



**FOURTH  
FIVE-YEAR PLAN  
ANDHRA PRADESH**

***A DRAFT OUTLINE***

**PLANNING AND PANCHAYATI RAJ DEPARTMENT  
GOVERNMENT OF ANDHRA PRADESH.**

**OCTOBER, 1968**

# INDEX

## PART I

	Pages
I. Introduction .. .. .	1-8
II. A brief Review of the overall Development and Economic Growth in Andhra Pradesh .. .. .	9-23
III. An approach to Fourth Five-Year Plan of Andhra Pradesh .. .. .	24-34
IV. Financial Resources for the Fourth Plan .. .. .	35-39
V. Plan outlay and Allocations .. .. .	40-56

## PART II

### Sectoral Programmes :—

1. Agriculture .. .. .	59-76
2. Minor Irrigation .. .. .	77-87
3. Soil Conservation and Land Development .. .. .	88-89
4. Ayacut Development .. .. .	90-100
5. Animal Husbandry .. .. .	101-109
6. Dairying and Milk Supply .. .. .	110-114
7. Forests .. .. .	115-119
8. Fisheries .. .. .	120-128
9. Warehousing and Marketing .. .. .	129-130
10. Co-operation .. .. .	131-136
11. Community Development .. .. .	137-138
12. Irrigation .. .. .	139-148
13. Power .. .. .	149-172
14. Industrial Development .. .. .	173-192
15. Roads and Transport .. .. .	193-197
16. General Education .. .. .	198-205
17. Technical Education .. .. .	206-211

	Pages
18. Medical and Health Services .. .. .	212-221
19. Urban Water Supply and Drainage .. .. .	222-225
20. Rural Water supply .. .. .	226-227
21. Housing .. .. .	228
22. Welfare of Scheduled Tribes .. .. .	229-237
23. Welfare of Scheduled Castes and Backward Classes .. .. .	238-241
24. Social Welfare .. .. .	242-244
25. Craftsmen Training and Employment Services .. .. .	245-246
26. Statistics .. .. .	247
27. Evaluation .. .. .	248
28. Employment in Fourth Plan .. .. .	249-251
29. Development of Chronically Drought Affected Areas .. .. .	252-263
30. Development of Metropolitan Areas of Hyderabad and Secunderabad .. .. .	264-266
31. Creation of Employment opportunities for Skilled and Technical Personnel .. .. .	267-270

### PART III

32. <b>Statement I</b> —Outlay and Expenditure during 1966 to 1969 .. .. .	272-281
33. <b>Statement II</b> —Proposed Plan Outlays .. .. .	282-349
34. <b>Statement III</b> —Important Projects Costing Rs. 5 Crores and Above. .. .. .	350-355
35. <b>Statement IV</b> —Checklist in Respect of Projects Costs .. .. .	356-393
36. <b>Statement V</b> —Physical Programmes .. .. .	394-405

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## I. INTRODUCTION

### **Preliminary survey and assessment :**

The Planning Commission had suggested in February, 1968 that the States may undertake a review of economic development and the success of various programmes from 1950-51 onwards so that such an assessment would provide a basis for determining the objectives and priorities for the Fourth Five-Year Plan. The State Government had taken up such a review in September, 1967 itself and as a result a survey of the economic development of Andhra Pradesh from 1951 to 1968 was published in February, 1968.

2. With regard to a detailed appraisal of the various schemes that had been undertaken under the Plans in the past, it was felt that it would be useful to have the views of the Zilla Development Boards regarding the utility of these schemes based on their performance at the field level. The Zilla Development Boards were, therefore, requested in March, 1968 to undertake a review of the performance of different programmes taken up under the Five-Year Plans and send a report to the Government and the Head of Department concerned on the following lines:—

(a) The objectives of the scheme—whether these are well-conceived and continue to be valid;

(b) whether the scheme has been well designed for achieving the specified objectives; if not what the defects are;

(c) whether on the basis of performance so far, the scheme should be continued during the Fourth Plan period or closed down;

(d) if the scheme is to be continued what modifications if any would be suggested particularly economy in staff, subsidies, etc.

3. In order to facilitate a critical analysis of the existing conditions and the performance of past programmes,

the Zilla Development Boards were asked, as suggested by the Planning Commission, to prepare maps for each area depicting the existing infra-structure and the potentialities based on the natural resources of the area.

**Working groups :**

4. In June, 1968 orders were issued constituting 12 Working Groups for the different subjects indicated in the annexure. The terms of reference for the Working Groups were given as follows:

(a) to make a critical review of the performance and achievement under the Plan schemes in the last three years in the sectors with which they are concerned;

(b) to make an assessment of the spill-over commitments for the new Fourth Five-Year Plan;

(c) to revise the earlier Working Group reports regarding the original Fourth Plan proposals in the light of (a) and (b) above;

(d) to specify the objectives and programmes in the respective sectors for the new Fourth Five-Year Plan, 1969-74 taking into account the potentialities of the State.

5. The Working Groups were also informed that as soon as an assessment of the State's resources for financing the State's Fourth Plan was made, the Government would take a tentative decision regarding the size of the State's new Fourth Five-Year Plan and the sectoral allocations. The programmes to be included under each sector in the new Fourth Plan could then be worked out in greater detail. Meanwhile the Working Groups were asked to consider the fourth term of reference given above in the context of the other three terms of reference and the allocations already approved under the earlier Rs. 522 crore Plan.

6. Each Working Group was also required to study and analyse the employment potential of the programmes recommended and the availability of manpower for the new Fourth Plan. The Working Groups were also asked to give special attention to the problem of employment of skilled personnel such as Engineers *etc.*, produced by existing technical and educational institutions.

### **Association of Zilla Development Boards with the process of Plan formulation :**

7. In view of the very tight time schedule given for the various stages of the preparation of the draft Fourth Five-Year Plan, the Working Groups could not wait for reports from the various Zilla Development Boards with regard to their own assessment of the functioning of the various Plan schemes so far. The Working Groups therefore had to consider the first term of reference indicated in para 4 above in the light of the assessment given by the Head of Department concerned himself. However, in order to ensure that the Zilla Development Boards continue to be associated in the process of formulating the Plan while at the same time adhering to the time schedules indicated by the Planning Commission, two procedures have been adopted.

8. Firstly the Working Groups were requested to ensure that while finalising the proposals for each Department they indicated the schemes and the outlays which would form part of the District Plans. The Heads of Departments would then break up these outlays into district segments so that based on these the Zilla Development Boards could subsequently take up the detailed formulation of Plans at the district level.

9. At the time Zilla Development Boards were constituted in November, 1967 and charged with the responsibility for the economic growth of the district it was stated that their task would be to formulate and implement programmes designed to secure the economic growth of the districts and in particular programmes connected with agriculture and industrial production. In order to enable the Zilla Development Boards to discharge this responsibility the State Heads of Departments concerned with schemes relating to agricultural and industrial production were asked to furnish to each District Collector within 15 days of the Budget being approved each year a list of schemes, both Plan and non-Plan, that were to be taken up in that district during the year and the provisions available for these schemes. The Zilla Development Boards have to examine the productive potentialities of each of these schemes and fix targets of production to be achieved during the year. The Collectors were also given powers of the Head of the Department for reappropriat-

ing the Budgetary provisions under the same head. The intention, therefore, is that just as the Zilla Development Boards formulate district plans each year based on the district segments of the Budget communicated by the various Heads of Departments, they should also formulate the Fourth Five-Year Plan for the district based on the allocations available under different sectors in the Fourth Five-Year Plan as indicated by the Heads of Departments and an assessment of the local resources. The powers given to the Boards to reappropriate allocations would give them the necessary initiative for preparing a District Plan based on local resources and potentialities.

10. The other steps that has been taken is to ensure that the Working Groups that deal with schemes having a bearing on planning at the district level keep in view the varying levels of development of different regions of the State and in respect of such sectors certain district-wise indicators of the level of development have been worked out and intimated to the Working Groups concerned. The Working Groups have been asked to take into consideration the existing level of development of the different areas in the State and see how far the allocations could be made with a view to reducing the regional imbalances. For instance, in the case of irrigation the percentage of gross area irrigated to gross area sown was worked out for each district and the attention of the Working Group was drawn to the fact that the percentage in respect of certain regions was less than the State average. The Working Group was informed that one of the aims of the Fourth Five-Year Plan, as mentioned in the Approach Paper approved by the National Development Council, was to minimise differences in the levels of development between different regions within the State also and that as such one of the considerations while preparing a Plan for irrigation, would have to be to see how the percentage of irrigation could be increased in these areas where it was at present far below the State average. Similarly, the Working Groups concerned with sectors like Communications, Education, Health were also requested to determine the existing level of facilities available in different districts and see how far the disparities could be reduced.

### **Spill-over commitments a constraint :**

11. In the case of our State one important constraint on planning at the local level will be the magnitude of the spill-over commitments. To the extent that these commitments are large, the scope for flexibility and initiative at this stage at any level would be restricted. For instance, if the spill-over commitments on Power Generation Schemes and Major and Medium Irrigation Projects form a large proportion of the Fourth Plan, the allocations for sectors where local initiative can be promoted would be severely restricted. Of course, to the extent that completion of spill-over schemes even in these sectors provides the infra-structure for further development, the scope for local planning in another sense is greatly increased. For instance, if there is greater generating capacity created or if more medium projects are completed, there will be greater scope for rural electrification and for plans for the development of ayacuts, and these are spheres of activity in which there is greater scope for local planning. But so far as the immediate task of preparing broad sectoral plans is concerned, heavy spill-over commitments will, for the time being, restrict the scope of local planning.

### **Planning at local and State levels a two way process :**

12. It will thus be seen that the involvement of the agencies available for planning at the local level and at the State level will be a two-way process in which the field experience and the assessment of local potentialities and resources made at the local level would have to guide the decisions taken at the State level, while conversely the decisions taken at the State level, bearing in mind overall considerations of State and National priorities, would have to set limits to the Planning process at the local level. Experience in the past has shown that if the Planning process is initiated at the local level without any guide lines from the State level and is expected to proceed only on the basis of an assessment of the local resources and needs, there is a tendency only for need-based plans being evolved with an insufficient awareness of overall priorities or constraints. Nor has the process at all times resulted in a serious effort to indicate ways and means of mobilising local resources. It would therefore appear that the best course would be for certain overall priorities and



magnitudes to be determined at the State level and to initiate the process of Planning at the local level on this basis just as Planning at the State level itself can be done in a meaningful sense only after an approach is decided at the National level. This need not necessarily mean that the experience at the local level would not be availed of or that the local level would be deprived of its initiative in the matter of Plan formulation for that level. By permitting a degree of flexibility in the subsequent process of Plan formulation, that is after the Draft Plan is formulated and before the detailed plans are drawn up, it can be ensured that the agencies for Plan formulation at the local level play their full role.

13. The present Draft Memorandum has been prepared on the basis of the reports of the various Working Groups. As mentioned earlier a detailed survey of the resources and potentialities of the State and of its economic development during 1951-68 has been done and has been separately published. However, for the sake of making this Draft Memorandum self-contained in this respect a brief survey of the resources and of the development of the State achieved so far had been included in this memorandum also.

## ANNEXURE

<i>Name of the Working Group</i>	<i>Subjects to be considered by the Working Group</i>
(1)	(2)
1. Financial Resources	.. Assessment of financial resources of the State.
2. Agricultural Production	.. 1. Agricultural production. 2. Agricultural University. 3. Land Development. 4. Minor Irrigation. 5. Soil Conservation. 6. Animal Husbandry. 7. Dairying & Milk Supply . 8. Forests. 9. Fisheries. 10. Warehousing and Marketing. 11. Co-operation. 12. Extension & Training.
3. Community Development and Development of Ayacuts.	1. Community Development. 2. Panchayats. 3. Development of Ayacuts under Irrigation Projects.
4. River Valley Projects, Major and Medium Irrigation.	1. Nagarjunasagar Project. 2. Major and Medium Irrigation Projects. 3. Drainage and Flood Control Works. 4. Engineering Research.
5. Power	.. Power Generation, Transmission and Rural Electrification.
6. Industries	.. 1. Large and Medium Industries. 2. Mineral Development. 3. Mining Corporation. 4. Village and Small Scale Industries. 5. Handlooms.
7. Roads & Transport	.. State Roads, Panchayati Raj Roads, Municipal Roads, Road Transport, Minor Ports.
8. Medicine and Public Health	Medical including Indian Medicine, Public Health.

<i>Name of the Working Group</i>	<i>Subjects to be considered by the Working Group.</i>
(1)	(2)
9. Housing, Water supply, Urban Development.	1. Rural Water Supply. 2. Urban Water Supply and Drainage. 3. Housing. 4. Urban Development.
10. General and Technical Education.	1. General Education. 2. Technical Education. 3. Archaeology and Museums. 4. Craftsmen Training Centres.
11. Social Welfare	.. 1. Welfare of Scheduled Castes and Backward Classes. 2. Welfare of Scheduled Tribes. 3. Social Welfare.
12. Man-power	.. Labour, Labour Welfare. Man-power and Employment.

## II. A BRIEF REVIEW OF THE OVERALL DEVELOPMENT AND ECONOMIC GROWTH IN ANDHRA PRADESH

### Resources of Andhra Pradesh—A brief Survey :

Andhra Pradesh with an area of more than 1,06,000 square miles and a population of about 36 millions (1961) is the fifth largest and the fourth most populous State in the Indian Union. The State is situated in a tropical region between 13° N to 20° N and 77° E to 85° E, bounded on the East by the Bay of Bengal, on the North-east by Orissa and Madhya Pradesh, on the North by Maharashtra, on the West by Mysore and on the South by Madras State. It has a long Coast line of 600 miles running from Ichapuram in Srikakulam district in the North to Sulerpet in Nellore district in the South. There are seven working ports in the State including one major port, i.e., Visakhapatnam and two intermediate ports (Kakinada and Masulipatnam). Visakhapatnam is the only major port between Calcutta and Madras with an excellent natural harbour, whose hinterland stretches into Madhya Pradesh and Orissa.

2. The State is endowed with many rivers, the biggest being the Godavari and the Krishna. The Godavari with its 900 miles length is by far the longest and the broadest river in South India. Though its irrigation and power potentialities are immense, most of its water at present goes waste into the sea. It is fed by a number of tributaries important among them being Pranahita, Manjira, Sabari and Penganga. The Godavari branches off at Dowlaishwaram, 40 miles inland, giving rise to the fertile delta region known as Konaseema. The Dowleshwaram Anicut across the Godavari near Rajahmundry is one of the oldest anicuts in the country.

3. The Krishna is 800 miles long and flows through the centre of State. It has 19 tributaries important among them being Tungabhadra, Bhima and Musi. Like the Godavari it has also formed one of the richest deltas in the country. The total cultivable command area in the

Krishna and the Godavari basins lying in Andhra Pradesh is nearly 200 lakh acres of which only 38 lakh acres is at present being irrigated which shows the immense possibilities of further development of irrigation under these basins.

4. The State can be divided into three distinct regions on the basis of economic development and geographical features, *viz.*, (1) Coastal Andhra, (2) Rayalaseema, and (3) Telangana.

5. The Coastal Andhra Region covers nearly 1/3rd of the area of the State. The fertile delta areas formed by Godavari and Krishna are located here. The natural advantages and the enterprise of the cultivators have made the delta region a rich area of high agricultural productivity. The rainfall in this region which is on an average 40 inches is the highest in this area which is fed by both South-West and North-East monsoons.

6. The Rayalaseema region is a dry tract and it is most vulnerable to drought and famine conditions. The soil in this region is rocky and unyielding and the rainfall is scanty and fitful. There are sizeable mineral deposits but they have not been exploited to any appreciable degree and the region remains industrially the most backward in the State.

7. The Telangana Region is backward in many respects. The land is barren and dry. Agriculture is largely dependent on rainfall with the result the level of productivity is still low. Although this region has many natural advantages, its topography and soil conditions present a serious handicap to the development of agriculture. Though this region is industrially better off than the other two regions, most of the industries are concentrated only in and around Hyderabad City, and the vast resources of the region are yet to be fully exploited.

8. The total cropped area in the State is over 31 million acres out of which about 4/5th is under food crops of which rice alone accounts for a third of the total area under foodgrains. Oil seeds, sugarcane, tobacco and cotton are the principal commercial crops of the State. The soils of the State are well suited for oil seeds and cur-

rently about 15 per cent of the cropped area in the State is under these crops. About 50 per cent of the country's entire production of castor and 95 per cent of Virginia tobacco is in Andhra Pradesh. The climatic conditions in the State are well suited for sugarcane crop and the rich alluvial soils of coastal districts offer special advantages for highly profitable sugarcane cultivation.

9. Andhra Pradesh also possesses immense potentialities for the development of fisheries both marine and inland because of a long coastline of 600 miles with an average width of 20 miles of continental shelf, and also large number of rivers, tanks and reservoirs.

10. The State has immense power potential both hydel and thermal. The hydel resources of the State are capable of generating about 2500 M.W. of power at 60 per cent load factor whereas the hydro electric power developed so far is only 272 M.Ws. The State possesses huge coal reserves which are estimated at 1,000 million tons proved to a depth of 1,000 feet whereas the reserves calculated to a depth of 2,000 feet are 1,320 million tons. As the coal available in the State is of low and medium grade with high ash content, it can be better utilised for generation of electricity.

11. Andhra Pradesh is endowed with a rich variety of minerals, the State ranking next only to Bihar in mineral resources. The asbestos deposits of the State are important and the State has a virtual monopoly of quality "chrysotile asbestos" in the country. The State has also a complete monopoly in the production of barytes producing about 75 per cent of the total production in the country. The reserves of barytes in the State are of the order of 1.7 million tons and the present rate of production per year is of the order of 36,000 tons. The deposits of iron ore in the State are estimated at 400 million tons and the output of iron ore in 1965-66 was 1.5 lakh tons. Andhra Pradesh ranks fifth in manganese ore production in the country. The reserves of this ore are very extensive and are estimated to be of the order of 3 to 4 million tons while the current annual output is about 1.34 lakh tons. In the production of mica the State ranks next to Bihar and Rajasthan. Except coal and lime-stone, most of the minerals are not utilised within the State and they

have to depend largely on outside markets. Minerals like mica, manganese ore, iron ore, barytes and steatite which are found in the State are exported to foreign countries. The prospects for the development of mineral-based industries on a large scale in the State are therefore bright.

### **Review of Economic Development :**

12. A broad indicator for judging the general level of development is the per capita income. In Andhra Pradesh the State income estimates have been compiled from 1950-51 onwards. Initially, the methodology adopted for compilation of gross domestic product at the National level was followed. Subsequently when the Central Statistical Organisation evolved some uniform procedures for compilation of State income estimates these have been adopted from the year 1960-61 onwards. According to these figures, in Andhra Pradesh, during the decade covering the first two Plans the aggregate State Income at 1960-61 prices increased from Rs. 799 crores in 1950-51 to Rs. 1,012 crores in 1960-61 and the per capita income from Rs. 256 to Rs. 284 at 1960-61 prices. Thus the State income increased by 26.7 per cent and the per capita income by 10.9 per cent over the first two Plan periods. In 1965-66 the last year of the Third Plan, the per capita income was Rs. 278. However this was a drought year and therefore if we take the year 1964-65 which was an year of bumper agricultural production for the State, the per capita income was Rs. 312, showing an increase of 9.9 per cent over 1960-61.

13. Any improvement in the State's economy largely depends on the development of the productive sectors. The development of the tertiary sectors and their contribution to the State Income would be conditioned to a large extent by the growth in the productive sectors. It will not, therefore, be out of place to analyse in detail the growth of the two principal productive sectors, *viz.*, agriculture and industries in the State.

### **Agricultural Production :**

14. During the first three Plans, there have been several significant developments in the agricultural sector in the State. Firstly, there appears to be greater awareness

now of the need to bring the maximum area under crops. In recent years the total area under crops has been much higher than in pre-Plan years. Even in 1965-66 when severe drought conditions prevailed throughout the State, the total gross cropped area in the State was of the order of 299 lakh acres against 263 lakh acres in 1950-51. The index number of area under all crops with base 1953-57=100 was 96.7 in 1965-66 against 85.6 in 1950-51. In 1966-67, it was 101.6. Secondly, there has been a significant improvement in the overall productivity per acre and consequently in overall agricultural production. Considering overall agricultural production, *i.e.*, all crops put together, it will be observed that the index of productivity per acre with base 1956-57=100 was 125.4 in 1964-65 against 87.7 in 1950-51 or an increase by 43 per cent. Even in 1965-66, the index number of overall productivity per acre was of the order of 103.6 which was 18 per cent higher than that in 1950-51. In 1966-67, the index was 112.1. The increase in total area brought under crops together with the significant improvement in the per acre productivity have had the effect of raising the overall agricultural production of the State to fairly high levels. The index number of overall agricultural production with base 1956-57=100 which was 75.1 in 1950-51 increased to 127.9 in 1964-65 or an increase by 70 per cent. Even in 1965-66 which was a drought year the index was 100.2 which shows an increase of 33 per cent over 1950-51 levels of production. In 1966-67 when also the seasonal conditions were not normal, the index of agricultural production was 113.9 or an increase by 51.7 per cent over 1950-51. It will be obvious from these figures that the agricultural base in the State has been strengthened considerably over the Plans and that even in an acutely severe drought year like 1965-66, the State's agricultural production did not come down to pre-plan years.

15. The area under foodgrains in Andhra Pradesh increased from 181 lakh acres in 1950-51 to about 233 lakh acres in 1964-65 or an increase by 28.5 per cent. Much of this increase in area was achieved by the end of the First Plan period itself. The increase was 2.5 per cent only in the Second Plan period and 3.2 per cent in the first four years of the Third Plan indicating the limited possibilities of further increasing the area under foodgrains.



16. The production of foodgrains in the State, increased from 39.66 lakh tons in 1950-51 to 75.82 lakh tons in 1964-65 or an increase by 91.2 per cent indicating that a substantial increase in production was achieved by raising the yields per acre. The increase in production was of the order of 39.5 per cent in the First Plan period, 14.2 per cent in the Second Plan period and 20.0 per cent in the first four years of the Third Plan. In 1965-66, when many parts of the State were affected by severe drought the total foodgrains production was about 60.01 lakh tons which was still 51.3 per cent higher than that in 1950-51, though this was 20.9 per cent lower than that in 1964-65. In 1966-67, the total foodgrains production in the State, stood at 68.23 lakh tons showing a 13.7 per cent increase over the production in 1965-66. In 1967-68, when parts of the State were again affected by drought the production of foodgrains was of the order of 67.48 lakh tons according to the first forecast estimates.

17. In 1950-51, about 30 per cent of the total area under foodgrains was under rice while in 1964-65, it accounted for 36.7 per cent of the total area under foodgrains in the State. The area under rice in 1964-65 was 85.50 lakh acres against 54.60 lakh acres in 1950-51 or an increase of 56.5 per cent. On the other hand, the production of rice in the State increased from 22.37 lakh tons in 1950-51 to 49.28 lakh tons in 1964-65 or an increase of 120.3 per cent. More than half of this increase in production was achieved by a stepping up of the yield per acre which went up from 917 lbs. in 1950-51 to 1,291 lbs. in 1964-65. In 1965-66, the production of rice in the State was 38.99 lakh tons only due to a decrease in the acreage by 9.3 per cent and a decrease in the yield per acre by 12.8 per cent. In 1966-67 the production of rice was slightly better than that in 1965-66, being 43.45 lakh tons and in 1967-68 as per final forecast the production was 43.08 lakh tons.

18. In the case of other foodgrain crops such as millets and pulses, which are almost entirely rainfed crops the increase in area by 1964-65 was not as significant as in the case of rice. The area under jowar in 1964-65, was 28.8 per cent higher than that in 1950-51, other cereals and millets 11.7 per cent higher and pulses 4.9 per cent higher against an increase of 56.5 per cent in rice acreage. Though a straight comparison of 1964-65 with 1950-51 shows a net

increase in the area under these rainfed crops, it is interesting to note that there has been a downward trend in the area sown under jowar over the Third Plan and a similar trend over both the Second and Third Plan years in the case of other cereals and millets.

19. Among the cash crops, the area under sugarcane had gone up substantially over the first three Plans. It was 3.59 lakh acres in 1964-65 against 1.74 lakh acres in 1950-51 or an increase of 106.3 per cent. On the other hand, the production of sugarcane showed an increase of 154.6 per cent during this period due partly to an increase in area and partly to an increase in yield per acre which has gone up from 6,064 lbs. (gur) per acre in 1950-51 to 7,477 lbs. in 1964-65 or an increase by 23.3 per cent.

20. The production of cotton and tobacco in the State increased considerably during the period 1950-51 to 1964-65 accounting for an increase of 29.5 per cent in case of cotton and 31.0 per cent in case of tobacco.

21. However, the area under groundnut, which is a very important cash crop of the State, came down substantially during the period 1957-58 to 1961-62 due to unfavourable crop conditions. In the Third Plan years, however, the area under this crop started picking up and in 1965-66 the area under groundnut was 30.63 lakh acres against 29.71 lakh acres in 1950-51. Similarly, the production of groundnut in the State was 8.99 lakh tons in 1964-65 against 10.27 lakh tons in 1950-51 or a decline by 12.5 per cent. In 1967-68 according to final forecast estimates, the area under groundnut was of the order of 32.33 lakh acres and the production was 9.83 lakh tons, indicating a recovery of the old production levels. In the current year again groundnut has suffered heavily due to drought conditions. The crop is grown mostly under rainfed conditions in the State and the decline between 1957-58 to 1961-62 was mainly due to the continuous failure of rains particularly in Telangana and Rayalaseema areas and the crop being affected with pests and diseases on a large scale.

22. Due to the set back in the acreage sown with oil seeds in the period 1957-58 to 1961-62, the share of commercial crops in the gross cropped area in the State had

come down somewhat over the Plan years. In 1964-65, these crops accounted for 21.2 per cent of the total cropped area while in 1950-51, they accounted for 27.0 per cent. On the other hand, the share of foodgrains which was 69.0 per cent in 1950-51 went up to 74.0 per cent in 1964-65.

23. Linear trend equations fitted to the production data of 1956-57 to 1964-65 reveal that over this period, production of foodgrains in the State increased at a compound rate of about 3.0 per cent per annum, sugarcane at 8.2 per cent and cotton at 1.3 per cent. However, in the case of oil seeds although the overall growth rate over this period shows a decline due to the sharp decrease in area in the last four years of the Second Plan and the first year of the Third Plan, because of the picking up of the area in the last four years of the Third Plan, the growth rate over the Third Plan was 9.2 per cent (compound) per annum.

24. While thus the general picture that emerges is one of substantial growth in both agricultural production and productivity during the three Plan periods, a comparison with the all-India figures will show that the overall position is still not satisfactory. Thus the growth rate in agricultural production in the State during the period 1952-53 to 1964-65 was below the all-India average being 3.06 per cent for Andhra Pradesh against 3.42 per cent for all-India for all crops. The growth rate for Andhra Pradesh under food crops for this period was higher than the all-India average; but the growth rate under non-food crops was only 1.83 per cent against 4.79 per cent all-India thus depressing the average rate of growth. The value of output per acre in Andhra Pradesh is also much lower than the all-India average the reason being that agricultural production is heavily weighed in favour of food crops whose returns are usually low. In a sense, therefore, by concentrating large areas under food crops which subserves the national priority with regard to self-sufficiency in food, the State has been bearing a social cost.

25. Over the three Plans, there has been a more or less steady increase in the irrigated area in the State. In 1964-65, the gross irrigated area was 95.14 lakh acres

against 62.36 lakh acres in 1950-51 or an increase by 52.6 per cent. The substantial increase in irrigation facilities has been one of the factors responsible for the step up of the productivity per acre in the State. In 1964-65, the gross area irrigated formed 30.2 per cent of the gross cropped area while the net area irrigated formed 27.5 per cent of the net area sown.

26. However most of the increase in irrigated area during 1950-51 to 1964-65 was under tanks and wells, with the result that the susceptibility of agriculture production to the vagaries of monsoon was not reduced as was seen by the effect of the severe drought conditions in 1965-66 and succeeding years up to date.

### **Industrial Production :**

27. The industrial production in the State had also gone up substantially over the first three Plans. The general index of industrial production with base 1956=100 was 163 in 1961, 242 in 1965, 214 in 1966, 215 in 1967 and 241 in the first six months of 1968. Thus the overall industrial production in the State increased by 63 per cent in the Second Plan period giving an annual average growth rate of about 12.6 per cent and by 48.5 per cent during the first four years of the Third Plan giving an annual average growth rate of about 12.1 per cent. In 1966, however, several industries showed a decline in production partly due to the decline in the agricultural production in that year due to severe drought and partly due to the slowing down of the overall tempo of development expenditure and the consequent fall in demand. In 1967 the industrial production started picking up again excepting in case of cement, asbestos, cement products and sugar. The index for the first six months of 1968 indicates that the production levels of 1965 have almost been restored.

28. The principal minerals of the State are coal, limestone, iron ore, mica, manganese, asbestos and barytes. The value of all minerals produced in the State went up from about Rs. 6.04 crores in 1956 to Rs. 9.20 crores in 1961 and to Rs. 15.09 crores in 1966. Thus over the Second Plan, the mineral production in the State went up by about 52.8 per cent giving an average-annual growth rate

of 10.5 per cent and in the Third Plan by about 64.0 per cent giving an annual growth rate of 12.8 per cent.

29. Thus the production of both industries and minerals increased at a much faster rate during the Second and Third Plan periods than agriculture but their overall effect in increasing the pace of growth of the State's economy was found to be marginal because of the limited industrial base of the State. The State lags behind other States in respect of industrial development and this is proved by any criteria that one may prefer to select whether by number of workers in factories, per capita value added by manufacture, by the number of Joint Stock Companies at work in the State or by the percentage contribution to State Income by the Industrial Sector.

30. According to the returns furnished to the Labour Bureau under the Factories Act, the number of workers in registered factories in the State in 1964 was 2.58 lakhs against 45.75 lakhs in all-India, forming 5.6 per cent of all the factory workers in the country. The number of workers per 1,000 population in the State works to 6.7 against 9.6 in all-India. In regard to proportion of factory workers in the population, Andhra Pradesh ranks eighth, the States having a higher proportion being West Bengal, Maharashtra, Gujarat, Kerala, Madras, Mysore and Punjab.

31. In 1964, the per capita value added by manufacture was Rs. 11.61 only in Andhra Pradesh against Rs. 89.84 in Maharashtra, Rs. 88.52 in West Bengal Rs. 53.29 in Gujarat, Rs. 36.07 in Madras and Rs. 31.76 in all-India.

32. In 1965-66 the paid-up capital of the Joint Stock Companies at work in the State was Rs. 49.52 crores against Rs. 2,756.3 crores in all-India. Thus, the paid-up capital of the companies at work in the State does not form even two per cent of the total paid-up capital of all the companies in the country.

33. Though there was significant growth in the paid-up capital of the Joint Stock Companies at work in the State during the last few years the position is not encouraging when compared to all-India. During the nine years period 1956-57 to 1965-66, the paid-up capital of the Joint Stock Companies at work in the country went up by about

Rs. 1,679 crores while there has been a small increase of Rs. 26.9 crores in the paid-up capital of the companies at work in the State forming only about 1.6 per cent of the increase in all-India. Even so, 26.6 per cent of the paid-up capital in the State is of companies concerned with the manufacture of foodstuffs, textiles and leather products while in all-India this group formed only 15.9 per cent. Again only 31.7 per cent of paid-up capital of companies in the State is in the manufacture of metals, chemicals and products thereof as against 42.3 per cent in all-India.

34. In 1964-65, the Industrial Sector (i.e., Mining, Factory establishments and small enterprises) contributed only 6.9 per cent to the State income of Andhra Pradesh against 13.0 per cent in the National Income of the country. The backwardness of the State's Industrial Sector is conspicuous from the fact that in 1964 the State's contribution to the net industrial output for the country as a whole was only 2.73 per cent while the corresponding percentage for West Bengal, Maharashtra, Madras and Gujarat was 18.6, 26.4, 7.7 and 8.7 respectively. In 1951 the percentage of Andhra Pradesh to the total industrial output of the country was 2.68 thus showing that from 1951-64 the increase in percentage was only 0.05. The share of Andhra Pradesh in the net additional industrial output generated in the country during this period was 2.77 per cent. Even among the industries, the non-factory enterprises predominate. The factory establishments contributed in 1964-65 only 39.1 per cent of the industrial income of the State against 57.5 per cent in all-India.

### **Other Sectors :**

35. For a more rapid economic development of the State it is, therefore, essential to broaden the industrial base of the State and diversify the economy. The role of the State in the industrialisation of the State is broadly limited to the provision of the infra-structure and to providing institutional finance. One of the more important items of infra-structure for accelerating industrialisation is the provision of electricity. In this sphere the State has made considerable progress. The installed capacity of power which was only 43 M.W. in 1950-51 increased to 292 M.W. by the end of Third Plan and to 645.5 M.W. by the end of 1967-68. During 1950-51 to 1967-68, the instal-

led capacity of power has thus registered a spectacular increase by 1,401 per cent. The per capita consumption of electricity increased from 2.5 K.W.H. in 1950-51 to 26 K.W.H. in 1965-66 or by 940 per cent. • In spite of this progress, the per capita consumption of power in the State in 1965-66 was still low compared to many States—104 K.W.H. in Maharashtra, 106 K.W.H. in West Bengal, 98 K.W.H. in Punjab, 87 K.W.H. in Madras and 54 K.W.H. in all-India. The position in regard to industrial consumption of power is even more disappointing. The per capita consumption of power for industrial purposes in 1965-66 was only 15.0 K.W.H. in the State as against 83.4 K.W.H. in Maharashtra, 83.0 K.W.H. in West Bengal, 80.8 K.W.H. in Punjab, 49.96 K.W.H. in Madras and 41.3 K.W.H. in all-India. The State ranks twelfth among the States of the Indian Union in respect of per capita consumption of electricity for industrial purposes.

36. Even if we judge the level of development by certain other indicators in the field of social services, it will be seen that the level reached by Andhra Pradesh is lower than that of several other States. Further, in some of these sectors it will be seen that while State average may be comparable to the all-India average, the level in some regions, such as the Telangana region, within the State itself is below the all-India average. The magnitude of the problem faced by the State should be judged taking into consideration the fact that the area of this region is itself considerable and comparable to that of several other States as West Bengal, Kerala and Haryana. Thus for instance, the percentage of school-going children in the age-group of 6-11 during 1965-66 was 76.1 in Andhra Pradesh as against 78.5 in all-India, 117.0 in Kerala, 103.6 in Madras and 93.9 in Mysore. In the Telangana region the percentage of enrolment in this age group was only 51.39 (1967-68). Similarly, the percentage of enrolment in the age-group of 11-14 is even more disappointing since it was only 25.5 in Andhra Pradesh against 30.9 in all-India, 71.0 in Kerala, 57.8 in Jammu and Kashmir, 45.0 in Madras, 40.5 in Maharashtra and 38.1 in Gujarat. The road mileage per 100 square miles in Andhra Pradesh in 1964 was only 39 against 191 in Kerala, 77 in West Bengal, 68 in Madras and 61 in Mysore, and within the State in the Telangana region it was only 20.

37. Thus it will be seen that while considerable progress has been achieved over the three Plan period, still in several important respects—whether it be in sectors like power and industry, or in the Social Services—the level in Andhra Pradesh is less than that of several States as also of the all-India average. The progress achieved so far has been due mainly to the effort that has been made in the three Plans in the State Sector. Thus the outlays on the Plans increased from 96.78 crores in the First Plan to Rs. 188.60 crores in the Second Plan period to Rs. 352.42 crores in the Third Plan period. The resources raised by the State which were Rs. 93.49 crores in the Second Plan went up to Rs. 126.94 crores in the Third Plan; while the additional taxation alone went up from Rs. 24.49 crores in the Second Plan period to Rs. 47.41 crores in the Third Plan period. Thus if the level of development reached is still low it has not been due to any lack of effort on the part of the State itself, but is due to two main reasons.

38. First, in all the three plans so far large outlays have had to be made on long-gestation projects in the Irrigation and Power Sectors which did not yield results till after the end of the Third Plan period. Thus in the Second Plan out of the total investment of Rs. 188.60 crores about Rs. 40 crores invested in Irrigation and Power Projects did not yield any benefits during the Plan period. Similarly, in the Third Plan out of the total plan outlay of Rs. 352.42 crores an investment of nearly Rs. 135 crores did not yield any benefits during the Plan period. Thus, during these two Plans an investment of about Rs. 179 crores, i.e., over 33 per cent of the total investment, was spent on long-gestation projects which did not yield any benefits by the end of the Third Plan. The Nagarjuna-sagar Project alone accounts for an expenditure of Rs. 120.68 crores up to the end of March, 1967 while the first benefits from the project began to flow only from June, 1967. Taking the period 1951-69 the amount spent on long-gestation irrigation and Power Projects would be Rs. 493 crores or nearly 57 per cent of the total expenditure.

39. Another effect of this kind of investment has been that it has resulted in a large spill-over commitment for the Fourth Plan also. Further, these investments have so shaped our total plan outlays in the past that nearly



90 per cent of the Central assistance the State got for the Plans had to be in the shape of loans with the result that the burden of loan repayment during the next Plan period is going to be extremely heavy. During the two years 1966-68 the percentage of grant assistance to the total assistance received by Andhra Pradesh was only 11 per cent against an all-India average of 20.6 per cent and against over 50 per cent in the case of a State like Maharashtra.

40. The second reason for the general development of the State not being commensurate with the effort put in is that investments in the State Plans account for only about one-third of the total investment in the economy of the State and, therefore, unless investments in the other two sectors, *viz.*, the Central Sector and the Private Sector are also on a commensurate scale there would not be a corresponding impact on the level of development of the economy. Unfortunately however, the Central and the Private Sector investments in Andhra Pradesh during the three Plan periods have been much lower than its due share. Thus out of the total Private Sector investment of Rs. 9,000 crores during the three Plan periods the private sector investment in the State was only about Rs. 374 crores, *i.e.*, 4.2 per cent. Similarly, in the public sector out of a total investment of Rs. 11,510 crores the investment in the State is estimated to be only about Rs. 326 crores, *i.e.*, 2.8 per cent. Or, taking only the investment in the Organised Industry and Minerals sector the investment in the private sector in Andhra Pradesh over the three Plan periods was only Rs. 101 crores against Rs. 958 crores in the whole of India. Similarly in the case of Central Industrial Projects the percentage investment in the State during the first three Plans was only 3.56 against the total investment.

41. A review of the progress in the State in the various sectors given above would show that good progress has been achieved in the Agricultural Sector. A great deal of investment has also gone into Power and Irrigation which provide the infra-structure for further growth—whether it be in industry or agriculture. The development achieved so far has been due to these investments. But no further significant or substantial progress can be achieved unless the advantages created by agricultural progress and the provision of the infra-structure are utilised

by adequate investment now in the other sectors, particularly in the Industrial Sector. Thus the level of development reached in Andhra Pradesh and the nature of the development so far are such that while on the one hand they provide the necessary infra-structure for industrial development, on the other hand unless investment now takes place in the Industrial sector there may be no further significant increase in the pace of development of the economy of the State.

### III. AN APPROACH TO FOURTH FIVE-YEAR PLAN OF ANDHRA PRADESH

To sum up therefore, if Andhra Pradesh continues to be backward in several respects, it is not due to any lack of effort on the part of the State for achieving its economic development in the past three Plans, but is due to three main factors:—

- (a) the magnitude of the problems with which the State had to begin with considering that it had extensive backward and chronically drought affected areas which require considerable investment for bringing them up to a reasonable level of development;
- (b) the pattern of outlays to which the State has been committed in the last three Plans which gave greater emphasis to agriculture and to irrigation projects having long gestation periods and which was necessary in the national interest;
- (c) the lack of adequate investment in the Private and Central Sectors in the State so far.

2. One of the important constraints for any effort on the part of the State itself to quicken its pace of development is the shortage of financial resources. This again has not been due to any lack of effort on the part of the State as can be judged from the levels of taxation in the State compared to the highest levels in the country, or by any indicator such as the percentage of per capita tax to per capita income, but because the result has not been commensurate with the effort. This is due to the fact that the economy of the State being predominantly agriculture-based, and that too non-commercial agricultural crops, the finances of the State lack buoyancy. One important objective of the Plans for the economic development of the State should, therefore, be to diversify the economy by diversifying agricultural production and by increasing

industrial production in the State. This is necessary not only because such diversification would—

- (a) lend greater stability to the economy of the State by reducing the dependance on agriculture; and
- (b) impart greater buoyancy to the financial resources of the State.

but also because in a State like Andhra Pradesh, where some areas at least have already achieved agricultural break-through, industrialisation is an important means of drawing the surplus resources of the agricultural sector for investment in the development of the economy. In the absence of industries, these resources are likely to either lie idle or be diverted to consumption expenditure.

3. Although, therefore, the primary objective of the Plans has to be diversification of the State economy, it cannot also be forgotten that even in agricultural production the position of the State as a whole is not satisfactory and a great deal has yet to be done to bring up this level. For instance, although the State as a whole is surplus because of certain areas of the State being very highly developed in terms of agricultural production, and the rate of growth for production of food crops is much higher than all-India, the rate of growth for agricultural production as a whole has been below the all-India average primarily because of a low rate in production of non-foodgrains. The composition of agricultural production in the State is such that the value of agricultural output per worker is very low. One of the main reasons for this unsatisfactory overall picture is that there are pockets in the State which are under-developed in terms of agricultural production and unless the level of these areas is brought up, the indices of agricultural production or productivity for the State as a whole will not be satisfactory. This brings us to what ought to be the second main objective for the State's Plan effort, *viz.*, removal of regional imbalances.

4. Therefore, it can be stated that while keeping in view the national objectives for the Fourth Plan of securing a 5 per cent rate of growth in agricultural sector and a 8-10 per cent rate of growth in the industrial sector, the

two broad objectives of development for the State over a longer perspective should be—

- (a) to encourage industrialisation of the State so as to increase the percentage contribution of industrial income to the total income of the State, which would mean that the rate of growth in the industrial sector for the State should be even more than 10 per cent; and
- (b) to remove regional disparities within the State particularly in respect of agricultural production, so that the level of agricultural production for the State as a whole is also further raised and the objective of a 5 per cent rate of growth in the agricultural sector is also achieved.

5. However, in the immediate future, at least for the Fourth Plan period, two important constraints on the States development effort will be (a) shortage of financial resources, and (b) heavy spill-over commitments. The shortage of finances is not due to any lack of effort as mentioned above but due to the economy of the State being such that the resources of the State are not buoyant. Further the heavy investment by the State in long gestation irrigation projects which really serve the national interest also, has resulted in a heavy loan liability for the State during the next plan period.

The allocations for different sectors and the strategy of development for each sector would have to be based on these two objectives and these two constraints.

6. The spill-over commitments of the State themselves amount to Rs. 350 crores of which Rs. 180 crores are under Power and Rs. 90 crores under Irrigation. A large percentage of the Fourth Plan outlay would therefore have to be earmarked for Power and Irrigation. However, it will be seen that these allocations will also subserve both the objectives mentioned above, since power is an important infra-structural facility for both industrial development and agricultural production, while irrigation is an essential pre-requisite for agricultural production.

7. However, to the extent that major and medium irrigation schemes already undertaken has not subserved the

other objective *viz.*, removal of regional disparities, it would have to be ensured that the allocations under Minor Irrigation are made keeping this objective in view. In other words, the allocations for Minor Irrigation will have to be concentrated in areas where the percentage of irrigation is now below the State average and where no outlay is being made on Major and Medium Irrigation Projects.

8. Next to Power and Irrigation would come programmes directly related to agricultural production and to Industry and Mining. The allocations for these two sectors may by themselves appear to be a low percentage of the total, but it has to be borne in mind that several other investments such as those made for Power, Irrigation, Transport, Communications also contribute directly to increasing agricultural and industrial production. Furthermore, in the case of agriculture two important inputs, *viz.* fertilizer and credit, do not figure in the Plan. To the extent that credit does not figure in the shape of provision for debenture participation, it has to be ensured that full provision is made in order to be able to meet the credit requirements. This should, therefore receive the highest priority in the respective sectors. Similarly, in the case of industry, the major investment has to come either in the Private or the Central Sector which do not figure in the State Plan. As such the allocation in the Plan for industry need only be for providing the necessary facilities for attracting private investment and for Central Sector Projects. Next to these priority should be given to Transport and Communications, because this is another important infra-structure which would help both industrial and agricultural production.

9. The level achieved in our State with regard to services is not high judged by any criteria such as percentage enrolment of children, or beds per thousand population, *etc.* In fact some parts of our State are below the all-India average level in some of these respects. These sectors have suffered in the past due to the requirements of investment sectors like Power and Irrigation. Adequate attention has therefore to be paid to this sector at least in the Fourth Plan. However, even these outlays may not be sufficient considering the magnitude of the problems in these sectors. There is, therefore, on the one hand a need

for even higher outlays and on the other a shortage of resources.

10. While this would be the overall strategy the broad strategy for each sector would also have to be derived from the two objectives and the two constraints indicated above.

### **Agriculture :**

11. While considering the allocation for agriculture we have to bear in mind the fact mentioned above that the most important inputs relating to agricultural production, *viz.*, fertiliser and credit do not figure under this head at all. In the Plan allocation only two inputs figure, *viz.*, seed and pesticides, and it will have to be ensured that these are properly provided for and that the outlays are not frittered away on staff schemes. Considering the second objective, *viz.*, removal of regional imbalances, the strategy for agricultural production should concentrate on areas and farmers whose level of productivity is low and should attempt to solve their problems so that while agricultural production goes up regional disparities are also reduced.

12. Taking into account the constraint on financial resources and the fact that we have by and large passed the stage when innovation is to be rendered acceptable by being made attractive and have now reached a stage where the real problem is one of ensuring adequate supply, we should as a matter of policy give up subsidising the supply of any input. In agricultural production it is pricing that ought to be used as an incentive and not the provision of inputs at reduced cost.

### **Co-operation :**

13. In view of the fact that—

- (a) credit is one of the important inputs for agricultural production, and
- (b) due to the constraint of financial resources we should adopt other sources for financing such as the Land Mortgage Banks and Agricultural Refinance Corporation to the maximum extent,

it is necessary that the highest priority is given under co-operation to the provision necessary for participation by the State Government in the general and special debenture programmes of the Land Mortgage Bank. It will be seen that this also subserves—

- (a) the priority for ground water under Minor Irrigation that is sought to be given under the Head 'Irrigation', and
- (b) the priority for the problems of areas of low productivity that is sought to be given under agricultural production, since Minor Irrigation and particularly exploitation of ground water helps precisely such areas.

It may not however help farmers whose productivity is low, who are likely to be marginal farmers and the question of ensuring credit for this category of farmers would have to be specially considered.

#### **Community Development :**

14. It would have to be ensured that the programmes under Community Development—

- (a) concentrate on productive schemes related to Minor Irrigation and Agricultural Production; and
- (b) that suitable methods are devised for making grants to the Fanchayati Raj institutions in such a way that these are linked to the effort made by these institutions themselves for mobilising financial resources.

#### **Irrigation :**

15. There is considerable disparity in the percentage of area irrigated to area sown between the different districts of the State and the three different regions. One of the main objectives under this sector should, therefore, be a reduction of these disparities. It will be seen that even under Major and Medium Irrigation the three important spill-over projects, *viz.*, Nagarjunasagar Project, Pochampad Project and Tungabhadra High Level Canal Stage II, are in the three different regions of the State and do benefit areas where the percentage of irrigation is now low.



However two considerations under Major and Medium Irrigation are likely to go in favour of areas which already have a higher percentage of irrigation. Firstly, taking into account the constraint of financial resources some schemes where people's contribution is forthcoming by way of advance betterment levy, may have to be given priority on that consideration, and these are likely to be in areas which at present already have a higher percentage of irrigated area. Secondly, major and medium projects have to be located on the basis of technical considerations and the availability of surface water and cannot be widely dispersed like Minor Irrigation works.

16. Therefore, the objective of reducing regional disparities should be given the highest priority under Minor Irrigation which is susceptible of such regional discrimination.

17. Under Minor Irrigation higher priority would have to be given for ground water because:—

- (a) experience has shown the unreliability of minor irrigation tanks during periods of adverse seasonal conditions; and
- (b) the areas which now have lesser percentage of irrigation are likely to benefit more from exploitation of ground water than by minor irrigation tanks.

18. Due to the constraint of resources, Area Development Schemes should be prepared on as large a scale as possible so that the resources of the Land Mortgage Banks and the Agricultural Refinance Corporation can be availed of.

### **Power :**

19. Since Power provides the basic infra-structure both for agricultural and industrial production, it is necessary that power generation is planned in such a way that a serious shortage of power does not arise. Transmission and distribution should be so planned that the Power generated can be sold without undue time-lag, so that the Board is able to contribute resources at least for its own

capital development. The priorities under Rural Electrification should be fixed taking into account—

- (a) the requirements of agricultural production by giving priority to energisation of pumpsets; and
- (b) by giving priority to the less developed areas.

### **Industries :**

20. The main effort for industrialisation of the State has to come in the Central and Private Sectors. The State Plan can, therefore, only provide for the infrastructure necessary to attract private capital as well as investment in the Central Sector. Since one of the objectives of industrial development in this State is also that surplus rural wealth should be drawn into productive investment, priority should be given for small-scale industries. In view of the constraint on resources the effort should be concentrated on areas which have the greatest potential for immediate industrial development. The focal points so identified are—

(1) Hyderabad-Secunderabad region, (2) Visakhapatnam-Anakapalle region, (3) Vijayawada-Guntur region, (4) Nagarjunasagar Project Ayacut area, (5) Kothagudem-Ramagundam region, and (6) K.C. Canal Ayacut area.

### **Transport and Communications :**

21. This is an important infra-structure both for agricultural and industrial production, which has been somewhat neglected in the Plans of the State in the past. It is, therefore, necessary that adequate provision is made at least now. In determining priorities under this, naturally the first priority will go to spill-over works. But while considering new works, the requirements of the focal points mentioned under industries should be given priority. Similarly, areas where agricultural production is likely to go up in the immediate future, such as the Nagarjunasagar ayacut, should also be taken into account. In view of the constraint on resources, it should be examined wherever possible whether resources can be raised by methods such as charging a toll fees on large bridges, etc.

### **Social Services :**

22. The programme for Education will have to take into account the man-power requirements of the Plan. Rural Water Supply has to be given priority in view of the acute distress that is being periodically caused by drought conditions. Urban Water Supply has to be related to plans for Industrial Development.

23. The welfare of Scheduled Castes and Backward Classes is a responsibility that has to remain with the State Government and, irrespective of the difficulty regarding finances that has been mentioned in relation to Education and Health, the requisite provision under this item would necessarily have to be made on considerations of social justice.

### **Special problems :**

24. The State has to face certain special problems of a large magnitude which will cast a tremendous burden on the available resources. Chief among these is the problem of chronically drought affected areas. The drought conditions that have prevailed consecutively for the last three years in the various parts of our State have highlighted the problems of Chronically Drought Affected Areas which constitute nearly 56 per cent of the total area of the State, the population affected being 41 per cent of the total. Permanent measures have to be taken for the development of these areas not only from the point of view of alleviating the human distress involved but also because in a State like ours, where a large portion of the State is subject to such conditions, the creation in famine areas of permanent assets of a type that would contribute to agricultural production will solve both the short-range and long-range problems and will be complementary to the overall strategy of the Plan.

25. The State has a large tribal population and over 10 per cent of the area of the State are scheduled areas. The problems of these areas require urgent attention. Due to the requirements of sectors with higher priority adequate provisions could not be made for the development of these areas in the previous Plans. It would however not be possible to postpone at least certain urgent measures for the development of these areas any further because even as it

is there has been some discontent in the areas arising out of some of the basic problems not having been effectively tackled.

26. Extensive areas in the State—especially in the coastal deltaic districts—are frequently subject to floods on account of heavy and widespread rainfalls occurring in the region under the influence of storms and depressions in the nearby Bay of Bengal. As a result immense damage is being caused year after year to standing crops and private and public property. Rail and road communications and other public utilities get disrupted over long periods. Serious flood damages have occurred in recent times during 1949, 1953, 1959 and 1964, thus showing that the problems has become a recurring one. During the floods of 1964 the total value of damage caused by the floods has been estimated about Rs. 27 crores. Besides the damage in money terms there is also loss to crops, particularly in the fertile deltaic areas which adversely affects the food situation not only in the State but the country as a whole since these are important surplus districts. It is, therefore, necessary to take some long-range measures for flood control in the State.

27. Hyderabad City has been growing at a very fast pace in recent years and the development of the infrastructure available in the city has not been able to keep pace with the growth with the result that several problems not only of an economic but also of a social nature have begun to arise. Unless urgent measures are taken severe social problems and critical economic bottlenecks are likely to arise. It is therefore necessary that adequate provision is made for tackling some of the basic problems at least of the city.

28. The State has been facing since 1966 a severe problems with regard to the educated unemployed particularly of technical personnel. Although a revival of the tempo of development as a result of a Fourth Plan with an outlay at least of the order of Rs. 650 crores would help, to some extent, in absorbing the available technically trained persons, special efforts would still have to be made to find avenues of employment at least for those who have received technical education. In preparing the Plans for the Engineering Departments therefore, this particular aspect

has been kept in view and where necessary special schemes for this purpose have been formulated. Under Industries also it is proposed to consider special schemes which would help such technically trained persons in seeking gainfull self-employment.

29. Besides the general priorities mentioned earlier special consideration will have to be given to these particular problems. But in formulating schemes for these special problems care has been taken to see that they are dovetailed into the Sectoral Plans and they also sub-serve the basic objectives that have been formulated for the State Plan. It will, therefore, be seen that the two broad objectives of the economic development of the State mentioned above have been translated into concrete terms in the strategy adopted for the different sectors of development.

#### IV. FINANCIAL RESOURCES FOR THE FOURTH PLAN

The magnitude of the Fourth Five-Year Plan now envisaged at the National and State levels to attain a growth rate of 5 to 6 per cent per annum will call for vigorous efforts on the part of the Centre and the States in mobilising resources. It will be seen from the following table that the State Government had made concerted efforts during the Second and Third Plans to mobilise resources through additional taxation such as the upward revision of land revenue, sales-tax, electricity tariffs and the motor vehicles tax, and that the success of the State Government in raising additional tax resources in spite of its relative backwardness was impressive.

##### State's resources for the Second and Third Plans.

<i>Sources</i>	<i>Second Plan period.</i>	<i>Third Plan period.</i>
<i>(Rs. in crores)</i>		
1. Surplus on Current Revenue Account ..	24.30	16.02
2. Additional taxation .. ..	24.49	47.41
3. Small savings (net) .. ..	11.11	7.55
4. Public Borrowings (net including Public enterprises)	28.91	58.90
5. Miscellaneous Capital receipts .. ..	4.88	0.30
Sub-total ..	93.49	130.18
6. Central assistance .. ..	95.08	222.25
Plan outlay ..	188.60	352.43

2. The resources of the State for the Fourth Plan are estimated to be about Rs. 201 crores as compared to Rs. 242 crores estimated for the original Fourth Plan in 1966.

**Statement showing the State's resources for the Fourth  
Five-Year Plan**

	<i>As decided in 1966 after dis- cussions with the Planning Commis- sion</i>	<i>As now proposed</i>
	(Rs. in crores.)	
1. Balance from Current Revenues .. ..	66.10	..
2. Loans from Public (net) .. ..	60.00	65.35
3. Share in Small Savings .. ..	25.00	25.00
4. Unfunded Debt (net) .. ..	10.00	40.75
5. Miscellaneous Capital Receipts (net) ..	—8.90	—89.58
6. Contribution of autonomous Public enterprises ..	29.00	79.05
7. Additional taxation .. ..	88.30	99.47
8. Share in Centre's taxation .. ..	21.20	23.47
	290.70	243.51
<i>Withdrawal from Reserve and net increase in floating debt :</i>		
(a) Withdrawals from cash balance .. ..	..	..
(b) Treasury Bills .. ..	..	..
(c) Ways and Means advance from the Reserve Bank of India .. ..	—38.90	..
(d) Increase in overdrafts .. ..	..	..
(e) Ad-hoc loans from Centre .. ..	34.40	—42.70
(f) Repayment of loans to Centre .. ..	—44.40	..
Net State's resources for the Fourth Plan ..	241.80	200.81

**Balance from Current Revenues :**

3. The balance from Current Revenues at 1968-69 rates of taxation actually works out to (—) Rs. 355.55 crores. However, since it is expected that the Finance Commission would bridge the gap in the non-Plan Revenue Account it has been assumed for the purpose of the forecast for 1969-74 that the balance from Current Revenues would be nil.

**Loans from Public :**

4. The State Government were able to raise Rs. 52.66 crores during 1964-69. Having regard to the potentialities in the State and the need to raise more resources for the Plan, the State Government expects to raise an open market loan of Rs. 16 crores per year during the Fourth Plan period (1969-74). Allowing for repayments of Rs. 32.95 crores, the net loans are expected to be of the order of Rs. 47.05 crores.

5. Judged from the past performance, it would be possible for the State Electricity Board to float an Open Market Loan of Rs. 2.2 crores per year during the Fourth Plan period. Deducting from this, the amount of Rs. 3.10 crores to be repaid, the net amount available for financing the Fourth Plan will be Rs. 7.9 crores.

6. The State Electricity Board expects to draw a total loan of Rs. 12.5 crores during the Fourth Plan period from the Life Insurance Corporation. Allowing for repayment of Rs. 2.1 crores, the net drawal will be Rs. 10.4 crores.

**Share in Small Savings :**

7. The State's share in Small Saving collections during 1964-69 are expected to be over Rs. 10 crores. Since Small Savings is an important measure for mobilising resources, the State Government propose to make all possible efforts to step up collections from this source. Credit has, therefore, been taken for Rs. 25 crores under this head.

**Unfunded Debt :**

8. Unfunded Debt which consists largely of the provident fund subscriptions of employees of the State Government are expected to provide Rs. 40.75 crores on the as-



sumption that the present practice of crediting 50 per cent of the increased amount of dearness allowance to the provident fund account of the employees will continue even after 1st March, 1969.

**Contribution of Public enterprises :**

9. (i) *State Electricity Board*.—The gross revenue of the State Electricity Board has increased from Rs. 5.56 crores in 1959-60 to Rs. 24.5 crores in 1967-68 and it is expected to rise to Rs. 68 crores in 1973-74. It has been estimated that the State Electricity Board would transfer Rs. 72.40 crores to Reserve Funds and realise Rs. 5.65 crores under “Debt Deposits and Remittances” (net). After setting off Rs. 50 lakhs towards other capital expenditure, it has been assumed that the State Electricity Board’s contribution would be Rs. 77.55 crores.

9. (ii) *Road Transport Corporation*.—The Road Transport Corporation would be contributing Rs. 10.36 crores to its depreciation fund during 1969-74. It is also likely to earn a net profit of Rs. 1.44 crores during this period. It is therefore considered feasible for the Corporation to contribute at least Rs. 1.5 crores for financing the Plan.

10. The State’s resources for the Plan have gone up from Rs. 93.49 crores in the Second Plan to Rs. 130.18 crores in the Third Plan and are now expected to go up to Rs. 201 crores in the Fourth Plan. The additional taxation has gone up from Rs. 24.49 crores in the Second Plan to Rs. 47.41 crores in the Third Plan while for the Fourth Plan it is expected to be nearly Rs. 100 crores. The increase in taxation from the Third Plan to the Fourth Plan is about 110 per cent. Considering that the level of taxation in this State under various sectors is already comparable to the highest in the country, this would involve a great effort on the part of the State Government. It will, therefore, be seen that the State Government have done the utmost for mobilising resources for the Fourth Plan.

11. If despite this effort the resources available for the Plan are not higher, it is because the State has a very heavy loan liability to the Centre. In fact, the decline in resources of nearly Rs. 100 crores under the item “Miscellaneous Capital Receipts” is explained mostly by this item. The reason for such a heavy loan liability is

that as a result of large investments in Irrigation and Power most of the Central assistance to the State has been in the form of loans. If the burden of this loan liability could be reduced by some suitable arrangements with regard to re-scheduling of loans, the State would have considerably larger resources for the Plan.

12. The total outlay for the Plan has been fixed at Rs. 650 crores on the basis of the minimum requirements of the various sectors most of which are in fact spill-over commitments. The Central assistance for the State has to be given on a liberal scale in view of the fact that the level of development in several sectors is still very low and the fact that the State has large backward and chronically drought affected areas whose problems have to be dealt with on a special basis. If this is done and if suitable relief is given with regard to the loan liability of the State it would be possible to implement a Plan with an outlay of Rs. 650 crores.

## V. PLAN OUTLAY AND ALLOCATIONS

The National Plan envisages an annual 5 per cent rate of growth in agriculture, 8 to 12 per cent rate of growth to industry and an overall rate of growth of 5 to 6 per cent in the economy as a whole. In order to ensure that Andhra Pradesh does not lag behind the all-India pace of development, it is imperative that the State should plan for at least the same rate of growth as envisaged in the National Plan. It is estimated that for the State to achieve an annual 5 to 6 per cent rate of growth in its State Income an amount of about Rs. 1,500 crores would have to be invested in the State over the Fourth Plan period out of which Rs. 650 crores will have to be in the Central Sector, Rs. 550 crores in the State Sector and Rs. 300 crores in the Private Sector. Adding current outlay to the investment in the State Sector, the total outlay on the State Plan has been fixed at Rs. 650 crores. To the extent there is any shortfall in the investments in any of these sectors the rate of growth envisaged will not materialise.

2. The outlay of Rs. 650 crores has to be viewed in the light of the fact that the spill-over commitment from the Third Plan is itself Rs. 350 crores of which over Rs. 180 crores is under Power and Rs. 90 crores under Irrigation. Further, certain special problems such as those of the chronically drought affected areas of the State, which we had expected to be dealt with outside the State Plan, have now had to be accommodated within the State Plan.

3. The total outlay on the Third Five-Year Plan of the State was Rs. 352.43 crores. The outlays during the Third Plan period had increased from Rs. 50 crores in 1961-62, the first year of the Plan, to Rs. 105.23 crores in 1965-66, the last year of the Plan. However, due to financial difficulties from 1966-67 onwards the Plan outlays have been reduced from year to year, the Annual Plan outlays being Rs. 94.97 crores in 1966-67, Rs. 71.15 crores in 1967-68 and Rs. 72.13 crores in 1968-69. I, however, the tempo of development has to be resumed and the Fourth Plan has to start at least at the level of activity at which

the Third Plan had ended, it will be necessary that the outlays on the Annual Plan are now sharply stepped up. Such a stepping up would be necessary even if the spill-over commitments alone are to be fully met. In fact in the annual phasing that has been given elsewhere in these proposals, the outlay indicated for the Annual Plan 1969-70 is based on the assumption that spill-over commitments alone will be met in major sectors like Power and Irrigation. The step up in outlay will be necessary because most of the spill-over schemes have come to a stage where a substantial part of their expenditure has to be incurred next year. Therefore, the outlay on the Plan has to be of the magnitude envisaged in these proposals not for any spectacular increase in the tempo of activity, but merely in order to be able to resume the level that had already been reached in the last year of the Third Plan.

4. The sectoral allocations proposed in the Plan are as follows:—

<i>Rs. in crores.</i>						
<i>Head of Development</i>	<i>Expenditure incurred in Third Plan</i>	<i>% to total</i>	<i>Expenditure incurred in three Annual Plan years i.e. 66-69</i>	<i>% to total</i>	<i>Outlay now recommended by the Working Group</i>	<i>% to total</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Agricultural Programmes	51.48	14.60	36.29	16.04	95.72	14.71
2. Co-operation and Community Development including Panchayats ..	27.86	7.91	6.39	2.83	18.93	2.90
3. Major and Medium Irrigation including Nagarjunasagar ..	93.01	26.39	54.60	24.14	109.29	16.80
4. Power ..	93.61	26.56	92.32	40.82	225.00	34.58
5. Industries & Mining ..	15.19	4.32	6.23	2.75	46.75	7.18
6. Transport and Communications ..	17.00	4.82	7.20	3.18	34.49	5.30
7. Social Services ..	53.22	15.10	23.01	10.17	119.30	17.45
8. Miscellaneous ..	1.57	0.39	0.15	0.07	1.15	0.18
Total ..	352.41	100.00	226.19	100.00	650.63	100.00

Detailed Department-wise allocations are shown in the statement at pages 50-56.

**Power :**

5. The highest percentage allocation of 34.58 has been made for the Power sector because of the large spill-over commitment in this sector. With the allocation of Rs. 225 crores 3 spill-over schemes, *viz.*, Ramagundam Thermal Scheme, Kothagudem Thermal Scheme Stage III and Lower Sileru Hydro-Electric Scheme will be completed during the Fourth Plan period adding a generating capacity of 482.5 M.W. Even with this there will be a shortfall in the requirement of generating capacity by the end of the Plan. But because of the constraint of resources and the fact that equal importance has to be given to Transmission and Distribution and Rural Electrification, which are essential for utilising the capacity generated, a larger allocation for meeting the full requirements of generation could not be made.

**Irrigation :**

6. The alloation for Major and Medium Irrigation is Rs. 109.29 crores, *i.e.*, 16.80 per cent of the total allocation. This provides for the completion of the spill-over schemes the most important of which are the Nagarjunasagar Project, the Pochampad Project and the Tungabhadra High Level Canal Stage II. In view of the fact that a large number of schemes that have spilt over to the Fourth Plan have reached an advanced stage of completion, the total irrigation potential to be created during the Fourth Plan period under Major and Medium Projects alone will be 20.51 lakh acres compared to a potential of 9.65 lakh crores created in all the three previous Plan periods. All the new schemes included are those for which Advance Betterment Levy is expected to be collected.

7. Recurring floods are a great problem in the State not only from the point of view of human suffering and the physical damage caused, but also from the point of view of the loss of foodgrains in the fertile deltaic areas. A provision of Rs. 3.65 crores has therefore been made for Flood Control Schemes.

8. It will thus be seen that the percentage allocation for Irrigation and Power together comes to 51.38 per cent as against 52.95 per cent in the Third Plan. This alloca-

tion has been necessary in view of the large spill-over commitments in both these sectors. While the total percentage allocation under this head is approximately the same as in the Third Plan, the allocation for Power has gone up from 26.56 per cent in the Third Plan to 34.58 per cent in the Fourth Plan while that of Irrigation has come down from 26.39 per cent to 16.80 per cent. This has become possible because of a large number of spill-over projects nearing completion and of the resource mobilisation made possible by collection of advance betterment levy. With the result the physical achievement will be spectacular even with this allocation.

### **Agricultural Programmes:**

9. The allocation for agricultural programmes is Rs. 95.72 crores as against Rs. 51.48 crores in the Third Plan the percentage being 14.71 in this Plan against 14.60 in the Third Plan. The largest outlay within this Head is Rs. 48.15 crores for Minor Irrigation. In keeping with the objective, mentioned earlier in the general approach to the Plan, that greater emphasis should be given for ground water under Minor Irrigation, as much as Rs. 26.11 crores have been allocated for exploitation of ground-water resources. The highest priority will be given in this sector for the Chronically Drought Affected Areas and the Telangana Region of the State where the percentage irrigation is lower than the State average.

10. An allocation of Rs. 13.38 crores has been made for the development of ayacuts in view of the fact that a large irrigation potential is being created during the Fourth Plan period and every effort has to be made to utilise this potential. It is expected that 3.50 lakh acres of unutilised potential that has spilt over from the previous Plans and 16.50 lakh acres out of the potential created in the Fourth Plan will be utilised during the Plan period.

11. Rs. 14.30 crores has been allocated under agricultural programmes. It has however to be noted that the most important inputs for agriculture, *viz.*, water and credit figure under other Heads of Developments in the Plan and the allocation under this Head is meant mostly for staff schemes of the Agriculture Department itself. The adequacy of this allocation has to be viewed in this context.

12. In view of the importance of soil conservation and afforestation for the chronically drought affected areas, the allocation under these Heads has been substantially increased over the Third Plan allocations.

13. While making allocations for different items having a bearing on agricultural production the requirements for achieving the growth rate envisaged in the agricultural production programme have been taken into account. Thus the provision made for debenture participation is based on a long-term credit programme which takes into account the targets under Minor Irrigation and Energisation of pumpsets. Similarly, the allocation for the Development of Ayacuts is based on the potential to be created under Major and Medium Irrigation. The allocations under Heads like Rural Electrification, Minor Irrigation, Soil Conservation and Afforestation also take into account the special requirements of Chronically Drought Affected Areas and the Telangana Region.

#### **Co-operation and Community Development :**

14. The allocation under the Head Co-operation and Community Development has declined from Rs. 27.86 crores in the Third Plan to Rs. 18.93 crores in the present Plan, the percentage to the total allocation having come down from 7.91 to 2.90. However, within this Head the allocation for Co-operation has gone up from Rs. 3.38 crores in the Third Plan to Rs. 5.50 crores in the present Plan. Here again the actual allocation made under the Head Co-operation has to be viewed in the light of the fact that the requirements for the long-term credit programmes are provided for under Development of Ayacuts and Minor Irrigation and not under this Head. Thus, under Minor Irrigation over Rs. 20 crores have been provided for participation in the Debenture Programmes of the Land Mortgage Bank. Similarly, under Development of Ayacuts Rs. 4 crores have been provided for participation in the special debenture programmes. It will therefore be seen that the credit requirements of the Agricultural Plan have been fully taken into account.

15. The decline in the allocation under Community Development Programme is due to the fact that provision is made under this Head for the requirements of the Com-

munity Development Blocks according to the schematic budget. In our State all the national Community Development Blocks enter Stage II by October 1968 and the requirements for these Stage II Blocks according to the schematic budget which come to Rs. 6.14 crores have been provided for. Special provision has also been made for maintaining a minimum tempo of activity in the post-Stage II Blocks on the lines suggested at the Chief Ministers' meeting on Community Development at Madras. Provision has also been made for incentives to be offered to Panchayati Raj Institutions for additional resources raised through taxation.

### **Industry and Mining :**

16. The outlay for Industry and Mining has been raised substantially from Rs. 15.19 crores in the Third Plan to Rs. 46.75 crores in the Fourth Plan, the percentage going up from 4.32 to 7.18. This has been done taking into account the fact that the level of industrialisation of the State is very low and that with the infra-structure, such as availability of power, being better provided now than before, there is need for a concerted and co-ordinated programme to increase the rate of industrial growth in the State. The allocations under this Head are meant essentially for providing infra-structural facilities like development of land and provision of water and for offering incentives such as subsidy on power. The allocation has been worked out on the basis of an estimate that Rs. 200 to 250 crores under the Central Sector and Rs. 155 crores for Large and Medium Industries and Rs. 50 crores for Small-Scale Industries under the Private Sector would be the minimum investment that would have to be attracted to the State if at least a 15 per cent growth is to be achieved over the Plan period. The requirements of backward areas such as the Chronically Drought Affected Areas and the Telangana Region will be given special attention under this head also. In identifying the growth centres, the fact that there would be a spurt in agricultural production in certain areas, particularly as a result of new irrigation potential being created, has also been taken into account.

### **Transport and Communications :**

17. In view of the fact that transport and communications are an important element in the infra-structure whe-



ther for industrial or agricultural production, the allocation under the Head has been more than doubled from the Third Plan and is now Rs. 34.49 crores, the percentage allocation going up from 4.82 to 5.30. While formulating the plans for roads the results of the Regional Transport Survey will be taken into account. The requirements of regions such as the Telangana region, which are backward from the point of view of communications, have been specially taken into account. It has also been ensured that nearly one-third of the total allocation for roads is made for roads under Panchayati Raj Institutions, i.e., for rural roads. The State has excellent minor ports which require to be developed both from the point of view of export promotion as well as for augmenting fishing programme. Similarly, the canal system in the deltas can provide an excellent means of inland water transport and can connect these areas right up to Madras port if properly developed. Since both these schemes have been accepted as Centrally sponsored schemes, it is proposed to formulate separate schemes for them to be posed as Centrally-sponsored Schemes.

### **Social Services :**

18. The allocation for Social Services has been more than doubled from the Third Plan and is Rs. 119.30 crores, the percentage going up from 15.10 to 18.35. The allocation for General Education is Rs. 44.64 crores as compared to Rs. 17.97 crores in the Third Plan. With this allocation the percentage of enrolment to the corresponding population will be 90 in the age group 6-10, 40 in the age-group 11-12 and 22.5 in the age-group 13-16 by the end of the Plan period. Within General Education the largest increase over the Third Plan allocation has been made in the case of Higher Education because of the commitments arising out of the introduction of a Two-year P.U.C. and the opening of a large number of Government and private colleges during the last four years.

19. The allocation for Technical Education is Rs. 5.35 crores against Rs. 3.11 crores in the Third Plan. In view of the large-scale unemployment of engineers at all levels that has taken place in the last few years and the decision of the Government of India that no expansion should take place in the conventional branches of engineering and

that no new institutions should be started in the Fourth Plan period, the Plan for Technical Education is restricted to consolidation and improvement of quality and to diversification and expansion of facilities for part-time and correspondence courses.

20. In the Third Plan a great deal of emphasis was laid on Medical Education and nearly one-third of the total allocation for medical facilities was spent on this item alone. In view of the fact that the educational facilities created by these outlays are now adequate, the emphasis in the Fourth Plan has been shifted from Medical Education to improvement of services and facilities in hospitals and dispensaries particularly in the rural areas. Thus, out of the total allotment of Rs. 9.75 crores under medical, over Rs. 6.25 crores are allotted for district and taluk hospitals alone. The allocation for Public Health which is Rs. 6.05 crores has not been greatly increased from the Third Plan allocation because practically all schemes intended for control of endemic diseases such as the National Malaria Eradication Programme, Leprosy Control Programme, Filaria Control Programme etc., are in the Centrally-sponsored Sector.

21. The allocation under Urban Water Supply is meant mostly for a large number of spill-over schemes and for the Manjira Water Supply Scheme meant for the Hyderabad City. A substantial provision of Rs. 8.5 crores has been made for Rural Water Supply in view of the importance of water supply in the rural areas. Priority will be given under this sector for Chronically Drought Affected Areas and the Telangana region and within these areas for those villages where there are no drinking water facilities at all at present.

22. As mentioned earlier, in the approach to the Plan, the State has a large area with a tribal population and urgent measures have to be taken for the development of this area. As such an allocation of Rs. 10 crores has been made for this purpose particularly for schemes of the economic uplift and for education of tribals. Provision has also been made for providing roads in these areas.

23. In view of the anticipation that industrial investment in the State would be substantially stepped up the

Expenditure for Labour and Labour Welfare has also been considerably increased. Provision has also been made for Craftsmen Training Centres which will no longer be Centrally-sponsored.

24. In view of the rapid growth of the twin cities of Hyderabad and Secunderabad a number of urban problems have arisen in this area which require to be tackled urgently. An allocation of Rs. 4 crores has therefore been made for this purpose.

### **Chronically Drought Affected Areas and Special Development Schemes for Telangana :**

25. The State Government had been pressing that a Plan for the permanent eradication of drought in chronically drought affected areas should be taken up as a National Plan outside the States' Sector and that additional assistance should be given for this purpose. However, the decision taken at the N.D.C. Committee was that this would be considered as one of the special problems of the States concerned and that 10 per cent of the total Central assistance available for the States' Sector would be ear-marked for dealing with the special problems of various States. In view of this the outlays required for tackling some of the problems of these areas have been provided within this Plan itself and the allocations have been shown under the respective sectors. The total allocations so made in different sectors come to Rs. 51 crores. However, in order to give an integrated picture of what is sought to be done for these areas the outlays available under different Heads and the programmes meant to be taken up for them have been briefly indicated in a separate chapter. The Government had agreed to provide a sum of Rs. 30.54 crores for programmes relating to the development of the Telangana region in addition to its due share under the normal Plan allocations. As against this a provision of Rs. 40.46 crores has been made in the Plan under various Heads for the development of this region.

26. It will thus be seen that the allocations made for various sectors follow the general priorities indicated in the approach to the Fourth Plan. It has also been ensured that the allocations in different sectors are properly co-

ordinated with a view to seeing that the basic objective of increasing the rate of growth in agricultural and industrial production is fulfilled. Care has also been taken to see that within each sector the priorities are so regulated that an effort is made to reduce regional imbalances within the State. The allocations indicated for Chronically Drought Affected Areas and the Telangana region in certain important sectors like Minor Irrigation and Rural Electrification will also help achieve this objective.

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**DEPARTMENT-WISE ALLOCATION MADE IN FOURTH  
FIVE-YEAR PLAN.**

(Rs. in lakhs)

HEAD OF DEVELOPMENT <i>Department.</i>	<i>Expendi- ture in- curred in the Third Plan.</i>	<i>Anticipated expendi- ture in 1966-69.</i>	<i>Outlay proposed in Fourth Plan.</i>
(1)	(2)	(3)	(4)
<b>1. Agriculture Production ..</b>	<b>1,002.47</b>	<b>674.61</b>	<b>1,430.00</b>
(a) Director of Agriculture ..	815.11	522.17	1,015.00
(b) Agriculture University ..	187.36	129.63	385.00
(c) Registrar of Cooperative Societies ..	..	14.81	10.00
(d) Chief Engineer (Public Health) ..	..	8.00	20.00
<b>2. Training Centres ..</b>	<b>85.78</b>	<b>6.00</b>	<b>25.45</b>
<b>3. Land Development ..</b>	<b>27.31</b>	<b>30.63</b>	<b>30.00</b>
(a) Director of Agriculture ..	27.31	1.74	10.00
(b) Registrar of Co-operative Societies ..	..	28.89	20.00
<b>4. Consolidation of Holdings ..</b>	<b>17.70</b>	<b>..</b>	<b>..</b>
<b>5. Minor Irrigation ..</b>	<b>2,893.78</b>	<b>1,645.64</b>	<b>4,815.29</b>
(a) Director of Agriculture ..	391.82	36.55	293.29
(b) Chief Engineer (Minor Irrigation) ..	1,728.89	1,056.42	1,867.00
(c) Board of Revenue ..	483.57	65.48	60.00
(d) Registrar of Co-operative Societies ..	..	342.62	2,005.00
(e) Chief Engineer (Local Administration)	289.50	90.07	340.00
(f) Planning Department ..	..	54.50	250.00

(Rs. in lakhs.)

HEAD OF DEVELOPMENT <i>Department.</i>	<i>Expendi- ture in- curred in the Third Plan.</i>	<i>Anticipated expen- diture in 1966-69</i>	<i>Outlay proposed in Fourth Plan.</i>	
(1)	(2)	(3)	(4)	
<b>6. Soil Conservation</b> .. ..	<b>144.58</b>	<b>160.42</b>	<b>347.50</b>	
(a) Director of Agriculture ..	110.97	134.09	307.50	
(b) Chief Conservator of Forests ..	33.61	23.97	40.00	
(c) Andhra Pradesh Agricultural Univer- sity .. ..	..	2.36	..	
<b>7. Development of Ayacuts</b> ..	<b>225.85</b>	<b>545.45</b>	<b>1,338.39</b>	
(a) Board of Revenue for appointment of staff at Districts ..	}	112.27	30.00	
(b) Chief Engineer (Major Irrigation and General)		24.76	100.00	
(c) Director of Agriculture		229.74	382.00	
(d) Registrar of Co-operative Societies		116.13	400.00	
(e) Director of Animal Husbandry		225.85	23.88	36.00
(f) Inspector-General of Registration		4.37	10.00	
(g) Chief Engineer (Nagarjunasagar Canals) (for ayacut roads)		31.48	200.00	
(h) Chief Engineer (N.S.) Canals for field channels		..	170.00	
(i) Agricultural University		2.82	10.39	
<b>8. Animal Husbandry</b> ..		<b>190.74</b>	149.22	400.00
<b>9. Dairying and Milk Supply</b> ..	<b>255.98</b>	189.05	380.00	
<b>10. Forests</b> .. ..	<b>138.68</b>	..	500.00	
<b>11. Fisheries</b> .. ..	<b>141.53</b>	123.19	255.00	
<b>12. Warehousing and Marketing</b> ..	<b>23.66</b>	7.14	50.00	

(Rs. in lakhs)

HEAD OF DEVELOPMENT <i>Department</i>	<i>Expendi- ture in- curred in the Third Plan.</i>	<i>Anticipated expendi- ture in 1966-69.</i>	<i>Outlay proposed in Fourth Plan.</i>
(1)	(2)	(3)	(4)
<b>I. AGRICULTURAL PROGRAMMES</b>	<b>5,148.06</b>	<b>3,628.56</b>	<b>9,571.63</b>
1. Co-operation .. ..	338.78	143.36	550.00
2. Community Development Programmes	2,402.53	495.23	1,140.00
3. Panchayats .. ..	45.03	..	203.00
<b>II. CO-OPERATION AND COMMUNITY DEVELOPMENT</b> .. ..	<b>2,786.34</b>	<b>638.59</b>	<b>1,893.00</b>
1. Irrigation .. ..	9,301.43	5,520.87	10,928.86
(a) Nagarjunasagar Project ( P. W. Projects Department) ..	6,500.01	3,700.00*	3,886.00
(b) Major and Medium Irrigation—Chief Engineer (Major Irrigation and General) .. ..	2,663.63	1,820.87	6,677.86
(c) Flood Control .. ..	137.79	..	365.00
2. Power .. ..	9,361.47	9,755.78	22,500.00
<b>III. IRRIGATION AND POWER</b> ..	<b>18,662.90</b>	<b>15,276.65</b>	<b>33,428.86</b>
1. Large and Medium Industries ..	581.59	279.17	2000.00
2. Mineral Development .. ..	44.98	43.83	200.00
(a) Director of Mines and Geology ..	4.98	6.83	100.00
(b) Andhra Pradesh Mining Corpora- tion .. ..	40.00	37.00	100.00
3. Village and Small Scale Industries ..	892.56	299.53	2,475.00
(a) Director of Industries ..	531.75	117.46	1,775.00
(b) Director of Handlooms ..	360.81	182.07	700.00

\*Does not include the sum of Rs. 5.50 crores sanctioned for Nagarjunasagar Project in 1968-69.

(Rs. in lakhs.)

HEAD OF DEVELOPMENT <i>Department</i>	<i>Expenditure incurred in the Third Plan.</i>	<i>Anticipated expenditure in 1966-69</i>	<i>Outlay proposed in Fourth Plan.</i>
(1)	(2)	(3)	(4)
<b>IV. INDUSTRY AND MINING</b>	.. 1,519.13	622.53	4,675.00
1. <b>Roads</b>	.. 1,393.92	588.73	2,800.00
(a) Chief Engineer (Roads and Buildings)	.. 827.85	466.83	1,800.00
(b) Chief Engineer (Local Administration.)	.. 566.07	121.90	850.00
(c) Director of Municipal Administration	.. ..	..	70.00
(d) Hyderabad Municipal Corporation	..	..	80.00
2. <b>Road Transport</b>	.. 300.60	130.00	530.00
3. <b>Minor Ports</b>	.. ..	..	62.00
4. <b>Toursim</b>	.. 5.53	1.69	33.00
5. <b>Inland Water Transport</b>	.. ..	..	24.00
<b>V. TRANSPORT AND COMMUNICATIONS</b>	.. 1,700.05	720.42	3,449.00
1. <b>General Education</b>	.. ..		4,464.00
(a) Director of Public Instruction	.. } 1,796.70	621.12	4,230.00
(b) Others	.. }		234.00
2. <b>Technical Education</b>	.. 310.77	138.36	535.00
(a) Director of Technical Education	307.78	129.66	500.00
(b) Director of Archaeology	.. 2.99	8.70	35.00
3. <b>Scheme for Educated unemployed..</b>	..	..	300.00



(Rs. in lakhs.)

HEAD OF DEVELOPMENT			<i>Expendi- ture in- curred in the Third Plan.</i>	<i>Anticipated expendi- ture in 1966-69.</i>	<i>Outlay proposed in Fourth Plan.</i>
<i>Department.</i>					
(1)			(2)	(3)	(4)
<b>4. Medical</b>	..	..	<b>672.41</b>	<b>203.83</b>	<b>975.00</b>
(a) Director of Medical Services	..	..	658.82	198.69	940.00
(b) Special Officer, Indian Medicine Department	..	..	13.59	4.94	35.00
<b>5. Public Health</b>	..	..	<b>610.61</b>	<b>380.52</b>	<b>605.00</b>
<b>6. Urban Water Supply and Drainage</b>	..	..	<b>1,024.78</b>	<b>657.22</b>	<b>1,550.00</b>
(a) Chief Engineer (Local Administration and Public Health)	..	..	590.91	444.32	1,100.00
(b) Chief Engineer (Buildings)	..	..	433.87 <sup>a</sup>	212.90	450.00
<b>7. Rural Water Supply and Sanitation :</b>					
Chief Engineer (Local Administration) Panchayati Raj Department	..	..	<b>23.26</b>	<b>56.60</b>	<b>850.00</b>
<b>8. Housing</b>	..	..	<b>250.28</b>	<b>52.22</b>	<b>400.00</b>
(a) Housing Board	..	..	47.56	12.13	65.00
(b) Director of Municipal Administration*	..	..	included under RCS.	5.93	70.00
(c) Director of Town Planning	..	..	37.36	4.03	35.00
(d) Commissioner of Labour	..	..	45.02	7.85	80.00
(e) Registrar of Co-operative Societies..	..	..	119.48*	9.70	125.00
(f) Commissioner, Hyderabad Municipal Corporation	..	..	0.43	12.58	25.00
(g) Director, Bureau of Economics and Statistics	..	..	0.43	..	..

(Rs. in lakhs)

<u>HEAD OF DEVELOPMENT</u> <i>Department.</i>	<i>Expendi- ture in- curred in the Third Plan.</i>	<i>Anticipated expendi- ture in 1966-69.</i>	<i>Outlay proposed in Fourth Plan.</i>
(1)	(2)	(3)	(4)
<b>9. Welfare of Scheduled Castes and Backward Classes .. ..</b>			
Director of Social Welfare .. ..	179.90	31.01	332.00
<b>10. Welfare of Scheduled Tribes :</b>			
Director of Tribal Welfare .. ..	179.71	76.02	1,000.00
<b>11. Social Welfare .. ..</b>	<b>143.45</b>	<b>14.42</b>	<b>122.00</b>
(a) Director of Social Welfare .. ..	101.25	0.70	30.00
(b) Director of Women Welfare .. ..	34.57	12.65	77.00
(c) Inspector-General of Prisons .. ..	6.18	0.53	15.00
(d) Panchayati Raj Department .. ..	1.45	0.54	..
<b>12. Labour and Labour Welfare :</b>	<b>94.07</b>	<b>57.97</b>	<b>308.18</b>
(a) Commissioner of Labour .. ..	13.99	2.78	125.18
(b) Director of Employment and Training :			
(i) Craftsmen Training Schemes .. ..	73.76	49.50	128.00
(ii) Employment Schemes .. ..	1.46		
(c) Director of Medical Services (E.S.I. Schemes) .. ..	4.86	5.69	45.00
<b>13. Urban Development :</b>	<b>34.02</b>	<b>9.60</b>	<b>475.00</b>
(a) Director of Municipal Administration .. ..	21.50	7.27	52.00
(b) Director of Town Planning .. ..	12.52	2.33	23.00
Development of Metropolitan areas .. ..	..	..	400.00

(Rupees in lakhs.)

HEAD OF DEVELOPMENT <i>Department.</i>	<i>Expendi- ture in- curred in the Third Plan</i>	<i>Anticipated expendi- ture in 1966-69</i>	<i>Outlay proposed in Fourth Plan</i>
(1)	(2)	(3)	(4)
<b>14. Public Co-operation .. ..</b>	<b>1.90</b>	<b>1.64</b>	<b>14.00</b>
(a) Planning Department .. ..	1.64	1.38	10.00
(b) Revenue Department .. ..	0.26	0.26	4.00
<b>VI. SOCIAL SERVICES .. ..</b>	<b>5,321.86</b>	<b>2,300.53</b>	<b>11,930.18</b>
<b>1. Statistics .. ..</b>	<b>18.63</b>	<b>8.58</b>	<b>24.00</b>
(a) Director, Bureau of Economics & Statistics. .. ..	18.63	7.47	21.00
(b) Planning Department .. ..	..	1.11	3.00
<b>2. Publicity :</b>			
Sanchalak, Janasambanda Sakha .. ..	9.94	3.47	25.00
<b>3. Broadcasting :</b>			
Sanchalak, Janasambanda Sakha .. ..	19.39	2.92	60.00
<b>4. Evaluation Organisation .. ..</b>	<b>..</b>	<b>..</b>	<b>6.00</b>
<b>5. Assistance to Zilla Parishads and     Panchayats .. ..</b>	<b>55.30</b>	<b>..</b>	<b>..</b>
<b>VII. MISCELLANEOUS .. ..</b>	<b>103.26</b>	<b>15.47</b>	<b>115.00</b>
<b>Grand Total</b>	<b>35,241.60</b>	<b>22,617.05</b>	<b>65,062.67</b>

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**PART — II**

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## 1. AGRICULTURE

The economy of Andhra Pradesh is largely agriculture-oriented. More than half of the State Income is derived from agricultural and allied sectors, on which nearly 70 per cent of the State's population depend for a livelihood. Even the industrial sector in the State is dependent to a large extent on agricultural raw materials. An adequate rate of growth in the agricultural sector is therefore necessary not only for raising the level of development of this sector but of the economy as a whole.

2. The index of productivity per acre in the State with base 1956-57=100 was 125.4 in 1964-65 against 87.7 in 1950-51 or an increase by 43 per cent. Even in 1965-66 the index number of overall productivity per acre was of the order of 103.6. For the period 1952-53 to 1964-65 the annual linear growth of productivity for Andhra Pradesh was 2.72 per cent against 1.91 per cent for all-India. However for agricultural production the growth rate was 3.06 per cent against 3.42 per cent for all-India for the same period. This was largely due to a low growth rate in the production of non-food grains. Apart from creation of additional irrigation potential due to major and minor irrigation schemes implemented in the plan periods, the strategy followed in advocating and stressing the application of fertilizers, and proper manurial schedules was largely responsible for this increase in productivity. The level of consumption of Nitrogenous fertilisers which was of the order of only 0.93 lakh tons in terms of Ammonium Sulphate in 1956-57 had increased to 5.06 lakh tons by the end of Third Plan. This consumption of phosphatic fertilizers too had risen from 0.27 lakh tons to 1.56 lakh tons in terms of Super Phosphate by the end of Third Plan.

3. The following statement shows the average yield per acre at the commencement of each of the Plan periods, for some of the important crops of the State:

*(Yield per acre in lbs.)*

			1950-51	1955-56	1960-61	1964-65
			(1)	(2)	(3)	(4)
Rice	..	..	917	1,015	1,105	1,291
Jowar	..	..	343	401	443	407
Groundnut	..	..	774	780	772	748
Castor	..	..	140	163	171	168
Sesamum	..	..	182	175	151	165
Sugarcane (Gur)	..	..	6,064	6,625	7,930	7,477
Cotton (lint)	..	..	49	50	58	62
Tobacco	..	..	728	744	706	834

4. During the Third Plan the target for the creation of an additional production of potential was 27.79 lakh tons, over the base level of 64.2 lakh tons in 1960-61. The actual achievement was 20.70 lakh tons.

5. The area under foodgrains in the State increased from 181 lakh acres in 1950-51 to about 233 lakh acres in 1964-65 or an increase by 28.5 per cent. Much of this increase in area was achieved by the end of the First Plan period itself. The increase was only 2.5 per cent in the Second Plan period and 3.2 per cent in the first 4 years of the Third Plan indicating the limited possibilities of further increasing the area under foodgrains. Further increase in foodgrains production therefore, could be achieved primarily by increasing the productivity per acre, notwithstanding the fact that there are still a few areas in the Rayalaseema and Telangana regions of the State where some additional land can be pressed into cultivation. In 1965-66, the area under foodgrains in the State was of the order of 218 lakh acres or 20 per cent higher than that in 1950-51.

6. In assessing the possibility for further increases in agricultural production in this State, we have to keep in view the above physical constraint on further extension of area. The prospect of further extension of cultivation through reclamation of culturable wastes is not bright. The programme of action contemplated in the Fourth Plan period for increased agricultural production keeps these considerations in view.

7. The principal objective of the Fourth Five-Year Plan in regard to agricultural production should primarily be (a) to maximise food production in the State and ensure an optimum level of food consumption in the State, (b) to maximise total agricultural production in the State and (c) to satisfactorily meet the rising demand for industrial raw materials. The estimated level of foodgrains production in the State at the beginning of the Fourth Plan would be 67.47 lakh tons. This is proposed to be stepped up to 97.56 lakh tons, during the Fourth Plan.

8. A bold and new strategy for quick agricultural development is therefore envisaged for realising the above broad objectives during the Fourth Plan. This new strategy is in accordance with the strategy approved at the national level and is summarised below:—

(1) Keeping self-sufficiency in production and the desirability of non-dependence on foreign sources for the country as a whole, it is necessary to aim at rapid increases in food production in the shortest time. For these, priorities have been laid down and integrated policies worked out in the State.

(2) Water is the most important agricultural input for higher agricultural production. Keeping this in view, all steps necessary such as development of minor irrigation, maximisation of surface irrigation sources and the exploitation of ground water resources would have to be planned for and implemented.

(3) The package of practices comprising of water management, high yielding varieties of seeds, pest control fertilizers, *etc.*, would have to be adopted on a large scale in the field to maximise production,



(4) Short-term varieties would have to be encouraged for cereals and food crops and for second crops in irrigated areas to enable the agriculturists to obtain two crops where they are obtaining one now, and three crops where they are obtaining only two crops at present.

(5) Commercial crops should be quickly developed and their export potential and utilisation in the State maximised. Andhra Pradesh is favourably placed in that, it has a good potential for crops such as sugarcane, oil seeds (especially groundnuts), cotton, etc. Special plans would have to be drawn up for the exploitation of these crops for export and for industrial purpose.

(6) *Rural electrification.*—Availability of power is very necessary in the agricultural sector so that ground water can be tapped and utilised quickly. This needs special attention. Lift irrigation utilising surface water wherever possible also needs special attention in the State.

(7) *Ayacut development and water management.*—Ayacut development poses several problems and even where irrigation projects have been completed there has been lag in the development of ayacuts for several years. All this results in wastage of time and loss of valuable agricultural produce to the State. It is therefore, necessary in any integrated plan of agricultural development to plan for Ayacut Development even at the time of the inception of the project and ensure that ayacut development is not delayed for any reason whatsoever.

(8) Water management would also have to be scientific. Conservation of water resources and water management should be planned in such a way that the same available water can be used for more acreage and for more crops. This is possible by a *change in the cropping pattern* and by a change in the timing of planting of crops depending on the rainfall and irrigation facilities available.

(9) *Fertilizers, pesticides, improved seeds, etc.*—Agricultural inputs such as hybrid and high yielding variety seeds, fertilisers and pesticides are important and the

demand for these should be carefully planned for and provided in an integral plan of agricultural development.

(10) *Agricultural credit*.—Credit is one of the very vital factors prompting agricultural production. Credit would have therefore to be made available in abundant measure to agriculturists and especially the small farmers.

(11) *Agricultural machinery*.—Agricultural machinery such as pump-sets, power tillers, tractors, etc., are essential for any effective plan of agricultural development and Ayacut Development in the State particularly in the new project areas. The Agro-Industries Corporation recently set up will have to plan for assuring the supply of requisite machinery and for their efficient operation in cases where the machinery is hired out to farmers. The Corporation has also a vital role to play in tapping the under-ground water resources of the State by providing the rigs etc., necessary for this programme. Surveys would also have to be conducted of ground-water resources.

(12) *Promotion of research in the agricultural field and extension facilities*.—The importance of research has already been indicated. The need for effective extension organisations has been recognised but the machinery required is yet to be satisfactorily created to carry the message of scientific agriculture to every nook and corner in the villages of our State. The Zilla Development Boards created in this State recently should be able to show good progress in agricultural extension work.

### **Outlays and Physical Targets :**

9. The outlays on the four important sectors of agricultural and allied programmes are indicated below:—

1. Agricultural Production	..	..	10.15 crores
2. Minor Irrigation	..	..	48.15 crores
3. Co-operation	..	..	5.50 crores
4. Agro-Industries Corporation	..	..	3.00 crores.

10. With the above order of inputs envisaged in the Fourth Plan, the additional production potential that is ex-

pected to be created by the end of the Fourth Plan in the case of principal crops will be as shown below:—

Sl.No.	Items	Units	ACHIEVEMENTS IN			Targets for 1968-69	Base level of production year.	Targets for Fourth Plan 1969-70 and 73-74.
			Third Plan	1966-67	1967-68			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	Food-grains production.	lakh tons	20.70	6.08	9.88	11.82	67.47	34.92
2.	Oil seeds	.. lakh tons	3.09	1.13	1.57	2.58	11.00	3.96
3.	Sugarcane (gur)	.. lakh tone	10.18	3.00	3.00	3.00	97.50	191.70
4.	Cotton	.. lakh bales	0.96	0.08	0.13	0.22	1.49	0.70

11. The measure-wise break-up of the targets of additional production potential for foodgrains is given below:

Measure of Development	Unit	Physical target.	Additional Production (in lakh tons) Potential.
(1)	(2)	(3)	(4)
1. Major & Medium Irrigation (Utilisation)	Lakh acres	20.00	8.50
2. Minor Irrigation	.. Do.	16.77	7.13
3. Soil Conservation	.. Do.	4.80	0.20
4. Land Development	.. ..	..	..
5. Improved seed :			
(a) High yielding varieties	.. Lakh acres	29.26	18.38
(b) Others	.. Do.	15.00	0.70
6. Urban Compost	.. Lakh tons.	*4.14	0.01
Total		..	34.92

\*Cumulative. The additional production of urban compost during the plan will be only 1.00 lakh tons.

**Agricultural Production :**

12. The outlay for this sector in the Fourth Plan will be Rs. 10.15 crores as already indicated. The schemes have been drawn up in furtherance of the strategy envisaged for this sector. A brief description of the various sub-heads of development and the important schemes there under is given below:—

(1) *Improved Seed Programmes.*—The outlay on Improved Seed Programmes during the Fourth Plan period will be Rs. 181.81 lakhs. The following statement gives in brief the provision and expenditure during the Third Plan, the subsequent Annual Plans and the provision made for the Fourth Plan:

(Rs. in lakhs)

Sl. No.	Name of the Scheme	Third Plan Revised provision	Actual expenditure in the Third Plan	Revised provision for 1967-68	Actuals 1967-68	Provision for 1968-69	Provision for Fourth Plan 1969-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<b>Agricultural Production :</b>							
<i>Improved Seed Programmes :</i>							
1.	Seed Farms and Seed Stores ..	63.26	60.27	12.60	4.89	22.60	130.06
2.	Seed certification scheme and Establishment of Seed Testing Laboratories ..	4.39	3.11	0.75	0.64	0.85	11.75
3.	Distribution of Improved Seeds (subsidy)..	24.60	69.59	1.42	0.13	0.80	..
4.	Establishment of State Seed Corporation.	..	..	..	..	2.30	..
5.	Development of Seed Farms ..	10.50	5.05	..	..	..	..
6.	Establishment of New Seed Farms ..	..	..	..	..	..	40.00
	Total ..	102.75	138.02	14.77	5.66	26.55	181.81

13. It will be seen that a major portion of the outlay is ear-marked for Seed Farms, Seed Stores and the establishment of new Seed Farms. Provision has also been made for establishing Seed Certification and Seed Testing

Laboratories. Brief particulars of some of the important schemes are given below:—

(i) *Seed Farms.*—The scheme for production of foundation seed in the State Seed Farms will be continued in the Fourth Plan period. Foundation seed will be multiplied in selected seed villages and the registered seed so produced will be distributed to farmers. At present the area covered by the seed farms is 6,314 acres and is a programmed to extend this area by another 2,000 acres during the Fourth Plan.

(ii) *High yielding varieties.*—An area of 10.71 lakh acres is being covered at present with Seed from high yielding varieties and another 170.00 lakh acres with seed from improved local varieties. It is proposed to cover a total area of 29.26 lakh acres with high yielding varieties and in the seed requirements of high yielding varieties in the Fourth Plan is estimated to be 35,806 tonnes registering an increase of 257 per cent over the existing levels. In addition 8.00 lakh acres in the State will be covered with improved varieties of rice 5.00 lakh acres with improved millets, 2.00 lakh acres with improved pulses and 3.00 lakh acres under multiple cropping in Krishna delta besides 5.00 lakh acres of rice and 6.00 lakh acres under irrigated dry crops with improved varieties in the Nagarjunasagar Project area. The estimated improved seed requirements by the agriculturists will be 2,90,000 tonnes. For this purpose six additional Seed Processing Units, ten Seed Stores and godowns and two additional testing laboratories will be set up in the State. Five Seed Processing Units will be set up at Samalkot, Mathumeda, Adigoppula, Garladinne and Nellore. The New Storage Godowns will be located at Maruteru, Hyderabad, Guntur, Chittoor, Karimnagar, Samalkot, Adigoppula, Anantapur, Nizamabad and Nellore.

(iii) *Soil testing and laboratory facilities, etc.*—At present there are only three Soil Testing Laboratories in the State which can handle about 10,000 soil samples each per annum. Keeping in view the need as well as the heavy demand for the soil testing, seventeen Soil Testing Laboratories at a cost of Rs. 15.00 lakhs will be set up in the districts of Andhra Pradesh to ensure that there is at least one Soil Testing Unit in each district. Mobile Soil Testing

Vans will also be provided in the districts for quick field tests of soils with an outlay of Rs. 5.00 lakhs.

(iv) *Seed Testing Laboratory etc.*—There is only one Seed Testing Laboratory at present at Rajendranagar. This Laboratory is not able to cope up with the seed testing work. Two more Seed Testing Laboratories will therefore be established at Guntur and Chittoor during the Fourth Plan with an outlay of Rs. 7.8 lakhs. The following statement gives the physical target proposed to be achieved under this programme:—

<i>Sl. No.</i>	<i>Programme</i>	<i>Unit</i>	<i>Physical targets proposed.</i>
(1)	(2)	(3)	(4)
<b>1. Improved Seeds :</b>			
<i>(a) High Yielding Varieties :</i>			
	(i) to be distributed ..	.. thousand tonnes.	36.00
	(ii) area to be covered ..	.. lakh acres	29.26
<i>(b) Other improved varieties :</i>			
	(i) Quantity to be distributed	thousand tonnes.	290.00
	(ii) area to be covered ..	.. lakh acres	190.00

14. (2) Manures and fertilisers form an important input for higher agricultural production next only to irrigation, water and improved seed. The proposed outlay on manures and fertilizers in the Plan sector will be Rs. 5.00 lakhs. An integrated approach will be adopted for maximising the local manurial resources. Cattle dung, urine, farm waste, night-soil including urban waste, sewage and sullage resources of the State will be fully utilised during the Plan period. Green manuring practices will also be intensified and suitable cropping patterns also advocated for growing green manure crops without detriment to commercial or cereal crops.

15. As regards fertilizers, the quantities of nitrogenous fertilizers and phosphatic fertilizers distributed in the Third Plan in terms of Ammonium Sulphate and Super Phosphate were 17.09 lakh tonnes and 6.94 lakh tonnes res-

pectively. In view of the stress on package of practices, introduction of high yielding varieties and improved varieties, and proper manurial schedules in the State new enthusiasm for fertilizers has been created and the Andhra Pradesh cultivator has become acutely conscious of the benefits of the use of manures and fertilisers. The demand for fertilisers has therefore been rising year after year. The quantities of nitrogenous fertilizers and phosphatic fertilizers in terms of ammonium sulphate and super phosphate distributed during the period between 1966-67 and 1967-68 were 12.74 lakh tonnes and 6.52 lakh tonnes respectively. About 11.25 lakh tonnes of nitrogenous fertilizer and 7.5 lakh tonnes of phosphatic fertiliser will be distributed during the year 1968-69. Keeping in view the growing demand for fertilizers and the manurial schedules advocated for all crops, the targets for N, P and K for the Fourth Plan are as follows:—

N		P		K		
As. lakh tons	As. N lakh tons	As. lakh tons	S.P. lakh tons	As P205 lakh tons	As M. P. lakh tons	K. 20 lakh tons
14.00	2.80	8.40		1.40	1.50	0.76

Special stress is also being laid on rural and urban compost production and also sewage irrigation. It is proposed to produce and utilise 414,000 tonnes of urban compost annually in the State.

16. The importance of Plant protection in agricultural production need not be over emphasised. The outlay on Plant protection measures will be Rs. 174.04 lakhs in the Plan. This outlay will be utilised on the following schemes:—

	Rs. in lakhs	
1. Control of Pests and diseases of crops	..	151.00
2. Establishment of Laboratories for testing pesticides at Rajendranagar	..	4.20
3. Epidemic control of crop pests and diseases including aerial sprayings	..	18.84
Total	..	174.04

(i) *Control of Pests and Diseases of Crops:*

17. Prophylactic as well as control operations to combat pests and diseases on crops will be intensified. During 1966-67, 88.5 lakh acres were given protection against pests and diseases and the coverage during 1967-68 was 91.00 lakh acres. This programme will be intensified and 360.62 lakh acres will be covered during the Fourth Plan as suggested by the Government of India. The strategy to be followed includes supply of adequate quantities of pesticides required in the State, and providing full plant protection measures to crops. For this purpose mobile plant protection squads are being increased in the districts. Some of the important schemes under this programme are briefly indicated below:—

(i) *Strengthening of the Pesticides Laboratory at Rajendranagar.*—Quality control of pesticides to be used is very necessary. To ensure this a bio-testing unit is being added to the existing pesticide testing laboratory at Rajendranagar at a cost of Rs. 2.8 lakhs.

(ii) *Mobile Plant Production squad.*—At present there is only one mobile plant protection squad in each district. It is proposed to add one more squad to each of the twenty districts in the State at a cost of Rs. 35.00 lakhs to improve efficiency and services to be made available to agriculturists.

(iii) *Pilot Project on package of Plant Protection Practices for High Yielding Varieties.*—A Pilot Project for adoption and extension of Package of Plant Protection practices for high yielding varieties is proposed at a cost of Rs. 10.00 lakhs.

(iv) *Community spraying etc.*—Community spraying is becoming increasingly popular in the State. Andhra Pradesh has vast tracts where groundnut and paddy are grown each year. There is therefore need for community or aerial spraying to combat pests and diseases.

5. *Commercial Crops:*

18. Andhra Pradesh has several important commercial crops such as oil seeds, cotton, sugarcane, tobacco etc. Out of the gross cultivated area of 298.77 lakh acres in the State nearly 15.3 per cent is under oil seeds, 2.3 per cent under



cotton, 13 per cent tobacco etc. Groundnut is the most important crop among the oil seeds closely followed by castor. Cotton also has high future possibilities in this State. During the Third Plan cotton production in the State increased from 1.14 lakh bales to 2.00 lakh bales. There is however need to introduce better quality varieties of cotton such as long and medium staple cottons in the State to maximise cotton production.

19. Sugarcane production reached 10.77 lakh tonnes (gur) in the State by the end of the Third Plan. Sugarcane is becoming increasingly popular in the State and there is need to further improve the yield and extents of cultivation under this crop.

20. Tobacco is another very important commercial crop of the State, earning valuable foreign exchange to the country. Andhra Pradesh stands first in the production of flue-cured Virginia tobacco which is cultivated in the districts of Krishna, East Godavari, West Godavari and Guntur quality is a vital factor for maximisation of the export potential of tobacco.

21. Keeping these factors in view a Master Plan for the development of all commercial crops is being drawn up for adoption in the Fourth Plan. The outlay on the development of commercial crops in the State during the Fourth Plan will be Rs. 151.37 lakhs. The important schemes under the development of commercial crops are briefly indicated below:—

(i) *Sugarcane Development Schemes including Pilot Project.*—The outlay on this scheme will be Rs. 41.30 lakhs. It is proposed to start a sugarcane liaison farm at Nizamabad. Four demonstration farms will also be established at Amadalavalasa, Chagallu, Palacole and Charlapalli. A production target of 117 lakh tonnes of cane representing 20 per cent increase over the base level production has been fixed as against 20 per cent increase suggested by the Government of India for sugarcane. It is envisaged that the additional production at the end of the Fourth Plan in the State will be 19.70 lakh tonnes over the production of 97.5 lakh tonnes anticipated in the year 1968-69 planning for an increase of 22 per cent. Intensive sugarcane crop development work will be taken up on 3 lakh

acres in the State during the Plan. Emphasis will be mainly on improving the productivity of cane per acre.

(ii) *Co-ordinated Cotton Development Scheme including Package Programme.*—The proposed outlay on this scheme will be Rs. 15.00 lakhs. An additional production of 70,000 bales is targetted for the Plan period. Package practices will be advocated under this programme. Several improved varieties will also be introduced in the State. Coconut, jute and mesta are important from the point of export and import substitution. Two schemes for their development have therefore been included in the Plan with an outlay of Rs. 9.90 lakhs for coconut and Rs. 2.95 lakhs for jute and mesta. Two Pilot Projects Schemes, (1) introduction of cotton in Tungabhadra Project area in the Rabi season, and (2) introduction of sea island cotton under wells in Cuddapah and Chittoor districts will also be taken up in the Plan with a total outlay of Rs. 10.00 lakhs. The physical targets under this programme will be as follows:—

1. Package Scheme in cotton in rice fallows	..	50,000 bales.
2. Package schemes in assured rainfall areas of Guntur and Adilabad districts	..	10,000 bales.
3. Improved seed under co-ordinated cotton development scheme	..	10,000 bales.
		<hr/>
	Total	.. 70,000 bales.
		<hr/>

(iii) *Tobacco Development Scheme.*—The outlay on this scheme will be Rs. 15.11 lakhs. The programme envisages the creation of an additional production potential of 30 million Kgs. of flue-cured virginia and natu tobacco. Additional area to an extent of 50,000 acres will also be brought under this crop in Nellore, Kurnool, East Godavari, West Godavari and Krishna districts. An additional 27 million Kgs. of flue-cured virginia and natu tobacco will also be obtained by intensive development and adoption of package schemes for flue-cured Virginia and natu tobacco.

(iv) *Oil seeds development.*—The outlay on this scheme will be Rs. 57.11 lakhs. The programme envisages

additional production of 3.96 lakh tonnes of oilseeds as given below by adoption of package programmes in irrigated areas and assured rainfall areas. The use of high yielding varieties will also be stressed during the Plan:

1. By distribution of improved seed and adoption of improved agronomic practices in the districts of Kurnool, Chittoor, Guntur and Krishna	..	3.14 lakh tonnes.
2. Package programme (ground nut)	..	..
(a) Assured rainfall areas	..	.. 0.20 lakh tonnes.
(b) Double cropping	..	.. 0.55 lakh tonnes.
Seasamum	..	.. 0.07 lakh tonnes.
		Total .. 3.96 lakh tonnes.

#### 6. *Agricultural Education and Agricultural Research :*

22. The proposed outlay during the Fourth Plan on agricultural education extension and research will be Rs. 386.00 lakhs. The outlay on agricultural education and extension will be Rs. 200.00 lakhs and the outlay on agricultural research will be Rs. 176.00 lakhs.

23. Agricultural education and agricultural research in the State is the responsibility of the Andhra Pradesh Agricultural University which came into existence in June, 1964 as a Plan Scheme. During the Third Plan an outlay of Rs. 99.00 lakhs was provided by the State in addition to an outlay of Rs. 51.00 lakhs by the Centre for the University. At present, the University is receiving a pattern of assistance similar to the assistance given by the University Grants Commission to traditional Universities. The University will however need matching grants under the Plan by the State Government in addition to the assistance given by the Indian Council of Agricultural Research.

(i) *Schemes under the Agricultural University.*—New Schemes under agricultural education and extension include development of farm research facilities in the agricultural and veterinary colleges in the State, recreation facilities, strengthening of the three agricultural colleges in the State *etc.* The new schemes under agricultural research include development of regional extension

units at Rudrur, Warangal, Anantapur, Nandyal, Maruteru and Anakapalli, establishment of a pesticides Residual Analysis Laboratory at Tirupati, establishment of a grain quality laboratory etc. It is hoped that the strengthening of the Agricultural University, expansion of its research activities and the extension of the education programmes launched by the University will play a key role in helping the State to effect a break through in Agriculture.

#### 7. *Extension Training and Farmers' Education:*

24. The outlay on extension training and farmers' education will be Rs. 22.2 lakhs. These schemes will be under the control of the Director of Agriculture. It is proposed to establish an agricultural school in addition to providing training to agricultural officers and field staff in Plan Protection Methodology.

#### 8. *Agricultural Statistics:*

25. Certain surveys require to be conducted for preparation of agricultural plans. The special collection of certain statistics is also necessary for this purpose. Hence Rs. 5.36 lakhs have been provided for this programme.

#### 9. *Intensive Cultivation Programme:*

26. This programme covers Intensive Agricultural Area Programme and Intensive Agricultural District Programme, in West Godavari district and Pilot Project on Package of Plant Protection practices on high yielding varieties with a total outlay of Rs. 338.47 lakhs. Brief details of the schemes under this programme are given below:—

(i) *Intensive Agricultural District Programme.*— This programme is at present being implemented in West Godavari district of the State. The scheme was initiated in 1960-61 with the objective of demonstrating the feasibility of achieving substantial increase in the productivity of crops by the package approach of improved practices along with assured irrigation and the minimisation of natural hazards. The crops chosen originally were paddy, sugarcane, chillies, vegetables, fruits, tobacco, groundnut and cotton. During the Third Plan composite demonstra-

tions taken up involving package of practices including optimum application of the recommended inputs, yielded an increase of 26 per cent in the yield rate of paddy and about 16 per cent and above in respect of other crops compared to the yields from traditional methods of cultivation adopted by ryots. Another notable achievement has been the increase in the second crop area in the district by about 50,000 acres as a result of introduction of early planting of crops. The objective in the Fourth Plan will be to continue this programme in the West Godavari district with cent per cent coverage of all irrigated crops.

(ii) *Intensive Agricultural Area Programme:*

27. The outlay on this programme will be Rs. 220.6 lakhs. This is a modified form of the Intensive Agricultural District Programme. This was introduced in ten districts in the year 1963-64 in East Godavari, Krishna, Guntur, Nellore, Chittoor, Kurnool, Nizamabad, Warangal, Karimnagar and Mahaboobnagar covering in all 116 reorganised blocks. The crops selected were paddy, sugarcane, banana, groundnut, vegetables, fruits and cotton and the targets during the Third Plan were to cover 40 per cent, 70 per cent and 100 per cent of the areas for the above crops during 1963-64, 1964-65 and 1965-66 years respectively. As a result of this programme, there was 15 to 33 per cent increase in yield in paddy, 25.7 per cent increase in jowar and 29 per cent increase in the yields of sugarcane. This programme will be continued during the Fourth Plan in the districts mentioned above, the objective being 100 per cent coverage of all irrigated crops.

(iii) *Pilot Project on Package of Plant Protection Practices on high yielding varieties:*

28. The outlay on this scheme will be Rs. 10.00 lakhs. Full Plant Protection is a must for all high yielding varieties. A Pilot Project Scheme has therefore been drawn up to demonstrate the benefits of package of practices for plant protection for such high yielding varieties.

12. *Miscellaneous Agricultural Programmes:*

29. A sum of Rs. 131.75 lakhs has been provided for various miscellaneous agricultural improvement schemes. These include apart from strengthening the departmental

staff, establishment of research centres in major river valley projects, etc.

*Agro-Industries Corporation :*

30. The Agro-Industries Corporation Limited has been set up with the objective of promoting agro-industries and other ancillary enterprises in the State. The State has 51 per cent investment and the Centre 49 per cent in the Corporation. The authorised capital of the Agro-Industries Corporation Limited is Rs. 2.00 crores and it has been fully subscribed already. It is proposed to raise the authorised capital initially to Rs. 4.00 crores and to about Rs. 8-9 crores by the end of the Fourth Plan. The programmes envisaged by the Corporation will broadly be as follows:

- (a) Reclamation of land by earthmoving machinery such as tractors.
- (b) Sinking of tube-wells and bore-holes.
- (c) Miscellaneous land development activity.
- (d) Hire purchase of equipment—(i) tractors and farm implements; and (ii) pumpsets.
- (e) Modernisation of processing machinery.
- (f) Establishment of Food Processing Plants.
- (g) Organisation of workshops and services facilities.
- (h) Miscellaneous trading activities such as meeting the demands for services and supplies in the Agro-Industrial sector.

31. With the Corporation discharging the above functions, it is proposed to transfer the work of the existing Agricultural Engineering Branch of the Office of the Director of Agriculture to this Corporation so as to have a single unified agency for this work. Equipment in the shape of rigs etc., belonging to the State Government is also proposed to be transferred to the Agro-Industries Corporation Limited, to enable it to launch a vigorous programme of agricultural development. In addition, the following outlays provided in various sectors of the Fourth Plan totalling up to Rs. 3.12 crores will be made available to the Agro-Industries Corporation Limited, as share capital to

pursue the strategy and objectives of the respective sectors:—

(Rs. in crores.)

*Minor Irrigation :*

(a) Purchase of Power drills and rock blasting units .. 1.02

*Development of Ayacut :*

(b) Purchase of bulldozers under Nagarjunasagar Project .. 1.75

(c) Purchase of bulldozers under Pochampad Project .. 0.25

(d) Land Development and purchase of machines .. 0.10

Total Rs. .. 3.12 crores

32. With corresponding share capital contribution by the Centre, the total subscribed capital of the Agro-Industries Corporation will go up to Rs. 8-9 crores in the Fourth Plan period.

## MINOR IRRIGATION

1. Irrigation is the most important input for higher agricultural production. Andhra Pradesh is an agricultural State with 70 per cent of its population dependent on agriculture. But nearly 41 per cent of the population of the State in 56 per cent of the total area of the State live in chronically drought affected areas. The long term strategy to combat the ever recurring drought in the State has therefore necessarily to give high priority to Irrigation. The assured irrigated area has to be stepped up in the State to ensure that the vagaries of the monsoon do not inflict misery on the vast masses of population dependent solely on rainfed Agriculture. There is also an imbalance in the irrigated extents of land in the Rayalaseema, Telangana and Andhra areas of the State. One of the objectives under the Irrigation sector is therefore a reduction of these regional imbalances. In order to determine priorities a study of the several districts of Andhra Pradesh analysing categories of assured rainfall, optimum rainfall, sub-optimum rainfall and distress or little rainfall along with the indicator of net area irrigated to net area sown has been done. Further 71 taluks have been identified as chronically drought affected, which will require special attention in the irrigation sector. These considerations and problems have been kept in view while drawing up plans for the irrigation sector in the Fourth Five-Year Plan. The general strategy has been to maximise net irrigated areas in the State while achieving balanced regional development in irrigation as far as possible. The tapping of ground water resources of the State has been given priority in the Minor Irrigation Sector. The Agro-Industries Corporation which has been set up recently will also be utilised for providing the machinery such as rigs, *etc.*, necessary for Minor Irrigation Works.

2. Minor Irrigation has thus a major role to play in the improvement of the efficiency of Agricultural Production in the State. As compared to Major and Medium Irrigation. Minor Irrigation Projects have the advantage that the work can be completed quickly and benefits can also be utilised quickly.



3. The Minor Irrigation Programmes in this State are implemented by the Director of Agriculture, Chief Engineer (Minor Irrigation), Chief Engineer (Panchayati Raj) and the Registrar of Co-operative Societies. The Chief Engineer (Minor Irrigation) is in charge of the maintenance of tanks with an ayacut of 100 acres, and above in Telangana and 200 acres and above in Andhra. The maintenance and restoration of tanks with a lower ayacut was transferred to the control of Panchayati Raj Institutions in the year 1961-62. The Chief Engineer (Minor Irrigation) however is in-charge of construction of tanks with an ayacut of more than 25 acres, while the Chief Engineer (Panchayati Raj) is in-charge of tanks below that ayacut limit. Provision is being made in this sector for contributions to debentures floated by the Land Mortgage Bank, so that long term loans are made available to the agriculturists.

4. There are several small minor irrigation works in the State which can be completed within a single agricultural working season and which can help in the maximisation of food production in the State. Keeping this objective in view, the State Development Board has been making allocations to the Zilla Development Boards for such productive works subject to the following conditions:—

- (1) the work should be such as can be completed within one season so that the benefits from it would flow from the very next season;
- (2) the beneficiaries should come forward with offers of contribution towards the cost of the work commensurate with their capabilities; and
- (3) the work should be of such a nature that it cannot be fitted into the District Plan by either dropping some other work of lesser priority or by suitable re-appropriation *etc.*

5. It will be seen that these works will be financed partly by public contribution, the minimum public contribution for these works being 25 per cent. A sum of Rs. 50 lakhs is expected to be utilised for this programme during the year 1968-69. The outlay for works of this kind

to be sponsored and utilised by the various Zilla Development Boards in the State will be Rs. 2.5 crores during the Fourth Plan period.

6. The following table will show the outlay incurred and the physical targets achieved during Second and Third Plan periods and the area brought under irrigation by the departments implementing the programmes.

(Rs. in lakhs).

Department	SECOND FIVE YEAR-PLAN				THIRD FIVE YEAR-PLAN.			
	Outlay proposed.	Expenditure incurred.	Target	Achievement.	Outlay proposed.	Expenditure incurred.	Target	Achievement.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Chief Engineer (Minor Irrigation) ..	494.82	434.61	285.00	319.00	1,808.50	1,728.89	561.60	471.00
Chief Engineer (Local Administration) ..	48.41	48.41	..	..	342.00	289.50	102.78	88.83
Board of Revenue (New Well Subsidy Scheme) ..	223.77	218.39	21.77	22.80	447.00	483.57	169.42	169.42
Director of Agriculture ..	119.14	110.08	..	..	228.50	391.82	128.94	86.20
C. D. Programme ..	..	..	..	..	..	..	242.06	187.80
	886.14	811.47	306.77	341.80	2,826.00	2,893.78	1,204.80	1,003.25

It is worth noting that the additional ayacut (including stabilised area) under M.I. sources which was 3.41 lakh acres during the Second Plan period rose to 10.03 lakh acres during the Third Plan period.

### **Review of Programmes for the years 1968-69 :**

#### *Chief Engineer (Minor Irrigation):*

7. The programmes relating to the exploitation of surface water resources continues to be implemented by the Chief Engineer (M.I.) and the Chief Engineer (P.R.) while programmes relating to utilisation of ground water resources are the responsibility of the Director of Agriculture, and the Registrar of Co-operative Societies. As against an outlay of Rs. 5.25 crores an irrigation potential of 104 lakh acres of new ayacut and 1.05 lakh acres of stabilised ayacut was created in 1966-67. On account of the reduction of the size of the State's Plan for 1967-68, an allotment of only Rs. 2.70 crores could be made available for Chief Engineer (M.I.) Against this an expenditure of Rs. 2.59 crores was incurred. An additional new irrigation potential of 0.65 lakh acres was created and an extent of 1.14 lakh acres was stabilised.

8. In the current year, a sum of Rs. 2.75 crores was allotted to the Chief Engineer (M.I.). The intention was to ensure that works which are in an advanced stage of execution should be pushed through with a view to completing them as early as possible. The target for 1968-69 is to create 32,000 acres of additional potential and to stabilise an extent of 69,000 acres.

#### **Chief Engineer (Panchayati Raj) :**

9. In 1966-67, an expenditure of Rs. 26.32 lakhs was incurred and with this outlay an additional ayacut of 5,090 acres was stabilised. The expenditure incurred in 1967-68 is more than in 1966-67 being Rs. 32.75 lakhs. The area stabilised in 1967-68 also improved slightly being 9,000 acres. The outlay ear-marked for 1968-69 is Rs. 30 lakhs.

**Director of Agriculture :**

10. The Director of Agriculture is implementing the State Tube-wells Scheme from the year 1966-67. Under this programme, 10 tube-wells were sunk during 1966-67 and it was estimated that an area of 100 acres was brought under irrigation. The expenditure incurred in 1967-68 was Rs. 2.55 lakhs under the State Tube-Wells Scheme. Sixteen wells were excavated bringing an additional area of 160 acres under irrigation. The outlay provided in the current year's Plan is Rs. 28 lakhs.

**Board of Revenue :**

11. Under the Liberalised Loan-cum-Subsidy Scheme, the Board of Revenue disburses loans through Panchayat Samithis in Agency and Tribal Blocks. In 1966-67, the Board of Revenue released an amount of Rs. 58.73 lakhs for distribution as the second instalment to enable the ryots to complete the wells sanctioned in 1965-66. It was estimated that an additional area of 7,500 acres was brought under irrigation during 1966-67. The entire provision of Rs. 2.25 lakhs made in 1967-68 was adjusted to the funds of the Zilla Parishads of the districts where Tribal Blocks are located for the sanction of the first instalment of loan for wells. An amount of Rs. 4.50 lakhs is provided in the 1968-69 Annual Plan. With this outlay, the second instalment of loans to those wells will be sanctioned, besides giving fresh loans for sanctioning wells.

**Registrar of Co-operative Societies :**

12. The Central Co-operative Land Mortgage Bank is disbursing loans to cultivators for sinking tube-wells, ordinary wells, and for installation of pumpsets. An expenditure of Rs. 847.43 lakhs was incurred in 1966-67. The Bank disbursed loans for the purchase of 7,154 oil engines and 3,279 electric motor pumpsets and for digging 11,414 ordinary wells. It was estimated that an additional area of 95,687 acres was brought under irrigation during 1966-67. The amount spent in 1967-68 towards this programme was Rs. 1,025.36 lakhs towards digging 1,749 tube-wells, 14,495 ordinary wells, and for the installation of 8,542 oil engines and 3,182 electric motor pumpsets. The outlay provided in 1968-69 is Rs. 1,300.00 lakhs. With this

outlay it is proposed to dig 9,000 wells and also to distribute loans for purchase of 7,000 oil engines and 15,000 electric pumpsets.

#### **Fourth Five-Year Plan:**

13. As stated in the general approach, one of the major objectives in this sector is to minimise the differences in the levels of development between different regions in the State. It is in relation to the achievement of this objective, that Minor Irrigation Programmes have a greater role to play.

14. Under the Major and Medium Irrigation, the three important spill-over schemes viz., Nagarjunasagar, Pochampad and Tungabhadra High Level Canal Stage II are in the three different regions of the State and confer benefits on areas where the percentage of irrigation is now low. Minor irrigation has a greater role than Major or Medium Irrigation to play in reducing the regional disparities in the Irrigation Sector. Even under Minor Irrigation, higher priority would have to be given for ground-water because:—

- (a) experience has shown the unreliability of minor irrigation tanks during periods of adverse seasonal conditions; and
- (b) the areas which now have lesser percentage of irrigation are likely to benefit more from exploitation of ground water than by Minor Irrigation tanks.

15. Keeping this in view, a sum of Rs. 26.11 crores is proposed to be utilised on exploitation of ground-water resources in the State while the balance of Rs. 22.04 crores on surface water resources. The State has also established an Agro-Industries Corporation as advance action for the Fourth Plan and the exploitation of the ground-water resources of the State will be facilitated by the facilities such as rigs *etc.*, that will be available with the Government.

16. The total outlay in the States Fourth Plan for Minor Irrigation will be Rs. 48.15 crores. The break-up

of this allocation for individual schemes together with the physical targets proposed are given below:—

*Surface wells*

<i>Scheme</i>	<i>Provision Rs. in crores.</i>	<i>Addl. gross area likely to be irri- gated. (Lakh acres).</i>
(1)	(2)	(3)
<b>Surface Water Resources :</b>		
1. Restoration of M. I. Works, Chief Engineer (M. I.), .. ..	16.77	5.20 (New)
2. Restoration of M.I. Sources under P.R. Institutions. Chief Engineer (L.A.) ..	3.40	1.26 (Stabilised)
3. Special Public Contribution works of Zilla Development Boards .. ..	2.50	..
<b>Exploitation of Ground-Water Wells :</b>		
1. Liberalised loans from subsidy schemes in Tribal areas (Board of Revenue) ..	0.60	0.07
2. Tube-wells scheme by (C.E., M.I.) ..	1.90	2.20
3. Purchase of Power drills, rigs, etc. (Director of Agriculture) .. ..	2.93	..
4. Loans for sinking of wells, supply of oil engines, electric motor pumpsets (R.C.S.)	16.05	6.30
5. Area Development Schemes (R.C.S.) ..	4.00	3.00
	48.15	16.77 (New)
		3.60 (Stabilised)

**Surface water resources :**

17. The outlay on this head of development is Rs. 22.67 crores. On the basis of the survey conducted during 1963-64, it was assessed that there were altogether 42,000 M.I. Sources (with an ayacut of less than 25 acres) requiring restoration in the State. These sources will have a

total ayacut of 9.12 lakh acres. So far out of this potential of 9.12 lakh acres to be stabilised by restoring the sources, tanks having a total ayacut of 57,000 acres have already been restored. During the Fourth Plan period, it is proposed to restore another 10,000 tanks. The Minor Irrigation programme of the Public Works Department includes formation of small anicuts across the several streams in the State, construction of new tanks and the restoration of tanks to Public Works Department standards. An outlay of Rs. 16.77 crores has been earmarked for this purpose. With this outlay, it has been proposed to create an irrigation potential of the order of 5.20 lakh acres besides stabilising the existing ayacut of 1.43 lakh acres. The works will be generally taken up in areas, keeping the objective of regional balanced development in view.

### **Ground Water Exploitation :**

18. With a view to intensifying agricultural production in the State through utilisation of ground-water resources, a Package Project envisaging the construction of 7,500 production tube-wells (5,000 in the delta and 2,500 in the uplands in West Godavari, East Godavari, Krishna and Guntur districts) has also been formulated. This project however does not form part of the Fourth Plan, due to constraint of resources in the State Sector. The Project has been submitted to the Government of India for special assistance from international agencies if necessary. The Government have however sanctioned the construction of 88 exploratory tube-wells in order to collect valuable scientific data required for the successful implementation of the Package Programme. A provision of Rs. 37 lakhs has been provided in the Plan towards this scheme. In addition to this, a provision of Rs. 53 lakhs has also been made for undertaking the construction of production tube-wells. In addition an allotment of Rs. 1 crore has been made for lift irrigation schemes in the State.

19. As mentioned earlier the equipment necessary for excavation works such as power drills, rock-blasting equipment, *etc.*, was under the control of the Director of Agriculture and provision for it was being made by the Director of Agriculture under the head 'Minor Irrigation'. With the establishment of the Agro-Industries Corporation



however, all this work has been taken over by the Corporation and the amounts provided for power drills, rock-blasting equipment *etc.*, amounting to a total of Rs. 104.29 lakhs will be utilised for making contribution on behalf of the State Government to the Corporation. Since an equal contribution will be made by the Government of India and since the Corporation is in a position to obtain assistance from other financing agencies like banks *etc.*, the physical programme that can be done will now be much more.

### **Ground-water Survey :**

20. As has already been mentioned, one of the aims of the M.I. programme has been the exploitation of ground water resources especially in the chronically drought affected areas in the State. The Director of Agriculture is implementing a scheme prepared on the guidelines given by the Government of India at an estimated cost of Rs. 27 lakhs out of which it is expected that a sum of Rs. 3 lakhs will be spent by the end of 1968-69. The scheme envisages extensive and intensive survey in the districts of Visakhapatnam, Mahboobnagar, Anantapur, Chittoor, Kurnool, Cuddapah and the seven taluks of Gondwana formations in Adilabad, Warangal, Karimnagar and Khammam districts of Telangana. This would cover an extent of 2,400 square miles under extensive survey and 2,800 square miles under intensive survey. However an amount of Rs. 90 lakhs is now provided so as to extend the scope of the survey to the whole state and to expedite the work.

### **Co-operative Department :**

21. The activities of the Co-operative Department under the Minor Irrigation Programmes are (i) grant of long term loans to the agriculturists by making contributions towards debentures floated by the Land Mortgage Banks. The Andhra Pradesh Land Mortgage Bank has drawn up an impressive programme of lending Rs. 95.00 crores during the Fourth Plan period, keeping in view the needs of the State and also the National Plan for this sector. The share of the State Government towards debenture participation will be Rs. 15.20 crores. Besides, this, an amount of Rs. 85 lakhs is required towards payment of sub-

sidies in certain areas. Thus the total amount required to be provided in the Plan will be Rs. 16.05 crores. This amount has been provided in the Plan. With this outlay, it is proposed to advance loans for sinking 72,500 wells and for the installation of 46,250 oil engines and 87,000 electric motors besides giving loans to the tune of Rs. 14.50 crores towards rural electrification. About 6,30,000 acres will thus be brought under Irrigation in the Minor Irrigation sector.

#### **Area Development Schemes :**

22. The State Development Board in the State and the Zilla Development Boards which are responsible for the implementation of Plans of agricultural production etc., at the district level are taking active steps for implementing Area Development Plans in the Minor Irrigation Sector. The Land Mortgage Bank has estimated that Area Development Schemes with a minimum outlay of Rs. 40 crores will be implemented by the various Zilla Development Boards in the State to create an Irrigation potential of 3 lakh acres during the Fourth Plan period. On the basis of 10 per cent contribution by the State Government the outlay to be provided in the Plan for this purpose will be about Rs. 4 crores, which has been made in the Plan.

## SOIL CONSERVATION AND LAND DEVELOPMENT

1. Soil Conservation is essential for the preservation and restoration of soil fertility which also helps in the conservation of water. Most of the dry lands in this State are in undulating terrains and are subjected to severe soil erosion losses. Soil Conservation programmes have therefore to be taken up in the catchment areas to reduce the run off, soil erosion losses and to conserve the precious water in soil. As these schemes are usually labour intensive, additional employment will also thus be generated in the rural sector. A beginning was therefore made in protective conservation in the First Plan period in this State, and the tempo was increased in the Second Plan. However during the first two Plan periods, an area of only about 0.80 lakh acres was covered by Soil Conservation. The activities were stepped up in the Third Plan period and an area of 1.88 lakh acres was brought under Soil Conservation. The areas brought under Soil Conservation measures during 1966-67 and 1967-68 were 72,830 acres and 69,082 acres respectively, while the target set for the current year is 80,000 acres. A study of the areas already protected with Soil Conservation measures has shown that such measures are very beneficial and help in increasing the productivity of land.

2. The objective in the Fourth Plan period in this sector is to take up Soil Conservation measures over 4.50 lakh acres of land in the State, giving priority to drought affected areas. A provision of Rs. 300.00 lakhs has been provided for this purpose. A sum of Rs. 7.00 lakhs has also been provided for the continuance of the Soil Conservation Training Centre.

### **Soil Conservation under Forest Department :**

3. Coffee is an effective soil binder because of its bushy growth and coffee cultivation is useful as a means of Soil Conservation in this State. It is therefore proposed to take up coffee cultivation in the agency districts of this State to conserve vast areas of land. A total area of 1,171½ acres

will be brought under coffee in the agency areas of the East Godavari and Visakhapatnam districts. This will require an outlay of Rs. 40.00 lakhs, and provision has been made in the Plan.

4. Soil erosion posed a special problem in the drought affected areas of the State such as Rayalaseema *etc.* Soil Conservation programmes have therefore to be launched on a large scale in these areas. A Plan for drought affected areas specially drawn up to tackle drought makes a provision of Rs. 2.00 crores for protective programmes under this sector.

#### **Land Development :**

5. The outlay of Rs. 10.00 lakhs on Land Development Schemes during the Fourth Plan is meant for the purchase of tractors and as such this will be transferred to the "Agro-Industries Corporation."

## AYACUT DEVELOPMENT

One of the basic objectives of the Fourth Five-Year Plan is the early completion of spill-over schemes and the full utilisation of the potential created thereby. Large sums of money are being spent in creating new irrigation facilities in this State. It is necessary that the irrigation potential created is utilised fully. An additional irrigation potential to the tune of 20.51 lakh acres will be created during the Fourth Plan period. Out of this, the irrigation potential under the Nagarjunasagar Project area will itself be 11.04 lakh acres. The irrigation potential in the other important projects will be as follows:—

Pochampad Project	..	..	.. 5.70 lakh acres.
Tungabhadra High Level Canal Stage-I			.. 1.19 lakh acres.
Tungabhadra High Level Canal Stage-II	..		1.37 lakh acres.
		Total	.. 8.26 lakh acres.

2. A potential of 3.50 lakh acres created up to the end of the Third Plan has yet to be utilised. Thus the total potential to be utilised will be about 24.51 lakh acres out of which a potential of 2.20 lakh acres will be created in the last year of the Fourth Plan and as such the net ayacut to be developed in the Fourth Plan will be 21.81 lakh acres.

3. The total irrigation potential created in the three Plans up to the end of the Third Plan was only 9.65 lakh acres while the potential to be created in the Fourth Plan itself will be 20.51 lakh acres. In this context the Ayacut Development Programmes assume the utmost importance.

4. Generally the schemes provided under this head of development are the localisation of ayacuts, the acquisition of land for and construction of ayacut roads and field channels, the organisation of special agricultural research programmes, soil survey and production of improved seed, provision of mechanical equipment such as bulldozers, etc., for reclamation of land, contribution to

the debentures to be floated by the Land Mortgage Banks to provide special credit facilities required for this purpose in the Project areas and special animal husbandry programmes for feeding, breeding and upgrading of agricultural livestock.

5. At the time of formulation of the Third Plan, it was anticipated that various programmes needed for the development of ayacuts under the new irrigation projects would be provided by the departments concerned in their own departmental Plans and that the allocations necessary would be provided within the respective ceiling. It however became apparent very early during the Third Plan period that these expectations were not being realised due to the preoccupation of the department with their own schemes in other areas. It was therefore decided that a separate allotment would be indispensable for the development of ayacuts and that the funds required for various programmes for such development should be separately provided for, although the execution of such programmes would continue to vest with the departments concerned. Accordingly a separate provision of Rs. 2.08 crores was made for these schemes when the plan was revised in 1963 to Rs. 312.66 crores. The expenditure incurred to the end of 1964-65 was however very meagre being only Rs. 28.52 lakhs, due to foreign exchange difficulties in the procurement of machinery, legal complications in the acquisition of land *etc.* In 1965-66 however the tempo of activities was stepped up and an amount of Rs. 225.85 lakhs was finally spent on ayacut development during the Third Plan period.

6. During 1966-67, the outlay for ayacut development programme was Rs. 244.70 lakhs out of which the expenditure was Rs. 216.82 lakhs. The provision made for ayacut development in 1967-68 was Rs. 282.96 lakhs against which an expenditure of Rs. 113.05 lakhs only was incurred due to delay in the acquisition of machinery.

7. The outlay for ayacut development in 1968-69 is Rs. 250.00 lakhs. A large portion of this provision made in 1968-69 is for the purchase of bulldozers, and the State's participation in the special debentures floated by the Land Mortgage Banks. Special development programmes are being taken up particularly under major irrigation projects

like the Nagarjunasagar Project, Tungabhadra Project High Level Canal, Rajolibanda Diversion Scheme, Pochampad and Kadam Projects.

8. The total outlay on schemes of ayacut development during the Fourth Plan will be Rs. 13.38 crores. The department-wise allocation of the above outlay is shown below :—

(Rs. in lakhs)

<i>Department</i>	<i>Outlay proposed</i>
1. Director of Agriculture .. .. .	382.00
2. Agricultural University .. .. .	10.39
3. Director of Animal Husbandry .. .. .	36.00
4. Registrar of Co-operative Societies .. .. .	400.00
5. Inspector General of Registration and Stamps .. .. .	10.00
6. Chief Engineer (Nagarjunasagar) Canals .. .. .	170.00
7. Chief Engineer (Nagarjunasagar Canals) (Ayacut Roads) .. .. .	200.00
8. Chief Engineer (Major Irrigation) .. .. .	100.00
9. Revenue staff for Ayacut Development .. .. .	30.00
Total .. .. .	1,338.39

9. The important programmes and schemes are briefly indicated below :

*Agriculture*:—The major problem is the preparation of land, hitherto cultivated as dry land for wet cultivation consequent on irrigation water being made available for such land. It is expected that dry land with less than 2 per cent slope can be converted by manual labour but land with more than this slope would require machine reclamation. It is anticipated that about 1/5th of the total localised area on the left bank canal and 1/10th of the localised area on right bank canal require machine reclamation. The procurement of machines was taken up during the Third Plan period but only 101 machines could

be obtained upto the end of 1967-68. Besides this, 18 old units were also pressed into service. Thus in all 119 units are at present functioning in the Nagarjunasagar Project area. These units have so far developed 52,000 acres of land. It is expected that the area that will have to be developed by machinery would be about 35,000 acres per annum. As against this the capacity of the existing 119 units is about 24,000 acres per annum. Since there is thus a shortage of machinery, it has been proposed to purchase additional units during the Fourth Five-Year Plan period and a provision of Rs. 1.75 crores has been earmarked in the Plan for this purpose. Since these will be acquired by the Agro-Industries Corporation this amount will be utilised for share capital contribution to the Agro-Industries Corporation.

#### **Scheme on Soil Survey under Nagarjunasagar Project.**

10. Soil survey is an essential requirement to ascertain the suitability or otherwise of land for irrigation. Besides this, the determination of soil fertility by soil testing is also important to work out manurial schedules. A semi-detailed soil survey was therefore undertaken in the entire ayacut area of the Nagarjunasagar Project and detailed soil maps of the entire area have been prepared based on which the localisation of the ayacut is being done. However, it is necessary that detailed soil fertility maps of each village are also prepared to develop appropriate manurial schedules for homogenous tracts of land. The soil testing and soil survey scheme will therefore be continued in order to attend to the work of soil testing, the preparation of fertility index maps for each unit and to collect the required data on the water table *etc.* There are at present three laboratories one on the left canal at Miryalguda, one at Guntur on the right canal and a central laboratory to take up special analysis at Bapatla. The programme of work for each year in the laboratories would be as follows:

- |  |       |                    |
|--|-------|--------------------|
| 1. Collecting of soils and analysis            | ..    | .. 20,000 samples. |
| 2. Preparation of village fertility index maps | ..    | .. 300             |
| 3. Well-water analysis                         | ..    | .. 15,000 samples. |
| 4. Water-table studies                         | .. .. | .. 600 villages.   |

A provision of Rs. 12.00 lakhs has been made in the Plan for the above scheme,



*Seed Farms:*

11. With the advent of irrigation under Nagarjunasagar Project, new cropping patterns are being developed and improved seeds are to be supplied to this area. To meet the requirement of improved seeds three seed farms—two under the right bank canal at Adigoppula and Jangameswaram and one under the left bank canal in Miryalguda have been established. These seed farms were started during 1967-68 and require to be developed. A quantity of 5,000 quintals of paddy, 5,000 quintals of hybrid jowar and bajra are likely to be produced each year as nucleus seed on these farms for further distribution in the ayacut area. A sum of Rs. 50.00 lakhs is provided in the plan for the development of these seed farms.

*Project Development and Demonstration Farms:*

12. Basic research on developing suitable cropping patterns, agro-economic practices which would fit in with the change over from dry farming to irrigated farming etc., is being conducted at the agricultural research stations situated at Garikapadu and Amaravati. The station at Garikapadu is tackling the problems presented by the red soils of the left bank while the station at Amaravati is attending to the problems of black soils on the right bank. Paddy, cotton, groundnut, maize, bajra and improved grain varietal trials are being made at Garikapadu while wheat trials are being made in addition at Amaravati.

*Administration under the Nagarjunasagar Project:*

13. Under Nagarjunasagar Project, a total irrigation potential of 20.54 lakh acres will be created by the end of the Fourth Plan period. A planned and integrated development of all agricultural activities for fuller utilisation of this irrigation potential will therefore be necessary. A trained and well knit extension organisation is therefore proposed to be created for the entire ayacut area.

*Intensive Agriculture Development:*

14. The tempo of activities in the Community Development Blocks will also increase and there will be need for the development of the extension activities in the department of Agriculture. It is therefore proposed to provide

for two additional agricultural extension officers in each Block.

*Field Demonstration:*

15. With the acceptance of the concept of high yielding varieties and multiple cropping in the State it is essential that intensive field demonstrations of crops should be organised in the ayacut areas. It is, therefore, proposed to organise extensive field demonstrations to demonstrate the benefits of multiple cropping in about 400 villages in the Nagarjunasagar Project area. It is proposed to contact each individual farmer and guide him in the adoption of improved practices under this programme.

*Plant Protection Programmes:*

16. With the development of intensive agriculture, there will be greater need for adequate plant protection measures in the project area. It is, therefore, proposed to set up six plant protection field units; each unit will consist of one Assistant and four Fieldmen. A provision of Rs. 50.00 lakhs is made for this scheme.

*Cattle Breeding Farm:*

17. The existing cattle population in the Nagarjunasagar ayacut area particularly on the left bank is not only inadequate but also very poor in quality and needs upgrading. It is estimated that 6.80 lakh bullocks will be needed for the ayacut area while the existing number of bullocks is only 3.4 lakhs. Steps would have to be taken to organise cattle fairs, *etc.*, to import the draught animals required for the area. The existing stock is proposed to be improved by the two cattle breeding farms located one on the left bank and the other on the right bank of the Nagarjunasagar Project. The farms will be strengthened to meet the requirements of the area.

*Key Village Blocks:*

18. Eight Key Village Blocks with 10 sub-centres each are also proposed to be established. Each block will cover ten thousand breedable cows and buffaloes, facilities for artificial insemination with semen from Ongole and Mouli breeds will also be provided in adequate measure. The

existing centralised semen collection centres will also be suitably strengthened.

*Credit:*

19. The Andhra Pradesh Co-operative Central Land Mortgage Bank is advancing long term credit to the farmers for reclamation and development of ayacut under major, medium and minor irrigation projects.

20. The Bank has so far implemented the following eight schemes during the years 1965-66, 1966-67 and 1967-68.

<i>Name of the scheme</i>				<i>Financial outlay</i>	<i>Area developed</i>
				<i>(Rs. in lakhs)</i>	<i>(acres)</i>
1.	Kadam	..	..	65.00	21,925
2.	K. C. Canal (Kurnool District)	..	..	126.36	44,297
3.	Ramadugu	..	..	1.24	413
4.	Ramabhadrunipalli	..	..	0.75	261
5.	Zurreru	..	..	2.20	759
6.	Thotavaripalem	..	..	5.00	1,565
7.	Emmileru	..	..	13.88	2,955
8.	Thungabhadra High Level Canal (Mid Pennar)			51.00	16,030
				265.43	88,205

21. At present two schemes sanctioned by the Agricultural Refinance Corporation and one scheme pending sanction by the Agricultural Refinance Corporation i.e., (a) Nagarjunasagar Project first loan scheme, (b) Thungabhadra High Level Canal 2nd loan scheme and (c) Nagarjunasagar Project 2nd loan scheme, are under implementation.

22. The following schemes will be spill-over schemes to the Fourth Five-Year Plan:

*Nagarjunasagar Project Ayacut Development.*—The Nagarjunasagar Project Ayacut Development Scheme is under implementation from 5th December, 1964. It has since been rephased extending the duration of the scheme upto 31st December, 1969. The rephased scheme envisages reclamation of 1,93,821 acres of land with a financial outlay of Rs. 621.04 lakhs in Guntur and Nalgonda districts.

23. As on 30th June, 1968, the Land Mortgage Bank had advanced a sum of Rs. 490.08 lakhs to 29,309 farmers for development of 1,70,033 acres and an extent of 1,42,549 acres was developed.

24. The Bank proposes to float debentures to the extent of Rs. 31.04 lakhs during the year 1969-70 i.e., first year of the Fourth Plan.

*Nagarjunasagar Project Ayacut Development Second Loan Scheme:*

25. A scheme to develop an area of 38,000 acres of land situated in the 9th and 10th blocks on the left canal side in Nalgonda district, and the 11th block on right canal side in Guntur and Nellore districts with an outlay of Rs. 150.00 lakhs has been recommended to the Agricultural Refinance Corporation. The scheme is under implementation in anticipation of approval by the Agricultural Refinance Corporation. The duration of the scheme will be two years beginning from the year 1968-69. The Bank proposes to float special development debentures to the extent of Rs. 80.00 lakhs during the year 1969-70 i.e., the first year of the Fourth Plan period and the State Government's contribution for this will be Rs. 20.00 lakhs.

*Nagarjunasagar Project—Third Loan Scheme:*

26. It is proposed to prepare a scheme for development of 8.50 lakh acres, which is scheduled to receive irrigation water during the Fourth Five-Year Plan. It is estimated that ayacutdars owning in all about 3.50 lakh acres will require long term loans for development of land. The total financial outlay of the scheme is estimated at Rs. 1,400.00 lakhs at an average rate of Rs. 400 per acre.

27. The financial requirements for the three schemes under Nagarjunasagar Project during the Fourth Five-Year Plan will be as follows:

<i>Year</i>	<i>Loaning programme</i>	<i>A. R. C. contribution.</i>	<i>Govt. contribution.</i>	<i>Ayacut to be developed</i>	
	<i>Rs. in lakhs</i>	<i>Rs. in lakhs</i>	<i>Rs. in lakhs</i>	<i>Acres.</i>	
1969-70	Nagarjunasagar Project 1st Loan Scheme	31.04	27.946	3.10	9,700
1969-70	Nagarjunasagar Project 2nd Loan Scheme	80.00	60.00	20.00	20,000
1969-70	Nagarjunasagar Project 3rd Loan Scheme.	200.00	150.00	50.00	50,000
1970-71	Do.	250.00	187.50	62.50	62,500
1971-72	Do.	200.00	150.00	50.00	50,000
1972-73	Do.	200.00	150.00	50.00	50,000
1973-74	Do.	150.00	112.50	37.50	37,500
	Total	1,111.04	837.94	273.10	2,79,700

*Tungabhadra High Level Canal—II Phase Scheme:*

28. The scheme for reclamation and development of land under the Tungabhadra High Level Canal (Second Phase) in Anantapur, Rayadrug, Uravakonda and Tadipatri taluks of Anantapur district and Jammalamadugu taluk of Cuddapah district with an outlay of Rs. 71.09 lakhs is under implementation from the year 1967-68. The duration of the scheme is three years. The scheme contemplates the development of 23,500 acres of land. During the current year i.e., 1968-69, the Bank proposes to float special development debentures to the tune of Rs. 31.76 lakhs for which the State Government's contribution will be Rs. 7.94 lakhs. As on 30th June, 1968 the Bank has disbursed a sum of Rs. 28.83 lakhs for development of 12,827 acres, out of which 4,388 acres has already developed.

29. It is proposed to float special development debentures to the extent of Rs. 15.13 lakhs during the year 1969-70, i.e., the first year of the Fourth Five-Year Plan period. The State Government's contribution in this regard will be Rs. 3.78 lakhs.

*Pochampad Project:*

30. It is proposed to implement a scheme costing Rs. 300.00 lakhs for development of 75,000 acres from the year 1971-72. The irrigation water under this project is likely to be made available in 1970-71 and an area of two lakh acres are likely to come under irrigation by the end of Fourth Plan. The maximum area under this project which require to be developed by bulldozers in a year will be about 8,000 to 10,000 acres. A provision of Rs. 25.00 lakhs is made in the Plan towards purchase of bulldozers.

*Other Schemes:*

31. A scheme for development of Cheeni gardens (citrus) in Anantapur district with an outlay of Rs. 60.30 lakhs is under consideration by the Agricultural Refinance Corporation. Another scheme for coconut gardens is also under preparation which will be implemented during the Fourth Five-Year Plan.

32. It may thus be seen that the total loaning programme under ayacut development schemes during the Fourth Five-Year Plan period comes to Rs. 1,478.626 lakhs. The State Government's contribution for these schemes will be Rs. 365.00 lakhs and also Rs. 35.00 lakhs towards administrative charges at the rate of Rs. 7.00 lakhs per year to meet the cost on the staff.

*Ayacut Roads:*

33. The assessed length of the ayacut roads in the Nagarjunasagar Project area is 5,000 miles. For the above mileage it is anticipated that an area of 45,500 acres (29,000 acres under right side and 16,500 under left side) is to be acquired. It has been assumed that more than 50 per cent of the required land will be Government lands. Thus the approximate area to be actually acquired will be about 20,000 acres. A provision of Rs. 1.00 crore has been made in the Plan for this purpose. Another sum of Rs. 1.00 crore has been provided towards cost of masonry works like culverts and pipes.

*Field Channels:*

34. The work on the acquisition of land for field channels was started during 1965-66. The programme envisaged was to acquire 7251 acres during Third Plan period. Against this an extent of 6,653 acres under the right canal and 975 acres under the left canal was acquired. The Chief Engineer has estimated that a provision of Rs. 172.00 lakhs would be required for acquisition and execution of field channels and field bodhies and against this Rs. 170.00 lakhs has been provided.

## ANIMAL HUSBANDRY

A healthy and productive livestock is the mainstay of any predominantly agricultural economy. Scientific Animal Husbandry is therefore as important as Scientific Agricultural Production in an Agricultural State such as Andhra Pradesh. This has been kept in mind while drawing up a strategy of scientific breeding, feeding and management of livestock in the State, with a view to maximise the Agricultural wealth of the State and its income.

2. Andhra Pradesh occupies the fourth place among the States in the country in respect of livestock population and stands first in respect of poultry and sheep population. According to the 1966 Livestock Census, Andhra Pradesh had a total livestock of 31.59 millions. Of these, cattle and buffaloes alone accounted for 19.13 millions (61 per cent), sheep and goats 11.76 millions (37 per cent) and other animals such as pigs, horses *etc.*, 0.89 million (2 per cent). The poultry population in the State in 1966 was 14.71 millions. The livestock sector contributed 11 per cent to the State income in the year 1964-65. There is good scope for increasing the contribution of this sector by improving the productivity of cattle and maximising the benefits from other livestock.

3. Andhra Pradesh has certain world famous breeds of cattle of which the Ongole breed or the Brahmani breed as it is known abroad is the most pre-eminent. Other important breeds of cattle are the Hallikar, Malvi, Deoni, Krishnavalley and Punganoor breeds. Among Buffaloes, the Murrah of Marathawada and Nagpuri are important. The last two are from Telangana region. Among sheep, the Bellary, Nellore and Nilgiri breeds are important. Goats are also found in large numbers in the four districts of Rayalaseema and in Nalgonda. The cattle population of the State though large in size is of a non-descript type and improved breeds are only in small numbers. There is thus a case for improving the cattle by all expedients and methods available and this has been taken note of



while spelling out the objectives in the strategy for this sector.

### Expenditure on Animal Husbandry Programmes during the Previous Plans :

4. An outlay of Rs. 67.23 lakhs was incurred in the First Plan on Animal Husbandry Programmes. The following statement gives in brief the expenditure incurred in Animal Husbandry programmes, during the subsequent plans.

			<i>Expenditure in Second Plan period</i>	<i>Expenditure in Third Plan Period.</i>
<i>(Rs in lakhs)</i>				
1. Key village scheme	..	..	52.03	23.62
2. Cattle Development	..	..	33.59	44.95
3. Feed and Fodder Development	..	..	..	6.35
4. Sheep Development	..	..	12.53	8.59
5. Poultry Development	..	..	23.58	11.52
6. Veterinary aid	..	..	106.07	45.57
7. Other schemes	..	..	8.02	50.14
			235.82	190.74

The expenditure during 1966-67 and 1967-68 Plans was Rs. 69.65 lakhs and Rs. 36.00 lakhs respectively. The Plan provision for the current year i.e., 1968-69 is Rs. 35.00 lakhs.

5. The outlay on Animal Husbandry programmes during the Fourth Plan period is Rs. 400.00 lakhs. In addition a sum of Rs. 40.00 lakhs will also be spent on Animal Husbandry Programmes in Ayacut area and another Rs. 20.00 lakhs under Community Development. The break-up of the outlay for the various programmes is given below:—

		<i>(Rs. in lakhs)</i>
1. Cattle Development programme	..	222.22
2. Feed and Fodder Development Programme	..	8.00
3. Sheep Development programme	..	56.10
4. Poultry Development programme	..	47.03
5. Piggery Development Programme	..	18.50
6. Animal Health Services	..	68.00
7. Education, Research and Training	..	16.00
8. Administration and Miscellaneous	..	24.15
Total		460.00

The important programmes under Animal Husbandry have been continuing from the previous plan periods. More stress, however, is being laid during the IV Plan on Cattle Development Programmes, Animal Health Services and Poultry Development Programmes. The piggery development programme is also being given due importance. The physical targets under the various programmes are as follows:—

<i>Sl.No.</i>	<i>Item</i>	<i>Unit</i>
1.	Veterinary Hospitals/Dispensaries.	No. 10 Veterinary Hospitals, 35 Primary Veterinary Dispensaries upgrading of 100 R. V. Ds. into P. V. Ds. and 25 P. V. Ds. into Veterinary Hospitals.
2.	Artificial Insemination	.. No. 60.
3.	Stockman centres	.. No. One Stockmen centre and 3 V. C.'s centres.
4.	Area under fodder crops	.. No. 1000 acres.
5.	Key village blocks	.. No. 22 Blocks.
6.	Cattle Breeding Farms.	Strengthen 11 Farms.
7.	Sheep Breeding Farms.	.. 3 Farms.
8.	Sheep and Wool Extension Centres	.. 22 Centres.
9.	Production of Animal Products.	
	(a) Milk/Milk products	.. ..
	(b) Meat	.. ..
	(c) Wool	.. ..
10.	Number of Government Poultry Farms Expansion	.. ..
11.	Number of Poultry Farm Trained.	.. ..
	(i) Short term course	.. No. ..
	(ii) Long term course	.. No. ..
12.	Intensive Egg & Poultry Production-cum Marketing centres	.. .. No. One Main & 2 Sub-centres.
13.	Intensive Cattle Development Blocks.	.. .. No. one I.C. D. Block with 4 R. C. D. units & 2 R. C. D. Units.

The schemes under the various programmes are briefly indicated below highlighting the progress achieved during the previous plans.

### **Cattle Development Programme :**

#### *Key Village Schemes :*

6. This is an important programme of Cattle development in select compact areas of the State and aims at bringing a significant improvement in the milking capacities and draught efficiency of the cattle population through special attention to breeding and improving the stock of the cattle in the State. 28 such key village centres were set up during the Second Plan period. During the Third Plan 4 key village centres were taken up for intensification of activities and four additional centres set up for expansion activities to cover larger areas in the breeding tract. During the Third Plan period an expenditure of Rs. 147.35 lakhs was incurred on cattle development programmes.

7. The setting up of two intensive cattle development blocks and one regional cattle development unit covering 47,600 more breedable Cows and She-buffaloes has been programmed in the annual plan for 1968-69.

8. At present there are 33 key village Blocks with 268 sub-centres 2 intensive cattle development blocks, and one Regional cattle development unit in the State. In addition there are ten Centralised Semen banks. There are at present 14 State Dairy and Livestock Farms in the State including the 3 farms under the Andhra Pradesh Agricultural University. All these farms are engaged in production of quality bulls and improving local stock of cattle with improved stock such as Ongoles, Murrahs, and Tharparkars. To accelerate the pace of improving the local cattle cross breeding of local cattle has also to be launched on a large scale with bulls of exotic varieties like the Jersey, the Brownwiss, and Kerry, the Guernsey *etc.*

9. An outlay of Rs. 192.22 lakhs representing more than half the total outlay for the Animal Husbandry sector is provided for cattle development in view of the importance of rapid cattle development in the State. Cross breeding of local stock with exotic bulls will be the Key note of this

programme. The master plan for this envisages (1) the establishment of one large size intensive cattle development block with 4 regional cattle development units, two more regional cattle development units and 22 key village blocks in various milk shed areas and (2) intensification of the artificial insemination programmes in the State. With a view to supply adequate and quality semen for organising artificial insemination programmes, one semen centre is also proposed to be started besides upgrading the units at Narasannapet and Mandapeta and strengthening the existing centralised semen collection in the State. It started in the Project Ayacut Development areas. To step up milk production in these areas progeny testing will also be taken up in the larger live-stock farms apart from meeting the demand for stud bulls and milk requirements in the adjacent urban areas. The necessary training will also be imparted to farmers on livestock management *etc.*, to enable them to take to dairy and poultry farming. Breeding bulls will also be supplied at subsidised rates, on a limited scale in hilly and backward areas where artificial insemination will be comparatively more difficult and expensive.

#### **Feed and Fodder Development schemes :**

10. The scheme was implemented for the first time during the III Plan period and an expenditure of Rs. 7.65 lakhs was incurred. A sum of Rs. 8 lakhs is proposed during the IV Plan period for starting three seed farms to produce quality seed of different fodder crops and grasses on a regional basis to strengthen scientific fodder development in the whole State. Special attention will be paid to the fodder development in the Milk Shed areas. The existing three feed mixing plants will also be strengthened.

#### **Sheep development programme :**

11. Andhra Pradesh State has got a large sheep population forming 1/6th of the sheep population of the country. The native Nellore breed has great potentialities for development as a mutton variety.

12. During the Third Plan period, an amount of Rs. 22.43 lakhs was spent on sheep development in the State with a view to demonstrate modern methods of raising sheep

to the farmers. 25 Sheep and Wool Development Centres were therefore established, in Rayalaseema and Telangana regions of the State. Quality rams were also distributed in the State for developing the local breeds of sheep in the State. Seventeen mutton grading centres and sheep demonstration units were also established.

13. An outlay of Rs. 12 lakhs has been made for this programme in the IV Plan period. The objectives of this programme will be to step up production of wool and mutton in the State and to bring out an improvement in the quality of the sheep and wool in the State. These objectives will be achieved by selective breeding and cross breeding programmes. Exotic sheep such as the Dorset, Horn *etc.*, will be freely introduced in the breeding programmes, sheep rearing will also be introduced and encouraged in the farming communities especially the delta areas. The important schemes under this programme include, the expansion and reorganisation of the existing sheep breeding farms, the expansion of the existing sheep and wool extension centres, introduction of sheep rearing in delta areas, importing of exotic sheep and rendering assistance to the weaker sections of the population interested in sheep-rearing by distribution of quality rams on a loan-*cum*-subsidy basis.

#### **Poultry Development Programmes :**

14. An amount of Rs. 30.15 lakhs was spent for poultry development during the III Plan period. Three poultry production-*cum*-marketing centres were also established during the III Plan period under Crash Programme at Hyderabad, Vizag and Vijayawada. This scheme aims at encouraging the setting up of large scale commercial poultry farms by supplying good stock, providing protection to poultry against diseases, scientific feeding and the required technical services to all poultry keepers. The scheme has made an impact around the Urban complexes of Hyderabad, Vijayawada and Viag. Several other towns have also taken to poultry farming. There are at present six regional poultry farms under Expanded Nutrition and Applied Nutrition programmes and eight district poultry farms in the State.

15. The present per capita annual consumption of eggs in the State is estimated to be 8 eggs, as against 10

eggs per annum for the country, which is very low compared to the per capita consumption of 320-410 eggs in developed countries such as the U.S.A., Australia, Denmark etc. According to the nutritional standards recommended by the Nutritional Advisory Committee, a balanced diet include at least half an egg per head per diem.

16. With rapid urbanisation and industrialisation and better understanding about the nutritive value of eggs and chicken meat, the demand for such protective foods has been steadily increasing. Poultry farming can be therefore a highly remunerative enterprise, when run on modern and scientific lines. It is one of the quickest ways of producing rich animal protein and creating full time or part time employment opportunities for large sections of the population. Keeping in view the importance of poultry development for maximisation of the wealth in the rural sector, great importance is being given to this programme. The total outlay on this programme during the IV Plan will be Rs. 29.28 lakhs.

17. The important under this programme are the establishment of one more poultry marketing centre in addition to the three existing centres, the consolidation of the existing centres and sub-centres, the creation of a suitable organisation in the State for taking up poultry feed manufacturing, egg marketing and provision of credit facilities to poultry farmers.

### **Piggery Development :**

18. A Bacon factory is being set up at Gannavaram and is expected to be commissioned in December, 1968 or in early 1969. One pig breeding station with 100 Sows has already been established at Gannavaram along with two piggery units at Mukyala and Pedavagi. Under "The Freedom From Hunger Campaign", a modern piggery has already been set up at Gannavaram during the year 1967-68. Two meat shops were also opened at Vijayawada and Guntur to popularise consumption of pork in the State. The outlay on this programme during the IV Plan is Rs. 18.50 lakhs. The programme for piggery development in the Fourth Plan envisages the expansion of the Bacon Factory at Gannavaram, expansion of the pig breeding farms in the State the setting up of pig development blocks

and accelerate piggery development in the tribal areas of the State.

### **Animal Health Services :**

19. The importance of the expansion of veterinary aid facilities has also been recognised in the strategy under Animal Husbandry Programmes. Steps are therefore, being taken to improve as well as strengthen the Animal Health Services in the State.

20. During the third plan an amount of Rs. 52.89 lakhs was spent on this programme and 28 stationery veterinary dispensaries, 33 minor veterinary dispensaries, and 149 rural veterinary dispensaries were established. At present there are as many as 152 veterinary hospitals, 663 primary veterinary dispensaries and 362 rural veterinary dispensaries.

21. For conducting the regular vaccination, 10 mobile squads were also established in 10 districts, for the regular vaccination programmes in the State. In addition 17 check posts and 19 immune belt stations were also opened for protecting cattle that pass through inter-state boundaries. The Veterinary Biological Institute at Hyderabad has also been strengthened to meet the requirements of the biological products required for the entire State. The Institute is producing 14 varieties of both bacterial and viral vaccines.

22. An outlay of Rs. 68.00 lakhs has been provided during the IV Plan under this programme with the following objectives:— 1. Veterinary aid facilities by opening 10 Veterinary Hospitals and 35 Primary Veterinary Dispensaries.

2. Ugrading of 100 rural veterinary dispensaries into primary veterinary dispensaries and 25 primary veterinary dispensaries into veterinary hospitals;

3. Establishing investigation laboratories at the State level and clinical laboratories at district level with research facilities;

4. Strengthening the Veterinary Biological Research Institute at Hyderabad to enable it to produce the entire requirements of biological products for the State;

5. Providing better storage facilities for vaccine; and

6. Providing loans and subsidies for starting private veterinary institutions for unemployed veterinary graduates.

#### **Educational Research and Training :**

23. A sum of Rs. 16.00 lakhs has been provided under this head to start one more Stockmen Training Centre and three Veterinary Compounder Training Centres. At present the training facilities are being made available to Veterinary Stockmen at Warangal to man artificial insemination sub-centres, cattle development sub-centres and live-stock poultry farms. The School of Animal Reproduction at Mandapeta which is conducting Post Graduate courses in Animal Gynæcology *etc.*, and also refresher courses will be strengthened during the Fourth Plan period to intensify the training facilities in artificial insemination. In addition provision has been made to meet the State's share on schemes relating to the research schemes of the Indian Council of Agricultural Research.

#### **Administrative and Miscellaneous :**

24. Under this head of scheme, a sum of Rs. 16.00 lakhs is provided during the IV Plan period to strengthen the administrative machinery at State, regional and district levels and to provide permanent buildings to veterinary institutions located in towns.



## DAIRYING AND MILK SUPPLY

1. Dairy development has a very significant role to play in the development of the rural sector service. It not only provides a valuable source of nutrition but also helps supplement the incomes of the farmers substantially.

2. The per capita availability of milk at present in India is 135 grams against an optimum requirement of 284 grams for a recommended balance diet. The per capita consumption of milk in Andhra Pradesh is estimated to be only 5.4 ounces. The annual production of milk in the State is only 1.9 million tonnes. The need for cattle development and milch production in the State is being increasingly recognised and the strategy in this sector is based on the need to step up the milk production potential of the State by all means possible.

3. The Commissioner of Milk Supply who is also the Director of Animal Husbandry is responsible for the development of Dairy and Milk Supply in the State. The following statement gives the outlay and expenditure on Dairying and Milk Supply schemes during the previous plan periods:

	FIRST PLAN		SECOND PLAN		THIRD PLAN	
	<i>Outlay</i>	<i>Expenditure.</i>	<i>Outlay</i>	<i>Expenditure.</i>	<i>Outlay</i>	<i>Expenditure.</i>
	(Rs. in lakhs)					
Dairying and Milk Supply.	23.82	25.00	54.82	34.42	227.30	255.98
	1966-67		1967-68		1968-69	
	<i>Outlay</i>	<i>Expenditure.</i>	<i>Outlay</i>	<i>Expenditure.</i>	<i>Outlay</i>	<i>Expenditure.</i>
	(Rs. in lakhs.)					
Dairying and Milk Supply	71.10	70.43	62.50	61.61	56.00	56.00

4. It is seen from the above statement that the expenditure on Dairy development has been increasing from Plan to Plan. The expenditure on this sector during the Third Plan was Rs. 255.98 lakhs. The total expenditure for the period between 1966-69 will be about Rs. 188.04 lakhs. Keeping in view, the important role of the State in this sector an outlay of Rs. 380.00 lakhs has been provided in the Fourth Plan. The outlay on the Hyderabad-Vijayawada Integrated Milk Project will be Rs. 2.20 crores. The outlay on the other schemes will be Rs. 1.60 crores. The Plan of this sector includes schemes for intensive milk development in rural and urban areas, the provision of loans to small farmers to enable them to purchase good milch animals and helps improve the milk production in the State, the training required for the technical personnel etc. The important schemes under this sector are briefly discussed below:

#### **Integrated Milk Project :**

5. A big Integrated Milk Project with an estimated cost of Rs. 4.35 crores was started in the State during the Third Plan. This project was started with the object of fully exploiting the milk potential available in the Krishna and Guntur districts and to cater to the milk requirements of about three lakh consumers in the twin cities of Hyderabad and Secunderabad and one lakh fifteen thousand consumers in the towns of Vijayawada and Guntur. An expenditure of Rs. 1.90 crores was incurred on this project by the end of the Third Plan period. This scheme now spills over into the Fourth Plan. The scheme is aided by the UNICEF, and machinery valued at Rs. 78.00 lakhs has been received so far. The ultimate target of this project will be to process 2.50 lakh litres of milk per day at Vijayawada and 2 lakh litres per day at Hyderabad. At Vijayawada skimmed milk powder and other ancillary products will also be produced. The Hyderabad Dairy was commissioned during the year 1966-67. The construction work of the Milk Products factories at Vijayawada and Hyderabad are now in progress.

6. Three Chilling Centres around Vijayawada and one Cooling Centre near Hyderabad were also established during the year 1967-68. The Hyderabad Dairy handled about 40,000 litres a day while 10,000 litres a day were

distributed at Vijayawada. The current year's programme envisaged the collection of about 70,000 litres of milk a day in the Vijayawada area, and about 30,000 litres a day in the Hyderabad area (Pochampalli, Narsapur and Medchal) along with the starting of milk collection in Zahirabad area. The target of milk production for the Fourth Plan will be 2,00,000 litres.

7. The outlay on the project during the Fourth Plan will be Rs. 220.00 lakhs (Rs. 110.00 lakhs at Hyderabad and Rs. 110.00 lakhs at Vijayawada) out of a total outlay of Rs. 380.00 lakhs for the sector as a whole. The main objectives of the scheme are (1) to maximise milk distribution to reach the target of 2.00 lakh litres of milk during the Fourth Plan period (2) commissioning of the Vijayawada Milk Powder Factory and (3) the establishment of additional cooling centres for pooling of large quantities of milk.

#### **Consolidation and Expansion of Milk Scheme :**

##### *(Intensive Milk Development Scheme):*

8. The Dairy schemes coming up in Chittoor, Nellore and Visakhapatnam are spill over schemes. Two new schemes will be started at Warangal and Rajahmundry. The total provision for all 5 dairies in the Fourth Plan is Rs. 55 lakhs.

##### **Chittoor Dairy :**

9. The expenditure in Third Plan was Rs. 5.76 lakhs and upto 1968-69, was Rs. 10.87 lakhs. The construction of the Dairy building at Chittoor is almost completed. The equipment from Sweden costing Rs. 4.66 lakhs has been received and the Dairy would be started during the first year of the Fourth Plan.

##### **Nellore Dairy :**

10. The expenditure in the Third Plan was Rs. 4.76 lakhs and upto 1968-69 a sum of Rs. 15.72 lakhs was incurred. An amount of Rs. 3.00 lakhs will be the outlay during the Fourth Plan. The Dairy is expected to be commissioned during the current year. 4,000 litres a day is the target during the Fourth Plan period.

##### **Visakhapatnam Dairy :**

11. A sum of Rs 5.00 lakhs has been provided under the Fourth Plan and the target is 6,000 litres of milk per day.

It is proposed to utilise Rs. 5.00 lakhs for the purchase of vehicles and equipment for collection centres. It is hoped to commission the dairy shortly as the buildings have been completed.

**New Schemes:**

12. Warangal and Rajahmundry Dairies will be the new milk schemes in the Fourth Plan. A sum of Rs. 20.00 lakhs has been provided for each of these two schemes. Danish dairy equipment worth Rs. 4.5 lakhs has already been received for the Rajahmundry Dairy. A target of 6,000 litres per day has been fixed for the Warangal dairy and 10,000 litres per day initially for the Rajahmundry Dairy.

**Rural Dairy Centres and Renovation of Guntur and Kurnool Dairies :**

13. A sum of Rs. 50.00 lakhs has been provided for organising rural dairy centres in four towns having a population of 50,000 with good milk potentialities. In addition renovation of small sized dairies at Guntur and Kurnool is also proposed to be taken up. It is hoped to achieve a target of 14,000 litres per day with the setting up of the four rural dairy centres and with the renovation of Guntur and Kurnool Dairies. Under dairy extension, a sum of Rs. 15.00 lakhs has been provided with the objective of increasing the milk production in the State, by providing suitable financial assistance in the form of grants and subsidies to Milk Societies and Milk Unions for the purchase of dairy equipment, vehicles *etc.*

**Loans for the purchase of milch animals**

14. Institutions like the Agricultural Refinance Corporation, the Andhra Pradesh State Co-operative Bank and Agricultural Finance Corporation have been sponsoring loans for dairy development schemes. Therefore there is not a big case to include large amounts under loans for purchase of milch animals. However, a sum of Rs. 20.00 lakhs has therefore been provided under the Fourth Plan to meet the needs of the small farmers in full in areas covered under the Integrated Milk Project and other milk shed areas. During the Third Plan period, an amount of Rs. 32.00 lakhs was disbursed as loans.

**Training of technical personnel :**

15. A sum of Rs. 5.00 lakhs has been provided under the Fourth Plan for training suitable personnel to man the new dairies and for higher courses in dairying.

**Dairy Development Staff :**

16. A sum of Rs. 15.00 lakhs has been provided in the Fourth Plan for the strengthening of the district-set-up in this sector.

## FORESTS

Forests and afforestation programmes have a major role to play in the Conservation of natural resources of the State. The long term objective of the Plans for development of forests in this State has been to progressively increase the forest area to 33 1/3 per cent of the geographical area, as laid down in the National Forest Policy, by bringing in waste lands under afforestation and improving and expanding the existing forests by raising plantations of economically important and quick growing species over extensive areas. At present the area under forests in the State is only 24 per cent of the State's total geographical area.

2. The per capita forest area in the State is 0.44 acre as against 0.54 acre for the country as a whole. The contribution of forests to the State Income during 1965-66 was Rs. 12.01 crores forming about 0.8 per cent of the State Income. The value of forest products in 1967-68 was Rs. 6.17 crores which works out to Rs. 2,403 per square mile of forest area in the State as against Rs. 2,833 in all-India in 1965-66. Forestry development in the State largely depends upon conserving the forest wealth and developing its commercially exploitable resources thus contributing to the overall growth of the economy as a whole.

3. During the First Plan period, an outlay of Rs. 26.40 lakhs was incurred on this sector. In the Second Plan period, an expenditure of Rs. 97.13 lakhs was incurred, and an extent of 948 acres was planted with teak, 705 acres with casurina and 24,143 acres with cashewnut plantations.

4. The programmes under the First and Second Five-Year Plans were intensified during the Third Plan. Special emphasis was laid on measures which would help to meet the long term forest product requirements of the country and to ensure economic and efficient utilisation of the available forest products including inferior timber and wood residues. The general strategy in this sector is: (1) to increase this output of forest based wealth through better techniques of timber extraction, (2) to develop and im-

prove forest communications, (3) to survey the existing forests resources of the State, (4) to conserve wild life, and (5) to promote better utilisation of secondary timbers through the increased use of preservatives and seasoning processes. With a view to bridge the gap between demand and supply of timber and fuel the developmet programmes of the Forest Department were reoriented during the Third Plan itself. The plantation programme was thus geared up from 1963-64 onwards. The Plantation Programmes under teak, which is the most important commercial species in this State was given high priority. In addition the plantation programmes of species like eucalyptus *etc.*, also received attention. The expenditure incurred under the Forestry Sector during the Third Plan was Rs. 138.68 lakhs. The other important schemes implemented during the period were the establishment of a Zoo at Hyderabad, the establishment of an integrated saw mill, planting of teak over an area of 17,756 acres, planting of casurina over an area of 3,410 acres, planting of eucalyptus over an area of 2,341 acres and planting of red sanders over an area of 578 acres.

5. The following objectives have been kept in view in the strategy of this sector for the Fourth Plan:—

- (1) Consolidating and increasing the productive capacity of existing forests.
- (2) Replacement of forests with a slow rate of growth by artificial regeneration of fast growing species with a satisfactory economic and industrial potential.
- (3) Extension and improvement of communications for facility in exploiting forest produce.
- (4) Improvement and strengthening of research and training facilities.
- (5) Strengthening of the administration for ensuring protection and scientific management of forests.

These objectives have assumed added importance in view of the fact that nearly 2.25 lakh acres of forest area was lost during the last 15 years in the State due to submergence by river valley projects, rehabilitation of dis-

placed persons, assignment of land to landless poor and for mining leases for industrial purposes etc. It is therefore, necessary to recognise the need for not encouraging schemes which will have the effect of further reducing the forest areas in the State.

6. An outlay of Rs. 5 crores is proposed for forestry development in the Fourth Plan. A brief description of the important schemes under this sector is given below :—

#### **Economic Plantations :**

7. (a) *Teak Plantations.*—At present the gap between demand and supply of industrial wood in our State is 3.4 million c.ft. This is likely to increase to 7.3 million c.ft. by 1970 to 10.57 million c.ft. by 1975. In order to meet the increased demand large scale plantations of teak have to be raised. Accordingly, it is proposed to raise teak plantations over an area of 30,000 acres at a cost of Rs. 1.50 crores.

8. (b) *Red Sanders.*—Red sanders in the exclusive monopoly of Andhra Pradesh. This species grows naturally in the forests of Cuddapah and Chittoor districts. This forest product has a good foreign market, and is a dollar earner. It is therefore, desirable to promote the natural growth of the species by artificial regeneration methods with a view to step up the yield of these plantations. It is therefore, proposed to raise Red Sanders Plantations over an area of 500 acres at a cost of Rs. 2 lakhs.

#### *Fuel Plantations:*

9. As per the timber trend survey, the present gap between demand and supply is expected to increase from 297 million c.ft. to 383.7 million c.ft. by 1970 and to 470 million c.ft. by 1975. The present supply from forests is only of the order of 130.66 million c.ft. In order to increase the present rate of supply to meet the demand, it is proposed to raise casurina plantations in the coastal areas of the State over an area of 12,500 acres at a cost of Rs. 37 lakhs.

#### *Quick Growing Species:*

10. This was a Centrally sponsored scheme up to end of 1968-69 and has now been shifted to the State Plan



Sector. The object of this scheme is to supply raw material for paper and pulp industry in the State and to meet the heavy demand for pulp wood products. The present requirements of paper mills which are of the order of 1.70 lakh tonnes is likely to go up in future. A sum of Rs. 50 lakhs is therefore provided in the Fourth Plan towards raising 'Quick Growing Species' such as eucalyptus and bamboos over an area of 7,000 acres during the Fourth Plan period.

*Development of Communications :*

11. Much of the forest area is unexploited or under-exploited due to lack of adequate communications. In order to scientifically exploit forests, and thereby step up the forest wealth of this State, a satisfactory communication system has to be developed quickly. A sum of Rs. 14 lakhs is therefore provided for improvement of communications in the forest area.

*Nehru Zoological Park including setting up of Botanical Gardens :*

12. A Master Plan for the establishment of Zoological Gardens at Hyderabad was prepared during the Third Plan at an estimated cost of Rs. 120 lakhs. A sum of Rs. 45.42 lakhs was spent on this project up to end of Third Plan. The Park was declared open to public in October, 1963. A sum of Rs. 11.3 lakhs was spent on this project. A sum of Rs. 20 lakhs is provided for further development of this Zoo during the Fourth Plan. Besides this, a sum of Rs. 3 lakhs is provided exclusively for setting up Botanical Gardens in the State. This scheme is sponsored by the Government of India and about 100 acres of land has to be made available for this project. The cost of acquisition of land for this project is about Rs. 3 lakhs and has been provided in the Plan.

*Cultural Operations :*

13. Cultural operations are important in any scheme of Forest Conservation and protection. A sum of Rs. 1.42 lakhs only was spent during the Third Plan towards cultural operations like cleanings, tendings, etc. in the felled coupes and in plantations to make them yield more. The outlay on this scheme during the Fourth Plan will be Rs. 15 lakhs.

14. Besides, a sum of Rs. 1.50 crores is provided in the Fourth Plan for afforestation in the drought affected taluks of the State. The schemes to be implemented under this special plan are:—

- (i) Soil and moisture conservation works in reserve forests by carrying out Extension Contour trenching work in catchment areas coupled with gully plugging, check damming, natural pasture development, improvement of existing pastures by introducing better strains of drought resistant grass and afforestation wherever possible.
- (ii) Extension and farm forestry with a view to undertake large scale planting of species on the bunds of agricultural lands in drought affected taluks.
- (iii) Improvement of existing water sources in catchment areas in reserve forests by desilting and deepening the existing tanks and kuntas besides excavating new tanks and kuntas in the catchment areas.
- (iv) Establishment of an Aridzone Research Station in Anantapur district to find solutions to the problems connected with developing good pastures and selection of suitable species for afforestation.

## FISHERIES

Andhra Pradesh has great possibilities in the quick development of fisheries—both marine and inland—in view of its vast water resources. The State has a long coast line of 960 K.Ms. with sufficient continental shelf, the major rivers, Godavari and Krishna and important rivers such as the Pennar with a total mileage of 26,000 miles in the State could be developed as major potential bases for riverine fisheries in the State. In addition to 50 reservoirs with a water spread of 2.75 lakh acres and about 40,000 tanks and ponds with a water spread of about 5.25 lakh acres, important backwaters such as the 'Pulicat Lake' and the famous lake the 'Collair' Lake etc., can be made important fishery growth points in the State. In spite of these rich natural resources, the development of fisheries has been halting and slow in this State. In 1965, the estimated production of inland and marine fisheries in the State was only of the order of 2.02 lakh tonnes valued at Rs. 19.57 crores. Though 68 per cent of its population consume fish, the per capita consumption of fish for the population of the State as a whole is only about 1.93 Kgs. as against 2.72 Kgs. for all-India which itself compares very unfavourably with the higher per capita consumption figures of 20 Kgs. each for Norway, Sweden and Portugal and 28 Kgs. per capita consumption for Japan. Keeping in view the importance of maximising the food resources of the country, it is necessary that a bold and new strategy with adequate financial and other inputs should be adopted for the development of fisheries in the State during the Fourth Plan.

### Progress during the Previous Plans :

2.The following statement shows the outlay and expenditure on fisheries during the previous Plan periods:—

				<i>Outlay</i> <i>Rs. in lakhs.</i>	<i>Expenditure</i> <i>Rs. in lakhs.</i>
First Plan	..	..	..	14.47	10.39
Second Plan	..	..	..	70.28	63.61
Third Plan	..	..	..	131.22	138.48

				<i>Outlay</i> Rs. in lakhs.	<i>Expenditure</i> Rs. in lakhs.
<b>Annual Plans :</b>					
1966-67	..	..	..	48.03	44.25
1967-68	..	..	..	42.32	38.97
1968-69	..	..	..	40.00	40.00

3. The above statement shows that the maximum expenditure on fisheries was incurred during the Third Plan period. The expenditure during the Annual Plan periods of 1966-67 and 1967-68 was Rs. 44.25 lakhs and Rs. 38.97 lakhs only. The outlay in the Annual Plan for the year 1968-69 is Rs. 40.00 lakhs and this is likely to be spent in full during the current year.

4. It was only during the Third Plan that some efforts were made to exploit the vast fisheries potential in the State. During the previous Plans, the department confined itself in main activities such as the collection and distribution of fish seed. The importance of marine fisheries was recognised even during the Second Plan and steps taken to go in for mechanised boats. A 20-ton ice-cum-350 tons cold storage plant was commissioned during the period at Visakhapatnam to provide better storage facilities for fish. Steps were however initiated during the Third Plan to accelerate the development of fisheries in the State. Some of the important achievements of the department in physical terms are given below:—

- (i) Under the Expanded Nutrition Programme, 17 Community Development Blocks were taken up for production and free distribution of fish to beneficiaries.
- (ii) Intensive development of fisheries was taken up in 30 Community Development Blocks of the State.
- (iii) Seven new fish farms sanctioned were completed and commissioned.

- (iv) 432.19 lakhs of fingerlings produced were stocked and made available for quick fisheries development.
- (v) One, 7-ton semi-trailer van with refrigeration facilities was purchased and a 2-ton-ice-cum-4-ton cold storage plant was commissioned at Nizamsagar.
- (vi) The importance of training to fishermen was recognised and 209 fishermen were trained in mechanised fishing for a period of six months. Necessary training was also imparted to the field staff and officers of the department.
- (vii) 147 boats were constructed and mechanised in the Boat Building Yard at Kakinada mostly for trained fishermen.
- (viii) The construction of the State's first fishing harbour was also taken up at Kakinada.
- (ix) The exploitation of lakes and reservoirs in the State was intensified and 400.2 tons of fish were caught by the deep water netting units.
- (x) A Master Plan for Nagarjunsagar area was drawn up and initiated. Deep water fishing operations were also commenced and a fish farm was established in the area.
- (ix) 1,87,914 lbs. of synthetic fibre were distributed to the fishermen through co-operative societies by giving them loans against the target of 1,25,000 lbs.

#### **Annual Plans 1966-69 :**

5. During the year 1966-67, 140.49 lakhs, of fingerlings were produced in the fish farms and nurseries. The 5-ton ice-cum-10-ton cold storage plant at Tadepalligudem and a 5 ton-ice-cum-10 ton cold storage plant at Nagarjunsagar were commissioned during the period. The machinery for the canning plant at Kakinada was installed. Forty additional boats were constructed and mechanised. The walk-in-cooler at Kakinada and the shell-ice making plant at Hyderabad were commissioned. Under inland fisheries 115.84 lakh fingerlings were produced in the

various fish seed farms of the State during 1967-68. An amount of Rs. 40.00 lakhs has been provided for fisheries development for the year 1968-69. It is proposed to produce and distribute 200.00 lakh fingerlings during the current year. The deep freezing plant at Visakhapatnam and the ice-cum-cold storage plant at Nellore will also be completed and commissioned during the current year. Thirty-six mechanised boats will also be constructed during the year.

### The Strategy in the Fourth Five-Year Plan :

6. The total outlay for fisheries development in the State during the Fourth Plan period will be Rs. 2.55 crores. The break-up of the outlay on the various schemes will be as follows:—

	<i>(Rs. in lakhs)</i>
<b>Spill-over Schemes :</b>	
1. Development of fisheries in Nagarjunasagar and other reservoirs.                      ..                      ..                      ..                      ..	10.00
2. Development of marine fishery centre, Kakinada                      ..	1.00
3. Collection of spawn and production of seed                      ..	1.00
4. Strengthening and supervision of Co-operatives                      ..	5.00
<b>New Schemes in Fourth Plan :</b>	
<i>Inland Fisheries :</i>	
1. Improvement of fish farms, nurseries and production of seed                      ..                      ..                      ..                      ..	50.00
2. Master Plan for Collair and Pulicat lakes by loans from Agricultural Refinance Corporation                      ..                      ..	10.00
<b>Marine Fisheries :</b>	
<b>Development of Marine Fishery Centres :</b>	
Kakinada                      ..                      ..                      ..                      ..	45.00
Upputeru                      ..                      ..                      ..                      ..	10.00
Machilipatnam                      ..                      ..                      ..                      ..	30.00
Visakhapatnam                      ..                      ..                      ..                      ..	10.00
Krishnapatnam                      ..                      ..                      ..                      ..	20.00
Development of fisheries through master Plans by loan from Agricultural Refinance Corporation at Kakinada	12.00

**Other Schemes :**

Training in Fisheries	..	..	..	5.00
Laons to fishermen co-operative societies			..	33.00
Fishing Corporation and companies	..		..	10.00
Strengthening of Marketing, Statistics, Directorate and divisions	..	..	..	3.00
				Total Rs. .. 255.00 lakhs
				Or
				Rs. .. 2.55 crores.

7. The strategy for fisheries development during the Fourth Plan period has been drawn up taking into account the developmental work undertaken so far in the inland fisheries sector and the leeway to be made up in developing marine fisheries in the State. Special stress is laid in the Fourth Plan on the development of marine fisheries which has not received sufficient attention so far. Definite growth points have been identified even in this sector and the strategy is to draw up master plans for accelerated development of these growth points to ensure the quick exploration of marine fisheries in the State. The concept of optimum investment in the field of fishing has been accepted and the package approach being adopted in selected growth points to mobilise and intensify planned efforts should produce the results expected. The strategy also recognises the need for strengthening the inland fisheries in the State. Even here the project approach has been recognised and it is proposed to draw up master plans for the exploitation of the fishery resources of the two great inland and natural resources of the State, the inland water lake, the 'Collair Lake' and the marine backwater lake, the 'Pulicat Lake'. The fish farms and nurseries in the State will be strengthened and production of fish seed intensified. The importance of training programmes and making available sufficient credit to fishermen co-operative societies has also been recognised. A fishing Corporation is also envisaged and steps necessary for the exploitation, storage and marketing of all kinds of fish in the State will form part of the strategy adopted in the State.

8. The important physical targets under this programme during the Fourth Plan period will be as follows:

	<i>Unit</i>	<i>Target</i> 1969-74
<i>Inland fisheries</i>		
Fish Seed Production .. ..	.. lalkhs	450.00
Additional Production of fish .. ..	.. tons.	17,306
Value of additional Production .. ..	.. Rs. in lakhs	173.06
Estimated fish landings .. ..	.. tons.	4,22,450
<b>Marine Fisheries :</b>		
Construction of boats :		
(a) 30' .. ..	.. No.	45
(b) 32' .. ..	.. No.	75
(c) 37' .. ..	.. No.	45
(d) 50' .. ..	.. No.	43
	Total boats ..	208
Additional production of fish .. ..	.. tons	15,825
Value of additional production .. ..	..Rs. in lakhs	158.25
Estimated fish landings .. ..	.. tons	10,98,370

9. The important schemes proposed to be taken up are briefly discussed below:

#### **Spill over Projects :**

10. The spill-over commitment of the Fisheries programme is Rs. 17.00 lakhs. Rs. 10.00 lakhs will be utilised for the continued planned development of fisheries in Nagarjunasagar and other important resources of the State. The outlay on the strengthening and supervision of co-operatives will be Rs. 5.00 lakhs. A lakh of rupees each will be utilised on the development of the marine fisheries centre at Kakinada and for collection of spawn and production of fish seed.



### **Inland Fisheries :**

11. The most important programme under inland fisheries is the production of seed. It is an admitted fact that production of fish seed is a pre-requisite for development of inland fisheries. The fish seed is either collected directly from the rivers and reared in nurseries and fish farms or it can be produced in fish farms by either induced breeding or bundh type of breeding of certain species. In either case, sufficient nursery space has to be provided. It is therefore proposed to increase the nursery area in the existing fish farms in the districts of Hyderabad, Chittoor, East Godavari, Karimnagar, Kurnool, Mahbubnagar, Medak, Nalgonda, Nellore, Nizamabad and West Godavari during the Plan period. The Plan is to increase 10 acres of nursery space each year during the first four years of the Plan to produce additional 45,00,000 of seed each year commencing from the second year of the Fourth Five-Year Plan. This will result in the increased capacity of 40 acres of nursery space by the end of the Fourth Five-Year Plan with the capacity to produce 180 lakhs of fingerlings per year valued at Rs. 7.20 lakhs. An amount of Rs. 50.00 lacs has been provided for this project.

There are about 50 reservoirs and 40,000 tanks in Andhra Pradesh with the total acreage of 5.00 lakh acres. Excepting Nizamsagar and Manair none of the existing reservoirs have been developed so far. It is, therefore, proposed to develop during the Fourth Five-Year Plan a few of the reservoirs and tanks in addition to Nagarjunasagar. Such reservoirs may include Cumbum, Kanigiri, Mopad, Bhravanitippa, Musi, Pocharam, Kadam, Dindi, Ramappa, Pakhal and Sreesailam. A beginning would be made in these projects by stocking them with fish seed following by settling of fishermen, distribution of improved craft and tackle arrangements for transport etc. The other tanks would be continued to be stocked with the available fish seed. For these programmes an amount of Rs. 10.00 lakhs has been provided.

12. There are two important lakes in Andhra Pradesh the Collair in Krishna and West Godavari districts and Pulicat Lake in Nellore district. These cover roughly 100 square miles and 80 square miles of area respectively. These lakes are capable of yielding sustained fishery

wealth. It is proposed to develop these lakes during the Fourth Plan at a cost of Rs. 10.00 lakhs by providing loans from Agricultural Refinance Corporation.

### **Marine Fisheries :**

13. The coast line of Andhra Pradesh differs sharply from that of the west coast, where river mouths are open for navigation for more than six months in a year. The east coast is flat near the sea. The water brings in considerable quantity of silt and the flow is sluggish; there is less scouring action by the flood; the bar usually gets silted up rapidly. Sometimes due to this silting up of the bar, rivers and streams change their mouths opening into the sea every 3 to 4 years. It is, therefore, impossible to operate mechanised boat requiring 4 feet draft in river mouths of the State except in Godavari and Pennar. Even here only small boats can operate. These small boats can fish only within an arc of 20 miles radius in the sea. Apart from the economics of fishing operations, the boats operating from Kakinada, Narsapur, Visakhapatnam and Krishnapatnam ports have to confine their fishing operations to limited areas in the Bay of Bengal leaving more than 40 miles of the coast line unexploited. It is not also possible to provide fishing harbours all along the coast, as the current carries every year one million tonnes of sand northward. Keeping these difficulties in view, a few fishery growth points have been selected during the Fourth Plan such as Visakhapatnam, Kakinada, Upputeru, Masulipatnam and Krishnapatnam. These centres will become the focal points of growth in marine fisheries development in the State:

### **Kakinada :**

14. The fishing harbour at Kakinada has almost been completed and a canning plant and a shark liver oil factory have gone into production. The boat building yard is equipped with the latest machinery and it is manufacturing even medium size boats of 50 feet length. It is therefore proposed to double the boat building capacity from 300 tonnes to 600 tonnes per annum at a cost of Rs. 20.00 lakhs. Thirty boats of 32 feet are proposed to be constructed at a cost of Rs. 25.00 lakhs during the Plan period. In view of its importance for fishing as well as other items connected with export promotion Kakinada has

to be given priority for development under Minor Ports. The other important fishery growth units will be Upputeru, Masulipatnam, Krishnapatnam and Visakhapatnam.

15. Besides the above programme, a corporation is proposed to be floated with a capital of Rs. 10.00 lakhs to implement the marine centre at Visakhapatnam with the assistance of International Bank for Reconstruction and Development.

16. An amount of Rs. 33.00 lakhs will also be disbursed as loans to Apex Societies for purchase and distribution of fishery requisites on subsidised rates. It is also proposed to distribute 70,000 Kgs. of synthetic fibre.

17. With the implementation of the above schemes, the fish production both inland and marine is expected to go up to 3.17 lakh tons at the end of Fourth Plan.

## WAREHOUSING AND MARKETING

The importance of marketing of agricultural produce and the warehousing facilities required have been kept in view while drawing up a plan for this sector.

2. The outlay and expenditure during the Second Plan, Third Plan and the three Annual Plans are indicated below:—

*(Rs. in lakhs.)*

			<i>Second Plan</i>	<i>Third Plan</i>	1966-67	1967-68	1968-69
Outlay	..	..	33.04	40.82	..	3.00	3.00
Expenditure	..	..	24.69	24.03	1.74	2.40	3.00

3. During the Third Plan, schemes were taken up to strengthen the market intelligence system in the State. Quality consciousness was also created in respect of groundnut, castor, turmeric, jaggery and other commodities under grading schemes. The State Warehousing Corporation also constructed 20 godowns besides increasing its storage capacity by renting of godowns necessary. Twenty-three regulated markets were also established under the Hyderabad Agricultural Markets Act and the Madras Commerical Markets Act. Keeping the need for an integrated statute for the whole State Legislation was undertaken and the Agricultural Produce and Livestock Markets Act was enacted.

4. The outlay on Warehousing and Marketing during the Fourth Plan will be Rs. 50 lakhs. The scheme-wise details of expenditure so far incurred and the amounts

proposed in the Fourth Plan are given below:—

<i>Sl. No.</i>	<i>Name of the Scheme</i>	<i>Expenditure incurred (Rs. in lakhs)</i>	<i>Amount provided for Fourth Plan (Rs. in lakhs.)</i>	<i>Total (Rs. in lakhs)</i>
<b>(A) Marketing Schemes :</b>				
1.	Statistics and Survey	.. 1.50	..	1.50
2.	Grading in Regulated Markets	.. 1.00	1.80	2.80
3.	Grading at Farmer's Level	.. ..	11.00	11.00
4.	Cotton Grading Scheme	.. 1.50	..	1.50
5.	Ghee and Oil Grading Laboratories	.. 0.70	..	0.70
6.	Regulation Cell at Head Office	1.25	..	1.25
7.	Strengthening of Marketing Department in Districts	.. 3.00	9.00	12.00
8.	Market Intelligence	.. 1.00	5.00	6.00
9.	Engineering Cell	.. 1.50	1.50	3.00
10.	Agmark Emporia Administrative Subsidy to Consumer's Society	.. ..	0.25	0.25
Total on Marketing Schemes		.. 11.45	28.55	40.00
<b>B. State Warehousing Corporation, Andhra Pradesh</b>		.. ..	10.00	10.00
Grand Total		.. 11.45	38.55	50.00

5. It will be seen that stress is being laid on quality control and the grading of agricultural produce at farmers' level and in regulated markets, strengthening of the marketing organisation, market intelligence and the warehousing facilities in the State. The State Warehousing Corporation would also be taking up a programme of construction of godowns during the Fourth Plan period.

## CO-OPERATION

Co-operation would necessarily have to play a paramount role in a planned economy both from the point of view of mobilising local resources and for channelling credit to the agricultural sector. The supply of adequate and timely credit to the agricultural sector would have to be the basic objective in this sector. It will also have to be ensured that the Co-operative structure subserves the interests of the small farmers and the weaker sections of the community also. Unless the credit structure is strong in the rural areas, agricultural production cannot be maximised. Co-operatives therefore have a vital role in assisting the agricultural sector to achieve the planned growth rates. These requirements have been kept in view while spelling out the objectives and formulating the strategy in the co-operative sector. The major programmes in the Fourth Plan will consequently be effective implementation of the existing crop loan system, planning for and providing sufficient long-term loans to agriculturists, strengthening the efficiency of co-operative sector, the development of co-operative marketing, and the processing of agricultural produce.

### Credit :

2. The outlay in the credit sector in the Plan period will be Rs. 118.60 lakhs, with a capital component of Rs. 75 lakhs. There were 9,692 primary agricultural credit societies in the State with a membership of 7.5 lakhs at the end of the First Plan. The number of societies went up to 13,771 with a membership of 15.89 lakhs by the end of the Second Plan, and to 15,299 societies with a membership of 24.27 lakhs by the end of the Third Plan. The total number during 1966-67 was 15,332 with a membership of 25.88 lakhs covering 90 per cent of the villages in the State and 51 per cent of the rural families. Efforts will be made during the Fourth Plan to consolidate the benefits of co-operation and reorganise the existing primary credit structure with a view to establish viable units as recommended by the State Co-operative Ministers Conference in 1964. By the end of the Fourth Plan, it is pro-

posed to cover all the villages in the State with co-operatives and to bring in 65 per cent of the rural families into the co-operative fold.

3. The short and medium term credit made available at the end of the First Plan was only Rs. 6.3 crores, and this rose up to Rs. 17 crores at the end of Third Plan period. Short and medium term loans of the order of Rs. 17.32 crores and Rs. 20.53 crores were made available to the agricultural sector in the years 1966-67 and 1967-68 respectively (excluding fertilizer and produce loans). Special emphasis is being laid in the Plan to make credit available to the small and medium farmers during the Fourth Plan. There is a proposal to prescribe ceilings of Rs. 4,000 for short term loans and Rs. 3,000 for medium term loans. The targets for loans to agriculturists in the Fourth Plan will be Rs. 45 crores and Rs. 5 crores. The important physical targets to be achieved during the Plan period will be as follows:—

<i>Item</i>	<i>Physical Targets fixed</i>
1. Coverage of villages .. ..	.. 100%
2. Membership in credit Societies L.S. Societies and Rural banks (level target) .. ..	.. 33 lakhs.
3. Coverage of families .. ..	.. 65%
4. Issue of S.T. and M.T. Loans .. ..	.. Rs. 50.00 crores.
S.T. 45 crores	
M.T. 5 crores.	
5. Deposits to be held (level targets)	
(a) Andhra Pradesh State Co-operative Bank ..	12.00 crores.
(b) Central Banks .. ..	20.00 crores.
(c) Primary Credit Societies .. ..	2.10 crores.
6. Share capital (excluding Government contribution)	
(a) Andhra Pradesh State Co operative Bank ..	2.50 crores.
(b) Central Banks .. ..	5.80 crores.
(c) Primary Credit Societies .. ..	9.20 crores.
7. Branches to be opened by Co-operative Central Banks.	68 numbers.

The important schemes under this head of development will include loan assistance to weak Co-operative Central Banks (Rs. 75 lakhs), outright grants as Special Bad Debts, Reserve for Co-operative Central Bank and Primary Credit Societies (Rs. 20 lakhs), revitalisation of existing village credit societies (Rs. 10 lakhs), etc.

#### **Credit Facilities to Small Farmers :**

4. It is very necessary that adequate credit facilities should be made available to the small farmers in the State to enable them to maximise agricultural production. At present, a majority of the small farmers are not able to take full advantage of modern agricultural practices because of several constraints like credit, supply of inputs, etc. Under the credit sector, steps will therefore be taken to ensure that the small farmer is helped with his credit requirements as far as possible. Ceilings have therefore been laid down for provision of short and medium term credit with this objective in view. Under short-term credit programmes, the maximum credit that would be available to any farmer in the State will be Rs. 4,000. Similarly the ceiling for medium-term loans would only be Rs. 3,000. This will ensure large credit being available to small and medium cultivators. The same strategy will be followed in making crop loans for the smaller farmers.

5. The formation of the Zilla Development Boards in the State, it is hoped, will give the necessary direction and create the required zeal to strengthen and revitalise the credit structure in the State.

#### **Long Term Credit :**

6. The need for providing sufficient long-term credit to the enterprising agriculturist has been kept in mind while drawing up the programmes of this sector. It is programmed to make long-term loans available to the tune of Rs. 130 crores during the plan period. The State Government's contribution to the debentures to be floated for this loaning programme of Rs. 130 crores has been provided for in the minor irrigation of Ayacut Development Plan. Out of the total outlay of Rs. 130 crores, Rs. 95 crores will be under the normal loaning programmes and the remaining Rs. 35 crores under special area development programmes. The Zilla Development Boards in the State have been doing pioneering work in planning for and imple-



menting special area development programmes in the agricultural sector. These area development schemes will continue to be financed from the funds of the Land Mortgage Banks and through the Agricultural Re-finance Corporation as at present. It is hoped that these Area Development Programmes will bring about substantial investment in agriculture, thus helping achieve a break through in agricultural production.

7. A sum of Rs. 10 lakhs has been specially provided for managerial subsidies to Primary Land Mortgage Banks to strengthen and increase the efficiency of the Primary Land Mortgage Banks in the State. There were only 104 Land Mortgage Banks at the end of the Second Plan period in this State; this went up to 174 by the end of the Third Plan and to 178 by the end of the year 1968 covering all the taluks in the State. The long term loans issued by the Land Mortgage Banks rose from Rs. 0.63 crore in 1955-56 to Rs. 1.83 crores in 1960-61 and Rs. 11.44 crores in 1967-68. It is proposed to provide these loans up to Rs. 130 crores during the entire Fourth Plan period.

#### **Co-operative Marketing and Processing :**

8. The outlay on co-operative marketing and processing during the Fourth Plan will be Rs. 138.80 lakhs and Rs. 181.60 lakhs respectively. The strategy adopted will be to provide share capital and marginal finance to existing co-operatives with processing units to enable them to find working capital required, and to increase their operational efficiency. The break up of the outlay in this sector will be as follows:—

	<i>Rs. in lakhs</i>
Godowns .. .. .	23.00
Share capital contribution .. .. .	109.50
Cold storage (committed) .. .. .	5.00
Block capital and margin money for processing units .. .. .	181.00
Managerial subsidies .. .. .	1.90
	320.40

The important schemes under this sector will include construction of 45 godowns for scientific storage of agricultural produce in the focal points of the State from the

agricultural production point of view, making adequate capital available to district co-operative marketing societies, provision of cold storage facilities for perishable agricultural commodities, provision of share capital and loans required for processing units etc. The following tabular statement indicates the programmes and targets for the Fourth Plan:—

<i>Sl.No.</i>	<i>Scheme</i>	<i>Number of societies to be assisted</i>	<i>Number of units to be set-up spill over.</i>	<i>New</i>	<i>Outlay proposed (Rs. in lakhs)</i>
(1)	(2)	(3)	(4)	(5)	(6)
1.	Godowns .. .. .		60	} 40 Mandi 5 big.	23.00
2.	Share capital to Primary cooperative Marketing Societies .. .. .	50	..		..
3.	Share capital to District Co-operative Marketing Societies .. .. .	20	..	..	99.50
4.	Share capital to Apex Marketing Societies .. .. .	1	..	..	5.00
5.	Cold storage .. .. .	..	..	2	5.00
6.	Subsidy to Apex Cooperative Marketing Society for creating service cadre .. .. .	1	..	..	1.00
7.	Managerial subsidy to Tobacco Marketing Societies for graders .. .. .	1	..	..	0.30
8.	Block Capital (share capital and loans to processing societies) .. .. .	10	..	..	91.00
9.	Loan for Margin Money to processing units .. .. .	180	..	..	90.00
10.	Managerial subsidy to processing Societies .. .. .	..	9	24	0.60
			Total	..	320.40

#### 4. Co-operative Sugar Factories :

9. The outlay on this head of development will be Rs. 30 lakhs during the Fourth Plan. There are eight sugar factories at present in the co-operative sector. Two more sugar factories one at Zahirabad and another at Bhim-singhi will be established during the Fourth Plan period.

In addition one more sugar factory is proposed to be set up during the Fourth Plan period.

**5. Co-operative Farming :**

10. The outlay on this head of development will be Rs. 5 lakhs during the Fourth Plan period. The line of strategy proposed to be adopted will be to establish efficient farming societies in which each member looks after his own land; the co-operative society would only provide the required services and supplies.

**6. Co-operative Training and Education :**

11. The outlay on co-operative training and education will be Rs. 37 lakhs. The five existing co-operative training institutions will be continued during the Plan period and further strengthened.

**7. Administration :**

12. A provision of Rs. 18 lakhs had been made for strengthening the administration during the Plan period.

**8. Others :**

*(i) Co-operatives for Weaker Sections :*

13. There are present 463 Labour Contract Societies, 6 Washermen Societies, 20 Rickshaw Societies, 3 Taxi Drivers Societies and 5 Co-operative Printing Presses in the State to assist the weaker sections of the community. The financial assistance provided to these societies rose up from Rs. 4.11 lakhs in the Second Plan to Rs. 36.09 lakhs in the Third Plan and came down to Rs. 3.41 lakhs during 1966-67 and Rs. 2.04 lakhs during 1967-68. A sum of Rs. 1 lakh has been provided during the Fourth Plan for assisting these societies. Efforts will be made during the Fourth Plan to ensure that the existing societies run effectively.

*(ii) Consumer Co-operative Stores :*

14. Consumer Co-operative Stores were organised to ensure supply of essential and scarce commodities. There are at present 24 Government Employees Consumer Co-operative Societies and 23 Central Co-operative Stores and 3 departmental stores in the State. A provision of Rs. 10 lakhs has been made in the Fourth Plan for this activity. Additional departmental stores will also be established at Vijayawada, Rajahmundry, Kurnool, Guntur and Warangal soon.

## COMMUNITY DEVELOPMENT

The Community Development Programme was first introduced in this State on 2nd October, 1952. This programme covered the entire rural area in the State by the end of March 1964. There were as many as 326 Blocks in the State and 121 new Blocks were created during the Third Plan.

2. An expenditure of Rs. 286.02 lakhs was incurred under this programme during the First Five-Year Plan. The expenditure on this programme during the Second Plan period was Rs. 1,609.35 lakhs against an outlay of Rs. 1,621.54 lakhs. The State's Third Plan had a provision of Rs. 2,426.79 lakhs. Against this provision the expenditure incurred was Rs. 2,402.53 lakhs.

3. Panchayati Raj was introduced in the State in 1959. Subsequently in 1965 the State Government decided to examine whether there was any scope for a more effective utilisation of Community Development and other funds allotted to Panchayat Samithis, by a territorial reorganisation of Blocks and by a modification of the staffing pattern wherever necessary, in the light of the experience gained in the administration of the Panchayat Samithi Blocks. A Higher Power Committee was therefore appointed to go into the question of territorial reorganisation of Blocks and in pursuance of the recommendations of this Committee, the total number of Blocks in the State were reduced from 448 to 321. The staffing pattern of the reorganised blocks was also modified suitably depending on the work load to ensure that the Panchayat Samithis worked efficiently. With this reorganisation, the distinction between Stage I, Stage II and the Post Stage II of the Community Development Blocks had to be given up. In order to ensure that Community Development and other funds were distributed to the reorganised blocks on an equitable basis the blocks were classified as Advance, Ordinary and Backward on the basis of certain development indicators and per capita grants were determined with reference to this classification. While considering the quantum of funds to be

provided for the Community Development Programme in the Fourth Plan, the overall objectives of the Community Development Programmes as enunciated in the 3 earlier plans were kept in view. The Community Development Programme envisaged that the local area covered by the block would develop rapidly based on local initiative and resources and with Government assistance and that by the end of the 10 years of Stages I and II the block would have become the unit of Planning and Development and would have attained the stage of self-generating growth. It has however to be conceded that the original expectations of the Community Development Programme that a Block can reach the fully self-generating growth stage in ten years have not been realised. It therefore becomes necessary to consider making some provision for Blocks in the Post Stage II also. It was therefore agreed to at the Chief Minister's Conference on Community Development at Madras that Rs. 1 lakh would be provided for each Post Stage II Blocks.

4. By 2nd October, 1968 all the Blocks in the State will enter Stage II. The requirements of outlay during the Fourth Plan period in respect of notional Stage II Blocks works out to Rs. 614.00 lakhs. The special assistance to Post Stage II Blocks requires an additional provision of Rs. 3.26 crores. Both these have been provided in the Plan.

5. A major expectation of the Panchayati Raj Institutions has been that such popular institutions would mobilise more energetically the local resources for an effective implementation of the developmental programmes. Determined and concerted efforts would therefore have to be made by the Panchayati Raj Institutions to mobilise local resources. While the raising of some resources through *ad hoc* voluntary contributions for specific programmes will continue to play an important role in the Panchayati Raj programme during the Fourth Plan, there is also need for a specific provision for giving incentives to the Panchayati Raj Institutions for raising such resources on a regular and on a continuing basis through taxation. A provision of Rs. 1.50 crores has therefore been made in the Plan for providing incentives for additional tax effort by the Panchayati Raj Institutions.

## 12. IRRIGATION

Irrigation is the most important input for higher agricultural production. Andhra Pradesh is an agricultural State with 70 per cent of its population dependent mainly on agriculture. The long term strategy in the Irrigation Sector would therefore primarily be the increase of the net percentage of irrigated area to total area sown in the State. Major and medium irrigation projects have a significant role to play in this strategy.

### **Irrigation in the Earlier Plan periods :**

2. Statement No. I shows the development of the total cropped and irrigated areas in the State over the different plan periods. The total irrigation potential created under the major and medium irrigation projects during the first three Plans was of the order of 9.65 lakh acres. The actual utilisation was of the order of 6.90 lakh acres, working out to 71.5 per cent of the potential created.

3. Statement No. II gives details of expenditure incurred on Major and Medium Irrigation Projects during the Second Plan, Third Plan and the Annual Plan periods. The statement shows the progressively increasing investments on the irrigation sector.

4. The Irrigation Sector during the Third Plan consisted of the Nagarjunasagar Project and 42 other Major and medium projects including spill-over schemes and new schemes. The outlay on Nagarjunasagar Project itself was Rs. 65.00 crores during this period while the outlay on other Major and Minor Irrigation Projects was 28.00 crores. The additional potential created during the Third Plan under Major and Medium Projects was 3.75 lakh acres. Out of this the utilisation was 2.54 lakh acres. The actual expenditure on medium irrigation projects during the years 1966-68 was Rs. 1,172.46 lakhs. The expenditure on Nagarjunasagar Project during 1966-67 and 1967-68 was Rs. 1,650.00 lakhs and Rs. 1,200.00 lakhs respectively. The outlay for 1968-69 on Nagarpunasagar Project is Rs. 1,400.00

lakhs while the outlay on Major and Medium Irrigation Schemes is Rs. 626.00 lakhs. The additional potential created under major and medium projects was 0.91 lakh acres for the year 1966-67 excluding 6.5 lakh acres for Nagarjunasagar Project. The additional potential created was 26,710 acres under major and medium projects for the year 1967-68 excluding the additional potential of 50,000 acres under Nagarjunasagar Project. The additional potential likely to be created in the year 1968-69 would be 28,480 acres for all projects, excluding the additional potential under Nagarjunasagar Project which would be 2.5 lakh acres. The total potential created under Nagarjunasagar Project by the end of 1968-69 would be about 9.5 lakh acres.

5. The outlay on Major and Medium Irrigation Schemes during the Fourth Plan period has been fixed at Rs. 109.29 crores. The following statement gives in brief distribution of the outlay on irrigation, flood control, drainage, anti-water logging, anti-sea-erosion, investigation and research programmes comprising the Irrigation Sector.

(Rs. crores)

<i>S. No.</i>	<i>Sub-Head of Development</i>	<i>Expenditure in the Third Plan</i>	<i>Expenditure during the: Annual Plan periods 1966-69</i>	<i>Outlay proposed in the Fourth Plan.</i>
1.	Irrigation			
	(a) Continuing .. ..	90.37	57.26	90.64
	(b) New .. ..	0.85	2.37	13.50
2.	Flood Control Drainage, Anti-water logging and Anti-sea-erosion ..	1.38	0.24	3.65
3.	Investigation and Engineering Research	0.42	0.23	1.50
	<b>Total</b> ..	93.02	60.10	109.29

6 . Statement III gives project-wise details of expenditure incurred so far and outlay proposed for the Fourth Plan period.

7. The Irrigation Plan will be more or less a spill-over Plan during the Fourth Plan period. The important major spill-over projects are Nagarjunasagar, Pochampad and Tungabhadra High Level Canal—Stage II. The completion of the spill-over major and medium projects will result in the creation of an irrigation potential of 20.50 lakh acres during the Fourth Plan Period.

### **Major Spillover Projects :**

#### *Nagarjunasagar Project :*

8. This is a major project of national importance which was taken up in the year 1955-56. The expenditure incurred on the project by the end of the Third Plan was Rs. 104.18 crores. The total expenditure incurred up to the end of 1967-68 was Rs. 132.68 crores. The expenditure on this project for the year 1968-69 is anticipated to be Rs. 14.00 crores bringing the total expenditure incurred so far to Rs. 146.68 crores. The spill-over cost on this multi-purpose river valley project is likely to be of the order of Rs. 39.00 crores, including the cost of canals. The additional irrigation potential in the Fourth Plan under this Project itself will be of the order of 11.40 lakh acres.

#### **Pochampad Project :**

9. This major project was taken up in the year 1959-60, the fourth year of the Second Plan at an estimated cost of Rs. 40.10 crores to irrigate an ayacut of 5.7 lakh acres in the districts of Karimnagar, Nizamabad and Adilabad. This project has been dragging on since the last eight years due to paucity of funds. A masonry dam of 3,141 feet long to a height of 140 feet at its deepest point—will be constructed for this project providing for a maximum flood discharge of 1.6 million cusecs. The project will be completed during the Fourth Plan period with an outlay of Rs. 29.24 crores

#### **Tungabhadra Project High Level Canal—Stage II. :**

10. This is one of the major projects which was started during the year 1967-68. The additional irrigation poten-



tial under this project will be 1,37,425 acres—62,425 acres in Anantapur and Kurnool districts under the Guntakal branch channel and 75,000 acres in Cuddapah and Kurnool districts under the Cuddapah North and South Canals. The outlay proposed on this scheme during the Fourth Plan period is Rs. 9.56 crores and the project will be completed during the Fourth Plan period.

#### Advance Betterment Levy :

11. It is also worth noting that Andhra Pradesh has introduced a scheme for the collection of advance betterment levy for several new schemes to be taken up during the Plan. Two major projects which will be newly taken up during the Fourth Plan are the Godavari Barrage and the Somasila. A Special Betterment Levy Act (Andhra Pradesh Irrigation Betterment and Advance Betterment Levy Act, 1955) has already been enacted and put on the Statutory Book for collecting advance betterment levy for the Godavari Barrage Scheme. Similarly advance betterment levy is proposed to be collected for the Somasila Project benefiting Nellore district in coastal Andhra area. Even in the case of other new medium irrigation schemes advance betterment levy is proposed to be collected.

12. The following are the new schemes proposed to be taken up in the Fourth Plan:—

<i>Scheme</i>	<i>Estimated cost (Rs. lakhs)</i>	<i>IV Plan provision (Rs. lakhs)</i>
1. Godavari Barrage .. ..	2,100.00	500.00
2. Somasila Project .. ..	1,036.40	200.00
3. Yeleru Reservoir .. ..	300.00	200.00
4. Pulivendla Scheme .. ..	194.00	194.00
5. Naredi Barrage .. ..	194.00	156.00
6. Thogurupeta Project .. ..	100.00	100.00
Total .. ..		1,350.00

13. In the delta districts the problem of drainage is a serious one which effects the yields of the crops. In view of the constraint of resources drainage schemes could not be taken up on a very large scale. The Government have therefore, passed a special Drainage Cess Act under which it is proposed to levy and collect a Drainage Cess for taking up drainage schemes in the Krishna and the Godavari deltas. Drainage schemes have to be taken up in the K.C. Canal and the Nizamsagar areas also and for these a provision of Rs. 10 lakhs has been made.

14. Extensive areas in the State particularly in the Krishna and Godavari deltas are frequently subject to floods and considerable damage is caused to standing crops and property. Besides this, disruption of communications and health and sanitation problems are also caused. It is, a larger scale than hitherto. A provision of Rs. 3.65 crores has therefore, been made for this purpose.

#### **Investigation and Research :**

15. An outlay of Rs. 75.00 lakhs for investigation and another sum of Rs. 75.00 lakhs for engineering research have also been specially ear-marked for taking up detailed investigation of new projects and for advance action of schemes to be included in the Fifth Plan.

## STATEMENT—I.

Development of Cropped and irrigated areas over Plan periods in  
Andhra Pradesh.

(Lakh acres)

Items	YEAR					
	1950-51	1955-56	1960-61	1964-65	1965-66	1966-67
1. Net area sown ..	242.63	278.98	269.07	283.77	271.68	280.29
2. Net area irrigated	58.22	68.88	71.88	78.03	73.57	75.85
3. Net area irrigated as % of Net area sown	24.0	24.7	26.7	27.5	27.1	27.1
4. Gross area sown ..	262.89	303.98	295.21	315.22	298.77	313.23
5. Gross area irrigated	62.36	79.07	77.07	95.14	87.31	94.52
6. Gross area irrigated as % of gross area sown ..	23.7	26.0	26.1	30.2	29.2	30.2

Source : 1. Basic statistics relating to the economy of Andhra Pradesh—  
1950-51—1962-63.

2. Season and Crop Report of Andhra Pradesh 1965-66 and 1966-67.

**STATEMENT—II**

## STATEMENT—

**Provision and Expenditure during the Second and Third Plans and the subsequent**

<i>Item</i>	SECOND PLAN	
	<i>Provision</i>	<i>Expenditure.</i>
I. Irrigation :		
(a) Spill-over .. .. .	5,260.52	5,620.62
(b) New .. .. .	181.70	96.81
II. Flood Control, Drainage and anti-sea erosion ..	..	..
III. Investigation and Engineering Research ..	29.41	25.54
<b>Total</b> ..	<b>5,831.63</b>	<b>5,743.04</b>

## II

## Annual Plans on Irrigation Projects including Nagarjunasagar.

(Rs. lakhs)

THIRD PLAN		ANNUAL PLAN 1966-67 & 1967-68		Provision
<i>Provision</i>	<i>Expenditure</i>	<i>Provision</i>	<i>Expenditure</i>	1968-69
7,192.81	9,024.20	3,872.11	3,883.77	1,903.00
128.01	85.12	73.73	67.34	170.00
152.93	148.94	16.94	18.49	5.00
59.18	41.89	13.88	14.27	9.00
7,532.93	9,300.15	3,976.66	3,983.87	2,087.00

## STATEMENT—III

## Particulars of Expenditure incurred and outlay proposed for the Fourth Plan on Major and Medium Irrigation Projects.

(Rs. lakhs)

Project	Expenditure incurred up to Third Plan.	Expenditure in the three Annual Plans 1966-69	Total anti-anticipated expenditure upto end of 1968-69	Outlay proposed during the IV Plan.
<b>I. Major Schemes :</b>				
<i>(a) Continuing :</i>				
(i) Nagarjunasagar ..	10,418.00	4,250.00	14,668.00	3,886.00
(ii) T. B. P. L. L. C. ..	1,231.99	16.58	1,248.57	32.71
(iii) T.B.P. H. L.C. Stage-I ..	1,508.87	304.41	1,813.28	73.35
(iv) Pochampad ..	462.88	623.66	1,086.54	2,923.46
(v) T. B. P. H. L. C. Stage -II ..	..	170.27	170.27	955.73
(vi) Kaddam ..	784.32	13.02	797.34	10.00
<i>(b) New :</i>				
(i) Godavari Barrage ..	..	..	..	500.00
(ii) Somasila ..	..	..	..	200.00
<b>II. Medium Schemes :</b>				
<i>(a) Continuing :</i>				
(i) Thandava Reservoir ..	51.06	55.24	106.30	263.77
(ii) Varaha Reservoir ..	11.79	51.11	62.90	35.48
(iii) Vottigedda Project ..	7.59	58.69	66.28	69.40
(iv) Kanupur canal ..	46.63	51.28	97.91	115.33
(v) Torrigadda Pumping Scheme ..	41.97	7.96	49.93	27.15
(vi) Pampa Reservoir ..	10.40	41.93	52.33	7.67
(vii) Swarna Project ..	29.43	24.45	53.88	61.73
(viii) Nallavagu Project ..	6.69	60.50	67.19	9.02
(ix) Kotipallivagu Project ..	4.19	58.70	62.89	14.14
(x) Lankasagar Project ..	9.39	51.45	60.84	15.71
(xi) Rajolibanda Diversion Scheme ..	343.83	27.80	371.63	11.37
(xii) Musi Project ..	312.27	20.12	332.39	76.61
(xiii) Guntur channel ..	..	41.00	41.00	129.00
(xiv) Bahuda reservoir ..	..	16.84	16.84	23.16
(xv) Gazuladinne Project ..	..	..	..	96.36
(xvi) Kalyani Reservoir ..	..	..	..	70.00
(xvii) Okkachettivagu Project ..	..	0.29	0.29	59.71
(xviii) Gandipalem Project ..	..	..	..	97.00
<i>(b) New :</i>				
(i) Yeleru reservoir ..	..	..	..	200.00
(ii) Pulivendala Scheme ..	..	..	..	194.00
(iii) Ncredi Barrage ..	..	..	..	156.00
(iv) Thogurupeta Project ..	..	..	..	100.00

### 13. POWER

It is axiomatic that power is indispensable for the quick growth of industry, agriculture and the optimum development of the economy. Keeping this in view special emphasis is being laid on the quick development of power in Andhra Pradesh. The per capita consumption of electricity is one of the important indicators of economic development. The per capita consumption of power was only 2.5 Kwh in the State at the beginning of the First Plan. Due to Plan efforts, the per capita consumption rose to 16 Kwh at the end of the Second Plan and to 26 Kwh at the end of the Third Plan. The consumption of power at the beginning of the Fourth Plan (i.e., 1968-69) is expected to be 45 Kwh and 101 Kwh by the end of 1973-74. Statement I shows the consumption of power in the State for the period of 1956-66 according to various categories of consumption. It is worth noting that there has been year to year significant increase in the consumption of power for productive purposes such as commercial, industrial and irrigation.

2. The installed capacity of power in the State at the beginning of the First Plan was only 43.1 M.W. and it rose to 98.9 M.W. at the beginning of the Second Plan, 213 M.W. at the beginning of the Third Plan, 291.8 M.W. at the end of the Third Plan and 645.5 M.W. at the end of 1967-68. The investment in the public sector for Power Projects also has been increasing from Plan to Plan. The total capital investment on Power Projects was only Rs. 5.83 crores at the beginning of the First Plan; and additional expenditure of Rs. 28.5 crores was incurred in the First Plan and another Rs. 38.8 crores during the Second Plan. The expenditure during the Third Plan on Power Projects was Rs. 89.1 crores. The gross revenue of the Electricity Board has also been rising steadily from Rs. 0.40 crore at the beginning of the First Plan to Rs. 1.68 crores at the beginning of the Second Plan and to Rs. 6.78 crores at the beginning of the Third Plan; the gross revenue at the end of the Third Plan was Rs. 15.37 crores. The gross revenue of the Electricity Board at the end of 1967-68 is expected to be Rs. 24.54 crores.



3. The installed capacity at the end of 1967-68 (645.5 M.W.) comprises the following Hydro, Thermal, and other Power Stations:—

Hydro Electric Power Stations at Machkund, Tungabhadra, Nizamsagar, and Upper Sileru	..	272.90 M.W.
Thermal Power Stations at Ramagundam, Nellore, Kothagudem, Vijayawada and Hussainsagar	..	346.75 M.W.
Gas Turbo sets at Hyderabad Disel sets at Nizamsagar, Nizamabad, Nirmal, Mahboobnagar, Thrimulghery	..	20.00 M.W.
Hussainsagar etc. (in all 11)	..	5.90 M.W.
	Total	.. 645.55 M.W.

4. The net work of transmission and distribution lines is also being strengthened in the State. The energisation of 220 K.V. line from Nagarjunasagar to Madras border *via* Srisailam, Cuddapah and Chittor is expected to further strengthen the system. The total length of transmission lines in the State rose from 4,640 Kilometers at the beginning of the First Five-Year Plan to 51,076 kilometres at the end of Third Five-Year Plan, registering an increase of 1,000 per cent. The State also has registered significant progress in rural electrification particularly during the Third Plan. A sum of about Rs. 21.87 crores was spent on rural electrification during the Third Plan period compared to Rs. 24.48 crores spent during the First and Second Plan periods put together. The total number of towns and villages electrified at the beginning of 1960-61 was 2,565 and this went upto 4,680 by the end of the year 1966-67. In spite of the significant progress in generation of power in the State during the last ten years, it has to be stated that the demand for power has always been running ahead of the supplies possible. While the power generated is being quickly consumed for productive purposes such as industrialisation, agricultural production *etc.*, the State continues to be backward in power development from the demand point of view and in the context of the large power potential available in the State both in the form of coal, and hydro electric Power resources. Estimates indicate that the water resources in the State are capable of generating about 2,500 M.W. of power at 60 per cent load factor. It has, however, been possible so far only

to utilise 8 per cent of the available power potential due to constraint of financial resources.

5. It was during the Third Plan that sustained and planned efforts were initiated to increase power production in the State. Major Schemes like Kothagudem Thermal Scheme Stage-I (2 × 60 M.W.) Ramagundem Thermal scheme (1 × 62.5 M.W. AID Unit), the Upper Sileru Project (2 × 60 M.W.) the Tungabhadra-Nellore Hydro Thermal Scheme (58.8 M.W.) etc., were initiated during this period. Advance action on the Kothagudem Stage-II and Lower Sileru Projects was also initiated during this period. However, due to procedural delays, time taken for finalisation of aid programmes, inter-State water problems, Indo-Pak hostilities and other bottlenecks, the pace of work had slowed down. Consequently the State passed through a power crisis in the year 1965-66 which was greatly accentuated on account of severe drought conditions. There was, however, considerable improvement in power supply during the two Annual Plan periods of 1966-67 and 1967-68. Kothagudem Stage-I (2 × 60 M.W.) and Kothagudem Stage-II (2 × 60 M.W.) and Upper Sileru Projects (2 × 60 M.W.) were commissioned considerably stepping up the power supply position during this period.

6. There has been increasing demand for power in the State particularly from the productive consumers. The Fifth Annual Electric Power Survey indicates that the Peak-load demand during the Fourth Plan period will be as follows:—

(in M.W.)

	1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
Peak-load in M.W. ..	351	520	630	760	880	1,050	1,200

The generating capacity would have to be roughly of the order of 1560 M.W. by 1973-74 to meet this load demand of 1,200 M.W. The net generation capacity at the end of 1968-69 will be about 580 M.W. after making due allowance for obsolete power sets etc. Therefore, the additional generating capacity to be added during the Fourth Plan will be about 980 M.W. The minimum investment required in the Power sector to meet this demand is estimated to

be Rs. 350 crores. Due to limited resources, however, the investment in the power sector will be Rs. 225 crores. The spill-over commitment of the Power Sector in the Fourth Plan is Rs. 176.70 crores. This is a special problem peculiar to the State, necessitating the maximisation of additional resources and financial assistance from the Centre. Statement No. II indicates the power availability position showing installed capacity, capability, firm capacity, Peak-load requirements and deficit in power in the State during the Five Years of the Fourth Plan period. Taking into account the installed capacity that will come into existence during the period indicated, it will be seen that the deficit installed capacity will be 187.1 M.W. even at the beginning of the Fourth Five-Year Plan. This deficit will continue to increase to 609.5 M.W. in the year 1972-73 and will register a slight decrease to 535.5 M.W. in the last year of the Fourth Five-Year Plan. The very large gap between demand and availability of power in the State would have therefore to be faced by making planned efforts such as importing energy from the surplus available in the neighbouring States etc.

7. A provision of Rs. 225 crores has been made for the Power sector in the Fourth Plan. The break-up of the outlay on power schemes is given in the following table:—

Sl. No.	Sub-Head of Development	OUTLAY PROPOSED IN THE FOURTH PLAN		
		Spill-over Schemes	New Schemes.	Total
(Rs. in crores.)				
1.	Generation .. ..	117.95	6.00	123.95
2.	Transmission and Distribution :			
	(a) Inter-State Links ..	16.38	1.00	59.75
	(b) Trunk Transmission lines	} 42.37		
	(c) Others			
3.	Rural Electrification .. ..		40.00	40.00
4.	Investigation .. ..		0.50	0.50
5.	Miscellaneous .. ..		0.80	0.80
	Total .. ..	176.70	48.30	225.00

8. The targets of additional capacity to be installed and additional services to be released and pumpsets to be energised are as follows:—

1. Additional installed capacity .. .. 482.5 M.W.
2. Number of services other than agricultural .. 8.00 lakhs.
3. Number of agricultural pumpsets to be energised .. 2.00 lakhs.

The additional generating capacity expected to be commissioned is shown below:—

1. Kothagudem Third stage-Unit I	1972-73	110 M.W.
2. Kothagudem Third Stage-Unit II	1973-74	110 M.W.
3. Lower Sileru Hydro Electric Scheme (2 × 100 M.W.)	1973-74	200 M.W.
4. Ramagundam Thermal Scheme	1970-71	62.5 M.W.
	Total	.. 482.5 M.W.

9. Statement III gives in brief the particulars of all important projects included in the Fourth Plan which cost Rs. 5.00 crores or more. The three important generation schemes which are expected to be commissioned towards the end of Fourth Plan are—Kothagudem Thermal Scheme-III Stage 2 × 110 M.W., Ramagundam Thermal Scheme “B” Station 1 × 62.5 M.W. and the Lower Sileru Hydro Electric Scheme 2 × 100 M.W. The first unit of 110 M.W. of the Srisaïlam Hydro Electric Project is expected to be commissioned early in the Fifth Plan. The descriptive particulars of the important power schemes included in the Fourth Plan are given below:—

(i) *Upper Sileru Hydro Electric Scheme:*

10. The Scheme is almost completed and the two units of 60 M.W. each capacity were commissioned in 1967-68. A spill-over provision of Rs. 10.00 lakhs is necessary to complete the minor works of the scheme.

(ii) *Andhra share of Balimela Dam including Andhra Pradesh Power House:—*

11. This is an inter-State Project under the joint control of Andhra Pradesh and Orissa Governments. The cost of the joint project is to be shared equally subject to a maximum of Rs. 12 crores by Andhra Pradesh Government.

The State will get a regular discharge of 2,100 cusecs from Balimela Dam to be utilised in Power Projects situated down stream *viz.*, the Upper Sileru and Lower Sileru. Construction of a 30 M.W. Power House can be taken up for the exclusive use of the State after the completion of the Dam possibly in the Fifth Plan.

(iii) *Srisaïlam Hydro-Electric Project :*

12. 4 Units of 110 M.W. capacity will be installed during the first stage of this project. This scheme will spill-over into the Fifth Plan and the first set is expected to be commissioned by about August, 1975.

(iv) *Lower Sileru Hydro-Electric Scheme :*

13. This scheme envisages the installation of four units of 100 M.W. each in the first stage of the project. Civil works are in progress and the first two units of 100 M.W. each are being imported from U.S.S.R. These units are expected to be received at site very soon. The detailed project report and design drawings are under finalisation by the State Electricity Board. The total cost of this scheme will be Rs. 4,235.85 lakhs. An amount of Rs. 605.62 lakhs would be spent on this project by the end of 1968-69 and the spill-over commitment during the Fourth Plan will be Rs. 3,630.23 lakhs. This is one of the important schemes which will add additional installed capacity for the State during the Fourth Plan. In view of the shortage in power anticipated in the State, it will be necessary that atleast two 100 M.W. units are commissioned in this project by 1973-74. It will therefore be necessary that adequate funds are made available during the First four years of the Plan, to enable this project being commissioned quickly.

(v) *Kothagudem Thermal Scheme, Stages I and II :*

14. The Thermal Scheme—Stages I and II envisaged the commissioning of  $2 \times 60$  M.W. and  $2 \times 60$  M.W. units respectively. All the four units have been commissioned and only minor works remain to be completed.

(vi) *Ramagundem Thermal Scheme 'B' Station (AID Unit) :*

15. This scheme envisages the intallation of a 62.5 M.W. unit. The estimated cost of this project is Rs. 12.48 crores

out of which Rs. 10 crores would be spent by the end of 1968-69. This scheme has been delayed due to several bottlenecks such as the delay in appointment of consultants, approval of site by AID authorities, placing of orders for equipment such as boilers *etc.* The tenders for instrumentation and controls, ash handling plant *etc.*, have not yet been finalised and a new invitation to bids was issued recently. There is need to expedite this work in view of the over all shortage of power in the State. This unit has to be commissioned in 1970-71 and accelerated efforts will therefore be necessary to import plant *etc.*, required in time.

(vii) *Kothagudem Thermal Scheme Stage III:*

16. This is another important scheme envisaging installation of  $2 \times 100$  M.W. capacity at Palvancha near Kothagudem. Top priority would have to be given for this scheme and adequate funds made available during the initial years of the Plan to ensure the commissioning of the installed capacity in time. Orders have already been placed with the B.H.E.L. for boilers and turbines costing Rs. 19.40 crores to be delivered before 1971-72. The preliminary works connected with the Power Station are taken up in 1968-69. The provision required during Fourth Plan period of 1969-74 will be Rs. 40 crores. This will be one of the important schemes which would have to be completed during the Fourth Plan itself.

17. All the following transmission and distribution schemes are spill-over schemes:—

(i) *Srisailam Transmission Scheme:*

This scheme provides for carriage of power from the Srisailam Hydro Electric Power Station to other areas in the State. Important lines like Nagarjunasagar to Srisailam and Srisailam-Cuddapah are included in this scheme. Other lines included are the Gooty-Dharmavaram 132 K.V.S.C. line and the Gooty-Kurnool 132 K.V.S.C. line.

(ii) *Third Plan transmission and distribution scheme:*

18. This scheme envisages construction of 220 K.V. 132 K.V. and 66 K.V. lines and sub-stations. All the distribution works under the scheme have been completed. Under this scheme the transmission lines will be connect-

ing Upper Sileru and Kothagudem, Kothagudem and Nagarjunasagar, Upper Sileru and Gajuvaka, Cuddapah and Madras Border, Warangal and Hyderabad, Kurnool and Srisaillam, Dharmavaram and Kalikiri and Chittoor areas of the State. Sub-stations will be located at Gajuvaka, Nagarjunasagar, Kurnool, Chittoor, Kalikiri etc.

(iii) *Fourth Plan transmission scheme and railway electrification :*

19. This scheme envisages construction of 220 K.V. and 132 K.V. Transmission lines and sub-stations connecting all important places in Andhra, Rayalaseema and Telangana areas of the State. The Railway electrification provides for power requirements of the electrification of the Madras-Vijayawada section of the Indian Railways.

*New Schemes :*

*Nagarjunasagar Pumped Storage Hydro Electric Scheme :*

20. This scheme envisages installation of  $2 \times 50$  M.W. units with turbines having reversible features to meet the peaking power needs of the State. The estimated cost of the scheme is only Rs. 4.78 crores.

(ii) *Ramagundem Thermal Scheme—'C' Station :*

21. This is an important scheme envisaging the installation of  $2 \times 110$  M.W. at Ramagundam in Telangana in the first stage. A 37.5 M.W. Station is already in operation and another 62.5 M.W. unit is under erection. In view of coal resources readily available, the location of additional capacity at Ramagundam will be ideal.

*Rural Electrification :*

22. The importance of rural electrification in the economy of an agricultural State need not be over emphasised. Andhra Pradesh is going in a large way to provide for agricultural purposes. Out of the outlay of Rs. 40.00 crores provided for rural electrification, a sum of Rs. 10.00 crores is exclusively reserved for rural electrification of Telangana area keeping in view the urgency and needs of making power available in this part of the State. Power will also be made available to energise 2 lakhs new agricultural pumpsets in the State to increase agricultural

production. Agricultural service connections will be given the highest priority to maximise food production in the State.

**Investigation :**

23. Investigation of new schemes is being undertaken in the Krishna-Godavari basins and Telangana and Rayalseema areas of the State to initiate advance action for the Fifth Plan period. A total outlay of Rs. 0.5 crore has been provided for in this connection.

*Advance action on Fifth Plan Schemes:*

24. In order to take up preliminary works on the schemes to be included in Fifth Plan so that time would not be lost in taking up major works, it is proposed to take advance action in the Fourth Plan period itself. For this a provision of Rs. 80 lakhs has been made.



## STATEMENT I

## Consumption of Power according to Categories : (In Million Units.)

<i>S.No.</i>	<i>Category</i>	1956	1957	1958	1959	1960
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Domestic consumption ..	35.18	50.61	48.40	55.36	68.68
2.	Commercial consumption ..	32.67	32.14	26.89	29.58	36.62
3.	Industrial Consumption ..	90.79	142.32	166.87	339.18	374.74
4.	Public Lighting ..	8.99	10.20	10.65	13.88	16.60
5.	Irrigation ..	11.40	11.13	25.79	35.58	59.25
6.	Public Water Works and Sewage Pumps ..	54.13	9.58	10.02	12.83	20.06
	Total sales ..	233.16	255.98	288.62	486.41	575.95

*Source* : 1. Central Water and Power Commission (for years upto 1960)

2. Chief Engineer Electricity Board, Andhra Pradesh from 1960 to 1966.

## STATEMENT I—(Contd.)

## Consumption of Power according to Categories (In Million Units)—(Contd.)

S.No.	Category	1961	1962	1963	1964	1965
(1)	(2)	(8)	(9)	(10)	(11)	(12)
1.	Domestic consumption ..	77.6	90.3	70.9	100.5	85.4
2.	Commercial consumption ..	37.6	38.0	85.6	51.4	170.5
3.	Industrial Consumption ..	488.1	517.1	589.4	726.8	570.5
4.	Public Lighting ..	18.0	19.8	15.1	23.0	20.3
5.	Irrigation ..	63.6	65.5	96.2	131.3	172.7
6.	Public Water Works and Sewage Pumps ..	19.2	45.1	11.2	17.5	22.3
	Total Sales ..	704.1	775.8	868.4	1,050.5	1,047.4

Sources : 1. Central Water and Power Commission (for years upto 1960)  
2. Chief Engineer Electricity Board, Andhra Pradesh from 1960 to 1966.

## STATEMENT I—(Contd.)

## Consumption of Power according to Categories (In Million Units)—(Contd.)

S. No.	Category	1966	% Variation in Col 8 over Col. 3	% Variation in Col. 3 over Col. 9	% Variation in Col 13 over Col. 3
(1)	(2)	(13)	(14)	(15)	(16)
1.	Domestic Consumption ..	78.0	+95.2	+0.5	+121.5
2.	Commercial Consumption	172.8	+12.1	+359.5	+428.4
3.	Industrial Consumption ..	496.5	+312.8	+1.7	+446.8
4.	Public Lighting ..	17.1	+84.6	—5.0	+90.0
5.	Irrigation ..	175.6	+419.7	+176.1	..
6.	Public Water Works and Sewage Pumps ..	22.8	—62.9	+18.8	—57.9
	Total Sales ..	968.0	+147.0	+37.5	+315.1

**STATEMENT—II**

				STATE	
				1967-68	1968-69
				All	
Installed capacity	..	..	..	645.5	580.4
Capability	..	..	..	435.5	435.5
Firm Capacity	..	..	..	332.9	332.9
Peak Load	..	..	..	351.0	520.0
Gross Margin (Peack Load minus capacity)	..			(+)79.5	-87.5
Surplus (+) or Deficit (-) (Peack load minus firm capacity)	..	..	..	(-)18.1	(-)187.1

## MENT—II

1969-70	1970-71	1971-72	1972-73	1973-74
figures in (M. Ws.)				
580.4	642.9	642.9	752.9	1,062.9
435.5	482.0	482.0	537.0	778.0
332.9	385.5	385.5	440.5	664.5
630.0	760.0	880.0	1,050.0	1,200.0
193.5	-281.0	-397.0	-512.0	-422.0
(-)-297.1	(-)-374.5	(-)-494.5	(-)-609.5	-535.5

## STATEMENT—III

## Fourth Five-Year Plan.

(Important Projects costing Rs. 5 crores and above)

(Rs. in lakhs)

S.No.	Head of Development	Total Estimated cost.	TOTAL EXPENDIURE BY	
			the end of III Plan.	1968-69
(1)	(2)	(3)	(4)	(5)
<b>A. Spill-over Generation Schemes :</b>				
1.	Upper Sileru Hydro-Electric Scheme	1,850.00	1,272.03	1,814.76
2.	Andhra Share of Belimela Dam including Andhra Pradesh Power House	1,200.00 +60.00	300.00	680.59
3.	Srisaillam Hydro-Electric Project	7,470.00	967.00	2,159.00
4.	Lower Sileru Hydro-Electric Scheme	4,235.85	118.75	605.62
5.	Kothagudem Thermal Scheme 1st Stage	2,896.61	1,419.68	2,740.41
6.	Kothagudem Thermal Scheme II Stage	1,333.33	278.26	1,212.50
7.	Ramagundam Thermal Scheme 'B' Station A.I.D. Set (62.5 MW.)	1,248.00	208.95	1,000.28
8.	Kothagudem Thermal Scheme III Stage	4,400.00	..	450.00

## STATEMENT- III—Contd.

## Fourth Five-Year Plan

(Important Projects costing Rs. 5 crores and above)

S. No.	Head of Development	(Rs. in lakhs)			
		FOURTH PLAN OUTLAY		1969-70	
		Total	F.E.	Total	F.E.
(1)	(2)	(6)	(7)	(8)	(9)
<b>A. Spill-over Generation Schemes :</b>					
1.	Upper Sileru Hydro-Electric Scheme	10.00	Nil.	10.00	Nil.
2.	Andhra Share of Belimela Dam including Andhra Pradesh Power House	480.00	..	50.00	..
3.	Srisaïlam Hydro-Electric Project	3400.00	..	450.00	..
4.	Lower Sileru Hydro-Electric Scheme	3,570.00	400.0	500.00	100.00
5.	Kothagudem Thermal Scheme 1st Stage	32.00	Nil.	32.00	Nil.
6.	Kothagudem Thermal Scheme II Stage	55.00	25.0	55.00	25.00
7.	Ramagundam Thermal Scheme 'B' Station A.I.D. Set (62.5 M.W.)	248.00	121.0	180.00	90.00
8.	Kothagudem Thermal Scheme III Stage	4,000.00	500.0	1,250.00	150.00



## STATEMENT III—(Contd.)

## Fourth Five-Year Plan

(Important Projects costing Rs. 5 crores and above)

		(Rs. in lakhs.)			
S. No.	Head of Development	1970-71		1971-72	
		Total	F. E.	Total	F. E.
(1)	(2)	(10)	(11)	(12)	(13)
<b>A. Spill-over Generation Schemes :</b>					
1.	Upper Sileru Hydro-Electric Scheme	..	..	..	..
2.	Andhra Share of Belimela Dam including Andhra Pradesh Power House	..	50.00	..	100.00
3.	Srisaillam Hydro-Electric Project	..	600.00	..	600.00
4.	Lower Sileru Hydro-Electric Scheme	750.00	150.00	750.00	150.00
5.	Kothagudem Thermal Scheme 1st Stage	..	..	..	..
6.	Kothagudem Thermal Scheme II Stage	..	..	..	..
7.	Ramagundam Thermal Scheme 'B' Station A. I.D. Set (62.5 M.W.)	..	68.00	31.10	..
8.	Kothagudem Thermal Scheme III Stage	..	1,500.00	200.00	850.00

## STATEMENT III—(Contd.)

## Fourth Five-Year Plan

(Important Projects costing Rs. 5 crores and above)

(Rs. in lakhs)

S. No.	Head of Development	1972-73		1973-74	
		Total	F. E.	Total	F.E.
(1)	(2)	(14)	(15)	(16)	(17)
<b>A. Sipll-over Generation Schemes :</b>					
1.	Upper Sileru Hydro-Electric Scheme	..	..	..	..
2.	Andhra Share of Belimela Dam including Andhra Pradesh Power House	.. 140.00	..	140.00	..
3.	Srisaillam Hydro-Electric Project	.. 750.00	..	1,000.00	..
4.	Lower Sileru Hydro-Electric Scheme	770.00	..	800.00	..
5.	Kothagudem Thermal Scheme 1st Stage.	..	..	..	..
6.	Kothagudem Thermal Scheme II Stage	.. ..	..	..	..
7.	Ramagundam Thermal Scheme 'B' Station A.I.D. Set (62.5 MW.)	..	..	..	..
8.	Kothagudem Thermal Scheme III Stage	.. 300.00	..	100.00	..

## STATEMENT III—(Contd.)

## Fourth Five-Year Plan

(Important Projects costing Rs. 5 crores and above)

(Rs. in lakhs.)

S. No.	Head of Development	Total Estimated cost,	TOTAL EXPENDITURE BY	
			the end of III Plan.	1968-69
(1)	(2)	(3)	(4)	(5)
<b>B. Spill-over Transmission and Distribution Schemes :</b>				
1.	Srisaïlam Transmission Scheme	.. 851.00	150.35	458.16
2.	Third Plan Transmission and Distribu- tion	.. .. 1,892.00	729.40	1,646.82
3.	Fourth Plan Transmission Scheme and Railway Electrification	.. 3,600.00 +200.00	..	173.88
4.	Fourth Plan Distribution Scheme	.. 3,184.00	..	759.81
<b>C. New Schemes :</b>				
1.	Nagarjunasagar Hydro-Electric Scheme	478.00	..	..
2.	Ramagundam 'C' Station	.. 4,500.00	..	..
<b>D. Rural Electrification :</b>				
E.	Investigation of New Projects	..	..	..
P.	Advance Action on Fifth Plan Schemes	..	..	..

## STATEMENT III—(Contd.)

## Fourth Five-Year Plan

(Important Projects costing Rs. 5 crores and above)

(Rs. in lakhs)

S. No.	Head of Development	FOURTH PLAN OUTLAY		1969-70	
		Total	F.E.	Total	F.E.
(1)	(2)	(6)	(7)	(8)	(9)
<b>B. Spill-over Transmission and Distribution Schemes :</b>					
1.	Srisaïlam Transmission Scheme ..	393.00	30.00	180.00	20.00
2.	Third Plan Transmission and Distribution ..	245.00	30.00	150.00	20.00
3.	Fourth Plan Transmission Scheme and Railway Electrification ..	3,000.00	135.00	380.00	15.00
4.	Fourth Plan Distribution Scheme ..	2,337.00	50.00	453.00	12.00
<b>C. New Schemes :</b>					
1.	Nagarjunasagar Hydro-Electric Scheme	200.00	150.00	..	..
2.	Ramagundam 'C' Station ..	400.00	..	..	..
D.	Rural Electrification ..	4,000.00	..	800.00	..
E.	Investigation of New Projects ..	50.00	..	10.00	..
P.	'Advance Action on Fifth Plan Schemes'	80.00	..	..	..
Total		22,500.00	*1,441.00	4,500.00	432.00

\*In respect of Kothagudem IIIrd Stage, most of the equipment like Ash Handling Plant, Instruments and controls etc. will be procured indigenously as far as possible, in which case the F. E. component for this scheme will be small.

## STATEMENT III—(Contd.)

## Fourth Five-Year Plan

(Important Projects costing Rs. 5 crores and above)

(Rs. in lakhs.)

S. No.	Head of Development	1970-71		1971-72	
		Total	F. E.	Total	F. E.
(1)	(2)	(10)	(11)	(12)	(13)
<b>B. Spill-over Transmission and Distribution Schemes :</b>					
1.	Srisaillam Transmission Scheme ..	120.00	10.00	93.00	..
2.	Third Plan Transmission and Distribution .. ..	70.00	10.00	25.00	..
3.	Fourth Plan Transmission Scheme and Railway Electrification ..	620.00	30.00	800.00	40
4.	Fourth Plan Distribution Scheme ..	400.00	12.00	400.00	10
<b>C. New Schemes :</b>					
1.	Nagarjunasagar Hydro-Electric Scheme ..	..	..	..	75
2.	Ramagundam 'C' Station ..	..	..	..	..
<b>D.</b>	<b>Rural Electrification :</b>	800.00	..	800.00	..
E.	Investigation of New Projects ..	10.00	..	10.00	..
P.	Advance Action on Fifth Plan Schemes ..	..	..	..	..
		4,988.00	443.00	4,428.00	425

## STATEMENT III—(Contd.)

## Fourth Five-Year Plan

(Important Projects costing Rs. 5 crores and above)

(Rs. in lakhs)

S. No.	Head of Development	1972-73		1973-74	
		Total	F. E.	Total	F.E.
(1)	(2)	(14)	(15)	(16)	(17)
<b>B. Spill-over Transmission and Distribution Schemes :</b>					
1.	Srisailam Transmission Scheme .. ..	..	..	..	..
2.	Third Plan Transmission and Distribution .. ..	..	..	..	..
3.	Fourth Plan Transmission Scheme and Railway Electrification ..	600.00	35	600	15
4.	Fourth Plan Distribution Scheme ..	600.00	8	484	8
<b>C. New Schemes :</b>					
1.	Nagarjunasagar Hydro-Electric Scheme	100.00	75	100	..
2.	Ramagundam 'C' Station ..	100.00	..	300	..
<b>D.</b>	<b>Rural Electrification :</b> .. ..	800.00	..	800	..
<b>E.</b>	<b>Investigation of New Projects</b> ..	10.00	..	10	..
<b>P.</b>	<b>Advance Action on Fifth Plan Schemes</b>	20.00	..	60	..
		4,190.00	118	4,394	23



## 14. INDUSTRIAL DEVELOPMENT

As has been mentioned earlier the level of Industrial development in Andhra Pradesh is very low despite the vast natural resources the State has. This has been due to several reasons, but chiefly due to lack of adequate investment in the Central and Private sectors. The absence of the necessary infra-structure might have been one cause for this lack of investment but this is no longer so. The strong agricultural sector in the State provides the base for industrial growth and in fact a stage has been reached when unless investment in the Industrial sector is stepped up the overall growth of the State's economy will not progress satisfactorily. Industries and Mining have therefore been given high priority in the strategy to be adopted during the Fourth Plan, next only to Power and Irrigation and programmes directly related to Agricultural Production. With the State's increasing investments in Power and the consequent stepping-up of total Power available for productive uses, the necessary foundation for rapid industrial development has already been laid in the State. The strategy in the Fourth Plan would be to strengthen this foundation and at the same time provide the infra-structure necessary for rapid industrialisation in the State. However optimum development will only be possible if major investments are made in the Central and Private sectors of the State to enable the State to keep up pace with the Industrial development envisaged in the country during the Fourth Plan. Thus the contribution of the Industrial sector to the State Income in 1964-65 is only 6.9 per cent as against 18.0 per cent to National Income of the Country.

2. The net industrial output for the State in 1951 was estimated to be only 2.68 per cent to the total output for the country as a whole and this rose to 2.73 per cent by 1964 registering an insignificant marginal increase.

3. Keeping the need for diversification of income and rapid industrialisation, the State has despite heavy commitments under Irrigation and Power been increasing the outlay on the Industrial sector to the extent possible. The



outlay on Industries has thus gone up from Rs. 1.5 crores in the First Plan to Rs. 10.57 crores in the Second Plan and to Rs. 15.19 crores in the Third Plan.

4. The Industrial production in the State has been increasing during the first three Plan periods. The index of industrial production with base 1956—100 thus rose to 163 in 1961, to 242 in 1965, although it declined again to 214 in 1966 and to 215 in 1967. The year 1964-65 was a good year in the agricultural sector, explaining the 'peak' in production of industrial products based on agricultural raw materials. The decline in production in 1966 and 1967 was due to drought seriously affecting supply of industrial raw materials as well as the general Industrial recession in the country. It has however to be remembered that because of the Industrial base being narrow despite the growth the contribution of the Industrial sector to the total State Income has remained very low. The need for broadening and diversifying the industrial sector in the State is therefore urgent and this has been kept in view while spelling out the objectives in the strategy for this sector during the Fourth Plan. However investment in the State sector can ensure only the provision of the infra-structure but the actual growth in the sector can be brought about only by investment in the Central and Private sectors. As mentioned earlier the total investment on Central sector Industrial Projects in the State is only 3.6 per cent. Unless the investments in the State in the Central sector are sharply increased the efforts made by the State for provision of infra-structure will be of no avail. Similarly in the private sector also besides the incentives provided by the State, the Projects at the all-India level also have to be such that investments in industrially back-ward States are increased.

5. It is estimated that an investment of the order of Rs. 400 to Rs. 450 crores will be required in the State to attain at least 8 to 10 percentage rate of growth in the Industrial sector in the State as envisaged in the National Plan. It is anticipated that of this Rs. 155 crores will be in the Private sector for Large and Medium Industries and about Rs. 50 crores in Small Scale Industries. The Central Sector investment would therefore have to be of the order of Rs. 200 crores to Rs. 250 crores in the State.

## I. LARGE AND MEDIUM INDUSTRIES

### *State Industrial Projects :*

6. The Plan does not envisage the starting of any new State Industrial Projects. The Andhra Pradesh Industrial Development Corporation however has already floated a few industries in collaboration with the Private sector which have been dealt with separately. The strategy in the Industrial Sector is based on the development of certain growth areas and to provide the infra-structure facilities necessary and to afford the necessary incentives for attracting capital and entrepreneurs to establish new large and medium scale industries in the State.

7. Keeping the potential resources certain focal points for industrial development have been identified in the State for quick and rapid development. These focal points will be made the future growth centres for industrialisation in the State. The resources in the hinter-land of the focal points will be fully utilised and the infra-structure *etc.*, required for such growth will be made available by the State. The growth centres will be as follows:—

- (i) K.C. Canal Ayacut area
- (ii) Kothagudem and Ramagundem area
- (iii) Nagarjunasagar Ayacut area
- (iv) Hyderabad-Secunderabad area
- (v) Visakhapatnam-Anakapalli area

8. In these areas developed land with the required infra-structural facilities such as water *etc.*, and other facilities will be made available to entrepreneurs on payment basis. The amount provided for this is Rs. 400 lakhs, out of which Rs. 200 lakhs is proposed to be utilised for providing facilities for Central Sector Projects.

9. The industries which are contemplated in these areas are indicated below :

#### *(i) K.C. Canal Ayacut area :*

This is an area in the Rayalaseema region of Andhra Pradesh where mineral based, agricultural and light engineering industries can be set up. Important minerals such as barytes, limestone, asbestos, gypsum, steatite *etc.*, are available in this region. On the agricultural side the

Kurnool-Cuddapah canal waters enable the harvesting of important commercial crops like groundnut, sugarcane, and foodgrains such as paddy etc. With the development of additional power in the Srisailem Project, this area will have great possibilities in future for industrial development. The agricultural based industries which will be ushered in, in this area are sugar industry, groundnut oil and vanaspathi industry solvent extraction industry, rice mills etc. The mineral based industries proposed for this area are cement, barytes, paints and varnishes, pigments, asbestos and light engineering industries such as the manufacture of electric motors and pumpsets. In addition tanning and footwear industries, fertilizer mixtures, insecticides, bone meal, dusters and sprayers, and consumer based industries making the best use of the local resources will be encouraged.

(ii) *Kothagudem and Ramagundam areas:*

10. These areas are located in the Telangana area of Andhra Pradesh. These areas are famous for their coal reserves. There will be super thermal power stations in this area in the near future in view of the thermal stations which have already come up and are proposed to be set up during the Fourth Plan. The mineral based industries in these areas will be fertilizers, manufacture of low carbonised coke, briquettes from coke dust, pig iron, alloy steel, corrugated sheets, textiles, etc. Light engineering industries will also prosper in the area due to availability of cheap power and varied mineral resources in the neighbourhood. Several forest based industries and consumer-based industries such as housing materials, seasoned wood industries will also be encouraged.

(iii) *Nagarjunasagar Project area:*

11. The importance of the Nagarjunasagar Ayacut area need not be specially emphasised. Several industries such as sugar, power, alcohol, cotton and tobacco products on the agricultural side, and engineering industries such as tractor manufacturing, automobile and allied industries, fertilizers etc., have solid potentialities in this area. Fruit industry, the vanaspathi industry and the cement industry will also prosper in this area.

(iv) *Hyderabad-Secunderabad area:*

12. This area is already developed. In view of the existing facilities industries such as scooter manufactur-

ing, small car manufacture, tractor factories, light engineering industries, electrical industries, manufacture of drugs and pharmaceuticals and host of consumer-based industries can come in this area.

(v) *Visakhapatnam-Anakapalli area :*

13. Keeping the natural resources and the advantage of an excellent inland harbour such as Visakhapatnam, in view, steel and pig iron plants can come up in this area. Other industries which can come up in this area are zinc smelter units, crane factories, fertilizer factories, marine and salt industries, chemical industries, agro-based industries and light engineering industries.

**Incentives :**

14. The incentives to be offered will be the development of special growth areas. It is also proposed to provide incentives for industries in the State on the lines already provided by several other States like :—

(1) Power subsidy.

(2) Certain exemptions from sales tax on raw materials and finished products for industries established in the Fourth Plan for a period of 5 years.

(3) Relief from incidence from the local taxes, duties and rates for industries established during the Fourth Plan for a period of 5 years.

(4) Assistance in the investigation and preparation of feasibility reports for industries to be set up during the Fourth Plan.

(5) Exemption from any fresh non-agricultural assessment for industries to be set up during the Fourth Plan.

The outlay for providing these incentives is Rs. 6 crores.

15. It is also proposed to give certain preferential incentives to technically qualified persons so as to tackle the problem of unememployment of engineering personnel

by providing them avenues of self-employment. Details are given in the concerned chapter.

### **Andhra Pradesh Industrial Development Corporation :**

16. The Andhra Pradesh Industrial Development Corporation was set up by the Government of Andhra Pradesh in 1960 for accelerating the tempo of industrialisation in the State. The principal activities of the Corporation are:—

(i) To render financial assistance to industry and participation in the private industry; and

(ii) direct promotion of selected industries. The corporation ever since its establishment has been underwriting/participating in the Share Capital of Industrial undertakings. The Corporation has up to 31st March 1967 rendered financial assistance to the extent of Rs. 6.10 crores for setting up of industries such as fertilizers, plastics, chemicals, engineering, cement, textiles, etc. It has also taken up the investigation of certain selected industries in the State for joint sponsoring in full collaboration with the Private Sector. The Government of India has granted industrial licence and letters of intent to the Corporation in respect of 7 industries for the establishment of a ball bearing project, a glass project, a high tension and low tension insulators project, a pig iron project and a power cables projects. The Corporation intends to expand the range as well as the tempo of its operations during the Fourth Plan. The investment of the Government on Corporation schemes during the Fourth Plan will be Rs. 10.00 crores. In addition the Corporation itself will be in a position to generate internal resources. The Andhra Pradesh Industrial Development Corporation has therefore programmed to invest about Rs. 15.5 crores as its share of industrialisation of the State during the Fourth Plan period. The commitments of the Corporation for the Fourth Plan period are briefly summarised below:—

		<i>Rs. crores.</i>
<b>A. Spill-over commitments :</b>		
(a) Financial Assistance	..	0.25
(b) Ball Bearings project	..	2.25
		2.50

**B. New Schemes :**

(a) Kothagudem Complex (including Pig Iron Project) .. ..	1.00
(b) Financial Assistance and Joint Ventures ..	
(i) Financial assistance to Small Scale Industries .. ..	4.00
(ii) Financial assistance to Large and Medium Scale Industries ..	8.00
	13.00
	Rs. 15.50 crores

*State Financial Corporation :*

17. The State Financial Corporation is a statutory organisation created under the State Financial Corporations Act with the desirable objective of industrial financing to promote industrial expansion in the country. It undertakes programmes of issue of loans to accelerate industrialisation programmes, underwriting/participating in the Share Capital of Projects etc. Since its inception up to 15th September, 1968, the Corporation has sanctioned assistance as detailed below:—

	<i>Rs. lakhs</i>
I. Loans .. .. .	1,320
II. Direct subscription to Debentures .. .. .	27
III. Underwriting the issue of shares and debentures .. .. .	36
IV. Guarantees for Deferred payments .. .. .	196

18. Under the re-finance scheme of the I.D.B.I. the Corporation can obtain refinance up to 3 times the paid-up capital plus reserves of the Corporation. As it stands, the maximum limit of refinance that can be availed works out to Rs. 518 lakhs as under:—

	(Rs. in lakhs)
Present paid up capital	150
Reserves	23
	173
3 time of that	518 lakhs

19. The Corporation under this facility has already availed an amount of Rs. 336 lakhs (outstanding) and proposed to draw another Rs. 138 lakhs within the next few months in respect of certain applications which have been already sanctioned by the I.D.B.I. and in the case of applications pending with them. Thus the total utilisation under this head would touch Rs. 474 lakhs, and the further funds that can be expected under this source, i.e., refinance, in the coming years is just Rs. 44 lakhs. However the Corporation has reached the ceiling under this facility. The only way left out to find further funds is to increase the paid-up capital.

20. During the Fourth Plan a sum of Rs. 1.00 crore will be invested by the Government as its share of capital in the State Financial Corporation. This enables the State Financial Corporation to generate resources to the tune of about Rs. 5.00 crores from other financing institutions so as to meet the industrial financing needs of the State.

*Andhra Pradesh Small Scale Development Corporation :*

21. The investment for the Andhra Pradesh Small Scale Development Corporation during the Fourth Plan will be Rs. 2.00 crores. The programme of the Corporation during the Fourth Plan is as follows:—

	Rs.
(1) Additional machinery for the existing units	3,50,009
(2) Industrial Financing	1,00,00,000
(3) Leather units	6,50,000
(4) Hire Purchase scheme	50,00,000
(5) Sample Room	25,000
(6) Marketing and Export Promotion	25,00,000
(7) Yanam Tannery	10,00,000
8. Six New Raw Material Servicing centres .. ..	10,00,000
Total .. ..	2,05,25,000

22. The details of the schemes proposed to be taken up by the Andhra Pradesh Small Scale Industrial Development Corporation are indicated below:—

(i) *Additional machinery for the existing units:*

23. The Corporation is running a number of Units and it is estimated that during the Fourth Five-Year Plan period, a sum of Rs. 3.50 lakhs would be required under capital expenditure:—

(Rs. in lakhs)

(a) Addition of Wood Working Machinery to Saw Mill-cum-Timber Seasoning Plant, Warangal .. ..	1.50
(b) Provision of machinery like Welding sets, punching and Shearing Machines, Plate Bending Machines, Presses etc. to General Engineering Workshops. .. ..	2.00

(ii) *Industrial Financing:*

24. It is proposed to extend financial assistance to the Small Scale Units for which a sum of Rs. 1 crore is earmarked.

(iii) *Leather Units:*

25. It is proposed to shift the Utility Leather Goods Centre to the premises of Hyderabad Tanneries and establish new units for the manufacture of leather board, glue and leather goods for which a sum of Rs. 6.50 lakhs would be required for capital expenditure:

(Rs. in lakhs)

(a) Leather Board Manufacturing Unit at Hyderabad ..	2.50
(b) Leather goods Manufacturing Unit (Suit cases etc.) ..	2.50
(c) Glue manufacturing Unit .. ..	1.50

(iv) *Hire Purchase Scheme:*

26. The Corporation proposes to assist the entrepreneurs to establish small scale industrial units by importing complete plants or machines from *Rupee Payment Areas*. Estimating that a sum of Rs. 10.00 lakhs would be required for two units per year, the funds required for the Plan period would be Rs. 50.00 lakhs.

(v) *Sample Room:*

27. The Corporation proposes to establish a Sample Room to exhibit the articles which are required by vari-



ous Government Agencies like Defence Department. Railways, Government undertakings, D.G.S. & D., etc., so that the Small Scale Industrial Units within the State may try to manufacture the requirements of these Departments. The capital expenditure is estimated to be Rs. 25,000

(vi) *Marketing and Export Promotion:*

28. The Corporation plans to work as a 'Liasion' between the Government Purchasing Departments and Overseas Market. In addition to this, the Corporation proposes to advance money to the suppliers and collect the bills in due course from the purchasing departments. It is estimated that on the basis of four turn overs in a year, the working capital required to finance the marketing activity would be Rs. 25.00 lakhs.

(vii) *Yanam Tannery:*

29. The Tannery established by the Government of Pondicherry is proposed to be taken over by the A.P.S.S.I.D.C. Ltd, To run this tannery efficiently, further capital investment of Rs. 10.00 lakhs is earmarked.

(viii) *Six new Raw Material Servicing Centres:*

30. It is proposed to establish six more raw material servicing centres in the State. A sum of Rs. 10.00 lakhs is to be provided for this purpose.

(ii) *Andhra Pradesh Mining Corporation:*

31. The Andhra Pradesh Mining Corporation was established in 1961 as a Government company with an authorised capital of Rs. 50.00 lakhs. This authorised capital was increased to Rs. 2.00 crores subsequently. The Government invested a sum of Rs. 40.00 lakhs in the shares of the Corporation during the Third Five-Year Plan period.

32. The important objectives of the Corporation are to undertake prospecting of strategic and important minerals, mining of such minerals and establishment of mineral-based industries.

33. The Andhra Pradesh Mining Corporation has at present the following mines working in addition to the Gandrai Iron ore mine in Krishna district.

- (1) The Brahmagundam Iron Ore Mine at Veldurthi in Kurnool district.
- (2) The Ramathirtham limestone mine in Kurnool district.
- (3) The Choulapalle quartz mine near Shadnagar in Mahaboobnagar district.
- (4) The Pocharam barytes mine in Khammam district.
- (5) The Velugumetla barytes mine in Khammam district.
- (6) The Punyakshetram clay mine at Punyakshetram in East Godavari district.
- (7) The Sree Venkateswara Clay mine at Dwaraka Tirumala in West Godavari district.
- (8) The Brahmanapalle Asbestos Mine in 'Pulivendla, Cuddapah district.

34. In addition to the above, the Corporation is running a mica bricks manufacturing unit at Gudur based on the process patented by the National Research Development Corporation.

35. The investment of the State Government in the Andhra Pradesh Mining Corporation during the Fourth Plan period will be Rs. 1.00 crore. The abstract of investment on the spill-over and new schemes in the Fourth Plan are indicated below:—

<i>Sl. No.</i>	<i>Name of Project</i>	<i>Capital Expenditure.</i>
		<i>(Rs. in lakhs)</i>
1.	Spill-over Mining schemes .. ..	11.28
2.	Spill-over Mineral Processing units .. ..	2.50
3.	New Mining schemes .. ..	18.00
4.	New Mineral processing units .. ..	25.00
5.	Mineral trading schemes .. ..	25.80
6.	Ongole Iron ore Mining .. ..	50.00
		132.58

36. The following statement gives the production targets envisaged for spill-over schemes and new schemes to be taken up by the Mining Corporation during the Fourth Plan:—

<i>Sl. No.</i>	<i>Project</i>	<i>Targetted annual production (tonnes)</i>	<i>Total production in Plan period (tonnes.)</i>
<b>Mining</b>			
1.	Iron ore Mine, Veldurthi ..	30,000	150,000
2.	Iron Ore Mine, Siddepuram ..	90,000	450,000
3.	Quartz mine and Silica Sand unit, Shadnagar ..	24,000	120,000
4.	Ball Clay mine, Dwarakatirumala ..	10,000	50,000
5.	Limestone mine, Ramthirtham ..	10,000	50,000
6.	Asbestos mine, Brahmanapalli ..	500	2,500
<b>Mineral Processing</b>			
1.	Mica Bricks Unit, Gudur ..	84,000 Nos.	420,000 Nos.
2.	Clay Washing Plant, Dwaraktirumala ..	3,000	15,000
<b>New Mining Schemes</b>			
1.	Asbestos Mine, Veidendla-1 ..		2,000
2.	Asbestos Mine, Gunakanapalle ..		2,000
3.	Asbestos Mine, Velidendla-2 ..		2,000
<b>New Mineral Based or Mineral Processing Units</b>			
1.	Asbestos Processing Plant ..	2,000	8,500
<b>Mineral Trading Schemes</b>			
1.	Manganese export trade ..	1,00,000	5,00,000
2.	Barytes export trade ..	5,000	25,000
3.	Felspar Export trade ..	10,000	50,000
4.	Black granite export ..	2,520	11,600

## DEPARTMENT OF MINES AND GEOLOGY

37. The investment on Mines and Geology during the Fourth Plan will be Rs. 1.00 crore. The Department of Mines and Geology supplements the efforts of the Geological Survey of India in studying and surveying the mineral resources of the State.

38. The Department of Mines and Geology concerns itself with the intensification of mineral surveys in the State to maximise the benefits of the utilisation of these resources. The principal minerals of the State are coal, manganese, asbestos, barytes, mica, iron ore, china clay, limestone, etc. Apart from these important minerals, deposits are also found of apatrite graphite, steatite, limonite, gypsum, fireclay, quartz and silica. In spite of possessing a large variety of minerals, the level of exploitation and their utilisation has so far been poor in the State except in the case of coal and limestone. The following statement shows the quantity and value of minerals mined in Andhra Pradesh during 1965:—

<i>Mineral</i>	<i>Production (in tonnes)</i>	<i>Estimated Reserves</i>
Asbestos .. ..	78	Not estimated.
Barytes .. ..	36,170	1.7 million tons.
Calcite .. ..	5,806	1.0 million ton.
Coal .. ..	40,41,000	1000 million tons.
Fire clay .. ..	1,593	Not estimated.
Iron ore .. ..	1,51,248	About 400 million tons.
Limestone .. ..	19,38,592	Very large reserves.
Manganese ore .. ..	1,34,299	3 to 4 million tons.
Mica .. ..	5,641	Large reserves.
Yellow Ochre (1964-65) .. ..	5,146	Not estimated.
Quartz and Silica .. ..	48,350	Large reserves.
Steatite .. ..	7,858	Not estimated.
Apatrite .. ..	972	0.15 million tons.

*Source* : "A brief sketch of the Geology and Mineral resources of Andhra Pradesh" issued by Department of Mines and Gology.

39. The Department of Mines and Geology proposes to intensify its activities during the Fourth Plan period, to confer quick benefits of the exploitation of minerals of the State. The programme of the Department of Mines and Geology during the Fourth Plan and financial commitments are briefly indicated below :

		<i>(Rs. in lakhs)</i>
I.	(a) Intensification of mineral surveys. (Asbestos, Barytes, Managanese Clays, Steatite, Limestone, Chromite, Apatite and some base metals and Starategic minerals)	37.50
	(b) Funds for Pilot Plant Studies, Preparation of Feasibility Reports, Publication of Departmental Reports and Bulletins. Purchase of Library Books etc. ..	2.50
II.	Exploration of Iron Ore deposits of Ongole (Export Potential)	22.00
III.	Technical Cell .. .. .	20.00
IV.	Mineral Regulation .. .. .	3.00
V.	Development of Feeder Roads .. .. .	15.00
Total ..		100.00

## II. VILLAGE AND SMALL INDUSTRIES

### *Handloom Industry :*

40. The outlay on Handloom Industry and Power looms during the Fourth Plan period will be Rs. 7.00 crores.

41. The main objectives of the Plan in this sector will be (i) reduction of under-employment among weavers, (ii) development of handlooms, and (iii) improving the sales of handloom cloth. The other aims of this sector would be to consolidate and stabilise the working of weavers co-operative societies and to step up production of handloom cloth in the State. The Government of India have tentatively fixed a target for production of 3,200 million yards under Handloom Industry in the State compared to the present level of production of 2,250 million yards. This would mean that the production would have to be increased by 50 per cent in the State. Efforts will be made in the State to achieve this target. Some of the important schemes under the Handloom Sector are discussed below :

#### *(i) Power Looms :*

42. The Andhra Pradesh State has been allotted 12,400 power looms. More than 50 per cent of this allotment will

be installed in the Co-operative Sector during the Fourth Plan period with an outlay of Rs. 1.50 crores. The working capital for power looms will be made available through Co-operative Financing Agencies.

(ii) *Rebate :*

43. One of the incentives being given to improve sales of handloom cloth is the rebate scheme which reduces the price gap between mill made cloth and the handloom cloth. The conditions which necessitated the introduction of this scheme some years ago still continue. The question of continuance of this scheme would however ultimately depend upon the policies of the Government of India and the policies of neighbouring States. The outlay on the rebate scheme during the Plan period will be Rs. 2.00 crores.

(iii) *State participation in existing spinning mills :*

44. The outlay on this scheme will be Rs. 50.00 lakhs during the Fourth Plan period. State participation in the existing spinning mills is necessary to strengthen the financial position of the Spinning Mills and Apex Weavers Co-operative Societies to enable them to work efficiently.

(iv) *Technical Schemes :*

45. The technical schemes being implemented in the Handloom Sector include supply of improved appliances to Weavers Co-operative Societies, setting up of Dye units, finishing plants etc. Keeping in view the export targets of handloom cloth for the Fourth Plan, it will be necessary to set up three more mercerising plants, one garment factory and one Zari thread plant in the State in addition to the supply of improved appliances during the Plan period.

(v) *Share Capital loans :*

46. The need to strengthen and develop the Co-operative Societies in this sector cannot be over emphasised. A sum of Rs. 40.00 lakhs will be the provision for this purpose.

47. Other important schemes in the Handloom Sector include technical schemes for wollen and handloom deve-

lopment, setting up of a waste cotton plant, wool spinning plant etc.

### III. SMALL SCALE INDUSTRIES

48. Small Scale Industries have a large part to play in the State in the programme of rapid industrialisation as well as expansion of employment opportunities in the State. The need to encourage dispersal in Small Scale Industries has also been recognised. There has been substantial progress in the establishment of Small Scale Industries during the previous Plan periods including production of consumer goods. However, these industries have more or less concentrated in large cities and towns. Steps will therefore be taken during the Fourth Plan to increase these industries in small towns and rural areas by offering special incentives to entrepreneurs. The development of ancillary industries which could not make much headway during the previous Plan will also be given due importance. The outlay for this sector will be as follows:—

				(Rs. in lakhs)
(a) Small Scale Industries	..	..	..	720.00
(b) Community Development Programme	..	..	..	86.00
(c) Leather industry	..	..	..	21.00
(d) Industrial Co-operatives	..	..	..	7.95
(e) State's share on Rural Industries Projects			..	5.00

49. Brief particulars of these programmes are given below:—

#### *Small Scale Industries and Leather Industry:*

The outlay on Small Scale Industries will be Rs. 720.00 lakhs. During the last three Plan period, several production centres were set up as departmental units to manufacture items of production which could not be taken up by private entrepreneurs. Model units for the production of bicycle parts, builders, hardware, Mangalore tiles, sheet metal articles, leather goods, stoneware pipes, steel furniture, wood based articles, radio spare parts, super enamelled copper wire etc., were established. With

a view to providing servicing facilities, certain categories of industrial servicing centres were also set up for graphite crucible, jar bodies and glazes in addition to tool rooms and general engineering workshops. Most of these production centres have been transferred to the control of the Andhra Pradesh Small Scale Industrial Development Corporation. These centres produced goods worth Rs. 33.00 lakhs during the Second Plan. Some important schemes which will be implemented during the Fourth Plan are as follows:—

		<i>(Rs. in lakhs)</i>
(i)	Modernisation of 3 departmental Tanneries	50.00
(ii)	Setting up of 2 new tanneries .. ..	50.00
(iii)	Expansion of Tool Room at Sanathnagar .. ..	10.00
(iv)	Manufacture of Semies .. ..	38.00
Total ..		148.00

50. The Leather Industry has very bright prospects in Andhra Pradesh in view of the availability of large quantities of hides and skins in this State. It has also a good export potential. This industry will be built up in a big way during the Fourth Plan with a total outlay of Rs. 21.00 lakhs.

51. Several Small Industrial Units in the State have obsolete and out-dated equipment. It is, therefore, necessary to launch on a programme of modernisation of these inefficient units by proper advice and implementation. Industrialists will be advised to go in for machinery required by obtaining finances available under the State Aid to Industries Act, the State and Commercial Banks. The outlay required under the Scheme of "Modernisation of the Small Industries" will be Rs. 5.00 lakhs.

#### *Marketing of Small Scale Industrial Products:*

52. Marketing plays an important role in the growth of small scale industries. It is therefore necessary to expand the domestic as well as foreign markets for the products of this State. This will be done by organising mobile exhibition, printing and publishing of catalogues required, expansion of Quality Marketing Centres at Hyderabad and Rajahmundry, establishment of new cen-



tres at Visakhapatnam, Vijayawada and Guntur, establishment of Analytical and Chemical Test Houses at two selected places in the State and by extending the facilities of purchase by Government Stores purchase organisations. A portion of the financial provision for the Fourth Plan would have to come out of the finances of the Andhra Pradesh Small Scale Industries Corporation.

53. The outlay on Small Scale Industries in the Community Development Programme will be Rs. 86.00 lakhs. The need for integrated and comprehensive Planning will be kept in mind under schemes in this sector.

*Industrial Co-operatives :*

54. The outlay on this sector will be Rs. 7.95 lakhs. The existing co-operatives will be strengthened and new units started where necessary.

*State's share on Rural Industrial Projects :*

55. The importance of Rural Industries Projects has to be recognised in any ideal scheme of improving small scale industries in the State. In addition to expansion of the existing rural industrial projects, new units required will be taken up during the Fourth Plan.

#### IV. INDUSTRIAL ESTATES

56. The programme of Industrial Estates in the State was taken up towards the end of the First Five-Year Plan and continued in the successive Plan periods. They have been successful in the large cities though they are yet to make much headway in semi-urban areas. The need for such Estates continues for the industrial development in the sector of Small Scale Industries. The working of the Industrial Estates will therefore be revitalised during the Fourth Plan. The outlay on Industrial Estates will be Rs. 380.00 lakhs as given below:—

					<i>(Rs. in lakhs)</i>
(a) Rural Estates	..	..	..	..	16.70
(b) Semi-urban Estates	..	..	..	..	95.95
(c) Urban Estates	..	..	..	..	267.35
				Total	.. 380.00

57. The important schemes under this head of development will be as follows:—

		<i>(Rs. in lakhs)</i>
1.	Consolidation of existing Industrial Estates by providing all amenities and completion of balance items of civil works, provision of adequate water supply and also quarters for staff and labour housing colonies in certain selected Estates .. .. .	60.00
2.	Maintenance of existing Industrial Estates .. .. .	40.00
3.	Establishment of Two Rural Industrial Estates at Narasaraopet and Miryalaguda .. .. .	15.00
4.	(a) Establishment of 4 functional estates in the fields of electronics, chemicals, Rubber and plastics and Leather Industry .. .. .	60.00
	(b) Establishment of 2 new Conventional Industrial Estates with adequate number of developed plots one each at Visakhapatnam and Kurnool .. .. .	30.00
5.	Establishment of Assisted Private Industrial Estate at Kukatpally .. .. .	25.00
6.	Establishment of Cluster Type Work sheds in selected growth centres for technicians and others in 30 towns at a cost of Rs. 1.66 lakhs at each place. .. .. .	50.00
7.	To convert selected Assisted Private Industrial Estates into Conventional Estates .. .. .	60.00
8.	Establishment of Industrial Estates near Nagarjunasagar Project site with available land and vacant buildings ..	10.00
9.	Development of Jawahar Autonagar, Vijayawada ..	30.00
<b>Total ..</b>		<b>380.00</b>

## V. HANDICRAFTS

58. Andhra Pradesh is famous for its native genius in producing handicrafts. Its Nirmal work, Bidri work, its metallic and bronze-ware, and its toys made out of Red Sanders have already achieved international fame. It is necessary to give a fillip to the existing handicrafts not only with a view to improve the quality and quantum of goods produced and improve export potential but also to

augment the employment opportunities in the State. The investment in this sector will be Rs. 48.05 lakhs.

## VI. SERICULTURE

59. The Sericultural industry has been neglected in the State during the last 3 Plan periods though Andhra Pradesh has been famous down the centuries for its silk goods such as Dharmavaram silk sarees, *etc.* In order to give a new life to this industry and also augment the employment opportunities in the State, it is proposed to revitalise the sericulture industry. This will be done by giving a fillip to cultivate mulberry in the State and also by going in for the development of tassar silk, eri silk *etc.*, in addition to the conventional silk for which Andhra Pradesh has always been famous. The investment on this programme will be Rs. 75.00 lakhs in the Fourth Plan.

## VII. COIR INDUSTRY

60. The Coir Industry in the State has vast potentialities keeping in view the existing and potential coconut plantations of the State. The Coir Industry has yet to make a beginning in the State. The investment on this industry during the Fourth Plan will be Rs. 30.00 lakhs.

## VIII. KHADI AND VILLAGE INDUSTRIES

61. The importance of Khadi and Village Industries need not be specially emphasised to provide employment in the rural sector. The State's share in this sector during the Fourth Plan will be Rs. 2.00 lakhs. Schemes will be taken up which will increase the employment potential in the State.

## 15. ROADS AND TRANSPORT

Communication is an important part of the infrastructure of the State. Though considerable attention was paid to the development of this sector during the first three Plans and substantial progress was achieved, there are still several deficiencies in the highway system requiring urgent and special attention. The existing road and transport facilities as well as the needs of traffic in the State were therefore carefully assessed by a Regional Transport Survey sometime ago.

2. The levels of development of roads in the State at the end of the Third Plan varied greatly in the different regions of the State road lengths being lowest in the Telangana region. Apart from the mileage norm, most of the roads in the State have sub-standard surfaces, inadequate crust thickness, narrow widths and the entire road circulation system is weak due to lack of bridges. Thus in the coastal region while the road length, is more than in other regions the bearing capacity of the roads is very poor due to the soil condition, heavy rainfall etc.

3. The road transport industry has made some progress in the State in the recent years. There were 79,486 registered motor vehicles in the State at the end of 1965-66 registering an increase of 65.9 per cent over 1960-61. Notwithstanding this, the State has still to make a considerable leeway to achieve the All-India standards as can be seen from the statement below:—

	NUMBER OF MOTOR VEHICLES IN 1963-64				
	Total	per 100 Km. of		Per 100 Sq. Km. of area	Per lakh of Popu-lation.
		Surfaced Roads.	All Road		
Andhra Pradesh	.. 62,000	228	94	23	163
All-India	.. 9,06,000	345	114	28	191

4. The goods transport in the State is entirely in the private sector and most of the vehicles are owned by small operators. The Andhra Pradesh Road Transport Corporation set up in 1958, holds a monopoly in passenger transport in 12 out of 20 districts of the State. The Corporation owned a large fleet of 2,120 buses out of 3,891 buses on the road in the year 1965-66. The capital requirements of the Andhra Pradesh Road Transport Corporation, a public undertaking, are met by the State and Central (Railway) Governments in the ratio 3:1. The total investments of the Corporation stood at Rs. 14.33 crores including Rs. 4.57 crores spent from the internal finances of the Corporation as on 31st March, 1967.

5. The State has one major port at Visakhapatnam, two intermediate ports at Kakinada and Machilipatnam besides five other minor ports *viz.*, Kalingapatnam, Bheemunipatnam, Narsapur, Vadarevu and Krishnapatnam. The Visakhapatnam port is administered by a separate Port Trust and is out of the purview of the State Plan. The intermediate and minor ports have also to be developed in view of their importance for export promotion. The Kakinada Port is at present handling about 4 to 5 lakh tonnes of cargo annually with a revenue of about Rs. 8 lakhs per annum. The trade through this port can be further intensified with better facilities. The trade in Machilipatnam port can also be further intensified if the approach channel to the port is developed properly. In order to promote the development of this port, the Expert Committee appointed for studying this port has recommended a project costing about Rs. 125.00 lakhs. In view of the ideal situation of the Port with an industrially and agriculturally developed hinterland, the Committee has given high priority for this port.

6. The important inland waterways in the State are the Godavari Canal system, the Krishna Canal system and the Buckingham Canal. The delta canals are intended for navigation and irrigation purposes while the Buckingham canal is for navigation only. All these waterways are connected with the sea either by tidal waters or through backwaters. This important inland waterways system needs strengthening since it will provide an important means of transport for the fertile delta area, right up to Madras.

7. In view of the above considerations and the key role to be played by the transport and communications sector as an essential part of the infra-structure necessary for the development of the economy in the agricultural and industrial sectors, an outlay of Rs. 34.49 crores has been provided in the Fourth Plan under various programmes as indicated below :—

		(Rs. in crores)
<i>Programme</i>		<i>Provisuon in the Fourth Plan.</i>
1. Government Roads	.. .. .	18.00
2. Zilla Parishad & Panchayat Samithi Roads	.. .. .	8.50
3. State's contribution towards the Capital account of Andhra Pradesh State Road Transport Corporation	.. .. .	5.00
4. Traffic Surveys of the Transport Commissioner	.. .. .	0.30
5. Minor Ports	.. .. .	0.62
6. Inland waterways	.. .. .	0.24
7. Municipal Roads other than Hyderabad Municipal Corporation	.. .. .	0.70
8. Hyderabad Municipal Corporation Roads	.. .. .	0.80
9. Toursim	.. .. .	0.33
	Total	34.49

8. The important programmes and schemes are indicated below :—

9. As per the recommendations of the Regional Transport Survey, minimum of Rs. 19.00 crores is required for improvement of surfaces and shoulders, widening and strengthening of crusts. Besides, an amount of Rs. 4.24 crores has to be earmarked towards the State's share of the road-cum-rail bridge across the river Godavari at Rajahmundry. In view of the constraint on finances however, an outlay of Rs. 18.00 crores only has been provided

for improving the Government roads in the State. Even out of this provision, an amount of Rs. 2.65 crores is to be spent on spill-over schemes, while another sum of Rs. 2.55 crores is to be spent on schemes sanctioned in the earlier Plans but not taken up for want of funds. As has been pointed out earlier, the condition of roads in the State is generally at sub-standard level and the need to bring them up to standards in the interests of the quick development of the economy is very urgent. The programmes of the Highways Department will therefore generally follow the strategy of improving and strengthening the existing roads structure while the programmes under Zilla Parishads and Panchayat Samithis will comprise of formation of new roads, wherever necessary. The spill-over commitment for Zilla Parishad and Panchayat Samithi roads is Rs. 4.31 crores. The outlay for Zilla Parishad and Panchayat Samithi roads during the Fourth Plan will be Rs. 8.50 crores. It will thus be seen that nearly 1/3 of the total allocation for roads is available for rural roads. The provision of Rs. 0.80 crore under the Hyderabad Municipal Corporation is intended for the improvement of road system in the city. With the development and growth of industries in and around Hyderabad City, there has been a steady increase in the traffic and the existing road system in the city is not able to cope with the demands of the traffic. The Municipal Corporation of Hyderabad has, therefore recognised this special metropolitan problem and prepared a Master Plan for developing the road system in the twin cities. A sum of Rs. 0.70 crore has also been provided for improving the roads in other municipalities in the State.

10. The Andhra Pradesh Road Transport Corporation requires a loan assistance of Rs. 7.19 crores from the State Government, during the Fourth Plan to improve its services in the State. However an amount of Rs. 5.00 crores only has been provided in the Fourth Plan. This amount will be utilised for the purchase of passenger vehicles, equipment etc., to improve the mobility of passenger traffic in the metropolitan area of Hyderabad and Secunderabad, and to improve the transport facilities in the area of its operation.

11. The amount provided for the development of ports is Rs. 62 lakhs out of which a sum of Rs. 37.41 lakhs will

be spill-over commitments for Kakinada (Rs. 35.42 lakhs) and Krishnapatnam (Rs. 1.99 lakhs) ports. The balance is intended for new schemes at Kakinada and Machilipatnam ports. However, other schemes are being formulated as Centrally Sponsored Schemes.

12. The outlay on traffic surveys to be undertaken by the Transport Commissioner, during the Fourth Plan as advance action for the future transport plans of the State is Rs. 30 lakhs.

13. The facilities on the existing inland waterways have to be greatly improved by constructing new wharves locks etc. Since this is however, Centrally sponsored a separate scheme is being formulated.



## 16. GENERAL EDUCATION

Education has to be looked at not merely as a social service but as a factor directly related to economic growth just as trained man-power is an important input for industrial production, the spread of literacy and the consequent improvement in the means of communications in rural society will have an immediate impact on innovation and social change in that sector which are important pre-requisites for a break-through in agricultural production.

2. An appropriate spread of educational opportunities, based on the principle of equalisation of educational opportunities is therefore the need of the day. There has been a phenomenal expansion in all sectors of education, particularly in the field of elementary education, during the earlier Plan periods in the State. This was necessary in view of our constitutional obligation to provide Universal Compulsory Primary Education under Article 45 of the Constitution. During the Fourth Plan period while the programmes of expansion will be continued to meet the ever-growing social demand for education, at least certain minimum programmes of qualitative improvement of the level at which facilities are envisaged in the Fourth Plan are included.

3. The Second Educational Survey was undertaken in the State during 1965-66, in collaboration with the Ministry of Education, Government of India. The Survey has provided good base-line data for preparing the Fourth Plan. Based on the data collected during Survey new criteria for location of schools at various stages of school education were evolved. The guiding principles in evolving the criteria for location of schools, among other things, were equalisation of educational opportunities, provision of educational facilities to backward areas and sections of people, expansion in the field of girls education, consolidation of schools at secondary stage.

4. Based on the data collected in the survey and criteria for location of schools, the District Educational Officers

in the State have prepared District Development Plans for education for the first time in the State.

5. The new Fourth Plan for General Education is prepared on the basis of the District Development Plans. Thus for the first time educational planning has been done right from the grass-roots.

6. The Fourth Plan outlay for General Education works out to Rs. 42.30 crores. The sectoral break-up *vis-a-vis* the Plan outlays during Third Plan are given below:

(Rs. in lakhs)

	<i>Sector</i>		<i>III Plan Outlay</i>	<i>IV Plan Outlay</i>
1.	Elementary Education	.. ..	972.72	1,445.88
2.	Secondary Education	.. ..	516.83	1,222.65
3.	University Education	.. ..	162.60	1,158.67
4.	Teachers' Training	.. ..	..	179.43
5.	Social Education	.. ..	..	52.82
6.	Other programmes	.. ..	98.87	170.55
	Total	.. ..	1,751.02	4,230.00

*Note:*—During the III Plan Teacher's Training Programmes were included in the Elementary and Secondary Sectors and Social Education in other programmes.

### **Elementary Education :**

#### **(a) Primary Schools (Classes I-V):**

7. There are 37,114 Primary schools in the State. The Second Educational Survey has revealed that about 97 per cent of the rural population has been served with Primary Education facilities within one mile walking distance. Thus Andhra Pradesh has fulfilled to a very great extent her obligation under Article 45 of the Constitution. The villages in the population slab of 300 and above are by and large served by primary schools. The question of expanding primary school facilities during

Fourth Plan period will mainly be that of providing primary school facilities for the small habitations.

8. The enrolment of Classes I-V constituted about 75 per cent of the estimated child population in the age-group 6-11. Considering the data in the context of the population served by the primary schools it is obvious that in many cases the enrolment has not kept pace with expansion in schooling facilities. This is due mainly to widespread prevalence of the evils of stagnation and wastage. Girls constitute only about 40 per cent of the enrolment in primary schools in the State as a whole. The corresponding percentage for rural and urban areas separately are 39.36 and 44.37 respectively.

9. Keeping these in view the schemes for primary schools (Classes I-V) have been evolved for the Fourth Plan. Highest priority is given to the fulfilment of the constitutional directive. Special emphasis is laid on measures calculated to increase the enrolment of girls Scheduled Castes, Scheduled Tribes and reduction of wastage and stagnation. It is proposed to enrol 13,60,000 additional children in the age-group 6-11 (6,20,000 boys and 7,40,000 girls). This, if achieved, will result in 100 per cent enrolment of boys and 80 per cent enrolment of girls and the total percentage works out to 90.

10. At present the single teacher schools constitute about 40 per cent of the total number of primary schools. This has resulted in widespread prevalence of multiple class-teaching. In the Fourth Plan it is proposed to convert about 25 per cent of the single-teacher schools into two-teacher schools. Under this scheme provision has been made for the appointment of 4,500 Secondary Grade Teachers in a phased manner. The total number of additional secondary grade teachers proposed to be appointed during the Fourth Plan is 7,100.

11. To provide incentives to children to enrol in greater number it is proposed to provide midday meals to additional 10 lakhs beneficiaries during the Fourth Plan period at an estimated cost of Rs. 50.00 lakhs.

12. An amount of Rs. 25.00 lakhs is provided in the Plan to accelerate girls education. This will be utilised to provide free uniform, books and attendance scholar-

ships to needy and deserving girls students. The scheme is likely to benefit about 2 lakhs children.

13. In addition, adequate provision is also made for qualitative improvement in the shape of equipment grant to primary schools etc.

14. Providing school buildings is an urgent problem. Maximum reliance will have to be placed on the community. However a provision of Rs. 100.00 lakhs has been made for this purpose in the Fourth Plan.

*(b) Upper Primary Schools:*

15. There are 22,800 Upper Primary Schools in the State. In addition, about 70 per cent of the High schools have Upper Primary sections in them. The Second Educational Survey has revealed that about 72 per cent of the rural population in the State has Upper Primary school facilities either in their own villages or within three miles radius.

16. The enrolment in classes VI to VII constitutes about 32 per cent of the estimated population in the age group 11-12. Of the total enrolment in Upper Primary schools girls constitute only 26.02 per cent. Like the primary stage the enrolment at Upper Primary stage has not kept pace with the expansion of educational facilities.

17. The main stress at this stage of education during Fourth Plan is consolidation of existing institutions.

18. It is proposed to enrol 2,40,000 additional children in the age-group 11 to 12 (1,00,000 boys and 1,40,000 girls). This will result in 40 per cent enrolment in this age-group (50 per cent boys and 30 per cent girls) by the end of the Fourth Plan period.

19. It is proposed to open 2,000 Upper Primary schools during the Fourth Plan period to bring the ratio between Primary and Upper Primary schools to 5:1. Of these 2,000 Upper Primary schools 400 are exclusively for girls. This is with a view to accelerating girls education.

20. It is proposed to appoint 4,500 trained graduate teachers, 4,250 Language Pandits and 1,500 Secondary Grade Teachers during the Fourth Plan period to strengthen the

existing Upper Primary Schools and also to provide the required staff to the new Upper Primary Schools proposed to be started during the Fourth Plan.

21. The other programmes among other things, include supply of equipment to 2,700 Upper Primary Schools, publication of journals and pamphlets for the benefit and guidance of teachers, preparation of books for supplementary reading material for teachers, and printing of hand books.

### **Secondary Education :**

22. There are 2,832 secondary schools in the State. The Second Educational Survey has revealed that 74 per cent of the rural population is served by secondary schools with in a radius of five miles. About 81 per cent of the habitations in the population slab of 5,000 and above have secondary schools in them.

23. During the Fourth Plan high priority is given to the consolidation of existing secondary schools, expansion and improvement of Science Education through pre-service and in-service training of Science Teachers and adequate provision for construction of science laboratories, supply of laboratory equipment, teaching materials and aids. The Director of Technical Education is expected to prepare an effective plan of action for vocationalization of secondary education.

24. The enrolment in secondary schools constitutes 15 per cent of the population in the age-group 13 to 16 (boys 23 per cent, girls 7 per cent). It is proposed to enrol 2,30,000 additional students in this age-group to bring about 22.5 per cent of the enrolment (above 30 per cent and girls 15 per cent) in this age-group by the end of the Fourth Plan i.e., by 1973-74.

25. It is proposed to open 300 new high schools during the Fourth Plan. Of these, 75 are exclusively for girls. It is also proposed to open 400 additional sections in the existing schools. In order to provide adequate staff in the existing high schools and also to the new schools and additional sections proposed to be opened, it is proposed to appoint 996 trained graduate teachers, 1,406 language pandits, 520 physical training instructors and physical directors and 300 Craft-cum-Drawing Masters.

26. Great emphasis will be laid in the Plan on qualitative programmes in the field of Secondary Education. Out of the total outlay of Rs. 1,222.65 lakhs for Secondary Education Rs. 566.70 lakhs (*i.e.*, about 46 per cent) are provided exclusively for qualitative programmes. The qualitative programmes, among other things, include formation of school complexes, establishment of Central Science Workshop experimental schools, Development of Manufacturing Unit for mass production of proto-types, State Science Museum, Science Fairs, building of Science Laboratories, establishment of Special Schools for Gifted Children, Pilot Project on new curriculum in science for Classes VIII to X, production and free supply of teaching materials, strengthening of Guidance Unit including large scale testing programmes in schools, Training Courses for Career Masters and Organising Orientation Courses at district level in the modern methods of evaluation for Secondary Schools Teachers.

#### **University Education :**

27. The outlay for university education during the Fourth Plan period is Rs. 1,158.67 lakhs. There are 135 colleges at present in the State. The total enrolment in the colleges at present is 87,608 inclusive of 14,928 girl scholars. About 30,00 additional scholars will be enrolled in the colleges of the State during the Fourth Plan period.

28. A major decision in the educational field taken recently has been the introduction of a 2-year Intermediate course after high school. This will mean that eleven years of primary and secondary education will have to be followed by a 2-year Intermediate course as a preliminary to Degree Courses in colleges. During the Fourth Plan, steps will be taken to introduce the 2-year Intermediate course in the existing colleges and selected higher secondary schools at a total cost of Rs. 473.12 lakhs. Several new colleges will also be established at a cost of about Rs. 200.00 lakhs. The other important schemes for this sector include development of campus colleges in the university areas, improvement of post-graduate centres, construction of buildings for Government colleges, development of existing colleges and strengthening the existing training colleges in the State.

29. During the year 1967-68, three new post-graduate centres were also established in the State at Warangal, Guntur and Anantapur. These post-graduate centres will be given the funds necessary to build up their campuses and to enable them improve the standard of teaching and education at these centres.

*Teachers' Training—Elementary and Secondary:*

30. The outlay on Teachers' Training Programme during the Plan period will be Rs. 179.43 lakhs. Care has been taken to estimate the training facilities required and provision has been made taking the felt needs of training programmes during the Fourth Plan period. The staffing pattern in the training schools will also be modified suitably keeping the need to improve quality in these institutions. The teaching of English will also be improved in the State by opening eight more English language teaching centres. Other important programmes in this sub-head of development in-service training of supervisors and teachers and educators, evaluation and experimental schemes in science for teachers' training institutions, opening of new extension centres in four training colleges in the State and in-service training for college staff.

*Social Education:*

31. The outlay on Social Education during the Plan will be Rs. 62.82 lakhs. This programme will make attempts to reduce illiteracy among adults in the State and also take steps to produce neo-literature for neo-literates. Eight 'Dendulur' type schools will also be opened in the State at a cost of Rs. 15.12 lakhs to improve adult educational facilities. In addition adult literacy centres will be opened in 320 Blocks in the State at the rate of two centres in each Block. About 20 adults will be educated in each centre in each course. A sum of Rs. 2.00 lakhs has also been provided for production of suitable neo-literature for the neo-literates. An adult education cell will also be added to the Education Directorate to improve the adult education programmes in the State.

*Other Educational Programmes:*

32. The outlay on miscellaneous educational programmes will be Rs. 170.55 lakhs during the Plan period.

Steps will be taken to improve the standard of physical education in the State by providing for more playgrounds in schools, provision for physical efficiency testing centres, launching of a State-wide physical efficiency drive, improving audio-visual education in the State, development of Sanskrit and other languages including creating a State Board for Sanskrit with a special directorate in addition to strengthening the administrative machinery in the State. State level student festivals will be organised to channelise the energy of students into constructive activities and help them to develop as useful citizens of the State.

*Telugu :*

33. Special efforts will also be taken to improve the standard of Telugu and Telugu teaching by schemes such as constitution of a Telugu vocabulary committee, adequate provision for the Telugu Academy etc. This is a very important programme as this will lay the foundation necessary to make Telugu the official language of the State as early as possible at all levels of administration in the State.

*Cultural Programmes :*

34. The outlay on Cultural Programmes is Rs. 50.00 lakhs. This provision will be utilised for improving the three State Academies, provision of matching grants for construction of medium-size theatres in all the district headquarters schemes for revival and presentation of folk arts, appointment of teachers for dramas and/such other creative activities in schools and colleges and for the establishment of a full-fledged college for theatre arts at Hyderabad.



## 17. TECHNICAL EDUCATION

Development of facilities of technical education during the First Plan period was slow. There was significant development however in the Second Plan period both by way of opening new institutions and expansion of the then existing ones. The Plan expenditure during the Second Plan period amounted to Rs. 256.07 lakhs. During the Second Plan period, the fullfledged development of the Government Colleges at Kakinada and Anantapur reached final stages with the provision of buildings and laboratories while the intake capacity was also stepped upto 150 and 120 respectively. During this plan period, 2 new Engineering Colleges, one at Waltair and another at Tirupati, were also started. The Regional Engineering College, a joint project of the State and Central Governments was established at Warangal during 1959-60 with an annual intake capacity of 250.

2. At the Diploma level also similiar trend of expansion was witnessed during the Second Plan period. The three Polytechnics in the State, one in Hyderabad and the other two at Kakinada and Vijayawada, were expanded by stepping up their intake capacities and providing them with permanent buildings and well equipped laboratories. In addition, 8 new Polytechnics in Andhra region and 5 new Polytechnics in Telangana were also established. Besides, 2 new institutions at Kothagudem and Gudur offering diploma courses in Mining Engineering were also started. At the end of the Second Plan, there were 19 diploma institutions in the State with a total intake of 2,433.

### Third Five-Year Plan:

3. The technical education programme during the Third Plan mainly envisaged the consolidation of the expansion which took place during the Second Plan period, by completing and bringing the developmental programmes on par with the standards prescribed by the all-India Council for Technical Education. Against an outlay of Rs. 293.00 lakhs originally allotted for technical education for the

Third Plan an expenditure of Rs. 307.68 lakhs was incurred. During the Third Plan period three Polytechnics, one for Boys at Srikakulam and two for girls (one at Kakinada and another at Hyderabad) were established. A diploma course in Textile Technology in the Government Polytechnic Guntur and a Diploma course in Metallurgy in Vijayawada were also started. Part time course in engineering both at Diploma and Degree level was also started. During the last year of the Third Plan, a new Nagarjuna-sagar Engineering College with 120 seats was established.

#### Progress during the Annual Plans 1966-69 :

4. Very little expansion took place in this period. The only new institution started was the Government Polytechnic for Women at Guntur with 60 seats. The rest covered only expansion of facilities in part-time courses, pharmacy courses *etc.*

5. The physical targets and achievements from the First to Third Plans and 1966-69 are:—

Item	Unit	Position at the beginning of Ist Plan.	Position at the end of Ist Plan.	Position at the beginning of IIInd Plan.	Position at the end of IIInd Plan	Achievements in the years.			
						1966-67	1967-68	1968-69	
(1)	(2)	(3)	(4)	(5)	(6)	(7)			
<b>Degree Courses :</b>									
(a) Institutions	.. No	3	3	6	7	..	..	..	..
(b) Intake (seats)	.. No	290	540	1,015	1,755	120	..	..	..
<b>Diploma level :</b>									
(a) Institutions	.. No	3	4	19	22	..	..	1	..
(b) Intake (seats)	.. No	240	470	2,433	3,463	250	..	60	..

6. There were 12 Junior Technical Schools for boys at the end of 1967-68 with a total intake capacity of 720 per annum. The admissions to the Junior Technical Schools at Hyderabad were suspended in order to provide accommodation for the Nagarjunasagar Engineering College temporarily located at Hyderabad.

7. The number of institutions and the actual intake at degree and diploma courses is as follows:—

<i>Level of Education</i>		<i>Total intake at the end of 1967-68</i>	<i>Reduction effected in 1968-69</i>	<i>Residual intake 1968-1969</i>
	(1)	(2)	(3)	(4)
Degree	.. ..	1,855	595	1,260
Diploma	.. ..	3,713	500	3,213

8. It may be seen from the above that roughly about 30 per cent of the intake was reduced at degree and diploma level for the year 1968-69. However, the effect of this reduction will be seen only at the end of the Fourth Plan in the case of the degree institutions and during the last 2 years of the 4th Plan in the case of the diploma institutions. This, therefore, only helps in reducing the out-turn after a period of about 4 to 5 years and till then, the annual turn-over will be maintained as in the previous years.

9. Under the draft 4th Plan earlier prepared, the technical education programme envisaged the opening of three new engineering colleges with 1,650 seats and 11 Polytechnics with 2,200 seats, the outlay proposed being Rs. 10.00 crores. The outlay for the 4th Plan (1969-74) is Rs. 5 crores. Moreover, Government of India have since decided that no expansion should take place physically in the conventional branches of engineering and no new institutions should be started in the 4th Plan period in view of the present large scale unemployment of engineers at all levels and the large stock of unemployed engineers now available and the expected out-turn of the present institutions during the 4th Plan period.

10. In these circumstances, physical expansion during the 4th Plan would be restricted to the following:—

- (1) Consolidation of existing institutions.
- (2) Quality improvement programmes.
- (3) Diversified courses of Engineering and Technology at Degree and Diploma levels.

(4) Expansion of facilities for part-time and Correspondence courses.

(5) Sandwich courses.

(6) Co-operative institutions in collaboration with industries in places having industrial complexes.

(7) Vocationalisation of Secondary Education, and

(8) Re-organisation of Junior Technical Schools and organisation of Trade Schools.

11. Most of the proposed expansion is expected to take place only in existing institutions and no new institutions are expected to be established at degree or diploma level with conventional branches of engineering.

12. The details of the diversified courses and branches of other specialisations which require to be introduced in these institutions during the 4th Plan, have not yet been indicated by Government of India. These have to be determined on the basis of all-India requirements and the needs of the existing industrial and agricultural activity and the expected growth in such activity during the 4th Plan. However, some of the diversified courses which could be chosen for introduction during the 4th Plan at both degree and diploma levels are Metallurgy, Marine Engineering, Aeronautical Engineering, Oil Technology, Petro Chemicals and Refineries and Ceramics and Refractories, Plastic Technology, Instrument Technology, Production Engineering, Leather Technology, Printing Technology, Industrial Electronics, Paint Technology, Air-conditioning Refrigerators etc. As an estimate of the requirements of the personnel in these specialisations and others as well are not readily available covering the Fourth Plan period, only rough estimate has been made and the physical targets fixed.

13. The Department has prepared a draft outline for the reorganisation of the pattern of technical education at lower levels particularly at Certificate level for the next 10 to 20 years. This is now under consideration of Government. According to this, the structure of the existing technical schools and also the engineering stream of the existing Multipurpose High Schools is proposed to be re-

organised as the Trade Schools to train the skilled workers who would be useful both in the industries as well the agricultural sectors. Government have appointed a small Committee to advise on the implementation of those recommendations.

14. Based on the recommendations of the Education Commission, a scheme to vocationalise Secondary Education at post-5th, post-7th and post 10th class levels has been drawn up by the department. It is proposed to implement the scheme in the first stage in Multipurpose Schools where an engineering stream has already been functioning and to later expand this to other Secondary Schools. It is also proposed to organise Trade Schools to offer more diversified training to youngsters. The scheme is to cover all the existing Multipurpose Schools and is expected to cost about Rs. 600.00 lakhs. However, as it is proposed to implement this scheme by stages, the expenditure is proposed to be restricted to the minimum possible.

#### **N. C. C.—Junior and Senior :**

15. The National Cadet Corps—Junior and Senior—have an important role to play in the inculcation of a proper sense of discipline and performance among school going children and college students. The Senior and Junior cadres of the N.C.C. will be further strengthened in Fourth Plan. The outlay on these schemes will be Rs. 45.00 lakhs and Rs. 28.00 lakhs respectively.

#### **Public Libraries :**

16. The State has already made rapid studies and spectacular progress in the establishment of Public libraries, at State and district levels. During the Fourth Plan, steps will be taken out only to expand the existing Public Libraries but also to set up new libraries in different areas of the State. Stress has also been laid on taking the library movement to the rural areas of the State. The outlay on this head of development will be Rs. 95.00 lakhs. In all 300 branch libraries and 1,000 book deposit centres will be opened in the State during the Plan period. 25 children libraries will also be set up with the objective of expanding the children's mental horizon and to provide suitable reading material for the developing child.

**State Archives :**

17. The Archives in the State in addition to repository and administrative work involved in the preservation of records, books manuscripts *etc.*, specialise in productive research. The Archives Department in the State is therefore being further developed on scientific lines. Steps are also being taken to preserve valuable records and at the same time to make them available for research to expand the sum total of knowledge available in various educational fields such as History, Administration, *etc.* The outlay on this head of development will be Rs. 16.00 lakhs during the plan period. Important schemes under this head of development include the establishment of an Oriental Manuscripts Library, purchase of microfilm equipment obtaining microfilm copies of valueless manuscripts available in Saraswati Mahal Library at Tanjore *etc.*

**Archaeology and Museums :**

18. An outlay of Rs. 4.74 lakhs only was provided during the Third Plan for Archaeology and Museums, out of which only a sum of Rs. 3.83 lakhs could be spent. A sum of Rs. 10.00 lakhs was provided for schemes connected with Archaeology and Museums for the years 1966-69. Andhra Pradesh is a veritable treasure house of the sculptures, bronzes, monuments, stone and copper inscriptions *etc.*, which proclaim the glory of the ancient culture of Andhras. There is thus abundant research material and scope for doing pioneering and original work on the archaeological side. If this vast potential knowledge is unearthed a beginning can be made to rewrite the History of the Andhras and the History of India. The outlay of Archaeology and Museums will be Rs. 35.00 lakhs. A major portion of this outlay will be utilised on survey and exploration of monuments and a systematic survey of the lith records available in the State. New Museums will also be set up in the State to conserve the historical monuments such as sculptures, inscriptions, *etc.*

## 18. MEDICAL AND HEALTH SERVICES

The importance of maintenance of efficient Medical and Health Services for the well-being of the people of the State need not be specially emphasised. The Plan efforts under this sector have resulted in a significant improvement of the standards of health in the State compared to the standards which obtained in the pre-independence days. It is well-known that the life expectancy of the average Indian which was as low as 27 years during pre-independence days. The life expectancy has significantly increased in the country and the State as a whole, as the following statement shows:—

### Life Expectancy, Birth / Death rates in Andhra Pradesh.

Year	ALL-INDIA		ANDHRA PRADESH			
	Males	Females	Males	Females		
1. Life Expectancy :						
1951-61	..	..	41.9	40.6	37.8	36.0
1968	..	..	53.2	51.9	50.3	48.5
2. Birth and Death rates for population of 1000						
Birth and Death rates in the year 1961	..	..	<i>All-India</i>		<i>Andhra Pradesh.</i>	
Birth rate in the year 1961	..	..	41.7		39.7	
Death rate in the year 1961	..	..	22.7		25.2	

2. It is seen that the life expectancy of males and females was 37.8 and 36 years during the period 1951-61. This rose upto 50.3 for males and 48.5 years for females by the year 1968. This is obviously due to significant improvement in the standards of living and due to better Medical and Health Services in the country and the State. However it can be seen from the fact that life expectancy in the State is lower than All-India and that the Death

rate is higher than all-India that the public health measures in the State require improvement. Along with this, it is also necessary that emphasis is laid on Medical care and that a satisfactory and efficient system of Health Services is provided in the State. An integrated approach is also necessary while dealing with Health and Medical Services. Keeping these objectives in view, Andhra Pradesh took early steps sometime ago to effect integration of the Medical and Health Services of the State. The strategy in the Fourth Plan has also to take into account in the different levels of facilities available in the different areas of the state and increase the hospitals in different areas accordingly. Along with increasing the bed strength of these Hospitals, necessary technical staff and proper medical equipment *etc.*, will also have to be provided. Even where facilities are available there is need to improve the quality of these services. These considerations have been kept in view while spelling out the strategy and objectives for this sector.

### **Progress in the Medical Sector during the previous Plans :**

#### *Third Five-Year Plan :*

3. The health programmes of the Medical Department during the Third Plan envisaged improvement of the health services and the medical colleges and provision of training to medical and para-medical personnel. There were 18 teaching hospitals and 8 Medical Colleges including two private Medical Colleges at the end of Second Plan. During the Third Plan, under the programme of Medical Education, the admission capacity of Medical Colleges was increased from 850 to 1,120. The bed strength in the Teaching hospitals was also raised to 7,780 from 6,183 at the end of Second Plan. Under improvement to District Headquarters Hospitals, it was proposed that the bed strength in each district hospital should be raised to 250. Moreover against the provision of 628 additional beds targetted 471 beds were provided during the Plan period. Besides this, new buildings for headquarters hospitals at Anantapur and Eluru were completed, and a building for surgical linen and medical stores was also constructed at the Headquarters hospital, Masulipatnam. Under the improvement to taluk hospitals, 448 additional beds were added during the Plan period. Under the training pro-



gramme of Nurses, 125 new admissions per annum sanctioned during the First and Second Plans were continued and in addition 105 seats were sanctioned. Similarly for training for Auxiliary Nurse Midwives, 160 admissions sanctioned in the First and Second Plans were continued and in addition 120 seats were sanctioned in 26 hospitals. Further training facilities were provided to Midwives, Lab technicians and Lab attendants.

4. During the Third Plan a total expenditure of Rs. 423.26 lakhs was incurred against a provision of Rs. 553.26 lakhs under different Medical programmes. At the end of Third Plan, there were 13 doctors per one lakh population as against 10 at the end of the Second Plan. At the end of Third Plan there were 61 beds per lakh population against 57 beds at the end of Second Plan.

5. During 1966-67 additional teaching staff was appointed in Medical Colleges and the bed strength in the teaching hospitals was raised by 235. The bed strength of district headquarters hospitals was also increased by 100 in Andhra Region and 208 in Telangana region by providing additional staff and equipment to the District Headquarters Hospitals at Anantapur, Eluru, Khammam, Nalgonda, Mahboobnagar, Sangareddy, Nizamabad and Adilabad. In taluk hospitals, 161 additional beds were sanctioned in the Andhra region and 124 in the Telangana region with the provision for additional equipment and other contingencies. A new E.N.T. Hospital was also opened at Hyderabad.

6. During the year 1967-68, six post graduate departments in Osmania Medical College, Hyderabad were upgraded and the annual admission capacity in the Gandhi Medical College was raised by 30 seats making the total to 150. Besides this, two new buildings for district headquarters hospital at Nalgonda and Khammam were completed. The provision made for Annual Plan 1968-69 is Rs. 71.00 lakhs which is mostly intended for continuing schemes.

7. The progress made so far in the field of Medical services reveals that adequate attention could not be paid in the past for the improvement of dispensaries and hospitals and increasing the bed strength in hospitals in the

rural areas due to paucity of resources. At the end of the Third Plan, Andhra Pradesh had only one hospital bed for 1,900 people against the Bhore Committees' Recommendations of one bed for 500 people. Similarly we had only one doctor for 6,500 population as against the recommendations of one doctor for 2,000 people. These statistics assume importance when the vast area of the State is taken into account. These facts only emphasise that larger outlays are required for the State if medical and health services have to be improved.

*Fourth Plan:*

8. During the Fourth Plan an amount of Rs. 940 lakhs is provided under the head "Modern Medicine". The break-up of the provision under the various schemes and the corresponding outlays in Third Plan are given below:

*Outlays on principal medical services*

(Rs. in lakhs)

<i>Item</i>	<i>Outlay in Third Plan</i>	<i>Provision in Fourth Plan</i>
(i) Medical Education .. ..	220.15	28.00
(ii) Training Programmes .. ..	83.98	10.00
(iii) Teaching hospitals .. ..	266.97	136.43
(iv) District and Taluk Hospitals ..		625.50
(v) Other programmes (Eye Clinics, E.N.T. Clinics Dental Clinics).	87.72	104.27
(vi) Provision for spill-over works ..		35.80
Total: ..	658.82	940.00

The programmes and important schemes are briefly discussed below:

**Medical Education:**

9. There will be expansion of seats in M.B.B.S. course in the 8 Medical Colleges in the State. The amount provided under this head is mainly intended for construction

of buildings like hostels residential accommodation etc., for Gandhi Medical College, at Hyderabad (Rs. 8 lakhs) and the S.V. College, Tirupati (Rs. 15 lakhs).

### **Training Programmes :**

10. It is proposed to train a limited additional number of nurses and depute Medical Officers for short term training in Blood Bank Work, laboratory technics, refresher courses in Forensic Medicine etc. The State is self-sufficient in trained Nurses, Radiographers, Lab. Technicians and other categories of para-medical personnel. The requirements of the skilled manpower, necessary in future has also been taken into account.

### **Hospitals and Dispensaries :**

11. This is the largest sector of development in the entire plan under 'Modern Medicine' great emphasis will be laid in the sector on strengthening of the existing facilities. Increase of the existing bed-strength has been provided for, wherever considered essential. Provision has also been made in the 4th Five-Year Plan for the construction of residential quarters for nurses, Medical Officers and para medical staff wherever considered most essential. A sum of Rs. 37.66 lakhs is provided for acquisition of lands for future expansion of Medical Institutions in the State. It is proposed to increase the bed strength in teaching hospitals by 270, by 787 beds in District Hospitals and by 1,563 beds in taluks hospitals. 100 local fund hospitals and dispensaries will also be provincialised.

### **Other programmes:**

12. An amount of Rs. 16.80 lakhs has been provided for establishing 3 regional workshops for servicing of the costly and sophisticated equipment in the Medical Institutions. The need for such a workshop has been keenly felt. Three Regional workshops are proposed to be located at (1) Guntur (2) Tirupati and (3) Hyderabad.

13. It is proposed to provide air conditioning facilities in operation theatre at a cost of Rs. 25 lakhs. At present such facilities are available only in three hospitals at Hyderabad and Secunderabad.

14. In addition to 6 Blood Banks, 3 Eye Clinics, 3 E.N.T. Clinics, 16 Dental clinics and 9 sterilisation units will be

opened during the Plan period. All the District Headquarters Hospitals would thus have blood banks, eye clinics and E.N.T. Clinics. A medical record section will also be established in 12 more hospitals as part of a phased programme.

15. The targets under the "Medical Services" for the Fourth Plan will be as follows compared to the position obtaining at Third Plan.

<i>Item</i>	<i>At the end of Third Plan</i>	<i>Target by the end of Fourth Plan</i>
1. Number of Hospital beds ..	23,838	27,858 ( <i>Government L. F. &amp; Private</i> )
2. Population for one hospital bed ..	1,640	1,661
3. Number of Doctors ..	5,235	10,482
4. Population per one Doctor ..	7,466	4,413
5. Number of Nurses (Regd.) ..	2,928	6,443
6. Population per one Nurse ..	13,348	7,180
7. Intake in Medical College ..	1,120	1,150

### **Indian Medicine :**

16. During the Third Plan an amount of Rs. 13.59 lakhs was spent against a provision of Rs. 19.81 lakhs on Indian Medicine Programmes. Under the expansion of Ayurvedic and Unani dispensaries 46 dispensaries (28 in Andhra and 18 in Telangana) were opened at a cost of Rs. 6.75 lakhs. Besides this, 18 additional beds were provided in the Government Ayurvedic Hospital at Warangal. During 1966-67, thirteen dispensaries of Indian Medicine were opened, 32 compounders and 20 nursery orderlies were trained. During 1967-68 four more dispensaries were opened.

17. An outlay of Rs. 35.00 lakhs is provided in the Fourth Plan for opening of 15 dispensaries of Indian

Medicine, construction of buildings for the Government Ayurvedic College and Hospitals and for Indian Medicinal Pharmacy. It is also proposed to add 140 beds to the hospitals at Vijayawada, Gudivada, Warangal and Hyderabad.

### **Public Health :**

#### *Third Five-Year Plan :*

18. The various public Health Schemes that aim at community health services with stress on the individual and family approach are all planned and implemented according to the specific recommendations made by the expert groups constituted by Central Council of Health, with the single objective of assuring a minimum standard of health to the community. Due to the limited finances the schemes could not however be implemented in full. Important National Health Programmes are National Malaria Eradication, Small Pox Eradication, Family Planning and Maternity and Child Health Services.

#### *National Malaria Eradication :*

19. The National Malaria Eradication and Small Pox Eradication Programmes alone claimed between themselves an amount of Rs. 588.70 lakhs out of a total expenditure of Rs. 610.61 lakhs on public health programmes during Third Plan period in the State. An amount of Rs. 507.43 lakhs was spent on National Malaria Eradication Programme for the continuance of 35.5 spraying and surveillance units and 5 zonal offices. About seven units entered into the maintenance phase during 1965-66. Spraying and surveillance operations were continued in the year 1966-67 in 33.5 National Malaria Eradication Programme units which about eleven units entered into the maintenance phase. At the end of 1967-68 there were about seventeen units in the maintenance phase. As a result of these sustained efforts the incidence of Malaria has considerably come down in the State as can be seen below :—

<i>Year</i>	<i>Blood smears collected</i>	<i>Number of positives</i>
1962	21,84,000	12,533
1965	35,48,812	8,782
1967	39,51,734	3,029

*Small Pox Eradication :*

20. Under Small Pox Eradication 351.03 lakh people were protected during the Third Plan. All the 20 district units were continued during 1966-67 and 1967-68 in order to complete the uncovered areas of the State. The incidence of small pox in the State during the last three years was as follows: —

<i>Year</i>	<i>Attacks</i>	<i>Deaths</i>
1965 ..	11,229	2,031
1966 ..	4,629	873
1967 ..	8,618	1,804

Steps would have to be taken to intensify the efforts in this programme.

**Family Planning Programme :**

21. The Family Planning Programme has made significant progress in the State during the last few years. During the Third Plan 136 new rural family planning clinics and 21 mobile surgical units were opened. One State Family Planning Bureau and 20 District Family Planning Bureaux were also set for action on family planning work.

22. During 1967-68, against a target of 1,63,700 sterilisations the achievement was 1,66,729. The progress in I.U.C.D. Programme in the year 1967-68 was not however impressive. Only 51,307 I.U.C.D. insertions were made as against a target of 3,27,400 insertions.

**Fourth Five-year Plan :**

23. The outlay on Public Health Programmes during the Fourth Plan is Rs. 625 lakhs. The main aim of the Public Health Programmes is to improve the general standards of Health and step down the present high birth and death rates. Priority is given to the establishment and strengthening of Public Health Centres to serve as the main agency for medical and Public Health Programmes

in rural areas. The following are the important programmes included in the Fourth Plan.

(Rs. in lakhs)

<i>Name of the scheme</i>	<i>Outlay in Third Plan</i>	<i>Provision in Fourth Plan</i>
1. Training Programmes .. ..	2.40	30.00
2. Primary Health Centres (opening new centres strengthening and construction of buildings etc.) .. ..	..	235.00
3. Control of communicable diseases ..	590.88	20.00
4. Health Education .. ..	4.94	20.00
5. School Health Services .. ..	2.75	35.00
6. Maternity and Child Health Services ..	0.95	37.00
7. Vital statistics .. ..	0.15	37.00
8. Health transport organisation .. ..	..	30.00
9. Other schemes .. ..	8.54	211.00
	610.61	625.00

24. It is however to be noted that the major National Programmes like the National Malaria Eradication Programme, National Small Pox Eradication, Filaria Control, Antiyaws, Leprosy Control and the Family Planning Programmes will be operative as centrally sponsored schemes. Detailed plans for these schemes are under preparation separately.

#### *Training Programmes:*

25. The provision under this head is intended for the training of 20 District Medical and Health Officers, 60 Deputy District Medical and Health Officers in D.P.H. Course, training of officers abroad and training of health visitors, nurses and sanitary inspectors.

*Primary Health Centres:*

26. There are at present 409 Primary Health Centres. It is proposed to open 10 more Primary Health Centres during the Fourth Plan. The existing grant-in-aid of Rs. 32,800 for each primary health centre is quite inadequate to meet the minimum expenditure on staff and medicines. Therefore an additional amount of Rs. 5,000 per Primary Health Centre is provided to meet the expenditure on vehicles and purchase of medicines. There are no staff quarters for the staff at most of the Primary Health Centres. It is therefore proposed to construct staff quarters for 200 centres at a cost of Rs. 200 lakhs.

27. The major scheme under Maternity and Child Health Services is the immunisation of children with triple antigen. The outlay for this scheme is Rs. 16.50 lakhs. Twenty per cent of children in the age group of six months and below will be covered under this scheme. It is also proposed to start five Mobile Emergency Obstetric Units in the State.

28. The School Health Services programme envisages the immunisation of 50.35 lakhs of school going children in the age group of 6 to 16 by giving five doses of triple antigen during the first year and a booster dose in the subsequent years. Under Health Education Programme, audio visual units and mobile exhibition units will also be set up in all districts.



## 19. URBAN WATER SUPPLY AND DRAINAGE

Water supply and drainage are important services which require special attention in urban planning. Andhra Pradesh State has one Corporation and 81 Municipalities with a population of 4.62 millions as per 1961 census, representing 12.4 per cent of the State's total population of 35.98 millions. The Public Health Engineering Department is in charge of water supply and drainage schemes in the 81 Municipalities in the State. Out of these 81 Municipalities in the State, 37 Municipalities were provided with water supply facilities by the end of Second Five-Year Plan. None of the Municipalities had underground drainage facilities at that time. A provision of Rs. 561.85 lakhs was made for Urban Water Supply and Drainage during the Third Five-Year Plan. The above provision was meant for the execution of 24 spill-over schemes and 12 new schemes, out of which Draksharama Water Supply scheme was transferred to the control of the Panchayati Raj Department as this Municipality was downgraded to a Panchayat. 28 Urban Water Supply and Drainage Schemes were completed during the Third Five-Year Plan. In addition 6 Municipalities *viz.*, Gudivada, Ongole, Anakapalli, Parvathipuram, Nalgonda under non-plan and Sangareddy under Telangana Regional Funds were provided with protected water supply facilities. Thus by the end of Third Plan, out of 81 Municipalities, 43 were provided with protected Water Supply facilities covering 3.72 millions or 80 per cent of the Municipal population. Certain improvements to Hyderabad Drainage system were also completed in addition to providing underground drainage facilities to parts of the Vijayawada Municipality. The following Urban Water Supply and Drainage schemes and the Telangana Regional Works were left as spill-over works, at the end of Third Five-Year Plan.

1. Thatipudi Reservoir Scheme
2. Narasaraopet Water Supply Improvement Scheme
3. Gudiwada Water Supply Scheme
4. Vijayawada Drainage Scheme

5. Eluru Drainage Scheme
6. Warangal Water Supply Improvement Scheme
7. Khammam Water Supply Improvement Scheme
8. Secunderabad Water Supply Improvement Scheme and
9. Telangana Regional Works Programme (26 numbers).

2. No new schemes could be taken up for execution during the Annual Plan years of 1966-69. The Thatipudi Water Supply Scheme was physically completed during 1966-67 augmenting the Visakhapatnam Water Supply in Visakhapatnam by a quantity of 10 Million Gallons per day. Two Drainage Schemes namely Vijayawada Drainage Scheme (Blocks I and II of Eastern area) and the Eluru Drainage Scheme were completed in 1967-68. 15 schemes are expected to be completed by the end of 1968-69 out of 28 Telangana Regional Works.

#### Fourth Five-Year Plan :

3. A provision of Rs. 15.50 crores has been made in the Fourth Plan for Water Supply Schemes in the State. Of this, a sum of Rs. 11.00 crores has been allotted to schemes to be implemented by Public Health Engineering Department and the balance of Rs. 4.50 crores for the Manjira Water Supply Scheme. The sum of Rs. 11.00 crores allotted to the Public Health Engineering Department will be utilised as follows:

	<i>(Rs. in crores.)</i>
1. Spill-over Schemes .. .. .	4.43
2. (a) Hyderabad Drainage Improvement Scheme ..	0.50
(b) Comprehensive Drainage Scheme for the disposal of Industrial affluent in and around Hyderabad ..	0.50
3. New Water Supply Scheme in Municipalities declared as endemic to cholera .. .. .	4.16
4. New Drainage Schemes in Municipalities declared hyper endemic to filariasis .. .. .	1.41
	11.00
1. Manjira Water Supply Scheme phase I and improvements to Hyderabad Water Works .. .. .	0.34
2. Manjira Water Supply Scheme Phase II .. .. .	4.16
	15.50

*Spill-over Schemes:*

4. It is proposed to complete the spill-over schemes taken up in the earlier Plan periods. The spill-over schemes taken up in the earlier Plan periods are (1) The Narasaraopet Water Supply Improvement Scheme (2) The Gudivada Water Supply Scheme (3) The Warangal Water Supply Improvement Scheme (4) The Khammam Water Supply Improvement Scheme (5) The Secunderabad Water Supply Improvement Scheme and (6) The completion of Telangana Regional Schemes. A sum of Rs. 4.43 crores has been earmarked for these schemes. Another sum of Rs. 1.00 crore has also been earmarked for execution of Hyderabad Drainage Improvement Scheme.

*New Water Supply Schemes:*

5. Out of the 81 Municipalities in the State, 46 are in areas endemic to Cholera. Twenty-six of such Municipalities were provided with protected Water Supply by the end of 1968-69. Two of the remaining 20 Municipalities have planned for provision of protected Water Supply Schemes with financial assistance from the Life Insurance Corporation. It is therefore proposed to undertake protected Water Supply Scheme in the other 18 Municipalities during the Fourth Plan. A sum of Rs. 4.16 crores required for this purpose has been provided in the Plan.

*Drainage Schemes:*

6. A sum of Rs. 1.41 crores will be utilised for the execution of underground drainage schemes in Towns susceptible to hyper endemic Filariasis. Out of 13 such Municipalities, 6 Municipal areas are susceptible to hyper endemic Filariasis. It is therefore proposed to take up the underground Drainage Schemes in these areas. A sum of Rs. 1.41 crores has, therefore, been provided for this purpose.

*Manjira Water Supply Scheme:*

7. The Manjira Water Supply Scheme Phase I increased the Water Supply potential of the Twin Cities to the tune of 20 million gallons. For the full utilisation of this Water Supply potential, it has become necessary to provide air-vessels, voltage stabilizers, etc., for minimising the interruptions due to fluctuation of voltage etc. A sum of

Rs. 12.00 lakhs is provided in the Plan for the works necessary. The Water Supply potential of the Twin Cities at the end of 1968-69 will be of the order of 64 million gallons per day. The projections of demand for water in the capital by the end of Fourth Plan will be about 81 million gallons per day. It is therefore necessary to create this additional potential. To supply this qauntity of water it is proposed to take up the Manjira Water Supply Scheme Phase II with an additional water supply potential of 25 million gallons per day. The scheme consists of laying additional water supply mains from the Manjira Barrage at Sangareddy and the construction of necessary filter beds, pump houses, etc. The scheme is estimated to cost of Rs. 7.50 crores. A sum of Rs. 0.04 crore has been provided in the Plan for this Project.

*Improvements to Hyderabad Water Works :*

8. Several improvement works were taken up during the Third Plan period and during the three Annual Plan years to Hyderabad Water Works and these improved the water supply in the City. A provision of Rs. 34.00 lakhs is made for the spill-over commitment under these works.

*Drainage and Sewage Schemes :*

9. A sum of Rs. 240.61 lakhs will be spent on Drainage and Sewage Schemes in the State.

## 20. RURAL WATER SUPPLY

### Rural Water Supply (Well Construction Programmes)

1. There are 41,395 Villages and hamlets in the State according to the 1961 census. Both the villages and hamlets have been grouped for the purpose of providing drinking water facilities. Excluding the Villages which had adequate drinking water facilities, about 31,873 villages had to be provided with satisfactory drinking water facilities at the beginning of the Third Plan as shown below:—

Category I	..	21,175	Where there was no facility for drinking water at all.
Category II	..	10,698	Where the existing facilities are inadequate.

2. During the Third Five-Year Plan, 12,000 villages were provided with drinking water facilities at a total expenditure of Rs. 485.89 lakhs. Out of this, the expenditure under Plan was Rs. 366.64 lakhs.

#### Proposals for the Fourth Plan :

3. By the end of 1968-69, 19,450 villages out of the above 31,873 will be provided with drinking water facilities leaving 12,423 villages yet to be covered, the break-up of which is as follows:

*(Number of Villages)*

<i>Item</i>		<i>Category-I</i>	<i>Category-II</i>	<i>Total</i>
1. Spill-over	.. ..	2,636	5,323	7,959
2. New	.. ..	2,189	2,275	4,464
		4,825	7,598	12,423

4. It is proposed to complete all the 7,959 spill-over works under categories I and II with an estimated cost of Rs. 180 lakhs. In addition 1,800 villages under Cate-

gory I will be provided with drinking water facilities at a cost of Rs. 180 lakhs. Thus with an outlay of Rs. 360 lakhs in the Plan, 7,959 villages both under Category I and II (spill-over and new) will be covered.

5. Besides this, an amount of Rs. 175 lakhs at the rate of Rs. 35 lakhs per year a expected under non-Plan provision. This additional provision would be utilised for provision of drinking water facilities in all the remaining Category I villages, besides provision of drinking water facilities in 1,360 villages in Category-II.

### Piped Water supply Schemes :

6. In the Fourth Five-Year Plan, an amount of Rs. 4.90 crores has been provided for the piped water supply schemes. The programmes envisaged for the Fourth Five-Year Plan period would be as follows:—

	<i>Rs. in lakhs.</i>
1. Spill-over Works (78) .. .. .	157.00
2. 25 schemes taken up by the Panchayat Samithis and sanctioned by Government .. .. .	5.33
3. Amount required for schemes which are proposed to be taken up for which machinery has already been purchased	211.00
4. 120 new works in drought areas .. .. .	140.00
Total ..	513.33

## 21. HOUSING

The housing schemes are under the control of the Director of Municipal Administration, the Andhra Pradesh Housing Board, the Municipal Corporation, the Commissioner of Labour and the Registrar of Co-operative Societies. The outlay on Low Income Group Housing schemes under the control of the Director of Municipal Administration will be Rs. 19.00 lakhs during the Fourth Plan for providing housing facilities to low income groups in municipal areas. The outlay on investments for housing in the Co-operative sector will be Rs. 1.25 crores. 1,000 houses will be constructed under this scheme during the Fourth Plan. The outlay on schemes of the Housing Board during the Fourth Plan period will be Rs. 45.00 lakhs. The outlay on municipal housing schemes of the Municipal Corporation under slum clearance schemes will be Rs. 31.00 lakhs. The outlay on integrated subsidised housing schemes for industrial labour and economically weaker sections of the community under the Commissioner of Labour, Housing Board and the Director of Municipal Administration will be Rs. 60.00 lakhs, Rs. 30.00 lakhs and Rs. 30.00 lakhs respectively.

## 22. WELFARE OF SCHEDULED TRIBES

The population of Scheduled Tribes in this State was 1.32 millions according to the 1961 Census. Out of the 212 tribal groups listed in the Scheduled Tribes Lists (Modification) Order 1956, 33 tribal groups are resident in this State, Gonds, Koyas, Hill Reddis, Savaras, Bagathas, Valmikis etc., are the major tribal groups of this State. Yanadis and Yerukalas also form a distinct tribal group in the State though they inhabit the plains of the State. Other important tribal groups in the State are Andhra Bhils, Malis, Manne Doras, Naiks and Reddi Doras. The total scheduled area in Andhra Pradesh is 29,683 square K.Ms. accounting for over 10 per cent of the geographical area of the State.

2. The scheduled areas in the State can be broadly divided into three categories viz., (1) the Upper Agency area covering Araku, Ananthagiri, Munchingputta, Paderu, Gangaṛajumadgole, Pedabayalu and Chintapalli of Visakhapatnam district; (2) the Lower Agency covering Koyuru in Visakhapatnam district, Seethampet, Pachipenta and Bhadrhiri of Srikakulam district, Rampachodavaram, Maredumilli, Addateegala and Rajavommangi of East Godavari district, Polavaram and Muttayagudem blocks of West Godavari district; and (3) the Tribal Development Blocks of Khammam, Warangal and Adilabad. The scheduled area in Andhra Pradesh covers 4,346 villages in the districts of Srikakulam, Visakhapatnam, East Godavari, West Godavari, Khammam, Warangal, Adilabad and Mahbubnagar. There are at present 24 Tribal Blocks in the State with an area of 22,212.40 square K.Ms. covering a tribal population of 5.31 lakhs. About 7.93 lakh tribals are living outside the Tribal Development Blocks. Out of this 2.90 lakh tribals live in isolated pockets in the State while 5.03 lakh tribals live in the plains. Literacy among the scheduled tribes is only 4.41 per cent in the State compared to 21.2 per cent for the whole State. According to the 1961 Census, 29.5 per cent of the tribals were cultivators and 20.8 per cent were agricultural labourers. In all 82.3 per cent of the workers among scheduled tribes were engaged in



Agriculture and Agricultural labour sectors. In addition, the collection of minor forest produce such as tamarind, myrobolams, soapnuts *etc.*, is the subsidy occupation for tribal people. Podu cultivation is also common among tribals more particularly among the Bagathas, Savaras Gabadas and Khonds. The Chenchus of Nallamalai Forest in Kurnool district and Mahbubnagar district have still not out-grown the primitive stage of food gathering and hunting in forest areas, while the main occupations of the Yanadis is fishing. Land is the most prized possession of the tribals. The land owned by tribals has not so far been surveyed and settled in the scheduled areas of Andhra region. The pressure on land has been increasing and the tribal areas represent a typical example of an improvised economy eking out a precarious existence at substandard subsistence levels. The low yield in agriculture, the total lack of industrialisation, inadequacy of transport and communication facilities, a high ratio of tribal population below 14 years of age, illiteracy, ignorance, superstition, custom-bound traditions and a low standard of living these would more or less sum up the living conditions of the tribal population of this State.

3. The poverty can be mainly attributed to the policies of isolation and non-interference pursued previously. Several vigorous measures were however initiated to improve the lot of these people, after the dawn of independence in India. There are several other Constitutional guarantees and directives which concern themselves with the welfare of the tribals. These constitutional directives and the special problems of the tribals have therefore to be kept in view in the strategy to be adopted to help this weaker section of society.

4. Efforts made in the First, Second and Third Five-Year Plans of the State brought a new ray of hope to the tribals in the State. Welfare schemes were designed and drawn up during these years to achieve integrated development of tribal areas in all sectors such as Agriculture, Animal Husbandry, Communications, Education, Cottage Industries, Health and Medical facilities *etc.* The total expenditure under the three Plans in the adoption of this strategy was Rs. 547.71 lakhs which roughly works out to Rs. 41.36 per head of population. It was during the

Third Plan that significant progress was initiated and achieved in this State. 20 Tribal Development Blocks were also started during this period in addition to four existing Multipurpose Blocks in the tribal areas.

5. Communications is an item on which major expenditure was incurred because this is one of the important factors contributing to the improvement of the economic conditions of the tribals. A sum of Rs. 30.21 lakhs during the First Plan, a sum of Rs. 117.73 lakhs during the Second Plan period and a sum of Rs. 87.48 lakhs during the Third Plan period were incurred on communications. With this outlay, 81 miles of roads in the First Plan period and 236 miles of roads in the Second Plan period were laid. No target was fixed during the Third Plan period and the aim was to complete the incomplete works that had already been taken.

6. Education is another important factor in changing the outlook of the tribals and any scheme that may be introduced without education will not be of much use to Tribals. During the First and Second Five-Year Plan periods, an expenditure of Rs. 8.90 lakhs and Rs. 20.73 lakhs respectively was incurred towards provisions of educational facilities to the tribals. In all 583 elementary schools, 15 secondary schools, 6 adult schools, 13 boarding homes, 13 hostels and 8 training centres were started during the above two Plan periods. Besides this, 80 school buildings were started, 15,000 students were awarded scholarships and 86,000 students were supplied with books, stationery and clothes. During the Third Plan period, an amount of Rs. 13.09 lakhs was spent towards development of education. During this period 67,293 students were supplied with books, slates and clothing; and in 28 centres, supply of midday meals was also undertaken.

7. In order to educate the tribals in the improved methods of Agriculture and help them in prevention of Podu cultivation, a number of small schemes such as opening of pilot farms, supply of seeds and manures and training of hillmen in horticulture and supply of ploughs and bullocks were undertaken. Under this scheme, an expenditure of Rs. 1.92 lakhs in the First Plan period, Rs. 16.18 lakhs in the Second Plan period, and a sum of Rs. 31.67 lakhs in the Third Plan period were incurred.

8. With a view to utilising the available raw material in the forest areas and also to improve the economic conditions of the tribals certain cottage industries were also started in the tribal areas. A sum of Rs. 0.57 lakh in the First Plan period, Rs. 3.24 lakhs in the Second Plan period and Rs. 8.44 lakhs in the Third Plan period were incurred.

9. In spite of substantial progress achieved as indicated above, it has to be conceded that more remains to be done for the tribals of the State. Keeping in view the fact that the rapid development of the tribals and tribal areas cannot be postponed any further, a Special Plan for the development of tribals has been envisaged in this sector. The strategy in this sector will concern itself with vital and basic problems such as education of tribal people, development of ayacut and minor irrigation, improvement of roads and communications in tribal areas, improvement of medical and public health facilities, survey and settlement of land in tribal areas etc. The outlay during the Fourth Plan period will be Rs. 10.00 crores. The break-up of this expenditure on important programmes will be as follows:—

	<i>Rs. in crores</i>			
(a) Education	..	..	..	3.28
(b) Survey and Settlement	..	..	..	0.40
(c) Development of Ayacut and Minor Irrigation schemes				2.10
(d) Agricultural schemes	..	..	..	0.86
(e) Scheduled Tribes Corporation		..	..	0.35
(f) Industries	..	..	..	0.02
(g) Roads and Communications	..	..	..	1.20
(h) Medical and Public Health	..	..	..	0.22
(i) Miscellaneous schemes	..	..	..	1.75
Total	Rs.	..	10.00	crores

10. The important programmes and schemes are briefly indicated below:—

(a) *Education:*

The percentage of literacy among scheduled tribes is 4.4 per cent only as already indicated above. The number of primary schools in the Tribal Development Blocks is only 1,217 catering to 5,250 villages and hamlets. The number of higher elementary schools is only 27 while the number of high schools is a mere 20. The estimated number of school going tribal students at present is 2.38 lakhs. It is therefore proposed to open 400 Ashram schools with a strength of 30 students in each school to cover at least 5 per cent of the school-going children in these areas. An outlay of Rs. 2.5 crores has been provided for this. The number of tribal students who will be enrolled by the end of the Fourth Plan in the existing 19 Ashram schools and the new schools proposed will be 15,000.

11. Eight higher elementary schools will also be opened in the Tribal areas in addition to the twenty-seven existing schools. These schools will have an agricultural bias. Two high schools will also be opened in addition to the twenty existing high schools with an outlay of Rs. 0.09 crore. Tribal students will also be given incentives by way of scholarships, educational facilities like books, clothes midday meals, merit bonuses etc. The outlay on this programme will be Rs. 0.25 crore. Eighteen hostels will also be opened for tribal students to enable them to pursue higher education. A sum of Rs. 9.00 lakhs has been earmarked for this. In addition sixty-six hostel buildings will also be constructed at a cost of Rs. 0.13 crore to provide hostel facilities to tribal children. A sum of Rs. 0.02 crore has also been provided for construction of 100 teachers quarters to ensure the availability of teachers in adequate number in the tribal areas.

(b) *Survey and Settlement:*

12. There is an urgent necessity to confer ownership rights on the lands in the possession of tribals so that they can obtain facilities from co-operative and other institutions and also have interest in the development of their own lands instead of resorting to Podu cultivation. This

is possible only after the tribal area is surveyed and settled. At present, an area of 5,600 square miles in the Andhra region and 1,250 square miles in the Telangana region remains to be surveyed and settled. The survey and settlement operations in the above areas will require an amount of Rs. 2.00 crores. It is proposed to complete 20 per cent of this work at a cost of Rs. 0.40 crore.

(c) *Development of Ayacut and Minor Irrigation Schemes :*

13. It is proposed to develop the ayacut area which will come under medium and minor irrigation schemes to be completed during the Plan period. This will require an outlay of Rs. 0.10 crore.

14. To enable the tribal to make the best use of the land under his possession, it is necessary to offer him irrigation facilities. It is also common knowledge that where irrigation facilities exist, the tribals are not tempted to take to Podu cultivation. At present, the irrigated area in the Tribal Development Blocks is only 15 per cent of the total cultivated area. 3,593 Hectares are irrigated by canals, 1,014 Hectares by tanks, 874 Hectares under wells and 19,817 Hectares by indigenous methods. There is great scope for developing further irrigation facilities. An amount of Rs. 10.00 crores will be required to complete the irrigation schemes already put on ground and to take up further essential schemes to double the irrigated area in scheduled areas. It is proposed to complete 20 per cent of the work at a cost of Rs. 2.00 crores.

(d) *Agricultural Schemes :*

15. Eight demonstration-cum-seed multiplication farms are proposed to be opened. These farms will be attached to the eight higher elementary schools proposed to be opened. The farms will enable the students of the schools to acquire agricultural training. In addition, the farms will serve the purpose of seed production. This will involve an outlay of Rs. 0.68 crore.

16. It is also proposed to introduce high yielding crops by supplying high yielding seeds, fertilizers and pesticides to tribals at a cost of Rs. 0.14 crore.

17. Many a tribal at present is not keen on cultivation due to lack of plough bullocks of his own. It is estimated

that one lakh families will require plough bullocks and this will involve an outlay of Rs. 5.00 crores. It is however proposed to supply plough bullocks at least to 12,800 persons at a cost of Rs. 0.64 crore.

*(e) Scheduled Tribes Corporation :*

18. The Andhra Pradesh Scheduled Tribes Co-operative Finance and Development Corporation required further the working capital and funds for construction of godowns etc. An amount of Rs. 0.35 crore will be needed by the Corporation. An amount of Rs. 2.60 lakhs is provided in the Centrally sponsored scheme for the year 1968-69 for expenditure on the staff of the Corporation.

*(f) Industries :*

19. An amount of Rs. 0.02 crore will be needed to start bee keeping units which are best suited for the agency areas.

*(g) Roads and Communications :*

20. Communication facilities will open up the tribal area and bring in economic and other benefits. At present there are only 520 miles of pucca roads of which 75 per cent are black topped. Fifteen road works covering a length of 250 miles are now in progress and these will require an amount of Rs. 1.62 crores to be completed, thus bringing the road mileage for the 11,595 square miles of scheduled area to 770 miles. It is proposed to complete some of these works at a cost of Rs. 0.65 crore.

21. It is also proposed to have link roads to connect important tribal villages and also roads in the forests to facilitate the easy transport of forest produce. 120 miles of such roads will be laid at a cost of Rs. 0.37 crore.

*(h) Medical and Public Health :*

22. There are only 14 primary health centres whereas the number of tribal development blocks is 24. It is proposed to open primary health centres in the remaining 10 blocks. This will require an amount of Rs. 0.22 crore.

*(i) Miscellaneous Schemes :*

23. There are several other important schemes such as provision of drinking water wells in tribal areas, the

development of scheduled tribes in the plains, aid to voluntary organisations, strengthening of administration etc.

*Drinking Water Wells:*

24. Out of the 5,250 tribal villages and hamlets, only 2,250 are provided with drinking water facilities so far. The remaining 3,000 have to be provided with wells. This will involve an outlay of Rs. 1.50 crores. It is proposed to complete this work at a cost of Rs. 0.30 crore.

*Scheme for development of scheduled tribes in the plains:*

25. The Yerukalas, Yanadis and Sugalis living in the plain area are very backward compared to the rest of the population. It is estimated that there are 1,00,000 such families living in 5,000 habitations. It is proposed to give housing aid to 2,000 families at the rate of Rs. 700 a house involving an outlay of Rs. 0.14 crore.

26. Two hundred drinking water wells are also proposed to be sunk in the plains at a cost of Rs. 0.04 crore for the benefit of these tribals. 1,600 families will also be provided with plough bullocks at a cost of Rs. 0.08 crore.

*Aid to Veterinary Organisations:*

27. Voluntary organisations have an useful role to play in the welfare schemes for the scheduled tribes. It is proposed to aid such organisations for implementing specific schemes. An amount of Rs. 0.10 crore will be the outlay on the scheme.

*Strengthening of administration:*

28. An amount of Rs. 0.05 crore is required for strengthening the existing administrative structure of the Tribal Welfare Department so that the schemes for Tribal Welfare may be implemented effectively and quickly. An amount of Rs. 4.50 lakhs is ear-marked in the State's Fourth Plan for this purpose.

29. An integrated plan for the development of the tribal areas in the State has been drawn up which requires an outlay of Rs. 50 crores during the Fourth Plan period.

However, due to the constraint of resources an allocation of only Rs. 10 crores has been made in these proposals. This represents the minimum outlay required if some progress has to be made in the development of these areas and if their condition is not to further deteriorate in relation to the levels of development in the rest of the State.



## 23. WELFARE OF SCHEDULED CASTES AND OTHER BACKWARD CLASSES

The total outlay on Scheduled Castes and other Backward Classes during the Third Plan period was Rs. 205.39 lakhs of which an amount of Rs. 180.43 lakhs was spent, resulting in a shortfall of Rs. 24.96 lakhs. Education, Economic Uplift, Health, Housing and other schemes were implemented for the scheduled castes, while in respect of the backward classes, only schemes of education and a few economic uplift schemes were implemented since the backward classes derive the benefits of the health, housing and other schemes from the general sector.

2. Out of a total outlay of Rs. 205.39 lakhs during the Third Plan, the provision intended for Scheduled Castes was Rs. 171.90 lakhs constituting 83.7 per cent of the total outlay. The remaining amount of Rs. 33.49 lakhs was intended for other Backward Classes. During the Fourth Plan the total outlay is Rs. 332 lakhs of which Rs. 275.00 lakhs (83 per cent) will be spent on Scheduled Castes, while the remaining amount will be spent on other Backward Classes.

### **Scheduled Castes :**

#### *(a) Education :*

3. Out of a total provision of Rs. 137.41 lakhs on educational schemes during the Third Plan, an expenditure of Rs. 114.69 lakhs constituting 83.5 per cent was incurred. 15,405 pre-matric and 18,169 post-matric scholarships were granted to the Scheduled Caste students. 2,42,427 Scheduled Castes primary class pupils received monetary aid for purchase of books and stationery. 123 new Government hostels were started for the Scheduled caste students, and 23,694 boarding grants were given to the subsidised hostels for maintaining the scheduled caste boarders. During the 3 year period 1966-67 to 1968-69 the educational schemes implemented during the III Plan were continued and against a provision of Rs. 24.24 lakhs for the 3 years, an expenditure of Rs. 24.17 lakhs was incurred. The shortfall was negligible.

4. During the IV Plan, it is proposed to spend Rs. 230.00 lakhs on educational schemes for Scheduled Castes. The earlier schemes which have benefited the scheduled caste students will all be continued and a new scheme of merit bonus for students of outstanding ability is also being introduced. It will cover about 1,000 students every year during the Plan period. Another scheme for the establishment of libraries containing books relating to technical and professional studies in Government hostels at a cost of Rs. 0.60 lakh is also included.

*(b) Economic uplift:*

5. An amount of Rs. 5.96 lakhs was provided for economic uplift schemes and this amount was wholly spent. 1,213 Scheduled Caste families were supplied with ploughs, bullocks and carts and 4,765 individuals were given aid for cottage industries. No schemes of economic benefit were implemented during the period 1966-67 to 1968-69. During the Fourth Plan period Rs. 20.00 lakhs is provided for vocational training and assistance for agriculture.

*(c) Health, Housing and other schemes:*

6. An amount of Rs.28.53 lakhs was provided for these schemes and Rs. 28.51 lakhs (almost 100 per cent) was spent towards the schemes. 1,121 drinking water wells were dug and 72 Community halls were constructed. Land intended for house sites was acquired under the Plan scheme in addition to that acquired under the normal departmental Plan. During the Fourth Plan Rs. 25.00 lakhs is provided for housing schemes since this programme has proved popular with the Scheduled Castes.

**Backward Classes :**

7. The provision made for Backward Classes Schemes during the Third Plan was Rs. 33.49 lakhs. During the Fourth Plan the provision is Rs. 40.28 lakhs.

*(a) Education:*

8. Against a provision of Rs. 31.67 lakhs during the Third Plan for educational schemes Rs. 29.45 lakhs consti-

tuting 93 per cent was incurred. 11,785 scholarships were granted to the Backward Class students. 90,720 backward class primary school going boys were given monetary aid for purchase of books and stationery. 2,460 pupils were supplied with mid-day meals.

9. During the period 1966-67 to 1968-69, against a provision of Rs. 7.28 lakhs for distribution of stipends to students, an amount of Rs. 6.84 lakhs was spent. During the Fourth Plan the entire provision of Rs. 57 lakhs intended for the backward classes will be spent towards stipends and monetary aid for books and stationery.

*(b) Economic uplift:*

10. The total provision of Rs. 1.82 lakhs during the Third Plan was wholly spent towards industrial aid and the number of families that benefited through this scheme was 3,767. No schemes were taken up during the 3 year period 1966-67 to 1968-69 and no schemes of this nature have been included in the Fourth Plan since the schemes implemented during the Third Plan had made no visible impact on the beneficiaries.

11. The above review will reveal that the provision of Rs. 205.39 lakhs for Scheduled Castes and other backward classes during the Third Plan has been increased to Rs. 332 lakhs during the Fourth Plan. Schemes of education including new ones such as merit bonus to provide an additional incentive for extra effort on the part of the students, have been given high priority since these schemes more than any thing else are likely to improve their conditions. Housing schemes have been proposed to better the conditions of these sections since they live under hopelessly insanitary conditions. Vocational and agricultural aid have been proposed for bringing about economic uplift. These programmes combined with the implementation of the normal departmental schemes will bring about a considerable improvement in the living conditions of this vulnerable section of society. No difficulties are expected to be encountered in the implementation of these programmes, since they are all of a non-technical nature not requiring any special skill. The implementation of the programmes in the districts is the responsibility of the Zilla Parishads and the Panchayat Samithis, and the

District Social Welfare Officer attached to the Zilla Parishad attends to this work. The District Collector as the Chairman of the Standing Committees of the Zilla Parishads supervises the implementation of the schemes.

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## 24. SOCIAL WELFARE

### **Welfare of Women and Children :**

The Women Welfare Department is in charge of the implementation of Women and Children Welfare schemes. A sum of Rs. 34.27 lakhs was spent on these schemes during the III Plan. During this period, the Service Homes at Anantapur and Hyderabad were expanded to include training-cum-production units. 29 Children's Homes, 23 Creches, 28 Bala Vihars, two Creche-cum-Pre basic classes for Tribal Children were opened during this period. A sum of Rs. 2.00 lakhs was given as grant-in-aid to social welfare institutions. Besides strengthening the staff at Headquarters and in the districts, a sum of Rs. 3.00 lakhs was spent on Rehabilitation programmes of the Department.

2. During the period between 1966-67 and 1968-69, a sum of Rs. 12.46 lakhs was spent on various schemes of Women's Welfare and Child Welfare. Several Children's Homes and Creches were started during this period.

3. The Fourth Plan outlay for welfare schemes of the Department will be Rs. 77.00 lakhs. The Children's Homes have proved quite popular in the State and a sum of Rs. 55 lakhs will be spent during the Fourth Plan for opening 45 Children's Homes, Orphanage Homes, Homes for the destitutes and the mentally retarded, and for Creches. About Rs. 10 lakhs has been provided for building Service Homes at Hyderabad, Warangal and Vijayawada and the State Home at Rajahmundry as a part of the Social Defence Programme. The spill-over schemes will absorb about Rs. 4.00 lakhs while Rs. 5.00 lakhs will be given as grant-in-aid to social welfare institutions. A sum of Rs. 1.00 lakh has also been provided for the training programmes of officers and staff and Rs. 2.00 lakhs for strengthening the Department and improving the mobility of the staff of the Department.

### **Other Social Welfare Programmes :**

4. The Inspector-General of Prisons is in-charge of some of the Social Welfare Schemes connected with the eradi-

cation of beggary, social defence programmes etc. The Department spent Rs. 5.85 lakhs on various programmes during the III Plan. A junior certified school at Eluru, a senior certified school at Hyderabad and the expansion of the Borstal School at Visakhapatnam were initiated during the period. During the last phase of the Third Plan, a scheme for control and eradication of juvenile vagrancy and begging was also started in the twin cities of Hyderabad and Secunderabad. All the above schemes were Centrally sponsored and the Government of India's share in expenditure was 50 per cent.

5. During 1967-68, the department was strengthened with the appointment of 5 Probation Officers. Certain facilities for the Children of female prisoners were also made available at the Central Jail, Hyderabad, and the State Jail for women at Rajahmundry. During 1968-69, 5 more Probation Officers were appointed. Several other schemes meant for the welfare of the weak and vulnerable sections of the society were also implemented during the Third Plan period. The old age pension scheme was implemented in the State at a cost of Rs. 40.04 lakhs. A social and moral hygiene and aftercare programme for men was also implemented at a cost of Rs. 0.89 lakh. Beggar Homes were run at a cost of Rs. 0.91 lakh. Ten Welfare Extension Projects were also continued during the Third Plan at a cost of Rs. 1.34 lakhs.

6. The provision for the schemes to be implemented by the Inspector-General of Prisons is Rs. 16.00 lakhs during the Fourth Plan. The opening of non-institutional services for prevention of Child beggary and Vagrancy at Vijayawada (Provision of Rs. 4.96 lakhs) setting up a Children's Home at Warangal (provision of Rs. 2.56 lakhs) construction of emporia for Jail products and the re-organisation of correctional institutions through appointment of additional staff (provision of Rs. 4.80 lakhs) are some of the important programmes proposed to be implemented by the Department. Training Schemes intended for female prisoners and training facilities for Borstal school inmates have also been included at a cost of Rs. 0.50 lakh and Rs. 0.68 lakh respectively.

7. Sheltered workshops for the physically handicapped and welfare services for the aged and infirm were first

initiated in the State in the year 1968-69. A total provision of Rs. 30 lakhs has been made for providing sheltered workshops for the physically handicapped (Rs. 14 lakhs) and welfare services for the aged and infirm (Rs. 8 lakhs) and orphanages (Rs. 8 lakhs) during Fourth Plan.

## 25. CRAFTSMEN TRAINING AND EMPLOYMENT SERVICES

A total outlay of Rs. 128.00 lakhs has been provided for Craftsmen Training during the Fourth Plan. The most important programme in this sector is the craftsmen training scheme costing Rs. 121.20 lakhs. The apprenticeship training scheme will have a provision of Rs. 6.00 lakhs. The scheme for part-time classes for industrial workers will have an outlay of Rs. 0.80 lakh.

2. An amount of Rs. 10.00 lakhs has also been provided for new employment services in the Fourth Plan. Ten new employment exchanges will be opened during the Fourth Plan with an outlay of Rs. 4.76 lakhs.

### **Labour Welfare/Administration :**

3. The total expenditure on Labour Welfare during the Third Plan period was Rs. 13.92 lakhs. A major share of the expenditure *i.e.*, Rs. 11.92 lakhs was towards the expansion of the administrative machinery of the department. Rs. 0.92 lakh was spent towards the establishment of the institute for Industrial Safety and Productivity. A sum of Rs. 0.57 lakh was spent towards the establishment of one Labour Welfare Centre at Adoni. A sum of Rs. 0.27 lakh was also spent on training of 11 officers and Rs. 0.24 lakh on 8 workers education classes.

4. In view of the emphasis laid on rapid industrialisation of the State, it is necessary that adequate priority should be given for Labour Welfare also. The expenditure on Labour Welfare Centres, Institute of Industrial Safety, training of officers and expansion of administrative machinery was Rs. 271 lakhs during the period 1966-67.

### **Labour Welfare Schemes :**

5. The outlay on Labour Welfare Scheme during the Fourth Plan will be Rs. 125.18 lakhs. The schemes envisaged are the establishment of Labour Welfare Centres (Rs. 36.27 lakhs), expansion of the administrative machi-



nery in the Labour, Factory and Boiler Units and the establishment unit (Rs. 47.86 lakhs), improvement of the Institute of Industrial Safety (Rs. 4.00 lakhs), establishment of a laboratory in the Boilers Unit (Rs. 4.00 lakhs), conducting of industrial relations courses (Rs. 2.40 lakhs) *etc.*

## 26. STATISTICS

During the Third Five-Year Plan the various Statistical Units in the Bureau of Economics and Statistics were strengthened and two new units *viz.*, Labour Statistics Unit and Official Statistics Unit were established. Besides, in order to improve the quality and timeliness of agricultural statistics at the primary level, 190 Taluk Statistical Assistants were appointed at the rate of one for each taluk. During 1966-67 the State income unit was strengthened and a public finance unit was established in the Bureau to undertake studies pertaining to resource mobilisation. The Agricultural Statistics Unit at the headquarters and the statistical agencies at the district level were further strengthened in 1967-68.

2. The main objective of the schemes proposed to be taken up during the Fourth Plan under statistics is to fill up the gaps in the availability of data required in the context of Planning and also to improve the quality and timeliness of the data already available. It is proposed to take up surveys on village and small scale industries, distributive trade and family budget enquiries besides collection of data on industries, labour and commercial undertakings. An amount of Rs. 21.00 lakhs is provided for the statistical schemes of the Bureau of Economics and Statistics.

## 27. EVALUATION

The Central Working Group in its report on 'Evaluation in States' has strongly recommended the strengthening of the evaluation machinery in the Fourth Plan. The Evaluation Wing in this State is weak and needs further strengthening. Many States in the country accepted the recommendations of the Central Working Group and strengthened their evaluation machinery in the year 1966-67 utilising the 50 per cent Central assistance given for such strengthening. Only this State could not strengthen its evaluation machinery due to the difficult financial position of the State at that time. Notwithstanding this handicap, the Evaluation Wing has so far issued 35 evaluation reports and one special review on various schemes. It may not be out of place to mention here that the Central Working Group has commended the working of the evaluation machinery in this State for adoption in other States also. Effective and timely evaluation, is necessary not only for an effective utilisation of resources, financial and otherwise, but also for proper review and reporting of Plan progress. It will therefore, be necessary to strengthen the State's evaluation machinery at least during the Fourth Plan.

The outlay on the strengthening of the Evaluation Organisation in the State will be Rs. 6.00 lakhs for the Fourth Plan period. The existing Evaluation Organisation will be strengthened at the State and field levels. It is also proposed to give the assistance of one Evaluation Assistant to each Zilla Development Board.

## 28. EMPLOYMENT IN THE FOURTH PLAN

A major difficulty in the correct assessment of the employment and unemployment situation in the State has been the lack of adequate data on the subject. Steps are being taken to remedy this situation. Certain steps have been taken recently to secure reliable and continuous information on the employment trends in the State. Based on the information so collected and on the norms of employment prescribed by the Planning Commission, a preliminary estimate of the employment position in the State has been made.

2. At the time of formation of the Third Plan, the Planning Commission had estimated originally that the back-log of unemployment in Andhra Pradesh would be of the order of 7.46 lakhs. A revised estimate of the back-log of unemployment at the beginning of Third Plan based on 1961 Census data and the conclusions drawn in the 16th round of the National Sample Survey, indicated that the back-log of unemployment at the beginning of the Third Plan was only of the order of 3.75 lakhs. Assuming that the new entrants in the labour force during the Third Plan period were about 12.59 lakhs, the employment requirements of the Third Plan period to achieve full employment has been worked out at 16.34 lakhs. It was at first estimated that 10.79 lakhs employment opportunities would be created during the Third Plan and that the back-log at the end of the Third Plan would be about 5.55 lakhs, but revised estimates indicated that the employment opportunities during the Third Plan were of the order of about 8.79 lakhs only. This would show that the back-log of unemployment at the end of the Third Plan was roughly of the order of 7.55 lakhs.

3. Taking this estimate as the base, we would have to make an estimate of the growth to the labour force year after year for the years 1966-67, 1967-68 and 1968-69 and deduct the employment opportunities created and likely to be created during these years, to get the position of employment in the beginning of the Fourth Plan i.e. (1969-70) Roughly, the additions to the labour force in Andhra

Pradesh can be taken as 2.65 lakhs every year. The total additions to the labour force for the three years 1966-67, 1967-68, and 1968-69 would thus work out to 7.94 lakhs. Assuming a linear relationship between the estimated employment opportunities in the Third Plan to the total Plan outlay, the job opportunities created during the three years has been roughly worked out at 5.14 lakhs. It can thus be estimated on the basis of the above computations that the back-log of unemployment at the beginning of the Fourth Plan would be roughly of the order of 10.30 lakhs.

4. The population of gross working force between the ages 15 and 59 as on 31st March, 1974 has been computed to be of the order of 247 lakhs. The additions to the gross working force during the Fourth Plan period would be roughly of the order of 18.00 lakhs. Assuming that 93 per cent of men and 47 per cent of women will be seeking employment, the effective addition to the labour force during the Fourth Plan period would work out to 12.60 lakhs. Taking the back-log of unemployment at the beginning of the Fourth Plan at 10.35 lakhs, the total employment potential to be created during the Fourth Plan to achieve full employment would be 22.95 lakhs jobs. A preliminary estimate of the employment opportunities to be created in the State is about 9.15 lakhs, with a Plan of the size of Rs. 650 crores. The back-log of unemployment at the end of the Fourth Plan would therefore be about 13.80 lakhs. A major portion of the labour would be in the rural sector increasing the supply of labour and adding to the pressure of population in the agricultural sector.

#### *Man Power:*

5. Availability of sufficient trained man-power was an important factor which affected the economic growth of the State during the previous Plans. There has however been a total shift from this position and the problem at present is not so much the availability of trained man-power but their optimum utilisation. The provision of full employment particularly of skilled personnel has now become a problem in the State particularly in the category of engineering personnel. The number of degree holders and diploma holders in Engineering that would be produced during the Plan period is expected to be 4.820 and 10.400 respectively. With a provision of about Rs. 650

crores, the man-power requirement of Engineers and Diploma holders would be 1,260 Engineers and 1,132 Diploma holders in the Engineering Sector. It is estimated that there are about 10,440 engineering personnel at present in the State (2,915 engineering graduates and 7,525 other Diploma holders) who are unemployed. Including this back-log, the engineering graduates and diploma holders to be absorbed in the private sector and other Governmental sectors including the Central Government would be 5,475 and 16,793 respectively, on the assumption that the State would find employment for 1,260 Engineers and 1,132 Diploma holders during the Fourth Plan.

6. Surpluses of man-power are also expected in the case of doctors and agricultural graduates during the Fourth Plan. The surplus among doctors will not be a problem as there is growing need for Medical and Health Services in the State and they will be absorbed in the economy in the Private Sector. More employment opportunities would therefore have to be provided to the educated unemployed particularly among skilled and technical personnel. A special Plan has therefore been prepared to provide employment to the unemployed engineers and such other skilled technical personnel in the State with a total outlay of Rs. 2.00 crores in the Fourth Plan. The rising tempo of activities in the Agricultural Sector on the threshold of an agricultural break through should however by and large be able to take care of the surplus of skilled and unskilled personnel in the agricultural and other sectors.

## **DEVELOPMENT OF CHRONICALLY DROUGHT AFFECTED AREAS**

In the Southern region, certain areas in Andhra Pradesh, Mysore and Maharashtra States are subject to chronic drought conditions. According to the estimates of the Ministry of Food and Agriculture, Government of India, the total area in the Southern Region which is generally susceptible to scarcity conditions is about 97,780 square miles and the population affected is 227 lakhs. The corresponding estimate of drought affected area in Andhra Pradesh is 59,890 square miles and the population affected, 149 lakhs. Thus about 60 per cent of the area and 70 per cent of the population affected by scarcity conditions in the Southern Region are in Andhra Pradesh. The affected area constitutes 56.5 per cent of the total area of the State, while the population in this area forms 41.4 per cent of the State's population. This should bring home the enormity of the problem confronting the State Government.

2. The Rayalaseema region constitutes the major part of the chronic famine area in Andhra Pradesh. The soil in this region is rocky and unyielding and the rainfall is scanty and fitful. Between 1900 and 1959 famine or near famine conditions occurred as many as 14 times in Andhra region, which means that there was a famine once in every four years. Anantapur and Kurnool districts were affected 11 out of these 14 times. In the Telangana region also between 1927 and 1959, famines occurred six times, which means that there was a famine in this region, about once in every five years. Due to erratic and indifferent monsoons in these areas, particularly in Rayalaseema, the distribution of rainfall during cropping season is uneven and insufficient. The crops, therefore, fail either completely or partially year after year and as a result famines have become recurrent features in these areas.

3. In the context of working out an integrated plan for permanent measures for tackling the problem of drought in chronically drought affected areas, the State Govern-

ment considered it essential that the drought affected areas should first be identified scientifically so that special and integrated plans suitable to the areas keeping in view the local conditions are prepared for their development. Accordingly, action has been taken to delineate the areas on the basis of certain objective criteria, such as average rainfall over a period of time, variation from the average, the minimum rainfall required to sustain the dry crops *etc.* The periodicity and intensity of drought conditions in the affected areas have also been taken into account.

4. On the above basis, 71 taluks in 10 districts of the State have been tentatively declared as chronically drought affected areas (*vide* Annexure). Out of these 71 taluks, 33 taluks have been identified as the 'Hard-core' of the chronically drought affected areas, where the drought conditions are more acute and which should be given priority. The entire Anantapur district with its 11 taluks forms part of the 'Hard-core'.

5. At present money is spent every time famine or drought conditions occur and very often this is expenditure, that is by its very nature non-productive and even wasteful. Investment in permanent measures for the eradication of drought conditions will, therefore, be only a kind of capitalisation of the expenditure that is incurred for tackling famine conditions when they occur from time to time. The creation of permanent assets in the famine area of a type that would contribute to agricultural production alone can solve both the short-range and long-range problems of these areas.

6. In 1961 the Ministry of Food and Agriculture, Government of India had prepared an outline of a Draft Plan for the Development of Drought Effected areas and commended it to the State Governments of the Southern region. Based on this Draft Plan the Andhra Pradesh State Government had prepared several pilot projects and had sought additional assistance from the Government of India since the outlays required were too large to be accommodated within the State Plan. Subsequently, the problem of chronically drought affected areas, which is not limited to any one State but is spread over several States in the Southern region, had been discussed amongst the Chief Ministers concerned and also with the Planning Commission and the Government of India. The State has



consistently taken the stand that this should be taken up as a national plan and that additional central assistance should be given for this purpose. The magnitude of the problem is such that a comprehensive plan for the development of these areas will require an investment of at least Rs. 450 crores. However, the final decision of the National Development Council Committee has been that the Chronically Drought Affected Areas would be dealt with as one of the special problems of the States concerned and that 10 per cent of the total central assistance to the States would be earmarked for such special problems. In view of this decision, the only alternative now is to try and tackle the problems of areas in a phased manner by giving priority for the outlays required for these areas under the relevant sectors. The outlays in some of the sectors have therefore had to be increased in order to provide the minimum amount for tackling this problem.

7. The principal sectors of development concerned with this problem are agriculture, minor irrigation, soil conservation, animal husbandry, afforestation, rural electrification, industries and drinking water supply. The outlays provided in these sectors for this purpose are indicated below so as to give an idea of the total amount that would be available for tackling the various problems of these areas.

<i>Sector of Development</i>				<i>Outlay</i> <i>(Rs. in crores.)</i>
I.	Agriculture	..	..	1.00
II.	Minor Irrigation :			
	(i) Survey of Ground-water resources	..	..	0.90
	(ii) Sinking of new wells, supply of oil engines and electric motor pumpsets	..	..	6.50
	(iii) Establishment of power drilling and rock blasting units and purchase of rigs	..	..	1.10
	(iv) Restoration and renovation of tanks	..	..	11.50
III.	Soil Conservation	..	..	2.00
IV.	Animal Husbandry	..	..	1.00
V.	Afforestation	..	..	2.00
VI.	Rural Electrification	..	..	16.00
VII.	Industries	..	..	5.00
VIII.	Drinking Water Supply	..	..	4.00
			Total	51.00

8. A brief description of the programmes proposed is given below :

### **I. Agriculture :**

The programmes proposed to be taken up under agriculture for the development of chronically drought affected areas are :

#### **(i) Establishment of Soil Testing Units :**

9. Judicious application of fertilizers to the dry crops has opened up a potential new approach for increasing agricultural production in the chronically drought affected areas. For this purpose, it is necessary to take up systematic soil testing of the fields to fix up suitable doses of fertilizers for application to the dry crops.

10. There are already 3 soil testing laboratories in four of the 10 chronically drought affected districts. During the Fourth Five-Year Plan it is proposed to establish six additional soil testing laboratories in the remaining districts.

11. In the draft Fourth Five-Year Plan, an amount of Rs. 33.15 lakhs is provided for soil testing programmes and from out of this Rs. 10 lakhs will be utilised in the chronically drought affected districts.

#### **(ii) Setting up of a Research Station for evolving drought resistant varieties of crops :**

12. Drought is a period of dryness during crop season sufficiently prolonged to adversely affect growth and development of crops due to lack of required moisture in the soil. It is therefore, necessary that research is undertaken to evolve drought resistant crops in these areas. Studies have to be taken up regarding climatic factor particularly rainfall for locating the safe period of sowing so that crops may not suffer from extreme drought during critical periods of growth and development. Varieties have to be evolved which will successfully resist the drought condition by systematic research, survey, collection and screening of crop varieties.

13. The chronically drought affected areas have predominantly two types of soils *viz.*, black soils and red soils.

The problem in the areas depends on the soil types. At present there is one Research Station in the red soil region at Anantapur. During the Fourth Plan, it is proposed to establish another research station to cater to the needs of the black soil areas at a cost of Rs. 15 lakhs.

**(iii) Raising of orchards :**

14. The raising of orchards using drought-resistant species will have to be taken up. Tamarind and mango are both drought resistant species, which will also yield a reasonable return by way of their produce. Mango requires no irrigation from the third year of planting onwards. It is, therefore, proposed to cover an area of 35,000 acres with tamarind topes and 26,000 acres with mango gardens. In both cases, subsidies and loans will have to be given the order to help the people bear certain expenditure in the initial years. For this purpose, a total provision of Rs. 75 lakhs has been made.

**II. Minor Irrigation :**

15. In 1966-67, the gross area irrigated was 17.18 lakhs acres against the total cultivated area of about 137.52 lakh acres in the chronically drought affected areas of the State. The percentage of irrigated area in these taluks was only 12.5 as against the State average of 30.0.

**Survey of ground-water resources :**

16. Any plan of development of the drought areas should aim at reducing the dependence of agriculture on the vagaries of rainfall by developing the existing surface and ground-water resources to the maximum extent possible. In these areas, the surface water potential is limited. The best solution for increasing irrigation potential in these areas will therefore be to tap ground-water resources. However, it is necessary to have a survey of ground-water resources since otherwise the risk of unsuccessful wells as well as of the failure of wells due to indiscriminate exploitation will be great. High priority has therefore, to be given to ground-water survey.

17. The Geological Survey of India, Southern Region, Hyderabad are at present conducting ground-water surveys in Andhra Pradesh. Out of about 48,000 square

miles of drought area, they have so far surveyed an area of about 4,500 square miles in a preliminary way. As it will take quite a long time for them to cover the entire area, the State Government have considered it essential that an organisation of their own should be set up to complete, the survey work in the drought affected areas in the State at least during the Fourth Plan period. For this purpose, a sum of Rs. 90 lakhs has been provided.

18. In order to tap the ground-water resources where available the following schemes have been formulated.

(i) *Sinking of new wells, supply of oil engines and electric motor pumpsets:*

19. In 1966-67 there were 2.25 lakh irrigation wells in the drought affected areas, irrigating about 6 lakhs acres. Since many of the existing irrigation wells have yet to be supplied with oil engines or electric motor pumpsets, it is proposed to supply 15,400 oil engines and 29,000 electric motor pumpsets.

20. For sinking of wells and supply of oil engines and electric motor pumpsets, an amount of Rs. 6.50 crores is provided towards debenture participation for issue of loans by the Andhra Pradesh Co-operative Central Land Mortgage Bank to the farmers.

(ii) *Establishment of power drilling and rock blasting units and purchase of rigs:*

21. The large scale well sinking programme is proposed to be linked up with certain essential services that are necessary for sinking of wells. For instance, unless there is adequate provision for power drilling units, the pace of well sinking programme might be hampered. An amount of Rs. 110 lakhs is provided for the establishment of power drilling and rock blasting units and purchase of rigs. The agency of the Agro-Industries Corporation will be used for obtaining this equipment.

(iii) *Restoration and renovation of tanks:*

22. It is also proposed to restore and renovate the breached and abandoned tanks, besides construction of new tanks and excavation of supply channels, wherever possible. An amount of Rs. 11.50 crores is provided for this purpose.

### III. Soil Conservation :

23. Crop production in the chronically drought affected areas depends on the uncertain rainfall and hence it is very essential to conserve the limited water to the maximum extent. The total cultivated area in this region is about 138 lakh acres. Most of this dry land is undulating and subject to severe soil erosion and run off losses. Further, in these areas often the little rain that is perceived comes in heavy intensities aggravating the problem of soil erosion and water losses.

24. A reconnaissance survey has revealed that about 25 per cent of this dry land area is severally eroded, needing immediate adopting of soil conservation measures and another 50 per cent is moderately eroded, which also requires the soil conservation measures within a reasonably short period, before they become too bad to be of any use for crop production.

25. The soil conservation measures, besides conserving the soil and water, would also increase the ground water re-charge and thus help in increasing the water supply in the wells. The programmes include contour bunding, nalla plugging, head water tanks and other conservation practices like introduction of suitable crop pattern etc.

26. During the Fourth Five-Year Plan a total outlay of Rs. 300 lakhs is proposed for soil conservation works of which Rs. 200 lakhs would be spent in the chronically drought affected areas.

### IV. Animal Husbandry :

27. Livestock is complementary to agriculture for achieving a balanced economy in a predominantly agricultural State like Andhra Pradesh. The livestock development programme in chronic drought effected areas should form part of the agricultural pattern and aim at a system of mixed farming, which would contribute materially to the building up of permanent assets. Keeping this object in view, schemes have been formulated under the following items at a total cost of Rs. 100 lakhs.

#### (i) *Cattle Development :*

28. It is proposed to establish 10 Key Village Blocks (in a phased manner) in compact area and provide for multi-

purpose approach to the problem by simultaneous attention to breeding, disease control, marketing *etc.*, at a total cost of Rs. 30 lakhs.

(ii) *Sheep Development :*

29. Next in importance to cattle, sheep husbandry, occupies a prominent place in rural economy of the drought affected areas. The object of the scheme is to assist farmers to maintain in small flocks of sheep which they can maintain on their farms. This would result in increased mutton production. A sum of Rs. 42.60 lakhs has been provided for establishing 14,200 units during the Fourth Plan period.

30. Besides the above, it is also proposed to distribute 1,000 half-bred exotic rams at a total cost of Rs. 1.50 lakhs in the drought affected areas at half cost for upgrading the local sheep.

(iii) *Poultry Development :*

31. It is proposed to start 500 poultry units for 5 years in each of the drought affected taluks in the State at a total cost of Rs. 14.20 lakhs. It is also proposed to introduce exotic cocks to upgrade the local poultry at a cost of Rs.3,55 lakhs.

32. A provision of Rs. 8.15 lakhs is made for appointment of supervisory staff for all the three schemes mentioned above.

**V. Afforestation :**

33. Over the centuries there has been a gradual denudation of the trees in the region with the result that there has been a perceptible decline in the rainfall over the decades. Afforestation is therefore essential for drought areas. The following programmes are proposed under afforestation.

(i) *Soil and moisture conservation works in Reserve Forests :*

34. Soil and moisture conservation works have to be undertaken in reserve forests under the control of the Forest Department by carrying out extensive contour trenching work in catchments coupled with gully plug-

ging, check-daming, natural pasture development, improvement of existing pastures by introducing better strains of drought resistant grass and afforestation, wherever possible.

(ii) *Extension and Farm Forestry :*

35. It is necessary to undertake large scale planting of tree species wherever possible on the bunds of agricultural lands as wind breaks and shelter belts. Planting can also be carried out on the foreshores of tanks and other village waste lands under the control of the panchayats, to develop farm forests and village wood lots which will be managed by the panchayats for their common weal.

(iii) *Establishing an Arid Zone Research Station in Anantapur district :*

36. It is necessary that intensive research is undertaken in this State by establishing a fully equipped research station in the arid zone, preferably in Anantapur district to tackle various problems connected with developing good pastures and selection of suitable species for afforestation including work on sissal. It is, therefore, proposed to establish a research centre.

37. For the above programmes under afforestation in the drought areas, a provision of Rs. 200 lakhs has been made.

**VI. Rural Electrification :**

38. Out of 7,819 inhabited villages in drought affected areas, 1,489 villages have been electrified up to the end of March, 1968. During the Fourth Plan period it is proposed to electrify 1,350 villages in the drought affected areas. Apart from this, a number of pumpsets will be energised the villagers already electrified. Assuming on an average four pumpsets will be energised in each electrified village, 6,000 pumpsets will be energised. To undertake the above programme under rural electrification in the chronically drought affected areas a sum of Rs. 16 crores has been provided.

**VII. Industries :**

39. The lack of surface water facilities in the chronically drought affected areas and the limitations of increasing the sub-soil water resources make it imperative that a long-

term plan for this area should provide for a gradual transfer of population from the agricultural sector to the industrial sector. Fortunately, the drought affected areas have certain local resources which would be exploited for the creation of an expanding industrial sector in these areas.

40. The industries contemplated in these areas would be based on available resources of minerals, forest and agricultural produce; inputs required for agricultural development and livestock resources. Besides these, consumer based industries, which could be started any where but which require a low level of skill and large labour employment, would be set up in these areas. The strategy would be to give a higher rate of preferential financial assistance to industries to be set up in these areas and to provide additional incentives over and above the incentives proposed for industries elsewhere in the State for attracting investments to these areas.

41. An outlay of about Rs. 5 crores will be provided in the Industries Sector for offering these special facilities and incentives for industrial development of the drought affected areas during the Fourth Plan period.

### **VIII. Drinking Water Supply :**

42. The drought affected areas do not have adequate drinking water facilities and the distress caused is acute practically every year.

43. Under drinking water supply programmes, 3,381 wells, which are under construction covering 3,160 villages, will be completed, besides constructing 3,254 new wells during the Fourth Plan period in the chronically drought affected areas. Under the protected water supply programme, besides completing 71 schemes already in progress, 120 new schemes can be taken up. For this purpose, a provision of Rs. 4 crores has been made in the Fourth Five-Year Plan.

44. It will thus be seen that priority has been sought to be given in all the important sectors for the problems of these areas. However, as mentioned earlier that these problems are of enormous magnitude and due to the constraint of resources can be tackled only in a phased manner. This programme, therefore, represents only a modest beginning in this regard.



## ANNEXURE

Tentative list of Chronically drought affected Taluks in Andhra Pradesh.

<i>District/Taluk</i>	<i>District/Taluk</i>
<b>1. Anantapur</b>	<b>3. Cuddapah—(Contd.)</b>
1. Anantapur*	24. Jammalamadugu
2. Tadpatri*	25. Proddatur*
3. Dharmavaram*	26. Pulivendla
4. Kalyandurg*	<b>4. Kurnool</b>
5. Rayadurg*	27. Markapur
6. Penukonda*	28. Kurnool*
7. Madakasira*	29. Dhone*
8. Hindupur*	30. Nandikotkur
9. Kadiri*	31. Adoni*
10. Gooty*	32. Aluru*
11. Uravakonda*	33. Pattikonda
<b>2. Chittoor</b>	34. Koilkuntla*
12. Chittoor*	35. Banganapalli*
13. Chandragiri	36. Arlagadda.
14. Madanapalli*	37. Giddalore
15. Voyalpad*	38. Atmakur
16. Pungunur	39. Nandyal
17. Palamanar*	<b>5. Nellore</b>
18. Kuppam	40. Udayagiri
<b>3. Cuddapah</b>	41. Kundukur*
19. Cuddapah	42. Kanigiri
20. Kamalapuram	43. Podili*
21. Rayachoti	44. Darsi*
22. Rajampet*	45. Atamakur*
23. Badvel*	

<i>District/Taluk</i>	<i>District/Taluk</i>
<b>6. Guntur</b>	<b>8. Mahabubnagar—(Contd.)</b>
46. Ongole	59. Shadnagar
47. Sattanapalli	60. Achampet
48. Vinukonda	61. Kollapur
49. Palnadu.	62. Gadwal
<b>7. Hyderabad</b>	63. Atmakur
50. Hyderabad (West)	<b>9. Nalgonda</b>
51. Ibrahimpatnam	64. Suryapet
52. Hyderabad (East)	65. Bhongir
53. Chevella (Shabad)*	66. Huzurnagar
<b>8. Mahabubnagar</b>	67. Deverkonda
54. Kalwakurthy*	68. Miryalguda
55. Nagarkurnool	69. Ramannapet*
56. Wanaparthy	70. Nalgonda
57. Alampur	<b>10. Warangal</b>
58. Makthal*	71. Jangaon*

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\*These taluks represent the 'Hard-core'.

## DEVELOPMENT OF THE METROPOLITAN AREAS OF HYDERABAD AND SECUNDERABAD

Proper Urban Development is important in the economic development of any State. Urban areas are usually the focal points of growth in any developing economy, the development of metropolitan areas which can never keep pace with the growth in the economy usually generates several special problems such as increasing pressure of population in the urban areas, the need for scientific land use, adequate housing facilities, improvements to the traffic circulation system, communications etc. The metropolitan area of Hyderabad and Secunderabad which became the capital of Andhra Pradesh in 1956, has not been free from all these pressures and pangs of rapid growth. The population of the twin cities was a little over 10 lakhs before the year 1956. The 1961 census recorded an increase of more than one lakh of population and during the following seven years, the population of the twin cities has been increasing, by leaps and bounds. The population is expected to cross the two million mark during the Fourth Plan period. This unprecedented growth of the metropolitan area has put all metropolitan amenities and services, out of gear, necessitating the preparation of a Plan of development at least for the future.

2. The Corporation limits of the twin cities, have been extended to an area of about 74 square miles and the anticipated quick expansion of the metropolitan area during the Fourth Plan period will bring in a crop of fresh problems such as proper land use, socio-economic problems of the existing population and the provision now influx additional services in the city area such as drainage, water supply etc. At present only 40 per cent of the city is served with sewerage facilities. Similarly the roads and bridges forming part of the traffic circulation system constructed to cater to the needs of a small population originally are not at present able to cope with the increasing demands of traffic. Traffic jams and accidents have therefore become a common feature in the twin cities. The slum areas have also been growing in the city

and apart from the problem of housing for slum dweller, these areas pose the problem of a potential health hazard to the community as a whole. Again there are only a limited number of markets in the city, while there is urgent need to disperse and expand the existing markets at least to 40 in the city area. Scientific land-use planning has also become urgent and it will be indispensable to plan for a satellite towns for the further development of the twin cities, if the problem of growth of this metropolitan area should not go out of control. Keeping these special problems in view a Master Plan for the perspective development of the twin cities is being prepared with an outlay of about Rs. 100 crores. A beginning however is proposed to be made during the Fourth Plan period itself to tackle the urgent problems of this metropolitan area which cannot be postponed any further. Therefore a plan with an outlay of Rs. 4.00 crores has been proposed to make a modest beginning for the present. The distribution of this outlay on important schemes proposed to be taken up during the Fourth Plan are indicated below:—

	<i>Rs. in crores.</i>			
1. Road and bridge works in the city .. .. .	..	..	..	1.70
2. Acquisition of land for ring roads .. .. .	..	..	..	1.00
3. Drainage works .. .. .	..	..	..	1.00
4. Markets and Slaughter houses .. .. .	..	..	..	0.30
				4.00

3. Roads and bridges have been given highest priority in this plan to relieve congestion, improve traffic circulation and lay the foundation for providing an efficient circulation system for the twin cities. Important roads and link roads where there is heavy traffic and congestion such as the road from Charminar to Falaknuma, Chaderghat Bridge to Saifabad, the road from the School of Blind and Deaf at Malakpet to Mahboob Mansion, the road from Darusalam Fire Brigade Office to Goshamahal Topkana, the road from Women's College at Residency to Narayana-guda *via* Badi Chowdi, the road from Bellavista to Begumpet *viz.*, Somajiguda and Greenlands *etc.* will be given pri-

ority during the Fourth Plan period. In addition improvement of road inter-sections, provision of pedestrian guard rails, traffic centre points, parking lots, sub-ways *etc.*, which form an integral part of traffic engineering will also be taken up. The metropolitan area has also a large number of cycles and it will be necessary to provide safe cycle tracks on the important highways of this City. Important works such as the widening of the Chaderghat bridge, construction of new bridges on the Moosi river, reconstruction of the old Puranaphool, expansion of the Muslim Jung bridge *etc.*, which are vital to the development of the twin cities will also be taken up.

4. The agricultural hinterland such as the delta districts as well as the new Nagarjunasagar ayacut area lie to the south with the result that the maximum amount of traffic can be expected to come to the city from this direction, within the city limits however the crossings over the river Musi constitute a great bottleneck. Besides impeding the flow of traffic, these bottlenecks have inhibited the development of the City to the south of the river in which area in the old part of the City is located. If this part does not develop quickly serious socio-economic problems are almost likely to arise in this metropolitan area. For all these reasons, it is important that the flow of traffic across the river Musi should be greatly eased and this can be done only by increasing the number of bridges over the river. Part of this problem can also be solved by providing a ring road around the city, because some of the traffic coming from the south can take this route without going through the congested part of the city. The ring road will also improve the efficiency of the circulation system in the city by making provision for fast moving traffic. A sum of Rs. 1 crore is earmarked for acquisition of land.

5. A sum of Rs. 1 crore will be earmarked for undertaking drainage schemes in the city in view of the urgent need for improving the drainage facilities in the city. Markets, slaughter houses and parks in the city will also be improved with a provision of Rs. 30 lakhs.

6. The implementation of the above schemes during the Fourth Plan. would only be a modest beginning of a part of the Master Plan for the development of the Twin cities, and these efforts would have to be continued in the subsequent Plan periods.

## **CREATION OF EMPLOYMENT OPPORTUNITIES FOR SKILLED AND TECHNICAL PERSONNEL**

It has already been pointed out that the back-log of unemployment in the State would be about 13.8 lakhs at the end of the Fourth Plan. The problem of unemployed engineers, other technical and skilled personnel such as degree and diploma holders in engineering, agricultural graduates etc., has become rather acute in the State during the last two years. As already indicated, employment opportunities for 1,260 engineers and 1,132 diploma holders would be created in the State with a Plan investment of Rs. 648 to 650 crores. This would still leave a back-log of about 5,475 engineers and 16,793 diploma holders at the end of the Fourth Plan. Keeping this impasse in the employment of technical personnel in view, a special scheme has been drawn up to maximise the employment for skilled and technical personnel in the State and Private sectors. The strategy adopted would be to create employment by absorbing engineering personnel in the investigation of new engineering schemes and also by providing incentives to technical personnel for starting new small scale industries in the State.

While the normal development schemes to be taken up during the Fourth Plan will create opportunities for employment of engineers to some extent, the main stress in the scheme of employment has to be laid on investigation of schemes. It has been decided that during the Fourth Plan period there should be as many schemes as possible which are fully investigated. Taking that into account, the provision to be made for the employment of the educated unemployed will be utilised for the following types of schemes:—

- (1) completion of investigation already taken on hand in respect of continuing schemes and preparation of detailed estimates relating to irrigation, roads and bridges;
- (2) completion of investigation of new schemes to be taken up in the Fourth Plan and preparation

of detailed estimates relating to irrigation, roads and bridges;

- (3) water supply schemes to be investigated for;
  - (a) villages and towns with a population of 10,000 and above;
  - (b) chronically drought affected areas;
- (4) investigation of water supply and drainage schemes in the municipalities in the State which are yet to be covered by such facilities.

The requirements of funds and employment potential are as follows:—

Scheme	Funds	EMPLOYMENT POTENTIAL					Total
		SEs.	EEs.	AEs.	JEs./ Suprs.		
1. Investigation of irrigation and Hydro-Electric Schemes ..	200.00	2	4	40	200	246	
2. Public Health Department : Water Works and Sewage in Municipalities ..	39.90	1	4	14	60	79	
3. Panchayati Raj : Investigation of water supply, road works, minor irrigation, tanks, wells ..	28.50	..	1	17	72	90	
4. Roads and Buildings Department including Hyderabad water works ..	80.00	2	4	22	73	101	
Total ..	348.04	5	13	93	405	516	

In addition to the above scheme it is also expected their preferential treatment is shown to the unemployed degree and diploma holders and attract them to industrial field by offering incentives slightly over and above than what are generally given to entrepreneurs, the problem of unemployment can be solved to a great extent. Starting of new industries by the engineering personnel automatically opens fresh avenue of employment to the I.T.I. trained persons also.

Industries such as cement based and allied industries engineering chemical and non-engineering industries can be encouraged.

The type of special incentives that would be given to them are:—

- (i) A complete subsidy of the promotional expenditure like project report, market survey, *etc.*
- (ii) An attractive subsidy in the case of land and buildings for setting up of the industry in places where ready-made factory sheds are not available.
- (iii) Where ready-made buildings are available on Industrial Estates, subsidised rent would be provided.
- (iv) Ten per cent financial assistance for purchase of machinery and construction of factory buildings.
- (v) Liberal working capital provision.
- (vi) Higher rate of power subsidy.
- (vii) Offer of guarantee to financing institutions like State Bank of India when securities are demanded.

Using the strategy it is proposed to provide new employment in the Industrial Sector to 10,000 persons during the Fourth Plan period. The C/L ratio of small scale industries is indicated as 5,000:1. To employ 10,000 persons we require an investment of Rs. 5 crores. Out of this amount, Rs. 2 crores would be met from the Plan provision, made under Industries Sector. A sum of Rs. 3 crores has been made in the Plan.





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**PART—III**

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# DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

## STATEMENT I

### OUTLAYS AND EXPENDITURE 1966-1969

(Rs. lakhs)

<i>Head/Sub-Head</i>	1966-67		1967-68		1968-69	
	<i>Budget</i>	<i>Actual Expenditure</i>	<i>Approved outlay.</i>	<i>Actual Expenditure</i>	<i>Budget</i>	<i>Anticipat'd Expenditure</i>
	(1)	(2)	(3)	(4)	(5)	(7)
<b>1. Agricultural Production</b> .. .. .	346.00	218.14	279.94	251.47	205.00	205.00
(a) Director of Agriculture .. .. .	304.00	162.31	230.18	204.86	155.00	155.00
(b) Agricultural University .. .. .	32.00	41.38	42.25	42.25	46.00	46.00
(c) Registrar of Co-operative Societies .. .. .	..	6.45	4.36	4.36	4.00	4.00
(d) Chief Engineer (Public Health) .. .. .	10.00	8.00	3.15	..	..	..
<b>2. Training Centres</b> .. .. .	<b>9.18</b>	<b>0.72</b>	<b>3.83</b>	<b>1.28</b>	<b>4.00</b>	<b>4.00</b>
<b>3. Land Development</b> .. .. .	<b>20.00</b>	<b>9.50</b>	<b>10.13</b>	<b>10.13</b>	<b>11.00</b>	<b>11.00</b>
(a) Director of Agriculture .. .. .	15.00	0.74	..	..	1.00	1.00
(b) Registrar of Co-operative Societies .. .. .	5.00	8.76	10.13	10.13	10.00	10.00

4. Consolidation of Holdings :	..	..	2.00	..	..	..	..	..	..
5. Minor Irrigation	..	..	641.00	736.28	414.96	402.36	507.00	507.00	
(a) Director of Agriculture	..	..	116.00	6.00	11.40	2.55	28.00	28.00	
(b) Chief Engineer (Minor Irrigation)	..	..	400.00	522.72	270.58	258.70	275.00	275.00	
(c) Board of Revenue	..	..	75.00	58.73	2.25	2.25	4.50	4.50	
(d) Registrar of Co-operative Societies	..	..	..	122.51	96.98	105.11	115.00	115.00	
(e) Chief Engineer (Panchayati Raj)	..	..	50.00	26.32	33.75	33.75	30.00	30.00	
(f) Planning Department	..	..	..	..	..	..	54.50	54.50	
6. Soil Conservation	..	..	81.00	57.93	55.71	57.49	45.00	45.00	
(a) Director of Agriculture	..	..	70.00	47.04	47.25	49.05	38.00	38.00	
(b) Chief Conservator of Forests	..	..	10.00	9.95	7.79	7.77	6.25	6.25	
(c) Andhra Pradesh Agricultural University	..	..	1.00	0.94	0.67	0.67	0.75	0.75	
7. Development of Ayacuts	..	..	186.00	216.82	118.04	78.63	250.00	250.00	
(a) Board of Revenue	..	..	48.00	66.14	23.70	21.13	25.00	25.00	
(b) Chief Engineer (Major Irrigation and General)	..	..	..	14.56	..	..	10.20	10.20	
(c) Director of Agriculture	..	..	34.15	96.88	32.18	22.86	110.00	110.00	
(d) Registrar of Co-operative Societies	..	..	69.00	19.61	40.00	16.52	80.00	80.00	

DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

STATEMENT I—(Contd.)  
OUTLAYS AND EXPENDITURE 1966-1969

(Rs. lakhs)

Head/Sub-Head	1966-67		1967-68		1968-69	
	Budget	Actual Expenditure	Approved outlay.	Actual Expenditure	Budget	Anticipated Expenditure
(1)	(2)	(3)	(4)	(5)	(6)	(7)
(e) Director of Animal Husbandry .. ..	11.00	10.06	6.82	6.82	7.00	7.00
(f) Inspector-General of Registration .. ..	..	2.12	1.48	0.75	1.50	1.50
(g) Chief Engineer (Roads & Buildings) .. ..	22.00	7.19	12.60	9.29	15.00	15.00
(h) Andhra Pradesh Agricultural University .. ..	1.85	0.26	1.26	1.26	1.30	1.30
8. Animal Husbandry .. ..	52.00	78.22	36.25	36.00	35.00	35.00
9. Dairying & Milk Supply .. ..	75.60	71.44	62.50	61.61	56.00	56.00
10. Forests .. ..	32.00	35.25	28.45	25.96	36.00	36.00
11. Fisheries .. ..	48.03	44.25	42.32	38.94	40.00	40.00
12. Warehousing and Marketing .. ..	6.00	1.74	2.70	2.40	3.00	3.00
I. AGRICULTURAL PROGRAMMES .. ..	1,498.81	1,470.29	1,054.83	966.27	1,192.00	1,192.00

1. Co-operation	..	..	..	88.00	45.33	59.40	38.03	60.00	60.00
2. Community Development Programme	..	..	..	208.25	207.69	135.00	115.03	165.00	165.00
3. Panchayats	..	..	..	..	..	..	..	..	..
4. Applied Nutrition Programme	..	..	..	..	..	6.72	7.51	..	..
II. CO-OPERATION AND COMMUNITY DEVELOPMENT	..	..	..	<u>296.25</u>	<u>253.02</u>	<u>201.12</u>	<u>160.57</u>	<u>225.00</u>	<u>225.00</u>
1. Irrigation	..	..	..	1,325.00	2,270.48	1,750.98	1,713.39	1,537.00	1,537.00
(a) Nagarjunasagar Project (Public Works (Projects) Department)..	..	..	..	820.00	1,650.00	1,200.00	1,200.00	850.00*	850.00*
(b) Major and Medium Irrigation (Chief Engineer (Major Irrigation and General) ..	..	..	..	505.00	605.84	550.98	513.39	682.00	682.00
(c) Flood Control	..	..	..	..	14.64	..	..	5.00	5.00
2. Power	..	..	..	3,200.00	4,025.64	2,814.00	2,730.14	3,000.00	3,000.00
III. IRRIGATION AND POWER	..	..	..	<u>4,525.00</u>	<u>6,296.12</u>	<u>4,564.98</u>	<u>4,443.53</u>	<u>4,537.00</u>	<u>4,537.00</u>
1. Large and Medium Industries	..	..	..	160.00	81.40	109.19	117.77	80.00	80.00
2. Mineral Development	..	..	..	12.00	21.84	13.02	11.49	10.50	10.50
(a) Director of Mines and Geology	..	..	..	2.00	1.84	3.52	1.99	3.00	3.00
(b) Andhra Pradesh Mining Corporation	..	..	..	10.00	20.00	9.50	9.50	7.50	7.50

\*Does not include the sum of Rs. 5.50 crores sanctioned by the Government of India in 1968-69.

# DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

## STATEMENT I—(Contd.)

### OUTLAYS AND EXPENDITURE 1966-1969

(Rs. lakhs)

Head/Sub-Head			1966-67		1967-68		1968-69	
			Budget	Actual Expenditure	Approved outlay	Actual Expenditure	Approved Budget	Antici- pated Expenditure
	(1)	..	(2)	(3)	(4)	(5)	(6)	(7)
<b>3. Village and Small Scale Industries</b>	...	...	128.00	125.22	86.30	79.81	94.50	94.50
(a) Director of Industries	..	..	65.00	41.35	42.08	36.11	40.00	40.00
(b) Director of Handlooms	..	..	63.00	83.87	44.22	43.70	54.50	54.50
<b>IV. INDUSTRY AND MINING</b>	..	..	<b>300.00</b>	<b>228.46</b>	<b>208.51</b>	<b>209.07</b>	<b>185.00</b>	<b>185.00</b>
<b>1. Roads</b>	..	..	<b>233.00</b>	<b>259.57</b>	<b>167.52</b>	<b>154.16</b>	<b>175.00</b>	<b>175.00</b>
(a) Chief Engineer (Roads and Buildings)	..	..	178.00	209.57	127.40	122.26	135.00	135.00
(b) Chief Engineer (Panchayati Raj)	..	..	55.00	50.00	40.12	31.90	40.00	40.00
(c) Director of Municipal Administration	..	..	..	..	..	..	..	..
(d) Hyderabad Municipal Corporation	..	..	..	..	..	..	..	..
<b>2. Roads and Transport</b>	..	..	<b>160.00</b>	<b>60.00</b>	<b>25.00</b>	<b>25.00</b>	<b>45.00</b>	<b>45.00</b>

3: <b>Minor Ports</b>	..	..	..	..	..	..	..	..	..
4. <b>Tourism</b>	..	..	..	1.00	0.69	0.67	..	1.00	1.00
5. <b>Inland Water Transport</b>	..	..	..	..	..	..	..	..	..
V. <b>TRANSPORT AND COMMUNICATIONS</b>	..	..	..	<b>394.00</b>	<b>320.26</b>	<b>193.19</b>	<b>179.16</b>	<b>221.00</b>	<b>221.00</b>
1. <b>General Education : (Director of Public Instruction)</b>	..	..	..	<b>262.00</b>	<b>170.16</b>	<b>218.06</b>	<b>180.96</b>	<b>270.00</b>	<b>270.00</b>
2. <b>Technical Education</b>	..	..	..	<b>75.00</b>	<b>47.35</b>	<b>50.62</b>	<b>43.01</b>	<b>48.00</b>	<b>48.00</b>
(a) Director of Technical Education	..	..	..	71.00	44.46	47.92	40.20	45.00	45.00
(b) Director of Archaeology and Museums	..	..	..	4.00	2.89	2.70	2.81	3.00	3.00
3. <b>Medical</b>	..	..	..	<b>73.00</b>	<b>59.50</b>	<b>72.20</b>	<b>71.13</b>	<b>73.20</b>	<b>73.20</b>
(a) Director of Medical and Health Services	..	..	..	70.00	58.51	70.18	69.18	71.00	71.00
(b) Special Officer, Indian Medicine Department	..	..	..	3.00	0.99	2.02	1.95	2.20	2.20
4. <b>Public Health</b>	..	..	..	<b>107.00</b>	<b>126.67</b>	<b>130.35</b>	<b>127.05</b>	<b>126.80</b>	<b>126.80</b>
5. <b>Urban Water Supply and Drainage</b>	..	..	..	<b>285.00</b>	<b>280.97</b>	<b>183.77</b>	<b>161.25</b>	<b>215.00</b>	<b>215.00</b>
(a) Chief Engineer (Panchayathi Raj and Public Health)	..	..	..	175.00	203.30	109.57	101.02	140.00	140.00
(b) Chief Engineer (Buildings)	..	..	..	110.00	77.67	74.20	60.23	75.00	75.00



# DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

## STATEMENT I—(Contd.)

### OUTLAYS AND EXPENDITURE 1966-1969

(Rs. in lakhs)

(1)	(2)	1966-67		1967-68		1968-69			
		Budget	Actual Expenditure	Approved outlay	Actual Expenditure	Budget	Antici- pated Expenditure		
		(3)	(4)	(5)	(6)	(7)	(8)		
6.	<b>Rural Water Supply and Sanitation</b>	..	..	21.60	21.60	35.00	35.00		
	Chief Engineer (Panchayati Raj)	..	..						
7.	<b>Housing</b>	..	..	17.00	19.31	19.62	12.91	20.00	20.00
	(a) Housing Board	..	..	5.00	5.00	3.37	3.38	3.75	3.75
	(b) Director of Municipal Administration	..	..	2.00	2.29	2.50	1.39	2.25	2.25
	(c) Director of Town Planning	..	..	2.00	1.44	1.35	1.09	1.50	1.50
	(d) Commissioner of Labour	..	..	4.00	4.17	2.70	0.68	3.00	3.00
	(e) Registrar of Co-operative Societies	..	..	4.00	4.00	2.70	2.70	3.00	3.00
	(f) Commissioner, Hyderabad Municipal Corporation	..	..	..	2.41	7.00	3.67	6.50	6.50
8.	<b>Welfare of Scheduled Castes and Backward Classes</b>	..	..	13.00	12.52	8.77	8.74	9.75	9.75



# DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

## STATEMENT I—(Contd.)

### OUTLAYS AND EXPENDITURE 1966-1969

(Rs. in lakhs)

(1)	Head/Sub-Head (2)	1966-67		1967-68		1968-69	
		Budget (3)	Actual Expenditure (4)	Approved outlay (5)	Actual Expenditure (6)	Budget (7)	Antici- pated Expenditure (8)
1.	<b>Statistics</b>	3.08	3.93	1.75	1.75	2.90	2.90
	(a) Director, Bureau of Economics and Statistics	2.55	3.45	1.62	1.62	2.40	2.40
	(b) Planning Department	0.53	0.48	0.13	0.13	0.50	0.50
2.	<b>Publicity</b>	1.85	1.18	1.04	1.04	1.25	1.25
	Sanchalak, Janasambandha Sakha						
3.	<b>Broadcasting</b>	1.00	0.02	0.67	2.15	0.75	0.75
	Sanchalak, Janasambandha Sakha						
4.	<b>Urban Development</b>	4.00	4.00	2.69	2.60	3.00	3.00

(a) Director of Municipal Administration	..	3.00	3.00	2.02	2.02	2.25	2.25
(b) Director of Town Planning	..	1.00	1.00	0.67	0.58	0.63	0.63
(c) Health, Housing and Municipal Administration Department.	..	..	..	..	..	0.12	0.12
<b>5. Development of Chronically Drought Affected Areas</b>	..	..	..	..	..	..	..
Planning Department	..	..	..	..	..	..	..
<b>6. Assistance to Zilla Parishads and Panchayats</b>	..	..	..	..	..	..	..
<b>7. Evaluation</b>	..	..	..	..	..	<b>0.50</b>	<b>0.50</b>
<b>VII. MISCELLANEOUS</b>	..	<b>9.93</b>	<b>9.13</b>	<b>6.15</b>	<b>7.54</b>	<b>8.40</b>	<b>8.40</b>
<b>GRAND TOTAL</b>	..	<b>7,919.99</b>	<b>9,359.06</b>	<b>6,974.24</b>	<b>6,630.35</b>	<b>7,213.34</b>	<b>7,213.34</b>

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)
<b>I. Agricultural and Allied Programmes :</b>				
1. <i>Agricultural Production :</i>				
(1)	Improved seed programmes	39.85	17.50	0.50
(2)	Manures and fertilisers	1.00	..	..
(3)	Plant protection	33.84	10.00	..
(4)	Agricultural implements	1.00	..	..
(5)	Commercial crops	30.27	..	..
(6)	Agricultural Education	49.30	33.25	..
(7)	Agricultural Research	54.16	15.37	1.33
(8)	Extension Training and Farmers Education	11.21	..	..
(9)	Agricultural Statistics	1.07	..	..
(10)	Intensive cultivation Programmes (I.A.D.P., I.A.A.P., H.V.P.)	67.69	..	..
(11)	Land Development	9.43	9.43	..
(12)	Consolidation of holdings	..	..	..
(13)	Others	36.78	10.45	..
	<b>Total</b>	<b>335.60</b>	<b>96.00</b>	<b>1.83</b>

## YEAR PLAN (1969-74)—(Contd.)

## II—(Contd.)

## Outlays—(Contd.)

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
43.85	20.50	0.50	41.35	18.00	..
1.00	..	..	1.00	..	..
33.84	10.00	..	34.43	..	..
1.00	..	..	1.00	..	..
30.27	..	..	30.27	..	..
44.25	33.75	..	43.47	32.40	..
36.90	16.63	1.22	32.19	12.95	0.49
9.11	..	..	9.11	..	..
1.07	..	..	1.07	..	..
67.69	..	..	67.69	..	..
10.07	10.07	..	3.50	3.50	..
..	..	..	..	..	..
33.88	7.55	..	30.34	4.00	..
312.93	98.50	1.72	295.42	70.85	4.49

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>I. Agricultural and Allied Programmes :</b>				
<b>1. Agricultural Production :</b>				
(1)	Improved seed programmes	29.85	4.00	..
(2)	Manures and fertilisers	1.00	..	..
(3)	Plant protection	35.94	..	..
(4)	Agricultural implements	1.00	..	..
(5)	Commercial crops	30.27	..	..
(6)	Agricultural Education	35.71	24.30	..
(7)	Agricultural Research	27.51	4.42	0.20
(8)	Extension Training and Farmers Education	9.11	..	..
(9)	Agricultural Statistics	1.07	..	..
(10)	Intensive cultivation Programmes (I.A.D.P., I.A.A.P., H.V.P.)	67.70	..	..
(11)	Land Development	3.50	3.50	..
(12)	Consolidation of holdings	..	..	..
(13)	Others	30.36	4.00	..
	<b>Total</b>	<b>273.02</b>	<b>40.22</b>	<b>0.20</b>

## YEAR PLAN (1969-74)

II—(Contd.)

Outlays—(Contd.)

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F.E.	Total	Capital	F.E.
(15)	(16)	(17)	(18)	(19)	(20)
26.91	1.00	..	181.81	61.00	1.00
1.00	..	..	5.00	..	..
35.99	..	..	174.04	20.00	..
1.00	..	..	5.00	..	..
30.29	..	..	151.37	..	..
37.27	25.80	..	210.00	149.50	..
24.24	0.81	0.11	175.00	50.18	3.35
9.11	..	..	47.65	..	..
1.08	..	..	5.36	..	..
67.70	..	..	338.47	..	..
3.50	3.50	..	30.00	30.00	..
..	..	..	..	..	..
30.39	4.00	..	161.75	30.00	..
268.48	35.11	0.11	1,485.45	340.68	4.35



## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)
<b>2. Minor Irrigation :</b>				
(1)	New percolation Wells	.. ..	..	..
(2)	Lift irrigation from streams, reservoirs etc.	.. ..	15.00	15.00 ..
(3)	Installation of electric pumps	} 134.00	134.00	..
(4)	Installation of diesel pumps			
(5)	Others	.. ..	935.09	844.90 7.00
	<b>Total</b>	..	<b>1,084.09</b>	<b>993.90 7.00</b>
3.	Soil Conservation	.. ..	69.50	.. ..
4.	Ayacut development programme	.. ..	303.92	183.60 ..
5.	Animal Husbandry	.. ..	52.00	2.35 1.50
6.	Dairying and Milk Supply	.. ..	111.23	111.23 ..
7.	Forests	.. ..	71.00	20.50 ..
8.	Fisheries	.. ..	38.60	19.50 7.50
9.	Warehousing and Marketing	.. ..	8.01	2.00 ..
	<b>Total I</b>	..	<b>2,073.95</b>	<b>14,29.08 17.83</b>

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays—(Contd.)

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
..	..	..	..	..	..
25.00	25.00	..	25.00	25.00	..
134.00	134.00	..	134.00	134.00	..
921.20	804.00	4.00	776.00	718.00	..
1,080.20	963.00	4.00	935.00	877.00	..
69.50	..	..	69.50	..	..
240.16	118.60	..	268.05	142.20	..
86.53	1.90	0.50	87.20	1.35	0.40
95.15	95.15	..	76.00	76.00	..
106.00	8.50	..	109.00	9.50	..
57.10	31.00	9.50	58.10	28.50	9.00
9.22	2.00	..	10.59	2.00	..
2,056.79	1,318.65	15.72	1,908.86	1,207.40	9.89

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>2. Minor Irrigation :</b>				
(1)	New percolation Wells	..	..	..
(2)	Lift irrigation from streams, reservoirs etc.	25.00	25.00	..
(3)	Installation of electric pumps	} 134.00	134.00	..
(4)	Installation of diesel pumps			
(5)	Others	758.00	703.00	..
	<b>Total</b>	<b>917.00</b>	<b>862.00</b>	<b>..</b>
3.	Soil Conservation	69.50	..	..
4.	Ayacut development programme	259.72	124.10	..
5.	Animal Husbandry	87.42	1.00	0.50
6.	Dairying and Milk Supply	63.30	63.30	..
7.	Forests	109.00	9.50	..
8.	Fisheries	53.00	33.00	11.00
9.	Warehousing and Marketing	10.90	2.00	..
	<b>Total I</b>	<b>1,842.86</b>	<b>1,135.12</b>	<b>11.70</b>

## YEAR PLAN (1969-74)—(Contd.)

## II—(Contd.)

## Outlays—(Contd.)

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F.E.	Total	Capital	F.E.
(15)	(16)	(17)	(18)	(19)	(20)
..	..	..	..	..	..
10.00	10.00	..	100.00	100.00	..
134.00	134.00	..	670.00	670.00	..
655.00	600.00	..	4,045.29	3,669.00	11.00
799.00	744.00	..	4,815.29	4,439.90	11.00
69.50	..	..	347.50	..	..
266.54	121.10	..	1,338.39	689.60	..
86.85	1.00	..	400.00	7.60	2.90
34.32	34.32	..	380.00	380.00	..
105.00	9.50	..	500.00	57.50	..
48.20	26.50	11.00	255.00	138.50	48.00
11.28	2.00	..	50.00	10.00	..
1,689.17	973.53	11.11	9,571.63	6,063.78	66.25

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)
<b>II. Co-operation and Community Development :</b>				
<b>1. Co-operation :</b>				
(1) Credit	.. ..	18.90	10.00	..
(2) Marketing	.. ..	18.40	15.00	..
(3) Processing other than sugar factories and large processing units	.. ..	30.15	30.00	..
(4) Co-operative sugar factories	.. ..	6.00	6.00	..
(5) Co-operative farming	.. ..	1.05	1.00	..
(6) Co-operative Training and Education	.. ..	9.80	..	..
(7) Administration	.. ..	3.00	..	..
(8) Others	.. ..	3.80	1.00	..
	<b>Total</b>	<b>91.10</b>	<b>63.00</b>	<b>..</b>
2. <i>Community Development</i>	.. ..	260.50	..	..
3. <i>Panchayats</i>	.. ..	40.60	..	..
	<b>Total II</b>	<b>392.20</b>	<b>63.00</b>	<b>..</b>

## YEAR PLAN (1969-74)—(Contd.)

## H—(Contd.)

## Outlays—(Contd.)

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
26.00	15.00	..	27.60	15.00	..
23.15	21.00	..	29.25	27.00	..
35.15	35.00	..	40.15	40.00	..
10.00	10.00	..	5.00	5.00	..
1.55	1.50	..	1.55	1.50	..
8.00	..	..	6.40	..	..
4.00	..	..	4.00	..	..
2.99	1.00	..	1.41	..	..
110.84	83.50	..	115.36	88.50	..
277.39	..	..	244.06	..	..
40.60	..	..	40.60	..	..
428.83	83.50	..	400.02	88.50	..

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>II. Co-operation and Community Development :</b>				
1. <i>Co-operation :</i>				
(1) Credit	.. ..	30.65	20.00	..
(2) Marketing	.. ..	32.25	30.50	..
(3) Processing other than super factories and large processing units	.. ..	36.15	36.00	..
(4) Co-operative super factories	.. ..	5.00	5.00	..
(5) Co-operative farming	.. ..	0.43	0.40	..
(6) Co-operative Training and Education	.. ..	6.40	..	..
(7) Administration	.. ..	3.50	..	..
(8) Others	.. ..	1.40	..	..
	Total II	115.78	91.90	..
2. <i>Community Development</i>	.. ..	204.52	..	..
3. <i>Panchayats</i>	.. ..	40.60	..	..
	Total	360.90	91.90	..

## YEAR PLAN (1969-74)—(Contd.)

## II—(Contd.)

## Outlays—(Contd.)

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F.E.	Total	Capital	F.E.
(15)	(16)	(17)	(18)	(19)	(20)
25.45	15.00	..	128.60	75.00	..
35.75	34.50	..	138.80	128.00	..
40.00	40.00	..	181.60	181.00	..
4.00	4.00	..	30.00	30.00	..
0.42	0.40	..	5.00	4.80	..
6.40	..	..	37.00	..	..
3.50	..	..	18.00	..	..
1.40	..	..	10.00	2.00	..
116.92	93.90	..	550.00	420.80	..
153.53	..	..	1,140.00	..	..
40.60	..	..	203.00	..	..
311.05	93.90	..	1,893.00	420.80	..



DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)
<b>III. Irrigation and Power :</b>				
1. Irrigation :				
(a) Continuing	.. ..	2,264.76	2,264.76	..
(i) Nagarjuna Sagar Project	.. ..	1,040.00	1,040.00	..
(ii) Major and Medium Projects	.. ..	1,224.76	1,224.76	..
(b) New	.. ..	..	..	..
2. (a) Flood Control :				
Drainage, Anti-water Logging and Anti-sea erosion	.. ..	31.00	31.00	..
(b) Investigation and Research	.. ..	30.00	7.00	..
	Total	.. 2,325.76	2,302.76	..
3. Power :				
(1) Generation	.. ..	2,527.00	2,527.00	365.00
(2) Transmission and distribution	.. ..	1,163.00	1,163.00	67.00
(a) Inter State links	.. ..	..	..	..
(b) Trunk Transmission lines.	.. ..	290.00	290.00	..
(c) Others	.. ..	873.00	873.00	..
(3) Rural Electrification	.. ..	800.00	800.00	..
(4) Investigations	.. ..	10.00	..	..
(5) Miscellaneous	.. ..	..	..	..
	Total	.. 4,500.00	4,490.00	432.00
	Total III	.. 6,825.76	6,792.76	432.00

## YEAR PLAN (1969-74)—(Contd.)

## II—(Contd.)

## Outlays—(Contd.)

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
2,177.14	2,177.14	..	2,073.29	2,073.29	..
920.00	920.00	..	905.00	905.00	..
1,257.14	1,257.14	..	1,168.29	1,168.29	..
50.00	50.00	..	144.00	144.00	..
50.00	50.00	..	80.00	80.00	..
30.00	7.00	2.00	30.00	7.00	..
2,307.14	2,284.14	2.00	2,327.29	2,304.29	..
2,968.00	2,968.00	381.00	2,300.00	2,300.00	375.00
1,210.00	1,210.00	62.00	1,318.00	1,318.00	50.00
..	..	..	..	.. ..	..
300.00	300.00	..	350.00	350.00	..
910.00	910.00	..	968.00	968.00	..
800.00	800.00	..	800.00	800.00	..
10.00	..	..	10.00	..	..
..	..	..	..	..	..
4,988.00	4,978.00	443.00	4,428.00	4,418.00	425.00
7,295.14	7,262.14	445.00	6,755.29	6,722.29	425.00

DRAFT FOURTH FIVE-  
STATEMENT  
Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>III. Irrigation and Power :</b>				
1. Irrigation :				
(a) Continuing	..	.. 1,796.32	1,796.32	..
(i) Nagarjunasagar Project		.. 805.00	805.00	..
(ii) Major & Medium Projects		.. 991.32	991.32	..
(b) New	.. ..	.. 465.00	465.00	..
2. (a) Flood Control, Drainage, Anti-water Logging and Anti-Sea erosion	..	.. 100.00	100.00	..
(b) Investigation and Research	..	.. 30.00	7.00	..
	Total	.. 2,391.32	2,368.32	..
3. Power :				
(1) Generation	..	.. 2,180.00	2,180.00	75.00
(2) Transmission and distribution	..	.. 1,200.00	1,200.00	43.00
(a) Inter State links	..	.. ..	..	..
(b) Trunk Transmission lines	..	.. 240.00	240.00	..
(c) Others	..	.. 960.00	960.00	..
(3) Rural Electrification	..	.. 800.00	800.00	..
(4) Investigations	..	.. 10.00	..	..
(5) Miscellaneous	..	.. ..	..	..
	Total	.. 4,190.00	4,180.00	118.00
	Total—III	.. 6,581.32	6,548.32	118.00

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays—(Contd.)

(Rs. in lakhs)

Total	1973-74		FOURTH PLAN OUTLAY		
	Capital	F. E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
752.35	752.35	..	9,063.86	9,063.86	..
216.00	216.00	..	3,886.00	3,886.00	..
536.35	536.35	..	5,177.86	5,177.86	..
691.00	691.00	..	1,350.00	1,350.00	..
104.00	104.00	..	365.00	365.00	..
30.00	7.00	..	150.00	35.00	2.00
1,577.35	1,554.35	..	10,928.86	10,813.86	2.00
2,500.00	2,500.00	..	12,475.00	12,475.00	1,196.00
1,084.00	1,084.00	23.00	5,975.00	5,975.00	245.00
..	..	..	..	..	..
190.00	190.00	..	1,370.00	1,370.00	..
894.00	894.00	..	4,605.00	4,605.00	..
800.00	800.00	..	4,000.00	4,000.00	..
10.00	..	..	50.00	..	..
..	..	..	..	..	..
4,394.00	4,384.00	23.00	22,500.00	22,450.00	1,441.00
5,971.35	5,938.35	23.00	33,428.86	33,263.86	1,443.00

DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan

S. No.	Head/Sub-Head	1969-70			
		Total	Capital	F. E.	
(1)	(2)	(3)	(4)	(5)	
<b>IV. Industry and Mining :</b>					
1. <i>Large and Medium Industries :</i>					
(1)	State Industrial Projects	.. ..	..	..	
(2)	Industrial areas	.. ..	50.00	50.00	
(3)	Industrial Development Corporation	.. ..	150.00	150.00	
(4)	State Finance Corporation	.. ..	20.00	20.00	
(5)	Others	.. ..	90.00	90.00	
	Total	.. ..	310.00	310.00	
2.	Mineral Development	.. ..	49.09	39.00	5.00
3. <i>Village and Small Industries :</i>					
(1)	Handloom industry	.. ..	118.10	33.90	..
(2)	Power looms	.. ..	20.00	19.00	..
(3)	Small Scale Industries	.. ..	141.48	14.05	..
(4)	Industrial Estates	.. ..	49.17	44.77	..
	(a) Rural	.. ..	1.37	1.17	..
	(b) Semi-urban	.. ..	13.15	12.20	..
	(c) Urban	.. ..	34.65	31.40	..
(5)	Handicrafts	.. ..	10.57	5.19	..
(6)	Sericulture	.. ..	10.00	2.50	..
(7)	Coir Industry	.. ..	11.04	6.30	..
(8)	Khadi and Village Industries (State's Share only)	.. ..	0.40	..	..
	Others	.. ..	46.04	41.58	..
	Total (3)	.. ..	406.80	167.29	..
	Total	.. ..	765.89	516.29	5.00

## YEAR PLAN (1969-74)

II—(Contd.)

Outlays.

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
..	..	..	..	..	..
60.00	60.00	..	40.00	40.00	..
150.00	150.00	..	200.00	200.00	..
20.00	20.00	..	20.00	20.00	..
100.00	100.00	..	140.00	140.00	..
330.00	330.00	..	400.00	400.00	..
46.00	26.00	10.00	39.11	18.00	10.00
110.70	47.80	1.50	91.05	29.85	1.50
20.00	19.00	..	30.00	29.00	..
193.21	27.32	..	222.37	14.07	..
109.02	101.27	..	118.44	109.99	..
6.37	6.17	..	6.34	6.14	..
23.35	21.55	..	28.35	26.35	..
79.30	73.55	..	83.75	77.50	..
10.97	5.69	..	10.07	4.69	..
10.00	2.50	..	15.00	8.00	..
4.74	..	..	4.74	..	..
0.40	..	..	0.40	..	..
47.01	40.04	..	46.99	40.03	..
506.05	243.62	1.50	539.06	235.63	1.50
882.05	599.62	11.50	978.17	653.63	11.50

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>IV. Industry and Mining :</b>				
1. <i>Large and Medium Industries :</i>				
(1)	State Industrial Projects	..	..	..
(2)	Industrial areas	..	30.00	30.00
(3)	Industrial Development Corporation	..	200.00	200.00
(4)	State Finance Corporation	..	20.00	20.00
(5)	Others	..	240.00	240.00
	<b>Total</b>	..	490.00	490.00
2.	Mineral Development	..	36.40	25.00
3. <i>Village and Small Industries :</i>				
(1)	Handloom Industry	..	86.20	21.90
(2)	Power looms	..	40.00	39.00
(3)	Small Scale Industries	..	211.42	5.50
(4)	Industrial Estates	..	70.07	60.62
	(a) Rural	..	1.32	1.12
	(b) Semi-Urban	..	22.30	19.80
	(c) Urban	..	46.45	39.70
(5)	Handicrafts	..	10.02	4.69
(6)	Sericulture	..	15.00	8.00
(7)	Coir Industry	..	4.74	..
(8)	Khadi & Village Industries (State's Share only)	..	0.40	..
	Others	..	46.96	40.03
	<b>Total (3)</b>	..	484.81	179.74
	<b>Total</b>	..	1,011.21	694.74

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays—(Contd.)

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F.E.	Total	Capital	F.E.
(15)	(16)	(17)	(18)	(19)	(20)
..	..	..	..	..	..
20.00	20.00	..	200.00	200.00	..
300.00	300.00	..	1,000.00	1,000.00	..
20.00	20.00	..	100.00	100.00	..
230.00	230.00	..	800.00	800.00	..
570.00	570.00	..	2,100.00	2,100.00	..
29.40	18.00	..	200.00	126.00	25.00
78.95	18.05	..	485.00	151.50	4.50
40.00	39.00	..	150.00	145.00	..
212.52	1.07	..	981.00	62.01	..
33.30	23.35	..	380.00	340.00	..
1.30	1.10	..	16.70	15.70	..
8.80	6.30	..	95.95	86.20	..
23.20	15.95	..	267.35	238.10	..
6.42	1.19	..	48.05	21.45	..
15.00	8.00	..	65.00	29.00	..
4.74	..	..	30.00	6.30	..
0.40	..	..	2.00	..	..
46.95	40.03	..	233.95	201.71	..
438.28	130.69	..	2,375.00	956.97	4.50
1,037.68	718.69	..	4,675.00	3,182.97	29.50



DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan

<i>S. No.</i>	<i>Head/Sub-Head</i>	1969-70		
		<i>Total</i>	<i>Capital</i>	<i>F.E.</i>
(1)	(2)	(3)	(4)	(5)
<b>V. Transport and Communications :</b>				
1. <i>Roads :</i>				
Spill-over	.. ..	.. 230.00	230.00	..
New	.. ..	.. 353.00	336.00	..
	Total	.. 583.00	566.00	..
of which				
(a) Rural Roads	.. ..	.. 170.00	170.00	..
(b) Others	.. ..	.. 413.00	396.00	..
2. Road Transport	.. ..	.. 45.00	36.00	..
3. Ports and Harbours	.. ..	.. ..	..	..
4. Other Transport	.. ..	.. ..	..	..
5. Toursim	.. ..	.. 6.00	6.00	..
	Total	.. 634.00	608.00	..

## YEAR PLAN (1969-74)

II—(Contd.)

Outlays—(Contd.)

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F. E.	Total	Capital	F.F.
(6)	(7)	(8)	(9)	(10)	(11)
195.23	195.23	..	80.00	80.00	..
462.00	446.00	..	462.40	441.40	..
657.23	641.23	..	542.40	521.40	..
170.00	170.00	..	170.00	170.00	..
487.23	471.23	..	372.40	351.40	..
70.00	64.00	..	106.00	100.00	..
15.00	15.00	..	15.00	15.00	..
6.00	6.00	..	6.00	6.00	..
6.00	6.00	..	7.00	7.00	..
754.23	732.23	..	676.40	649.40	..

DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F.E.
(1)	(2)	(12)	(13)	(14)
<b>V. Transport and Communications :</b>				
1. Roads :				
Spill-over	.. ..	80.00	80.00	..
New	.. ..	419.00	399.00	..
	Total	499.00	479.00	..
of which				
(a) Rural Roads	.. ..	170.00	170.00	..
(b) Others	.. ..	329.00	309.00	..
2. Road Transport	.. ..	154.50	150.00	..
3. Ports and Harbours	.. ..	15.00	15.00	..
4. Other Transport	.. ..	6.00	6.00	..
5. Tourism	.. ..	7.00	7.00	..
	Total	681.50	657.00	..

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F. E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
99.10	99.10	..	684.33	684.33	..
420.30	420.30	..	2,116.70	2,042.70	..
519.40	519.40	..	2,801.03	2,727.03	..
170.00	170.00	..	850.00	850.00	..
349.40	349.40	..	1,951.03	1,877.03	..
154.50	150.00	..	530.00	500.00	..
17.00	17.00	..	62.00	62.00	..
6.00	6.00	..	24.00	24.00	..
7.00	7.00	..	33.00	33.00	..
703.90	699.40	..	3,450.03	3,346.03	..

DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)
<b>VI. Social Services :</b>				
1. <i>General Education :</i>				
(1)	Elementary Education .. ..	153.06	20.00	..
(2)	Secondary Education .. ..	264.38	82.83	..
(3)	University Education .. ..	168.77	15.00	..
(4)	Teachers Training			
	(a) Elementary .. ..	} 63.89	25.00	..
	(b) Secondary .. ..			
(5)	Social Education .. ..	8.36	..	..
(6)	Other Educational Programmes ..	55.21	2.80	..
	Total .. ..	713.67	145.63	..
2.	Technical Education .. ..	65.70	14.00	..
3.	Cultural Programmes .. ..	16.13	1.75	..
	Total General and Technical Educa- tion .. ..	795.50	161.38	..
	Educated Unemployed .. ..	..	..	..
4. <i>Health and Family Planning :</i>				
(a)	Modern Medicine .. ..	164.79	92.84	..
(b)	Health .. ..	132.33	47.00	..
	(1) Medical Education .. ..	4.40	2.00	..
	(2) Training Programmes .. ..	8.00	..	..
	(3) Hospitals and Dispensaries .. ..	120.20	70.84	..
	(4) Primary Health Centres .. ..	67.31	40.00	..
	(5) Control of Communicable diseases ..	4.00	..	..
	(6) Family Palnning .. ..	..	..	..
	(7) Indigenious System of Medicine ..	8.29	4.00	..

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F. E.	Total	Capital	F. E.
(6)	(7)	(8)	(9)	(10)	(11)
209.47	20.00	..	285.09	20.00	..
195.55	66.67	..	224.10	65.20	..
202.38	21.50	..	229.00	21.50	..
36.25	..	..	24.43	..	..
9.46	..	..	10.56	..	..
63.78	..	..	71.64	..	..
716.89	108.17	..	844.82	106.70	..
95.70	36.00	..	118.20	48.00	1.00
16.69	1.75	..	17.50	1.75	..
829.28	145.92	..	980.52	156.45	1.00
60.00	..	..	70.00	..	..
201.00	128.15	..	197.61	104.22	..
122.84	47.00	..	124.70	47.00	..
9.40	8.00	..	7.40	7.00	..
8.00	..	..	8.00	..	..
150.78	104.35	..	167.19	97.22	..
66.92	40.00	..	66.92	40.00	..
4.00	..	..	4.00	..	..
..	..	..	..	..	..
8.79	4.00	..	5.85	0.60	..

DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>VI. Social Services :</b>				
1. <i>General Education :</i>				
(1)	Elementary Education	361.94	20.00	..
(2)	Secondary Education	255.50	63.14	..
(3)	University Education	265.25	20.50	..
(4)	Teachers Training :			
	(a) Elementary	} 26.48	..	..
	(b) Secondary		..	..
(5)	Social Education	11.67	..	..
(6)	Other Educational Programmes	76.82	..	..
	Total	997.66	103.64	..
2.	Technical Education	114.20	35.00	..
3.	Cultural Programmes	17.06	0.75	..
	Total General and Technical Educa- tion	1,128.92	139.39	..
	Educated Unemployment	80.00	..	..
4. <i>Health and Family Planning :</i>				
(a)	Modern Medicine	223.56	105.68	..
(b)	Health	125.69	47.00	..
(1)	Medical Education	6.40	6.00	..
(2)	Training Programmes	8.00	..	..
(3)	Hospitals and Dispensaries	194.14	99.68	..
(4)	Primary Health Centres	66.92	40.00	..
(5)	Control of Communicable diseases	4.00	..	..
(6)	Family Planning	..	..	..
(7)	Indigenous System of Medicine	5.71	..	..

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F. E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
436.31	20.00	..	1,445.87	100.00	..
283.09	57.34	..	1,222.62	335.18	..
293.27	20.00	..	1,158.67	98.50	..
28.38	..	..	179.43	25.00	..
12.84	..	..	52.89	..	..
87.07	..	..	354.52	2.80	..
1,140.96	97.34	..	*4,414.00	561.48	..
106.20	28.00	..	500.00	161.00	1.00
17.62	0.75	..	85.00	6.75	..
1,264.78	126.09	..	4,999.00	729.23	1.00
90.00	..	..	300.00	..	..
158.04	26.46	..	940.00	457.35	..
119.44	47.00	..	605.00	235.00	..
0.40	..	..	28.00	23.00	..
8.00	..	..	40.00	..	..
129.62	26.46	..	761.93	398.55	..
66.93	40.00	..	335.00	200.00	..
4.00	..	..	20.00	..	..
..	..	..	..	..	..
6.36	..	..	35.00	8.60	..



## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S.No.	Head/Sub-Head	1969-70		
		Total	Capital-	F. E.
(1)	(2)	(3)	(4)	(5)
	(8) Other Programmes .. ..	88.21	27.00	..
	Total (4) ..	300.41	143.84	..
5.	<i>Water Supply (Urban and Rural)</i> ..			
	(1) Urban			
	(a) Water Supply .. ..	134.00	134.00	..
	(b) Sewerage and Drainage .. ..	10.00	10.00	..
	(c) Other Water Supply schemes <i>i.e.</i> Manjira and Hyderabad Water works .. ..	90.00	90.00	..
	Total ..	234.00	234.00	..
	(2) Rural			
	(a) Piped .. ..	90.00	90.00	..
	(b) Wells .. ..	60.00	60.00	..
	Total (5) ..	384.00	384.00	..
6.	<i>Housing :</i>			
	(1) Subsidised Industrial and Housing .. ..	10.63	10.63	..
	(2) Low income group housing .. ..	47.80	47.80	..
	(3) Village Housing projects .. ..	7.00	7.00	..
	(4) Plantation labour housing .. ..	..	..	..
	(5) Slum Clearance (State's share only) .. ..	11.20	11.20	..
	(6) Others .. ..	..	..	..
	Total (6) ..	76.63	76.63	..
7.	<i>Urban Development :</i>			
	(1) Town Planning .. ..	4.00	4.00	..
	(2) (a) Urban Development .. ..	10.40	10.40	..
	(b) Development of Metropolitan Cities of Hyderabad and Secunderabad .. ..	..	..	..
	Total (7) ..	15.00	15.00	..

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays—

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
79.74	22.80	..	63.80	7.00	..
327.63	179.15	..	323.16	151.82	..
180.00	180.00	..	207.00	207.00	..
53.00	53.00	..	59.00	59.00	..
90.00	90.00	..	90.00	90.00	..
323.00	323.00	..	356.00	356.00	..
95.00	95.00	..	100.00	100.00	..
70.00	70.00	..	70.00	70.00	..
488.00	488.00	..	526.00	526.00	..
20.15	20.15	..	20.85	20.85	..
47.80	47.80	..	45.80	45.80	..
7.00	7.00	..	7.00	7.00	..
..	..	..	..	..	..
11.20	11.20	..	11.20	11.20	..
..	..	..	..	..	..
86.15	86.15	..	84.85	84.85	..
4.00	4.00	..	4.00	4.00	..
10.40	10.40	..	10.40	10.40	..
100.00	100.00	..	100.00	100.00	..
115.00	115.00	..	115.00	115.00	..

## DRAFT FOURTH FIVE

STATEMENT  
Proposed Plan

S.No.	Head/Sub-Head	1972-73		
		Total	Capital	F.E.
(1)	(2)	(12)	(13)	(14)
(8)	Other Programmes .. ..	64.79	7.00	..
Total (4)		349.96	152.68	..
5. Water Supply (Urban and Rural) :				
(1)	Urban .. ..	..	..	..
(a)	Water Supply .. ..	183.57	183.57	..
(b)	Sewerage and Drainage .. ..	67.00	67.00	..
(c)	Other Water Supply schemes <i>i. e.</i> Manjira and Hyderabad Water works .. ..	90.00	90.00	..
(2)	Rural .. Total ..	340.57	340.57	..
(a)	Piped .. ..	100.00	100.00	..
(c)	Wells .. ..	80.00	80.00	..
Total (5)		520.57	520.57	..
6. Housing :				
(1)	Subsidised Industrial and Housing .. ..	13.55	13.55	..
(2)	Low income Group Housing .. ..	44.80	44.80	..
(3)	Village Housing projects .. ..	7.00	7.00	..
(4)	Plantation labour housing .. ..	..	..	..
(5)	Slum Clearance (State's share only) .. ..	11.20	11.20	..
	Others .. ..	..	..	..
Total (6)		76.55	76.55	..
7. Urban Development :				
(1)	Town Planning .. ..	4.00	4.00	..
(2)	(a) Urban Development .. ..	10.40	10.40	..
	(b) Development of Metropolitan Cities of Hyderabad and Secunderabad .. ..	100.00	100.00	..
Total (7)		115.00	115.00	..

## YEAR PLAN (1969-74)

II—

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F. E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
63.53	7.00	..	360.07	70.80	..
278.84	73.46	..	1,580.00	700.95	..
154.82	154.82	..	859.39	859.39	..
51.61	51.61	..	240.61	240.61	..
90.00	90.00	..	450.00	450.00	..
296.43	296.43	..	1,550.00	1,550.00	..
105.00	105.00	..	490.00	490.00	..
80.00	80.00	..	360.00	360.00	..
481.43	481.43	..	2,400.00	2,400.00	..
14.82	14.82	..	80.00	80.00	..
42.80	42.80	..	229.00	229.00	..
7.00	7.00	..	35.00	35.00	..
..	..	..	..	..	..
11.20	11.20	..	56.00	56.00	..
..	..	..	..	..	..
75.82	75.82	..	400.00	400.00	..
4.00	4.00	..	23.00	23.00	..
10.40	10.40	..	52.00	52.00	..
100.00	100.00	..	400.00	400.00	..
115.00	115.00	..	475.00	475.00	..

## DRAFT FOURTH FIVE-

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F.E.
(1)	(2)	(3)	(4)	(5)
<b>8. Welfare of Backward Classes :</b>				
(1) Scheduled Tribes	.. ..			
(a) Education	.. ..	35.96	..	..
(b) Economic Uplift	.. ..	38.80	..	..
(c) Health, Housing and Other Schemes		92.24	..	..
(2) Scheduled Castes :				
(a) Education	.. ..	46.00	..	..
(b) Economic Uplift	.. ..	4.00	..	..
(c) Health, Housing and Other Schemes		5.00	..	..
(3) Other Backward Classes :				
(a) Education	.. ..	10.00	..	..
(b) Economic Uplift	.. ..	..	..	..
(c) Health, Housing and Other Schemes		..	..	..
Total (8)		..	232.00	..

## YEAR PLAN

## II—(Contd.)

## Outlays

(Rs. in lakhs)

Total	1970-71		Total	1971-72	
	Capital	F. E.		Capital	F.F.
(6)	(7)	(8)	(9)	(10)	(11)
51.06	..	..	65.61	..	..
31.40	..	..	31.40	..	..
101.54	..	..	102.70	..	..
46.00	..	..	46.00	..	..
4.00	..	..	4.00	..	..
5.00	..	..	5.00	..	..
11.00	..	..	12.00	..	..
..	..	..	..	..	..
..	..	..	..	..	..
250.00	..	..	266.71	..	..

## DRAFT FOURTH FIVE-

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
8. <i>Welfare of Backward Classes :</i>				
(1) Scheduled Tribes :				
	(a) Education	80.91	..	..
	(b) Economic Uplift	32.40	..	..
	(c) Health, Housing and Other Schemes	103.70	..	..
(2) Scheduled Castes :				
	(a) Education	46.00	..	..
	(b) Economic Uplift	4.00	..	..
	(c) Health, Housing and Other Schemes	5.00	..	..
(3) Other Backward Classes :				
	(a) Education	12.00	..	..
	(b) Economic Uplift	..	..	..
	(c) Health, Housing and Other Schemes	..	..	..
	Total (8)	284.01	..	..

## YEAR PLAN (1969-74)

## II—(Contd)

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F.E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
94.46	..	..	328.00	..	..
32.40	..	..	166.40	..	..
105.42	..	..	505.60	..	..
46.00	..	..	230.00	..	..
4.00	..	..	20.00	..	..
5.00	..	..	25.00	..	..
12.00	..	..	57.00	..	..
..	..	..	..	..	..
..	..	..	..	..	..
299.28	..	..	1,332.00	..	..



## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F.E.
(1)	(2)	(3)	(4)	(5)
<b>9. Social Welfare :</b>				
(1)	Family and Child Welfare Projects ..			
(2)	Women Welfare ..	} 10.20	..	..
(3)	Child Welfare ..			
(4)	Eradication of beggary ..	..	..	..
(5)	Social Defence ..	5.17	..	..
(6)	Rehabilitation of handicapped ..	3.97	..	..
(7)	Grant-in-aid to voluntary Organisation ..	..	..	..
(8)	Training, research and administration ..	..	..	..
(9)	Others ..	3.00	..	..
	Total (9) ..	22.34	..	..
<b>10. Craftsmen Training and Labour Welfare :</b>				
(1)	Craftsmen Training ..	18.90	4.00	..
(2)	Apprenticeship Training ..	} 21.44	11.26	0.18
(3)	Part time classes for Industrial workers			
(4)	Rural training insitutions			
(5)	Labour Welfare/Administration	..	..	..
(6)	Employment Schemes ..	2.00	..	..
(7)	Employees and State Insurance ..	9.00	..	..
	Total (10) ..	51.34	15.26	0.18

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

Total	1970-71		Total	1971-72	
	Capital	F.E.		Capital	F. E.
(6)	(7)	(8)	(9)	(10)	(11)
11.60	..	..	10.60	..	..
5.58	..	..	5.25	..-	..
3.97	..	..	5.85	..	..
..	..	..	..	..	..
..	..	..	..	..	..
2.60	..	..	2.60	..	..
23.75	..	..	24.30	..	..
30.40	9.00	..	32.80	10.20	..
21.98	21.89	0.09	25.08	24.98	0.10
2.00	..	..	2.00	..	..
9.00	..	..	9.00	..	..
63.38	30.89	0.09	68.88	35.18	0.10

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>9. Social Welfare :</b>				
(1)	Family and Child Welfare Projects ..			
(2)	Women Welfare ..	} 11.60	..	..
(3)	Child Welfare ..			
(4)	Eradiction of beggary .. ..			
(5)	Social Defence .. ..	4.25	..	..
(6)	Rehabilitation of handicapped ..	7.87	..	..
(7)	Grant-in-aid to voluntary Organisation .. ..	..	..	..
(8)	Training, research and administration ..	..	..	..
(9)	Others .. ..	2.60	..	..
	<b>Total (9)</b> ..	<b>26.32</b>	<b>..</b>	<b>..</b>
<b>10. Craftsmen Training and Labour Welfare :</b>				
(1)	Craftsmen Training .. ..	24.70	9.40	..
(2)	Apprenticeship Training ..	} 26.94	26.84	0.10
(3)	Part time classes for Industrial workers ..			
(4)	Rural training insitutions ..			
(5)	Labour Welfare/Administration ..			
(6)	Employment Schemes .. ..	2.00	..	..
(7)	Employees and State Insurance ..	9.00	..	..
	<b>Total (10)</b> ..	<b>62.64</b>	<b>36.24</b>	<b>0.10</b>

## YEAR PLAN (1969-74)

II—(Contd.)

## Outlays

(Rs. in lakh)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	E. F.	Total	Capital	E. F.
(15)	(16)	(17)	(18)	(19)	(20)
11.00	..	..	55.00	..	..
4.75	..	..	25.00	..	..
8.34	..	..	30.00	..	..
..	..	..	..	..	..
..	..	..	..	..	..
1.20	..	..	12.00	..	..
25.29	..	..	122.00	..	..
21.20	7.40	..	128.00	40.00	..
29.74	29.65	0.09	125.18	114.62	0.56
2.00	..	..	10.00	..	..
9.00	..	..	45.00	..	..
61.94	37.05	0.09	308.18	154.62	0.56

DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan

S.No.	Head/Sub-Head	1969-70		
		Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)
11.	Public Co-operation	2.00	..	..
	Total : VI	1,879.22	796.11	0.18
<b>VII. Miscellaneous :</b>				
	(1) Statistics			
	Director Bureau of Economics and Statistics	2.56	..	..
	<del>P. &amp; P.R. (Planning) Department</del>	<del>0.50</del>		
	(2) Information and Publicity	2.0	..	..
	(a) Community listening sets	5.00	..	..
	(b) Others	..	..	..
	(3) Evaluation	1.20	..	..
	Total VII	11.26	..	..
	<b>Grand Total</b>	12,582.28	10,205.24	455.01

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F. E.
(6)	(7)	(8)	(9)	(10)	(11)
3.00	..	..	3.00	..	..
2246.19	1045.11	0.09	2,462.42	1069.30	1.10
3.59	..	..	4.06	..	..
0.50	..	..	0.75	..	..
5.00	..	..	6.00	..	..
10.00	..	..	15.00	..	..
1.20	..	..	1.20	..	..
20.29	..	..	27.01	..	..
13,683.52	11,041.25	472.31	13,208.17	10,390.52	447.49

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S.No.	Head/Sub-Head	1972-73		
		Total	Capital	F.E.
(1)	(2)	(12)	(13)	(14)
11.	Public Co-operation	3.00	..	..
<b>Total VI</b>		<b>2,646.97</b>	<b>1040.43</b>	<b>0.10</b>
<b>VII. Miscellaneous :</b>				
(1) Statistics				
	(a) Director Bureau of Economics and Statistics	5.25	..	.
	(b) P. & P.R. (Planning) Department	0.75	..	..
(2) Information and Publicity				
	(a) Community listening sets	15.00	..	.
	(b) Others	..	..	..
(3) Evaluation				
	..	1.20	..	..
<b>Total VII..</b>		<b>28.20</b>	<b>..</b>	<b>..</b>
<b>Grand Total</b>		<b>13152.92</b>	<b>10167.51</b>	<b>131.30</b>

## YEAR PLAN

II—(Contd.)

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F. E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
3.00	..	..	14.00	..	..
2,695.38	908.85	0.09	11,930.18	4,859.80	1.56
5.54	..	..	21.00	..	..
0.50	..	..	3.00	..	..
6.00	..	..	25.00	..	..
15.00	..	..	60.00	..	..
1.20	..	..	6.00	..	..
28.24	..	..	115.00	..	..
12,436.77	9,332.72	34.20	65,063.70	51,137.24	1,540.31



## DRAFT FOURTH FIVE-

## STATEMENT

## Major &amp; Medium Irrigation—Schemewise details Proposed Plan

S.No.	Head/Sub-Head	1969-70		
		Total	Capital	F.E.
(1)	(2)	(3)	(4)	(5)
<b>River Valley Projects :</b>				
<i>Nagarjunasagar Project :</i>				
(a) Dam	.. ..	140.00	140.00	..
(b) Right Canal	.. ..	350.00	350.00	..
(c) Left Canal	.. ..	550.00	550.00	..
	Total	1,040.00	1,040.00	..
<b>I. Continuing Major and Medium Schemes :</b>				
<i>Andhra Region :</i>				
(1) T.B. P. L. L. C.	Andhra Board	20.00	20.00	..
(2) T. B. P. H. L. C. Stage I	Andhra Board	32.00 10.70	32.00 10.70	.. ..
(3) Thandava Reservoir	.. ..	50.00	50.00	..
(4) Varaha Reservoir	.. ..	25.00	25.00	..
(5) Vottigadda Project	.. ..	25.00	25.00	..
(6) Kanupur Canal	.. ..	30.00	30.00	..
(7) Torrigedda Pumping Scheme	.. ..	20.00	20.00	..
(8) Pumpa Reservoir	.. ..	7.67	7.67	..
	Total	220.37	220.37	..

YEAR PLAN (1969-74)

II—(Contd.)

Outlays

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
20.00	20.00	..	5.00	5.00	..
350.00	350.00	..	350.00	350.00	..
550.00	550.00	..	550.00	550.00	..
920.00	920.00	..	905.00	905.00	..
.. 12.71 ..	12.71	..	..	..	..
30.65	30.65	..	..	..	..
.. 60.00 ..	60.00	..	60.00	60.00	..
.. 10.48 ..	10.48	..	..	..	..
.. 25.00 ..	25.00	..	19.40	19.40	..
.. 30.00 ..	30.00	..	25.00	25.00	..
.. 7.15 ..	7.15	..	..	..	..
.. ..	..	..	..	..	..
.. 175.99 ..	175.00	..	104.40	104.40	..

## PROPOSED FOURTH FIVE

## STATEMENT

## Proposed Plan

S.No.	Head/Sub-Head	1972-73		
		Total	Capital	F.E.
(1)	(2)	(12)	(13)	(14)
<b>River Valley Projects :</b>				
<i>Nagarjunasagar Project :</i>				
(a) Dam	.. ..	5.00	5.00	..
(b) Right Canal	.. ..	293.00	293.00	..
(c) Left Canal	.. ..	507.00	507.00	..
	Total	805.00	805.00	..

**I. Continuing Major and Medium Schemes :***Andhra Region :*

(1) T. B. P. L. L. C.	Andhra Board	..	..	..
(2) T.B. P.H. L.C. Stage I	Andhra Board	..	..	..
(3) Thandava Reservoir	.. ..	50.00	50.00	..
(4) Varaha Reservoir	.. ..	..	..	..
(5) Vottigadda Project	.. ..	..	..	..
(6) Kanupur Canal	.. ..	20.00	20.00	..
(7) Torrigedda Pumping Scheme	.. ..	..	..	..
(8) Pumpa Reservoir	.. ..	..	..	..
	Total	70.00	70.00	..

## YEAR PLAN (1969-74)—(Contd.)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F. E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
(+)5.00	(+)5.00	..	(+)175.00	(+)175.00	..
(-)-239.00	(-)-239.00	..	(-)-239.00	(-)-239.00	..
..	..	..	1,343.00	1,343.00	..
450.00	450.00	..	2,607.00	2,607.00	..
216.00	216.00	..	3,886.00	3,886.00	..
..	..	..	32.71	32.71	..
..	..	..	62.65	62.65	..
..	..	..	10.70	10.70	..
43.77	43.77	..	263.77	263.77	..
..	..	..	35.48	35.48	..
..	..	..	69.40	69.40	..
10.33	10.33	..	115.33	115.33	..
..	..	..	27.15	27.15	..
..	..	..	7.67	7.67	..
54.10	54.10	..	624.86	624.86	..

-DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)
<i>Telangana Region :</i>				
(9)	Pochampad Project .. ..	500.00	500.00	..
(10)	Kaddam Project .. ..	10.00	10.00	..
(11)	Swarna Project .. ..	20.00	20.00	..
(12)	Nallavagu Project .. ..	9.02	9.02	..
(13)	Kotipallivagu Project .. ..	10.00	10.00	..
(14)	Lankasagar Project .. ..	10.00	10.00	..
(15)	Rajolibanda Diversion Scheme .. ..	11.37	11.37	..
(16)	Musi Project .. ..	10.00	10.00	..
	Total .. ..	580.39	580.39	..
	Total : Continuing Schemes .. ..	800.76	800.00	..
<b>2. Schemes approved as new Schemes during 1966-67 and 1968-69 :</b>				
<i>Andhra Region :</i>				
(1)	T.B.P.H. L.C. Stage II			
	Andhra .. ..	260.00	260.00	..
	Board .. ..	100.00	100.00	..
(2)	Guntur Channel .. ..	40.00	40.00	..
(3)	Bahuda Reservoir .. ..	10.00	10.00	..
(4)	Gajuladenne Project .. ..	5.00	5.00	..
(5)	Gandipalem project .. ..	2.00	2.00	..
(6)	Kalyani Reservoir .. ..	2.00	2.00	..
	Total .. ..	419.00	419.00	..

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
700.00	700.00	..	700.00	700.00	..
..	..	..	..	..	..
20.00	20.00	..	21.73	21.73	..
..	..	..	..	..	..
4.14	4.14	..	..	..	..
5.71	5.71	..	..	..	..
..	..	..	..	..	..
20.00	20.00	..	20.00	20.00	..
749.85	749.85	..	741.73	741.73	..
925.84	925.84	..	846.13	846.13	..
200.00	200.00	..	200.00	200.00	..
41.30	41.30	..	..	..	..
50.00	50.00	..	39.00	39.00	..
10.00	10.00	..	3.16	3.16	..
10.00	10.00	..	20.00	20.00	..
5.00	5.00	..	15.00	15.00	..
5.00	5.00	..	20.00	20.00	..
321.30	321.30	..	297.16	297.16	..

**DRAFT FOURTH FIVE  
STATEMENT  
Proposed Plan**

S. No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>Telangana Region :</b>				
(9)	Pochampad Project	700.00	700.00	..
(10)	Kaddam Project	..	..	..
(11)	Swarna Project	..	..	..
(12)	Nallavagu Project	..	..	..
(13)	Kotipallivagu Project	..	..	..
(14)	Lankasagar Project	..	..	..
(15)	Rajolibanda Diversion Scheme	..	..	..
(16)	Musi Project	16.61	61.61	..
	Total	761.61	716.61	..
	Total : Continuing Schemes	786.61	786.61	..

**2. Schemes approved as new Schemes during  
1966-67 and 1968-69 :**

*Andhra Region :*

(1)	T.B.P.H.L. C. State II :			
	.. Andhra Board	100.00	100.00	..
(2)	Guntur Channel	..	..	..
(3)	Bahuda Reservoir	..	..	..
(4)	Gajuladenne Project	30.00	30.00	..
(5)	Gandipalem project	30.00	30.00	..
(6)	Kalyani Reservoir	25.00	25.00	..
	Total	185.00	185.00	..

## YEAR PLAN (1969-74)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F.E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
323.46	323.46	..	2,923.46	2,923.46	..
..	..	..	10.00	10.00	..
..	..	..	61.73	61.73	..
..	..	..	9.02	9.02	..
..	..	..	14.14	14.14	..
..	..	..	15.71	15.71	..
..	..	..	11.37	11.37	..
10.00	10.00	..	76.61	76.61	..
333.46	333.46	..	3,122.04	3,122.04	..
387.56	387.56	..	3,746.90	3,746.90	..
54.43	54.43	..	814.43	814.43	..
..	..	..	141.30	141.30	..
..	..	..	129.00	129.00	..
..	..	..	23.16	23.16	..
31.36	31.36	..	96.36	96.36	..
45.00	45.00	..	97.00	97.00	..
18.00	18.00	..	70.00	70.00	..
148.79	148.79	..	1,371.25	1,371.25	..



## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1969-70		
		Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)
<i>Telangana Region :</i>				
(7)	Cokachettivagu Project	.. 5.00	5.00	..
	Total	.. 5.00	5.00	..
	Total for approved new schemes	.. 424.00	424.00	..
	Grand total continuing Major and Medium schemes including Nagarjunasagar Project	.. 2,264.76	2,264.76	..
<b>New Schemes :</b>				
<i>Andhra Region :</i>				
(1)	Godavari Barrage	.. ..	..	..
(2)	Yeleru Reservoir	.. ..	..	..
(3)	Pulivendla Canal	.. ..	..	..
(4)	Neradi Barrage	.. ..	..	..
(5)	Togurupeta Project (Cheyyar Reservoir)	.. ..	..	..
(6)	Somacila Project	.. ..	..	..
	Total New Schemes	.. ..	..	..
	Total for Irrigation (continuing plus new including Nagarjunasagar Project)	.. 2,264.76	2,264.76	..

## YEAR PLAN (1969-74)

## II—(Contd)

## Outlays

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F. E.
(6)	(7)	(8)	(9)	(10)	(11)
10.00	10.00	..	25.00	25.00	..
10.00	10.00	..	25.00	25.00	..
331.30	331.30	..	322.16	322.16	..
2,177.14	2,177.14	..	2,073.29	2,073.29	..
10.00	10.00	..	50.00	50.00	..
5.00	5.00	..	20.00	20.00	..
20.00	20.00	..	24.00	24.00	..
10.00	10.00	..	10.00	10.00	..
5.00	5.00	..	10.00	10.00	..
..	..	..	30.00	30.00	..
50.00	50.00	..	144.00	144.00	..
2,227.14	2,227.14	..	2,217.29	2,217.29	..

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S. No.	Head/Sub-Head	1972-73			
		Total	Capital	F. E.	
(1)	(2)	(12)	(13)	(14)	
<i>Telangana Region :</i>					
(7)	Cokachettivagu Project	..	19.71	19.71	..
	Total	..	19.71	19.71	..
	Total for approved new schemes	..	204.71	204.71	..
	Grand total continuing Major and Medium schemes including Nagarjunasagar Project	..	1,796.32	1,796.32	..
<b>New Schemes :</b>					
<i>Andhra Region :</i>					
(1)	Godavari Barrage	..	200.00	200.00	..
(2)	Yeleru Reservoir	..	75.00	75.00	..
(3)	Pulivendla Canal	..	50.00	50.00	..
(4)	Neradi Barrage	..	50.00	50.00	..
(5)	Togurupeta Project (Cheyyar Reservoir)	..	20.00	20.00	..
(6)	Somacila Project	..	70.00	70.00	..
	Total New Schemes	..	465.00	465.00	..
	Total for Irrigation (continuing plus new including Nagarjunasagar Project)	..	2,261.32	2,261.32	..

## YEAR PLAN (1969-74)—(Contd.)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUTLAY		
Total	Capital	F. E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
..	..	..	59.71	59.71	..
..	..	..	59.71	59.71	..
148.79	148.79	..	1,430.96	1,430.96	..
..	..	..	..	..	..
752.35	752.35	..	9,063.86	9,063.86	..
..	..	..	..	..	..
240.00	240.00	..	500.00	500.00	..
100.00	100.00	..	200.00	200.00	..
100.00	100.00	..	194.00	194.00	..
86.00	86.00	..	156.00	156.00	..
65.00	65.00	..	100.00	100.00	..
100.00	100.00	..	200.00	200.00	..
691.00	691.00	..	1,350.00	1,350.00	..
1,443.35	1,443.35	..	10,413.86	10,413.86	..

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S.No.	Head/Sub-Head	1969-70		
		Total	Capital	F.E.
(1)	(2)	(3)	(4)	(5)
<b>Flood Control Drainage, Anti-Water Logging and Anti Sea Erosion :</b>				
Andhra Pradesh	.. ..	31.00	31.00	..
<b>Investigation and Research :</b>				
<i>Investigation of Projects :</i>				
Andhra Pradesh	.. ..	15.00	..	..
<i>Research (State-wide)</i>				
Expansion and equipment to Engineering Research Laboratories	.. ..	15.00	7.00	..
Total for Investigation and Research	.. ..	30.00	7.00	..
<b>Grand Total</b>	.. ..	2,325.76	2,302.76	..

## YEARS PLAN (1969-74)

## II—(Contd.)

## Outlays

(Rs. in lakhs)

1970-71			1971-72		
Total	Capital	F.E.	Total	Capital	F.E.
(6)	(7)	(8)	(9)	(10)	(11)
31.00	31.00	..	31.00	31.00	..
15.00	..	..	15.00	..	..
15.00	7.00	2.00	15.00	7.00	..
30.00	7.00	2.00	30.00	7.00	..
2,288.44	2,265.14	2.00	2,278.29	2,255.29	..

## DRAFT FOURTH FIVE

## STATEMENT

## Proposed Plan

S.No.	Head/Sub-Head	1972-73		
		Total	Capital	F. E.
(1)	(2)	(12)	(13)	(14)
<b>Flood Control, Drainage, Anti-Water Logging and Anti-Sea Erosion :</b>				
	Andhra Pradesh	.. .. 31.00	31.00	..
<b>Investigation and Research :</b>				
<i>Investigation of Projects :</i>				
	Andhra Pradesh	.. .. 15.00	..	..
<i>Research (State-wide)</i>				
	Expansion and equipment to Engineering Research Laboratories	.. 15.00	7.00	..
	<b>Total for Investigation and Research</b>	.. 30.00	7.00	..
	<b>Grand Total</b>	.. 2,322.32	2,299.32	..

## YEAR PLAN (1969-74)

II—(Contd.)

## Outlays

(Rs. in lakhs)

1973-74			FOURTH PLAN OUT-LAY		
Total	Capital	F.E.	Total	Capital	F. E.
(15)	(16)	(17)	(18)	(19)	(20)
34.00	34.00	..	365.00	158.00	..
15.00	..	..	75.00	..	..
15.00	7.00	..	75.00	35.00	2.00
30.00	7.00	..	150.00	35.00	2.00
1,507.35	1,484.35	..	10,928.86	10,606.86	2.00



DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

STATEMENT II

Proposed Plan Outlays

SCHEME-WISE DETAILS—AGRICULTURAL PRODUCTION

(Rs. in lakhs)

S.No.	Head/Sub-Head/Name of the Scheme	1969-70			1970-71			1971-72		
		Total	Capital	F.E.	Total	Capital	F. E.	Total	Capital	F. E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<b>1. Agricultural Production :</b>										
<i>I. Improved Seed Programmes :</i>										
1.	Seed Farm, Seed Multiplication including Seed Processing ..	32.00	15.00	0.50	31.00	14.00	0.50	32.00	14.00	..
2.	Establishment of Seed Testing Laboratories ..	3.85	2.50	..	3.85	2.50	..	1.35	..	..
3.	Establishment of New Seed Farms ..	4.00	..	..	9.00	4.00	..	9.00	4.00	..
	<b>Total</b> ..	<b>39.85</b>	<b>17.50</b>	<b>0.50</b>	<b>43.85</b>	<b>20.50</b>	<b>0.50</b>	<b>41.35</b>	<b>18.00</b>	<b>..</b>
<i>II. Plant Protection :</i>										
1.	Control of Pests and Diseases of crops	30.00	10.00	..	30.00	10.00	..	30.00	..	..
2.	Establishment of Laboratories for Testing Pesticides at Rajendranagar ..	0.84	..	..	0.84	..	..	0.84	..	..
3.	Epidemic control of Crop Pests and diseases including Aerial Spraying ..	3.00	..	..	3.00	..	..	3.59	..	..
	<b>Total</b> ..	<b>33.84</b>	<b>10.00</b>	<b>..</b>	<b>33.84</b>	<b>10.00</b>	<b>..</b>	<b>34.43</b>	<b>..</b>	<b>..</b>

S.No.	Head/Sub-Head/Name of the Scheme	1972-73			1973-74			TOTAL FOR THE IVTH PLAN		
		Total	Capital	F. E.	Total	Capital	F. E.	Total	Capital	F.E.
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
<b>1. Agricultural Production :</b>										
<i>I. Improved Seed Programme :</i>										
1.	Seed Farm, Seed Multiplication including Seed Processing .. ..	18.00	..	..	18.06	..	..	130.06	43.00	1.00
2.	Establishment of Seed Testing Laboratories .. ..	1.35	..	..	1.35	..	..	11.75	5.00	..
3.	Establishment of New Seed Farms ..	10.50	4.00	..	7.50	1.00	..	40.00	13.00	..
	<b>Total</b> ..	<b>29.85</b>	<b>4.00</b>	<b>..</b>	<b>26.91</b>	<b>1.00</b>	<b>..</b>	<b>181.81</b>	<b>61.00</b>	<b>1.00</b>
<i>II. Plant Protection :</i>										
1.	Control of Pests and Diseases of Crops	30.50	..	..	30.50	..	..	151.00	20.00	..
2.	Establishment of Laboratories for Testing pesticides at Rajendranagar ..	0.84	..	..	0.84	..	..	4.20	..	..
3.	Epidemic control of Crop Pests and Diseases including Aerial Sprayings	4.60	..	..	4.65	..	..	18.84	..	..
	<b>Total</b> ..	<b>35.94</b>	<b>..</b>	<b>..</b>	<b>35.99</b>	<b>..</b>	<b>..</b>	<b>174.04</b>	<b>20.00</b>	<b>..</b>

STATEMENT II—(Contd.)

S. No.	Head/Sub-Head/Name of the Scheme	1969-70			1970-71			1971-72		
		Total	Capital	F.E.	Total	Capital	F.E.	Total	Capital	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<i>III. Commercial Crops :</i>										
1.	Sugarcane Development Scheme including Pilot Project ..	8.26	..	..	8.26	..	..	8.26	..	..
2.	Co-ordinated Cotton Development Scheme including Package Programme ..	3.00	..	..	3.00	..	..	3.00	..	..
3.	Tobacco Development Scheme ..	3.02	..	..	3.02	..	..	3.02	..	..
4.	Jute and Mesta Development Scheme ..	0.59	..	..	0.59	..	..	0.59	..	..
5.	Oilseeds Development Scheme including Package Programme ..	11.42	..	..	11.42	..	..	11.42	..	..
6.	Coconut Development Scheme ..	1.98	..	..	1.98	..	..	1.98	..	..
7.	Pilot Project for Introduction of Cotton in T. B. P. Area in the Rabi Season ..	1.00	..	..	1.00	..	..	1.00	..	..
8.	Pilot Project for introduction of Sea Island Cotton under Wells in Cuddapah and Chittoor Districts ..	1.00	..	..	1.00	..	..	1.00	..	..
	Total ..	30.27	..	..	30.27	..	..	30.27	..	..
<i>IV. Extension Training and Farmers' Education :</i>										
1.	Training in Plant Protection for Officers and Assistants ..	2.39	..	..	2.39	..	..	2.39	..	..
2.	Establishment of Agricultural Schools ..	2.01	..	..	2.01	..	..	2.01	..	..
3.	Training of Fieldmen and Demonstration Maistries ..	0.04	..	..	0.04	..	..	0.04	..	..
	Total ..	4.44	..	..	4.44	..	..	4.44	..	..

S. No.	Head/Sub-Head/Name of the Scheme	1972-73			1973-74			TOTAL FOR THE IVTH PLAN		
		Total	Capital	F.E.	Total	Capital	F.E.	Total	Capital	F.E.
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
<i>III. Commercial Crops :</i>										
1.	Sugarcane Development Scheme including Pilot Project ..	8.26	..	..	8.26	..	..	41.30	..	..
2.	Co-ordinated Cotton Development Scheme including Package Programme ..	3.00	..	..	3.00	..	..	15.00	..	..
3.	Tobacco Development Scheme ..	3.02	..	..	3.03	..	..	15.11	..	..
4.	Jute and Mesta Development Scheme ..	0.59	..	..	0.59	..	..	2.95	..	..
5.	Oilseeds Development Scheme including Package Programme ..	11.42	..	..	11.43	..	..	57.11	..	..
6.	Coconut Development Scheme ..	1.98	..	..	1.98	..	..	9.90	..	..
7.	Pilot Project for Introduction of Cotton in T.B.P. Area in the Rabi Season ..	1.00	..	..	1.00	..	..	5.00	..	..
8.	Pilot Project for Introduction of Sea-Island Cotton under wells in Cuddapah and Chittoor Districts ..	1.00	..	..	1.00	..	..	5.00	..	..
	Total ..	30.27	..	..	30.29	..	..	151.37	..	..
<i>IV. Extension Training and Farmers' Education :</i>										
1.	Training in Plant Protection for Officers and Assistants ..	2.39	..	..	2.39	..	..	11.95	..	..
2.	Establishment of Agricultural Schools ..	2.01	..	..	2.01	..	..	10.05	..	..
3.	Training of Fieldmen and Demonstration Maistries ..	0.04	..	..	0.04	..	..	0.20	..	..
	Total ..	4.44	..	..	4.44	..	..	22.20	..	..

**STATEMENT II—(Contd.)**

S.No.	Head/Sub-Head/Name of the Scheme	1969-70			1970-71			1971-72		
		Total	Capital	F. E.	Total	Capital	F. E.	Total	Capital	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<b>V. Agricultural Statistics :</b>										
1.	Collection of Agricultural Statistics including Surveys .. .. .	1.07	..	..	1.07	..	..	1.07	..	..
<b>VI. Intensive Cultivation Programme : (I.A.D.P., I.A.A.P., H.V.P., etc.)</b>										
1.	Intensive Agricultural Area Programme	44.12	..	..	44.12	..	..	44.12	..	..
2.	Intensive Agricultural District Programmes (Eluru) .. .. .	21.57	..	..	21.57	..	..	21.57	..	..
3.	Pilot Project on Package on Plant Protection Practices on High Yielding Varieties .. .. .	2.00	..	..	2.00	..	..	2.00	..	..
	<b>Total</b> .. .. .	<b>67.69</b>	..	..	<b>67.69</b>	..	..	<b>67.69</b>	..	..

**VII. Other Schemes :**

1.	Grape-wine cultivation, Grape Advisory Unit .. .. .	1.15	..	..	1.15	..	..	1.15	..	..
2.	Development of Vegetable Production	2.44	..	..	2.44	..	..	2.44	..	..
3.	Progeny Orchards, etc., staff under Fruit Development Scheme .. .. .	2.05	..	..	2.05	..	..	2.06	..	..
4.	Soil Testing Laboratories and Vignan Mandirs .. .. .	6.63	..	..	6.63	..	..	6.63	..	..
5.	Integrated Scheme for Development of Local Manurial Resources .. .. .	1.00	..	..	1.00	..	..	1.00	..	..

S.No.	Head/Sub-Head/Name of the Scheme	1972-73			1973-74			TOTAL FOR THE IVTH PLAN		
		Total	Capital	F. E.	Total	Capital	F. E.	Total	Capital	F.E.
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
<i>V. Agricultural Statistics :</i>										
1.	Collection of Agricultural Statistics including Surveys	1.07	..	..	1.08	..	..	5.36	..	..
<i>VI. Intensive Cultivation Programme : (I.A.D.P., I.A.A.P., H.V.P., etc.)</i>										
1.	Intensive Agricultural Area Programme	44.12	..	..	44.12	..	..	220.60	..	..
2.	Intensive Agricultural Dist. programmes (Eluru)	21.58	..	..	21.58	..	..	107.87	..	..
3.	Pilot Project on Package on Plant Protection Practices on High Yielding Varieties	2.00	..	..	2.00	..	..	10.00	..	..
	Total	67.70	..	..	67.70	..	..	338.47	..	..
<i>VII. Other Schemes :</i>										
1.	Grape-wine cultivation, Grape Advisory Unit	1.15	..	..	1.16	..	..	5.76	..	..
2.	Development of Vegetable production	2.45	..	..	2.45	..	..	12.22	..	..
3.	Progeny Orchards, etc., staff under Fruit Development Scheme	2.06	..	..	2.06	..	..	10.28	..	..
4.	Soil Testing Laboratories and Vignan Mandirs	6.63	..	..	6.63	..	..	33.15	..	..
5.	Integrated Scheme for Development of Local Manurial Resources	1.00	..	..	1.00	..	..	5.00	..	..

STATEMENT II—(Contd.)

S.No.	Head/Sub-Head/Name of the Schemā	1969-70			1970-71			1971-72		
		Total	Capital	F.E.	Total	Capital	F.E.	Total	Capital	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
6.	Demonstration Centre in Major River Valley Project, Yemmiganur ..	0.83	..	..	0.83	..	..	0.83	..	..
7.	Technical Information Cell including.. provision of Library.	0.75	..	..	0.75	..	..	0.75	..	..
8.	Large Scale Trials with Ciolle Cocoa..	0.48	..	..	0.48	..	..	0.48	..	..
9.	Construction of Pucca Roads in Sugar Factory areas ..	1.00	..	..	1.00	..	..	1.00	..	..
10.	Strengthening of District Administration ..	5.00	..	..	5.00	..	..	5.00	..	..
11.	Mobile Soil Testing Van ..	1.00	..	..	1.00	..	..	1.00	..	..
12.	Establishment of inservice Training Centre ..	2.00	..	..	2.00	..	..	2.00	..	..
13.	Provision of Crop production Special- list for Special Corps in districts ..	3.00	..	..	3.00	..	..	3.00	..	..
14.	Popularisation of improved Agricultural Implements ..	1.00	..	..	1.00	..	..	1.00	..	..
	Total ..	28.33	..	..	28.33	..	..	28.33	..	..
	Grand Total ..	205.49	27.50	0.50	209.49	30.50	0.50	207.59	18.00	..

S. No.	Head/Sub-Head/Name of the Scheme	1972-73			1973-74			TOTAL FOR THE IVTH PLAN		
		Total	Capital	F.E.	Total	Capital	F.E.	Total	Capital	F.E.
(1)	(2)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
6.	Demonstration Centre in Major River Valley Project, Yemmiganur ..	0.83	..	..	0.84	..	..	4.16	..	..
7.	Technical Information Cell including Provision of Library ..	0.75	..	..	0.76	..	..	3.76	..	..
8.	Large Scale Trails with Ciole Cocoa ..	0.49	..	..	0.49	..	..	2.42	..	..
9.	Construction of Pucca Roads in Sugar Factory areas ..	1.00	..	..	1.00	..	..	5.00	..	..
10.	Strengthening of District Administration ..	5.00	..	..	5.00	..	..	25.00	..	..
11.	Mobile Soil Testing Van ..	1.00	..	..	1.00	..	..	5.00	..	..
12.	Establishmet of inservice training Centre ..	2.00	..	..	2.00	..	..	10.00	..	..
13.	Provision of Crop Production Specialist for Special Crops in districts ..	3.00	..	..	3.00	..	..	15.00	..	..
14.	Popularisation of Improved Agricultural Implements ..	1.00	..	..	1.00	..	..	5.00	..	..
	Total ..	28.36	..	..	28.39	..	..	141.75	..	..
	Grand Total ..	197.63	4.00	..	194.80	1.00	..	1,015.00	81.00	1.00



# DRAFT FOURTH FIVE-YEAR PLAN (1967-74)

## STATEMENT III

### Important Projects Costing Rs. 5 Crores and above.

(Rs. in lakhs)

Sl. No.	HEAD OF DEVELOPMENT	Total estimat- ed cost.	TOTAL EXPENDITURE BY		FOURTH PLAN OUTLAY	
	Name of the Scheme		the end of 3rd plan.	1968-69	Total	Foreign ex- change.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Nagarjunasagar Dam Unit ..	7,300.00	5,774.00	7,744.00	175.00 —239.00	13.11
2.	Nagarjunasagar Right Canals unit ..	5,220.00	2,731.00	3,877.00	1,343.00	40.00
3.	Nagarjunasagar Left Canals unit ..	5,650.00	1,910.00	3,043.00	2,607.00	36.00

STATEMENT III—(Contd.)

	OUTLAYS PROPOSED									
	1969-70		1970-71		1971-72		1972-73		1973-74	
	<i>Total</i>	<i>Foreign</i> <i>Ex-</i> <i>change</i>	<i>Total</i>	<i>Foreign</i> <i>Ex-</i> <i>change</i>	<i>Total</i>	<i>Foreign</i> <i>Ex-</i> <i>change</i>	<i>Total</i>	<i>Foreign</i> <i>Ex-</i> <i>change</i>	<i>Total</i>	<i>Foreign</i> <i>Ex-</i> <i>change</i>
	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1. Nagarjunasagar Dam unit	.. 140.00	13.11	20.00	..	50.00	..	50.00	..	5.00	..
2. Nagarjunasagar Right Canals unit	.. 350.00	10	350.00	10	350.00	10	293.00	10	..	..
3. Nagarjunasagar Left Canals unit	.. 550.00	3	550.00	3	550.00	10	507.00	10	450.00	10

DRAFT FOURTH FIVE YEAR PLAN (1969-74)

STATEMENT III

Important Projects Costing Rs. 5 Crores and above.

Sl. No.	HEAD OF DEVELOPMENT		Total estimated cost.	TOTAL EXPENDITURE BY		FOURTH PLAN OUTLAY	
	Name of the Scheme			the end of 3rd plan.	1968-69	Total	Foreign exchange.
(1)	(2)		(3)	(4)	(5)	(6)	(7)
<b>Continuing Major Schemes :</b>							
1.	T.B.P. H.L.C. Andhra Pradesh Board	..	281.28	1,231.99	1,248.57	32.71	..
2.	T.B.P. H.L.C. Stage -I	..	1,237.28	967.04	1,174.00	62.65	..
	Andhra Board	.. ..	649.35	541.83	638.65	10.70	..
3.	Pochampad Project	..	4,010.00	462.88	1,086.54	2,923.46	..
4.	Kaddam project	.. ..	798.50	784.32	797.34	10.00	..

## STATEMENT II—(Contd.)

		OUTLAYS PROPOSED									
		1969-70		1970-71		1971-72		1972-73		1973-74	
		Total	Foreign Ex- change	Total	Foreign Ex- change	Total	Foreign Ex- change	Total	Foreign Ex- change	Total	Foreign Ex- change.
		(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)

## Continuing Major Schemes :

1.	T.B.P., H.L.C. Andhra Board	..	20.00	..	12.71	..	..	..	..	..	..	..
2.	T.B.P., H.L.C. Stage I	..	32.00	..	30.65	..	..	..	..	..	..	..
	Andhra Board	..	10.70	..	..	..	..	..	..	..	..	..
3.	Pochampad project	..	500.00	..	700.00	..	700.00	..	700.00	..	323.46	..
4.	Kaddam project	..	10.00	..	..	..	..	..	..	..	..	..

DRAFT FOURTH FIVE YEAR PLAN (1969-74)

STATEMENT III

Important Projects Costing Rs. 5 Crores and above.

Sl. No.	HEAD OF DEVELOPMENT		Total estimated cost.	TOTAL EXPENDITURE BY		FOURTH PLAN OUTLAY	
	Name of the Scheme			the end of 3rd plan.	1968-69	Total	Foreign exchange.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<b>Schemes approved as new schemes during 1967-68 and 1968-69 :</b>							
5.	T.B.P. H. L.C. II Stage	.. ..	852.00	..	37.57	814.43	..
	Andhra Board	.. ..	274.00	..	132.70	141.30	..
<b>New Schemes :</b>							
6.	Godavari Barrage	.. ..	2,100.00	..	..	500.00	..
7.	Somasila dam	.. ..	317.00	..	..	..	..
	F.R.L. plus	.. ..	1,276.00	..	..	200.00	..

OUTLAYS PROPOSED

		1969-70		1970-71		1971-72		1972-73		1973-74	
		Total	Foreign Ex- change	Total	Foreign Ex- change	Total	Foreign Exi- change	Total	Foreign Ex- change	Total	Foreign Ex- change.
		(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<b>Schemes approved as new schemes during 1967-68 and 1968-69 :</b>											
5.	T.B.P. H.L.C., II .. .. .	260.00	..	200.00	..	200.00	..	100.00	..	54.43	..
	Andhra Board .. .. .	100.00	..	41.30	..	..	..	..	..	..	..
<b>New Schemes :</b>											
6.	Godavari Barrage .. .. .	..	..	10.00	..	50.00	..	200.00	..	240.00	..
7.	Somasila dam F.R.L. plus .. .. .	..	..	..	..	30.00	..	70.00	..	100.00	..

**POWER**

For Projects costing over Rs. 5 crores under Power please see the statements at pages 164 to 172.

## DRAFT FOURTH FIVE YEAR PLAN (1969-74)

## STATEMENT—IV

## Check-list in respect of principal project costing Rs. 5 crores and above.

1. Name of Project with brief description and location.      Nagarjunasagar Project.      The Project in execution comprises the construction of a Masonry Dam with Spill way Crest level at C. L. +546 with crest gates upto CL. +590 across the river Krishna and two Canals one on the Right side for a length of 126 Miles and another on the Left side for a length of 111 Miles in the First Phase, to irrigate in all 22 lakh acres including 1.5 lakh acres of second crop under Krishna Delta, in Nalgonda, Khammam, Krishna, Guntur, Kurnool and Nellore Districts of Andhra Pradesh. The Nagarjunasagar Dam is situated 1 1/2 Miles down stream of Nandigonda Village in Miryalguda taluk, Nalgonda District, Andhra Pradesh. The Right Canal takes off from the head regulator located in Dam while the Left Canal takes off from the foreshow of Nagarjunasagar Reservoir at its left flank about 6 Miles away from the Main Course of the River.
2. Gestation period in years.      The gestation period envisaged in the Project report is 8 years. This period gets extended due to non-availability of adequate funds and in the meanwhile the construction costs are going up. The construction period gets and is getting prolonged as a result.
3. Cost estimates and outlays (Rs. Round Lakhs)
- (a) *Total estimated cost* : N.S. Dam    N.S. Right Canal    N.S. Left Canal
- (i) Total      .. Rs. 7,300.00 lakhs    Rs. 5,220.00 lakhs    52.8+3.7=  
56.5 crores
- (ii) Foreign Exchange    Rs. 239.21 lakhs    Rs. 164.77 lakhs    158.47 lakhs

## STATEMENT IV—(Contd.)

## (b) Outlay and Expenditure :

Rs. in lakhs

Expenditure upto 1968-69		Outlay proposed 1969-74		1969-70 approved.		
Total	Foreign exchange	Total	Foreign exchange	Total	Foreign exchange	
	..	(+)175.00				
*1.	7,744.00	226.10	(—)239.00	13.11	140.00	13.11
*2.	3,877.00	124.77	1,343.00	40.00	350.00	10.00
*3.	3,044.00	158.47	2,607.00	36.00	550.00	3.00

1970-71 proposed		Three Years Total (1971-74)		Balance after 1973-74 if any.	
Total	Foreign exchange	Total	Foreign exchange	Total	Foreign exchange
20.00	..	15.00	..	(—)239.00 (likely avail)	..
350.00	10.00	643.00	20.00		
550.00	3.00	1,507.00	30.00		

\* 1. N. S. Dam. 2. N. S. Right Canal, 3. N. S. Left Canal.

## 4. Programme of output/benefits :

Item	Units	Progress upto 1968-69	Target for Fourth Plan.	PHASING		
				1969-70	1970-71	End of 1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)

## Potential (Gross)

Irrigation						
Right Canal	.. 1000 acres	610	1,174	700	750	1,174
Left Canal	.. 1000 acres	140	600	250	300	600
Krishna Delta.	.. 1000 acres	600	600	600	600	600
<b>Total (Gross) N.S.P.</b>		<b>1,350</b>	<b>2,074</b>	<b>1,550</b>	<b>1,650</b>	<b>2,374</b>
Net (Excluding Krishna Delta)	..	750	1,774	950	1,050	1,774



## STATEMENT IV—(Contd.)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Utilisation of Irrigation Potential (Gross) :</b>						
Right Canal	..	4.45	1,040	640	700	1,040
Left Canal	..	0.95	510	175	240	510
Krishna Delta		600	600	600	600	600
<b>Total N.S.P. (Gross)</b>		<b>1,140</b>	<b>2,150</b>	<b>1,415</b>	<b>1,540</b>	<b>2,150</b>
Net (exclduing Krishna Delta)	..	540	1,550	815	940	1,550

5. Training of Technical and Managerial personnel . The Nagarjunagar Project is a spill over scheme of the Third Five Year Plan and is now in an advanced stage of execution. Hence there is no problem in regard to training of Technical and Managerial personnel.

6. Employment (Man- years) 1966-67 1967-68 1968-69 **Fourth Plan**  
**I. Additional requirements :**

*Skilled :*

(a) Technical .. Additional requirements are nil as the present staff is sufficient for completion of the Project.

(b) Non-Technical .. Do.

*Unskilled :*

**II. Staff required on continuing basis 1968-69:**

<i>Skilled</i>	<i>Dam</i>	<i>Right Canal</i>	<i>Left Canal</i>	<i>End of Fourth Plan</i>
(a) Technical ..	325	1,500	1,200	It is too early to assess the staff requirements on a continuing basis at the end of Fourth Plan.
(b) Non-Technical	400	2,000	2,000	
<i>Unskilled</i> ..	1,200	30,000	45,000	Do.

Dam Unit : Any staff required at the end of Fourth Plan will be for maintenance only.

## DRAFT FOURTH FIVE-YEAR PLAN (1969-74.)

## STATEMENT IV.

## Check List in respect of Principal project costing Rs. 5 crores and above.

1. Name of Project with brief description and location:— T.B.P., L.L.C. scheme.

The T. B. P. Low Level canal takes off from Gundlakenivanka of Tungabhadra project and runs for a distance of 203 miles in the districts of Bellary and Kurnool.

2. Gestation period in years :—This scheme is completed except for few minor works.

3. Cost estimates and outlay :—(Rs. round lakhs)

(a) Total estimate cost :

(i) Total Rs. 1281.28 lakhs.

(ii) Foreign exchange. —Nil.—

(b) outlay and expenditure.

Expenditure upto 1968-69		outlay proposed 1969-70		1969-70 approved		1970-71 approved		Three years Balance total 71-74 after 1973-74 if any.			
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1,248.57	..	32.71	..	20.00	..	12.71	..	..	..	..	..

4. Programme of out put/benefits

Item	Unit	Progress upto 1968-69	target for IV Plan	PHASING		
				1969-70	1970-71	end of 1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Potential	1000 Acs.	148.87	148.87	148.87	148.87	148.87
cumulative						

5. Training of technical and managerial personnel :—Nil.

6. Employment (Man- years 1966-67 1967-68 1968-69 Fourth Plan (years by year)).

7. *Additional Requirements :*

Skilled :—	..	..	..	..
(a) Technical.	..	..	..	..
(b) Non-technical	..	..	..	..

Unskilled.

**II. Staff required on continuing basis**

			1968-69	end of Fourth Plan
<i>Skilled</i>				
(a) Technical	..	..	25	25
(b) Non-Technical	..	..	37	37
(c) unskilled	..	..	1,250	1,250

## DRAFT FOURTH FIVE YEAR PLAN (1969-74)

## STATEMENT IV

Check list in respect of principal project costing Rs. 5 crores above.

1. Name of project with brief description and location :—Kadam project.

The proposal is to form a reservoir across Kaddam river in Adilabad district. It consists of gravity dam, complete dam, spillway and canal of 48 miles long.

2. Gestation period in years :—The restoration works are almost completed.

(a) Total estimated cost :

- (i) Total Rs. 798.50 lakhs  
(ii) Foreign exchange.

(b) Outlay and expenditure.

Expenditure upto 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three year total 1971-74		Balance after 1973-74 if any	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
797.34	..	10.00	..	10.00	..	..	..	..	..	..	..

4. Programme of output/benefits.

Item	Unit	Progress upto 1968-69	Target for IV Plan	PHASING		
				1969-70	1970-71	end of 1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Potential	1000 acres	85.00	85.00	85.00	85.00	85.00

5. Training of technical and managerial personnel.

6. Employment (Man-years) 1966-67 1967-68 1968-69 *Fourth Plan*  
year by year.

**I. Additional requirements :**

*Skilled*

- (a) Technical  
(b) Non-technical  
Unskilled

**II. Staff required on continuing basis**

				1968-69	end of Fourth Plan.
Skilled.					
(a) Technical	..	..	..	26	12
(b) Non-technical		..	..	51	18
<i>Unskilled</i>	..	..	..	1,300	625

## DRAFT FOURTH FIVE YEAR PLAN (1969-74)

## STATEMENT IV

Check list in respect of principal project costing Rs. 5 crores and above.

*Pochampad Project*

1. Name of the project with brief description and location :  
 The project consists of construction of a reservoir at Pochampad across Godavari River and to excavate a canal for a length of 70 miles to irrigate lands in Nizamabad and Karimnagar districts.
2. Gestation period in years :—It is proposed to complete the project by the end of IV Plan.
3. Cost estimates and outlay (Rs. round lakhs)
  - (a) Total estimated cost : .. ..
    - (i) Total : Rs. 4,010.00 lakhs .. ..
    - (ii) Foreign Exchange.
  - (b) outlay and expenditure.

Expenditure upto 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 proposed		Three years total 1971-74		Balance after 1973-74 if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1,086.54	..	2,923.46	..	500.00	..	700.00	..	1,723.46	..	..	..

4. Programme of Output/benefits.

Items	Unit	Progress upto 1968-69	Target for IV Plan	PHASING		
				1969-70	1970-71	end of 1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Potential	1900 Acres	..	570.00	..	..	570.00

5. Training of Technical and Managerial personnel.



## DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

## STATEMENT IV.

Check list in respect of principal project costing Rs. 5 crores and above.

1. Name of project with brief description and location:—T. B. P. H. L. C. (Stage I)

This scheme comprises of excavation of main canal to M. 116/0-436, uravakonda out from M. 116-436 to 121/6, construction of a regulator excavating M. P. North and south canals.

2. Gestation period in years:—This scheme is completed except for payment of L.A. Charges.
3. Cost estimates and outlay (Rs. round lakhs).

(a) Total estimated cost :

- (i) Total Andhra Rs. 1,237.28 lakhs Board Rs. 649.35 lakhs  
(ii) Foreign Exchange.

(b) Outlay and expenditure :

Expenditure upto 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 proposed		Three years total 1971-74		Balance after 1973-74 if any.	
Total (1)	F.E. (2)	Total (3)	F.E. (4)	Total (5)	F.E. (6)	Total (7)	F.E. (8)	Total (9)	F.E. (10)	Total (11)	F.E. (12)
A. 1,174.63	..	62.65	..	32.00	..	30.65	..	..	..	..	..
B. 638.65	..	10.70	..	10.70	..	..	..	..	..	..	..

(A=Andhra B. Board)

4. Programme of output/benefit

Item	Unit	Progress upto 1968-69	Target for IV Plan	PHASING		
				1969-70	1970-71	end of 1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Potential	1,000 acres	119.00	119.00	119.00	119.00	119.00
					cumulative	





## DRAFT FOURTH FIVE YEAR PLAN (1969-74)

## STATEMENT IV.

## Check list in respect of principal project costing Rs. 5 crores and above

1. Name of project which brief description and location :—T.B.P., H.L.C., Stage II.

This scheme comprises of (i) construction of a dam across Pennar river near Mylavaram (ii) widening and lining of T. B. P., H.L.C. main canal (iii) excavation of Guntakal branch and Cuddapah north and south canals to irrigate lands in Anantapur and Cuddapah districts.

2. Gestation period in years :—This scheme is expected to be completed during IV Plan period.

3. Cost estimates and outlay (Rs. round lakhs)

(a) Total estimated Cost ;

(i) Total Andhra Rs. 852.00, lakhs Board Rs. 274.00 lakhs

(ii) Foreign exchange.

(b) Outlay and expenditure.

Expenditure upto 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 proposed		Three years total 1971-74		Balance after 1973-74 if any	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
A. 37.57	..	814.43	..	260.00	..	200.00	..	354.43	..	..	..
B. 1132.70	..	141.30	..	100.00	..	41.30	..	..	..	..	..

A—Andhra

B—Board

4. Programme of output/benefits

Item	Unit	Progress upto 1968-69	target for IV Plan	PHASING		
				1969-70	1970-71	end of 1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Potential	1000 acres	..	137.43	..	50.00	137.43
					(cumulative)	

5. Training of technical and managerial personnel :—Nil.

6. Employment (Man-Years)	1966-67	1967-68	1968-59	<u>FOURTH PLAN</u>
				<i>Year by year.</i>

**I. Additional requirements :**

*Skilled :*

(a) Technical.

(b) Non-Technical.

*Skilled :*

**II. Staff required on continuing basis**

				<b>end of Fourth Plan.</b>	
				<b>1968-69</b>	
(a) Technical	..	..	..	184	250
(b) Non-technical	..	..	..	349	480
Unskilled	..	..	..	9,200	12,500

## DRAFT FOURTH FIVE-YEAR PLAN—(1969-74)

## STATEMENT IV.

Check list in respect of principal project costing Rs. 5 crores and above.

1. Name of the Project with brief description and location :—Godavari Barrage.

The existing anicut across the Godavari at Dowleshwaram etc., are proposed to be replaced with a barrage to avoid any possible damage to the existing anicut.

2. Gestation period in years :—The work has yet to be taken up.

3. Cost estimates and outlay (Rs. round lakhs)

(a) Total estimated cost :

(i) Total : Rs. 2100 lakhs

(ii) Foreign exchange.

(b) Out lay and expenditure.

Expenditure upto 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years total 1971-74		Balance after 1973-74 if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
..	..	500.00	..	..	..	10.00	..	490.00	..	1,700.00	..

4. Programmes of output/benefits

Item	Unit	Progress upto 1968-69	Target for IV Plan	PHASING		
				1969-70	1970-71	end of 1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Potential	1,000 Acres	..	..	..	..	..

5. Training of Technical and managerial personal :

6. Employment (Man-years)	1966-67	1967-68	1968-69	<i>Fourth Plan Year by Year</i>
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**I. Additional requirements :***Skilled*

(a) Technical

(b) Non-technical.

*Unskilled :***II. Staff required on continuing basis****end of Fourth  
1968-69 Plan:***Skilled :*

(a) Technical

.. 350

(b) Non-technical

.. 525

(c) Unskilled

.. 10,500

## DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

## STATEMENT IV

Check list in respect of principal project costing Rs. 5 crores and above.

1. Name of the project with brief description and location :—*Somasila Dam.*

This project envisages the construction of a dam across Pennar near Somasila for stabilising the existing ayacut in Pennar delta.

2. Gestation period in years :—The project has yet to be taken up F. R. L 317.00.

3. Cost estimates and outlay (Rs. round lakhs).

(a) Total estimates cost :

(i) Total : Rs. 1,276.00 lakhs.

(ii) Foreign exchange.

(b) Outlay and expenditure.

Expenditure upto 1968-69		Outlay pro- posed 1969-74		1969-70 approved		1970-71 proposed		Three years total 71-74		Balance after 73-74 if any.	
Total (1)	F.E. (2)	Total (3)	F.E. (4)	Total (5)	F.E. (6)	Total (7)	F.E. (8)	Total (9)	F.E. (10)	Total (11)	F.E. (12)
...	..	200.00	..	..	..	..	..	200.00	..	1,076.00	..

4. Programme of output/benefits.

Item	Unit	Progress upto 1968-69	Target for IV Plan	PHASING		
				1969-70	1970-71	end of 1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Potential	1,000 Acres	..	..	..	..	..

5. Training of technical and managerial personnel.

6. Employment (Man-years) 1966-67 1967-68 1968-69 *Fourth Plan*  
*Year by Year.*

**I. Additional requirements :**

*Skilled :*

(a) Technical.	..	..	..	..	..
(b) Non-Technical.	..	..	..	..	..
<i>Unskilled.</i>	..	..	..	..	..

**II. Staff required on continuing basis**

*Skilled :*

	1968-69	end of Fourth Plan :
(a) Technical	..	170
(b) Non-technical	..	250
Unskilled,	..	8,500

## DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

## STATEMENT IV

CHECK-LIST IN RESPECT OF PRINCIPAL PROJECT  
COSTING Rs. 5 CRORES AND ABOVE1. Name of Project with brief Description and Location : Andhra Share of  
Balimela Dam :

Construction of Balimela Dam on Sileru river is a joint venture of Andhra Pradesh and Orissa Governments subject to a maximum expenditure of Rs. 1,200 lakhs by Andhra Pradesh. This State will get a regulated discharge of 2,100 cusecs from Balimela Dam. It is situated up-stream of Upper Sileru Project site at a distance of about 15 K.M.

2. Gestation period in years .. .. 10 years.

3. Cost estimates and outlays .. .. (Rs. round lakhs)

## (a) Total estimated cost :

(i) Total Rs. 1,200 lakhs Andhra Pradesh share Rs. 60 lakhs (towards Andhra Pradesh Power House Civil works) ;

(ii) Foreign exchange. Nil

## (b) Outlay and expenditure :

Expendi- ture upto 1968-69	Outlay pro- posed 1969-74	1969-70 Approved		1970-71 proposed		Three years total 1971-74		Balance after 1973-74 if any			
Total F.E.	Total F.E.	Total F.E.	Total F.E.	Total F.E.	Total F.E.	Total F.E.	Total F.E.	Total F.E.	Total F.E.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
680	..	480	..	50	..	50	..	380	..	Nil.	Nil.



## 4. Programme of out put/benefits :

Item	Unit	Progress upto	Target for Fourth Plan	PHASING		
				1968-69	1969-70	1970-71

The State will get a regulated discharge of 2,100 cusecs from Balimela Dam to be utilised in the Project/down-stream *i.e.* Upper Sileru, and Lower Sileru Projects.

## 5. Training of Technical and managerial personnel :

The Project is being executed by the Chief Construction Engineer, Balimela Dam Project.

## 6. Employment (Man-years) :

1966-67	1967-68	1968-69	<u>Fourth Plan</u>
			Year by Year

## I. Additional requirements :

*Skilled :*

(a) Technical .. .. .

(b) Non-Technical .. .. .

*Unskilled* .. .. .

II. Staff required on continuing basis .. 1968-69 *End of Fourth Plan**Skilled :*

(a) Technical .. .. .

(b) Non-Technical .. .. .

*Unskilled* .. .. .

## DRAFT FOURTH FIVE-YEAR PLAN (1969-74)

## STATEMENT IV

CHECK-LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
Rs. 5. CRORES AND ABOVE.

## 1. Name of Project with brief description and location :

*Srisaïlam Hydro-Electric Project* :—This scheme envisages installation of 4×110 M.W. units in the first stage. The project is located near the famous Srisaïlam Temple in Kurnool district.

## 2. Gestation period.

## 3. Cost estimates and outlays :—(Rupees round lakhs).

## (a) Total estimated cost :

(i) Total : Rs. 7470 lakhs

(ii) Foreign exchange.

## (b) Outlay and expenditure

Expenditure upto 1968-69		Outlay pro- posed 1969-74		1969-70 approved		1970-71 proposed		Thtee years total 71-74		Balance after 73-74 if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
2,159	..	3,400	..	450	..	600	..	2,350	..	1,911	..

## 4. Programme of output benefits :

Item	Unit	Progress upto 1968-69	Target for Fourth Plan	PHASING		
				1969-70	1970-71	End of 1973-74
Installed Capacity	M.W.	Civil works will be in progress.	Nil. Main dam and other civil works would be in ad- vanced stage of construction.	..	Nil.	Nil.

## 5. Training of Technical and managerial personnel :

Adquate number of experienced personnel are available in the department for construction of the project.

## 6. Employment (Man-years)

## STATEMENT IV

CHECK-LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
RS. 5 CRORES AND ABOVE

1. Name of the Project with brief description and location :

*Lower Sileru Hydro-Electric Scheme :*

This scheme envisages installation of 4×100 M.W. sets in the first stage. The project is located down stream of Upper Sileru Project, main dam at Donkarayi about 30 K.M. down stream of Upper Sileru Project and the Power House is located near Pollur about 24 K.M. from Donkarayi Dam.

2. Gestation period in years :—11 years.  
3. Cost estimates and outlays :—(Rs. round lakhs).

(a) *Total estimated cost :*

(i) Total : Rs. 4,236 lakhs

(ii) Foreign Exchange : Rs 464 lakhs

(b) *Outlay and Expenditure :*

Expenditure upto 1968-69		Outlay pro- posed 1969-74		1969-70 approved		1970-71 proposed		Three years total 71-74		Balance after 73-74 if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
605	64	3,570	400	500	100	750	150	2,320	150	€1	Nil.

4. Programme of output/benefits.

Item	Unit	Progress upto 1968-69	Target for Fourth Plan	Phasing		
				1969-70	1970-71	End of 1973-74
Installed Capacity.	M.W.	Main civil works would be in pro- gress.	200 M.W.	..	..	200 M.W.

5. Training of technical and managerial personnel :—Trained and experienced personnel are available in the department for supervision and construction.

6. Employment (Man-Years) .. 1966-67 1967-68 1968-69 Fourth Plan  
year by year.

I. Additional requirements :

*Skilled :*

(a) Technical	..	Nil.	Nil.	Nil.	Nil
(b) Non-Technical	..	Nil.	Nil.	Nil.	Nil
<i>Unskilled</i>	..	<i>Nil.</i>	<i>Nil.</i>	<i>Nil.</i>	Nil
		1969-70	1970-71	1971-72	1973-74

*Skilled :*

(a) Technical	..	200	300	..	..
(b) Non-Technical	..	40	40	..	..
<i>Unskilled</i>	..	2,000	3,000	..	..

II. Staff required on continuing basis :

1968-69 *End of  
Fourth Plan*

*Skilled :*

(a) Technical	..	..	..	Nil.	50
(b) Non-Technical	..	..	..	Nil.	85
<i>Unskilled</i>	..	..	..	..	30

## STATEMENT IV

CHECK LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
Rs. 5 CRORES AND ABOVE

1. Name of Project with brief description and location :  
*Ramagundam Thermal Scheme 'B' Station (62.5 M.W.)*

The scheme provides for installation of a 62.5 M.W. unit at Ramagundam near the existing 37.5 M.W. Thermal Power House in Karimnagar District.

2. Gestation period in years .. .. 9 years .
3. Cost estimates and outlays .. (Rs. round lakhs).

(a) Total estimated cost : ..

(i) Total Rs. 1,248 lakhs

(ii) Foreign Exchange :Rs. 487 lakhs

(b) Outlay and expenditure :

Expenditure upto 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three years total 1971-74		Balance after 1973-74 if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(01)	(11)	(12)
1000	366	248	121	180	90	68	37	Nil.	Nil.	..	..

4. Programme of out put/benefits :

Item	Unit	Progress upto 1968-69	Target for Fourth Plan.	PHASING		
				1969-70	1970-71	End of 1973-74
Installed capacity.	M.W.	The erection of boilers and turbo generator set would be completed. The switch-yard would be completed. The erection of Coal handling Plant would be completed.	65.5 M.Ws.	..	62.5	M.W.

5. *Training of Technical and managerial personnel :*

There are adequate experienced and trained personnel available in the department to manage the construction and operation of Power House.

6. *Employment (Man-years)*

1966-67 1967-68 1968-69 Fourth Plan  
Year by Year.

I. **Additional requirements :**

*Skilled :*

(a) Technical Nil. Nil. Nil. Nil.

(b) Non-Technical Ni. Nil. Nil. Nil.

*Unskilled :* Nil. Nil. Nil. Nil.

II. **Staff Required on continuing Basis :**

1968-69 *End of  
Fourth plan*

*Skilled :*

(a) Technical .. .. Nil. 82

(b) Non-Technical .. .. Nil. 20

*Unskilled* .. .. Nil. 200

## STATEMENT IV

CHECK LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
Rs. 5 CRORES AND ABOVE.

## 1. Name of Project with brief description and location :

*Kothagudem Thermal Scheme III Stage :*

This scheme envisages installation of 2×110 M.W. capacity units at Palvancha near Kothagudem where 4×60 M.W. units under the first and second stages are already under operation.

## 2. Gestation period in years . . 5 years.

## 3. Cost estimates and outlays . (Rs. round lakhs).

*(a) Total estimated cost :**(i) Total : Rs. 4,400 lakhs**(ii) Foreign Exchange : Rs. 500 lakhs (Tentative).**(b) Outlay and expenditure :*

Expenditure upto 1968-69		Outlay pro- posed 1969-74		1969-70 approved		1970-71 proposed		Three years total 1971-74		Balance after 1973-74 if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
40	—	4,000	500	1,250	150	1,500	200	1,250	150	360	Nil.

## 4. Programmes of output/Benefits :

Item	Unit	Progress upto 1968-69	Target for Fourth Plan.	PHASING		
				1969-79	1970-71	End of 1973-74
Installed Capacity.	M.W.	..	220	..	..	220

## 5. Training of technical and managerial personnel ; Technical personnel with adequate knowledge and experience required for the works are available in the department.

6. *Employment (Man-years)*

	1966-67	1967-68	1968-69	<u>Fourth Plan</u>	
				Year by year.**	

I. **Additional requirements :***Skilled :*

(a) Technical	.. Nil.	Nil.	12		
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(b) Non-Technical	.. Nil.	Nil.	2		
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<i>Unskilled</i>	.. Nil.	Nil.	4		
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	**1969-70	1970-71	1971-72	1972-73	1973-74
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*Skilled*

(a) Technical	.. 400	600	100	..	..
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(b) Non-Technical	.. 40	60	5	..	..
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<i>Unskilled</i>	.. 1,600	2,000	..	..	..
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II. **Staff required on continuing basis :***Skilled*

				1968-69	<i>End of Fourth Plan.</i>
(a) Technical	..	..	..	Nil.	160

(b) Non-Technical	..	..	..	Nil.	40
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<i>Unskilled</i>	....	..	..	.. Nil.	800
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## STATEMENT IV

CHECK-LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
Rs. 5 CRORES AND ABOVE

## 1. Name of Project with brief description and locatoin :

*Srisailam Hydro Electric Scheme : Transmission lines and Sub-stations portion only.*

This Scheme envisages installation of  $4 \times 110$  MW. units at Srisailam in the first stage with necessary provision for transmission lines and sub-stations. Important lines like Nagarjunasagar to Srisailam and Srisailam to Cuddapah are included in this scheme.

2. Gestation period .. 8 years.

3. Cost estimates and outlays .. (Rs. round lakhs).

(a) Total estimated cost :

(i) Total Rs. 851 lakhs.

(ii) Foreign Exchange Rs. 60 lakhs.

(b) Outlay and expenditure :

Expenditure upto 1968-69		Outlay proposed 1969-74		1969-70 Approved		1970-71 Proposed		Three year total 1971-74		Balance after 1973-74 if any.	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
458	30	393	30	180	20	120	10	93	..	Nil.	Nil.

## 4. Programme of output/Benefits :

Item	Unit	Progress upto 1968-69	Target for Fourth Plan.	PHASING		
				1969-70	1970-71	End of 1973-74
(a) Nagarjunasagar-Srisailam	220 K.V.	lines	was completed	and	Sri-	sailam to Cuddapah.

220 KV Lines    220 KV SS Line    To complete the scheme in full    Item (d) will be completed.

(b) Srisailam-Cuddapah 220 K.V. S. C. line.

The line is targetted for completion the end of 1968-69.

(c) Gooty-Kurnool 132 K.V. S. C. line.

The line is targetted for completion by the end of 1968-69.

(d) Gooty-Dharmavaram 132 K.V. S.C. Line.

The line is targetted for completion in 1969-70.

5. *Training of technical and managerial personnel :*

There are adequate trained and experienced departmental personnel for the construction of 220 KV. transmission lines and Sub-stations.

6. *Employment (Man-years) :*

	1966-67	1967-68	1968-69	<u>Fourth Plan</u>
				Year by Year.

I. **Additional requirements :**

*Skilled :*

(a) Technical	Nil.	Nil.	Nil.	Nil.
(b) Non-technical	.. Nil.	Nil.	Nil.	Nil.

<i>Unskilled :</i>	Nil.	Nil.	Nil.	Nil.
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II. **Staff required on continuing basis :**

				1968-69	<i>End of Fourth Plan</i>
<i>Skilled</i>					
(a) Technical	..	..	..	40	80
(b) Non-Technical	..	..	..	8	16
<i>Unskilled</i>	..	..	..	20	40

## STATEMENT IV

CHECK-LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
Rs. 5 CRORES AND ABOVE

1. Name of Project with brief description and location :

*Transmission and Distribution Scheme III Plan.*

This scheme envisages construction of various 220 K.V. , 132 K.V. lines and sub-station. All the distribution works under this schemes were completed. The inter-state transmission link with Madras is included in this scheme. The following are the main works taken up under this head.

*Transmission Lines :*

- (1) Upper Sileru-Kothagudem 220 KV. S.C. line.
- (2) Kothagudem-Nagarjunasagar 220 K.V. S.C. line.
- (3) Upper Sileru-Gazawaka 220 K.V. S. C. Line.
- (4) Cuddapah-Madras Border 220 K.V.S.C. Line.
- (5) Warangal-Hyderabad 132 KV.D.C. Line.
- (6) Kurnool-Srisailam 132 KV. S.C. Line.
- (7) Dharmavaram- Kalikiri- Chittoor 132 K.V.S.C. Line.

*Sub-Stations :*

- (8) 220 K.V. Sub-Stations at Gazawaka and Nagarjunasagar.
- (9) 132 K.V. Sub-Stations at Kurnool, Chittoor and Kalikiri.
- (10) Establishing new 33 K.V. Sub-Stations and power lines carrier current equipment and Central loan despatch station at Kothagudem Thermal Station.

2. Gestation period in years      10 years.

3. Cost estimates and outlays . (Rs. round lakhs)

(a) *Total estimated cost :*

- (i) Total Rs. 1892 lakhs.
- (iii) Foreign exchange : Rs. 200 lakhs.

(b) *Outlay and expenditure :*

<i>Expenditure upto 1968-69</i>		<i>Outlay proposed 1969-74</i>		<i>1969-70 approved</i>		<i>1970-71 proposed</i>		<i>Three years Balance total 71-74 after 73-74 if any.</i>			
<i>Total</i>	<i>F.E.</i>	<i>Total</i>	<i>F.E.</i>	<i>Total</i>	<i>F.E.</i>	<i>Total</i>	<i>F.E.</i>	<i>Total</i>	<i>F.E.</i>	<i>Total</i>	<i>F.E.</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1,647	170	245	30	150	20	70	10	25.0	Nil.	Nil.	Nil.

## 4. Programme of output Benefits :

Item	Unit	Progress upto 1968-69	Target for Fourth Plan.	PHASING		
				1969-70	1970-71	End of 1973-74
The 220 K.V. Upper Sileru Kothagudem To Complete the scheme in all respects	Kothagudem, Nagarjunasagar and Upper Sileru-Gazuwaka lines were completed. Hyderabad-Warangal 132 K.V. line was completed.			132 K.V. Dharmavaram-Kalikiri Chittoor line with connected substations will be completed in 1969-70 and 1970-71		
(a)	Cuddapah-Madras State Boarder 220 K.V.S.C. Line : The line is targeted for completion by the end of 1968-69.					
(c)	Kurnool-Srisailam 132 K.V. S.C. Line. The line is targeted for completion by the end of 1968-69.					

5. Training of technical managerial personnel :—There are adequate experienced and trained personnel available in the department for the construction of 220 K.V. 132 K.V. transmission lines and sub-stations.

## 6. Employment (Man Years).

	1966-67	1967-68	1968-69	Fourth Plan year by year.	
<b>I. Additional requirements Skilled :</b>					
(a) Technical	.. Nil.	Nil.	Nil.	Nil.	Nil.
(b) Non-Technical	.. Nil.	Nil.	Nil.	Nil.	Nil.
Unskilled	.. Nil.	Nil.	Nil.	Nil.	Nil.
<b>II. Staff required on continuing basis :</b>					
				1968-69	End of IV Plan.
<i>Skilled :</i>					
(a) Technical	..	..	..	150	190
(b) Non-Technical	..	..	..	25	30
<i>Unskilled</i>	..	..	..	80	100

## STATEMENT IV

CHECK LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
Rs. 5 CRORES AND ABOVE

## 1. Name of the Project with brief description and location :

*Fourth Plan transmission scheme and Railway Electrification :*

The Fourth Plan transmission scheme envisages construction of 220 K.V. 132 K.V. transmission lines and sub-stations and the other connected works. Electrification of Madras to Vijayawada Railway section which is a separate scheme is also included in this item.

The following are the 220 K.V. and 132 K.V. lines included in the Fourth Plan Transmission Scheme and which are proposed to be completed in the Fourth Plan period.

- (a) 220 K.V.S.C. Lines .. 1. Kothagudem-Hyderabad.  
2. Upper Sileru-Gazuwaka (II Circuit).  
3. Lower Sileru-Bommur.  
4. Kothagudem-Gunadala (Already taken up)  
5. Gunadala-Nellore.
- (b) 132 K.V.S.C. lines .. 1. Kurnool-Mahaboobnagar.  
2. Khammam-Nalgonda Nagarjunasagar.  
3. Kothagudem-Khammam.  
4. Ramagundam-Nirmal.  
5. Garividi-Tekkali.  
6. Hyderabad-Sangareddy-Tandur.  
7. Adoni-Kurnool (conversion from 66 K.V. to 132 K.V.).

2. Gestation period in years .. 9 years.

3. Cost estimates and outlays (Rs. round lakhs).

(a) *Total Estimated Cost :*

(i) Total Rs. 3,600 lakhs (Fourth Plan Transmission and +200 Railway Electrification).

(ii) Foreign Exchange Rs. 200 lakhs

A combined estimate for Fourth Plan Transmission and Distribution scheme costing Rs. 6,784 lakhs was already forwarded to Central Water and Power Commission.

<i>Expenditure upto</i> 1968-69	<i>Outlay pro- posed</i> 1969-74	1969-70 <i>approved</i>	1970-71 <i>proposed</i>	<i>Three years</i> <i>total 71-74</i>	<i>Balance</i> <i>after 73-74</i> <i>if any.</i>						
<i>Total</i>	<i>F.E. Total</i>	<i>Total</i>	<i>F.E. Total</i>	<i>Total</i>	<i>F.E. Total</i>						
174	45	3,000	135	380	15	620	30	2,000	90	626	20

## 4. Programme of Output/Benefits :

Item	Unit	Progress upto 1968-69	Target for Fourth Plan.	PHASING		
				1969-70	1970-71	End of 1973-74
(a) Kothagudem-Gunadala 220K.V.S.C. Lineworkk would be in progress by the end of 1968-69			Completion of lines and connected sub-stations under item (i) above.	Kothagudem Gundala 220 K. V.S.C. line Kurnool 132 K. V. line (Conversion from 66K.V. to 132 K.V.)	**All balance lines to be completed.	
(b) 132 K.V. ring main line around twin cities. The lines are targetted for completion in 1968-69.			** Kothagudem-Hyderabad 220 K.V. S. C. line Ramagundam-Nirmal 132 K.V. line Kurnool-Mahaboobnagar 132 K.V. S. C. line.			
(c) Hyderabad-Mahaboobnagar 132 K.V.S.C. line. The line. is targetted for completion in 1968-69.						

## 5. Training of Technical and managerial personnel :

Experienced personnel are available in the Department for construction, operation and maintenance of H. V. and L.V. lines and Sub-Station.

1966-67	1967-68	1968-69	Fourth Plan. year by year**
6. Employment (Man-years) ..			

## I. Additional requirements :

## Skilled :

(a) Technical	..	..	..	..
(b) Non-Technical	..	..	..	..

**Unskilled	..	..	..	..
-------------	----	----	----	----

1969-70	1970-71	1971-72	1972-73	1973-74
..	.. 100	..	..	..
..	.. 20	..	..	..
..	.. 400	..	..	..

## II. Staff required on continuing basis :

	1968-69	End of Fourth Plan
Skilled :		
(a) Technical	.. ..	200
(b) Non-Technical	.. ..	25
Unskilled	.. ..	200

STATEMENT IV  
CHECK-LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
Rs. 5 CRORES AND ABOVE

1. Name of the Project with brief description and location :  
*Fourth Plan Distribution Scheme.*

2. Gestation period in years .. 9 years.

3. Cost estimates and outlays .. (Rs. round lakhs).

(a) Total Estimated Cost :

(i) Total Rs. 3184. lakhs

(ii) Foreign Exchange Rs. 75. lakhs

A combined estimate for Fourth Plan Transmission and Distribution for Rs. 6784 lakhs was already forwarded to Central Water and Power Commission.

(b) Outlays and expenditure :

Expenditure upto 1968-69		Outlays proposed 1969-74		1969-70 Approved		1970-71 proposed		Three years Total 1971-74		Balance after 1973-74 if any	
Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.	Total	F.E.
760	20	2337	50	453	12	400	12	1,484	26	87	5

4. Programme of output/benefits :

Item	Unit	Progress upto 1968-69	Target for Fourth Plan	PHASING		
				1969-70	1970-71	End of 1973-74

The following are the anticipated number of service connections effected to the end of 1968-69

1. Domestic 5,27,642
2. Non-Domestic 61,444
3. Public Lighting 6,232
4. L.T. Industrial 18,030
5. H.T. Industrial 958

5 lakhsNo. 1 lakh 1 lakh 31 lakhs  
of service number number number  
connec- of servi- servi- servi-  
tions (1lakh ce conn- ce con- ce con-  
service conn- ections nections nections.  
nection per  
year are  
targetted to  
be effected,  
other than  
agricultural  
service con-  
nections.)

5. *Training of Technical and managerial personnel :*

Experienced personnel are available in the Department to carryout the distribution works.

6. *Employment (Man-years) :*

1966-67 1967-68 1968-69 *Fourth Plan  
year by year.*

I. **Additional requirements :***Skilled :*

(a) Technical	..	..	..	50	***
(b) Non-technical	..	..	..	5	
Unskilled	..	..	..	100	

1969-70	1970-71	1971-72	1972-73	1973-74
..	..	..	100	..
..	..	..	10	..
..	..	..	200	..

II. **Staff required on continuing basis :**

1968-69 *End of  
Fourth  
Plan*

*Skilled*

(a) Technical	..	..	..	..	300
(b) Non-Technical	..	..	..	..	25
Unskilled	..	..	..	..	400



## STATEMENT IV.

CHECK LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
Rs. 5 CRORES AND ABOVE

1. Name of Project with brief description and location :

*Ramagundam Thermal Scheme 'C' Station 440 M.W. :*

This Scheme envisages installation of 4 units of 110 M.W. capacity each at Ramagundam (2×110 M.W. under the First stage.)

2. Gestation period in years .. 6 years.
- 
3. Cost estimates and outlays .. (Rs. round lakhs)

(a) Total estimated cost :

(i) Total F.s. 4,500 lakhs

(ii) Foreign Exchange. —

(b) Outlay and expenditure :

Expenditure upto 1968-69		Outlay propos- ed 1969-74		1969-70 Approved		1970-71 Proposed	
Total (1)	F.E. (2)	Total (3)	F.E. (4)	Total (5)	F.E. (6)	Total (7)	F.E. (8)
..	..	400	..	..	..	..	..
Three year total 1971-74				Balance after 1973-74 if any.			
		Total (9)	F.E. (10)	Total (11)	F.E. (12)		
		400	Nil.	3,900			

4. Programme of Out-put/Benefits.

Item	Units	Progress upto 1968-69	Target for Fourth Plan.	PHASING		
				1969-70	1970-71	END OF 1973-74
Installed capacity.	M.W.	New Scheme	Completion of preliminary works.	..	..	..

5. *Training of technical and managerial personnel :*

There are adequate experienced and trained personnel available in the department to manage the construction and operation of Power House.

6. *Employment (Man-years)*

1966-67 1967-68 1968-69 *Fourth Plan  
year by year.*

I. **Additional requirements :**

*Skilled :*

(a) Technical .. Nil. Nil. Nil. Nil.

(b) Non-technical .. Nil. Nil. Nil. Nil.

*Unskilled :* Nil. Nil. Nil. Nil

II. **Staff required on continuing basis :**

*Skilled* 1968 69 1969-70 1970-71 1971-72 1972-73 1973-74

(a) Technical Nil. Nil. Nil. 15 100 100

(b) Non-technical Nil. Nil. Nil. 4 20 20

*Unskilled :* Nil. Nil. Nil. 30 500 500

## STATEMENT IV

CHECK LIST IN RESPECT OF PRINCIPAL PROJECT COSTING  
RS. 5 CRORES AND ABOVE

1. Name of the Project with brief discription and location :

*Rural Electrification including Agricultural Service connections.*

This Scheme envisages energisation of agricultural pumpsets and electrification of villages.

2. Gestation period in years ..
- 
3. Cost estimates and outlays .. (Rs. round lakhs).

(a) *Total estimated cost :*

(i) Total Rs. 3,000\* lakhs

(ii) Foreign Exchange.

\*This amount indicates provision for this item in Rs. 225.00 crores Power Sector in Fourth Five-Year Plan.

(b) *Outlay and Expenditure :*

<i>Expenditure upto 1968-69</i>	<i>Outlay proposed 197-174</i>	<i>1969-1970 Approved.</i>	<i>1970-71 proposed</i>	<i>Three years total 1971-74</i>	<i>Balance after 1973-74 if any</i>
<i>Total F.E.</i>	<i>Total F.E.</i>	<i>Total F.E.</i>	<i>Total F.E.</i>	<i>Total F.E.</i>	<i>Total F.E.</i>
— —	4,000	.. 800	.. 800	2,400	..

- 4.
- Programme of output/benefits :*

<i>Item</i>	<i>Unit</i>	<i>Progress upto 1968-69</i>	<i>Target for Fourth Plan.</i>	<i>PHASING</i>		
				<i>1969-70</i>	<i>1970-71</i>	<i>END OF 1973-74</i>
<i>Energisation of Pumpsets.</i>		<i>Anticipated total number of pumpsets by the end of 1968-69 is 1,28,659.</i>	200,000	40,000	40,000	1,20,000

5.. *Training of technical and managerial personnel :*

There are adequate experienced and trained personnel available in the department for execution, operation and maintenance of lines and sub-stations, and electrification of villages.

6. *Employment (Man Years) :*

1966-67 1967-68 1968-69 *Fourth Plan  
Year by year  
\*\**

**I. Additional requirements :***Skilled :*

(a) Technical	..	50	..	200
(b) Non-technical	..		..	25
Unskilled	..		..	500

**1969-70	1970-71	1971-72	1972-73	1973-74
60	Nil.	Nil.	Nil.	Nil.
8	Nil.	Nil.	Nil.	Nil.
150	Nil.	Nil.	Nil.	Nil.

**II. Staff required on continuing basis :**

1968-69 *End of  
Fourth  
Plan.*

*Skilled :*

(a) Technical	..	..	..	..	200
(b) Non-technical	..	..	..	..	25
Unskilled	..	..	..	..	200

DRAFT FOURTH FIVE YEAR PLAN 1969-74

STATEMENT V

PHYSICAL PROGRAMMES

Item	Unit	ESTIMATED LEVEL OF ACHIEVEMENT						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

**Agriculture and Forestry :**

*Area Under Forests :*

(i) Area under work Plans	..	..	..	..	..	..	..	..
(ii) Area under quick -growing economic plantations (addl)	Acres	}	14,204	16,209	9,900	9,900	9,900	9,900
(iii) Area under fuel Plantation	Do.							
(iv) Others (addl.)	.. Do.							
Total (addl)	Do.	1,4619	16,271	10,065	10,065	10,050	10,050	10,050

*Area under Commercial Crops :*

*Kharif.*

Crop/area/Irrigated area/  
production.

}  
} Not available

*Area under High-yielding Varieties :*

Wheat :	..	.. '000 acres	—	—	—	—	—	—	—
Paddy	..	.. '000 acres	329.00	766.45	1216.45	1666.45	2116.45	2566.45	3016.45
Jowar	..	.. '000 acres	24.00	82.70	162.70	242.70	322.70	402.70	482.70
Bajra	..	.. '000 acres	31.00	94.88	134.88	174.88	214.88	254.88	294.88
Maize	..	.. '000 acres	33.00	74.59	89.79	105.99	121.19	136.39	141.59

*Fertilizers Distributed :*

Nitrogenous (AsN)	..	Lakh tons	1.63	2.25	2.50	2.80	2.90	3.00	3.20
Phosphatic (as P. 205)	..	..	0.45	1.08	1.25	1.40	1.50	1.60	1.70
Potassic (as K)	..	..	0.05	0.35	0.50	0.76	0.80	0.90	1.00

Soil Conservation on agricultural land '000 acres

**Soil Conservation in catchment Area of River Valley Projects**

**Area Consolidated Lakh acres 4.79 5.77 6.67 7.57 8.47 9.37 10.27**

**No. of Regulated Markets No. — — — — — — —**

STATEMENT V—(Contd.)

Item	Unit	ESTIMATED LEVEL OF ACHIEVEMENT						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Animal Husbandary</b>				12 RVD				
Veterinary hospitals /Dispensaries	No.	Upgrade 20 R.V.C.	7 PVD	8 PVD	8 PVD	8 PVD	8 PVD	3 PVD
Artificial Insemination	No.	..	..	6	10	10	15	19
Stockmen Centres	..	..	..	1SMC 3 VCs.				
Area under fodder crops	Acres	..	..	..	..	..	..	..
Key Village Blocks	No.	..	3	10	4	4	4	..
Cattle breeding Farms	No.	..	4	6	4	2	..	..
Sheep Breeding Farms	No.	..	..	3	..	..	..	..
Sheep & Wool Extension Centres	No.	..	..	..	5	5	5	7
Wool Grading & Marketing Centres	No.	..	..	..	..	..	..	..
[V. H. Veterinary Hospitals, R.V.D. Rural Veterinary Dispensaries; P.V.D. Primary Veterinary Dispensaries]								
Production of Animal Products :								
(a) Milk/Milk Products	1000 litres per day	40	75	118	151	184	223	246
(b) Meat	..	..	..	..	..	..	..	..
(c) Wool	..	..	..	..	..	..	..	..

Number of Government Poultry Farms	..	..	Expansion	..	3 RPFs. 2 DPFS.	3 RPFs. 3 APFS	..	..	..	..	
Number of Poultry Co-operatives			No.	..			..	..	..	..	
Number of Poultry farmers trained :											
(i) Short-term course	..		No.	..	..	..	..	..	..	..	
(ii) Long-term course	..		No.	..	..	..	..	..	..	..	
Intensive Egg and Poultry production-cum-marketing centres (addl.)			No.	..	2 sub-Centres.	1 Centre	1 sub-Centres 4 R.C.D. units.		1 Sub-Centre 1 RCD. units.		
<b>Fisheries :</b>											
Machanisation of boats	..		No.		224	260	285	319	362	413	468
Cold storages for storing fish	..		No.		5	6	6	7	7	8	9
Co-operative marketing (Quantity)			tons.		392	450	460	475	490	505	515
Landing and Berthing facilities provided in harbours	..		No.		1	1	1	2	2	3	4
Loans advanced to Fishermen's Co-operatives	..	..	Rs. lakhs		4.00	7.50	6.00	6.00	7.00	7.00	7.00
Fingerlings distributed	..		No. lakhs.		115.48	150.00	150.00	195.00	240.00	285.00	330.00
Number of Fish-seed farms	..		No.		38	38	38	39	39	39	39



STATEMENT V—(Contd.)

Item	Unit	ESTIMATED LEVEL OF ACHIEVEMENT						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>2. Co-operation :</b>								
<i>(i) Primary Co-operative Societies</i>								
Number	No.	No targets in view of formation of viable units						
Membership (cumulative)	.. No. lakhs.	28.59	29.00	30.00	31.00	32.00	32.50	33.00
Share capital of members	.. Rs. crores	5.20	5.70	6.40	7.10	7.80	8.50	9.20
Deposits of members	.. Do.	1.30	1.42	1.54	1.68	1.82	1.95	2.10
<i>(ii) Agricultural Credit :</i>								
<i>(a) Short and Medium term</i>								
Advance during year	.. Rs. crores	..	38.00	40.00	42.00	44.00	47.00	50.00
Amount outstanding at the end of the year	.. Rs. crores	..	..	..	..	..	..	..
<i>(b) Long term</i>								
Advances during year	.. Rs. crores	11.44	20.00	22.00	24.00	26.00	28.00	30.00
Amount outstanding at the end of the year	.. Rs. crores	..	..	..	..	..	..	..
<i>(iii) Primary Marketing Societies</i>								
	No.	272	..	No targets.				
Business handled during the year	Rs. lakhs	..	..	..	..	..	..	..
<i>(iv) Processing Societies :</i>								
<i>(a) Rice Mills</i>								
	No.	143	143	147	151	155	159	163

(b) Business handled	Rs. lakhs	..	..	..	..	..	..	..
(i) Sugar factories	No.	8	8	8	9	9	9	9
(ii) Production	Rs. lakhs	..	..	..	..	..	..	..
(c) Cotton ginning and pressing	No.	..	..	..	..	..	..	..
Business handled	Rs. lakhs	..	..	..	..	..	..	..
(d) Others	No.	40	40	41	43	44	46	49
(i) Business handled	Rs. lakhs	..	..	..	..	..	..	..

### 3. Major and Medium Irrigation

Estimated area under irrigation :

(a) Potential (cumulative)	.. 000 acres	1,201.40	1,477.28	1,583.20	1,817.22	2,421.89	3,022.02	3,523.30
(b) Utilisation	.. 000 acres	706.334	1,127.24	..	..	..	..	2,953.30

### 4. Power :

(i) Installed capacity	:: (000 KW)	645.5	645.5	645.5	708.0	708.0	818.0	1128.0
(ii) Electricity generated	.. <sup>Million</sup> (000 KW)†	1,906	2,580	2,720	3,185	3,235	3,770	4,900
(iii) Electricity sold	.. Do.	1,334	1,880	2,260	2,710	3,250	3,900	4,680
(iv) Rural Electrification :								
(a) Villages electrified	..	No targets fixed.						
(b) Pumpsets energised by electricity	} No.	90,664	1,2,9664	1,69,664	2,09,664	2,49,664	2,89,664	3,29,664
(c) Tubewells energised by electricity								

## STATEMENT V—(Contd.)

Item	Unit	ESTIMATED LEVEL OF ACHIEVEMENT							
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<b>5. Transport</b>									
(i) Surfaced roads	.. (000 Kms.)		30.15	30.58	31.00	31.42	31.85	32.28	32.72
(ii) Unsurfaced roads	.. Do.		19.33	19.57	20.39	21.22	22.02	22.82	23.62
(iii) Villages not connected by roads	.. (No.)		Not available.						
<b>6. Education :</b>									
<i>General Education :</i>									
<i>Enrolment :</i>									
(i) Classes I-V	.. No.		3,794	3,794	4,016	4,338	4,610	4,882	5,154
Total as per centage of the population in this age group.	.. %		74	74	76	80	83	86	90
Grils	.. in 000		1,547	1,547	1,695	1,843	1,991	2,139	2,287
as percentage of population in this age group	.. %		60	60	64	68	72	76	80
(ii) Classes VI-VIII	.. in 000		580	580	628	676	724	772	820

Total	..	..	..	..	..	..	..	..
as percentage of population in this age-group.	..	..	..	..	..	..	..	..
Girls	..	..	..	..	..	..	..	..
as percentage of population in this age-group	..	..	..	..	..	..	..	..
(iii) Classes IX-XI	..	..	..	..	..	..	..	..
Total	..	..	..	..	..	..	..	..
as percentage of population in this age-group	..	..	..	..	..	..	..	..
Girls	..	..	..	..	..	..	..	..
as percentage of population in this age-group	..	..	..	..	..	..	..	..
(iv) University/Collegiate								
Total (Arts, Science and Commerce)	..	..	..	..	..	..	..	..
Science only	..	..	..	..	..	..	..	..

*Teachers :*

(i) In Elementary schools:

%trained.  
In Secondary Schools.  
%trained.

Not available

STATEMENT V—(Contd.)

Item	Unit	ESTIMATED LEVEL OF ACHIEVEMENT						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Technical Education :</b>								
<b>(i) Engineering Colleges :</b>								
(a) Number of institutions	No.	..	..	..	..	..	..	..
(b) Sanctined annual admission capacity	Nos.	..	..	60	120	140	200	100
(c) Outturn	Nos.	Not available.						
<b>(ii) Polytechnics :</b>								
Number of Institutions	No.	..	..	..	..	..	..	..
Sanctioned Annual admission Capacity	No	..	60	60	100	200	100	100
<b>7. Health :</b>								
(i) Hospitals	No.	..	—	..	..	..	..	..
<b>(ii) Dispensaries</b>								
(a) Urban	No.	267	267	267	267	267	267	267
(b) Rural	No.	1,775	1,775	1,776	1,776	1,176	1,778	1,778

<b>(iii) Beds :</b>									
<b>(a) Urban Hospitals &amp; Dispensaries</b>									
..	..	No.	19,635	19,635	210	20215	20572	20648	20,710
<b>(b) Rural Hospitals and Dispensaries</b>									
..	..	No.	5301	5301	5414	5517	5983	6515	7148
<b>(iv) Primary Health Centres Nos.</b>									
..	..	Nos.	408	409	416	424	432	440	448
<b>(v) Training of Nurses :</b>									
Institute	..	Nos.	..	..	..	..	..	..	..
Annual intake	..	Nos.	..	..	50	..	..	..	..
Annual outturn	..	Nos.	..	..	..	..	..	40	..
<b>(vi) Control of Diseases :</b>									
T.B. Clinics	..	Nos.	39	39	39	39	39	39	39
Leprosy Control Units	..	Nos.	2	2	3	4	4	4	4
V.D. Clinics	..	Nos.	21	21	51	51	51	51	51
Filaria Units	..	Nos.	..	..	..	..	..	..	..
<b>(vii) Maternity and Child Welfare Centres</b>									
..	..	Nos.	..	..	..	..	..	..	..

STATEMENT V--(Contd.)

Item	Unit	ESTIMATED LEVEL OF ACHIEVEMENT						
		1967-68	1968-69	1969-70	1970-71	1971-72	1972-73	1973-74
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>(viii) Medical Education :</b>								
(a) Medical Colleges	Nos.	..	..	..	..	..	..	..
(b) Annual admissions	Nos.	30	..	..	..	..	..	..
(c) Annual outturn	..	..	..	..	..	20	..	..
<b>8. Water Supply and Sanitations :</b>								
<i>(a) Urban :</i>								
<i>Corporation Towns :</i>								
(i) Augmentation of protected water supply.	Million gallons. per day	62.0	68.7	68.7	68.7	68.7	76.7	96.7
(ii) Municipal towns covered	No.	43	43	43	43	43	44	61
(iii) Municipal Population covered.	Millions.	3.72	3.72	3.72	3.72	3.72	3.798	4.215
<i>Other Towns :</i>								
(i) Towns covered	No.	4	15	28	28	28	28	58
(ii) Population covered	Millions	0.033	0.146	0.248	0.248	0.248	0.248	0.463
<i>(b) Rural</i>								
<i>Piped Water supply.</i>								
(i) Villages covered (addl.)	Nos.	95	65	60	30	30	30	58
(ii) Populatin covered (addl.)	Millions	0.47	0.26	0.24	0.26	0.30	0.20	0.22

*Simple Wells :*

(i) Villages covered (addl.) .. Nos.	1,450	3,500	2,800	2,800	2,800	2,000	2,923
(ii) Population covered (addl.) .. (Millions)	1.45	3.50	2.80	2.80	2.80	2.00	2.00

**9. Housing :**

(i) Industrial .. .. No. of tenements.	..	..	150	300	500	400	328
(ii) Slum clearance (addl.) .. Do.	48	3,145	2,430	2,430	2,430	2,430	2,430
(iii) Low Income Group (addl.) Housing Do.	..	..	219	219	219	219	219
(iv) Village Housing :							
(a) Number of villages (addl.) No.	16	..	..	..	..	..	..
(b) Number of houses completed (addl.) No.	146	30	131	146	149	143	131
(v) Land acquisition and Development. Area developed (Acres)	..	..	..	..	..	..	1

405

**10. Welfare of Backward Classes :**

(i) T.D. Blocks .. Nos.	..	..	..	..	..	..	..
(ii) Training staff by categories .. Nos.	..	..	..	..	..	..	..
(iii) Pre-matric scholarships ..	..	..	..	..	..	..	..
(a) General courses .. Nos. }							
(b) Technical and Professional Courses .. Nos. }	573	600	1800	2200	2,400	2,600	3,000