for the Third Plan in respect of these and certain other staff schemes are explained in this section.

83. The anticipated expenditure under Housing by 60-61 is expected to be Rs. 110.98 lakhs. In the Third Plan it is proposed to provide Rs. 226.75 lakhs. The details are as follows :—

(1) Subsidized Industrial Housing Scheme	Rs. 50.00 lakhs
(2) Low Income Group Housing Scheme	Rs. 100.00 „
(3) Slum clearance	Rs. 60.00 „
(4) Rural Housing Cell	Rs. 4.40 „
(5) Appointment of Clerks in Blocks for Village Housing.	Rs. 2.35 „
(6) Organisation of separate Housing Department.	Rs. 10.00 „
	<hr/>
Total ..	Rs. 226.75 lakhs
	<hr/>

84. 1. *Subsidised Industrial Housing Scheme*—As a result of acute shortage of accommodation for the industrial workers in the State, there has been considerable demand from Industrial employees for tenements constructed by Government. The scheme came into operation in the

First Plan period. 160 tenements at Rajabagicha were put up through the agency of the State Government under the scheme by 1955-56. In the Second Plan period it is expected that Rs. 30.26 lakhs will have been spent by 1960-61 in putting up 951 industrial tenements. In the Third Plan a provision of Rs. 50.00 lakhs has been made with which it is proposed to construct 1,364 tenements. Two-third of these tenements will be single storeyed and one-third double storeyed.

**84.2. Low Income Group Housing Scheme**—Under this scheme the State Government provides loans to individuals with an annual income not exceeding Rs. 6,000 repayable within 30 years, the assistance being limited to 80 per cent of the cost of the house including cost of land subject to a maximum of Rs. 8,000 per house. Although the Scheme actually commenced in the year 1954 nothing substantial was achieved in the First Plan period. In the Second Plan period a sum of Rs. 67.05 lakhs is expected to be the likely expenditure by 1960-61 as a result of which 1,040 houses would have come up. In addition, Government have also constructed 50 residential houses and 12 shop-cum-residential buildings in Bhubaneswar which will be sold either outright or on hire-purchase basis. There is considerable demand for loans under the scheme. In the Third Plan, a provision of Rs. 100.00 lakhs has been made for construction of 2,000 houses.

**84.3 Slum Clearance**—Under this scheme, the State Government receives central assistance on the basis of 50 per cent loan and 25 per cent subsidy on approved projects and the State Government contributes from its own resources the balance amount required. In the Second Plan the share of State Government was included in the State Plan ceiling and the Centre's share was kept outside. Including the Centre's share a sum of Rs. 12.00 lakhs is expected to be spent by 1960-61 in putting up 360 tenements. In the Third Plan period, the estimated Centre's share is proposed to be included in the State Plan ceiling. A scheme with a total cost of Rs. 60.00 lakhs has been drawn up for slum clearance with a view to construct 1,500 houses.

**84.4. Rural Housing Cell**—A small begining has been made in the Second Plan for dealing with the problem of Rural Housing. A Village Housing Project Scheme was taken up by selecting groups of 4 to 6 adjoining villages for locating housing projects. These projects are implemented on the basis of aided-self-help by facilitating technical supervision and also establishment of brick and lime kilns and workshops

for producing building components. About 204 villages have so far been selected under the scheme. The entire provision for the scheme has been made outside the State Plan ceiling as a Central Sector Project. In the Third Plan this project is expected to continue in the Central Sector, however, for the purpose of implementing the scheme, a Rural Housing Cell was established in the Second Plan period. This was a centrally sponsored scheme and the Centre's share was kept outside the ceiling. The Rural Housing Cell prepares Master Plans for villages in which the Village Housing Project Scheme is implemented. Including the Centre's share a sum of Rs. 2.48 lakhs is expected to be spent by the end of the Second Plan period. In the Third Plan a provision of Rs. 4.40 lakhs has been made for expanding the Rural Housing Cell. This includes an estimated Central assistance of Rs. 1.75 lakhs, which unlike in the Second Plan, will be kept within the State Plan ceiling.

84. 5. *Staff Schemes*—In addition to the schemes mentioned above a sum of Rs. 2.35 lakhs has been provided for appointment of clerks in the blocks for village housing scheme and Rs. 10 lakhs for creation of a separate housing department.

#### WELFARE OF BACKWARD CLASSES

85. According to 1951 Census Backward Classes constitute 67 per cent of the total population of the State. The present tribal population is estimated to have gone up to 33 lakhs which is more than 20 per cent of the present projected total population of the State. Twenty-two thousand sq. miles in 15,000 villages comprise the scheduled area declared as such under the constitution. While about 50 per cent of the tribal population are inhabitants of the scheduled area, the other 50 per cent are spread over other areas of the State in about 10,000 villages.

86. There are as many as 62 tribal communities in the State which could be grouped under 4 main categories, namely, (i) the tribes still in a primitive state, (ii) the tribes in transition, (iii) the assimilated tribes and (iv) the aristocratic tribes. The primitive tribes live in inaccessible areas and geographical barriers have prevented them from contact with outside influence. They are typically conservative. Lands on hilltops are distributed among the villagers on mutual agreement and private ownership is not recognised. The forests are mostly treated as common property. These tribes are generally accustomed to Podu and shifting cultivation. They are of migratory habits and averse to settled cultivation. The tribes in transition live at the foot of the hills and

primarily depend on shifting cultivation. They also carry on some amount of wet cultivation on dried up beds of hill streams. The assimilated tribes still retain their tribal character and the precarious method of cultivation while the so-called aristocratic tribes who claim to be the descendents of the old tribal chieftains have taken to some of the modern ways of living. The number of the latter category, however, among the tribal communities is very small.

87. The problem of welfare of Backward Classes has been receiving special attention of the State Government ever since 1946. Prior to the First Plan an expenditure of the order of Rs 46 lakhs was incurred on this programme. In the First Plan this was stepped up to Rs. 226.38 lakhs including schemes taken up outside the Plan and the anticipated outlay for the Second Plan in the State Sector is placed at Rs. 355.72 lakhs. The allocation for the Third Plan in the State Sector is proposed at 525.55 lakhs. The allotments proposed in the Third Plan for different groups included within the backward classes programme along with the anticipated outlay under the Second Plan in the State Sector are shown below :—

	Second Plan State Sector (anticipated outlay)	Third Plan Allotments Proposed
Scheduled Tribes ..	289.33 lakhs	409.08 lakhs
Scheduled Caste ..	59.81 lakhs	100.54 lakhs
Others ..	6.58 lakhs	15.93 lakhs

The programme in the sphere of the different groups consists of measures under the following broad heads :—

- (1) Education
- (2) Economic Uplift.
- (3) Health, Housing, etc.

88. The progress achieved by the end of Second Plan and the programmes envisaged in the Third Plan for the different groups of the backward classes are discussed in the following paragraphs.

89. By the end of First Plan 1,035 Sevashrams were established including 975 for scheduled tribes and 60 for scheduled castes. This number would go up to 1,191 by the end of Second Plan providing an additional number of 120 Sevashrams for scheduled tribes and 30 for scheduled castes besides 6 residential type Sevashrams under the Central Sector.

90. The Tribal villages are invariably very small in size and are separated from one another by long distances. Under the programme of general education, it is aimed to cover all villages with a population of 300 or more. There are very few tribal villages with a population of this size. The present teacher pupil ratio under the general education programme has been kept at a maximum of 1:40 and minimum of 1:30. To have 40 children in one village of the age-groups of 6-11 there has to be a population of about 250. It is not possible to group the tribal villages together as dense jungles, steep hills intervene between villages. Nor is it possible to stick to the normal teacher pupil ratio of 1:30. The number of eligible students in the scheduled areas and other areas inhabited by scheduled tribes is estimated at 6 lakhs. Under the general education programme about 6,000 primary schools in the scheduled areas and in the tribal inhabited villages in non-scheduled areas would have been provided by end of Second Plan. This is in addition to a total number of 1,101 Sevashrams for Tribals provided under the programme of Welfare of Backward Classes. There are at present 36,940 tribal boys and girls in these Sevashrams and this would go up to 44,200 by the end of the Second Plan. As against the total number of 20,000 schools of Lower Primary standard estimated to cover the tribal children there would be on the above basis about 700 schools functioning at the end of Second Plan. This leaves a balance of about 12,900 schools to be provided if full coverage of children of the age-group of 6—11 is to be achieved during the Third Plan. The programme in this sphere in the Third Plan will be mainly confined to one of co-ordination with the efforts provided under the general education programme and supplementing such efforts where necessary by additional provision to be made at a latter stage by adjustment.

91. In the sphere of Middle English education 48 Ashram Schools were provided during the First Plan and in the Second another 20 would have been set up both under the State and Central sectors. In the initial stages there was tremendous difficulty in getting students in the Ashram schools even though all the expenses were met by Government. There were frequent desertions. As a result of concentrated effort made during the First Plan, continuity in the schools could be achieved to a large extent at the beginning of Second Plan and the Ashram Schools have more or less stabilised themselves. There is a rush for the Ashram Schools so far as assimilated tribes are concerned but the Ashram schools which are located in the areas inhabited by the real primitive tribes and the tribes in transition, the full strength of 90 per Ashram school

is seldom reached. These are of the residential type where at present about 5,000 boys and girls are prosecuting their studies with all expenses borne by Government. Nine out of these Ashram schools are meant exclusively for girls. In the Girls Schools classes are retained from I to VII as education has not practically made a beginning among the tribal girls. In the Third Plan it is proposed to set up 10 more Ashram Schools in the State Sector. For privately managed schools according to the present pattern the local people have to contribute 1/3 of the net recurring deficit and 50 per cent of the non-recurring requirement. On account of non-fulfilment of this requirement by the tribal people it has not been possible for the State Education Department to establish adequate number of M. E. Schools for boys and girls passing out of the Sevashrams and Primary schools. Under the programme of welfare of backward classes provision has been made in the Third Plan for contributing the people's share in respect of 125 M. E. Schools. The total number of M. E. schools including Ashram schools during the Third Plan will go up to 300 as against the estimated ultimate requirement of 2,000 schools of M. E. standard.

92. Provision has also been made for hostels and stipends for the students in the M. E. Schools. The demand for higher education is steadily increasing and emphasis has now been shifted from teaching of crafts and agriculture to general education. The boys and girls from Ashram schools are now competing with other boys and girls in the common M. E. examination. So far 500 boys and girls have passed the common M. E. examination.

93. The number of High Schools in the tribal areas and the number of tribal students in High Schools are very limited. Under the programme of welfare of backward classes stipends are being provided for pre-matric classes from class IV. At present about 6,000 tribal boys and girls are receiving stipends in pre-matric classes. The number is proposed to be kept up at the same level as obtaining at the final year of the Second Plan during each year of the Third Plan. Grants will continue to be made on the criteria of merit and income of parents.

94. As for hostel facilities 52 hostels would have been provided for tribal boys in the State Sector and 70 in the Central Sector at the end of Second Plan. It may be mentioned that students belonging to other castes are allowed to stay in these hostels after the needs of the tribal students are met. In the Third Plan 12 hostels for post-matric students, 60 for students of High Schools, 80 of M. E. Schools and 60 of U. P. Schools have been proposed.



95. Other programmes in this sector include exhibitions to be held in each district and at the State headquarters with a provision of Rs. 2.50 lakhs, a provision of Rs. 5 lakhs for research in Social Science and for a Statistical Section to be attached to the Tribal Research Bureau.

96. *Economic Uplift*—A programme of settling the Adibasis on land to wean them away from the practice of Podu cultivation has been in operation for a long time. At the end of Second Plan 151 colonies would have been established, rehabilitating about 5,000 families in settled cultivation. In this scheme of rehabilitation 5 acres of cultivated land, bullocks, agricultural implements and seeds are provided. Subsidies are also given for construction of houses in the colonies and a common house is constructed for their recreation. Medicine is provided and a fair price shop is located in these colonies. The programme of Jhum control taken up during the Second Plan will be continued during the Third Plan at a cost of Rs. 2 lakhs.

97. Under the programme of Pisciculture a provision of Rs. 6.14 lakhs is proposed for opening of seed centres, training of tribals in fishery and supply of gear to fishermen. This is aimed at supplementing the effort provided under the programmes of Fisheries and Grama Panchayats in the Third Plan. Cultivation of lac has considerable scope in the tribal area. Four Brood Lac Farms are proposed to be established during the Third Plan for which Rs. 1 lakh has been provided. A provision of Rs. 1 lakh is included for development of Tassar cocoons which can provide standing income to the tribal areas. The Lac and Tassar resources can be worked through Forest Labour Co-operative Societies. At the end of Second Plan 25 Forest Labour Co-operative Societies started under the Centrally sponsored programmes will be functioning. 60 more Forest Labour Co-operative Societies have been provided for in the State Sector at a cost of Rs. 33.80 lakhs including loans for working capital. The provisions for loan will continue to be made from the State Loan budget as hitherto done.

98. The programme of poultry development will be further intensified in the Third Plan for which a provision of Rs. 10.30 lakhs has been proposed. Large industrial establishments are coming up in the tribal areas and in that context it is expected that the poultry programme would yield considerable economic benefits to the tribal families.

99. By the end of Second Plan about 800 grain golas would have been provided under this programme. In the Third Plan it is proposed to establish 800 more grain golas at a total cost of Rs. 40 lakhs. The object is to provide 1 grain gola to each Grama Panchayat in the backward and tribal areas. This will be in addition to the Grain Golas being provided under other programmes. The Grain Golas will provide credit facilities as well as improved seeds and manures. Provision of Rs. 2 lakhs has been made for Co-operative Marketing Societies for the opening of purchase and sale centres for Adibasi agriculturists the object being to enable the tribals to get reasonable price for their produce, thereby preventing exploitation by unscrupulous middlemen.

100. In the sphere of training, one Technical Training Institute and two Training-cum-Production Centres established during Second Plan in the Central Sector are now producing trained artisans at the rate of 150 a year. The Technical Training Institute is proposed to be expanded during the Third Plan in the State Sector at a cost of Rs. 14 lakhs. A provision of Rs. 4 lakhs has also been made for giving assistance to the trained artisans for establishing themselves in trades. An amount of Rs. 9.63 lakhs is proposed under the Expanded Nutrition Programme for catering to the nutrition needs of the expectant mothers and school children. For 6 months in a year eggs will be provided and for the other 6 months fish and fish oil capsules will be arranged from other sources. The UNICEF are assisting this programme during the Second Plan with equipment and vitamin tablets and it is expected that larger assistance will be forthcoming from the UNICEF during the Third Plan.

101. *Communication*—By the end of Second Plan 4,000 miles of roads would have been constructed in the tribal areas. A provision of Rs. 15 lakhs is proposed under this head with which 1,000 miles of roads will be constructed or repaired.

102. *Drinking Water-Supply*—At the end of Second Plan there would be about 5,000 wells which include 823 wells provided in the central sector. A provision of Rs. 30 lakhs is proposed for Third Plan with which 2,500 wells and 100 tanks will be provided. This programme will be carried through in accordance with the Master Plan under which every village with 30 families and above will be given a well. For smaller villages water cisterns will be provided on the hill streams.

103. *Housing*—Subsidy is proposed to be given to about 2,000 families at a cost of Rs. 15 lakhs during the Third Plan. By the end of Second Plan a sum of Rs. 42 lakhs (Rs. 30 lakhs under Central Sector and Rs. 12 lakhs under State Sector) would have been utilised for giving such subsidies to about 6,600 families.

104. *Medical and Public Health*—The tribes suffer from some chronic diseases and the modern facilities of treatment are beyond their reach. Diseases like Yaws have to be stamped out and adequate public health measures are to be undertaken to improve the health of the tribal population. The programme in this sphere will supplement the efforts provided in the Health Plan. Under this programme a provision of Rs. 6.50 lakhs for Primary Health Centres, Rs. 1 lakh for treatment of venereal diseases besides some provision for Pharmacist and Health Inspectors training have been included. Rs. 18 lakhs are provided for improvement of Subdivisional hospitals for provision of additional beds. Rs. 1 lakh is included to provide legal assistance to the tribals in land ejection and other cases and Rs. 1 lakh for Social and Cultural Shows.

#### SCHEDULED CASTES

105. *Education*—In addition to 60 Sevashrams established by the end of First Plan, 30 Sevashrams for the Scheduled Castes would have been opened by the end of Second Plan. At present 3,060 Scheduled Caste Students are in the Schools. One Ashram School which is of Middle English standard has also been started. The number of Scheduled Caste students in pre-matric classes is increasing and in the Second Plan restrictions in admission have been imposed through grant of stipends on merit-cum-poverty basis. A provision of Rs. 50 lakhs is provided in the Third Plan for stipends and lump grants to boarders and day scholars.

106. *Economic Uplift*—There is considerable scope for employment of Scheduled Caste artisans and for assisting them in setting up cottage industries. Grant to non-official organisations will continue in the Third Plan in the context of Socio-Economic uplift of Scheduled Castes and for this a provision of Rs. 1 lakh is included. The problem of untouchability and social disability will be tackled through the Depressed Classes League and under the programme of grants to Depressed Classes League a provision of Rs. 5 lakhs has been proposed. To ensure this and with the object of providing training facilities to Scheduled Castes in cottage industries a provision of Rs. 10 lakhs under the programme of cottage industries training and cottage industries development has been included.

107. *Drinking water*—By the end of Second Plan 916 wells for Scheduled Castes would have been constructed including 266 wells provided in the Central sector. These are in addition to the water sources provided under the general programme benefits from which will be enjoyed by the Scheduled Castes living mixed up with the general population all over the State. Provision of Rs. 9 lakhs is proposed in the Third Plan (State Sector) for construction of 650 wells and 50 tanks.

108. *Housing*—There was a provision of Rs. 15 lakhs, Rs. 5 lakhs under the State Sector and Rs. 10 lakhs under Central Sector, of the Second Plan with which 2,397 houses would have been constructed. A sum of Rs. 19.60 lakhs has been provided in the Third Plan (State Sector) for giving subsidy to 2,615 families. Other programmes for scheduled castes included Rs. 4.50 lakhs on staff, Rs. 0.65 lakh under legal assistance and Rs. 0.25 lakh under journal.

109. *De-notified tribes*—The population of such tribes in the State is estimated at about one lakh. The programme for these tribes in the Third Plan includes Rs. 1.10 lakhs for education of boys and girls, Rs. 4.95 lakhs for economic development and Rs. 9.88 lakhs for supply of medicine, sinking of wells and to provide housing facilities to the families of de-notified tribes.

#### GENERAL

110. Work in the tribal areas is rather difficult and unless proper amenities are provided to the staff no headway can be made in the implementation of the programme even inspite of liberal allocations. Experience has shown that staff posted to tribal areas are not willing to continue in their post on account of various difficulties. The Central Working Group recommended provision of certain minimum additional facilities to the workers engaged under this programme. This could be in shape of special pay and special facilities for medical attention and residential accommodation. Provision of Rs. 23 lakhs is proposed in the Third Plan for additional staff and amenities. This includes establishment of a cell in the Tribal and Rural Welfare Department to look after the employment problem of the tribals.

#### LABOUR AND LABOUR WELFARE

111. Among the main programmes included in the State's Second Five-Year Plan under the head "Labour and Labour Welfare" may be mentioned schemes for Employment Service Organisation, establishment of multi-

purpose Welfare Centres, implementation of Employees' State Insurance Scheme, training of Craftsman etc. In the Second Plan period 10 Employment Exchange Offices, 9 Multi-purpose Centres, 6 Employees' State Insurance dispensaries will have been opened. In respect of Craftsman training 5 new Industrial Training Institutes have been established and the total admission capacity in respect of craftsman trainees will have increased from 284 by the end of the First Plan period to 1,472 by the end of Second Plan. In the Second Plan the Centre's share in respect of certain schemes for Employment Exchanges and Craftsman training was kept outside the Plan ceiling. Including the Centre's share, the total anticipated expenditure on schemes under Labour and Labour Welfare by the end of Second Plan will be Rs. 119.33 lakhs.

112. The State's Third Plan for Labour and Labour Welfare has been drawn up with an estimated outlay of Rs 160.31 lakhs. This includes a sum of Rs. 113.49 lakhs set apart for craftsman training. The main programmes included in the Third Plan are explained below.

112.1 *Labour Welfare Schemes*—By the end of Second Plan period 9 multi-purpose labour welfare centres will have come into existence at Cuttack, Berhampur, Sambalpur, Rourkela, Champua, Bhubaneswar, Jharsuguda, Rayagada and Khariar Road. In the Third Plan period it is proposed to construct four more Multi-purpose centres. These centres will provide educational, recreational and cultural facilities for the industrial workers and their dependants and also enable them to pick up subsidiary occupations at home to supplement their income. Under the social benefit scheme the practice of giving aid to voluntary non-governmental labour welfare organisations that conduct labour welfare activities will continue in the Third Plan period.

The Employees-State Insurance Scheme which was implemented in the Second Plan period will continue in the Third Plan period also. This scheme provides medical benefits to the Insured Industrial employees under the Employee's State Insurance Act. The scheme has been given effect to at five places in the State by opening six Insurance Dispensaries, one each at Barang, Choudwar, Brajarajagar and Rajgaungpur and two at Cuttack. In the Third Plan period it is proposed to establish 12 new Employees' State Insurance Dispensaries at Rourkela, Hirakud, Berhampur, Barbil, Rayagada, Rairangpur, Kesinga, Jharsuguda, Bhanjagar, Khariar Road, Aska and Balasore. These dispensaries will cover all

Industrial areas, where the concentration of insurable workers is 1,500 and more and also at places where the concentration is between 500 and 1,500. The total cost of the scheme is Rs. 48.70 lakhs of which the share of the State Government and the Employees' State Insurance Corporation will be in the ratio of 1:7. The share of the Employees State Insurance Corporation is outside the Plan.

Among the other important schemes for Labour and Labour Welfare may be mentioned a scheme for Audio-visual Education to workers (Rs. 1 lakh), Labour Rally (Rs. 1.0 lakh), setting up of a Research and Training-cum Production Centre (Rs. 5.13 lakhs) and Training of Factory Managers and Trade Union Workers (Rs. 0.50 lakh).

On the administrative side it is proposed to set up a Departmental Implementation and Evaluation Machinery (Rs. 1 lakh) and effect separation of Labour Welfare and Industrial dispute machinery (Rs. 0.51 lakh). A scheme for training of Factory Inspectors in Labour Welfare is also proposed to be taken up in the Third Plan period (Rs. 0.05 lakh). Besides these schemes provision has also been made for expansion of staff and for constructing office-cum-residence buildings and staff quarters.

112.2. *Expansion of Employment Service Organisation*—By the end of the First Plan period there were 3 Employment Exchanges in Orissa at Cuttack, Sambalpur and Rourkela. During the Second Plan period 10 new Exchanges were established. All these 13 Exchanges will continue in the Third Plan period on the committed side. The Third Plan for expansion of Employment Service consists of opening of 3 sub-offices at Puri, Sundargarh and Rayagada, opening of one University Employment Bureau for the Utkal University, opening of 24 Employment Information and Assistance Bureaus at the headquarters of Community Development Blocks in addition to the two proposed to be established during 1960-61 and certain other staff schemes like opening of 3 Zonal Offices each under an Assistant Director, purchase of vehicles expansion of Employment Exchanges staff etc.

One of the prominent features of the Second Plan for expansion of Employment Service Organisation was collection of employment market information on an extensive basis for use in man-power planning. The State Employment Market Information Unit undertook survey at 13 Employment Exchanges for collection of Employment data in the public sector. Besides intensive studies in the private sector

were also undertaken in 7 Employment Exchanges. In the Third Plan 6 more intensive studies are contemplated. Besides, certain other staff schemes for expansion of staff and purchase of office equipment etc., have been included.

In respect of Vocational guidance, the two Vocational Guidance Units at Cuttaek and Berhampur opened during the Second Plan period will continue. Four more will be opened during the Third Plan period at Puri, Sambalpur, Balasore and Rourkela. In respect of sub-units, during the Second Plan period, 6 sub-units were created and attached to 6 Employment Exchanges. In the Third Plan 7 more sub-units will be created. The Third Plan also contains a proposal to set up a Vocational Guidance Unit at the State Directorate to supervise and co-ordinate vocational guidance work at Employment Exchanges. In addition provision has also been made for conducting aptitude and intelligence tests at the 4 proposed vocational guidance units and in the seven proposed sub-units. To support the expansion contemplated in Vocational Guidance as a result of the proposals mentioned above, necessary staff schemes for expansion of staff, purchase of office equipment etc. have also been included.

112.3. *Craftsman Training*—The main emphasis of the programme for craftsman training included in the State's Second Five-Year Plan was to considerably augment the seating capacity for craftsman trainees. As a result of the schemes executed during the Second Plan period 1,200 seats have been added for craftsman training against 284 seats which were in existence by the end of the First Plan period. The following five new Industrial Training Institutes came into existence during the Second Plan period with the seating capacity mentioned against each :—

(1) Industrial Training Institute,	Hirakud	..	208
(2) Industrial Training Institute,	Berhampur	..	200
(3) Industrial Training Institute,	Rourkela	..	304
(4) Industrial Training Institute,	Balasore	..	96
(5) Industrial Training Institute,	Junagarh	..	104

TOTAL	..	<u>912</u>
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In addition to the new institutes mentioned above, the Industrial Training Centre attached to the Orissa School of Engineering, Cuttack was expanded during the Second Plan period by providing it with an additional seating capacity of 288 seats. The net addition during the Second Plan period in the seating capacity will, therefore, be 1,200. Of the 284 seats which were existing by the end of the First Plan period 12 seats were reduced at the beginning of the Second Plan period in the Industrial Training Centre attached to the Orissa School of Engineering, Cuttack. The total seating capacity available by the end of the Second Plan period will, therefore, be 1472.

During the Third Plan period it is proposed to start five more new Industrial Training Institutes each with a seating capacity of 100. These new institutes will give an additional seating capacity of 500. Besides, another 500 seats are expected to be created by adding 100 seats each in the existing Industrial Training Institutes, except the one at Rourkela. The Third Five-Year Plan also makes provision for establishment of a Vocational Training Institute with a seating capacity of 80. During the Second Plan period no Vocational Training Institute was established. The Vocational Training Centre established during the First Plan period, however, continued to exist with a seating capacity of 48.

Besides the schemes mentioned above a few other miscellaneous schemes like apprenticeship training schemes, evening classes for industrial workers, State Council of Vocational Training, Award of Prizes, Leave Reserve and Training Reserve Instructors, Head quarter Staff, Training of Instructors have also been included in the programme for the Third Plan under Craftsman Training.

The anticipated expenditure by the end of the Second Plan period on the schemes included under Craftsman Training including Centres share which was outside the plan ceiling, will be Rs. 104.30 lakhs. As against this the provision made in the State's Third Five-Year Plan amounts to Rs. 113.49 lakhs including the anticipated Central share.

#### SOCIAL WELFARE

113. Over the past six years Social Welfare programmes implemented by voluntary agencies with the assistance of State Government and Central and State Social Welfare Boards have come to occupy an important place in schemes for Social upliftment. These schemes include the welfare extension projects set up by the State and Central Social Welfare Boards with Governmental assistance and programmes relating to Social and moral hygiene, aftercare services and social defence.



114. In the field of Social Welfare the main burden of Social work has necessarily to be undertaken by voluntary organisations. To enable them to do so and to channelise voluntary efforts in constructive channels, the Central and State Social Welfare Boards have been rendering financial assistance to the voluntary institutions for expanding their developmental activities. An outstanding achievement of the Central and State Social Welfare Boards in the field of Social Welfare has been the setting up of welfare extension projects and Project Implementing Committees which administer social welfare programmes covering women's welfare, child welfare, welfare of physically handicapped etc. According to the original pattern adopted by the State Social Welfare Board, the Board has so far established seventeen welfare extension projects in the State, each project covering 20—25 villages with an approximate population of 20,000. In addition, about 23 welfare extension projects will have been set up by the end of Second Plan on the integrated C. D. pattern.

115. Under Social and Moral Hygiene and after-care programmes, in the course of the Second Plan, two State Homes and seven District shelters have been set up.

116. The working of the Social Welfare programme has recently been comprehensively reviewed by a study team appointed by the Committee on Plan projects. This Study Group has made far reaching recommendations, many of which have been accepted by the State Government. The question of bringing together the different Social Welfare programmes administered by different departments and putting them in charge of a single department for Tribal and Social Welfare is, at present, under the active consideration of Government. The need to evolve a comprehensive social welfare policy and make up for the leeway in the field of social welfare that exists in the State is being keenly felt by the State Government. As a result of increased funds that are likely to be available, the State Social Welfare Board expects to expand its activities considerably in the Third Plan period. It has, in fact, prepared a comprehensive plan for expanding its activities. The total cost of this plan is to the tune of Rs. 284.77 lakhs. The Board proposes to open 75 new welfare extension projects of the integrated type during the Third Plan period, in addition to the 23 which would have come into existence by the end of 1960-61. It has also plans to open 15 urban welfare extension projects, 2 destitute homes for women, 16 women hostels, a Balabhawan at

Cuttack, 3 protective homes for women etc. The Board mainly depends for funds on the Central Social Welfare Board and is hopeful of getting substantial grants from the Central Board during the Third Plan period. For fulfilling the plan of the magnitude mentioned above, the contribution of the State Government would be to the tune of Rs. 41.52 lakhs. Provision has been made for this amount in the State's Third Plan.

117. In addition to the programme mentioned above which would be executed mainly under the auspices of the State Social Welfare Board certain other programmes for Social and Moral Hygiene and Care and After-care services have also been included in the State's Third Five-Year Plan. In the Second Plan period the programmes for Social and Moral Hygiene and Care and After-care services were treated as centrally sponsored schemes with Centre's share shown outside the State Plan ceiling. Including the Centre's share, the total expenditure on these programmes by 1960-61 will be Rs. 9.03 lakhs. As against this, the programme for the Third Plan has been drawn up with a total provision of Rs. 25.15 lakhs which includes the Central share of Rs. 16.67 lakhs which has been provided for within the State Plan ceiling. The programme includes provision for construction of buildings for 7 district shelters (Rs. 5.15 lakhs) continuance of probationary services (Rs. 4.80 lakhs) training of supervisory staff (Rs. 0.60 lakh), conversion of Angul Juvenile Jail into a Reformatory-cum-Borstal school (Rs. 5.45 lakhs), introduction of Welfare services in four district jails (Rs. 1.52 lakhs), establishment of 3 remand Homes (Rs. 3.71 lakhs), introduction of welfare services in jails for female prisoners (Rs. 0.44 lakh) and establishment of 2 probation hostels (Rs. 3.48 lakhs).

## CHAPTER VII

### MISCELLANEOUS

#### 1. PUBLICITY

1. The outlay proposed in the Third Plan under 'Publicity' is Rs. 51.90 lakhs as against Rs. 38.57 lakhs in the Second Plan.

2. Under the Community Listening Scheme it is proposed to purchase and distribute 9,000 radio sets as against 7,970 sets expected to be distributed by the end of the current Plan. It is estimated that Rs. 6.75 lakhs on this programme would be recovered from the recipients at the rate of Rs. 75 per set. Excluding the recovery a provision of Rs. 20.25 lakhs has been proposed under this scheme. It is also proposed to convert the existing maintenance centres at the district headquarters into servicing centres for which provision has been made for additional tools and equipment and one helper at each centre. In addition, there will be one maintenance centre for each 100 radio sets at the headquarters of Radio Inspectors. The supervisory staff will be suitably strengthened by appointment of one Assistant Radio Engineer and 2 Engineering Assistants. Complicated repairs and alignment of sets received from District Servicing Centres will be attended to at the State headquarters where investigations regarding major causes of break-down of sets and other technical details will also be carried on. A provision of Rs. 9.53 lakhs has been included on this account.

3. Other schemes to be continued in the Third Plan include production of informative literature, maintenance of Information Centres at State headquarters and district headquarters, publicity through song and drama, press advertising, additional mobile units and film production unit. The mobile units existing in the blocks are being taken over and the total number of units likely to be available with the 'Publicity' organisation will be 55 at the beginning of the Third Plan. It is proposed to purchase 4 additional units and replace 7 old units which have become unserviceable. Under the scheme of Film Production Unit provision of Rs. 1 lakh has been made for purchase of raw films.

4. Provision has also been made for opening of two repairing centres one each at the R. D. C. headquarters at Berhampur and Sambalpur for attending to the major repairs of the projectors, generators, speech equipment, etc. of the Blocks; opening of information centres at blocks, holding of plan exhibitions with an estimated expenditure of Rs. 30,000 a year, opening of a central film library at State headquarters for which it is proposed to purchase 90 to 100 selected documentary and films on training per year to be lent out for short periods to schools and colleges and other institutions having Projector units. A wholetime officer of the rank of an Assistant Director will be appointed to organise the Radio Rural Forum programme which is already operating in a number of selected villages.

## 2. BUREAU OF STATISTICS AND ECONOMICS

5. The need for compilation of accurate statistical information based on a scientific analysis cannot be overemphasised. To this end, a scheme for reorganising the Bureau of Statistics and Economics was taken up in the Second Plan of the State. Broadly it aimed at collection, analysis and dissemination of statistical information in various spheres of public and private activities, preparation of economic indicators, training of personnel in the theory and practice of statistics as required by different Government organisations, improvement of basic statistics and their timeliness at the district level and at the Block level, collection of original data through multipurpose sample survey and improvement of agricultural statistics through crop surveys.

6. For achieving these objectives five schemes were formulated and they are under way.

7. The scheme viz., 'Strengthening of the Bureau of Statistics and Economics for overall planning needs' aimed at setting up a suitable machinery at the State headquarters for handling planning statistics, estimating State Income, constructing economic indicators, collecting and disseminating statistical information on various aspects of administration through various publications and exploring possibilities of improvement in several other fields of statistics. This scheme has been in operation since the beginning of the Second Plan and has made considerable progress.

8. The demand for statistics in the context of planning is ever increasing and as we go on from plan to plan, not only do we require a continuity of the programme, so far undertaken, but we have also to be

ready to meet the increasing demand of statistics in other new fields. Several techno-economic norms are essential for the formulation of plan programmes. Information about the input-output ratio, the input employment ratio, additional State Income generated through implementation of different categories of plans like agriculture, industry, the methodology for allocation of plan outlay under various development heads etc., become indispensable in this context. These require comprehensive study by specialists and it is with these aims in view, it is proposed to not only continue the present Organisation but also to further expand it to meet the additional requirements. A sum of Rs. 3.38 lakhs on this scheme is proposed in the Third Plan.

9. District Statistical Offices in all the districts have been set up and considerable improvement effected in the quality and timely submission of material from the districts. This organisation will be maintained in the Third Plan. Office and residential accommodation for the staff will be provided for to the extent possible under the normal programme.

10. The Bureau formulated a scheme for providing inservice training to the untrained staff working in the Bureau and in statistical cells of different Departments of Government and Heads of Departments. Two courses of this inservice training were arranged in the year 1958 and 1959 and about 24 officers have so far been trained. The Bureau has also introduced training of Progress Assistants now being appointed in different Blocks of the State. Already there is a back-log of about 150 Progress Assistants to be trained whereas the capacity of the Bureau is to train only about 30 in a single batch. Besides every year additional Blocks will be allotted and additional Progress Assistants appointed and as such the Progress Assistants training will have to be continued till the entire State is covered with Blocks. The scheme for inservice and Progress Assistants training taken up during the Second Plan will, therefore, be continued in the Third Plan.

11. Socio-economic data on income, expenditure, pattern of consumption, demographic features, employment, unemployment etc., were not available. Basic data on these are very essential for formulation of any Socio-economic policy of the State and as such it was decided that the Bureau should undertake sample surveys, for obtaining basic data in these fields. Government of India extended financial assistance for undertaking such surveys in collaboration with the National Sample Survey Organisation. This was

undertaken on a matching basis and the State Government entered into a collaboration programme from the middle of the 14th round of the N. S. S. The 15th round of the N. S. S. is now in progress and it is proposed to continue the programme with the N. S. S. in all its subsequent rounds.

12. The most important sector in which statistics is very vital and where we do not have accurate data is Agriculture. The Bureau was seized with this problem from the beginning of the Second Plan and had taken up a scheme for sample survey for estimation of area and yield of principal crops in the State. Due to certain administrative difficulties this scheme could not be taken up earlier than the year 1959. Although in its present size, the survey will give fairly accurate estimates at the State level, the estimates in respect of districts are likely to be subject to larger errors. In order to obtain districtwise estimates with a fair degree of reliability, it is proposed to suitably revise the sampling design and with this object in view, in addition to continuing the existing operations under the normal budget, a scheme with a provision of Rs. 9 lakhs is proposed in the Third Plan. This scheme when implemented in its enlarged form is expected to give districtwise estimates of area and yield of some important crops of the State. But it will not be possible under the scheme to get information on a large number of other agricultural statistics, such as land utilisation, irrigation, temperature and rainfall, crop forecasts etc. At present this latter class of agricultural statistics is being collected through the revenue agency and is not reliable in all cases. In order to improve the position the Bureau has formulated a proposal for utilising the V. L. W. agency for the purpose, and a scheme for reorganisation of the primary reporting agency for agricultural statistics has been included in the Third Plan. Similarly, detailed information on capital structure, employment, labour, consumption of raw materials, fuel and power and production is now being collected in respect of about 140 factories coming under the C. M. I. Rules. No reliable information is, however, available in respect of other classes of industries which do not come under the C. M. I. Rules. Practically very little is known in respect of small-scale and cottage industries. This sector is now being emphasised more and more and various organisations have been pressing for detailed and accurate information in respect of small-scale and cottage industries of the State. The 1961 census is expected to make available a frame of all small-scale and cottage industries throughout the country. Taking advantage of this it is proposed

to undertake a sample survey of groups of small-scale and cottage industries year after year during the Third Plan period, and for this purpose, a scheme has been proposed for inclusion in the Third Plan.

13. With increase in tempo of developmental activities and with larger investment and consequent rapid rise in public expenditure it has become urgently necessary to undertake some evaluation work in respect of important projects. It is proposed to set up an evaluation organisation in the Third Plan which will be responsible for evaluation of the benefits accruing to the people consequent on the implementation of various projects under the Plans. A scheme has accordingly been proposed with the object of assessing the impact of the programme on the people, with the nature and degree of response to it, appraising quantitatively the achievements and the benefits in terms of production, income levels and standard of living of the people, besides identifying shortcomings and bottlenecks in the implementation of the programmes.

14. Other schemes included in the programme relate to setting up of a demographic unit in the Bureau and for conducting family budget enquiries of industrial and agricultural labour classes in the State.

### 3. MUNICIPAL DEVELOPMENT WORKS

15. There are 19 Municipalities and 23 Notified Area Councils in the State. The number of Notified Area Councils is likely to mount up to more than 50 by the end of Third Plan. These Municipalities and Notified Area Councils are given loans and grants to take up remunerative works like construction of markets, renovation of tanks, street lighting, fishery-scheme etc. to augment their income and also for taking up unremunerative projects, viz. establishment of libraries, reading rooms, town halls, construction of primary school buildings and such other works of social benefit, social education and entertainment. The loan that is required to be given for remunerative projects is to carry an interest of 5 per cent per annum repayable in 30 or less annual equated instalments. Such remunerative schemes on completion would create assets for the local bodies and the income accrued therefrom will help the repayment of the loan. The grants for the unremunerative projects to local bodies are to be given on the basis of matching contribution at the rate of 50 per cent of the cost of the projects.

16. In the First Plan there was no allocation for the scheme. In the Second Plan a provision of Rs. 17.10 lakhs was made to give loans and grants to the local bodies for remunerative and unremunerative projects. Up to the end of 1959-60, a sum of Rs. 9.370 lakhs has been allotted to the local bodies as grant-in-aid and Rs. 5.50 lakhs as loan for the unremunerative and remunerative items of development works. During 1960-61, a sum of Rs. 1.53 lakhs and Rs. 2.00 lakhs have been provided under loan and grant heads for the purpose. The local bodies have spent a sum of Rs. 5.50 lakhs from grants and Rs. 3.50 lakhs from loans up to the end of 1959-60. It is expected that the entire grant and loan allotted to them will be spent by the end of Second Plan period.

17. The demands of the Municipalities and Notified Area Councils for financial assistance for taking up various items of development works are on the increase. Considering the limitation of funds for the Third Plan, it is proposed to provide Rs. 25.00 lakhs only in the Third Plan for them as follows :—

(a) Loan for Remunerative Projects .. ..	Rs. 15.00 lakhs
(b) Grants for Un-remunerative Projects on the basis of 50 per cent matching contribution from local bodies. .. ..	Rs. 10.00 lakhs.

The local bodies have been given option to choose their schemes for execution during the Third Plan.

#### 4. TOWN PLANNING

18. The State has 63 towns including district and subdivisional headquarters. The character of these towns is rapidly changing owing to industrialisation, establishment of educational institutions, increase of opportunities available for trade and commerce etc. This has necessitated a planned development of the towns to regulate traffic, prevent the growth of slums, to locate different institutions and transactions at suitable places of the towns in a systematic way. During the First Plan, a Town Planning Organisation was created to take up preparation of a master plan for Cuttack city. In the Second Plan proposal was made for creation of a Directorate of Town Planning to take up the planning of towns like Cuttack, Sambalpur, Barbil and Berhampur and also to establish improvement Trust for taking development works such, as roads and drains etc. in the Cuttack town and subsequently in other towns. During the Second Plan, the outlay was Rs. 39.66 lakhs under the State Sector for Town Planning, out of which Rs. 28.00 lakhs was earmarked for execution of Cuttack Sewerage Scheme, Rs. 3.50 lakhs for establishment expenditure of Town Planning



Organisation, Rs. 5.00 lakhs for construction of avenue roads and Rs. 3.16 lakhs for surface drainage at Cuttack. The Sewerage Scheme was subsequently taken up in the Central Sector under the National Water-Supply and Sanitation Programme. A Town Planning Organisation with a skeleton staff continued during the Second Plan period to work out master plans etc. The other two schemes, viz.; construction of avenue roads and surface drainage at Cuttack could not be taken up for want of funds. The Town Planning scheme could not make much progress because of limitation of funds and difficulties regarding enforcement of the Orissa Town Planning and Improvement Trust Act of 1956. It is now proposed to introduce the Act shortly. During the Second Plan period, the Town Planning Organisation has prepared draft outlines of master plans for Cuttack city and Chowdwar town. Preparation of a master plan for the Rourkela town has been taken in hand during 1960-61.

19. During the Third Plan period it is proposed to continue the Town Planning Organisation for preparation of master plans for 10 important towns in the State, construction of 5 miles of avenue roads and storm-water drains in the Cuttack City according to the master plan with a provision of Rs. 50 lakhs, (Rs. 7.90 lakhs for Town Planning Organisation including its unit for preparation of master plans, aerial survey and training of personnel, Rs. 17.10 lakhs for construction of avenue roads and Rs. 25 lakhs for construction of storm-water drains.

20. The physical targets aimed at under this programme in the Third Plan constitute—

(i) Preparation of detailed master plan including aerial survey for 10 towns, viz.—Barbil, Sambalpur, Rourkela, Jharsuguda, Berhampur, Jeypore, Koraput, Cuttack, Puri and Chowdwar.

(ii) Construction of 5 miles of avenue roads.

(iii) Construction of storm-water ( surface ) drains of Cuttack City.

(iv) Training of personnel.

#### 5. NEW CAPITAL

21. The outlay of Rs. 228 lakhs under New Capital Programme in the Second Plan will be almost fully utilised. For completion of incomplete projects carried over from the Second Plan an amount of Rs. 63.24 lakhs is estimated to be necessary. The works are expected to be completed by 1962-63.

22. Including the spillover, a total provision of Rs. 301.00 lakhs has been proposed in the Third Plan. This amount will be spent

mainly on construction of office buildings and development of Surya Nagar, Bhoi Nagar, Gopabandhu Nagar, Madhusudan Nagar and Saheed Nagar (Unit No. VII, VIII, IX, X and XI). This will include provision of roads, water supply, electricity and drainage.

23. The outlay proposed on new projects in the Thrid Plan is Rs. 237.76 lakhs. Of this amount, Rs. 94.48 lakhs will be spent on public health works and Rs. 143.28 lakhs on roads and buildings as well as electricity. The allotment under public health works constitutes Rs. 39.71 lakhs for water-supply and Rs. 54.77 lakhs for sewerage.

## 6. GOVERNMENT PRESS

24. Arising out of organisation of new offices and expansion of old offices in connection with the Plans in progress, the printing work in shape of reports, forms, periodicals, statements, Committee reports, etc. has increased tremendously. The printing of Assembly proceedings is another heavy assignment. The Government Press is ill-equipped in respect of men and machines and is incapable of coping with the increasing demands. Government have under pressure taken recourse to printing Government jobs in private presses and the experience gained is very unsatisfactory. The charges of the private presses are not only high but they fail to execute the job in right time. Development of the Government Press by provision of modern equipment and adequate staff is therefore considered essential.

25. A new Press building at Madhupatna has been constructed during the Second Plan period and the old Government Press has been shifted to the new Press building except the Forms Department.

26. The employees of the new Government Press need have to be provided with quarters as most of the employees are outsiders and the new Press is rather away from the City. As the housing problem is very acute at Cuttack, Press work is bound to suffer unless the Government employees are accommodated in quarters adjoining the Government Press.

27. At Bhubaneswar one Assembly Wing of the Press is being started during 1960-61 for taking up the printing of Assembly work. This Branch Press has to be suitably strengthened with provision of machines, buildings and quarters for staff.

28. Taking the above requirements into account a provision of Rs. 80 lakhs is proposed under this programme.

## ANNEXURE VI

## SUMMARY STATEMENT OF PLAN OUTLAY PROPOSED

(Rs. in Lakhs.)

Sl. No.	Head of Development	Anticipated outlay 1956-61	Anticipated outlay 1960-61	Outlay 1961-66			[Phasing of outlay]					Balance after 1965-6
				Total	Capital	Foreign ex- change	1961-62	1962-63	1963-64	1964-65	1965-66	
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>L AGRICULTURE AND COMMUNITY DEVELOP- MENT</b>											
1	Agricultural Production ..	272.77	54.86	518.65	147.72	5.73	150.16	120.51	82.56	83.24	82.18	..
2	Minor Irrigation ..	164.51	33.22	304.40	274.02	16.20	69.86	60.15	59.73	59.48	55.18	40.00
3	Land Development ..	16.61	7.71	45.00	37.00	..	9.50	9.55	8.60	8.65	8.70	..
4	Animal Husbandry ..	159.92	42.13	295.00	101.79	7.23	72.04	55.47	53.32	53.28	60.89	0.16
5	Dairying and Milk Supply	6.86	0.74	80.95	50.62	1.50	6.76	20.45	19.46	18.83	15.45	..
6	Forests ..	48.91	11.26	175.00	57.01	1.50	38.76	39.13	32.84	32.11	32.16	..
7	Soil Conservation ..	50.84	12.32	150.00	5.55	..	21.45	24.65	29.73	34.17	40.00	..
8	Fisheries ..	75.86	11.45	156.00	103.59	27.65	25.57	43.14	29.66	29.97	27.66	..
9	Warehousing and Marketing	15.11	4.11	45.00	32.55	..	7.47	7.98	8.88	9.81	10.86	..
10	Co-operation ..	86.13	17.51	232.22	108.60	..	50.45	51.39	49.07	40.79	40.52	7.63
11	Community Development ..	997.32	290.70	1,750.00	500.38	..	300.00	328.00	369.00	376.00	377.00	917.65
12	Village Panchayats ..	53.67	12.48	166.44	97.00	..	35.45	34.97	33.85	33.63	28.54	56.69
	<b>TOTAL—I</b> ..	<b>1,948.51</b>	<b>498.49</b>	<b>3,918.66</b>	<b>1,515.83</b>	<b>59.81</b>	<b>787.47</b>	<b>795.39</b>	<b>776.70</b>	<b>779.96</b>	<b>779.14</b>	<b>1,022.13</b>

II—IRRIGATION AND POWER												
1	Major Irrigation	2,629-38	380-05	1,380-00	1,365-00	15-00	370-00	450-00	250-00	180-00	130-00	633-28
2	Medium Irrigation	188-23	93-87	791-00	733-32	57-68	202-44	247-22	146-99	118-00	76-35	685-42
3	Flood Control	..	..	150-00	150-00	..	40-00	30-00	30-00	25-00	25-00	679-44
	Total—Irrigation	2,817-61	473-92	2,321-00	2,248-32	72-68	612-44	727-22	426-99	323-00	231-35	1998-14
4	Power Projects	1,517-17	405-18	5,301-86	3,395-86	1,916-00	1,263-86	1,143-50	1,598-50	730-50	565-50	3,923-00
	TOTAL—II	4,334-78	879-10	7,622-86	5,644-18	1,988-68	1,876-30	1,870-72	2,025-49	1,053-50	796-85	5,921-14
III—INDUSTRY AND MINING												
1	Large and Medium Industries	35-25	..	55-00	55-00	..	17-00	22-00	10-00	4-00	2-00	..
2	Village and Small Industries	352-50	93-98	596-68	352-36	1-52	129-11	122-66	128-95	111-32	104-64	..
3	Mineral Development	26-08	7-10	198-91	151-00	6-60	102-63	33-45	31-20	17-92	13-71	..
	TOTAL—III	413-83	101-08	850-59	558-36	8-12	248-74	178-11	170-15	133-24	120-35	..

(Rs. in lakhs.)

Sl. No.	Head of Development	Anticipated outlay 1956-61	Outlay 1960-61	Outlay in 1961-66			Phasing of outlay					Balance after 1965-66
				Total	Capital	Foreign ex- change	1961-62	1962-63	1963-64	1964-65	1965-66	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>IV—TRANSPORT AND COMMUNICATION</b>											
1	P. W. D. Roads	495.57	88.94	870.00	870.00	..	174.00	174.00	174.00	174.00	174.00	663.99
2	Municipal Roads	22.90	3.46	35.00	35.00	..	7.00	7.00	8.00	7.00	6.00	..
3	Anchal Roads	15.15	1.50	30.00	30.00	..	6.00	6.00	6.00	6.00	6.00	..
4	Inland Water Transport	..	..	40.00	40.00	..	10.00	12.00	8.00	5.00	5.00	109.36
5	Road Transport	24.45	..	120.00	120.00	..	42.60	35.73	21.29	17.93	2.45	..
6	Tourism	1.92	0.93	7.00	..	..	0.96	2.50	2.06	0.73	0.75	..
	<b>TOTAL—IV</b>	<b>559.99</b>	<b>94.83</b>	<b>1,102.00</b>	<b>1,095.00</b>	<b>..</b>	<b>240.56</b>	<b>237.23</b>	<b>219.35</b>	<b>210.66</b>	<b>194.20</b>	<b>773.35</b>
	<b>V—SOCIAL SERVICES</b>											
1	<b>Education—</b>											
	(i) General Education	577.94	178.73	1,924.22	98.10	8.48	264.65	342.97	379.87	442.84	493.89	..
	(ii) Technical Education	86.98	27.26	502.21	109.93	17.00	159.80	115.83	95.56	69.38	61.64	..
	<b>Total— Education</b>	<b>664.92</b>	<b>205.99</b>	<b>2,426.43</b>	<b>208.03</b>	<b>25.48</b>	<b>424.45</b>	<b>458.80</b>	<b>475.43</b>	<b>512.22</b>	<b>555.53</b>	<b>..</b>

2	Health—											
	(i) Health ..	305.72	108.53	729.30	247.94	..	164.28	203.16	148.07	116.77	97.02	0.46
	(ii) Rural Water-Supply	70.95	10.00	105.00	..	..	21.00	21.00	21.00	21.00	21.00	..
3	Housing ..	101.18	46.36	226.75	110.00	..	45.42	45.31	45.33	45.34	45.35	..
4	Welfare of Backward Classes	355.72	94.64	525.55	108.25	0.53	115.39	111.35	106.81	97.99	94.01	0.19
5	Labour and Labour Welfare—											
	(i) Labour Welfare Schemes	12.31	5.40	46.82	9.22	..	14.29	9.47	9.38	6.80	6.88	..
	(ii) Craftsman Training ..	41.72	16.72	113.49	..	5.57	41.62	26.01	19.34	15.27	11.25	..
6	Social Welfare ..	14.98	5.58	66.67	11.15	..	10.90	13.51	11.83	14.26	16.17	..
	<b>TOTAL—V ..</b>	<b>1,567.50</b>	<b>493.22</b>	<b>4,240.01</b>	<b>694.59</b>	<b>31.58</b>	<b>837.35</b>	<b>888.61</b>	<b>837.19</b>	<b>829.65</b>	<b>847.21</b>	<b>0.65</b>
	<b>VI—MISCELLANEOUS</b>											
1	Publicity ..	24.45	4.79	51.90	..	..	10.75	9.52	9.94	11.54	10.15	..
2	Statistics ..	18.89	8.02	29.00	20.25	..	5.53	5.66	5.80	5.94	6.07	..
3	Municipal Development Works.	18.41	3.53	25.00	15.00	..	5.00	5.00	5.00	5.00	5.00	..
4	Town Planning ..	2.86	0.39	50.00	42.10	..	8.27	11.11	11.46	11.04	8.12	46.11
5	New Capital ..	217.55	40.01	301.00	301.00	1.00	67.00	74.24	56.00	58.00	45.76	..
6	Government Press ..	..	..	30.00	19.63	5.50	9.05	9.47	4.08	4.15	3.25	56.83
7	Others ..	3.88	1.08	..	..	..	..	..	..	..	..	..
	<b>TOTAL—VI ..</b>	<b>286.04</b>	<b>57.82</b>	<b>486.90</b>	<b>397.98</b>	<b>6.50</b>	<b>105.60</b>	<b>115.00</b>	<b>92.28</b>	<b>95.67</b>	<b>78.35</b>	<b>102.94</b>
	<b>GRAND TOTAL ..</b>	<b>9,110.65</b>	<b>2,124.54</b>	<b>18,221.02</b>	<b>9,905.94</b>	<b>2,094.69</b>	<b>4,096.02</b>	<b>4,085.06</b>	<b>4,121.16</b>	<b>3,102.68</b>	<b>2,816.10</b>	<b>7,820.21</b>

ANNEXURE VII  
LIST OF SCHEMES CARRIED OVER FROM SECOND PLAN

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Spill-over from Second Plan	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
				Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13	14
I—AGRICULTURE AND COMMUNITY DEVELOPMENT—													
1. Minor Irrigation.	Minor Irrigation	..	194.40	194.40	194.40	..	39.00	39.00	39.00	39.40	38.00	..	..
2. Co-operation	1. Revitalisation of Small-sized Credit Co-operative societies.	5.19	3.56	3.56	..	..	1.42	1.07	0.67	0.40	..	..	..
	2. Reorganisation of Central Co-operative Banks.	2.28	0.36	0.36	..	..	0.27	0.09	..	..	..	..	..
	3. Organisation of Primary Land Mortgage Banks.	0.75	0.50	0.50	..	..	0.25	0.25	..	..	..	..	..
	4. Establishment of Jute Bailing Plants.	1.40	0.05	0.05	..	..	0.05	..	..	..	..	..	..

3. Community Development	5. Installation of Rice-huller units.	6.78	0.30	0.30	..	..	0.30	..	..	..	..	..	..	
	6. Rice-cum-Oil milling units.	4.70	0.08	0.08	..	..	0.08	..	..	..	..	..	..	
	7. Co-operative Training and Education.	16.36	8.45	8.45	..	..	1.69	1.69	1.69	1.69	1.69	..	..	
	Total—2—Co-operation.	37.46	13.30	13.30	..	..	4.06	3.10	2.36	2.09	1.69	..	..	
	Community Development.	..	89.18	89.18	..	..	89.18	..	..	..	..	..	..	
	Total—I—Agriculture and Community Development.	..	296.88	296.88	194.40	..	132.24	42.10	41.36	41.49	39.69	..	..	
	II.—IRRIGATION AND POWER.													
	1. Irrigation													
	I. Major Irrigation Projects — Delta Irrigation Project.	2,500.00	1,506.28	1,130.00	1,115.00	15.00	350.00	400.00	150.00	130.00	100.00	376.28	..	
	II. Medium Irrigation Projects													
1. Salandi ..	465.60	435.08	430.35	391.77	38.58	100.00	150.00	100.00	50.00	30.35	4.73	..		
2. Salia ..	69.78	54.52	54.52	48.72	5.80	25.00	20.00	9.52	..	..	..	..		
3. Budhibudhiani	35.80	26.47	26.47	23.47	3.00	14.00	12.47	..	..	..	..	..		



(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Spill-over from Second Plan	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
				Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	4. Godahado ..	40.43	29.41	29.41	26.01	3.40	15.00	14.41	..	..	..	..	..
	5. Dhanei ..	32.10	13.34	13.34	10.84	2.50	8.00	5.34	..	..	..	..	..
	6. Salki ..	52.85	16.44	16.44	12.04	4.40	10.44	6.00	..	..	..	..	..
	7. Darjang ..	82.50	70.47	70.47	70.47	..	20.00	25.00	25.47	..	..	..	..
	Total—II—Medium Irrigation Projects	779.06	645.73	641.00	583.32	57.68	192.44	233.22	134.99	50.00	30.35	4.73	..
	III. Flood Control	74.44	48.44	48.44	48.44	..	35.44	7.00	6.00	..	..	..	..
	Total—1—Irrigation	3,353.50	2,200.45	1,819.44	1,746.76	72.68	577.88	640.22	290.99	180.00	130.35	381.01	..
2. POWER PROJECTS	1. Hirakud Power Utilisation Scheme.	225.59	39.00	39.00	39.00	..	20.00	19.00	..	..	..	..	..

	2. Duduma Transmission Scheme.	289.69	85.00	85.00	33.00	50.00	45.00	40.00	..	..	..	..	..
	3. Rural Electrification Scheme	..	15.65	15.65	15.65	10.00	15.65	..	..	..	..	..	..
	4. Hirakud Stage II	1,558.51	616.86	616.86	616.86	..	616.86	..	..	..	..	..	..
	Total—2—Power Projects.	2,073.79	756.51	756.51	706.51	60.00	697.51	59.00	..	..	..	..	..
	Total—II—Irrigation and power	5,427.29	2,956.96	2,575.95	2,453.27	132.68	1,275.39	699.22	290.99	180.00	130.35	381.01	..
III—INDUSTRY AND MINING													
1. Village and Small Industries	Industrial Estates	73.69	12.00	12.00	12.00	..	12.00	..	..	..	..	..	..
	Total—1—Village and Small Industries	73.69	12.00	12.00	12.00	..	12.00	..	..	..	..	..	..
2. Mineral Development	Assaying and Analytical Laboratory at Joda	..	0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..
	Total—2—Mineral Development	..	0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..
	Total—III—Industry and Mining.	73.69	12.50	12.50	12.00	..	12.10	0.10	0.10	0.10	0.10	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Spill-over from Second Plan	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
				Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13	14
IV—TRANSPORT AND COMMUNICATIONS	1. P.W. D. Roads	1,096.49	600.92	430.31	430.31	..	150.00	130.00	100.00	30.00	20.31	170.61	..
	2. Inland Water Transport—												
	(i) Improving the existing Taldanda and H. L. C Range I Canals.	15.60	12.86	4.00	4.00	..	1.00	2.00	1.00	..	..	8.86	
	(ii) Lining the Canal :—												
	(a) H.L.C. Range I	2.13	} 24.64	} 6.00	} 6.00	} ..	} 1.00	} 2.00	} 2.00	} 1.00	} ..	} 18.64	} ..
	(b) Kendrapara Canal.	8.16											
(c) Taldanda Canal	10.35												
(d) Machagaron Canal.	7.25												

V—SOCIAL SERVICES—  
EDUCATION  
1. General Education.

(iii) Making Machagaon Canal navigable.	19.54	13.54	6.00	6.00	..	1.00	2.00	1.00	1.00	1.00	7.54	..
Total—2— Inland Water Transport	63.03	51.04	16.00	16.00	..	3.00	6.00	4.00	2.00	1.00	35.04	..
Total—IV—Transport and Communication.	11,59.52	651.96	446.31	446.31	..	153.00	136.00	104.00	32.00	21.31	205.65	..
I. Primary Education—Training of teachers.												
1. Construction of Buildings of E.T. Schools.	..	6.00	6.00	6.00	..	2.00	2.00	2.00	..	..	..	..
2. Expansion of E.T. Schools (Government of India Scheme).	..	44.80	44.80	..	..	5.47	9.09	10.06	10.08	10.10	..	..
Total—I—Primary Education	..	50.80	50.80	6.00	..	7.47	11.09	12.06	10.08	10.10	..	..
II. SECONDARY EDUCATION—												
High Schools—												
1. Higher Secondary Schools.	..	3.00	3.00	1.00	..	2.00	1.00	..	..	..	..	..
2. Girls' High Schools (Buildings).	..	10.00	10.00	8.00	..	5.00	3.00	2.00	..	..	..	..
Training of teachers—												
3. Secondary Training Schools (Buildings)	..	3.00	3.00	3.00	..	2.00	1.00	..	..	..	..	..
Total—II—Secondary Education.	..	16.00	16.00	12.00	..	9.00	5.00	2.00	..	..	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Spill-over from Second Plan	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
				Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	<b>III. UNIVERSITY EDUCATION</b>												
	Introduction of three-year Degree course in colleges—												
	(i) Government Colleges.	..	12.60	12.60	..	..	6.30	6.30	..	..	..	..	..
	(ii) Non-Government Colleges.	..	1.70	1.70	..	..	0.85	0.85	..	..	..	..	..
	(iii) Construction of buildings for Colleges.	..	10.00	10.00	6.00	..	5.00	3.00	2.00	..	..	..	..
	<b>Total—III—University Education</b>	..	24.30	24.30	6.00	..	12.15	10.15	2.00	..	..	..	..
	<b>IV. OTHER EDUCATIONAL SCHEMES</b>												
	1. State Library (Buildings)	3.00 (Approx.)	2.00	2.00	..	..	2.00	..	..	..	..	..	..

2. Technical Education.

2. Opening of a branch of the Stewart School at New Capital.	5.40 (Approx.)	4.00	4.00	..	..	3.00	1.00	..	..	..	..	..
Total—Other Educational Schemes.	8.40 (Approx)	6.00	6.00	..	..	5.00	1.00	..	..	..	..	..
Total—1—General Education.	..	97.10	97.10	24.00	..	33.62	27.24	16.06	10.08	10.10	..	..
1. Expansion of Orissa School of Engineering.	42.53	11.99	11.99	2.00	1.00	3.31	2.17	2.17	2.17	2.17	..	..
2. Berhampur Engineering School.	42.33	9.10	9.10	1.00	1.00	3.22	2.72	1.72	1.22	0.22	..	..
3. Jharsuguda Engineering School.	46.73	9.10	9.10	1.00	1.00	3.22	2.72	1.72	1.22	0.22	..	..
4. Bhadrak Engineering School.	13.79	5.00	5.00	1.00	..	1.85	1.35	0.60	0.60	0.60	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Spill-over from Second Plan	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
				Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13	14
3. Health ..	5. Kendrapara Engineering School.	34.82	32.05	32.05	5.30	1.00	12.50	8.50	5.00	4.05	2.00	..	..
	6. Bolangir Engineering School.	38.04	36.33	36.33	6.00	1.00	17.33	9.00	4.00	3.00	3.00	..	..
	7. Orissa School of Mining Engineering.	25.38	13.73	13.73	2.00	2.00	3.00	3.00	3.50	2.00	2.23	..	..
	Total—2—Technical Education	243.62	117.30	117.30	18.30	7.00	44.43	29.46	18.71	14.26	10.44	..	..
	Total—Education	..	214.40	214.40	42.30	7.00	78.05	56.70	34.77	24.34	20.54	..	..
	Control and Eradication of Communicable diseases.												
	1. Anti T.B. Demonstration and Training Centre at S.C.B. Medical College.	..	1.00	1.00	..	..	1.00	..	..	..	..	..	..

4. Welfare of Backward Classes :— (a) Scheduled Tribes.	2. Establishment of T.B. Isolation Centres.	..	0.65	0.65	0.65	..	0.65	..	..	..	..	..	..
	3. Establishment of T.B. Clinics.	..	2.94	2.94	..	..	1.00	1.94	..	..	..	..	..
	Total—Control and Eradication of Communicable diseases.	..	4.59	4.59	0.65	..	2.65	1.94	..	..	..	..	..
	Hospital Services :—												
	Construction of buildings for the District Head-quarter Hospital, Baripada.	6.21	2.88	2.88	2.88	..	1.60	1.00	0.28	..	..	..	..
	Total—Health (excluding R.W.S.)	..	7.47	7.47	3.53	..	4.25	2.94	0.28	..	..	..	..
	R.W. Supply ..	85.95	15.00	15.00	..	..	10.00	5.00	..	..	..	..	..
	Total—3—Health (including R.W.S.)	..	22.47	22.47	3.53	..	14.25	7.94	0.28	..	..	..	..
	Education :—												
	1. Ashram Schools	46.97	7.01	7.01	7.01	..	7.01	..	..	..	..	..	..
	2. Training Centres	1.62	0.93	0.93	..	..	0.93	..	..	..	..	..	..
	Total—Education	48.59	7.94	7.94	7.01	..	7.94	..	..	..	..	..	..



(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Spill-over from Second Plan	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan			
				Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange		
														1	2
	Economic Uplift:—														
	3. Cottage Industries Training.	0·85	0·17	0·17	..	..	0·17	..	..	..	..	..	..	..	..
	Medical and Public Health. :—														
	4. Allopathic dispensaries.	6·60	0·51	0·51	..	..	0·51	..	..	..	..	..	..	..	..
	5. Pharmacists' Training.	0·17	0·04	0·04	..	..	0·04	..	..	..	..	..	..	..	..
	6. Health Inspectors' Training.	0·06	0·01	0·01	..	..	0·01	..	..	..	..	..	..	..	..
	7. Six-bedded Hospitals.	11·84	0·64	0·64	..	..	0·64	..	..	..	..	..	..	..	..
	Total—Medical and Public Health.	18·67	1·20	1·20	..	..	1·20	..	..	..	..	..	..	..	..
	Total—(a)—Scheduled Tribes.	68·11	9·31	9·31	7·01	..	9·31	..	..	..	..	..	..	..	..

(b) Scheduled Castes.	Education :—												
	1. Ashram Schools	1·81	0·53	0·53	..	..	0·53	..	..	..	..	..	..
	Public Health:—												
	2. Health Inspectors' Training.	0·05	0·01	0·01	..	..	0·01	..	..	..	..	..	..
	Total—(b)—Scheduled Castes.	1·86	0·54	0·54	..	..	0·54	..	..	..	..	..	..
5. Labour and Labour Welfare— Craf t s man Training.	Total—4—Welfare of Backward Classes.	69·97	9·85	9·85	7·01	..	9·85	..	..	..	..	..	..
	1. Industrial Training Institute, Cuttack.	50·52	21·31	21·31	..	..	12·06	6·05	3·20	..	..	..	..
	2. Industrial Training Institute, Berhampur.	19·19	6·91	6·91	..	..	4·05	2·86	..	..	..	..	..
	3. Industrial Training Institute, Hirkud.	17·00	1·22	1·22	..	..	1·06	0·16	..	..	..	..	..
	4. Industrial Training Institute, Junagarh.	8·16	3·46	3·46	..	..	2·54	0·92	..	..	..	..	..
5. Industrial Training Institute, Balasore.	10·12	3·30	3·30	..	..	2·60	0·70	..	..	..	..	..	

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Spill-over from Second Plan	Proposed outlay 1961-66			Phasing of proposed outlay					Balance after Third Plan	
				Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13	14
VI—MISCELLANEOUS.	6. Industrial Training Institute, Rourkela.	24.11	1.77	1.77	..	..	1.04	0.73	..	..	..	..	..
	Total—Craftsman Training	129.10	37.97	37.97	..	..	23.35	11.42	3.20	..	..	..	..
	Total—5—Labour and Labour Welfare.	129.10	37.97	37.97	..	..	23.35	11.42	3.20	..	..	..	..
	Total—V—Social Services	..	284.69	284.69	52.84	7.00	125.50	76.06	38.25	24.34	20.54	..	..
	Capital Construction.	268.86	63.24	63.24	63.24	..	40.00	23.24	..	..	..	..	..
	Total—VI—Miscellaneous	268.86	63.24	63.24	63.24	..	40.00	23.24	..	..	..	..	..
	Grand Total— I-VI Carried over schemes from Second Plan.	..	4266.23	3679.57	3222.06	139.68	1738.23	976.72	474.70	277.93	211.99	586.66	..

## ANNEXURE VIII

## LIST OF NEW SCHEMES PROPOSED FOR INCLUSION

(Rupees in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
I—AGRICULTURE AND COMMUNITY DEVELOPMENT— 1—Agricultural	I—STATE FARMS											
	1. Establishment of Experimental Seed Farms	71·00	71·00	61·84	..	29·64	31·67	5·66	2·01	2·02	..	..
	Total—I ..	71·00	71·00	61·84	..	29·64	31·67	5·66	2·01	2·02	..	..
	II—SUPPLY SCHEMES AND PLANT PROTECTION											
	2. Distribution of improved Paddy Seeds.	6·27	6·27	..	..	0·84	1·01	1·23	1·51	1·68	..	..
	3. Distribution of improved gram, millet and Pulses.	2·24	2·24	..	..	0·39	0·42	0·45	0·48	0·50	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan		
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change	
													4
1	2	3	4	5	6	7	8	9	10	11	12	13	
	4. Distribution of improved wheat seeds.	1·93	1·93	..	..	0·32	0·35	0·38	0·42	0·46	..	..	
	5. Distribution of improved vegetable seeds.	}	Net provision is Nil										
	6. Multiplication and distribution of green manuring seeds.												
	7. Production and distribution of Compost.		13·16	13·16	..	..	1·97	2·61	2·81	2·86	2·91	..	..
	8. Distribution of Bone-meal.	5·50	5·50	..	..	0·90	1·00	1·10	1·20	1·30	..	..	
	9. Distribution of Super-phosphate.	..	..	..	..	..	..	..	..	..	..	..	
	10. Distribution of Nitrogenous Fertilisers.	1·09	1·09	..	..	0·21	0·21	0·22	0·22	0·23	..	..	
	11. Construction of office building and staff quarters.	25·00	25·00	22·00	..	4·56	5·58	5·60	5·62	3·64	..	..	
	12. Plant Protection Scheme.	16·42	16·42	1·00	..	2·77	2·68	2·67	4·16	4·14	..	..	

13. Crop Competition	3-60	3-60	..	..	0-41	0-64	0-83	0-86	0-86	..	..
14 Establishment of zonal service stations.	2-10	2-10	0-75	0-45	0-70	0-41	0-32	0-33	0-34	..	..
15. Establishment of cold storage plants.	5-50	5-50	4-00	2-50	4-36	0-28	0-28	0-29	0-29	..	..
16. Grant of loan for purchase of Agricultural Machinery.	8-00	8-00	8-00	1-00	1-00	1-50	1-50	2-00	2-00	..	..
17. Potato Development (production) scheme	2-86	2-86	..	..	0-58	0-56	0-57	0-57	0-58	..	..
18. Scheme for supply of planting materials for fruit Production.	1-50	1-50	..	..	0-30	0-30	0-30	0-30	0-30	..	..
19. Maintenance of trucks for movement of seeds and manures etc.	3-75	3-75	1-50	..	1-95	0-45	0-45	0-45	0-45	..	..
20. Distribution of Potassic Fertilisers.	..	..	..	..	..	..	..	..	..	..	..
21. Production demonstration and supply of improved Agricultural implements.	0-52	0-52	..	..	0-09	0-10	0-10	0-11	0-12	..	..
22. Scheme for competition among State Farms.	0-50	0-50	..	..	0-10	0-10	0-10	0-10	0-10	..	..
<b>Total—II ..</b>	<b>99-94</b>	<b>99-94</b>	<b>37-25</b>	<b>3-95</b>	<b>21-45</b>	<b>18-20</b>	<b>18-91</b>	<b>21-48</b>	<b>19-90</b>	<b>..</b>	<b>..</b>

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>III—DEVELOPMENT OF COM M E R C I A L PLANTATION CROPS A N D H O R T I - CULTURE</b>											
	23. Arecanut Development.	1·62	1·62	..	..	0·28	0·32	0·32	0·35	0·35	..	..
	24. Coconut Development.	8·00	8·00	0·75	..	1·18	1·70	1·52	1·65	1·95	..	..
	25. Cotton Development	10·20	10·20	0·72	..	1·24	2·18	2·26	2·26	2·26	..	..
	26. Jute, Mesta and Sisal Development.	16·80	16·80	..	..	3·12	3·22	3·32	3·52	3·62	..	..
	27. Oil seed Development	10·45	10·45	..	..	2·08	2·05	2·08	2·10	2·14	..	..
	28. Sugarcane Development.	7·59	7·59	..	..	1·67	1·46	1·47	1·49	1·50	..	..
	29. Development of Turmeric, Ginger and Arrowroot.	0·60	0·60	..	..	0·08	0·13	0·13	0·13	0·13	..	..

30. Establishment of Progeny Orchards and Fruit Nurseries.	2.40	2.40	..	..	0.63	0.65	0.37	0.37	0.38	..	.
31. Training of Gardeners	1.80	1.80	..	..	0.49	0.32	0.33	0.33	0.33	..	..
32. Tobacco Development.	2.08	2.08	..	..	0.52	0.39	0.39	0.39	0.39	..	..
33. Establishment of garden colonies.	8.72	8.72	8.00	..	1.33	2.09	2.10	2.10	1.10	..	..
34. Vegetable seed production.	1.82	1.82	..	..	0.66	0.58	0.19	0.19	0.20	..	..
35. Seed certification scheme and Establishment of Seed Testing Centres.	1.67	1.67	..	..	0.71	0.20	0.21	0.27	0.28	..	..
36. Plantation Crop Development Scheme.	2.23	2.23	..	..	1.01	0.47	0.25	0.25	0.25	..	..
37. Scheme for Supervisory staff for Fruit Production.	4.56	4.56	..	..	0.82	1.28	0.79	0.82	0.85	..	..
38. Scheme for supervisory staff for Vegetable Production.	2.71	2.71	..	..	0.77	0.53	0.45	0.47	0.49	..	..
Total—III ..	83.25	83.25	9.47	..	16.59	17.57	16.18	16.69	16.22	..	..



(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>IV—AGRICULTURAL EDUCATION TRAINING AND EXTENSION</b>											
	39. Development of Agriculture College.	31.39	31.39	14.45	1.00	9.20	9.00	4.08	4.50	4.61	..	..
	40. Post-graduate Training in the State College of Agriculture.	22.44	22.44	9.78	0.78	10.77	3.12	2.83	2.82	2.90	..	..
	41. Establishment of F.M.Ds. Training Centres	3.46	3.46	..	..	1.18	0.57	0.57	0.57	0.57	..	..
	42. Post-graduate Training in outside Colleges in Foreign Countries.	3.70	3.70	..	..	0.86	1.20	0.60	0.52	0.52	..	..
	43. Refreshers Course Training.	3.75	3.75	2.07	..	2.38	0.33	0.34	0.35	0.35	..	..
	44. Introduction of Agriculture in Secondary High Schools.	1.80	1.80	..	..	0.20	0.30	0.40	0.50	0.40	..	..
	45. Agricultural Extension and Training.	61.20	61.20	..	..	18.53	10.66	10.66	10.67	10.68	..	..
	Total—IV ..	127.74	127.74	26.30	1.78	43.12	25.18	19.48	19.93	20.03	..	..

V—AGRICULTURAL  
RESEARCH, INFOR-  
MATION AND STATIS-  
TICS

46. Development of State Research Station and Central Farm.	5.00	5.00	4.86	..	2.50	2.50	..	..	..	..	..
47. Development of Botanical Section.	8.53	8.53	..	..	2.06	1.60	1.61	1.62	1.64	..	..
48. Development of Horticultural Section.	5.56	5.56	..	..	2.00	1.00	0.86	0.88	0.82	..	..
49. Development of Entomological Section.	2.53	2.53	..	..	0.53	0.53	0.47	0.49	0.51	..	..
50. Development of Mycological Section.	3.04	3.04	..	..	0.48	0.91	0.56	0.55	0.54	..	..
51. Development of Chemical Section.	3.85	3.85	..	..	0.98	0.75	0.69	0.70	0.73	..	..
52. Development of Agronomical Section.	4.91	4.91	..	..	1.19	1.04	0.87	0.89	0.92	..	..
53. Soil Testing Scheme	6.00	6.00	1.00	..	2.00	1.00	1.00	1.00	1.00	..	..
54. Sugarcane Research	6.91	6.91	..	..	2.02	1.17	1.22	1.24	1.26	..	..
55. Gur Research ..	1.81	1.81	..	..	0.36	0.36	0.36	0.36	0.37	..	..
56. Cotton Research	3.75	3.75	..	..	1.47	0.56	0.56	0.57	0.59	..	..
57. Coconut Research	1.45	1.45	..	..	0.35	0.26	0.27	0.28	0.29	..	..
58. Oilseed Research	1.80	1.80	..	..	0.82	0.24	0.24	0.25	0.25	..	..
59. Research on Pepper and Cardamum.	1.31	1.31	..	..	0.51	0.19	0.20	0.20	0.21	..	..

(Rs. in laksh)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	60. Co-ordinated scheme for sample Fertiliser Trial.	5.00	5.00	..	..	0.96	0.98	1.00	1.02	1.04	..	:
	61. Agricultural information Service.	3.93	3.93	..	..	1.23	0.66	0.67	0.68	0.69	..	..
	62. Establishment of Research Section on Agricultural Engineering in Utkal Krushi Mahabidyalaya.	7.01	7.01	..	..	3.11	0.87	0.99	1.01	1.03	..	..
	63. Agricultural Statistics and Agro-Economic Investigation Section.	2.30	2.30	..	..	0.58	0.43	0.43	0.43	0.43	..	..
	64. Establishment of Zonal Research Station.	9.60	9.60	3.00	..	3.18	2.88	1.18	1.18	1.18	..	..
	65. Establishment of Botanical Garden.	7.00	7.00	3.00	..	2.93	2.18	0.63	0.63	0.63	..	..
	66. Scheme for Sample Survey for correct Estimation of area and yield of coconut and arecanut.	1.64	1.64	..	..	0.32	0.32	0.33	0.33	0.34	..	..

67. Research on Tobacco	1·00	1·00	..	..	0·45	0·13	0·13	0·14	0·15	..	..
68. Tuber Research ..	3·29	3·29	..	..	0·98	0·57	0·57	0·57	0·60	..	..
69. Hybrid Maize Production	1·34	1·34	..	..	0·43	0·18	0·23	0·25	0·25	..	..
70. Research on Coffee and Cocoa	1·12	1·12	..	..	0·78	0·12	0·11	0·05	0·06	..	..
71. <i>Ad hoc</i> grant for Special Research Schemes of I.C.A.R.	10·00	10·00	..	..	2·00	2·00	2·00	2·00	2·00	..	..
Total—V ..	109·68	109·68	11·86	..	34·22	23·43	17·18	17·32	17·53	..	..
VI—ADMINISTRATION											
72. Scheme for administrative set-up of the Agriculture Directorate	25·55	25·55	1·00	..	4·85	4·18	4·86	5·50	6·16	..	..
73. Administrative staff at the State Headquarters—Setting up of a planning Branch in Development Department.	1·49	1·49	..	..	0·29	0·28	0·29	0·31	0·32	..	..
Total—VI ..	27·04	27·04	1·00	..	5·14	4·46	5·15	5·81	6·48	..	..
Total—I—Agricultural Production.	518·65	518·65	147·72	5·73	150·16	120·51	82·56	83·24	82·18	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
2. Minor Irrigation.	1. Minor Irrigation ..	90.00	50.00	50.00	..	10.00	10.00	10.00	10.00	10.00	40.00	..
	2. Tube Wells ..	30.00	30.00	23.20	10.20	11.26	7.51	4.33	4.95	1.95	..	..
	3. Lift Irrigation ..	30.00	30.00	6.42	6.00	9.60	3.64	6.40	5.13	5.23	..	..
	Total—2—Minor Irrigation.	150.00	110.00	79.62	16.20	30.86	21.15	20.73	20.08	17.18	40.00	..
3. Land Development	1. Land Reclamation in Saline inundated areas	Net Nil	..	..	..	..	..	..	..	..	..	..
	2. Enforcement of Agricultural Act-formation of Land utilisation and Plantation Board	8.00	8.00	..	..	1.50	1.55	1.60	1.65	1.70	..	..
	3. Tractor hiring Scheme	2.00	2.00	2.00	..	1.00	1.00	..	..	..	..	..
	4. Land Reforms ..	30.00	30.00	30.00	..	6.00	6.00	6.00	6.00	6.00	..	..

4. Animal Husbandry.	5. Consolidation of holdings.	5:00	5:00	5:00	..	1:00	1:00	1:00	1:00	1:00	..	..
	Total—3—Land Development.	45:00	45:00	37:00	..	9:50	9:55	8:60	8:65	8:70	..	..
	ANIMAL HUSBANDRY I—BREEDING											
	1. Opening of new Key village blocks.	10:13	10:13	2:83	..	0:91	1:46	2:02	2:58	3:16	..	..
	2. Expansion of existing Key village Centres.	5:33	5:33	0:71	..	0:68	0:96	1:30	1:19	1:20	..	..
	3. Intensification of existing key village Centres.	1:42	1:42	0:64	..	0:26	0:33	0:41	0:21	0:21	..	..
	4. Key village Extension Centres.	3:59	3:59	1:43	..	..	0:55	0:78	1:01	1:25	..	..
	5. Strengthening of supervisory staff for key village and A.I. Schemes.	2:07	2:07	0:07	..	0:40	0:40	0:41	0:42	0:44	..	..
	6. Centralised Semen Collection Centre.	3:00	3:00	0:78	..	1:19	0:43	0:45	0:46	0:47	..	..
	7. Feed and fodder Development in key villages.	2:09	2:09	1:68	..	1:75	0:08	0:08	0:09	0:09	..	..
8. In service Training of personnel.	0:96	0:96	0:33	..	0:44	0:13	0:13	0:13	0:13	..	..	
9. Organization of live stock Marketing Unit.	0:80	0:80	..	..	0:13	0:16	0:17	0:17	0:17	..	..	

(Rs. in lakh)

Head	Scheme	Total estimated cost	Proposed outlay 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
10.	Bull rearing Farm..	1.15	0.99	0.20	..	0.36	0.16	0.16	0.15	0.16	0.16	..
11.	Calf subsidy in key villages.	3.00	3.00	..	..	0.60	0.60	0.60	0.60	0.60	..	..
12.	Expansion of Artificial Insemination Centres.	2.18	2.18	0.18	..	0.16	0.45	0.54	0.51	0.52	..	..
13.	Artificial Insemination in Urban areas.	1.02	1.02	0.22	..	0.15	0.10	0.24	0.19	0.34	..	..
14.	Upgrading of indigenous goats.	0.98	0.98	0.40	..	0.12	0.16	0.20	0.23	0.27	..	..
15.	Pig breeding Unit	2.12	2.12	0.68	..	0.40	0.63	0.36	0.36	0.37	..	..
16.	Pig Development blocks.	1.29	1.29	0.64	..	0.77	0.13	0.13	0.13	0.13	..	..
17.	Goshala Development Scheme.	2.95	2.95	2.30	..	0.50	0.55	0.59	0.63	0.68	..	..
18.	Gosadan Scheme ..	2.35	2.35	1.20	..	1.42	0.23	0.23	0.24	0.23	..	..
19.	State Council of Gosambardhan.	0.24	0.24	0.03	..	0.07	0.04	0.04	0.04	0.05	..	..

20. Mass Castration of Scrub bulls.	2.50	2.50	0.21	..	0.64	0.45	0.46	0.47	0.48	..	..
21. Additional Staff for Goshala Development.	0.65	0.65	0.01	..	0.13	0.12	0.13	0.13	0.14	..	..
22. Contribution to the Utkal Gomangal Samiti.	7.50	7.50	..	..	1.50	1.50	1.50	1.50	1.50	..	..
23. Subsidised Silopits	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
24. Subsidised Chaff Cutters.	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
25. Pasture Development in the State Farms.	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
26. Pasture Development in blocks and villages.	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
27. Subsidised distribution of seeds and grasses.	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
Total—I—Breeding ..	62.32	62.16	14.54	..	13.58	10.62	11.93	12.44	13.59	0.16	..
<b>II—DISEASE CONTROL</b>											
1. Opening of new Veterinary dispensaries.	48.00	48.00	30.87	..	7.11	8.33	9.58	10.84	12.14	..	..
2. Opening of stockman Centres.	24.73	24.73	3.57	..	2.00	3.46	4.95	6.41	7.91	..	..
3. Supervisory staff at State level.	5.23	5.23	0.11	..	0.64	1.06	1.14	1.18	1.21	..	..
4. Supervisory staff at district level.	7.52	7.52	0.55	..	0.39	0.77	1.31	2.12	2.93	..	..



Head	Scheme	Total estimated cost	Proposed outlay 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	5. Strengthening of District Veterinary Offices.	4.07	4.07	0.17	..	0.81	0.79	0.80	0.82	0.85	..	..
	6. Upgrading of District Veterinary Officers.	1.17	1.17	..	..	0.23	0.23	0.23	0.23	0.25	..	..
	7. Provision of Jeeps for Extension work.	1.84	1.84	0.75	..	0.90	0.23	0.24	0.23	0.24	..	..
	8. Strengthening of existing District Headquarters Hospitals and Dispensaries.	4.87	4.87	0.72	..	0.42	0.72	1.04	1.23	1.46	..	..
	9. Opening of Veterinary Dispensaries due to delimitation of double blocks.	19.79	19.79	10.07	..	12.02	1.95	1.94	1.94	1.94	..	..
	10. Provision of Inpatient sheds.	2.63	2.63	0.27	..	1.51	0.27	0.28	0.28	0.29	..	..
	11. Buildings for Veterinary Dispensaries.	3.90	3.90	3.90	..	1.30	1.30	1.30	..	..	..	..
	12. Buildings for Stockman Centres.	6.00	6.00	6.00	..	1.20	1.20	1.20	1.20	1.20	..	..

13. Reorganisation of Mobile Propaganda Units.	4.60	4.60	1.80	..	0.86	0.33	1.19	0.69	1.53	..	..
14. Expansion of Serum Institute.	5.54	5.54	1.38	..	2.14	0.97	0.96	0.69	0.78	..	..
15. Eradication of rinderpest.	11.33	11.33	..	..	5.62	5.71	..	..	..	..	..
16. Diagnostic Laboratories at the District level.	2.06	2.06	0.58	..	0.22	0.33	0.43	0.50	0.58	..	..
17. Construction of Dog Kennels.	0.33	0.33	0.33	..	0.33	..	..	..	..	..	..
18. Strengthening of the Veterinary Laboratory.	0.76	0.76	0.60	..	0.60	0.16	..	..	..	..	..
<b>Total—II—Disease Control.</b>	<b>154.37</b>	<b>154.37</b>	<b>61.67</b>	<b>..</b>	<b>38.30</b>	<b>27.81</b>	<b>26.59</b>	<b>28.36</b>	<b>33.31</b>	<b>..</b>	<b>..</b>
<b>III—P O U L T R Y DEVELOPMENT</b>											
1. Provision of additional facilities in the existing poultry farms.	2.32	2.32	2.10	..	2.15	0.04	0.04	0.04	0.05	..	..
2. Strengthening of the All India Demonstration Farms.	10.52	10.52	5.20	..	2.18	2.78	2.34	1.59	1.62	..	..
3. Establishment of Duck Breeding Centre.	1.90	1.90	1.26	..	0.49	0.07	0.56	0.15	0.64	..	..
4. Establishment of Mat meal manufacturing Centre.	0.73	0.73	0.45	..	0.26	0.04	0.29	0.07	0.07	..	..
5. Supervisory Staff ..	4.94	4.94	..	..	0.48	0.75	0.93	1.37	1.41	..	..
<b>Total—III—Poultry Development.</b>	<b>20.41</b>	<b>20.41</b>	<b>9.01</b>	<b>..</b>	<b>5.56</b>	<b>3.68</b>	<b>4.16</b>	<b>3.22</b>	<b>3.79</b>	<b>..</b>	<b>..</b>

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>IV—MISCELLANEOUS SCHEMES</b>											
	1. Organisation of Cattle Shows.	3·00	3·00	..	..	0·60	0·60	0·60	0·60	0·60	..	..
	2. Popularisation of Livestock activities and Tape recording of speeches.	0·15	0·15	..	..	0·07	0·02	0·02	0·02	0·02	..	..
	3. Utilization of services of foreign experts.	2·00	2·00	..	..	0·40	0·40	0·40	0·40	0·40	..	..
	Total—IV—Miscellaneous Scheme.	5·15	5·15	..	..	1·07	1·02	1·02	1·02	1·02	..	..
	<b>V—VETERINARY EDUCATION AND RESEARCH</b>											
	1. Establishment of a Livestock Research Station.	9·94	9·94	3·00	2·00	2·00	2·60	2·56	1·11	1·67	..	..

2. Opening of Post-graduate classes in the Veterinary College.	4.57	4.57	1.00	1.00	..	1.50	1.50	0.58	0.99	..	..
3. Opening of an Information Bureau in the Directorate of Animal Husbandry and Veterinary Services.	2.75	2.75	0.33	—	0.79	0.48	0.49	0.49	0.50	—	—
4. Opening of a Statistical section in the Veterinary Directorate.	0.83	0.83	0.05	..	0.17	0.15	0.16	0.17	0.18	—	—
5. Opening of a Statistical Unit in the Veterinary College and Research Station	0.75	0.75	..	0.13	0.30	0.11	0.11	0.11	0.12	—	—
6. Training of personnel	1.54	1.54	..	1.33	0.13	0.27	0.38	0.38	0.38	..	..
7. Extension Wing in the Veterinary College.	2.02	2.02	0.59	0.70	1.36	0.16	0.17	0.17	0.16	..	..
8. Establishment of a Livestock Breeding Farm in the Veterinary College	9.37	9.37	1.39	0.80	1.40	0.39	2.09	2.74	2.75	..	..
9. Increasing efficiency of the Veterinary College.	2.63	2.63	..	1.27	0.41	0.45	0.47	0.63	0.67	..	..
10. Award of fellowships for Post-graduate education.	0.48	0.48	..	..	..	..	0.12	0.24	0.12	..	..
11. Expansion of the Veterinary College.	7.21	7.21	7.21	..	4.00	3.21	..	..	..	..	..
12. Staff quarters for the Veterinary College.	3.00	3.00	3.00	..	1.50	1.50	..	..	..	..	..
13. I.C.A.R. Schemes	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
Total—V—Veterinary Education and Research.	46.09	46.09	16.57	7.23	12.26	11.02	8.25	6.82	7.74	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>VI—RE-ORGANIZATION AND ADMINISTRATION</b>											
	1. Strengthening of the Office of the Director of Animal Husbandry and Veterinary Services.	1.65	1.65	..	..	0.31	0.32	0.33	0.34	0.35	..	..
	2. Formation of a Planning Section.	1.60	1.60	..	..	0.33	0.31	0.32	0.32	0.32	..	..
	3. Formation of an Engineering Section.	1.96	1.96	..	..	0.34	0.38	0.40	0.42	0.42	::	::
	4. Upgrading the posts of Extension Officers.	0.27	0.27	..	..	0.05	0.05	0.05	0.06	0.06	::	..
	5. Formation of an Audit and Accounts Wing.	1.34	1.34	..	..	0.24	0.26	0.27	0.28	0.29	..	..
	<b>Total—VI—Reorganization and Administration</b>	<b>6.82</b>	<b>6.82</b>	<b>..</b>	<b>::</b>	<b>1.27</b>	<b>1.32</b>	<b>1.37</b>	<b>1.42</b>	<b>1.44</b>	<b>::</b>	<b>::</b>
	<b>Total—4—Animal Husbandry</b>	<b>295.16</b>	<b>295.00</b>	<b>101.79</b>	<b>7.23</b>	<b>72.04</b>	<b>55.47</b>	<b>53.32</b>	<b>53.28</b>	<b>60.89</b>	<b>0.16</b>	<b>..</b>

5. Dairying and Milk Supply.	1. Establishment of small-scale Livestock Breeding Farms.	24.24	24.24	14.96	..	..	4.67	5.59	6.52	7.46	..	..
	2. Reorganization of the State Livestock Breeding Farm.	20.45	20.45	14.69	..	2.63	7.55	6.07	2.20	2.00	..	..
	3. Expansion of the District Livestock Breeding Farm.	4.80	4.80	3.50	..	2.01	2.01	0.26	0.26	0.26	..	..
	4. Survey of Milk area	0.33	0.33	..	..	0.11	0.22	..	..	..	..	..
	5. Training of Personnel in Dairying.	2.91	2.91	0.20	..	0.53	1.06	0.73	0.45	0.14	..	..
	6. Appointment of Dairy Development Staff.	4.50	4.50	0.14	..	0.86	0.76	0.88	0.97	1.03	..	..
	7. Establishment of a Creamery at Kunjang.	2.28	2.28	0.84	..	0.48	0.68	0.36	0.38	0.38	..	..
	8. Pilot Scheme for collection and Marketing of Milk.	1.50	1.50	0.80	..	0.14	0.60	0.32	0.22	0.22	..	..
	9. Extension Units in Dairying areas.	5.94	5.94	2.66	..	..	1.80	2.26	0.94	0.94	..	..
	10. Establishment of a Dairy Plant at Berhampur.	10.05	10.05	9.13	1.50	..	..	1.26	6.33	2.46	..	..
	11. Loans for purchase of milch animals and colonization of Goalas.	3.95	3.95	3.70	..	..	1.10	1.73	0.56	0.56	..	..
Total—5—Dairying and Milk Supply	80.95	80.95	50.62	1.50	6.76	20.45	19.46	18.83	15.45	..	..	
Total—4—Animal Husbandry Dairying and Milk Supply.	376.11	375.95	152.41	8.73	78.80	75.92	72.78	72.11	76.34	0.16	..	

(Rs in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>PRODUCTION SCHEMES</b>											
6. Fisheries ..	1. Collection of spawn	2.75	2.75	1.28	..	0.92	0.40	0.44	0.47	0.52	..	..
	2. Establishment of Composite Fish Seed Centres.	13.00	13.00	8.00	0.30	1.90	2.28	2.62	2.96	3.24	..	..
	3. Expansion of existing Fish Seed Centres.	2.75	2.75	2.32	..	0.71	0.74	0.60	0.60	0.10	..	..
	4. Development of reservoir fisheries.	5.25	5.25	3.25	0.65	1.58	0.81	0.86	0.96	1.04	..	..
	5. Pilot Scheme for Inland fish storage and ice production.	7.75	7.75	4.48	2.00	2.54	3.05	0.71	0.72	0.73	..	..
	6. Assistance to Inland fishermen.	5.00	5.00	4.12	2.50	1.07	0.96	0.97	1.00	1.00	..	..
	7. Pilot scheme for power Fishing in Sea.	57.25	57.25	38.73	9.00	6.43	13.75	11.71	12.45	12.91	..	..

8. Pilot Scheme for Marine by products.	5.00	5.00	3.35	1.70	2.17	1.74	0.59	0.25	0.25	..	..
9. Assistance to Marine fishermen.	8.75	8.75	7.25	2.50	1.22	1.78	2.48	2.88	0.39	..	..
10. Reclamation of foreshore of Chilka and Estuarine areas.	20.00	20.00	16.40	6.00	2.40	7.70	3.30	3.30	3.30	..	..
TRAINING											
11. Training in Fisheries	6.00	6.00	3.15	..	0.83	1.02	1.19	1.39	1.57	..	..
APPLIED RESEARCH											
12. Fresh Water Biology	4.50	4.50	3.00	0.70	0.55	1.55	1.30	0.80	0.30	..	..
13. Marine Biology ..	1.50	1.50	0.58	..	0.31	0.53	0.21	0.22	0.23	..	..
14. Deep Water Fishing	2.50	2.50	1.25	0.70	0.40	0.95	0.55	0.30	0.30	..	..
15. Fisheries Technology	2.00	2.00	1.11	0.60	0.49	0.76	0.25	0.25	0.25	..	..
OTHER SCHEMES											
16. Extension ..	1.50	1.50	0.24	..	0.20	0.29	0.36	0.32	0.33	..	..
17. Hydrographic Survey of Chilika Lake.	5.00	5.00	4.07	1.00	1.30	3.38	0.32	..	..	..	..
18. Supervision ..	5.50	5.50	1.01	..	0.55	1.45	1.20	1.10	1.20	..	..
Total—6—Fisheries ..	156.00	156.00	103.59	27.65	25.57	43.14	29.66	29.97	27.66	..	..



(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
7. Forests ..	1. Consolidation ..	5.00	5.00	..	..	1.00	1.00	1.00	1.00	1.00	..	..
	2. Communications ..	25.00	25.00	21.87	..	5.41	5.41	4.72	4.73	4.73	..	..
	3. Buildings ..	15.00	15.00	14.65	..	3.00	3.00	3.00	3.00	3.00	..	..
	4. Departmental Working of coupes.	Net Nil	..	..	..	..	..	..	..	..	..	..
	5. Training of Staff ..	9.86	9.86	0.65	1.50	2.31	3.00	2.00	1.27	1.28	..	..
	6. Economic Plantation	78.00	78.00	8.69	..	18.21	18.21	13.86	13.86	13.86	..	..
	7. Rehabilitation ..	20.87	20.87	0.48	..	4.32	4.32	4.08	4.07	4.08	..	..
	8. Forest Survey ..	1.00	1.00	..	..	0.26	0.19	0.18	0.18	0.19	..	..
	9. Forest resources Survey	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
	10. Forest Publicity ..	1.77	1.77	..	..	0.55	0.30	0.30	0.30	0.32	..	..
	11. Forest Protection	3.00	3.00	..	..	0.60	0.60	0.60	0.60	0.60	..	..
	12. Minor Forest Produce	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
	13. Nature Conservation	13.50	13.50	10.67	..	2.70	2.70	2.70	2.70	2.70	..	..
	Total—7—Forests ..	175.00	175.00	57.01	1.50	38.76	39.13	32.84	32.11	32.16	..	..

8. Soil Conservation.

1. Soil Erosion and Land Capability Survey.	2-67	2-67	0-17	..	0-67	0-50	0-50	0-50	0-50	0-50	..	..
2. Soil Conservation Research and Laboratory.	4-30	4-30	1-20	..	1-03	0-93	0-86	0-84	0-64	0-64	..	..
3. Establishment of Soil Conservation Demonstration Centres.	11-12	11-12	0-73	..	2-21	2-22	2-22	2-23	2-24	2-24	..	..
4. Soil Conservation in Machhkund Dam Catchment.	14-13	14-13	..	..	1-98	2-42	2-78	3-27	3-68	3-68	..	..
5. Soil Conservation in Hirakud Dam Catchment.	49-34	49-34	2-50	..	7-91	8-82	9-81	10-83	11-97	11-97	..	..
6. Pilot Scheme for Control of Stream Bank Erosion.	2-05	2-05	..	..	0-41	0-41	0-41	0-41	0-41	0-41	..	..
7. Soil Conservation in Coastal Sand Dunes.	10-00	10-00	..	..	2-00	2-00	2-00	2-00	2-00	2-00	..	..
8. Soil Conservation Training School.	3-90	3-90	..	..	1-24	0-85	0-70	0-55	0-56	0-56	..	..
9. Soil Conservation Supervisory Staff.	12-48	12-48	..	..	1-27	2-05	2-46	2-84	3-86	3-86	..	..
10. Soil Conservation in Medium and Minor Irrigation Projects.	8-95	8-95	0-58	..	0-83	1-46	2-22	2-22	2-22	2-22	..	..
11. Development of Pasture in eroded lands	7-06	7-06	0-22	..	0-48	0-85	1-41	1-94	2-38	2-38	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	12. Soil Conservation in Mine Spoils.	1·25	1·25	0·15	..	0·27	0·27	0·27	0·22	0·22	..	..
	13. Soil Conservation Field Staff in special Multipurpose Blocks.	20·75	20·75	..	..	0·75	1·47	3·69	5·92	8·92	..	..
	14. Training of personnel in Soil Conservation.	1·00	1·00	..	..	0·20	0·20	0·20	0·20	0·20	..	..
	15. Publicity and Education in Soil Conservation programme.	1·00	1·00	..	..	0·20	0·20	0·20	0·20	0·20	..	..
	Total—8—Soil Conservation	150·00	150·00	5·55	..	21·45	24·65	29·73	34·17	40·00	..	..
9. Warehousing and Marketing.	1. Regulation of markets	15·00	15·00	11·50	..	2·62	2·89	2·99	3·22	3·28	..	..
	2. Integrated Scheme for market intelligence	1·50	1·50	..	..	0·16	0·22	0·31	0·36	0·45	..	..
	3. Grading and Standardisation.	1·78	1·78	0·65	..	0·46	0·22	0·45	0·25	0·40	..	..

	4. Training of Marketing personnel.	6.72	0.72	..	..	0.14	0.14	0.14	0.15	0.15	..	..
	5. Strengthening of Marketing Directorate.	5.00	5.00	..	..	0.23	0.53	0.89	1.36	1.99	..	..
	6. Marketing Research, Survey and extension.	1.00	1.00	0.40	..	0.16	0.18	0.20	0.22	0.24	..	..
	7. Establishment of Licensed Warehouses.	20.00	20.00	20.00	..	3.70	3.80	3.90	4.25	4.35	..	..
	Total—9—Warehousing and Marketing	45.00	45.00	32.55	..	7.47	7.98	8.88	9.81	10.86	..	..
10. Co-operation	1. Re-vitalisation of small-sized credit Co-operative Societies.	43.00	37.80	25.00	..	6.20	7.00	7.80	8.20	8.60	5.20	..
	2. Re-organisation of Central Co-operative Banks.	7.85	6.89	..	..	0.81	1.35	1.62	1.62	1.49	0.96	..
	3. Organisation of Primary Land Mortgage Banks.	0.50	0.50	..	..	0.13	0.21	0.12	0.04	..	..	..
	4. Establishment of Regional Marketing Co-operative Societies.	26.10	26.10	24.00	..	6.35	6.58	6.70	3.35	3.12	..	..
	5. Organisation of Fishery Co-operatives.	10.00	10.00	..	..	2.00	2.00	2.00	2.00	2.00	..	..
	6. Organisation of House Building Co-operative Societies.	0.75	0.75	..	..	0.15	0.15	0.15	0.15	0.15	..	..
	7. Establishment of Jute Bailing Plants.	17.00	16.73	13.00	..	3.20	3.33	3.40	3.40	3.40	0.27	..

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	8. Establishment of Cotton Ginning and Pressing Factories.	3·00	3·00	2·50	..	0·55	1·13	1·18	0·10	0·04	..	..
	9. Installation of rice-hullers.	11·25	11·25	10·00	..	4·24	4·40	2·38	0·18	0·05	..	..
	10. Establishment of Cold Storage Plants.	18·75	18·75	18·00	..	9·38	6·25	3·12	..	..	..	..
	11. Co-operative Farming	20·24	19·82	16·10	..	3·95	4·25	4·40	4·40	2·82	0·42	..
	12. Co-operative Training and Education.	20·81	20·03	..	..	3·50	4·13	4·13	4·13	4·14	0·78	..
	13. Co-operative propo-ganda.	4·50	4·50	..	..	0·90	0·90	0·90	0·90	0·90	..	..
	14. Departmental Re-organisation.	42·80	42·80	..	..	5·03	6·61	8·81	10·23	12·12	..	..
	Total—10—Co-operation	226·55	218·92	108·60	..	46·39	48·29	46·71	38·70	38·83	7·63	..

**AGRICULTURE  
COMMUNITY  
& DEVELOP-  
MENT**

**11. Community  
Development**

Community Development

2,578.47 1,660.82 500.38 .. 210.82 328.00 369.00 376.00 377.00 917.65 ..

Total—11—Community  
Development

2,578.47 1,660.82 500.38 .. 210.82 328.00 369.00 376.00 377.00 917.65 ..

**12. Village  
Panchayats.**

1. Pisciculture ..

40.00 40.00 40.00 .. 5.00 10.00 10.00 10.00 5.00 .. ..

2. Other remunerative  
Schemes.

10.00 10.00 10.00 .. 2.00 2.00 2.00 2.00 2.00 .. ..

3. Training of Grama  
Panchayat Secretaries.

17.73 17.73 .. .. 3.55 3.55 3.55 3.54 3.54 .. ..

4. Panchayat Golas ..

30.00 30.00 30.00 .. 6.00 6.00 6.00 6.00 6.00 .. ..

5. Panchayat Roads ..

5.00 5.00 5.00 .. 1.00 1.00 1.00 1.00 1.00 .. ..

6. Establishment of Pan-  
chayat Raj.

18.69 15.00 .. .. 5.38 2.42 2.40 2.40 2.40 3.69 ..

7. Organisation and  
supervision.

22.91 22.91 .. .. 4.58 4.58 4.58 4.58 4.59 .. ..

8. Initial grants to Grama  
Panchayats.

5.60 5.60 .. .. 3.00 1.60 0.50 0.30 0.20 .. ..

9. Training of non-  
officials.

48.00 5.00 .. .. 1.10 0.98 0.98 0.97 0.97 43.00 ..

10. Panchayat Ghars

20.00 10.00 10.00 .. 2.00 2.00 2.00 2.00 2.00 10.00 ..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
II—IRRIGATION AND POWER	11. Quarters for Grama Panchayat Organizers.	3.20	3.20	..	..	0.64	0.64	0.64	0.64	0.64	..	..
	12. Press ..	2.00	2.00	2.00	..	1.20	0.20	0.20	0.20	0.20	..	..
	Total—12—Village Panchayats	223.13	166.44	97.00	..	35.45	34.97	33.85	33.63	28.54	56.69	..
	Total—I—Agriculture and Community Development	4,643.91	3,621.78	1,321.43	59.81	655.23	753.29	735.34	738.47	739.45	1,022.13	..
	I. MAJOR IRRIGATION PROJECTS:—											
	1. Bhimkund (Irrigation portion only).	507.00	250.00	250.00	..	20.00	50.00	100.00	50.00	30.00	257.00	..
	II. MEDIUM IRRIGATION PROJECTS											
	1. Pipalpankha ..	133.86	15.00	15.00	..	..	..	..	10.00	5.00	118.86	..
	2. Uttai ..	139.83	15.00	15.00	..	..	..	..	10.00	5.00	124.83	..

2. Power Projects	3. Salchua Tangna ..	271·00	20·00	20·00	..	..	..	..	10·00	10·00	251·00	..
	4. Siaria ..	18·00	15·00	15·00	..	..	..	..	8·00	7·00	3·00	..
	5. Lower Lant ..	86·00	15·00	15·00	..	..	..	..	10·00	5·00	71·00	..
	6. Bahuda ..	132·00	20·00	20·00	..	..	..	..	10·00	10·00	112·00	..
	Total—II—Medium Irrigation Projects	780·69	100·00	100·00	..	..	..	..	58·00	42·00	680·69	..
	III. Flood Control ..	781·00	101·56	101·56	..	4·56	23·00	24·00	25·00	25·00	679·44	..
	Investigation of Irrigation Projects.	50·00	50·00	50·00	..	10·00	14·00	12·00	10·00	4·00	..	..
	Total—1—Irrigation ..	2,118·69	501·56	501·56	..	34·56	87·00	136·00	143·00	101·00	1,617·13	..
	1. Talcher Thermal Scheme.	2350·00	2350·00	890·00	1460·00	350·00	700·00	1050·00	250·00	..	..	..
	2. Balimela Hydro-Electric Scheme											
	(a) Civil Works ..	1600·00	830·00	755·00	75·00	125·00	130·00	175·00	200·00	200·00	770·00	..
	(b) Power Portion ..	1368·00	870·00	597·00	273·00	50·00	150·00	250·00	150·00	270·00	498·00	..
Total—2—Balimela Hydro-Electric Scheme.	2968·00	1700·00	1352·00	348·00	175·00	280·00	425·00	350·00	470·00	1268·00	..	
3. Low head turbines	35·00	35·00	5·00	30·00	2·00	20·00	13·00	..	..	..	..	
4. Balimela, Talcher and Machkund Utilisation Scheme	178·00	178·00	160·00	18·00	20·00	35·00	60·00	40·00	23·00	..	..	



(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	5. Investigation of new Projects.	20·00	20·00	20·00	..	..	4·50	5·50	5·50	4·50	..	..
	6. Rural Electrification Scheme.	162·35	162·35	162·35	..	19·35	45·00	45·00	35·00	18·00	..	..
	7. Hirakud Stage III ..	2755·00	100·00	100·00	..	..	..	..	50·00	50·00	2655·00	..
	Total—2—Power Projects	8468·35	4545·35	2689·35	1856·00	566·35	1084·50	1598·50	730·50	565·50	3923·00	..
	Total—II—Irrigation and Power	10587·04	5046·91	3190·91	1856·00	600·91	1171·50	1734·50	873·50	666·50	5540·13	..
<b>III—INDUSTRIES AND MINING</b>												
1. Large and Medium Industries.	1. Purchase of shares in State Financial Corporation.	10·00	10·00	10·00	..	2·00	2·00	2·00	2·00	2·00	..	..
	2. Establishment of Developed Areas.	25·00	25·00	25·00	..	5·00	10·00	8·00	2·00	..	..	..

	3. Co-operative Sugar Factory (purchase of shares).	20.00	20.00	20.00	..	10.00	10.00	..	..	..	...	..
2. Village and Small Indus- tries.	Total—1—Large and Medium Industries	55.00	55.00	55.00	..	17.00	22.00	10.00	4.00	2.00	..	..
(a) Handloom	1. Rebate on sale of Handloom cloth.	25.00	25.00	..	..	5.00	5.00	5.00	5.00	5.00	..	..
	2. Sale Depots ..	1.75	1.75	..	..	0.33	0.33	0.38	0.36	0.35	..	..
	3. Quality Control ..	1.75	1.75	..	..	0.35	0.35	0.35	0.35	0.35	..	..
	4. Demonstration parties for Weaving and Dyeing.	6.48	6.48	..	..	1.02	1.03	1.45	1.47	1.51	..	..
	5. Improvement of Designs (Cotton)	0.52	0.52	..	..	0.10	0.10	0.10	0.11	0.11	..	..
	6 Housing Colonies ..	14.00	14.00	9.34	..	2.80	2.80	2.80	2.80	2.80	..	..
	7. Cottage Dyeing Units	1.60	1.60	..	..	0.28	0.30	0.32	0.34	0.36	..	..
	8. Pattern Making Fac- tories.	5.21	5.21	..	..	1.26	1.26	0.89	0.90	0.90	..	..
	9. R. B. I. Staff ..	9.60	9.60	..	..	1.73	1.75	1.98	2.00	2.14	..	..
	10. Calendering Plant	8.02	8.02	..	0.02	0.23	4.45	1.11	1.11	1.12	..	..
	11. Mobile Vans ..	0.98	0.98	..	..	0.18	0.19	0.20	0.20	0.21	..	..
	12. Eri, Silk and Tassar Weaving.	0.90	0.90	..	..	0.13	0.16	0.18	0.20	0.23	..	..
	13. Tassar Designs ..	0.45	0.45	..	..	0.09	0.09	0.09	0.09	0.09	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	14. Additional Staff ..	12·18	12·18	..	..	2·33	2·38	2·43	2·49	2·55	..	..
	15. Share capital to Weavers, Co-operative Society.	14·25	14·25	14·25	..	4·20	4·20	1·95	1·95	1·95	..	..
	16. Supply of Improved Appliances.	7·00	7·00	1·75	..	1·40	1·40	1·40	1·40	1·40	..	..
	17. Co-operative Spinning Mill (purchase of share).	10·00	10·00	10·00	..	..	..	10·00	..	..	..	..
	18. Central Depots ..	0·73	0·73	..	..	0·30	0·25	0·09	0·09	..	..	..
	19. Publicity and propaganda.	1·00	1·00	..	..	0·20	0·20	0·20	0·20	0·20	..	..
	20. Samples ..	0·25	0·25	..	..	0·05	0·05	0·05	0·05	0·05	..	..
	21. Running Expenses..	5·70	5·70	..	..	0·60	1·05	1·35	1·35	1·35	..	..
	22. Inter State Depots	0·75	0·75	..	..	0·15	0·15	0·15	0·15	0·15	..	..

(b) Small Scale Industries.	23. Purchase of shares in State Apex Society.	1·00	1·00	1·00	..	0·20	0·20	0·20	0·20	0·20	..	..
	24. Silk Share Capital	0·88	0·88	0·88	..	0·175	0·175	0·175	0·175	0·18	..	..
	Total—(a)—Handlooms	130·00	130·00	37·22	0·02	23·105	27·865	32·845	22·985	23·20	..	..
	1. Loan under State Aid to Industries Act.	50·00	50·00	50·00	..	10·00	10·00	10·00	10·00	10·00	..	..
	2. Share investment in Small Scale Industries (Pilot Project).	47·00	47·00	47·00	..	9·00	9·00	9·00	10·00	10·00	..	..
	3. Quality Marking Scheme.	10·00	10·00	..	..	1·00	1·50	2·50	2·50	2·50	..	..
	4. Exhibition and Fairs	5·00	5·00	..	..	1·00	1·00	1·00	1·00	1·00	..	..
	5. Common Service Centres.	5·00	5·00	..	..	0·45	1·35	1·10	1·10	1·00	..	..
	6. Production Centres for Tile making.	20·00	20·00	20·00	..	5·00	6·00	6·00	2·00	1·00	..	..
	7. Modernisation of Industrial Schools.	30·00	30·00	6·85	..	7·45	7·15	5·10	5·15	5·15	..	..
	8. Training of Small Scale Industrial Workers in established Units.	2·00	2·00	..	..	0·40	0·40	0·40	0·40	0·40	..	..
	9. Strengthening of Industries Directorate.	24·00	24·00	..	..	3·40	5·10	4·50	5·50	5·50	..	..
10. State Aid to Co-operatives of Small Industries.	10·00	10·00	10·00	..	2·00	2·00	2·00	2·00	2·00	..	..	
11. Subsidy for equalisation of power tariff.	5·00	5·00	..	..	0·50	0·75	1·25	1·25	1·25	..	..	

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	12. Investment in the shares of Orissa Small Scale Industries Corporation.	5.00	5.00	5.00	..	3.00	1.00	1.00	..	..	..	..
	13. China Clay washing plant.	5.00	5.00	5.00	1.50	1.00	2.00	2.00	..	..	..	..
	14. Production of publicity literature, technical bulletin and periodicals and their publication.	5.00	5.00	..	..	1.00	1.00	1.00	1.00	1.00	..	..
	15. Establishment of Information Centres.	5.00	5.00	..	..	1.45	1.60	0.65	0.65	0.65	..	..
	16. Raw material depots	14.00	14.00	14.00	..	2.00	5.00	6.00	0.50	0.50	..	..
	Total— <i>b</i> —Small Scale Industries	242.00	242.00	157.85	1.50	48.65	54.85	53.50	43.05	41.95	..	..
(c)—Industrial Estates.	Establishment of Industrial Estates.	138.00	138.00	138.00	..	24.40	26.80	29.26	31.70	25.84	..	..
	Total— <i>(c)</i> —Industrial Estates.	138.00	138.00	138.00	..	24.40	26.80	29.26	31.70	25.84	..	..

**(d) Handicrafts**

1. Handicrafts Emporium at Rourkela.	0.85	0.85	..	..	0.45	0.10	0.10	0.10	0.10	..	..
2. Handicrafts Mobile Van.	1.04	1.04	0.10	..	0.36	0.17	0.17	0.17	0.17	..	..
3. Arts and Crafts Centre, Puri.	1.40	1.40	0.50	..	0.68	0.18	0.18	0.18	0.18	..	..
4. Procurement-cum-sale depot.	2.45	2.45	1.00	..	1.26	0.29	0.29	0.30	0.31	..	..
5. Development of Non-Ferrous Metal Industry.	2.84	2.84	0.75	..	1.57	0.30	0.32	0.32	0.33	..	..
6. Artistic Mats ..	0.64	0.64	0.05	..	0.40	0.06	0.06	0.06	0.06	..	..
7. Articles out of cane and bamboo.	0.83	0.83	0.18	..	0.59	0.06	0.06	0.06	0.06	..	..
8. Filigree and Filigree-cum-Horn Industry.	1.87	1.87	0.50	..	1.32	0.13	0.14	0.14	0.14	..	..
9. Incense and Perfumery	0.30	0.30	0.06	..	0.10	0.05	0.05	0.05	0.05	..	..
10. Toymaking ..	0.78	0.78	0.26	..	0.36	0.11	0.11	0.10	0.10	..	..
11. Village Crafts through standardised products.	1.68	1.68	0.50	..	0.72	0.23	0.24	0.24	0.25	..	..
12. Horn Industry ..	0.47	0.47	0.10	..	0.15	0.20	0.04	0.04	0.04	..	..
13. Development of Brass fish.	0.78	0.78	0.40	..	0.62	0.04	0.04	0.04	0.04	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 61—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex- change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex- change
14. Handicraft week ..		0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..
15. Handicrafts Schools		2.54	2.54	..	..	0.50	0.50	0.50	0.52	0.52	..	..
16. Design Centre ..		3.17	3.17	..	..	0.60	0.61	0.63	0.65	0.68	..	..
17. Calico printing ..		0.89	0.89	0.25	..	0.40	0.13	0.12	0.12	0.12	..	..
18. Stone Carving ..		0.37	0.37	0.20	..	0.23	0.04	0.04	0.03	0.03	..	..
19. Publication of catalogue.		0.30	0.30	..	..	..	0.15	..	0.15	..	..	..
20. Participation in Exhibition.		0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..
21. Training Centre for Stone and Horn Industry.		2.48	2.48	..	..	0.48	0.49	0.49	0.50	0.52	..	..
22. Administration and Supervision of Handicrafts.		1.87	1.87	..	..	0.37	0.37	0.37	0.38	0.38	..	..

## (e) Sericulture

23. Training in Wooden Toy making.	0-19	0-19	..	..	0-04	0-04	0-04	0-04	0-03	..	..
24. Durries and Carpets	0-36	0-36	0-20	..	0-24	0-03	0-03	0-03	0-03	..	..
25. Training-cum-p r oduction Centre for cane, bamboo and golden grass.	0-78	0-78	0-20	..	0-32	0-12	0-12	0-11	0-11	..	..
26. Experimenting in raw materials.	0-12	0-12	..	..	0-03	0-03	0-03	0-03	..	..	..
Total—(d)—Handicrafts	30-00	30-00	5-25	..	11-99	4-63	4-37	4-56	4-45	..	..
1. Tassar Seed Station	2-41	2-41	..	..	0-26	0-41	0-60	0-55	0-59	..	..
2. Eri Seed Station ..	2-02	2-02	..	..	0-38	0-27	0-41	0-46	0-50	..	..
3. Research in Sericulture	1-46	1-46	..	..	0-48	0-22	0-24	0-25	0-27	..	..
4. Peripatetic Demonstration Party.	1-19	1-19	..	..	0-15	0-19	0-27	0-28	0-30	..	..
5. Tassar Rearers' Co-operative Society.	3-19	3-19	1-30	..	0-35	0-68	0-70	0-72	0-74	..	..
6. Eri Rearers Co-operative Society.	0-89	0-89	0-47	..	0-17	0-18	0-17	0-18	0-19	..	..
7. Central Tassar Depot	3-27	3-27	..	..	0-64	0-65	0-65	0-66	0-67	..	..
8. Headquarters Staff for Sericulture.	1-03	1-03	..	..	0-19	0-20	0-21	0-21	0-22	..	..
9. Improved Appliances	0-75	0-75	..	..	0-15	0-15	0-15	0-15	0-15	..	..
10. Farmers' Day ..	0-25	0-25	..	..	0-05	0-05	0-05	0-05	0-05	..	..
11. Tassar Reeling ..	0-22	0-22	0-08	..	0-15	0-01	0-02	0-02	0-02	..	..
Total—(e)—Sericulture	16-68	16-68	1-85	..	2-97	3-01	3-47	3-53	3-70	..	..



(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
(f) Coir ..	1. Development of Coir Industry.	1.25	1.25	0.19	..	0.25	0.25	0.25	0.25	0.25	..	..
	2 Production-cum-Training Centre.	1.75	1.75	..	..	0.75	0.25	0.25	0.25	0.25	..	..
	Total—(f)—Coir Industry	3.00	3.00	0.19	..	1.00	0.50	0.50	0.50	0.50	..	..
(g) Khadi and Village Industries	Grant to Orissa Khadi and Village Industries Board.	25.00	25.00	..	..	5.00	5.00	5.00	5.00	5.00	..	..
	Total—(g)—Khadi and Village Industries Board	25.00	25.00	..	..	5.00	5.00	5.00	5.00	5.00	..	..
	<b>Total—2—Village and small Industries</b>	<b>584.68</b>	<b>584.68</b>	<b>340.36</b>	<b>1.52</b>	<b>117.115</b>	<b>122.655</b>	<b>128.945</b>	<b>111.325</b>	<b>104.64</b>	<b>..</b>	<b>..</b>

**3. Mineral Development.**

1. Re-organisation of Directorate of Mines.											
(i) Circle Offices ..	8.46										
(ii) Survey Parties ..	11.55										
(iii) Drilling Party ..	3.40										
(iv) Geophysical Party	2.55										
(v) Engineering Geology Section.	3.92	36.41	-	1.50	6.60	7.00	7.40	7.80	7.61	..	..
(vi) Research Section	1.75										
(vii) Accounts Section	3.03										
(viii) Supervisory Section	1.75										
2. Assaying and Analytical Laboratory											
(a) Expansion of the Laboratory at Joda.	2.74										
(b) Laboratory at Titlagarh.	4.56	14.50	3.50	2.10	2.43	2.85	3.20	3.52	2.50	..	..
(c) Laboratory at Jajpur	7.20										

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	3. Purchase of shares in Mining Corporation.	17.50	17.50	17.50	..	3.50	3.50	3.50	3.50	3.50	..	..
	4. Construction of new Railway lines and installation of rope-way for movement of ores in Sukinda area.	100.00	100.00	100.00	*	80.00	10.00	10.00	..	..	..	..
	5. Transport of iron ores. (Boats and Barges)	30.00	30.00	30.00	3.00	10.00	10.00	7.00	3.00	..	..	..
	<b>Total—3—Mineral Development</b>	198.41	198.41	151.00	6.60	102.53	33.35	31.10	17.82	13.61	..	..
	<b>Total—III—Industries and Mining</b>	838.09	838.09	546.36	8.12	2366.45	178.005	170.045	133.145	120.250	..	..

\* Being worked out

**IV—T R A N S  
P O R T   A N D  
C O M M U N I C A  
T I O N S.**

1. P.W.D. Roads	P. W. D. Roads	933.07	439.69	439.69	—	24.00	44.00	74.00	144.00	153.69	493.38	..
2. Anchal Roads	Anchal Roads	30.00	30.00	30.00	—	6.00	6.00	6.00	6.00	6.00	..	..
3. Municipal Roads.	Improvement of Municipal Roads.	35.00	35.00	35.00	—	7.00	7.00	8.00	7.00	6.00	..	..
4. Road Transport.	Road Transport Services	120.00	120.00	120.00	..	42.60	35.73	21.29	17.93	2.45	..	..
5. Inland Water Transport.	(i) Extension of Taldanda Canal from Paradip to Baitrakud.	15.00	10.00	10.00	..	2.00	2.00	2.00	2.00	2.00	5.00	..
	(ii) Construction of new Dock at Cuttack.	12.32	7.00	7.00	..	1.00	1.00	2.00	1.00	2.00	5.32	..
	(iii) Purchase and operation of a Suction dredger for dredging the Canals and the mouths of entering for silt clearance.	6.00	5.00	5.00	..	3.00	2.00	..	..	..	1.00	..
	(iv) Making Daya West .. Canal navigable.	65.00	2.00	2.00	..	1.00	1.00	..	..	..	63.00	..
	Total—5—Inland Water Transport.		98.32	24.00	24.00	..	7.00	6.00	4.00	3.00	4.00	74.32
6. Tourism	1. Maintenance of Tourist Information Bureaus at Puri, Bhubaneswar, Hirakud and Rourkella.	1.60	1.60	..	..	0.28	0.30	0.32	0.34	0.36	..	..
	2. Low Income Group Rest Houses at Konark, Gopalpur, Hirakud and Balugaon.	4.00	4.00	..	..	0.50	2.00	1.50	..	..	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	3. Appointment of Guide-cum-Caretaker for Rest Houses.	0.30	0.30	..	..	..	..	..	0.15	0.15	..	..
	4. Staff for execution of Tourist Schemes.	0.45	0.45	..	..	0.08	0.09	0.09	0.09	0.10	..	..
	5. Additional staff in-charge of Rest Houses at Puri and Bhubaneswar	0.42	0.42	..	..	0.07	0.08	0.09	0.09	0.09	..	..
	6. Tourist Publicity ..	0.23	0.23	..	..	0.03	0.03	0.06	0.06	0.05	..	..
	..										..	..
	Total-6-Tourism ..	7.00	7.00	..	..	0.96	2.50	2.06	0.73	0.75	..	..
	Grand Total—IV—Transport and Communications.	1223.39	655.69	648.69	..	87.56	101.23	115.35	178.66	172.89	567.70	..

V. SOCIAL SERVICES—	I. PRIMARY EDUCATION—											
Education—	(a) New Enrolment—											
1. General Education.	1. Appointment of teachers for opening of new schools and upgrading of existing schools.	179·10	179·10	..	..	10·00	23·74	36·23	47·82	61·31	..	..
	2. Contingencies (Rec.) at Rs. 25 per teacher per year.	9·70	9·70	..	..	0·75	1·40	2·00	2·55	3·00	..	..
	3. Contingencies (Non-Rec.) at the rate of Rs. 150 per teacher.	18·00	18·00	..	..	4·50	3·90	3·60	3·30	2·70	..	..
	4. Appointment of inspecting staff's. (S. Is. and Deputy Inspectors).	45·03	45·03	..	..	3·25	6·25	9·13	11·85	14·55	..	..
	5. Construction of quarter-cum-office for 100 Sub-Inspectors of Schools.	10·00	10·00	..	..	1·00	1·50	2·00	2·50	3·00	..	..
	6. Construction of school buildings.	110·00	110·00	..	..	10·00	15·00	20·00	30·00	35·00	..	..
	Total—(a)—New Enrolment	371·83	371·83	..	..	29·50	51·79	72·96	98·02	119·56	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan		
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change	
1	2	3	4	5	6	7	8	9	10	11	12	13	
	(b) Other items												
	7. Provision of mid-day meals.	100·00	100·00	..	..	5·00	12·50	20·00	27·50	35·00	..	..	
	8. Orientation of primary schools to the basic pattern.	10·00	10·00	..	..	5·00	5·00	..	..	..	..	..	
	Total—(b)—Other items	110·00	110·00	..	..	10·00	17·50	20·00	27·50	35·00	..	..	
	(c) Amenities to teachers												
	9. Quarters for men-teachers in backward areas.	3·00	3·00	..	..	0·60	0·60	0·60	0·60	0·60	..	..	
	10. Improvement in the emoluments of primary school teachers.	410·00	410·00	..	..	46·20	82·60	88·56	93·96	98·68	..	..	
	Total—(c)—Amenities to teachers	413·00	413·00	..	..	46·80	83·20	89·16	94·56	99·28	..	..	

<i>(d)</i> Training of teachers											
11. Improvement of E. T. Schools—Opening of new Classes.	5·70	5·70	..	..	0·87	1·20	1·21	1·21	1·21	..	..
12. Condensed course E.T. Classes.	13·50	13·50	..	..	2·00	2·50	3·00	3·00	3·00	..	..
13. Increase in value of stipends at E. T. Stage.	12·60	12·60	..	..	1·80	2·70	2·70	2·70	2·70	..	..
Total— <i>(d)</i> —Training of teachers	31·80	31·80	..	..	4·67	6·40	6·91	6·91	6·91	..	..
<i>(e)</i> Special Schemes for Girls' Education.											
14. Attendance Scholarships.	30·00	30·00	..	..	3·60	5·10	6·10	7·10	8·10	..	..
15. Quarters for women-teachers.	75·00	75·00	..	..	15·00	15·00	15·00	15·00	15·00	..	..
16. Appointment of school mothers.	12·00	12·00	..	..	0·60	1·50	2·40	3·30	4·20	..	..
17. Training of school mothers.	1·20	1·20	..	..	0·24	0·24	0·24	0·24	0·24	..	..
18. Refreshers course	0·20	0·20	..	..	0·04	0·04	0·04	0·04	0·04	..	..
19. Provision of sanitary blocks in primary schools	5·00	5·00	..	..	1·00	1·00	1·00	1·00	1·00	..	..



(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	20. Organisation of enrolment drives.	6.00	6.00	..	..	1.20	1.20	1.20	1.20	1.20	..	..
	21. Condensed course for adult women.	3.45	3.45	..	..	0.23	0.46	0.69	0.92	1.15	..	..
	Total—(e)—Special schemes for Girls' Education.	132.85	132.85	..	..	21.91	24.54	26.67	28.80	30.93	..	..
	Total—I—Primary Education.	1059.48	1059.48	..	..	112.88	183.43	215.70	255.79	291.68	..	..
	<b>II. SECONDARY EDUCATION</b>											
	(a) Middle Schools											
	1. Middle English Schools for boys.	24.00	24.00	..	..	1.42	3.21	4.83	6.46	8.08	..	..
	2. Improvement of buildings of Middle English Schools (boys and girls).	8.50	8.50	..	..	1.70	1.70	1.70	1.70	1.70	..	..

3. Improvement in equipment and libraries of Middle English Schools (boys and girls.)	6'00	6'00	..	..	1'20	1'20	1'20	1'20	1'20	..	..
4. Introduction of crafts in Middle English Schools (boys).	7'30	7'30	..	..	0'98	1'30	1'48	1'67	1'87	..	..
5. Introduction of crafts in Middle English Schools (girls).	9'12	9'12	..	..	1'20	1'45	1'82	2'15	2'50	..	..
6. Sanitary blocks in Middle Schools.	1'00	1'00	..	..	0'20	0'20	0'20	0'20	0'20	..	..
7. Middle English Schools for girls—Grants for buildings, staff and equipment.	73'60	73'60	..	..	8'28	10'94	14'18	18'00	22'20	..	..
Total—(a)—Middle Schools	129'52	129'52	..	..	14'98	20'00	25'41	31'38	37'75	..	..
(b) High Schools											
8. High Schools for boys	17'30	17'30	..	..	1'59	2'46	3'41	4'42	5'42	..	..
9. Higher Secondary Schools.	25'00	25'00	5'00	..	2'57	3'37	5'03	6'56	7'47	..	..
10. Multipurpose Schools	8'00	8'00	1'00	0'30	1'55	1'63	1'82	2'10	0'90	..	..
11. Improvement in buildings of High Schools (Boys and Girls) and construction of buildings for Schools.	10'00	10'00	2'00	..	2'00	2'00	2'00	2'00	2'00	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	12. Improvement in library and equipment of High Schools (Boys and Girls).	9.00	9.00	..	..	1.00	2.00	2.00	2.00	2.00	..	..
	13. Appointment of additional staff in High Schools (Boys and Girls).	4.00	4.00	..	..	0.12	0.36	0.70	1.14	1.68	..	..
	14. Introduction of crafts in High Schools (Boys).	15.30	15.30	..	..	2.24	2.52	3.00	3.50	4.04	..	..
	15. Opening of Girls' High Schools.	18.88	18.88	..	..	2.54	3.12	3.62	4.40	5.20	..	..
	16. Provision of Sanitary blocks in High Schools.	0.40	0.40	..	..	0.08	0.08	0.08	0.08	0.08	..	..
	17. Introduction of crafts in High Schools (Girls).	1.72	1.72	..	..	0.25	0.30	0.34	0.39	0.44	..	..
	Total—(b)—High Schools	109.60	109.60	8.00	0.30	13.94	17.84	22.00	26.59	29.23	..	..

(c) Inspection and Board of Secondary Education											
18. Appointment of additional inspecting staff and office staff.	8.52	8.52	..	0.23	0.70	1.14	1.97	2.28	2.43	..	..
19. Provision of Jeeps for Inspecting staff.	3.72	3.72	..	1.80	1.02	1.26	0.48	0.48	0.48	..	..
20. Grant for Development of Secondary Education	4.00	4.00	..	..	0.80	0.80	0.80	0.80	0.80	..	..
Total—(c)—Inspection and Board of Secondary Education.	16.24	16.24	..	2.03	2.52	3.20	3.25	3.56	3.71	..	..
(d) Training of teachers											
21. Opening of Secondary Training Schools.	26.75	26.75	12.00	..	4.53	5.23	6.06	7.04	3.89	..	..
22. Increase in seats of existing Secondary Training Schools and provision of books and equipment.	1.50	1.50	..	..	0.22	0.28	0.33	0.33	0.34	..	..
23. Opening of new Training Colleges.	8.93	8.93	4.00	0.15	2.50	0.64	0.87	3.38	1.54	..	..
24. Expansion of existing Training Colleges and M. Ed. Classes.	2.00	2.00	..	..	0.25	0.30	0.47	0.49	0.49	..	..
25. Increase of value of Stipends in Secondary Training Schools (for men students).	1.00	1.00	..	..	0.14	0.21	0.21	0.22	0.22	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	26. Construction of quarters for Teachers' Training Institutions.	0·80	0·80	0·80	..	0·25	0·10	0·25	0·10	0·10	..	..
	27. Expansion of the Scheme of Training of Hindi Teachers.	1·40	1·40	0·80	..	0·92	0·12	0·12	0·12	0·12	..	..
	28. Training of P. T. Is. and construction of College Buildings.	2·00	2·00	1·50	..	0·12	0·08	0·35	0·85	0·60	..	..
	29. Expansion of the Scheme of Training of craft teachers.	3·50	3·50	3·00	..	0·05	1·07	1·10	1·13	0·15	..	..
	Total—(d)—Training of Teachers	47·88	47·88	22·10	0·15	8·98	8·03	9·76	13·66	7·45	..	..

(e) Construct i o n of hostels, award of stipends and scholarships and provision of Transport:—												
30. Construction of hostels for Boys' High Schools.	24·00	24·00	4·00	..	4·00	4·00	4·00	6·00	6·00	..	..	
31. Maintenance stipends in Middle English Schools (Boys).	2·52	2·52	..	..	0·28	0·56	0·56	0·56	0·56	..	..	
32. Maintenance stipends in High Schools (Boys).	11·20	11·20	..	..	0·80	1·60	2·40	3·20	3·20	..	..	
33. Scholarships (Upper Primary and Middle English).	15·48	15·48	..	..	1·08	2·52	3·42	4·14	4·32	..	..	
34. Administrative staff for the schemes of award of Stipends and Scholarships.	1·35	1·35	..	..	0·18	0·28	0·29	0·30	0·30	..	..	
35. Construction of hostels for Girls' High Schools along with quarters for Superintendents.	7·20	7·20	..	..	1·00	1·10	1·70	1·86	1·54	..	..	
36. Construction of hostels for Secondary Schools for Girls.	33·75	33·75	..	..	6·75	6·75	6·75	6·75	6·75	..	..	
37. Extension of subsidised Transport to new Urban areas.	2·75	2·75	..	..	0·28	0·42	0·55	0·68	0·82	..	..	

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	..	..
											Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	38. Maintenance stipends in Middle English Schools (Girls).	0.64	0.64	..	..	0.08	0.14	0.14	0.14	0.14	..	..
	39. Maintenance stipends in High Schools (Girls).	3.36	3.36	..	..	0.24	0.48	0.72	0.96	0.96	..	..
	40. Attendance Scholarships at Middle English stage for girls.	5.00	5.00	..	..	0.55	0.75	1.00	1.20	1.50	..	..
	Total—(e)—Host e l s, Stipends and Scholarships	107.25	107.25	4.00	..	15.24	18.60	21.53	25.79	26.09	..	..
	(f) Amenities to teachers											
	41. Quarters for men-teachers (High Schools).	2.40	2.40	..	..	0.48	0.48	0.48	0.48	0.48	..	..
	42. Quarters for men-teachers (Middle English Schools).	2.00	2.00	..	..	0.40	0.40	0.40	0.40	0.40	..	..

43. Improvement in the pay of teachers of Secondary Schools.	5·00	15·00	..	..	2·60	2·80	3·00	3·20	3·40	..	..
44. Quarters for women-teachers of Middle English Schools.	9·00	9·00	..	..	1·80	1·80	1·80	1·80	1·80	..	..
45. Special allowance to women-teachers of Middle English Schools in Rural areas.	2·40	2·40	..	..	0·48	0·48	0·48	0·48	0·48	..	..
Total—(f)—Amenities to teachers	30·80	30·80	..	..	5·76	5·96	6·16	6·36	6·56	..	..
(g) Basic Education (Secondary Stage)											
46. Upgrading of Junior Basic Schools to Senior Basic Schools.	2·00	2·00	..	..	0·24	0·29	0·38	0·49	0·60	..	..
47. Opening of post-basic Schools.	5·00	5·00	..	..	1·25	1·70	0·96	0·70	0·39	..	..
Total—(g)—Basic Education (Secondary Stage).	7·00	7·00	..	..	1·49	1·99	1·34	1·19	0·99	..	..
Total—II—Secondary Education	448·29	448·29	34·10	2·48	62·91	75·62	89·46	108·53	111·78	..	..
III. UNIVERSITY EDUCATION			..								
1. Opening of new colleges											
(i) Building	40·00	40·00	25·00	..	6·00	8·00	8·00	8·00	10·00	..	..
(ii) Equipment ..	18·00	18·00	..	4·00	4·50	4·50	3·00	3·00	3·00	..	..
(iii) Staff ..	18·00	18·00	..	..	0·78	2·42	3·72	4·78	6·30	..	..



(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	2. Upgrading of existing Intermediate Colleges to First Grade Colleges.	14·00	14·00	5·00	1·00	0·90	1·85	1·15	3·20	6·90	..	..
	3. Introduction of three years degree course in the existing Government Colleges.	3·40	3·40	..	0·50	0·40	0·64	0·72	0·80	0·84	..	..
	4. Introduction of three years Degree course in non-Government Colleges (Grants).	1·30	1·30	..	..	0·15	0·25	0·28	0·30	0·32	..	..
	5. Grants to Utkal University for Buildings and Teaching.	83·00	83·00	..	..	21·00	14·00	13·20	16·40	18·40	..	..
	6. Improvement to Buildings and construction of new Buildings for existing Colleges including quarters and Hostels.	15·00	15·00	10·00	..	3·00	3·00	3·00	3·00	3·00	..	..
	7. Appointment of additional staff in Colleges.	12·00	12·00	..	..	0·93	1·58	2·35	3·18	3·96	..	..

8. Improvement in library and equipment.	₹ 30	4'00	..	0'50	0'80	0'80	0'80	0'80	0'80	..	..
9. Award of Scholarships and staff for implementation of the Scheme.	8'56	8'56	..	..	0'79	1'77	2'00	2'00	2'00	..	..
10. Improvement in the scales of pay of non-Government College Teachers.	5'00	5'00	..	..	0'60	0'80	1'00	1'20	1'40	..	..
11. Special Scholarship for women students.	7'00	7'00	..	..	0'70	1'05	1'40	1'75	2'10	..	..
12. Maintenance stipends for women students residing in hostels.	1'00	1'00	..	..	0'05	0'15	0'20	0'25	0'35	..	..
13. Construction of hostels for women students.	20'00	20'00	..	..	2'00	3'00	4'00	5'00	6'00	..	..
Total—III—University Education	250'26	250'26	40'00	6'00	42'60	43'81	44'82	53'66	65'37	..	..
<b>IV. OTHER EDUCATIONAL SCHEMES</b>											
<b>(a) Physical Education and Youth Welfare</b>											
1. Expansion of N.C.C.	8'00	8'00	..	..	2'50	1'75	1'00	1'25	1'50	..	..
2. Youth Welfare ..	5'00	5'00	..	..	1'00	1'00	1'00	1'00	1'00	..	..
3. Grants to associations promoting Physical Education and Sports.	3'00	3'00	..	..	0'60	0'60	0'60	0'60	0'60	..	..
Total—(a)—Physical Education	16'00	16'00	..	..	4'10	3'35	2'60	2'85	3'10	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	(b) Social Education											
	8. Production of Social Education literature.	3.00	3.00	..	..	0.60	0.60	0.60	0.60	0.60	..	..
	9. Village Libraries Grants.	5.00	5.00	..	..	1.00	1.00	1.00	1.00	1.00	..	..
	10. Audio-Visual Education.	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
	11. Removal of Illiteracy	8.00	8.00	..	..	0.55	1.13	1.62	2.11	2.59	..	..
	12. Mobile library units in Blocks.	1.00	1.00	..	..	0.10	0.15	0.20	0.25	0.30	..	..
	Total—(b)—Social Education.	18.00	18.00	..	..	2.45	3.08	3.62	4.16	4.69	..	..

(c) Miscellaneous Schemes												
13. Strengthening of Administrative staff (D. P. Is. Office).	5.16	5.16	-	..	0.58	0.88	1.08	1.22	1.40	..	..	..
14. Strengthening of Administrative staff. (Secretariat).	2.00	2.00	..	..	0.38	0.39	0.40	0.41	0.42	..	..	..
15. State and City library	16.43	16.43	..	..	3.13	3.17	4.06	3.46	2.61	..	..	..
16. Improvement of Sanskrit Studies.	5.00	5.00	-	..	1.00	1.00	1.00	1.00	1.00	..	..	..
17. Education of the Handicapped.	2.50	2.50	..	..	0.50	0.50	0.50	0.50	0.50	..	..	..
18. Promotion of Hindi	3.50	3.50	..	..	0.50	0.50	0.50	1.00	1.00	..	..	..
19. Opening of a branch of the Stewart School.	0.50	0.50	..	..	..	..	0.08	0.18	0.24	..	..	..
Total—(c)—Miscellaneous schemes.	35.09	35.09	..	..	6.09	6.44	7.62	7.77	7.17	..	..	..
Total—IV—Other Educational Schemes.	69.09	69.09	..	..	12.64	12.87	13.84	14.78	14.96	..	..	..
Total—I—General Education.	1827.12	1827.12	74.10	8.48	231.03	315.73	363.81	432.76	483.79	..	..	..

(Rs. in Lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan		
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change	
													4
2. Technical Education.	I. TECHNICAL EDUCATION												
	1. Regional Engineering College, Rourkela.	180.52	180.52	55.63	6.00	60.00	47.00	31.00	22.12	20.40	..	..	..
	2. New Engineering College.	63.00	63.00	15.00	3.00	5.00	5.00	25.00	15.00	13.00	..	..	..
	3. One New Engineering School.	36.33	36.33	6.00	1.00	17.33	9.00	4.00	3.00	3.00	..	..	..
	4. One New Polytechnic	49.40	49.40	15.00	..	21.00	13.00	6.25	4.75	4.40	..	..	..
	5. Headquarters staff for Engineering Schools.	2.00	2.00	..	..	0.40	0.40	0.40	0.40	0.40	..	..	..
	6. Junior Technical Schools.	7.20	7.20	..	..	2.00	2.00	1.20	1.00	1.00	..	..	..
	7. State Council of Technical Education.	3.02	3.02	..	..	0.52	0.60	0.60	0.60	0.70	..	..	..
	8. Higher Training in Engineering.	30.00	30.00	..	..	6.00	6.00	6.00	6.00	6.00	..	..	..
	Total—I	371.47	371.47	91.63	10.00	112.25	83.00	74.45	52.87	48.90	..	..	..

		<b>(ii) OTHER TECHNICAL EDUCATION SCHEMES</b>											
		1. Grants to Cultural Associations.	4·00	4·00	..	..	0·80	0·80	0·80	0·80	0·80	..	..
		2. Expansion of the State Museum.	5·00	5·00	..	..	1·00	1·25	1·00	0·85	0·90	..	..
		3. Development of Modern Indian Languages.	3·00	3·00	..	..	0·60	0·60	0·60	0·60	0·60	..	..
		4. Revision of District Gazetteers.	1·44	1·44	..	..	0·72	0·72	..	..	..	..	..
		Total—(ii) ..	13·44	13·44	..	..	3·12	3·37	2·40	2·25	2·30	..	..
		Total—2—Technical Education.	384·91	384·91	91·63	10·00	115·37	86·37	76·85	55·12	51·20	..	..
		Total—Education	2,212·03	2,212·03	165·73	18·48	346·40	402·10	440·66	487·88	534·99	..	..
<b>2. Health</b>	..	<b>I. CONTROL AND ERADICATION OF COMMUNICABLE DISEASES</b>											
		1. National Malaria Eradication Programme.	..	105·51	..	..	33·68	23·90	20·90	19·02	8·01	..	..
		2. National Filaria Control Programme.	..	12·48	..	..	2·42	2·46	2·50	2·53	2·57	..	..
		3. Mass B. C. G. Campaign.	..	2·97	..	..	2·97	..	..	..	..	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	4. Anti-T. B. Demonstration Training Centre at S. C. B. Medical College.	..	2.07	1.00	..	..	0.29	0.60	0.58	0.60	..	..
	5. Establishment of T. B. Isolation Centre.	..	6.52	..	..	0.91	1.45	1.38	1.39	1.39	..	..
	6. Establishment of T. B. Clinics.	..	4.52	2.90	..	0.50	0.53	1.15	1.16	1.18	..	..
	7. Small Pox Eradication Programme.	2.87	2.41	..	..	0.47	0.47	0.48	0.49	0.50	0.46	..
	8. Leprosy Control Pilot Project.	12.87	12.87	..	..	..	1.44	2.62	3.80	5.01	..	..
	9. Increase of beds in T. B. Hospital.	4.37	4.37	0.70	..	..	0.30	0.70	1.46	1.91	..	..
	Total—I—Control and Eradication of Communicable diseases.	..	153.72	4.60	..	40.95	30.84	30.33	30.43	21.17	0.46	..

<b>II. PRIMARY HEALTH CENTRE AND FAMILY PLANNING PROGRAMME</b>	..			..						..	..
10. Establishment of Primary Health Centres.	91·94	91·94	85·28	::	20·93	28·87	37·34	2·38	2·42	::	::
11. Establishment of Family Planning Centres.	5·00	5·00	..	::	..	0·44	1·25	1·64	1·67	::	::
<b>Total—II—Primary Health Centres and Family Planning Programme.</b>	<b>96·94</b>	<b>96·94</b>	<b>85·28</b>	<b>..</b>	<b>20·93</b>	<b>29·31</b>	<b>38·59</b>	<b>4·02</b>	<b>4·09</b>	<b>..</b>	<b>..</b>
<b>III. EDUCATION AND TRAINING</b>											
12. Expansion of Medical College, Burla.	162·60	162·60	54·24	..	51·61	63·90	18·16	14·17	14·76	..	..
13. Establishment of Medical College at Berrampur.	136·39	136·39	67·75	..	20·00	39·56	22·46	31·39	22·98	..	..
14. Post-graduate education at S. C. B. Medical College, Cuttack.	6·31	6·31	..	..	1·35	1·16	1·22	1·27	1·31	..	..
15. Training of Nurses..	10·88	10·88	4·00	..	2·61	3·07	1·59	1·80	1·81	..	..
16. Training of auxiliary Nurse-Midwives.	8·81	8·81	2·00	..	2·36	2·38	1·38	1·34	1·35	..	..
17. Training of Pharmacists.	3·53	3·53	0·50	..	0·56	1·48	0·49	0·50	0·50	..	..
18. Training of Dais ..	0·45	0·45	..	..	0·09	0·09	0·09	0·09	0·09	..	..



(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	19. Training of Radiographers and Laboratory Assistants.	1.35	1.35	0.50	..	0.37	0.47	0.17	0.17	0.17	..	..
	20. Training of Health Inspectors.	0.80	0.80	..	..	0.16	0.16	0.16	0.16	0.16	..	..
	21. Training of Public Health Nurses.	5.91	5.91	1.00	..	1.01	1.65	0.89	1.18	1.18	..	..
	22. Training of candidates in post certificate course of Nursing.	0.48	0.48	..	..	0.07	0.10	0.10	0.10	0.11	..	..
	23. Deputation of candidates in D. P. H. training.	0.15	0.15	..	..	0.03	0.03	0.03	0.03	0.03	..	--
	24. Improvement of Rural Health Centre, Jagatsinghpur.	5.54	5.54	3.00	--	2.48	1.65	0.46	0.47	0.48	..	--
	25. Increase of admission at S. C. B. Medical College.	..	6.30	..	--	1.40	1.40	1.40	1.40	0.70	..	--
	<b>Total—III—Education and Training.</b>	--	349.50	132.99	--	84.10	117.10	48.60	54.07	45.63	--	--

<b>IV. PUBLIC HEALTH SERVICES</b>											
26. School Health Services—Appointment of additional Officers.	5.25	5.25	..	..	..	1.73	1.17	1.17	1.18	..	..
27. Dental Units ..	..	1.90	..	..	0.36	0.37	0.38	0.39	0.40	..	..
28. Health Education ..	..	1.98	..	..	0.37	0.38	0.40	0.41	0.42	..	..
29. Nutrition Programme	..	3.00	..	..	0.58	0.59	0.60	0.61	0.62	..	..
<b>Total—IV—Public Health Services.</b>	..	12.13	..	..	1.31	3.07	2.55	2.58	2.62	..	..
<b>V. IMPROVEMENT OF HOSPITAL SERVICES</b>											
30. Improvement of District Headquarters Hospitals.	8.07	8.07	1.72	..	..	..	1.83	3.11	3.13	..	..
31. Upgrading of subdivisional hospitals to the standard of referral hospitals.	14.55	14.55	4.80	..	..	1.00	3.11	4.92	5.52	..	..
32. Provision of additional medical stores.	15.00	15.00	..	..	3.00	3.00	3.00	3.00	3.00	..	..
33. Laboratory services at District Headquarters Hospitals.	2.10	2.10	..	..	0.12	0.31	0.70	0.48	0.49	..	..
34. Establishment of Blood Transmission Centres.	2.95	2.95	1.60	..	0.80	1.13	0.47	0.27	0.28	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	35. Establishment of Dental Clinics.	2·08	2·08	..	..	0·76	0·32	0·32	0·34	0·34	..	..
	36. Specialist services at District Headquarters Hospitals.	3·75	3·75	..	..	0·34	0·63	0·93	0·91	0·94	..	..
	37. Ambulance services in Hospitals.	4·62	4·62	..	..	..	0·30	3·26	0·53	0·53	..	..
	38. Improvement of Ex-District Board Hospitals and Dispensaries.	12·07	12·07	12·07	..	..	4·92	4·57	2·58	..	..	..
	39. Provision of diet for P. H. Cs, functioning under Block Budget.	10·98	10·98	..	..	2·02	1·95	2·16	2·59	2·26	..	..
	40. Provision of Cancer Wing at S. C. B. Medical College Hospital, Cuttack.	4·80	4·80	0·35	..	0·35	1·22	1·51	0·85	0·87	..	..

41. Establishment of Mass Miniature Radiography.	1.40	2.40	..	..	..	0.35	0.68	0.68	0.69	..	..
42. Drugs Control ..	1.44	1.44	..	..	0.09	0.26	0.35	0.36	0.38	..	..
Total—V—Improvement of Hospital Services.	84.81	84.81	20.54	..	7.48	15.39	22.89	20.62	18.43	..	..
<b>VI. INDEGENOUS SYSTEM OF MEDICINES</b>											
43. Establishment of Ayurvedic Dispensaries.	1.01	1.01	..	..	..	0.08	0.23	0.34	0.36	..	..
44. Improvement of Pharmacy at Bolangir.	0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..
45. Research of Ayurveda at G. A. V., Puri.	0.75	0.75	..	..	0.15	0.15	0.15	0.15	0.15	..	..
46. Development of Herbal garden at Bolangir.	0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..
47. Aid to Ayurvedic Board.	0.25	0.25	..	..	0.05	0.05	0.05	0.05	0.05	..	..
48. Establishment of Homeopathic Dispensaries.	1.10	1.10	..	..	..	0.14	0.28	0.34	0.34	..	..
49. Stipend to Homeo Trainees.	0.25	0.25	..	..	0.05	0.05	0.05	0.05	0.05	..	..
Total—VI—Indegenous system of medicines.	4.36	4.36	..	..	0.45	0.67	0.96	1.13	1.15	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>VII. ADMINISTRATION</b>											
	50. Integration of medical and Public Health cadre.	15·00	15·00	..	—	3·00	3·00	3·00	3·00	3·00	..	..
	51. Planning Branch in Health Directorate.	1·45	1·45	..	..	0·27	0·29	0·29	0·30	0·30	..	..
	52. Planning Branch in Health Secretariat.	1·92	1·92	..	..	0·35	0·36	0·38	0·41	0·42	..	..
	53. Medical Store Organisation.	2·00	2·00	1·00	..	1·19	0·19	0·20	0·21	0·21	..	..
	Total—VII—Administration.	20·37	20·37	1·00	..	4·81	3·84	3·87	3·92	3·93	..	..
	Total—Health (excluding Rural Water Supply).	..	721·83	244·41	..	160·03	200·22	147·79	116·77	97·02	0·46	..
	<b>VIII. RURAL WATER SUPPLY SCHEME</b>											
	90·00	90·00	..	..	11·00	16·00	21·00	21·00	21·00	21·00	..	..
	Total—2—Health (including Rural Water Supply).	—	811·83	244·41	..	171·03	216·22	168·79	137·77	118·02	0·46	—

3. Housing ..	1. S. I. Housing Scheme	50.00	50.00	50.00	..	10.00	10.00	10.00	10.00	10.00	..	..
	2. Low Income Group Housing Scheme.	100.00	100.00	..	..	20.00	20.00	20.00	20.00	20.00	..	..
	3. Slum Clearance ..	60.00	60.00	60.00	..	12.00	12.00	12.00	12.00	12.00	..	..
	4. Rural Housing Cell..	4.40	4.40	..	..	0.99	0.83	0.85	0.86	0.87	..	..
	5. Appointment of Clerks in Blocks for Village Housing.	2.35	2.35	..	..	0.43	0.48	0.48	0.48	0.48	..	..
	6. Creation of a separate Housing Department.	10.00	10.00	..	..	2.00	2.00	2.00	2.00	2.00	..	..
Total—3—Housing ..		226.75	226.75	110.00	..	45.42	45.31	45.33	45.34	45.35	..	
4. Welfare of Backward Classes— (a) Scheduled Tribes.	I. EDUCATION											
	1. Ashram Schools ..	35.00	35.00	15.22	..	4.75	11.90	7.85	5.25	5.25	..	..
	2. Tribal Research Bureau.	5.00	5.00	0.10	..	1.00	1.00	1.00	1.00	1.00	..	..
	3. Stipends ..	60.00	60.00	..	..	12.00	12.00	12.00	12.00	12.00	..	..
	4. Excursion ..	1.50	1.50	..	..	0.30	0.30	0.30	0.30	0.30	..	..
	5. Exhibition ..	2.50	2.50	..	..	0.83	0.83	0.28	0.28	0.28	..	..
	6. Hostels for M. E. and H. E. Schools.	8.00	8.00	8.00	..	1.56	1.56	1.56	1.56	1.76	..	..
	7. Peoples share of running M. E. Schools.	5.00	5.00	..	..	1.00	1.00	1.00	1.00	1.00	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	8. Hostels for Post-Matric Institutions.	3·00	3·00	3·00	..	1·00	1·00	1·00	..	..	..	..
	9. Teachers quarters in Primary Schools in Tribal Areas.	16·00	16·00	16·00	..	4·00	3·00	3·00	3·00	3·00	..	..
	Total—I—Education ..	136·00	136·00	42·32	..	26·44	32·59	27·99	24·39	24·59	..	..
	<b>II. ECONOMIC UPLIFT</b>											
	10. Jhum Control Scheme on Assam Pattern.	2·00	2·00	..	..	0·40	0·40	0·40	0·40	0·40	..	..
	11. Grants and subsidies for development of Cottage Industries .	10·00	10·00	3·00	..	2·00	2·00	2·00	2·00	2·00	..	..
	12. Poultry Rearing ..	10·30	10·30	3·28	..	2·53	3·24	1·27	1·86	1·40	..	..
	13. Pisciculture ..	6·14	6·14	3·62	0·53	1·97	1·21	1·10	0·92	0·94	..	..

14. Grants to non-official organisations.	0·00	10·00	..	..	2·00	2·00	2·00	2·00	2·00	..	..
15. Special Grants for Adibasi Welfare.	0·25	0·25	..	..	0·05	0·05	0·05	0·05	0·05	..	..
16. Midday Meals ..	7·50	7·50	..	..	1·50	1·50	1·50	1·50	1·50	..	..
17. Grain Golas ..	40·00	40·00	..	..	8·00	8·00	8·00	8·00	8·00	..	..
18. Forest Co-operative Societies.	33·80	33·80	23·30	..	5·70	5·70	6·80	7·50	8·10	..	..
19. Technical Training Institute.	14·00	14·00	9·00	..	4·00	4·00	4·00	1·00	1·00	..	..
20. Nutrition Programme.	9·63	9·63	..	..	1·92	1·92	1·93	1·93	1·93	..	..
21. Lac Cultivation ..	1·00	1·00	0·37	..	0·34	0·17	0·18	0·16	0·15	..	..
22. Tassar Rearing ..	1·00	1·00	..	..	0·20	0·20	0·20	0·20	0·20	..	..
23. Development of Pig-gery.	3·26	3·26	1·80	..	0·62	0·15	0·75	0·29	1·45	..	..
24. Fair Price Shops ..	2·00	2·00	2·00	..	0·40	0·40	0·40	0·40	0·40	..	..
25. Cottage Industries Training.	1·46	1·28	..	..	0·12	0·27	0·29	0·30	0·30	0·18	..
<b>Total—II—Economic Uplift.</b>	<b>152·34</b>	<b>152·16</b>	<b>46·37</b>	<b>0·53</b>	<b>31·75</b>	<b>31·21</b>	<b>30·87</b>	<b>28·51</b>	<b>29·82</b>	<b>0·18</b>	<b>..</b>
<b>III. RURAL COMMUNICATION</b>											
26. Rural Communication	15·00	15·00	..	..	3·00	3·00	3·00	3·00	3·00	..	..



(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>IV. RURAL WATER SUPPLY</b>											
	27. Drinking Water Supply	30.00	30.00	..	..	6.00	6.00	6.00	6.00	6.00	..	..
	<b>V. HOUSING</b>											
	28. Housing Facilities ..	15.00	15.00	..	..	3.00	3.00	3.00	3.00	3.00	..	..
	<b>VI. MEDICAL AND PUBLIC HEALTH</b>											
	29. Pharmacists' Training	0.48	0.48	..	..	0.04	0.09	0.16	0.15	0.04	..	..
	30. Treatment of venereal diseases.	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
	31. Peoples contribution for Primary Health Centres.	6.50	6.50	..	..	2.00	1.50	1.50	1.50	..	..	..
	32. Improvement of Hospitals	18.00	18.00	12.55	..	5.00	5.00	4.96	1.88	1.16	..	..

33. Training of Dais ..	0-50	0-50	..	..	0-10	0-10	0-10	0-10	0-10	..	..
34. Health Inspectors' Training.	0-14	0-13	..	..	0-02	0-02	0-03	0-03	0-03	0-01	..
Total—VI—Medical and Public Health.	26-62	26-61	12-55	..	7-36	6-91	6-95	3-86	1-53	0-01	..
<b>VII. MISCELLANEOUS</b>											
35. Measures for smooth execution of Welfare Schemes.	23-00	23-00	..	..	4-60	4-80	5-00	5-20	3-40	..	..
36. Social Customs of Adibasis.	1-00	1-00	..	..	0-20	0-20	0-20	0-20	0-20	..	..
37. Legal Assistance to Adibasis.	1-00	1-00	..	..	0-20	0-20	0-20	0-20	0-20	..	..
Total—VII—Miscellaneous	25-00	25-00	..	..	5-00	5-20	5-40	5-60	3-80	..	..
Total—(a) Scheduled Tribes.	399-96	399-77	101-24	0-53	82-55	87-91	83-21	74-36	71-74	0-19	..
<b>(b) Scheduled Castes.</b>											
<b>I. EDUCATION</b>											
1. Improvement of Education (Stipends).	50-00	50-00	..	..	10-00	10-00	10-00	10-00	10-00	..	..
<b>II. ECONOMIC UPLIFT</b>											
2. Cottage Industries Training and Cottage Industries Development.	10-00	10-00	..	..	1-67	2-03	2-10	2-10	2-10	..	..
3. Grants to non-official Organisations.	1-00	1-00	..	..	0-20	0-20	0-20	0-20	0-20	..	..
4. Grants to Depressed Classes League.	5-00	5-00	..	..	1-00	1-00	1-00	1-00	1-00	..	..
Total—II—Economic Uplift	16-00	16-00	..	..	2-87	3-23	3-30	3-30	3-30	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	<b>III. PUBLIC HEALTH</b>											
	5. Rural Water Supply	9.00	9.00	..	..	2.00	2.00	2.00	2.00	1.00	..	..
	<b>IV. HOUSING</b>											
	6. Housing facilities ..	19.60	19.60	..	..	4.00	4.00	4.00	4.00	3.60	..	..
	<b>V. MISCELLANEOUS</b>											
	7. Journals ..	0.25	0.25	..	..	0.05	0.05	0.05	0.05	0.05	..	..
	8. Legal Assistance ..	0.65	0.65	..	..	0.13	0.13	0.13	0.13	0.13	..	..
	9. Staff etc. ..	4.50	4.50	..	..	0.91	0.88	0.89	0.90	0.92	..	..
	Total—V—Miscellaneous	5.40	5.40	..	..	1.09	1.06	1.07	1.08	1.10	..	..
	<b>Total—(b) — Scheduled Castes.</b>	<b>100.00</b>	<b>100.00</b>	<b>..</b>	<b>..</b>	<b>19.96</b>	<b>20.29</b>	<b>20.37</b>	<b>20.38</b>	<b>19.00</b>	<b>..</b>	<b>..</b>

(c) Denotified Tribes

<b>I. EDUCATION</b>												
1. Award of Scholarships	0·35	0·35	..	..	0·07	0·07	0·07	0·07	0·07	..	..	
2. Adult Education Centres.	0·24	0·24	..	..	0·04	0·05	0·05	0·05	0·05	..	..	
3. Basic Schools ..	0·51	0·51	..	..	0·11	0·08	0·09	0·11	0·12	..	..	
Total—I—Education..	1·10	1·10	..	..	0·22	0·20	0·21	0·23	0·24	..	..	
<b>II. ECONOMIC UPLIFT</b>												
4. Agricultural facilities	2·95	2·95	..	..	0·55	0·60	0·60	0·60	0·60	..	..	
5. Cottage Industries ..	1·00	1·00	..	..	0·09	0·18	0·24	0·24	0·25	..	..	
6. Supply of Cows and Fowls.	1·00	1·00	..	..	0·20	0·20	0·20	0·20	0·20	..	..	
Total—II—Economic Uplift.	4·95	4·95	..	..	0·84	0·98	1·04	1·04	1·05	..	..	
<b>III. MEDICAL AND PUBLIC HEALTH</b>												
7. Supply of Medicines	0·38	0·38	..	..	0·07	0·07	0·08	0·08	0·08	..	..	
<b>IV. RURAL WATER-SUPPLY</b>												
8. Sinking of wells ..	2·00	2·00	..	..	0·40	0·40	0·40	0·40	0·40	..	..	
<b>V. HOUSING</b>												
9. Construction of hutments.	7·50	7·50	..	..	1·50	1·50	1·50	1·50	1·50	..	..	
Total—(c) — Denotified Tribes.	15·93	15·93	..	..	3·03	3·15	3·23	3·25	3·27	..	..	
Total—4—Welfare of Backward Classes	515·89	515·70	101·24	0·53	105·54	111·35	106·81	97·99	94·01	0·19	..	

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
5 Social Welfare	1 State Board Programme (State Share)	41.52	41.52	..	..	4.80	6.39	8.04	10.32	11.97	..	..
	2. Social and moral hygiene and after care programme.											
	(a) Care Programme											
	1. Conversion of Angul Jail into a Reformatory-cum-Borstal School.	5.45	5.45	1.99	..	0.99	1.78	0.73	0.97	0.98	..	..
	2. Introduction of Welfare Services in four district Jails.	1.52	1.52	..	..	0.37	0.28	0.28	0.29	0.30	..	..
	3. Establishment of three Remand Homes.	3.71	3.71	2.01	..	0.75	1.44	0.42	0.49	0.61	..	..
4. Introduction of Welfare Services in Jails for female prisoners.	0.44	0.44	..	..	0.11	0.08	0.08	0.08	0.09	..	..	

	5. Establishment of two Probation Hostels.	3.48	3.48	2.00	..	1.25	0.89	0.39	0.43	0.52	..	..
	6. Continuance of Probation Services.	4.80	4.80	..	..	0.92	0.94	0.96	0.98	1.00	..	..
	Total—(a)—Care Programme.	19.40	19.40	6.00	..	4.39	5.41	2.86	3.24	3.50	..	..
	(b) After Care Programme											
	1. Construction of buildings for seven District Shelters.	5.15	5.15	5.15	..	1.57	1.57	0.79	0.61	0.61	..	..
	2. Training of Supervisory staff.	0.60	0.60	..	..	0.14	0.14	0.14	0.09	0.09	..	..
	Total—(b)—After Care Programme	5.75	5.75	5.15	..	1.71	1.71	0.93	0.70	0.70	..	..
	Total—Social and Moral Hygiene and After Care Programme.	25.15	25.15	11.15	..	6.10	7.12	3.79	3.94	4.20	..	..
	Total—5—Social Welfare	66.67	66.67	11.15	..	10.90	13.51	11.83	14.26	16.17	..	..
6. Labour and Labour Welfare.												
(a) Labour Welfare Schemes.	1. Opening of Multi-purpose Labour Welfare Centres	5.35	5.35	..	..	2.34	0.11	2.45	0.22	0.23	..	..
	2. Social benefit Scheme	0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..
	3. Training of Factory Managers and Trade Union Workers	0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..

(Rs . in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Ex-change	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Ex-change
1	2	3	4	5	6	7	8	9	10	11	12	13
	4. Appointment of Assistant Engineer for Factory Inspectorate.	0.63	0.63	..	..	0.11	0.12	0.13	0.13	0.14	..	..
	5. Appointment of staff at Headquarters and Zonal offices.	3.00	3.00	..	..	0.91	0.48	0.53	0.53	0.55	..	..
	6. Employees State Insurance Scheme (State-share).	6.05	6.05	..	..	0.80	1.31	1.31	1.30	1.33	..	..
	7. Accommodation of District and Zonal labour offices.	2.55	2.55	2.55	..	1.78	0.38	0.39	..	..	..	..
	8. Research and Training-cum-production Centre.	5.13	5.13	2.85	..	2.85	0.84	0.46	0.49	0.49	..	..
	9. Training of Factory Inspectors.	0.05	0.05	..	..	0.01	0.01	0.01	0.01	0.01	..	..
	10. Separation of Labour Welfare from Industrial Dispute Machinery.	0.51	0.51	..	..	0.09	0.10	0.10	0.11	0.11	..	..

11. Labour Rally ..	1'00	1'00	..	..	0'20	0'20	0'20	0'20	0'20	..	..
12. Audio-Visual Education.	1'00	1'00	0'47	..	0'57	0'10	0'11	0'11	0'11	..	..
13. Implementation and Evaluation Machinery.	1'00	1'00	..	..	0'20	0'19	0'20	0'20	0'21	..	..
<b>MAN-POWER AND EMPLOYMENT</b>											
14. Expansion of Employment Service.	8'50	8'50	..	..	1'68	1'78	1'68	1'68	1'68	..	..
15. Collection of Employment Market Information.	1'85	1'85	..	..	0'34	0'38	0'38	0'38	0'37	..	..
16. Vocational Guidance	4'35	4'35	..	..	0'58	0'98	0'93	0'93	0'93	..	..
17. Building for Employment Exchange.	3'35	3'35	3'35	..	1'35	2'00	..	..	..	..	..
18. Appointment of additional staff in Secretariat for Development programmes.	1'50	1'50	..	..	0'28	0'29	0'30	0'31	0'32	..	..
<b>Total—(a)—Labour Welfare Schemes</b>	<b>46'82</b>	<b>46'82</b>	<b>9'22</b>	<b>..</b>	<b>14'29</b>	<b>9'47</b>	<b>9'38</b>	<b>6'80</b>	<b>6'88</b>	<b>..</b>	<b>..</b>
(b) Craftsman Training.											
1. National Apprenticeship Training Scheme.	2'50	2'50	..	..	0'50	0'50	0'50	0'50	0'50	..	..
2. Evening Classes ..	2'00	2'00	..	..	0'40	0'40	0'40	0'40	0'40	..	..
3. Headquarters Staff	4'00	4'00	..	..	0'80	0'80	0'80	0'80	0'80	..	..
4. Leave Reserve and Training Reserve.	2'00	2'00	..	..	0'40	0'40	0'40	0'40	0'40	..	..



(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	5. State Council of Training in vocational Trades.	2.50	2.50	..	..	0.50	0.50	0.50	0.50	0.50	..	..
	6. Expansion of I. T. I., Cuttack.	6.09	6.09	..	0.21	..	3.50	1.48	0.52	0.59	..	..
	7. Expansion of I. T. I., Berhampur.	6.91	6.91	..	..	3.64	1.57	0.57	0.53	0.60	..	..
	8. Expansion of I. T. I., Hirkud.	7.18	7.18	..	0.60	4.14	1.33	0.58	0.53	0.60	..	..
	9. Expansion of I. T. I., Junagarh.	5.22	5.22	..	0.55	2.70	0.88	0.53	0.57	0.54	..	..
	10. Expansion of I. T. I., Balasore.	6.82	6.82	..	0.57	4.00	1.18	0.52	0.57	0.55	..	..
	11. I. T. I., Khurdha ..	5.10	5.10	..	0.94	..	..	1.70	2.00	1.40	..	..
	12. I. T. I., Titilagarh ..	4.52	4.52	..	0.66	..	..	1.70	1.70	1.12	..	..
	13. I. T. I., Baripada ..	5.87	5.87	..	0.83	..	1.76	2.40	1.12	0.59	..	..
	14. I. T. I., Angul ..	5.02	5.02	..	0.62	..	..	1.79	2.13	1.10	..	..

VI—MISCELLANEOUS

1. Statistics ..

15. I. T. F. Keonjhar ..	5·20	5·20	..	0·59	..	..	1·79	2·33	1·08	..	..
16. I. T. I. Puri ..	3·80	3·80	..	..	1·00	1·58	0·28	0·47	0·47	..	..
17. Training of Instructors.	0·74	0·74	..	..	0·18	0·18	0·19	0·19	..	..	..
18. Award of prizes ..	0·05	0·05	..	..	0·01	0·01	0·01	0·01	0·01	..	..
Total—(b)—Craftman Training.	75·52	75·52	..	5·57	18·27	14·59	16·14	15·27	11·25	..	..
Total—6—Labour and Labour Welfare.	122·34	122·34	9·22	5·57	32·56	24·06	25·52	22·07	18·13	..	..
Total—V—Social Service	..	3955·32	641·75	24·58	711·85	812·55	798·94	805·31	826·67	0·65	..
1. Strengthening of the Crop Survey Scheme for Improvement of area and Yield Estimates.	8·75	8·75	..	..	1·68	1·71	1·75	1·78	1·83	..	..
2. Reorganisation of the Primary Reporting Agency for improvement of Agricultural Statistics.	6·50	6·50	6·50	..	1·24	1·27	1·30	1·33	1·36	..	..
3. Sample Survey of Small Scale Industries.	4·05	4·05	4·05	..	0·77	0·79	0·81	0·83	0·85	..	..
4. Creation of an Evaluation organisation in the Bureau of Statistics and Economics.	4·60	4·60	4·60	..	0·88	0·90	0·92	0·94	0·96	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay 1961—66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
	5. Strengthening of Bureau of Statistics and Economics for overall Planning needs.	3.38	3.38	3.38	..	0.64	0.66	0.68	0.69	0.71	..	..
	6. Creation of Housing Cell.	1.25	1.25	1.25	..	0.23	0.24	0.25	0.27	0.26	..	..
	7. Setting up of a Demographic unit.	0.47	0.47	0.47	..	0.09	0.09	0.09	0.10	0.10	..	..
	Total—1—Statistics	29.00	29.00	20.25	..	5.53	5.66	5.80	5.94	6.07	..	..
2. Publicity ..	1. Community Listening Scheme.	20.25	20.25	..	..	4.50	4.50	4.50	4.50	2.25	..	..
	2. Maintenance of Community Listening Scheme.	9.53	9.53	..	..	0.95	1.42	1.90	2.39	2.87	..	..
	3. Production of Informative Literature.	2.00	2.00	..	..	0.39	0.39	0.40	0.41	0.41	..	..

4. Maintenance of Information Centres at District Headquarters.	0.75	0.75	..	..	0.15	0.15	0.15	0.15	0.15	..	..
5. Publicity through song and Drama.	1.50	1.50	..	..	0.30	0.30	0.30	0.30	0.30	..	..
6. Information Centres at State Headquarters.	1.30	1.30	..	..	0.24	0.24	0.26	0.28	0.28	..	..
7. Press Advertising ..	0.80	0.80	..	..	0.16	0.16	0.16	0.16	0.16	..	..
8. Staff for execution of Plan Schemes.	0.50	0.50	..	..	0.10	0.10	0.10	0.10	0.10	..	..
9. Additional Mobile Units.	5.45	5.45	..	..	1.99	0.25	0.25	1.30	1.66	..	..
10. Film Production Unit	1.00	1.00	..	..	0.20	0.20	0.20	0.20	0.20	..	..
11. Opening of two Repairing Centres.	1.50	1.50	..	..	0.35	0.40	0.27	0.24	0.24	..	..
12. Opening of Information Centres at Block Headquarters.	1.50	1.50	..	..	0.27	0.28	0.30	0.32	0.33	..	..
13. Appointment of two Assistant Directors of Publicity.	0.92	0.92	..	..	0.20	0.17	0.17	0.19	0.19	..	..
14. Holding of Plan Exhibitions.	1.50	1.50	..	..	0.30	0.30	0.30	0.30	0.30	..	..
15. Opening of Film Library.	1.80	1.80	..	..	0.35	0.35	0.36	0.37	0.37	..	..
16. Appointment of operators for Community Development Blocks.	1.60	1.60	..	..	0.30	0.31	0.32	0.33	0.34	..	..
Total—2—Publicity ..	51.90	51.90	..	..	10.75	9.52	9.94	11.54	10.15	..	..

(Rs. in lakhs)

Head	Scheme	Total estimated cost	Proposed outlay, 1961-66			Phasing of proposed outlay					Balance after Third Plan	
			Total	Capital	Foreign Exchange	1961-62	1962-63	1963-64	1964-65	1965-66	Total	Foreign Exchange
1	2	3	4	5	6	7	8	9	10	11	12	13
3. Municipal Development Works. (Other than roads.)	1. Loans to Municipalities and Notified Area Councils for remunerative Projects.	15·00	15·00	15·00	..	3·00	3·00	3·00	3·00	3·00	..	..
	2. Grants to Municipalities and Notified Area Council for un-remunerative Projects.	10·00	10·00	..	..	2·00	2·00	2·00	2·00	2·00	..	..
	Total—3—Municipal Development Works.	25·00	25·00	15·00	..	5·00	5·00	5·00	5·00	5·00	..	..
4. Town Planning	1. Town Planning organisation including staff training and aerial survey and Planning of other Towns.	7·90	7·90	..	..	1·27	2·27	1·62	1·62	1·12	..	..
	2. Construction of Avenue Road in Cuttack Town.	22·33	17·10	17·10	..	3·00	3·84	3·84	3·42	3·00	5·23	..

	3. Construction of storm water drains in Cuttack Town.	65·88	25·00	25·00	..	4·00	5·00	6·00	6·00	4·00	40·88	..
	Total—4—Town Planning	96·11	50·00	42·10	..	8·27	11·11	11·46	11·04	8·12	46·11	..
5. New Capital	Capital Construction ..	237·76	237·76	237·76	1·00	27·00	51·00	56·00	58·00	45·76	..	..
6. Government Press.	Extension and reorganisation of Government Press.	86·83	30·00	19·63	5·50	9·05	9·47	4·08	4·15	3·25	56·83	20·24
	Total—VI—Miscellaneous	526·60	423·66	334·74	6·50	65·60	91·76	92·28	95·67	78·35	102·94	20·24
	Grand Total—New Schemes for Third Plan.	..	14,541·45	6,683·88	1,955·01	2,357·79	3,108·34	3,646·46	2,824·75	2,604·11	7,233·55	20·24

## ANNEXURE IX

### PRINCIPAL PROJECTS (COSTING Rs. ONE CRORE AND MORE) PROPOSED IN DRAFT THIRD PLAN

#### I. IRRIGATION AND FLOOD CONTROL PROJECTS

##### 1. DELTA IRRIGATION PROJECT

1. Description .. The Delta Irrigation Project comprises of the following works—(i) Construction of a new weir on Mahanadi at Mundali and New Canal system in Puri district and (ii) Remodelling of Birupa and Mahanadi Anicut and of existing canal system.
2. Whether new or carried over from Second Plan. Carried over from Second Plan.
3. Location .. Construction of New Weir at Mundali—  
Latitude .. 20°-27'  
Longitude .. 80°-44'
4. Scope and main component/items—  
Scope .. Under New canal system in Puri district it will irrigate an area of 536,367 acres as C. G. A. with navigation facility and under existing canal system in Cuttack district, it will irrigate an additional area of 3,40,790 acres with extra benefit of navigation throughout the year.
- Main components .. Length of Mahanadi Weir 4,370'-10½"  
Length of Main canal and Branches (New) .. 192.6 miles  
Length of distributaries and minors (New) .. 790 miles  
Length of existing main canals and branches to be remodelled .. 243.4 miles  
Length of distributaries and minors (Old) .. 1,225 miles  
Remodelling of existing Mahanadi and Birupa Anicuts.

5. Progress up to the end of the Second Plan (for continuing Schemes).

Work on this Scheme was actually taken up in the later years of the First Plan period. The original cost of the project was Rs. 14.92 crores. The estimate is now under revision and may go up to Rs. 25 crores. Till 1960-61 the anticipated expenditure including the expenditure incurred in the First Plan period is likely to be of the order of Rs. 9.94 crores. The balance amount required for the completion of the Project is estimated to be Rs. 15.06 crores. Of this, a sum of Rs. 11.30 crores has been provided for in the Third Plan period.

Most of the buildings both residential and non-residential to be constructed at different colony sites, have been completed. Communication facilities for transport of materials to work sites have also been provided. A special Land Acquisition Organisation has been set up to expedite Land Acquisition cases for the Project. Major portion of excavation of new canals has been completed. Construction of bridges at certain places of the Canals is in progress. Works on major syphons across the river Kuakhai, Kushabhadra, Bhargabi and the main weir at Mundali have also been taken up. Remodelling of the existing Mahanadi and Birupa anicuts to raise the posted level is in progress. Remodelling work of the existing canal system with distributaries is also in progress.

An additional area of 5,000 acres had been brought under irrigation during 1958-59 against the programme of 9,250 acres and attempts were made to bring more area under actual irrigation during 1959-60. During 1959-60 season irrigation potential has been created for an area of 1,00,000 acres. The extent of actual utilization is under investigation. By the end of Second Plan, an area of 2.50 lakh acres is expected to come under irrigation on account of this scheme.



6. Particulars of investigation and preparation of project reports and explanation of basis of estimates. Investigation completed and project report prepared.
7. Economic implications and justifications (for new schemes). Continuing Scheme.
8. Proposed date for commencement and completion and phasing of construction programme. Commencement → 1955-56  
Completion .. 1965-66

## 9. Cost estimates and expenditure (Rs. in lakhs)—

	Total	Foreign exchange
(1) Total estimated cost ..	2,500·00	45·00
(2) Expenditure up to 1960-61 ..	993·73	30·00
(3) Expenditure proposed 1961—66	1,130·00	15·00

## Phasing of expenditure—

(4) 1961-62 ..	350·00	} 15·00
(5) 1962-63 ..	400·00	
(6) 1963-64 ..	150·00	
(7) 1964-65 ..	130·00	
(8) 1965-66 ..	100·00	

## 10. Break-up of expenditure (Rs. in lakhs)—

	Total	1961—66
Wages and salaries ..	} The details are being worked out.	
Equipment and machinery ..		
Materials ..		
Buildings ..		
Land and development of land ..		
Others ..		

## 11. Programme of output/benefits—

(000 acres)

Name of scheme	Potential on full development		Potential during Second Plan		
	Gross	Net	At Head works	At outlets	Utilization
1	2	3	4	5	6
Delta Irrigation	1,558·0 + 200·0 (existing)	877·0 + 200·0 (existing)	528·8	528·8	250·0

Potential during the Third Plan			1961-62		
At Head works	At outlets	Utilization	At Head works	At outlets	Utilization
7	8	9	10	11	12
1,029·2	843·3	627·0	128·4	100·0	100·0
1962-63			1963-64		
At Head works	At outlets	Utilization	At Head works	At outlets	Utilization
13	14	15	16	17	18
100·0	100·0	127·0	800·8	300·0	125·0
1964-65			1965-66		
At Head works	At outlets	Utilization	At Head works	At outlets	Utilization
19	20	21	22	23	24
..	143·3	150·0	..	200·0	125·0

## 2. SALANDI IRRIGATION PROJECT

1. Description .. A dam is to be constructed across Salandi river near village Hadgarh in Keonjhar district and this will create a lake of 13 square miles. There will be one main canal on the left bank of Salandi to irrigate 2,25,000 acres.
2. Whether new or carried over from Second Plan— Carried over from Second Plan.
3. Location. .. The dam is situated at 21°—17'-18" latitude and 86°—18'-0" longitude.
4. Scope and main components/items. Scope—The project will irrigate 2,25,000 acres and will afford flood protection to an area of 50,000 acres in the Delta.
5. Progress up to the end of the Second Plan (for continuing schemes). Construction of staff quarters and office buildings at Bhadrak is almost complete.

*Main Components*—Earth dam 2106 ft. long spillway, including piers 376 feet and canal system to irrigate 2,25,000 acres.

Alignment of canals and the design statement of the distribution system have been approved. The detailed designs of all component masonry structures will be taken up by the proposed Design Division. Estimates for excavating the canals are now under preparation.

Jungle clearance work of the building sites at Hadgarh is in progress.

Excavation of foundation of spillway on right flank of the dam is in progress. Drilling operation in hard rock is in progress. Trial pits are being excavated for testing the foundation.

Construction of explosive godown at Hadgarh is complete. Construction of 4 blocks of temporary quarters for Clerks, one block of temporary quarters for Peons and one block of shopping Centre is in progress. Three temporary barracks have been completed.

Fair-weather road to dam site, road leading to borrow area in the left flank and road to Sajanapal are in progress.

About 2½ lakhs of bricks have been manufactured.

6. Particulars of investigation and preparation of project report and explanation of basis of estimate. Investigation completed and project report prepared.
7. Economic implication and justification (for new schemes). Continuing scheme
8. Proposed dates for commencement and completion and phasing of construction programme. Commencement—1959-60  
Completion—1965-66

9. *Cost estimates and expenditure—*

	(Rs. in lakhs) Total	Foreign exchange
1. Total estimated cost	465.60	38.58
2. Expenditure up to 1960-61	30.52	Nil
3. Expenditure proposed 1961—66	430.35	38.58

*Phasing of expenditure—*

4. 1961-62	100.00	} 38.58
5. 1962-63	150.00	
6. 1963-64	100.00	
7. 1964-65	50.00	
8. 1965-66	30.35	

10. *Break-up of expenditure—*

	(Rs. in lakhs) Total	1961—66
Wages and salaries	} Not available	
Equipment and machinery		
Materials		
Buildings		
Land and development of land		
Others		

11. *Programme of output/benefits—*

(in '000 acres)

Name of Scheme	Potential on full development		Potential during Second Plan		
	Gross	Net	At head works	At outlets	Utilisation
1	2	3	4	5	6
Salandi	327.0	225.0	..	..	..

Potential during Third Plan			1961-62		
Total at head works	At outlets	Utilisation	At head works	At outlets	Utilisation
7	8	9	10	11	12
327.0	327.0	225.0	..	..	..
1962-63			1963-64		
At head works	At outlets	Utilisation	At head works	At outlets	Utilisation
13	14	15	16	17	18
27.0	20.0	10.0	100.0	90.0	15.0
1964-65			1965-66		
At head works	At outlets	Utilisation	At head works	At outlets	Utilisation
19	20	21	22	23	24
100.0	100.0	140.0	100.0	117.0	60.0

### 3. SALCHUA TANGANA IRRIGATION PROJECT

1. Description	..	It is proposed to construct a series of dams to irrigate 54,100 acres of land at a cost of Rs. 2,71,00,000.
2. Whether new or carried over from Second Plan.		New
3. Location	..	The dam at Salchua across river Sunai, Lat. 21°—26½' and Long. 86°—27½'. Dam at Majhigadia across river Bara, Lat. 21°—27½' and Long. 86°—30'. Dam at Gayalmara across river Basudhara, Lat. 21°—27½' and Long. 86°—30'. Dam at Nachhipur across river Kala, Lat. 21°—31' and Long. 86°—29'. Dam at Jamuna across river Tangana, Lat. 21°—29' and Long. 86°—35'. Dam at Chhatrapur across river Tartari, Lat. 21°—30' and Long. 86°—37'.
4. Scope and main components/items.		The project will give benefit to 54,100 acres of land and the total annual irrigation will be to an extent of 75,800 acres.
5. Progress up to the end of the Second Plan (for continuing Schemes).		Does not arise.
6. Particulars of investigation and preparation of project report and explanation of basis of estimates.		Under investigation.
7. Economic implications and justifications (for new schemes).		The details are being worked out.
8. Proposed dates for commencement and completion and phasing of construction programme.		Commencement—1964-65. Completion during 4th Plan.
9. Cost estimates and expenditure.—		(Rs. in lakhs)
		Total Foreign exchange
1. Total estimated cost ...		271·00 Nil
2. Expenditure up to 1960-61.		.. ..
3. Expenditure proposed 1961—66.		20·00 Nil

<i>Phasing of expenditure</i>	(Rs. in lakhs)	
	Total	
4. 1961-62	..	
5. 1962-63	..	
6. 1963-64	..	
7. 1964-65	10.00	
8. 1965-66	10.00	
10. <i>Break-up of expenditure</i>	(Rs. in lakhs)	
	Total	1961—66
Wages and salaries	} Being worked out	
Equipment and machinery		
Materials		
Buildings		
Land and Development of land		
Others		

11. *Programme of output/benefits*—The gross potential of this project is estimated to be 0.758 lakh acres. Of this the net potential will be 0.541 lakh acres. The project will be taken up for execution in the last but one year of the Third Plan period. Irrigation benefits will accrue only in the Fourth Plan period.

#### 4. PIPALPANKHA IRRIGATION PROJECT

- |   |    |  |
|---|----|--|
| 1. Description  | .. | A dam is proposed to be constructed across the river Rushikulya and Adanji near village Pipalpankha in Ganjam district.  |
| 2. Whether new or carried over from Second Plan.  |    | New  |
| 3. Location   | .. | The dam site is about two miles upstream of the confluence of river Rushikulya and Adanji and about twenty-eight miles north-west of Aska village.                 |
| 4. Scope and main components/items.   |    | The project will irrigate 3,500 acres of direct ayacut and 40,000 acres of Rushikulya ayacut during rabi. The total area to be irrigated annually is 45,425 acres. |
| 5. Progress up to the end of the Second Plan (for continuing Schemes).                                  |    | Does not arise.  |
| 6. Particulars of investigation and preparation of project report and explanation of basis of estimate. |    | Detailed investigation complete and project report is under scrutiny.  |

7. Economic implications and justification (for new schemes). The project will yield a return of 1.89 per cent. considering the combined capital investment on the existing Rushikulya Project. A return of about 22.5 per cent. will be realised, if only the capital investment of the present project is considered.
8. Proposed date for commencement and completion and phasing of construction programme. Commencement 1964-65—Completion during Fourth Plan.

9. Cost of estimate and expenditure—

(Rs. in lakhs)

	Total	Foreign Exchange
1. Total estimated cost ..	133.86	Nil
2. Expenditure up to 1960-61 ..	..	..
3. Expenditure proposed 1961—66	15.00	Nil

Phasing of expenditure—

4. 1961-62 ..	Nil
5. 1962-63 ..	Nil
6. 1963-64 ..	Nil
7. 1964-65 ..	10.00
8. 1965-66 ..	5.00

10. Break-up of expenditure (Rs. in lakhs)—

	Total	1961—66
Wages and salaries	}	Not available
Equipment and machinery		
Materials		
Buildings		
Land and development of land		
Others		

11. Programme of output/benefit—

The gross potential of this project is estimated to be 0.454 lakh acres. Of this the net potential will be 0.435 lakh acres. The project will be taken up for execution in the last but one year of the Third Plan Period. Irrigation benefits will accrue only in the Fourth Plan period.



## 5. BAHUDA IRRIGATION PROJECT

1. Description .. A Dam is to be constructed across Bahuda river near village Bhramarpur above the confluence of Bahuda and Poichandianala to irrigate 30,000 acres of land. Besides, two pick up weirs will be constructed, one at Kalingdola below the junction of the Bahuda and its tributary Kantajorinala and another across Bagai.
2. Whether new or carried over from Second Plan. New
3. Location .. The Dam is situated at 19°-11' latitude and 84°-26' longitude.
4. Scope and main components/items—
- Scope .. The project will irrigate 30,000 acres during Khariff and 7,000 acres during Rabi.
- Main Components .. Earthdam—2 miles long including surplus escape 190 ft. and canal system to irrigate 30,000 acres.  
Pick up weir at Kalingdola—500 ft. long.  
Ditto across Bagai—300 ft. long.
5. Progress up to the end of the Second Plan (for continuing scheme.) New Scheme. Detailed investigation almost completed.
6. Particulars of investigation and preparation of project report and explanation of basis of estimates. Investigation nearing completion and project report is under compilation.
7. Economic implications and justifications (for new schemes.) Its execution is an urgent necessity as the area is badly affected owing to frequent droughts and famine.
8. Proposed dates for commencement and completion and phasing of construction programme. Commencement—1964-65.  
Completion during Fourth Plan.
9. Cost estimates and expenditure—
- |                                | (Rs. in lakhs) | Foreign exchange |
|--------------------------------|----------------|------------------|
| (1) Total estimated cost       | 132.00         | Nil              |
| (2) Expenditure up to 1960-61. | ..             | ..               |

	(Rs. in lakhs)	(Foreign exchange)
(3) Expenditure proposed 1961—66.	20·00	..
Phasing of expenditure—	..	..
(4) 1961-62 ..	..	..
(5) 1962-63 ..	..	..
(6) 1963-64 ..	..	..
(7) 1964-65 ..	10·00	..
(8) 1965-66 ..	10·00	..
	Total	1961—66

## 10. Break up of expenditure—

Wages and salaries	} The details are being worked out
Equipment and machinery	
Materials	
Buildings	
Land and Development of land.	
Others	

11. Programme of output/benefit. The gross potential of this project is estimated to be 0·370 lakh acres. Of this the net potential will be 0·30 lakh acres. The project will be taken up for execution in the last but one year of the Third Plan period. Irrigation benefits will accrue only in the Fourth Plan period.

## 6. UTTAI PROJECT

1. Description This project envisages construction of a dam at Rampur and a weir at Kosarla, across river Uttai in Kalahandi district.
2. Whether new or carried over from Second Plan. New.

3. Location .. Dam at latitude 20°-11' and longitude 83°-33'.
4. Scope and main components/items. Scope—The project will irrigate 10,700 acres from Rampur Reservoir and 17,700 acres from Kosarla Weir. The annual irrigation is estimated to be 28,500 acres.
- Main Components—
- Length of the earthdam . 2,100 ft.
- Length of the spillway .. 310 ft.
- Length of the Dyke .. 5,280 ft.
- Length of the Kosarla Weir.. 1,080 ft.
- Length of the Main Canal .. 17 miles.
5. Progress up to end of the Second Plan (for continuing Schemes). New
6. Particulars of investigation and preparation of project report and explanation of basis of estimates. Detailed investigation is in progress now.
7. Economic implications and justification (for new schemes). The project will yield a return of 2·14%
8. Proposed dates for commencement and completion and phasing of construction programme.
- Commencement .. 1964-65
- Completion .. During Fourth Plan
9. Cost estimates and expenditure.
- (Rs. in lakhs)
- |                                  | Total  | Foreign exchange |
|----------------------------------|--------|------------------|
| 1. Total estimated cost          | 139·83 | Nil              |
| 2. Expenditure up to 1960-61     | ..     | ..               |
| 3. Expenditure proposed 1961—66. | 15·00  | Nil              |

	(Rs. in lakhs)	Foreign exchange
Phasing of expenditure—		
4. 1961-62	..	
5. 1962-63	..	
6. 1963-64	..	
7. 1964-65	10.00	
8. 1965-66	5.00	
	(Rs. in lakhs)	
10. Break-up of expenditure—	Total	1961-62
Wages and Salaries ..	} Not available	
Equipment and Machinery ..		
Materials ..		
Buildings ..		
Land and development of of land.		
Others ..		

11. Programme of output/benefit— The gross potential of this project is estimated to be 0.386 lakh acres. Of this the net potential will be 0.285 lakh acres. The project will be taken up for execution in the last but one year of the Third Plan period. Irrigation benefit will accrue only in the Fourth Plan period.

### 7. BHIMKUND PROJECT (IRRIGATION PORTION)

1. Description .. A barrage is proposed to be constructed across river Baitarani near Biragobindpur with canals on either side. The cost of Irrigation portion will be Rs. 5.07 crores.
2. Whether new or carried over from Second Plan. New
3. Location .. The barrage will be located near Biragobindpur.
4. Scope and main components/items :
  - Scope .. The project will irrigate 178,000 acres in Stage I.
  - Main components .. A barrage over Baitarani near Biragobindpur, two main canals on either bank of Baitarani taking off from the barrage with distribution system.

5. Progress up to the end of the Second Plan (for continuing Scheme). **New.**
6. Particulars of investigation and preparation of project report and explanation of basis of estimates. **Detailed investigation 60% completed. Further investigation is in progress.**
7. Economic implications and justifications (for new Schemes). **The project (including power portion) will yield an overall return of 9.9% at the end of twentieth year of construction.**
8. Proposed dates for commencement and completion and phasing of construction programme. **Commencement.. 1961-62  
Completion .. During Fourth Plan**

9. Cost estimates and expenditure. (Rs. in lakhs)

	Total	Foreign exchange
1. Total estimated cost	507.00	Nil
2. Expenditure up to 1960-61	..	..
3. Expenditure proposed 1961-66	250.00	Nil

Phasing of Expenditure—

4. 1961-62	20.00	} Nil
5. 1962-63	50.00	
6. 1963-64	100.00	
7. 1964-65	50.00	
8. 1965-66	30.00	

10. Breakup of expenditure— (Rs. in lakhs)

	Total	1961- 66
Wages and salaries	} Not available	
Equipment and machinery		
Materials		
Buildings		
Land and development of land		
Other		

## 11. Programme of output/benefits :—

('000 acres)

Name of scheme	Potential on full development		Potential during Third Plan		
	Gross	Net	At Head works,	At outlets	Utilization
1	2	3	4	5	6
Bhimkund	267.0	178.0	267.0	90.0	60.0

1961-62			1962-63		
At Head works	At outlets	Utilization	At Head works	At outlets	Utilization
7	8	9	10	11	12
..	..	..	..	..	..

1963-64			1964-65			1965-66		
At Head works	At outlets	Utilization	At Head works	At outlets	Utilization	At Head works	At outlets	Utilization
13	14	15	16	17	18	19	20	21
..	..	..	267.0	30.0	10.0	..	60.0	50.0

## 8. FLOOD CONTROL SCHEMES

- |   |  |
|---|--|
| 1. Description  | .. Raising and strengthening the embankment system at weak points, construction of new embankments, construction of drainage channels and sluices in the river systems of Orissa specially in the deltaic regions.   |
| 2. Whether new or carried over from Second Plan.  | Some flood control schemes will be new and some carried over from the Second Plan.   |
| 3. Location   | .. This programme extends to the coastal belt of the whole State.  |
| 4. Scope and main components/items.   | The Flood Control Programme consists of improving various existing embankments and construction of new ones with necessary drainage sluices and other protective works to protect the area from the flood effects and works contemplated will protect an additional area of 21,000 acres and stabilise the protection to the existing areas already protected.   |
| 5. Progress up to the end of Second Plan (for continuing schemes).                                      | In the Second Plan, Flood Control Schemes were given very low priority. By the end of Second Plan, Rs. 227.14 lakhs will have been spent on Flood Control Schemes. The problem of flood control is one of tremendous magnitude and achievement so far has been very little due to paucity of funds. After the devastating floods of August 1960, the whole problem is being reviewed. The provision of Rs. 1.50 crores made for Flood Control Schemes is, therefore, only a token provision. Further details are being worked out. |
| 6. Particulars of investigation and preparation of project report and explanation of basis of estimate. | Some of the schemes are under investigation and some have already been completed and plans and estimates are under preparation.  |
| 7. Economic implication and justification for new schemes.  | For protection against floods.   |
| 8. Proposed date for commencement and completion and phasing of construction programme.                 | Commencement .. 1955-56<br>Completion .. 1970-71   |

9. Cost estimates and expenditure. The problem as a whole is under study. The provision of Rs. 1.50 crores in the Third Plan is only a token provision.

## Phasing of expenditure

			Rs. in lakhs
4. 1961-62	..	..	.. 40.00
5. 1962-63	..	..	.. 30.00
6. 1963-64	..	..	.. 30.00
7. 1964-65	..	..	.. 25.00
8. 1965-66	..	..	.. 25.00

(Rs. in lakhs)  
Total 1961-62

## 10. Break-up of expenditure—

Wages and salaries

Equipment and machinery

Materials

Buildings

Land and development of land

Others

} Details are being worked out.

## 11. Programme of output/benefit—

Items	Unit	Up to end of 2nd Plan	Total for 3rd Plan	1961-62	1962-63	1963-64	1964-65	1965-66
1	2	3	4	5	6	7	8	9
Flood Control.	Acres in lakhs.	500 sq. miles protected. Besides, 2,500 sq. miles already protected have been stabilised by raising and strengthening these embankments.	33 sq. miles.	..	..	10 sq. miles.	10 sq. miles.	13 sq. miles.



## II POWER PROJECTS

### TALCHER THERMAL SCHEME

1. Description .. Talcher Thermal Scheme
2. Whether new or carried over .. New
3. Location .. Talcher
4. Scope and main components/Items :

With a view to meet the large demand for power from industries fast springing up in the northern and north-western districts of Orissa, the need for this Thermal Station with an installed capacity of 240 M. W. has long been recognised. Though Hydro-Electric schemes can be developed in the State to meet the large power deficit, completion and commissioning of such Hydro-Electric projects would take 5 to 8 years. On the other hand Thermal Stations of equal capacity can be built and commissioned in about three years from the date of placing the order for the plant.

This scheme can be divided into the following components :—

- (a) Land and residential buildings
  - (b) Power House—
    - (i) Civil Works, including C. W. system
    - (ii) Plant and equipments
  - (c) Outdoor Switch Yard
  - (d) Local Service Lines
  - (e) Tools and Plant
  - (f) Establishment
  - (g) Transmission lines and sub-stations
5. Progress up to the end of the Second Plan. Preliminary investigation and preparation of the Project Report and Estimates were completed.
  6. Particulars of investigation and preparation of project report and explanation of basis of estimates :

The Project Report for this scheme has been prepared basing on the following salient points :

- (a) Close proximity of the site to the mining pit head and at the same time being outside any known coal field :
- (b) The land consists of metamorphic rocks having good bearing strength for locating heavy power plant and machinery.

- (c) Nearness of the Railway line to Talcher from which a siding can be taken for a distance of about 800 metres.
- (d) Nearness to the road connecting Sambalpur and Cuttack, the branch road to Talcher passing through the power-station.
- (e) Nearness to Chainpal Hydro-Sub-station with which the power-station will be inter-connected. The site would be about 3 Kilometres from Chainpal Sub-station.
- (f) Nearness to the Brahmani River in the east and Nadira Jhor in the south.

The estimate has been framed on the basis of approximate cost of machinery obtained from well-known manufacturers and other readily available data relating to large Thermal Stations in service or under construction in the country.

The estimated cost of the generating station under this scheme covers all items of work and plant required for the power-station including survey, land, levelling of ground, construction of power-house and quarters, erection of boilers, turbo-alternators, transformers, outdoor switch gear, etc., and establishment of Tools and Plant. The cost of construction of transmission lines has also been added to the above scheme.

7. *Economic implication and justification*—From the demands for large blocks of power already registered, which the State Electricity Department has been unable to cater to during the past years and the additional power demand expected before the end of the Third Plan period to the tune of 293 M. W. in the Hirakud system area itself, it is clear that large-scale additional generation of power within a short time is an urgent necessity. The Talcher Thermal Station scheme is an effort to meet this need. Even in the event of completion of Hirakud Stage II, it would be necessary to provide for 25 to 30 per cent of the installed capacity of Hydro-Electricity Stations by way of Thermal Station as a standby support to meet the seasonal variation in the water discharged by the rivers into the reservoirs and any unexpected additional demands for irrigation from the irrigation-cum-power projects like Hirakud and Balimela.

Considering the maximum demand on this Thermal Station to be 180 M. W. at 70 per cent L. F., the energy to be transferred to the Hydro-System works out to be approximately  $2,258 \times 10^5$  units which will be sold at 3.35 n.P. per Unit and considering the cost per K. W. per year at 70 per cent L. F. at the Grid Sub-station at Rs. 250, a return of 11.19 per cent on the capital investment will be available even in the sixth year rising to 15.34 per cent by the end of the tenth year. The scheme, is therefore highly remunerative.

8. Proposed dates of commencement and completion and phasing of construction programme—

Commencement	..	1961-62
Completion	..	1964-65

**Phasing of construction—**

**First Year :—**Most of the civil works including buildings to be completed, designs and working estimates finalised, orders for power plant boilers placed advances paid, and survey of transmission lines and tenders finalised.

**Second Year ;—**All other works will be started. 40 per cent of lines completed.

**Third Year :—**Installation of 1st set taken up and commissioned and 40 per cent lines further completed.

**Fourth Year :—**2 more sets to be commissioned and all transmission lines completed.

**9. Cost of Estimates and expenditure—**

	(Rs. in lakhs)	
	Total	Foreign exchange
(1) Total estimated cost	2,350·00	.. 1,460·00
(2) Expenditure up to 1960-61	..	.. ..
(3) Expenditure proposed up to 1961-66.	2,350·00	.. 1,460·00

**Phasing of expenditure—**

	(Rs. in lakhs)	
(4) 1961-62	..	350·00
(5) 1962-63	..	700·00
(6) 1963-64	..	1,050·00
(7) 1964-65	..	250·00
(8) 1965-66	..	..

**10. Break-up of expenditure—**

	(Rs. in lakhs)	
(a) Wages and Salaries	..	152·00
(b) Equipment and machinery	..	1,843·00
(c) Materials	..	185·00
(d) Buildings	..	43·00
(e) Land and development of land	..	6·00
(f) Others—		
1. Audit and Accounts charges	..	19·00
2. Tools and Plant—General	..	19·00
3. Tools and Plant—Special	..	10·00
4. Contingencies	..	73·00
Total	..	2,350·00

**11. Programme of Output/Benefits—**

(a) Installed generating capacity	..	240 M. W.
(b) Length of transmission lines indicating voltage.		62 miles of single circuit and 82 miles of double circuit of 132 K. V. lines,

## 2. BALIMELA, TALCHER AND MACHKUND POWER UTILISATION SCHEME

1. Description .. Balimela, Talcher and Machkund Power Utilisation Scheme.
2. Whether new or carried over from the Second Plan. New Scheme
3. Location .. Throughout the State
4. Scope and main components/items— In order to utilise the bulk power available from Balimela, Talcher and Machkund Schemes, 132 KV, 66 KV, 33 KV, 11 KV and L. T. lines have to be constructed to make available the power at the consumer's premises for various industries.

This scheme consists of the following components :—

- (i) Construction of 132 KV lines
- (ii) Construction of 66 KV lines
- (iii) Construction of 33 KV lines
- (iv) Construction of 11 KV lines
- (v) Construction of Sub-station
- (vi) Drawing up of L. T. Lines and Establishment

5. Progress up to the end of Second Plan. .. Does not arise
6. Particulars of investigation and preparation of Project report and explanation of basis of estimates. .. This scheme has been considered for transmission of a large bulk of power to Raigarh, Madhya Pradesh border, transmission of power to Ferromanganese factory at Kasipur in the Kalahandi district, modifications to the existing sub-station at Rayagada and Jharsuguda and construction of H. T. lines and Sub-stations throughout the State for delivery of power at consumers' premises.
7. Economic implication and justification. .. About 80 per cent of the power available from Talcher, Balimela and Machkund may have to be utilised by the Industrial and H. T. consumers. To feed such consumers, Sub-stations and line have to be constructed to earn revenues basing on which the schemes at Talcher and Balimela have been found remunerative.

8. Proposed dates of commencement and completion and phasing of construction programme.	Commencement .. 1961-62
	Completion .. 1965-66

## Phasing of construction—

1st year—Lines to be surveyed, Designs and layout of Sub-station extensions to be finalised, specifications drawn, tenders finalised, orders placed and L. T. and steel materials procured.

2nd year—20 per cent of H. T. and L. H. T. lines constructed and civil works for Sub-stations modified and buildings completed.

3rd year—50 per cent more of H. T. and E. H. T. lines completed and about 50 per cent of H. T. Sub-stations completed.

4th year—30 per cent more of H. T. and E. H. T. lines completed and 30 per cent of H. T. and Sub-stations completed.

5th year—The rest of the works will be completed.

## 9. Cost estimates and expenditure—

	(Rs. in lakhs)	
	Total	Foreign exchange
1. Total estimated cost ..	178·00	18·00
2. Expenditure up to 1960-61 ..	..	..
3. Expenditure proposed 1961—66	178·00	..

## Phasing of expenditure—

4. 1961-62 ..	20·00	..
5. 1962-63 ..	35·00	..
6. 1963-64 ..	60·00	..
7. 1964-65 ..	40·00	..
8. 1965-66 ..	23·00	..

## 10. Break-up of expenditure..

	(Rs. in lakhs)	
	Total	1961—66
Wages and salaries		
Equipment and machinery		
Buildings		
Materials		
Others—		
Tools and Plant		
Contingencies		

Details are being worked out

Total

## 11. Programme of output/benefits—

Length of transmission lines indicating voltage.	25 miles of 132 K. V. single circuit.
	32 miles of 66 K. V. lines
	250 miles of 33 K. V. lines
	200 miles of 11 K. V. lines
Total	507 miles

## 3. RURAL ELECTRIFICATION SCHEME

1. Description .. Rural Electrification Scheme
2. Whether new or carried over from Second Plan. New scheme
3. Location .. Throughout the State
4. Scope and main component/item. This scheme provides for construction of L. T. Lines and H. T. Lines and installation of step down Sub-stations in the areas to be served by the Balimela and Talcher Power Stations and also small Diesel Power Houses in prospective areas for purposes of development of load.

The scheme consists of the following components :—

- (a) Construction of 33 KV lines
  - (b) Construction of 11 KV lines
  - (c) Construction of Pole mounted and Plinth Sub-station
  - (d) Drawing up of L. T. lines
  - (e) Establishment
  - (f) Construction of Diesel Power House
5. Progress up to the end of Second Plan. New scheme
  6. Particulars of investigation and preparation of project report and explanation of basis of estimates. Considering the census report and the electricity mindedness of the village people, such villages have been visited by Engineers and load-survey prepared on the basis of C. W. and P. C. circulars. Taking into consideration the existing nearest H.T. line, if available, the cost of a tap off to the village is included in the L. T. Distribution of the same place. The estimates are prepared considering the present day rates which are available.

7. Economic implication and justification. While working out the details of the scheme strict calculations have been made as regards load and return.
8. Proposed dates of commencement and completion and phasing of construction programme.
- |              |    |         |
|--------------|----|---------|
| Commencement | .. | 1961-62 |
| Completion   | .. | 1965-66 |

**Phasing of construction programme—**

To utilise the surplus power available from the projects for supply to small towns and villages :—

1st year—Installation of 2 Diesel Stations and installation of Sub-station for electrifying villages about 30 mm.

2nd year—Installation of 2 Diesel Stations and installation of Sub-station for electrifying villages about 70 mm.

3rd year—Installation of 2 Diesel Stations and installation of Sub-station for electrifying villages about 70 mm.

4th year—Installation of 2 Diesel Stations and installation of Sub-station for electrifying villages about 55 mm.

5th year—Installation of 2 Diesel Stations and installation of Sub-station for electrifying villages about 25 mm.

**9. Cost estimates and expenditure :**

(Rupees in lakhs)

		Total	Foreign exchange
(1) Total estimated cost	..	162.35	..
(2) Expenditure up to 1960-61	..	..	..
(3) Expenditure proposed 1961—66	..	162.35	..

**Phasing of expenditure :—**

(4) 1961-62	..	19.35	..
(5) 1962-63	..	45.00	..
(6) 1963-64	..	45.00	..
(7) 1964-65	..	35.00	..
(8) 1965-66	..	18.00	..

	(Rupees in lakhs)	
	Total	1961—66
10. Breakup of expenditure :		
Wages and salaries	.. 4.00	..
Equipment and machinery	.. 36.00	..
Materials	.. 118.85	..
Others—		
Tools and plant	.. 1.00	..
Contingencies	.. 2.5	..

## 11. Programme of output/benefits—

- (a) Length of transmission lines .. 100 miles of 33 KV line  
indicating voltage 147 miles of 11 KV line
- (b) Towns and villages to be electric  
fed. .. 250 towns

## 4. BALIMELA HYDRO-ELECTRIC SCHEME

1. Description .. Balimela Hydro-Electric Scheme (Civil and Electrical works).

2. Whether new or carried.. New  
over from Second Plan.

3. Location .. The Dam is located 9 miles up-stream of proposed Dam site at Guntarada of Andhra Pradesh at 18°-9' N and 82°-7' E.

4. Scope and main Compo- The demand for more power in the State  
nents/Items. particularly in the southern region for large electro-chemical and electro-metallurgical industries as also industries utilising the forest products which are abundantly available in the southern region, has been long felt. The Madhya Pradesh Electricity Board has also requested for supply of a large block of Power. The Balimela Hydro-Electric Project will cater to the above demand and will have an installed capacity of 240 M. W. comprising 5 units of 48 M.W. each and an additional unit as stand by—

Main components—Earth Dam	.. 6,136'
Dykes	.. 8,679'
Saddle Spillway	.. 911'
Power channel	.. 12,200'
Power Tunnel	.. 8,000'
Penstocks	.. 2,352'



5. Progress up to the end of the Second Plan (for continuing Schemes) **New Scheme**
6. Particulars of investigation and preparation of project report and explanation of basis of estimates. The estimate has been framed on the basis of approximate cost of machinery and other readily available data. The estimated cost of the scheme covers all items of works including the transmission lines from Balimela to Chiplima so as to readily utilise the power generated in the Northern Hirakud system in the event of load in the Southern region not coming up quickly. The Project report has been submitted to C. W. and P. C. for approval.
7. Economic implications and justification (for new schemes). From the preliminary survey of the potential load demand in the Southern area, it is estimated that there will be a shortage of 82 M. W. of power by the end of Third Plan which is expected to increase to 177.5 M. W. towards the Fourth Plan.
- To augment the deficit of Power expected in the Hirakud system a large Block of Power has also to be transmitted to the Hirakud system even after utilisation of power from Talcher Thermal Scheme.
- Considering an average rate of Rs. 250 per K. W. at 70 per cent. L. F. and Rs. 8.78 crores required as the share of Orissa for construction of the dam, a rate of 60 per cent, return is expected in the 10th year of operation, i. e., 15th year of construction. The capital can be wiped out in 16 years. The Project is, therefore, remunerative.
8. Proposed dates for commencement and completion and phasing of construction programme.
- |                |         |
|----------------|---------|
| Commencement.. | 1961-62 |
| Completion..   | 1969-70 |

## Phasing of construction programme of electrical portion—

- First year .. 75 per cent. of all roads and buildings will be completed and designs and working estimates will be finalised. Orders for power plant, pen stocks and other special tools will be placed. Tenders for Tunnel will be finalised. Survey of Transmission lines and finalisation of tenders of lines and sub-stations will be taken up.
- Second year.. All works will be started and roads and buildings completed. 30 per cent. progress will be achieved during the year in water-conductor system works. 30 per cent. of lines and sub-stations will be completed.
- Third year .. The works of second year will be continued and 60 per cent. completed. Further, 60 per cent. of lines and sub-stations will be completed.
- Fourth year Entire water conductor system will be completed and one machine 48 M.W. installed. The rest 10 per cent. of lines and sub-stations will be completed.
- Fifth year .. One more set of 48 M.W. will be installed bringing the capacity to 96 M.W.

## 9. Cost estimate and Expenditure (Rs. in lakhs)—

	Total	Foreign exchange
(i) Total estimated cost ..	2,968.00	..
(ii) Expenditure up to 1960-61 ..	Nil	Nil
(iii) Expenditure proposed 1961—66	1,700.00	348.00

Phasing of expenditure		(Rs. in lakhs)		
		Electrical portion	Civil portion	Total
(iv) 1961-62	..	50.00	125.00	175.00
(v) 1962-63	..	150.00	130.00	280.00
(vi) 1963-64	..	250.00	175.00	425.00
(vii) 1964-65	..	150.00	200.00	350.00
(viii) 1965-66	..	270.00	200.00	470.00

10. Break-up of expenditure		(Rs. in lakhs)	
Wages and salaries	..	}	Details are being worked out.
Equipment and machinery	..		
Materials	..		
Buildings	..		
Land and development of land	..		
Others	..		

11. Programme of output/benefits—

- (a) Installed capacity .. 240 M.W.
- (b) Length of Transmission lines 280 miles of 220 K.V. line indicating voltage. (double circuit).

### 5. HIRAKUD DAM PROJECT, STAGE III

1. Description : .. Hirakud, Stage III. A weir is proposed to be constructed across Mahanadi near Deogan to divert the flow of average 10,000 cs. through a power canal and finally drop the water in Mahanadi about 5 miles below Sonapur. The scheme will generate 70,000 K. W. of power at 100 per cent L. F.
2. Whether new or carried over from Second Plan. New
3. Location .. Pick up weir—Lat. 21° 13½', Long. 83° 54' Power House—Lat. 20° 50', Long. 84° 2'.

4. Scope and main components/items. This is mainly a power scheme. About 70,000 K. W. of power at 100 per cent L. F. can be generated.

Main components : (1) Weir across Mahanadi near Deogan.  
 (2) Power canal 30 miles long.  
 (3) Power House at Kameshwarpali. Forebay Dam and transmission for 100 miles nearly.

5. Progress up to the end of the Second Plan (for continuing Schemes).

New Scheme

6. Particulars of investigation and preparation of project report and explanation of basis of estimate.

Except foundation exploration for weir all other investigations have been completed and the report is under preparation.

7. Economic implications and justification (for new schemes).

Cost for K. W. of power will be Rs. 2,400 excluding cost of Hirakud Dam. Details have not been worked out.

8. Proposed dates for commencement and completion and phasing of construction programme.

Commencement—1964-65  
 Completion—1970-71

9. Cost estimates and expenditure.

(Rs. in lakhs)

1. Total Estimated cost ..	2,755.00
2. Expenditure up to 1960-61	Nil
3. Expenditure proposed 1961—66.	100.00

Phasing of expenditure—

4. 1961-62 ..	Nil
5. 1962-63 ..	..
6. 1963-64 ..	..
7. 1964-65 ..	50.00
8. 1965-66 ..	50.00

## 10. Break-up of expenditure—

Wages and salaries	}	Details are being worked out
Equipment and machinery		
Materials		
Buildings		
Land and development of land.		
Others		

## 11. Programme of output/benefit

(a) Installed capacity .. 70,000 K. W. of power can be generated at 100 per cent. L. F.

## 6. HIRAKUD DAM PROJECT STAGE II

1. Description	..	Hirakud Dam Project Stage II— Chiplima Power House Project.	
2. Whether new or carried over from Second Plan.		Carried over from Second Plan	
3. Location	..	Chiplima } Burla }	Sambalpur
4. Scope and main components/items.		Generation of 1,47,000 K. W. of power.	
5. Progress up to the end of the Second Plan (for continuing schemes).		..	
6. Particulars of investigation and preparation of Project reports and explanation of basis of estimates.		..	
7. Economic implications and justification (for new schemes).		..	
8. Proposed dates for commencement and completion and phasing of construction programme.		It is expected that the project will be completed during 1961-62.	
9. Cost of estimates and expenditure :—		(Rupees in lakhs)	Foreign exchange
		Total	
(1) Total estimated cost (direct charges).		1,558.51	..
(2) Expenditure up to 1960-61 (direct charges).	..	941.65	..

( Rs. in lakhs )

	Total	Foreign Exchange
(3) Expenditure proposed 1961 .. —66 (direct charges).	616·86	

*Phasing of Expenditure :—*

(4) 1961-62 (direct charges)	616·86
(5) 1962-63 Ditto	..
(6) 1963-64 Ditto	..
(7) 1964-65 Ditto	..
(8) 1965-66 Ditto	..

## 10. Break-up of expenditure—

( Rs. in lakhs )

	Total	1961—66
Wages and salaries	}	Details are being worked out
Equipment and machinery		
Materials		
Buildings		
Land and development of land		
Others		

## 11. Programme of output/benefits—

(a) Installed generating capacity .. 147·000 K. W. It is a spill-over Scheme.

## III. TECHNICAL EDUCATION

## 1. REGIONAL ENGINEERING COLLEGE, ROURKELA

1. Description .. Regional Engineering College, Rourkela
2. Whether new or carried over from Second Plan .. New
3. Location .. Rourkela
4. Scope and main components/items. The scope of the scheme is to admit 250 candidates annually for training. The main components are college building, hostel, staff quarters and workshop.
5. Progress up to end of Second Plan .. New
6. Particulars of investigation and preparation of Project report and explanation of basis. Considering the needs for technical personnel during the Third Plan the All-India Council of Technical Education has recommended the scheme to Government of India for establishment of this institution at Rourkela.

7. Economic implication and justification.	The financial requirement for the college has been worked out on the basis of the estimates approved by the Government of India for the Durgapur and Jamshedpur Regional Engineering Colleges.				
8. Proposed dates for commencement and completion	1961-62 (commencement) 1965-66 (completion)				
and					
Phasing of construction programme. (Rs. in lakhs)	1961-62 40.00	1962-63 30.00	1963-64 18.00	1964-65 9.00	1965-66 4.90
9. Cost estimates and expenditure—	Total (Rs. in lakhs)				Foreign Exchange
(1) Total estimated cost	180.52			6.00	
(2) Expenditure up to 1960-61	..			..	
(3) Expenditure proposed 1961—66	180.52			..	
10. Break-up of Expenditure—					Total (Rs. in lakhs) 1961—66
(i) Wages and Salaries	..	43.50		43.50	
(ii) Equipment and Machinery..	..	32.12		32.12	
(iii) Materials	..	3.00		3.00	
(iv) Buildings	}	101.90		101.90	
(v) Land and development of land.	}				
(vi) Others	}				
Total	..	<u>180.52</u>		<u>180.52</u>	

## 11. Programme of output and benefits :—

The College will have an admission capacity of 250 students.

## IV. MINERAL DEVELOPMENT

1. Description	..	Construction of Railway lines and ropeways and installation of weigh bridge in Sukinda Mining Areas.
2. Whether new or carried over from Second Plan.		New
3. Location	..	Sukinda Mining Areas, Cuttack district
4. Scope and main components/items.		Vide page 115 (Annexure V)
5. Progress up to the end of the Second Plan ( for continuing scheme ).		New
6. Particulars of investigation and preparation of project report and explanation of basis of estimates.		New
7. Economic implications and justification.		Vide page 115 (Annexure V)
8. Proposed dates for commencement for completion and phasing of construction programme.		1961-62
9. Cost estimates and expenditure—		( Rs. in lakhs )
		Total                      Foreign Exchange
1. Total estimated cost		100·00                      N. A.
2. Expenditure up to 1960-61		..                              ..
3. Expenditure proposed 1961—66.		100·00
Phasing of expenditure—		
4. 1961-62 ..	80·00 lakhs	
5. 1962-63 ..	10·00 lakhs	
6. 1963-64 ..	10·00 lakhs	
7. 1964-65 ..	..	
8. 1965-66 ..	..	



10. Break-up of expenditure—	( Rs. in lakhs )	
	Total	1961—66
Wages and salaries		
Equipment and machinery		
Materials		
Buildings	Details are being worked out	
Land and development of land.		
Others		

11. Programme of output/benefits :—

This Scheme will enable movement to and export of 5 lakh tons of iron ore annually from Paradip Port.

## V. HEALTH PROGRAMME

### 1. ESTABLISHMENT OF MEDICAL COLLEGE, BERHAMPUR

- |  |  |
|--|--|
| 1. Description                                   | .. Establishment of Medical College, Berhampur.  |
| 2. Whether new or carried over from Second Plan. | New  |
| 3. Location                                      | .. Berhampur   |
| 4. Scope and main component items.               | Provision for training of doctors with 100 admissions annually for M.B., B.S. degree and teaching hospital attached to it with 450 beds. |
| 5. Progress up to end of Second Plan.            | Does not arise.  |

6. Particulars of investigation and preparation of project report and explanation of basis of estimates. } The requirement of doctors for the State is estimated at 3,600 by the end of the 3rd Plan on the basis of one Doctor to 5,000 population. Only 2,085 Doctors will be available from the existing training facilities by the end of Third Plan leaving a shortage of 1,515. Besides, All-India average is 12 admissions to Medical Colleges to one million population, whereas average admissions in our State is 9.8 only. To make up the leeway in this important sphere, establishment of a new Medical College at Berhampur with 100 annual admissions is proposed.
7. Economic implication and justification. }

The estimates of expenditure have been prepared on the basis of principles prescribed by the Medical Council of India.

8. Proposed dates for commencement and completion and phasing of construction programme. 50 candidates will be admitted from July 1962 and 50 more from July 1964.

A sum of Rs. 67.75 lakhs has been proposed and phased as under :—

1961-62	..	20.00
1962-63	..	30.00
1963-64	..	10.00
1964-65	..	7.75
1965-66	..	Nil
Total	..	67.75 lakhs

(Rs. in lakhs)

9. Cost estimate and expenditure— Total Foreign exchange

1. Total estimated cost .. 136.39
2. Expenditure up to 1960-61 Does not arise
3. Expenditure proposed from 1961—66. 136.39

Phasing of expenditure—

4. 1961-62 .. 20.00
5. 1962-63 .. 39.56
6. 1963-64 .. 22.46
7. 1964-65 .. 31.39
8. 1965-66 .. 22.98

Total .. 136.39

10. Break-up of expenditure	Total	1961—66
Wages and salaries	15.80	15.80
Equipment and machinery	35.00	35.00
Materials	..	..
Building	67.75	67.75
Land and Development of land	..	..
Others	17.84	17.84

#### 11. Programme of output/benefits—

The output of the College will be available at the beginning of the Fourth Plan.

#### 2. EXPANSION OF THE MEDICAL COLLEGE AT BURLA

- |   |  |
|---|--|
| 1. Description  | Expansion of Medical College at Burla  |
| 2. Whether new or carried over from Second Plan.  | New  |
| 3. Location   | Burla (Sambalpur district)   |
| 4. Scope and main components/items.   | Provision for teaching of Doctors for M. B., B. S. degree with 100 annual admissions and improvement of teaching hospital. |
| 5. Progress up to end of Second Plan.   | The College has been opened during 1959-60 and 50 candidates have been admitted in each of the years 1959-60 and 1960-61.  |
| 6. Particulars of investigation and preparation of project report and explanation of basis. | } <i>Vide</i> particulars under Berhampur Medical College.   |
| 7. Economic implication and justification.  | } The estimates of expenditure have been prepared on the basis of principles laid down by the Medical Council of India.    |
| 8. Proposed dates for commencement and completion and phasing of construction programme.    | Expansion of the College by 50 additional admissions during 1961-62.   |

A sum of Rs. 54.25 lakhs has been proposed and phased as under :—

1961-62	23.25 lakhs
1962-63	27.00 lakhs
1963-64	4.00 lakhs
1964-65	..
1965-66	..

(Rs. in lakhs)

9. Cost estimate and expenditure—	Total	Foreign exchange
Total estimated cost.	162·60	..
Expenditure up to 1960-61	..	..
Expenditure proposed from 1961—66.	162·60	..
Phasing of expenditure—		
1961-62	51·61	..
1962-63	63·90	..
1963-64	18·16	..
1964-65	14·17	..
1965-66	14·76	..
Total ..	162·60	..
10. Break-up of expenditure—	Total	1961—66
Wages and salaries	36·25	36·25
Equipment and machinery	45·00	45·00
Materials	..	..
Buildings	54·25	54·25
Land and development of land	..	..
Others	27·10	27·10
Total ..	162·60	162·60

## 11. Programme of output/benefits—

While as a result of admitting students to this institution from 1959-60, 48 Doctors during each of the years 1964-65 and 1965-66 are expected to be available, the benefit from the expansion proposed will be realised from the beginning of the Fourth Plan.

## 3. NATIONAL MALARIA ERADICATION PROGRAMME

1. Description	National Malaria Eradication Programme	
2. Whether new or carried over from Second Plan.	The programme will enter into surveillance phase.	
3. Location	..	Entire State with headquarters at Cuttack.
4. Scope and main components/items.	Control and eradication of Malaria from the State by surveillance and spraying where necessary.	
5. Progress upto end of Second Plan.	The attack phase will be over by the end of Second Plan.	
6. Particulars of investigation and preparation of project report and explanation of basis of estimates.	}	Malaria is a major public health problem in the State. The spleen rate in children was between 25 to 30 per cent. in coastal areas and 80 to 100 per cent. in hilly areas. According to the schemes formulated by Malaria Institute, Government of India, 14½ units already set up will carry on surveillance phase.
7. Economic implications and justifications (for new schemes).		
8. Proposed dates for commencement and completion and phasing of construction programme.	No construction work	
9. Cost estimate and expenditure.	(Rs. in lakhs)	
	Total	Foreign exchange
Total estimated cost		
1. Expenditure up to 1960-61 (during 2nd Plan).	62.39	
2. Expenditure proposed 1961-66.	105.51	
Phasing of expenditure—		
3. 1961-62	..	33.68
4. 1962-63	..	23.90
5. 1963-64	..	20.90
6. 1964-65	..	19.02
7. 1965-66	..	8.01

(Rs. in lakhs)

10. Break-up of expenditure—	Total	1961—66
Wages and salaries	..	90.73
Equipment and machinery	..	..
Materials	..	..
Buildings	..	..
Land and development of land	..	14.78
Others		

## 11. Programme of output/benefits—

Malaria will be eradicated by end of Third Plan.

