



FOURTH FIVE-YEAR PLAN TELANGANA

OUTLINE AND PROGRAMMES



PLANNING AND CO-OPERATION DEPARTMENT
GOVERNMENT OF ANDHRA PRADESH

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Part I—Outline

INTRODUCTION

The National Development Council decided in 1967 that the Fourth Five-Year Plan should be formulated for the period 1969-74. With reference to this, the Planning Commission suggested in February, 1968 that the States may undertake a review of economic development and also take preliminary steps for formulating a plan. Accordingly, 12 Working Groups were constituted for formulating the State's Fourth Plan. The aggregate of the outlays recommended by these Working Groups came to Rs. 628 crores. It was subsequently decided that special provision should be made in the State Plan for Chronically Drought Affected Areas, Metropolitan Areas and Tribal Areas. In order to provide for this, the outlay of the State's Draft Fourth Plan was raised to Rs. 650 crores and a draft outline of the State's Plan conforming to this outlay was prepared and presented to the Planning Commission in October, 1968.

2. The draft proposals were considered by the Central Working Groups in October, 1968, and by the State Advisory Committee in November, 1968. On the basis of the discussions of the Central Working Groups the outlay on the Plan came to about Rs. 651 crores. There were discussions with the Planning Commission for finalising the outlay on the State's Fourth Five-Year Plan in January, 1969 and subsequently in November-December, 1969. In the Draft Memorandum on the Fourth Five-Year Plan presented to the National Development Council in March, 1970, the size of our State's Fourth Plan was shown by the Planning Commission as Rs. 420.50 crores, comprising of Rs. 240 crores Central assistance and Rs. 180.50 crores State resources. In June, 1970, the Planning Commission communicated the sectoral distribution of this outlay. The State Government could not however finalise the Fourth Plan for the outlay of Rs. 420.50 crores indicated by the Planning Commission, since it would not have been possible to fulfil even the minimum spill-over commitments within an outlay of this order.

Considering the constraint of resources, the original proposals were revised with a view to reducing the outlay to the maximum extent possible while fulfilling the inevitable spill-over commitments. As a result of this exercise, it was decided in November, 1970 that the outlay on the State's Fourth Five-Year Plan would have to be at least Rs. 530 crores if the existing commitments were to be fulfilled. Consequently detailed review of the schemes included in the draft proposals was again taken up and revised proposals for an outlay of Rs. 530 crores were formulated.

Weightage in Plan allocations for backward Areas :

3. In connection with the determination of the fair share of Telangana in the developmental outlays, it was agreed during the discussions that the Chief Minister had with the Union Minister for Planning and the Chairman, Regional Committee in May, 1971 that weightage should be given for backward areas to the extent of 10 per cent of the plan outlay on the basis of the ratio of the population in such areas in each region. The weightage so determined was 5 : 3 : 2 for the three regions of Talangana, Rayalaseema and Coastal Andhra. The Plan outlays for 1971-72 were therefore allocated to the three regions to the extent of 90 per cent on the basis of the population of each region according to the 1971 Census and the balance 10 per cent was allocated between the three regions in the ratio of 5 : 3 : 2 mentioned above.

Telangana's Fourth Plan size :

4. Tentatively, in working out the proposals for the Rs. 530 crores—plan the actual outlay for 1969-70 and 1970-71 as also for 1971-72 had been adopted. For the remaining two years the formula adopted for 1971-72 had been projected. On this basis, the break-up of the outlay of Rs. 530 crores would come to Rs. 223 crores for Coastal Andhra, Rs. 105 crores for Rayalaseema and Rs. 203 crores for Telangana. On the other hand, if the formula agreed to for 1971-72 is applied to the total plan outlay the allocations will be Rs. 222.25 crores for Coastal Andhra, Rs. 104.34 crores for Rayalaseema and Rs. 202.27 crores for Telangana. The out-

The total outlay required for the actual proposals furnished by the Departments in respect of Telangana and which have been included in this Plan comes to Rs. 200.96 crores.

Subsequent to the formulation of these proposals however the outlay for the Annual Plan 1972-73 has been fixed by the Planning Commission at Rs. 105 crores. On the basis of the Mid-Term Reappraisal of resources, it can be anticipated that the outlay on the Plan for 1973-74 will be of the order of Rs. 113 crores bringing the total outlay to about Rs. 486 crores. Out of this, the outlay in the Telangana region worked out on the basis of the actual expenditure in 1969-71 and the allocations for 1971-74 according to the formula mentioned above will come to approximately Rs. 190 crores. A review of these proposals will therefore be undertaken as soon as a clearer picture emerges of the resources position for the next two years.

NATURAL RESOURCES

1. The Telangana region lies between $15^{\circ}50'$ and $19^{\circ}55'$ North latitude and $77^{\circ}14'$ and $81^{\circ}48'$ East longitude. It is bounded on the North by Maharashtra State; on the West by Maharashtra and Mysore; on the South by Rayalaseema and Coastal Andhra regions of Andhra Pradesh; and on the East by parts of Maharashtra and Madhya Pradesh States.

Physiography:

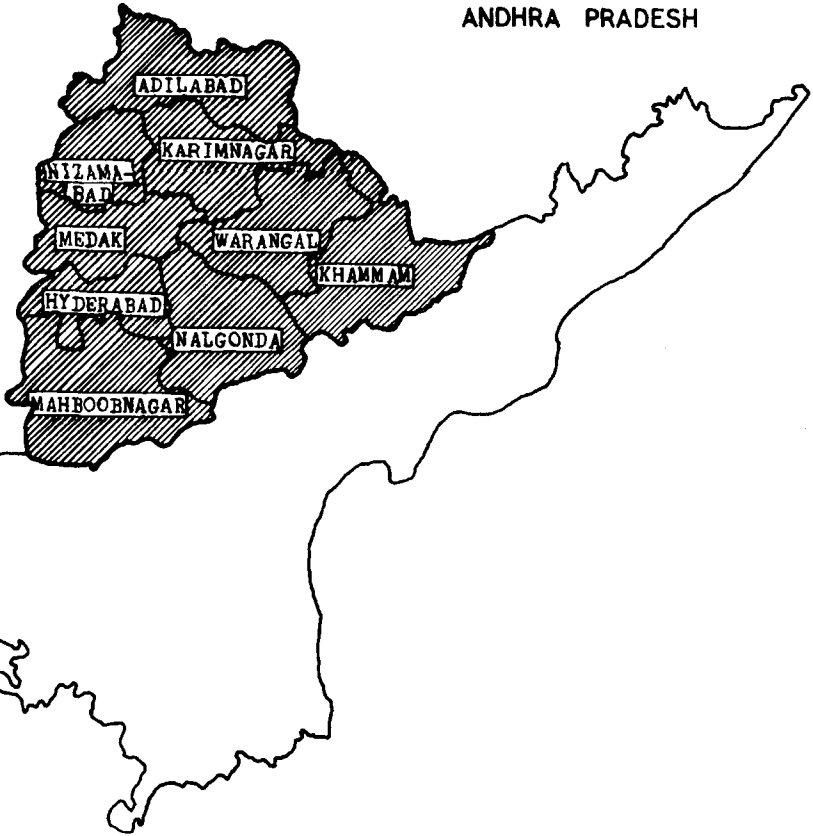
2. The Telangana region consists of peneplains developed on the Archæan Gneisses. A peneplain is a land having highly eroded, flat hillocks scattered all over the surface. In the north, faulting has preserved a belt of Gondwanas along the lower Godavari trough which is below 150 metres in altitude. The most general level lies between 480 to 800 metres altitude in this portion. On the South, the Krishna and the Tungabhadra valleys lie at an altitude of 300 to 450 metres below the ragged break of slope down from the Mysore plateau. To the north-west, the watershed between the rivers Bhima and Godavari is a great swelling upland reaching an altitude of 720 metres in certain places.

3. Both Krishna and Godavari, the two most important rivers of the State, flow through the Telangana region. Both these rivers are of perennial type. On its way through the Telangana region, the Godavari receives several important tributaries like Manjira, Maneru, Pranahita and Indravati. The Pranahita flowing north of Adilabad district forms the boundary between Andhra Pradesh, Maharashtra and Madhya Pradesh States. The Krishna river, the second important river in Andhra Pradesh, rises in Mahabaleshwar in the Western Ghats and flows through Maharashtra and Mysore and enters Andhra Pradesh in Makthal taluk of Mahbubnagar district. Its chief tributaries in the Telangana region are the Dindi, Musi, Paleru and Maneru.

Geology:

4. The Archæan gneisses are the oldest types of rock formations which dominate almost the whole of

LOCATION OF
TELANGANA REGION
IN
ANDHRA PRADESH



the Telangana region. These formations yield unlimited quantities of very high grade building stone in many parts of Hyderabad, Mahbubnagar, Karimnagar, Khammam, Nalgonda and Warangal districts. The granite from Lingampally in Hyderabad district belonging to this type, is famous for its great durability, massive nature and freedom from voids. The Dharwar formations, which mainly consist of schists, occur in minor patches in Makthal, Atmakur and Gadwal taluks of Mahbubnagar district. The Cuddapah formations occur in parts of Narasampet taluk in Warangal district, Yellandu, Bhoorgampahad and Kothagudem taluks in Khammam district and the northern most parts of Adilabad and Asifabad taluks in Adilabad district. These formations are associated with deposits of limestone, barytes, asbestos, steatite and ochres. Large deposits of iron ore are also found in the sand-stone of this group in Khammam district. There is a long strip of Gondwana formation in the Pranahita Godavari valley, in a 50 mile wide belt running into hundreds of miles. These formations contain valuable coal deposits.

5. The Deccan trap, which comes next to the Archæan gneisses in the geological succession, is found in the north-western and western parts of Telangana region and mostly in the areas adjoining Maharashtra and Mysore States. The rock of this type yields material used in making grinding and crushing stones. The crypto-crystalline varieties of silica and a few bands of inter-trappian limestone occur in these rocks.

6. The laterite formations occur in parts of Narayankhed and Zaheerabad taluks in Medak district and to a small extent in Adilabad taluk of Adilabad district. Laterite is used for minor constructions and as a road metal.

Minerals:

7. The Telangana region is fairly rich in mineral resources, the most important of which are coal, iron ore and limestone.

Coal:

8. Coal occurs in the region in a broad belt along the Godavari basin, covering parts of Adilabad, Karimnagar and Khammam districts. In Adilabad district the reserves of Barakar coal measures are estimated to contain about 375 million tonnes of coal. These coal reserves are found in the Pranahita-Godavari valley. The Singareni Collieries Company have extensively developed the Bellampalli and Ramakrishnapur coal fields in this district. In Karimnagar district, the Jangaon coal fields south of the Godavari river in Peddapalli taluk is worked by the Singareni Collieries Company Limited. The important coal bearing areas in Khammam district are Kothagudem, Yellandu, Lingala, Mumidavaram, Totapalli, Damarcherla, Madhavaram, Rajarampalli, Paloncha, Ravigudem and Aswaraopeta. The reserves of coal in the leased areas are estimated at 707 million tonnes. These coals are non-coking and non-briquetting types suitable only for steam raising. The total annual out-put of coal in the region is of the order of 4.00 million tonnes. However, the coal occurring in the region is mostly of the non-coking type and therefore is not directly useful for conventional steel production.

Iron ore:

9. High grade iron ore of 64 to 65 per cent iron occurs in parts of Khammam district located not too far from the coal fields. During the course of mining of high grade ore, certain lower grade material is also taken out. The reserves of high grade iron ore of this district are of the order of 6.3 million tonnes with plus 60 per cent iron content and those of low grade ores being 5.2 million tonnes. Iron ore is also found in Warangal, Karimnagar and Adilabad districts. In Warangal, low grade iron ore is found in the Yerraballi area, 8 miles from Kazipet, along the Karimnagar-Warangal border and estimated reserves are of the order of 25 million tonnes. Low and high grade hematite iron ore also occurs in the south of Pakal lake and in Nawabpet in Parkal taluk in Warangal district. The total reserves in this area are of the order of 6.5 million tonnes. In Karimnagar district, low grade iron ores in the form of banded hematite-magnetite

quartzites occur in Peddapalli and Jagtial taluks. The Chincholi area in Jagtial taluk is estimated to yield a reserve of 14 million tonnes of low grade ore of 35 to 40 per cent iron content. In Adilabad district, low grade magnetite hematite iron ores are available in Dharawar bands at Chityal, Kalleda and Dasturabad. A total reserve of 17.5 million tonnes of ore was estimated. The iron content of these ores is between 38 to 43 per cent.

Limestone:

10. Limestone is another very important mineral found in large quantities in Adilabad, Karimnagar, Khammam, Nalgonda, Mahbubnagar and Hyderabad districts. In Adilabad district, limestone occurs extensively in the north and west of Adilabad, in the forest area in Asifabad and Ralli reserve forests near Mancherial. The Asifabad area is estimated to have a reserve of 50 million tonnes of high grade limestone suitable for use in the chemical industries. The reserves in Ralli reserve forests are estimated to be of the order of 600 million tonnes. M/s Associated Cement Company Limited are obtaining their entire requirements of limestone from here for cement manufacture. The Cement Corporation of India recently prospected an extent of 7.3 sq. kms., 3 kms. north of Adilabad town, and proved to a depth of 220 metres a total quantity of 36.18 million tonnes of low magnesian and low alumina limestone of cement grade quality. In Hyderabad district, blue and cream coloured limestones are available. Extensive quarries of flagstones are developed near Tandur. These are sold locally and in the adjoining States under the name of Shahbad slabs. The Cement Corporation of India have proved reserves of about 173 million tonnes of cement grade limestone in the Tandur area. In Karimnagar district, cement grade limestone occurs extensively in Peddapalli taluk. Of these deposits, reserves near Narella were at one time estimated to be of the order of 150 million tonnes and of Putnoor reserve forests 87 million tonnes. The area has to be proved further. The limestone of Palakurti area near Ramagundem are being exploited for use in cement manufacture. In Khammam district, bands of dolomitic limestones

extend northwards from Madhira taluk through Khammam into Yellandu taluk. These limestones are found to be suitable for use as fluxing agent in steel metallurgy. Marbles of fairly good quality are found in Yellandu and Khammam taluks. The estimated reserves of limestones and marbles in this district are of the order of 200 million tonnes. In Mahbubnagar district limestones occur extensively in Alampur and Kolhapur taluks. The Cement Corporation of India have recently prospected some areas in Alampur and have proved a reserve of 181 million tonnes of limestone, out of which the reserves of cement grade limestone are of the order of 63 million tonnes. In Kodangal taluk in this district, flaggy limestones are worked out from Gandlapalli area for use as flooring slabs. In Nalgonda district, Miryalguda and Huzurnagar taluks contain extensive deposits of limestones suitable for manufacture of cement. Besides, coloured limestones are found in this area which may be useful for polishing and for decorative purposes.

11. Besides the above three minerals which are extensively found in the Telangana region, the region also contains several other minerals such as clays, quartz, lead, copper, barytes, felspar and graphite.

Clays:

12. Fire clay deposits are found in Pachegaon and Rallepet in Asifabad taluk of Adilabad district. This clay is suitable especially for refractories and stoneware. The deposits are estimated to have a reserve of 5 to 6 million tonnes of clay over an area of 1 sq. mile. Clay suitable for ceramic purposes are also available at Chintrala, along the bank of Krishna river, in Huzurnagar taluk of Nalgonda district. The deposit is estimated to yield about 2.5 lakh tonnes of clay which is of a high grade.

Quartz:

13. Several large quartz veins near Hyderabad city are being extensively exploited. The quartz is processed into silica sand and used in glass industries. It is estimated that in Hyderabad and Mahbubnagar

districts, the quartz available is of the order of 8 million tonnes. Quartz also occurs extensively in Medak district. Good quality quartz useful for glass industry occurs in Andole-Jogipet, Shankarampet and Pannapet areas of this district.

Lead and Copper :

14. Deposits of lead ore are found in Devarakonda taluk of Nalgonda district and copper ore in Burugampahad taluk of Khammam district. Recent detailed prospecting by the Geological Survey of India has revealed the existence of about 2.68 million tonnes of copper ore in Burugampahad taluk with above 2.02 per cent copper content.

Barytes :

15. Barytes occur in Khammam district and the mineral is exploited and used to some extent by the Barium Chemicals unit at Kothagudem.

Felspar :

16. Felspar of good quality and size is available near Hyderabad city.

Graphite :

17. Deposits of good quality graphite are found in Bhadrachalam and Paloncha taluks of Khammam district. The graphite is mostly flaky and has about 60 per cent of fixed carbon.

Soils :

18. The soils in Telangana region are mostly either red soils or black cotton soils. Nearly 63 per cent of the villages in the region contain predominantly red soils, while 37 per cent of the villages have black soils. Laterite soils, alluvial soils and alkaline soils are also found in the region, but in negligible extents.

19. The red soils of the region can be further subdivided into chalka soils (sandy loams) and dubba soils (loamy sands to sandy loams). Out of the 63 per cent of villages with red soils as predominant soil, 42

per cent have chalka and 21 per cent dubba. Thus, in the Telangana region, broadly 42 per cent of the soils are chalka, 37 per cent black and 21 per cent Dubba.

20. Red soils due to their lighter textures are open and porous to allow excess water to pass through quickly and drain away soluble plant nutrients like nitrates and potash. Their clay has a low moisture retentivity requiring frequent irrigation or rains for successful growth of crops. Therefore, the most important step in development of red soils is to increase its water holding capacity constant application of bulky organics and tank silt. In these soils, however, application of smaller quantities of water through irrigation or rains is much more effective for crop growth than in the case of black soils which require larger amounts of water. Red soils due to their coarser-texture etc., can be worked with implements within a wider range of their moisture contents when compared to the black soils which can be worked with only when they come in optimum moisture condition, after heavy rains.

21. Optimum physical condition of the soil to provide free drainage of excess water and aeration of the soil to supply oxygen to the plant roots and the soil microbia is always and almost self-maintained in the red soils. Black soils due to heavy texture and their clay being of montmorrillonite and biedelite type are highly moisture retentive. They cannot be easily worked unless optimum moisture condition is attained. The drainage and permeability of these soils are poor compared to red soils. Therefore, efforts have to be made by way of addition of organic matter to maintain the soil clay in granular and porous condition. The red soils resist the forces of erosion by water and wind better than the heavy texture black soils especially when the latter are poor in their organic matter content. The lighter soils are eminently suited for irrigation and for raising a wide variety of crops including root crops and vegetables. Thus from the point of view of maintaining optimum physical properties of the soil for good crop growth, red soils are superior to black soils provided the plant nutrient and moisture status of the soils is properly maintained.

22. The black soils in the region occur in a long strip along the northern and eastern borders of the region from Adilabad district in the North to Khammam district in the East. Another vertical strip running from north to south along the western border taluks in Nizamabad, Medak, Hyderabad and Mahbubnagar districts also consist of black soil. The chalka soils mostly occur in the central and southern portions of the region excepting Karimnagar and northern taluks of Nalgonda district, where Dubba soils predominate.

Forests :

23. The forest area in Telangana region extends over about 67.2 lakh acres forming 23.8 per cent of the geographical area of the region against 22.3 per cent in the State as a whole and 19.8 per cent in All-India. Thus a large percentage of the geographical area is under forests in the region compared either to State average or All-India. Most of the forests in the region are concentrated in the northern and eastern parts, bordering Maharashtra and Madhya Pradesh States. Nearly 51 per cent of the forest area in the region is in Adilabad and Khammam districts, while another 32 per cent is located in Karimnagar, Warangal and Mahbubnagar districts. In Mahbubnagar district, the bulk of the forest area is located in Achampet taluk. The areas in the region which have sparse forests are located in the south-western parts of the region, comprising Medak, Hyderabad, Nalgonda and Mahbubnagar districts excepting Achampet taluk.

24. The forests in the Telangana region can be broadly classified into two types *viz.*, dry deciduous forests and scrub forests according to the soil, rainfall and morphological conditions. The scrub forests mostly occur in the south-western parts of the region excepting in Achampet taluk, *i.e.*, in Nalgonda, Mahbubnagar, Hyderabad and Medak district. The rest of the forests are mostly dry deciduous type. The scrub forests do not generally contain any commercial species of forest growth. In the dry deciduous forests, however, teak is found extensively. Bamboo is also an important species in these forests. It is roughly estimated that 26 per cent of the forests in the

State contain teak, while 10 per cent contain bamboo. The largest concentration of teak is found in the forests of Adilabad, Karimnagar, Warangal and Khammam districts. Bamboo is largely concentrated in the forests in Adilabad and Karimnagar districts.

Rainfall:

25. The normal annual rainfall in the Telangana region varies from about 23" to 50" in different taluks. As one traverses from north to south and east to west of the region, the rainfall gradually gets reduced. In taluks bordering the northern and eastern boundaries of the region, covering parts of Adilabad, Khammam and Warangal districts, the rainfall is about 40". Further down to the south-west covering parts of Nizamabad, Karimnagar, Warangal and Medak districts, the rainfall is above 35". Still further down covering parts of Mahbubnagar, Nalgonda and Hyderabad districts, the rainfall is below 30". In some parts of Hyderabad and Mahbubnagar districts, the normal annual rainfall is even below 25".

26. A majority of the taluks in Khammam, Adilabad and Warangal districts receive rainfall which is above 40", while in Nizamabad, Medak and Karimnagar districts, a large number of taluks receive rainfall of more than 35". However, in the south-western districts *viz.*, Hyderabad, Mahbubnagar and Nalgonda, out of 28 taluks, as many as 18 receive only rainfall of less than 30".

27. Much of the rainfall in the region is received in the south-west monsoon period *i.e.* June-September. The rainfall received in the south-west monsoon period varies from 89 per cent in Adilabad district to 76 per cent in Nalgonda district.

28. The normal rainfall by itself does not indicate the adequacy or otherwise of the monsoon rains. What is more important is the distribution of rainfall and its dependability, especially in the south-west monsoon period which accounts for the bulk of the rainfall received in the region. An analysis of the rainfall data for the years 1942-43 to 1969-70 revealed that the median rainfall in the south-west monsoon

period was more than 25" in all the taluks of Khammam, Adilabad, Nizamabad, Warangal and Karimnagar districts excepting Jangaon taluk in Warangal district, where the rainfall is less than 25". In these five districts the reliability of the rainfall is also generally high. In Medak district also, 7 out of 8 taluks have a median rainfall of 25" or more in the south-west monsoon period. The variability is, however, low in the case of four taluks. But since the level of rainfall is high, this does not affect the crop growth very much adversely. The same cannot be said about the taluks in Hyderabad, Mahbubnagar and Nalgonda districts, where generally the median rainfall is less than 25" in the south-west monsoon period and the variability is also generally high. Thus, while six districts *viz.*, Adilabad, Nizamabad, Karimnagar, Warangal, Khammam and Medak have more or less generally satisfactory rainfall conditions, the remaining tract of the Telangana region, comprising Hyderabad, Mahbubnagar and Nalgonda districts and Jangaon taluk of Warangal district receive relatively low rainfall and the dependability of this rainfall is also much less than in the other districts.

29. In 1966, the State Government have identified 74 taluks in the State as chronically drought affected and among them 34 taluks were treated as hard core. For identifying these taluks as chronically drought affected, the rainfall during the period of 21 years covering 1942-62 was considered and an annual rainfall of 30" was considered as the minimum for sustaining normal crop growth. Using this data, the following taluks were identified as chronically drought affected:

- (1) All taluks which had an annual average deficit of rainfall of 3" or more from the minimum of 30" for 10 years between 1942-62; and
- (2) All taluks which had an annual average deficit of rainfall of 7" or more from the minimum of 30" for 7 years between 1942-62.

Of the taluks which are identified as chronically drought affected on the basis of the above two criteria, such of those with an average annual deficit in rainfall

of 7.5" or more from the minimum of 30" for 8 years between 1942-62 have been identified as hard core areas.

30. Out of the above 77 taluks identified as chronically drought affected in the State, 23 taluks belong to the Telangana region—almost all these taluks lying in the south-western part of the region. These are—

<i>District</i>	<i>Taluk</i>
Hyderabad	<ol style="list-style-type: none"> 1. Hyderabad (West). 2. Ibrahimpatnam. 3. Hyderabad (East). 4. Chevella (Shahbad).
Mahbubnagar	<ol style="list-style-type: none"> 1. Kalwakurthy. 2. Nagarkurnool. 3. Wanaparthy. 4. Alampur. 5. Makthal. 6. Shadnagar. 7. Achampet. 8. Kollapur. 9. Gadwal. 10. Atmakur.
Nalgonda	<ol style="list-style-type: none"> 1. Suryapet. 2. Bhongir. 3. Huzurnagar. 4. Deverkonda. 5. Miryalguda. 6. Ramannapet. 7. Nalgonda.
Warangal	Jangaon.
Medak	Narayankhed.

Out of these 23 taluks, 5 taluks *viz.*, Chevella Kalwakurthy, Makthal, Ramannapet and Jangaon taluks have been included in the hard core.

Summing up:

31. To sum up, the Telangana region is fairly rich in natural resources. The two important rivers *viz.*, Krishna and Godavari pass through the region and several important tributaries join these two rivers within the region. The region has also extensive resources of coal, iron ore and limestone. Deposits of other minerals, such as lead, copper, clays, quartz, barytes, felspar and graphite are also found in the region. Nearly 63 per cent of the soils in the region are red soils which are eminently suitable for irrigation and for raising a variety of crops including root crops and vegetables, provided the plant nutrient and moisture status of these soils is properly maintained. The region has also sizeable black cotton soil area which is suitable for growing cotton and tobacco crops. The proportion of the forest area in the region, as a percentage of geographical area, is larger than that in the State as a whole and All-India. Much of the forest area is located in the northern and eastern borders of the region. These forests contain teak and bamboo which have immense commercial value. The rainfall in the region is also fairly high excepting in the south-western part of the region comprising the districts of Hyderabad, Nalgonda and Mahbubnagar and Jangaon taluk of Warangal district, where the rainfall is not only low, but its dependability is also low. This tract is perhaps the problem tract of the entire region, where not only the rainfall is low, but also the mineral and forest resources are also generally poor and the soils are also affected by severe erosion. But for this tract, the rest of the Telangana region has all the necessary resources for an accelerated economic development.

REVIEW OF DEVELOPMENT

The Telangana region of Andhra Pradesh State comprises of the nine districts of Mahabubnagar, Hyderabad, Medak, Nizamabad, Adilabad, Karimnagar, Warangal, Khammam and Nalgonda. Till 1st November, 1956, these nine districts formed part of the erstwhile State of Hyderabad. Under the scheme of Reorganisation of States on 1st November, 1956, the nine districts of Telangana region were added to the erstwhile Andhra State to form the present State of Andhra Pradesh.

2. After the Reorganisation of States on 1st November, 1956, 23 villages of Munagala Paragana were transferred from Nandigama taluk of Krishna district to Huzurnagar taluk of Nalgonda district; and Bhadrachalam taluk and Nugur independent sub-taluk were transferred from East Godavari district to Khammam district.

3. According to the provisional figures from 1971, population census, the Telangana region (including transferred areas) covers 44.31 thousand square miles with a population of 157.71 lakhs, thus accounting for about 42 per cent of the area and 36.3 per cent of the population of Andhra Pradesh State.

AREA AND POPULATION BY REGIONS.

<i>Region</i>	<i>Area</i> (<i>'000 sq.</i> <i>miles</i>)	<i>Population</i> <i>1971</i> <i>(Lakh</i> <i>persons)</i>	<i>Density per</i> <i>square mile</i> <i>(Persons)</i>
Coastal Andhra	33.36	192.96	578
Rayalaseema (including Markapur and Giddalur taluks)	28.38	83.28	293
Andhra Region	61.74	276.24	447
Telangana Region	44.31	157.71	356
Andhra Pradesh	106.05	433.95	409

4. The Coastal Andhra region of the State is more densely populated than either the Telangana region or the Rayalaseema region. The density of population in Coastal Andhra in 1971 was 578 persons per square mile against 356 in Telangana and 293 in Rayalaseema. Thus, the density in Telangana was about 3/5ths of that in Coastal Andhra.

Plan Expenditure :

5. The new State of Andhra Pradesh was created exactly 7 months after the commencement of the Second Plan. By the time the States Reorganisation Act was given effect to the Second National Five-Year Plan was already finalised and under implementation and therefore the Second Plan of Andhra Pradesh was evolved by combining the Second Five-Year Plan of erstwhile Andhra State and the Telangana component of the Second Five-Year Plan of the erstwhile Hyderabad State. Thus, the new State of Andhra Pradesh could not have a direct involvement in the formulation of the Second Plan of the State.

6. The new Andhra Pradesh State has so far implemented the Second Plan, the Third Plan and the three Annual Plans for the years 1966-67, 1967-68 and 1968-69. The Fourth Five-Year Plan of the State has commenced from 1st April, 1969.

7. In the Second Plan, an amount of Rs. 188.60 crores was spent in the State's sector. Out of this, Rs. 64.42 crores was spent in the Telangana region, and the remaining Rs. 124.18 crores in the Andhra region. The expenditure incurred in the Telangana region during this Plan formed 34.2 per cent of the total expenditure in the State. Separate figures for Rayalaseema and Coastal Andhra in the Andhra region are not available.

8. In the Third Plan, Andhra Pradesh spent Rs. 352.42 crores in the State—Rs. 205.82 crores in the Andhra region and Rs. 146.60 crores in the Telangana region including Rs. 15.62 crores for special development schemes of Telangana. The expenditure in the Telangana region formed 41.6 per cent of the total plan expenditure. Even excluding the expenditure on special development schemes, the expenditure in the Telangana region was of the order of 37.2 per cent of the total plan expenditure.

9. In the three Annual Plans for the years 1966-67, 1967-68 and 1968-69, the State has spent Rs. 234.06 crores—Rs. 135.26 crores in the Andhra region and Rs. 98.00 crores in the Telangana region including

Rs. 5.88 crores on the special development schemes of Telangana. The expenditure in the Telangana region would form 42.2 per cent of the total plan expenditure in the State. If the special development schemes are excluded the plan expenditure in Telangana formed 40.7 per cent of the total.

Progress achieved :

10. The progress achieved in Telangana region since the formation of the State under the more important sectors of development is reviewed in the following paragraphs:—

Agriculture :

11. The expenditure in the plans during 1956-57 to 1968-69 Agriculture Sector (including Co-operation and Community Development) was of the order of Rs. 157.09 crores in the State. Out of this, Rs. 52.89 crores was spent in the Telangana region forming 33.7 per cent of the total. The expenditure on major and medium irrigation during the above period was of the order of Rs. 78.18 crores in the Telangana region out of Rs. 209.81 crores in the State as a whole constituting 37.3 per cent of the total expenditure.

12. During this period there has been a considerable increase in the over all agricultural production. The gross value of agricultural production in the State has been compiled, on lines indicated by the Central Statistical Organisation, only from the year 1960-61 onwards. As per these figures, the gross value of agricultural production, at current prices, in the Telangana region, increased from Rs. 141.36 crores in 1960-61 to Rs. 355.27 crores in 1967-68 or an increase by 151.32 per cent. In the Andhra region, the gross value of agricultural production increased from Rs. 456.38 crores in 1960-61 to Rs. 909.70 crores in 1967-68, or an increase by 99.33 per cent. In 1968-69, the entire State suffered from wide spread drought conditions during the earlier part of the kharif season while in the later part of kharif and rabi, the Coastal districts of the State suffered from two severe cyclones which caused considerable damage to the standing crops. Hence, the year 1968-69 is not taken for purposes of comparative analysis.

GROSS VALUE OF AGRICULTURAL PRODUCTION OF CURRENT PRICES

(Rs. in crores)

Region	Gross value of Agricultural production at current prices			Percentage increase over 1960-61 in the Years	
	1960-61	1964-65	1967-68	1964-65	1967-68
(1)	(2)	(3)	(4)	(5)	(6)
Coastal Andhra ..	314.54	505.06	655.97	60.57	108.55
Rayalaseema ..	141.84	215.18	253.73	51.71	78.88
Andhra Region ..	456.38	720.24	909.70	57.82	99.33
Telangana region ..	141.36	270.14	355.27	91.10	151.32
Andhra Pradesh ..	597.74	990.38	1,264.97	65.69	111.63

Source : Bureau of Economics and Statistics.

13. During 1960-61 to 1967-68, the gross value of agricultural production at constant (1960-61) prices increased by 47.38 per cent in Telangana region against 6.35 per cent in Rayalaseema and 17.78 per cent in Coastal Andhra.

GROSS VALUE OF AGRICULTURAL PRODUCTION AT CONSTANT (1960-61) PRICES.

(Rs. in crores)

Region	Gross value of agricultural production at constant prices.			Percentage increase over 1960-61 in the years.	
	1960-61	1964-65	1967-68	1964-65	1967-68
Coastal Andhra ..	314.54	395.05	370.30	25.60	17.73
Rayalaseema ..	141.84	158.14	150.85	11.49	6.35
Andhra Region ..	456.38	553.19	521.15	21.21	14.19
Telangana Region ..	141.38	203.57	208.34	44.01	47.38
Andhra Pradesh ..	597.74	756.76	729.49	26.60	22.04

Source : Bureau of Economics and Statistics.

14. During the period 1956-57 to 1967-68 there has been a substantial increase in the production of several important agricultural commodities. For instance, the production of rice in the Telangana region in-

creased from 6.34 lakh tonnes in 1956-57 to 13.30 lakh tonnes in 1967-68, or an increase by 109.8 per cent while in the Andhra region it increased from 27.19 lakh tonnes to 32.70 lakh tonnes i.e. by 20.4 per cent. Some parts of the State were affected by drought conditions in 1967-68 also and therefore the comparison will be more appropriate if a good agricultural year in the recent past such as 1964-65 is taken up for comparison. The production of rice increased by 100.2 per cent in the Telangana region and 34.5 per cent in the Andhra region during 1956-57 to 1964-65.

PRODUCTION OF RICE, BY REGIONS

Region	Production (in lakh tonnes)			Percentage increase in 1964-65 over 1956-57	%increase in 1967-68 over 1956-57
	1956-57	1964-65	1967-68		
Coastal Andhra	.. 22.90	30.11	27.47	31.5	20.0
Rayalaseema	.. 4.29	6.47	5.23	50.8	21.9
Andhra Region	.. 27.19	36.58	32.70	34.5	20.4
Telangana Region	.. 6.34	12.69	13.30	100.2	109.8
Andhra Pradesh	.. 33.53	49.27	46.00	46.9	37.2

Source : Season and Crop Reports of Andhra Pradesh, 1956-57, 1964-65, and 1967-68.

15. If we consider the total foodgrains production, it will be observed that in the Telangana region, the production went up from 14.54 lakh tonnes in 1956-57 to 24.75 lakh tonnes in 1964-65, or an increase by 70.2 per cent. On the other hand, in the Andhra region the production went up by 17.6 per cent from 43.44 lakh tonnes to 51.07 lakh tonnes.

PRODUCTION OF POOD GRAINS, BY REGIONS

Region	Production (in lakh tonnes)			Percentage increase in 1964-65 over 1956-57	%increase in 1967-68 over 1956-57
	1956-57	1964-65	1967-68		
Coastal Andhra	.. 30.42	37.93	34.24	24.7	12.6
Rayalaseema	.. 13.02	13.14	11.30	0.9	(—)13.2
Andhra Region	.. 43.44	51.07	45.54	17.6	4.8
Telangana Region	.. 14.54	24.75	25.25	70.2	73.6
Andhra Pradesh	.. 57.98	75.32	70.79	30.8	22.1

Source : Season and Crop report of Andhra Pradesh, 1956-57, 1964-65 and 1967-68

16. Much of the increase in production was achieved by an increase in the productivity per acre as can be seen from the following table.

GROSS VALUE OF OUTPUT PER ACRE OF CROPPED AREA AT CONSTANT (1960-61) PRICES

Region	Output per acre (in rupees)			Percentage increase	
	1960-61	1964-65	1967-68	in 1964-65 over 1960-61	in 1967-68 over 1960-61
Coastal Andhra ..	303	341	323	12.5	6.6
Rayalaseema ..	179	203	195	13.3	9.0
Andhra Region ..	249	285	271	14.4	8.9
Telangana Region ..	130	168	168	29.3	29.3
Andhra Pradesh ..	205	240	231	17.3	12.7

Source : Bureau of Economics and Statistics, Hyderabad.

The gross value of output per acre at constant prices increased by 29.3 per cent in Telangana during 1960-61 to 1967-68 as against 6.6 per cent in Coastal Andhra and 9.0 per cent in Rayalaseema.

17. The main factors responsible for an increase in the productivity per acre over the period under review were the extension of irrigation facilities, use of improved seeds, consumption of chemical fertilizers on an increasing scale and the adoption by the cultivators of better farming techniques.

Irrigation:

18. Over the period from 1956-57 to 1968-69 the gross area irrigated in the Telangana region increased from 23.00 lakh acres to 26.47 lakh acres or by 15.1 per cent whereas in Andhra region it increased from 60.71 lakh acres to 71.67 lakh acres or an increase by 18.1 per cent.

GROSS AREA IRRIGATED, BY REGIONS.

Regions	Gross area irrigated (lakh acres)			Percentage increase in 1964-65 over 1956-57	Percentage increase in 1967-68 over 1956-57
	1956-57	1964-65	1967-68		
Coastal Andhra ..	47.59	53.91	56.03	13.3	17.7
Rayalaseema ..	13.12	15.90	15.64	21.2	19.2
Andhra Region ..	60.71	69.81	71.67	15.0	18.1
Telangana Region ..	23.00	25.33	26.47	10.1	15.1
Andhra Pradesh ..	83.71	95.14	98.14	13.7	17.2

Source : Season and crop Report of Andhra Pradesh for 1956-57, 1964-65 and 1967-68,

19. The percentage of cropped area irrigated increased from 18.6 per cent in 1956-57 to 21.3 per cent in 1967-68 in the Telangana region. The corresponding increase in Rayalaseema was from 6.4 to 20.2 per cent and in Coastal Andhra from 45.9 to 48.9 per cent.

GROSS AREA IRRIGATED AS A PERCENTAGE OF CROPPED AREA

(Figures in lakh acres)

Regions	1956-57			1967-68		
	Gross cropped area.	Gross area irrigated.	Percentage of irrigated area to cropped area.	Gross cropped area	Gross area-irrigated	Percentage of irrigated ara to cropped area.
Coastal Andhra	103.58	47.59	45.9	114.65	56.03	48.9
Rayalaseema	80.15	13.12	16.4	77.31	151.64	20.2
Andhra Region	183.73	60.71	33.0	191.96	71.67	37.3
Telangana Region	123.77	23.00	18.6	124.19	26.47	21.3
Andhra Pradesh	307.50	83.71	27.2	316.15	98.14	31.0

Source : Season and crop Report of Andhra Pradesh 1956-57 and 1967-68.

Fertilisers:

20. The distribution of nitrogenous chemical fertilisers through the departmental agencies increased from a mere 0.14 lakh tonnes in 1957-58 to 2.44 lakh tonnes in 1968-69 in the Telangana region while in the Andhra region, it has increased from 1.00 lakh tonnes to 8.44 lakh tonnes. In 1957-58 the consumption of fertilisers in the Telangana region formed only 11.9 per cent of the total consumption in the State while in 1968-69 the consumption went upto 22.4 per cent of the total.

DISTRIBUTION OF NITROGENOUS FERTILISERS THROUGH GOVERNMENT AGENCY- BY REGIONS.

Regions	Fertilisers distributed (,000 tonnes)		Percentage increase.	Consumption per acre of gross irrigated in 1968-69 (in Kgs.)
	1957-58	1968-69		
Coastal Andhra	84.6	616.3	629.1	111.3
Rayalaseema	15.4	228.1	1,383.1	161.7
Andhra Region	100.0 (88.1)	844.4 (77.6)	744.4	121.6
Telangana Region	13.5 (11.9)	243.9 (22.4)	1,710.2	122.6
Andhra Pradesh	113.5 (100.0)	1,088.3 (100.0)	859.3	121.8

Source : Director of Agriculture, Hyderabad,

21. Taking into consideration the phosphatic fertilisers also, the distribution of which is now with the private agency, the consumption of total chemical fertilisers went up from 0.16 lakh tonnes in 1957-58 to 3.49 lakh tonnes in 1968-69 in the Telangana region while in the Andhra region it went up from 1.19 lakh tonnes to 11.62 lakh tonnes during the same period. In terms of consumption per acre of gross irrigated area there has been a spectacular increase in both the regions.

DISTRIBUTION OF FERTILISERS (BOTH NITROGENOUS AND PHOSPHATIC) BY REGIONS.

Region	Distribution of Chemical Consumption per acre of fertilisers ('000 tonnes) gross irrigated area (in Kgs.)					
	1957-58	1968-69	Percent- age increase	1957-58	1968-69	Percent- age increase
Andhra	119	1,162	876.5	19.6	167.3	753
Telangana	16	349	2,081.2	7.0	175.5	2,407
Andhra Pradesh	135	1,511	1,019.3	16.1	169.1	950

Source : Director of Agriculture, Hyderabad.

22. The oil engine and electric motor pump-sets utilised for agricultural purposes have expanded remarkably over the period 1956-57 to 1969-70.

23. The number of electric motor pump-sets used for irrigation purposes increased from 231 in 1956-57 to 57,297 in 1969-70 in the Telangana region. On the other hand, in the Andhra region, the number increased from 4,699 in 1956-57 to 100,347 in 1969-70. In 1956-57, the number of electric motor pump-sets used for irrigation purposes in Telangana formed 4.7 per cent of the total pumpsets in the State while in 1969-70 percentage has increased to 36.3.

PUMPSETS ELECTRIFIED, BY REGIONS

Regions	Number of pump-sets electrified			Percentage increase in	Percentage increase in
	1956-57	1967-68	1969-70	1967-68 over 1956-57	1969-70 over 1956-57
Coastal Andhra ..	2,911	29,599	46,952	917	1,573
Royalaseema ..	1,788	31,479	53,395	1,661	2,886
Andhra Region ..	4,699 (95.3)	61,078 (66.8)	1,00,347 (63.7)	1,200	2,036
Telangana Region ..	241 (4.7)	30,301 (33.2)	57,297 (36.3)	13,017	24,704
Andhra Pradesh ..	4,930 (100.0)	91,379 (100.0)	1,57,644 (100.0)	1,754	3,098

Source : Andhra Pradesh State Electricity Board, Hyderabad.

Note—Figures in brackets indicate percentages to State total.

24. If the number of electric motor pump-sets energised is compared with the area irrigated under wells, it will be observed that the number of electric motor pump-sets available per 1,000 acres of well irrigated area increased from a mere 1 in 1956-57 to 73 in 1968-69 in Telangana as against an increase from 7 to 77 in Royalaseema and from 14 to 149 in Coastal Andhra.

ELECTRIC MOTOR PUMPSETS PER THOUSAND ACRES OF WELL IRRIGATED AREA, BY REGIONS

Region	1956-57			1968-69		
	Electric motor pumpsets (No.)	Area irrigated under wells ('000 acres)	No. of pumpsets per 1,000 acres of well irrigated area	Electric motor pumpsets (No.)	Area-irrigated under wells ('000 acres)	No. of Pumpsets per 1,000 acres of well irrigated area
Coastal Andhra ..	2,911	206	14.1	44,068	295	149.4
Royalaseema ..	1,788	267	6.7	43,010	562	76.5
Andhra Region ..	4,699	473	9.9	87,078	857	101.6
Telangana Region ..	231	321	0.7	43,301	592	73.1
Andhra Pradesh ..	4,930	794	6.2	1,30,379	1,449	90.0

Source : Andhra Pradesh State Electricity Board, Hyderabad.

25. Similarly the number of oil engines used for irrigation purposes have also increased substantially. They increased by 156 per cent in Telangana, 148 per cent in Coastal Andhra and 240 per cent in Rayalaseema over the period 1956 to 1966.

OIL ENGINE PUMPSETS, BY REGION

Region	Number of oil Engines			Percentage increase in 1966 over 1956.
	1956	1961	1966	
Coastal Andhra	4,727	9,082	11,706	148
Rayalaseema	5,003	9,287	16,995	240
Andhra Region	9,730 (58.0)	18,369 (54.1)	28,701 (61.4)	195
Telangana Region	7,041 (42.0)	15,571 (45.9)	18,040 (38.6)	156
Andhra Pradesh	16,771	33,940	46,741	179

Source : Live Stock Census, Andhra Pradesh, 1966.

26. The number of oil engine pump-sets available per 1,000 acres of well irrigated area increased from 22 in 1956 to 46 in 1966 in the Telangana region against an increase from 19 to 38 in Rayalaseema and from 23 to 39 in Coastal Andhra.

OIL ENGINE PUMPSETS PER THOUSAND ACRES OF WELL IRRIGATED AREA : BY REGIONS.

Region	1956-57		1966-67			
	Oil engine pumpsets irrigated (Nos.)	Area under wells ('000 acres)	No. of pumpsets per 1,000 acres well irrigated	Oil engine pumpsets irrigated (No.)	Area under wells ('000 acres) irrigated area.	No. of pumpsets per 1,000 acres well irrigated
Coastal Andhra	4,727	206	22.9	11,706	304	38.5
Rayalaseema	5,003	267	18.7	16,995	447	38.0
Andhra Region	9,730	473	20.6	28,701	751	38.2
Telangana Region	7,041	321	21.9	18,040	391	46.1
Andhra Pradesh	16,771	794	21.1	46,741	1,143	40.9

Sources : 1. Quinquennial Livestock Census, Andhra Pradesh, 1956 and 1966.

2. Season and Crop Report of Andhra Pradesh 1956-57 and 1966-67.

Co-operative Credit :

27. The development of Agriculture depends in part, on the availability of cheap credit during the peak season for agricultural operations. In order to make available such credit at cheap rates of interest within the reach of the common cultivator, the development of Co-operative Societies has been taken up as one of the main planks of agricultural development.

28. It will be observed from the following table that there has been significant progress during the period 1956-57 to 1968-69 in the number and activities of Primary Agricultural Credit Societies. The number of credit societies increased from 3,074 in 1956-57 to 6,427 in 1968-69 or by 109.1 per cent in the Telangana region as against an increase from 6,616 in 1956-57 to 8,754 in 1968-69 or by 32.3 per cent in the Andhra region. The membership had increased during the same period by 325.9 per cent in the Telangana region and 93.4 per cent in the Andhra region. There had also been a substantial increase under owned funds, deposits, borrowings from central Financing Agencies, working capital and loans issued in both the regions while the growth in the Telangana region had been more pronounced. The amount of loans issued in the Telangana region had increased from a mere Rs. 61.48 lakhs in 1956-57 to 719.59 lakhs in 1968-69 or by 1070.4 per cent while in the Andhra region the increase was from Rs. 803.69 lakhs in 1956-57 to 1,869.31 lakhs in 1968-69 or by 132.6 per cent.

PRIMARY AGRICULTURAL CREDIT SOCIETIES

<i>Item</i>	<i>Unit</i>	<i>Region</i>	1956-57	1968-69	<i>Percentage increase</i>
1. Primary Agricultural credit societies. ..	Number	Andhra ..	6,616	8,754	32.3
		Telangana	3,074	6,427	109.1
		Andhra Pradesh	9,690	15,181	56.7
2. Membership ..	Lakh Nos.	Andhra	7.55	14.60	93.4
		Telangana	1.16	4.94	325.9
		Andhra Pradesh	8.71	19.54	124.3
3. Own funds ..	Rs. lakhs	Andhra	247.97	835.03	236.7
		Telangana	47.67	272.88	472.4
		Andhra Pradesh	295.64	1,107.91	274.7
4. Deposits ..	do.	Andhra	52.28	227.45	335.1
		Telangana ..	1.56	47.16	2,923.1
		Andhra Pradesh	53.84	274.61	410.0

5. Borrowings from central Financing Agents	Rs. lakhs	Andhra	739.31	1,919.82	159.8
		Telangana	72.98	1,032.95	1,315.4
		Andhra Pradesh	812.29	2,952.77	263.5
6. Working Capital	Do.	Andhra	1,039.56	2,982.29	286.9
		Telangana	122.21	1,353.00	1,007.1
		Andhra Pradesh	1,161.77	4,335.29	273.2
7. Loans	Do.	Andhra	903.69	1,869.31	132.6
		Telangana	61.48	719.59	1,070.4
		Andhra Pradesh	865.17	2,588.90	199.2

Source : Registrar of Co-operative Societies, Hyderabad.

29. The progress was similarly impressive even in regard to the disbursement of long term credit. The number of primary Land Mortgage Banks in the Telangana region increased from 12 in 1956-57 to 66 in 1968-69 while in the Andhra region they increased from 57 in 1956-57 to 115 in 1968-69. The loans issued by the Land Mortgage Banks in the Telangana region increased from Rs. 5.32 lakhs in 1956-57 to Rs. 631.81 lakhs in 1968-69, while in the Andhra region they increased from Rs. 69.35 lakhs to Rs. 1,320.84 lakhs over the same period.

PRIMARY LAND MORTGAGE BANKS

Item	Andhra		Percentage increase	Telangana		%age increase
	1956-57	1968-69		1956-57	1968-69	
1. Number of banks	57	115	101.7	12	66	450.0
2. Membership (Lakhs No.)	104	5.08	388.4	0.10	1.83	1,730.0
3. Share capital (Rs. lakhs)	29.23	353.94	1,110.9	1.51	136.72	9,054.3
4. Working capital (Rs. lakhs)	412.62	4,824.02	1,069.1	13.68	1,858.16	13,583.0
5. Loans issued (Rs. lakhs)	69.35	1,320.84	1,804.6	5.32	631.81	11,876.1

Source : Registrar of Co-operative Societies, Hyderabad.

Animal Husbandry:

30. Animal Husbandry forms an important aspect of agricultural development. The provision of facilities for treatment of cattle is an important scheme under the Animal Husbandry Programme. It will be seen from the table below that there has been a rapid increase in the veterinary institutions in all the regions of the State during 1956-57 to 1968-69.

VETERINARY INSTITUTIONS, BY REGIONS.

Region	Veterinary institutions		Percentage increase in 1968-69 over 1956-57
	1956-57	1968-69	
Coastal Andhra	107	319	198
Rayalaseema	72	144	100
Andhra Region	179 (62.8)	463 (61.7)	159
Telangana Region	106 (37.2)	287 (38.3)	171
Andhra Pradesh	285	750	163

Source : Statistical Abstract of Andhra Pradesh, 1957 and 1970.

If the dispensaries under the control of Extension Officers (Animal Husbandry) and those under the charge of Livestock Inspectors in the Old Community Development Blocks are also taken into account, the position regarding the total number of veterinary institutions in the State will be as follows:—

VETERINARY INSTITUTIONS INCLUDING BLOCK VETERINARY DISPENSARIES, BY REGIONS

Region	Number of veterinary institutions		Percentage increase in 1968-69 over 1956-57	No. of institutions available per lakh of bovine population in 1968-69
	1956-57	1968-69		
Coastal Andhra	107	513	379	7.0
Rayalaseema	72	234	225	6.5
Andhra Region	179 (62.8)	747 (63.3)	317	6.8
Telangana Region	106 (37.2)	433 (36.7)	308	5.3
Andhra Pradesh	285	1,180	314	6.2

Source : Director of Animal Husbandry, Hyderabad.

Power :

31. During the period 1956-57 to 1969-70 there has been a spectacular progress in rural electrification in the State, while the development in the Telangana region has been even more impressive. In the Telan-

gana region the number of towns and villages electrified increased from a mere 18 in 1956-57 to 2,539 in 1969-70 while in Coastal Andhra they increased from 398 to 3,108 and in Rayalaseema from 147 to 1,553. In 1956-57 the number of towns and villages electrified in the Telangana region formed only 3.2 per cent of the total in the State while in 1969-70 they formed as much as 35.3 per cent.

TOWNS AND VILLAGES ELECTRIFIED, BY REGIONS

	<i>No. electrified</i>				<i>Percentage increase in</i>	
	1956-57	1967-68	1968-69	1969-70	1967-68 over 1956-57	1969-70 over 1956-57
Coastal Andhra ..	398	2,372	2,674	3,108	496	681
Rayalaseema ..	147	1,084	1,292	1,553	637	956
Andhra Region ..	545 (96.8)	3,456 (69.8)	3,966 (68.7)	4,661 (64.7)	534	755
Telangana Region ..	18 (3.2)	1,494 (30.2)	1,792 (31.3)	2,539 (35.3)	8,200	14,006
Andhra Pradesh ..	563 (100.0)	4,950 (100.0)	5,758 (100.0)	7,200 (100.0)	779	1,179

Source : Andhra Pradesh State Electricity Board, Hyderabad.

32. There has been a substantial rise in the overall consumption of power in all three regions of the State. Between 1957-58 and 1969-70 the total consumption of power increased by 745 per cent in Telangana, 645 per cent in Rayalaseema and 528 per cent in Coastal Andhra. In 1969-70 the per capita consumption of power in the Telangana region, though higher than that in the Rayalaseema was however lower than that in Coastal Andhra. The per capita consumption of power for irrigation purposes was 6.3 Kwh., in Telangana against 12.9 kwh., in Rayalaseema and 6.9 kwh., in Coastal Andhra.

CONSUMPTION OF ELECTRICITY, BY REGIONS

Region	Total consumption (lakh kwh.)		Percent- age increase in 1969-70 over 1957-58	Per capita consumption in 1969-70 (kwh.)		
	1957-58	1969-70		Indus- trial	Agricul- ture	Total
Coastal Andhra	.. 1,673.6	10,507.6	528	37.6	6.9	55.4
Rayalaseema	.. 404.6	3,013.1	645	15.0	12.9	36.1
Andhra Region	.. 2,078.2	13,520.7	551	30.7	8.8	49.5
Telangana Region	.. 673.5	5,693.5	745	20.6	6.3	37.1
Andhra Pradesh	.. 2,751.7	19,274.2	598	27.1	7.9	45.1

Source : Andhra Pradesh State Electricity Board, Hyderabad.

Industry :

33. The allocations in the State Plan are meant for the provision of infrastructural facilities such as power, water, land, etc., for the development of industries, while the bulk of the investment on the industrial projects has to come from the Central Government sector and the private sector.

34. During 1956-57 to 1968-69 the plan expenditure was Rs. 12.46 crores in the Telangana region against Rs. 19.01 crores in the Andhra region towards the development of industries and mines. The plan expenditure in the Telangana region formed 40.0 per cent of the total expenditure in the State.

35. During the years 1960-61 and 1968-69, the income generated from manufacturing (Mining and Large scale manufacturing) at current prices increased from Rs. 13.95 crores to Rs. 33.86 crores in Telangana as against an increase from Rs. 24.23 crores to Rs. 51.42 crores in Andhra region. The income in Telangana region constituted 36.5 per cent of the total income in 1960-61 and 39.7 per cent in 1968-69. At 1960-61 prices, the income increased from Rs. 13.95 crores in 1960-61 to Rs. 24.45 crores in 1968-69 in Telangana region as against Rs. 24.23 crores to Rs. 37.74 crores in Andhra region. The income increased by 142.8 per cent at current prices and 75.2 per cent at 1960-61 prices in Telangana region as against 112.3 per cent at current prices and 55.8 per cent at 1960-61 prices in Andhra region.

**INCOME GENERATED FROM MANUFACTURING (MINING AND
FACTORY ESTABLISHMENT), BY REGIONS**

(Figures in Rs. crores)

	<i>At current prices</i>			<i>At 1960-61 prices</i>		
	1960-61	1968-69	<i>Percentage increase</i>	1960-61	1968-69	<i>Percentage increase</i>
Coastal Andhra ..	21.13	45.68	116.2	21.13	33.53	58.7
Rayalaseema ..	3.10	5.75	85.3	3.10	4.21	35.8
Andhra Region ..	24.23 (63.5)	51.43 (60.3)	112.3	24.23 (63.5)	37.74 (60.7)	55.8
Telangana Region ..	13.95 (36.5)	33.88 (39.7)	142.8	13.95 (36.5)	24.45 (39.3)	75.2
Andhra Pradesh ..	38.18 (100.0)	85.30 (100.0)	123.4	38.18 (100.0)	62.19 (100.0)	62.9

Source : Bureau of Economics and Statistics ; Hyderabad.

36. The information on the investments made by the Central Government on industrial and mineral projects and major ports is available according to their location. A perusal of these figures shows that 67.0 per cent of the total investments in the State were in the Telangana region.

**CENTRAL SECTOR INVESTMENT ON INDUSTRIAL PROJECTS
(INCLUDING MAJOR PORTS) BY REGIONS.**

	<i>Investment as at the end of 1967-68 (Rs. in crores)</i>	<i>Percentage to the total</i>
Andhra ..	41.77	33.0
Telangana ..	84.86	67.0
Andhra Pradesh ..	126.63	100.0

Source : Planning and Co-operation Department, Andhra Pradesh, Hyderabad.

37. During 1957-69 while the number of factories registered under the Factories Act increased by 48.7 per cent in the Andhra region and by 38.9 per cent in the Telangana region, the total employment in these factories however, increased by 73.6 per cent in the Andhra region and by 91.9 per cent in the Telangana region over this period.

FACTORIES REGISTERED UNDER THE FACTORIES ACT BY REGIONS

Region	No. of factories			No. of workers		
	1957	as on 1-1-1969	Per- centage increase	1957	as on 1-1-1969	Per- centage increase
Coastal Andhra	1,904	2,989	57.0	1,08,740	1,90,845	75.5
Rayalaseema	644	799	24.1	16,875	27,191	73.0
Andhra Region	2,548 (70.9)	3,788 (72.3)	48.7	1,25,615 (74.4)	2,18,036 (72.4)	73.6
Telangana Region	1,046 (29.1)	1,453 (27.7)	38.9	43,327 (25.6)	83,131 (27.6)	91.9
Andhra Pradesh	3,594 (100.0)	5,241 (100.0)	45.8	1,68,942 (100.0)	3,01,167 (100.0)	78.3

Source : Statistical Abstract of Andhra Pradesh, 1957 and 1969.

Transport and Communications :

38. The plan expenditure during 1956-57 to 1968-69 in the Telangana region on roads and transport was Rs. 16.75 crores against Rs. 16.93 crores in the Andhra region. The expenditure in the Telangana region, thus formed as much as 49.7 per cent of the total.

39. During 1956-57 to 1965-66 the road mileage (excluding municipal roads) increased by 147.4 per cent in the Telangana region against 33.2 per cent in Coastal Andhra and 32.2 per cent in Rayalaseema. However, inspite of this substantial increase in the road mileage over the plans, the Telangana region still continues to be backward in regard to road facilities. In 1965-66 the road length per 100 square miles of area was 20 miles in Telangana against 29 miles in Rayalaseema and 38 miles in Coastal Andhra and in terms of road length per lakh population it was 64 miles in Telangana against 106 miles in Rayalaseema and 72 miles in Coastal Andhra.

ROAD MILEAGE (ALL EXTRA-MUNICIPAL ROADS) BY REGIONS

Region	Government roads		Per- centage in- crease	Total roads		Per- centage in- crease	Road length in 1965-66	
	1956-57	1965-66		1956-57	1965-66		100 Sq. Miles	Lakh popula- tion area.
Coastal Andhra	4,226	5,456	29.1	9,488	12,641	33.2	38	72
Rayalaseema	2,616	3,479	33.0	6,188	8,178	32.2	29	106
Andhra Region	6,842 (66.8)	8,935 (65.8)	30.6 (81.1)	15,676 (81.1)	20,819 (69.8)	32.8	34	82
Telangana Region	3,404 (33.2)	4,647 (34.2)	36.4	3,647 (18.9)	9,024 (30.1)	147.4	20	64
Andhra Pradesh	10,246 (100.0)	13,577 (100.0)	32.5	19,323 (100.0)	29,843 (100.0)	54.4	28	76

Source : Chief Engineer (Roads and Buildings) Andhra Pradesh, Hyderabad.

40. The number of registered motor vehicles on road has increased by 252 per cent in the Telangana region against 127 per cent in Andhra region.

REGISTERED MOTOR VEHICLES ON ROAD, BY REGIONS

Region	No. of vehicles on 31st March			Percentage increase	
	1957	1968	1969	1968 over 1957	1969 over 1957
Coastal Andhra ..	10,443	27,154	27,979	160	168
Rayalaseema ..	4,501	5,206	5,995	16	33
Andhra Region ..	14,944 (56.5)	32,360 (48.3)	33,974 (45.6)	117	127
Telangana Region ..	11,517 (43.5)	34,575 (51.7)	40,527 (54.4)	200	252
Andhra Pradesh ..	26,461 (100.0)	66,935 (100.0)	74,501 (100.0)	153	182

Source : Commissioner of Transport, Andhra Pradesh, Hyderabad.

41. The number of post offices in the Telangana region increased by 93.4 per cent during 1956-69 while the corresponding increase in the Andhra region was 91.1 per cent. Thus, the development of postal facilities is fairly even in both the regions.

POST OFFICES, BY REGIONS

Region	No. of post offices as on 31st March			Percentage increase in	
	1956	1966	1969	1966 over 1956	1969 over 1956
Coastal Andhra ..	3,180	5,362	5,531	68.6	73.9
Rayalaseema ..	1,369	3,057	3,160	123.3	130.6
Andhra Region ..	4,549 (67.9)	8,419 (68.0)	8,691 (67.6)	85.1	91.1
Telangana Region ..	2,153 (32.1)	3,969 (32.0)	4,165 (32.4)	84.4	93.4
Andhra Pradesh ..	6,702 (100.0)	12,388 (100.0)	12,856 (100.0)	84.8	91.8

Source : Statistical Abstract of Andhra Pradesh 1956, 1966 and 1969.

Education :

42. The plan expenditure on general and technical education in the Telangana region during 1956-57 to 1968-69 was of the order of Rs. 16.43 crores as against Rs. 21.67 crores in the Andhra region. The expenditure in the Telangana region thus formed about 43.1 per cent of the total plan expenditure on education in the State.

43. Over the period 1956-57 to 1968-69, there had been a remarkable increase in the educational institutions in the State, the increase being generally more in case of Telangana, followed by Rayalaseema. The number of primary schools increased by 37.73 per cent in the Telangana region against an increase by 38.42 per cent in Rayalaseema and 16.42 per cent in Coastal Andhra. In 1956-57 the primary schools in the Telangana region formed 26.5 per cent of the total in the State while by 1968-69 this proportion increased to 28.8 per cent. The scholars in the primary schools increased by 14.02 per cent in the Telangana region against 25.94 per cent, in the Andhra region. However, it will be noted that still the enrolment in the Telangana region is not commensurate with the number of institutions. In 1968-69 though the number of primary schools in the Telangana region formed 28.8 per cent of the total in the State, the enrolment was only 18.5 per cent of that in the State as a whole.

PRIMARY SCHOOLS (INCLUDING PRE-PRIMARY) AND SCHOLARS, BY REGIONS

Region	Schools (No.)		Percentage increase	Scholars (lakh Persons)		Percentage increase
	1956-57	1968-69		1956-57	1968-69	
Coastal Andhra	.. 15,093	17,571	16.42	14.91	17.86	19.73
Rayalaseema	.. 6,223	8,614	38.42	5.04	7.27	44.33
Andhra Region	.. 21,316 (73.5)	26,185 (71.2)	22.84	19.95	25.13 (81.5)	25.94
Telangana Region	.. 7,684 (26.5)	10,583 (28.8)	37.73	5.00	5.70 (18.5)	14.02
Andhra Pradesh	.. 29,000 (100.00)	36,768 (100.0)	26.79	24.95	30.83 (100.00)	23.55

Source : Director of Public Instruction, Hyderabad.

44. The Middle/Upper Primary Schools increased manifold in all the three regions during the period 1956-57 to 1968-69 unlike in the case of the primary schools. The enrolment in the Middle/Upper Primary Schools in the Telangana region was more in conformity with the population proportion of the region. For instance, in 1968-69 the Telangana region accounted for 32.1 per cent of the total enrolment in the Middle/Upper Primary Schools in the State.

**MIDDLE/UPPER PRIMARY SCHOOLS AND SCHOLARS,
BY REGIONS**

Region	Schools (No.)		Percentage increase	Scholars (000 persons)		Percentage increase
	1956-57	1968-69		1956-57	1968-69	
Coastal Andhra	77	1,266	1,544	13.8	347.8	2,420
Rayalaseema	27	438	1,522	4.0	98.5	2,363
Andhra Region	104 (38.1)	1,704 (59.3)	1,538	17.8 (21.1)	446.3 (67.9)	2,407
Telangana Region	169 (61.9)	1,166 (40.2)	590	66.7 (78.9)	262.6 (32.1)	294
Andhra Pradesh	273 (100.0)	2,870 (100.0)	951	84.5 (100.0)	708.9 (100.0)	739

Source : Director of Public Instruction, Hyderabad.

45. In the case of High/Higher Secondary/Multi-purpose Schools the increase in the number of schools and scholars in them was much more marked in the Telangana region than in the Andhra region. Within the Andhra region the increase was more in Rayalaseema than in Coastal Andhra. The number of these schools increased from 105 in 1956-57 to 1,191 in 1968-69 in the Telangana region against an increase from 480 to 1,170 in Coastal Andhra and from 147 to 542 in Rayalaseema during the same period. In 1956-57 the schools in the Telangana region formed only 14.3 per cent of all the schools in the State, while by 1968-69 they formed as much as 41.0 per cent. Similarly, the enrolment in the Telangana region in High/Higher Secondary/Multipurpose schools formed 44.7 per cent of the total in 1968-69 against only 21.5 per cent in 1956-57.

**HIGHER/HIGHER SECONDARY/MULTIPURPOSE SCHOOLS
AND SCHOLARS, BY REGIONS**

Region	Schools (No.)		Percentage increase	Scholars (000 persons)		Percentage increase
	1956-57	1968-69		1956-57	1968-69	
	Coastal Andhra	480		1,170	144		221.2	449.1	103
Rayalaseema	147	542	269	78.4	171.4	119
Andhra Region	627 (85.7)	1,712 (59.0)	173	299.6 (78.5)	620.5 (55.3)	107
Telangana	105 (14.3)	1,191 (41.0)	1,034	82.1 (21.5)	502.0 (44.7)	511
Andhra Pradesh	732 (100.0)	2,903 (100.0)	296	381.7 (100.0)	1,122.5 (100.0)	194

Source : Director of Public Instruction, Hyderabad.

46. There has been a similar development of collegiate education. The number of colleges (including professional) increased from 30 in 1956-57 to 94 in 1968-69 in the Telangana region against an increase from 55 to 109 in Coastal Andhra and from 13 to 35 in Rayalaseema.

47. The enrolment in the colleges increased during the same period by 312.2 per cent in Telangana against 122.8 per cent in Andhra region.

COLLEGES (INCLUDING PROFESSIONAL) AND SCHOLARS,
BY REGIONS

Region	College (No)		Percent- age increase	Scholars (000 presons)		Percent- age increase
	1956-57	1968-69		1956-57	1968-69	
Coastal Andhra	55	109	90.9	32.0	62.6	95.6
Rayalaseema	13	35	169.2	7.4	25.2	240.5
Andhra Region	68	144	111.7	39.4	87.8	122.8
Telangana Region	30	94	213.3	12.3	50.7	312.2
Andhra Pradesh	98	238	142.9	51.7	138.5	167.9

FACILITIES FOR TECHNICAL EDUCATION, BY REGIONS.

Region	In-take Capacity in Degree Colleges (No. of seats)			In-take Capacity in Poly- technics (No. of seats)		
	1956-57	1967-68	Percent- age increase	1956-57	1967-68	Percent- age increase
Coastal Andhra	216	540	150.0	490	1,545	215.3
Rayalaseema	120	475	294.1	..	570	..
Andhra Region	336 (61.0)	1,013* (60.7)	201.5	490 (57.0)	2,115 (60.7)	331.6
Telangana Region	215 (39.0)	657** (39.3)	205.6	370 (43.0)	1,370 (39.3)	270.3
Andhra Pradesh	551 (100.0)	1,670 (100.0)	203.1	860 (100.0)	3,485 (100.0)	305.2

*Includes 83 seats in Regional Engineering College, Warangal.

**Includes 42 seats in regional Engineering College, Warangal.

Source : Director of Technical Education, Hyderabad,

FACILITIES FOR MEDICAL EDUCATION : BY REGIONS

Number of Colleges In-Take capacity (No. of Seats)

Region	Number of Colleges		In-Take capacity (No. of Seats)		Percentage increase
	1956-57	1968-69	1956-57	1968-69	
Coastal Andhra	2	2	230	300	30.4
Rayalaseema	1	2	50	250	400.0
Andhra Region	3	4	280	550	96.4
Telangana Region	2	2	158	270	70.9
Rangaraya Medical College, Kakinada . . .	..	1	..	150	..
Kakatiya Medical College, Warangal .. ..	..	1	..	150	..
Andhra Pradesh	5	8	438	1,120	155.7

Source : Director of Medical and Health Services, Andhra Pradesh, Hyderabad.

Medical and Public Health :

48. Another important field under the Social Services sector which received considerable attention in the plans was the provision of medical facilities in the urban as well as rural areas of the State. During the period 1956-57 to 1968-69 about Rs. 9.83 crores was spent on Medical and Public Health programmes in the Telangana region against Rs. 17.20 crores in the Andhra region, the expenditure in the Telangana region forming 36.4 per cent of the total.

49. The number of Government hospitals and dispensaries in the Telangana region increased from 143 in 1956-57 to 427 in 1968-69 as against an increase from 253 to 974 in the Andhra region. As regards hospital beds, the number of beds increased from 5,215 in 1956-57 to 9,502 in 1968-69 in the Telangana region against an increase from 8,780 to 11,416 in the Andhra region.

GOVERNMENT HOSPITALS AND DISPENSARIES (ALLOPATHIC)
BY REGIONS.

Region	No. of Hospital and Dispensaries		Percentage increase in 1968-69 over 1956-57
	1956-57	1968-69	
Coastal Andhra	175	686	297
Rayalaseema	80	288	260
Andhra Region	253 (63.9)	974 (69.5)	285
Telangana region	143 (36.1)	427 (30.5)	199
Andhra Pradesh	396 (100.0)	1,401 (100.0)	254

Source : Director of Medical and Health Services, Andhra Pradesh, Hyderabad.

HOSPITAL BEDS : BY REGIONS

Region	No. of Hospital Beds		Percentage increase in 1968-69 over 1956-57	No. of beds per lakh population in 1968-69
	1956-57	1968-69		
Coastal Andhra	6,926	7,808	12.7	41
Rayalaseema	1,854	3,608	94.6	44
Andhra region	8,780 (62.7)	11,416 (54.7)	13.0	42
Telangana region	5,215 (37.3)	9,502 (45.3)	82.0	62
Andhra Pradesh	13,995 (100.0)	20,918 (100.0)	49.5	49

Source : Director of Medical and Health Services.

50. It will be seen from the preceding paragraphs that there has been considerable development in Telangana region over the plans. Despite this impressive progress the region still continues to be backward in many sectors. The table below shows the position of Telangana *vis-a-vis* the State as a whole and All-India in respect of certain selected socio-economic indicators.

TABLE 1
SELECTED SOCIO-ECONOMIC INDICATORS FOR TELANGANA,
ANDHRA PRADESH AND ALL INDIA.

Indicator	Year	Telangana	Andhra Pradesh	All India.
1. Density of Population (per sq. mile)	1971	356	409	471
2. Percentage of urban population	1971	21.13	19.35	19.87
3. Percentage of urban population excluding Hyderabad city	1971	9.72	15.20	..
4. Percentage growth of population	1961-71	24.23	20.60	24.66
5. Percentage of workers to total population	1971	42.92	41.68	33.54
6. Percentage of forest area to geographical area	1967-68	23.8	22.3	19.8 ((a)
7. Percentage of cultivated land to total geographical area	1967-68	41.0	41.4	44.8 (a)
8. Percentage of net irrigated area to net area sown	1967-68	18.3	27.2	20.2 ((a)

9.	Percentage of gross irrigated area to gross cropped area	.. 1967-68	21.3	31.0	20.9(a)
10.	Yield per acre of paddy (in lbs.)	1967-68	1,232	1,227	920
11.	Yield per acre of jowar (in lbs)	.. 1967-68	366	430	491
12.	Yield per acre of ground-nut (in lbs.)	.. .. 1967-68	571	676	673
13.	Yield per acre of sugarcane (in lbs.)	1967-68	6,451	7,316	4,265
14.	Gross value of agriculture output per acre (Rs.)	.. .. 1967-68	286	400	356
15.	Per capita consumption of Electricity (K. wh.)	.. .. 1968-69	34	44	76
16.	Number of factory workers per lakh population	.. .. 1969	521	534	901
17.	Percentage literacy-All persons	.. 1971	20.64	24.56	29.34
18.	Percentage enrolment of children of the age group 6-11 in primary schools (Boys and girls)	.. 1968-69	51.3	72.7	77.3
19.	Per capita net domestic products (Rs.)	.. .. 1968-69	450	478	555

(a) 1966-67 provisional area figure.

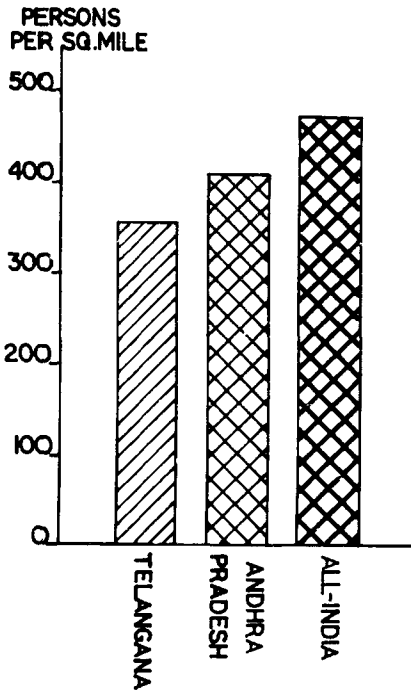
51. It will be observed from the above figures that the population density in Telangana is lower than that in Andhra Pradesh as well as in All-India, while the proportion of urban population is slightly higher than that in the State as a whole as well as in All-India. However, if Hyderabad City is excluded the urbanisation in Telangana is markedly less being only 9.72 per cent. The population growth during 1961-71 was slightly lower than that of All-India though higher than the State average. The workers form a larger percentage to the total population in the Telangana region as compared to the State average which itself is higher than that of All-India. The region is also fairly rich in mineral and forest resources. The proportion of geographical area under forests is higher than that of the State as a whole as well as All-India. The yields per acre in the region under irrigated crops such as paddy and sugarcane are much higher than All-India average, while they are comparable with those obtaining in the State as a whole.

52. In spite of these favourable factors, the per capita net domestic product in the region is lower than the State average as well as All-India average. This is partly because of the fact that the irrigated area in the region is much lower than the State average and partly because the industrial base in the region is meagre and consequently agriculture plays a prominent role in the growth of regional income and per capita income. The yields per acre of dry crops in the region such as Jowar and ground-nut which account for a large proportion of the total area under dry crops are much lower than either the State average or the All-India average. Moreover, a large proportion of the area under dry crops is accounted by low income yielding crops, such as millets and pulses. Thus the lower order of per capita income in the region is accounted for by the lower order of output per acre which itself is more dependent on the performance of dry crops within the region.

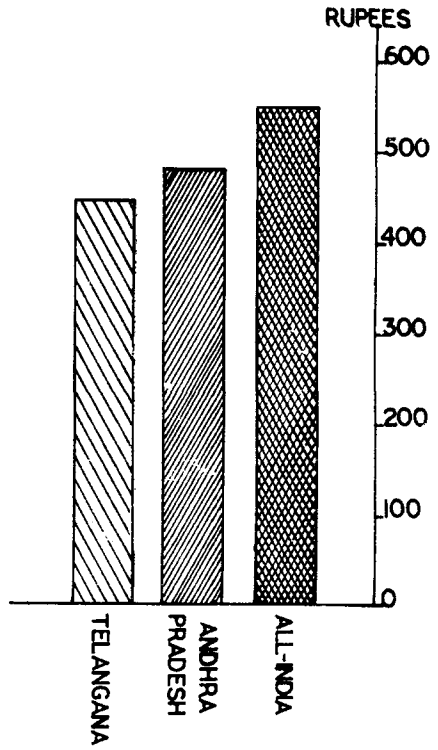
Despite the growth of industries in the twin cities in recent years the industrial base in the region is proportionately small compared to the All-India position and consequently this sector's contribution to the regional income does not have a significant impact on the over all income level in the region.

53. The economic backwardness of the region has its consequential effects on the social and tertiary sector activities. For instance, the literacy rate in the region is much less than the State average as well as the All India average and so is the case with the enrolment of children in Primary Schools.

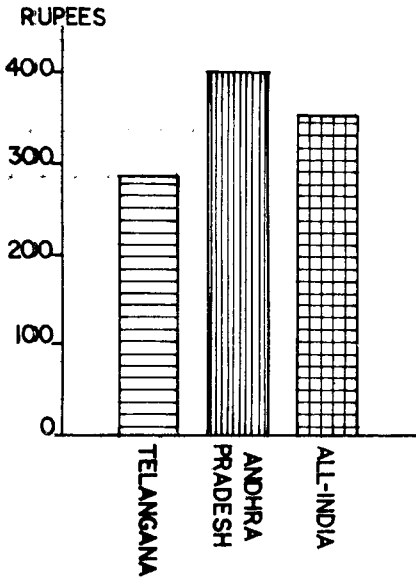
POPULATION
DENSITY
1971



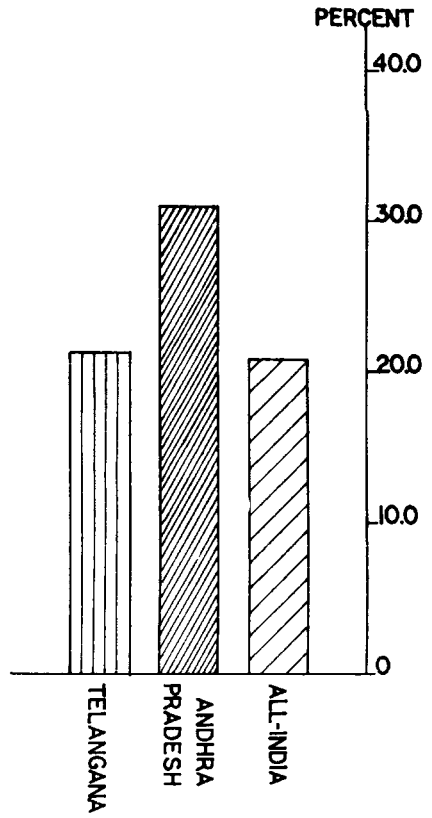
PER CAPITA NET
DOMESTIC PRODUCT
1968-69



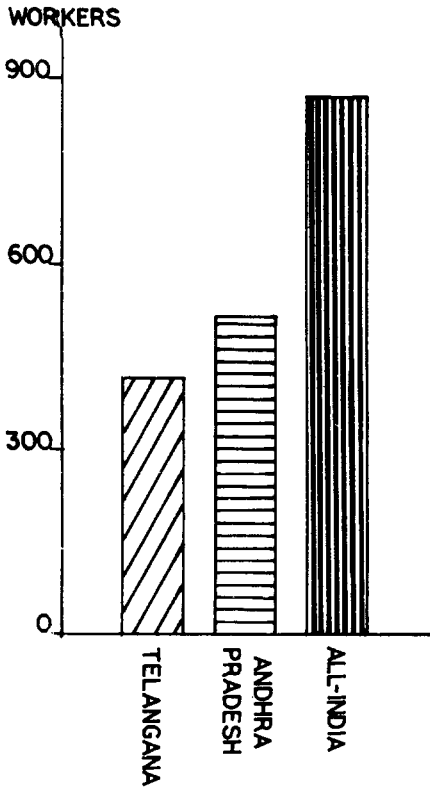
GROSS VALUE
OF AGL. OUTPUT
1967-68



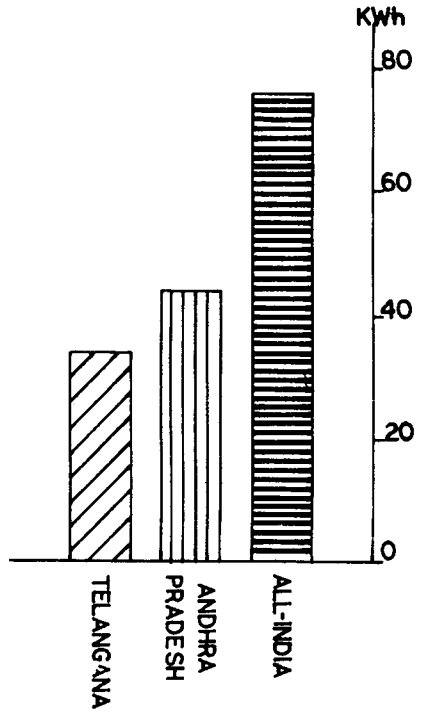
IRRIGATED AREA
AS % TO CROPPED AREA
1967-68



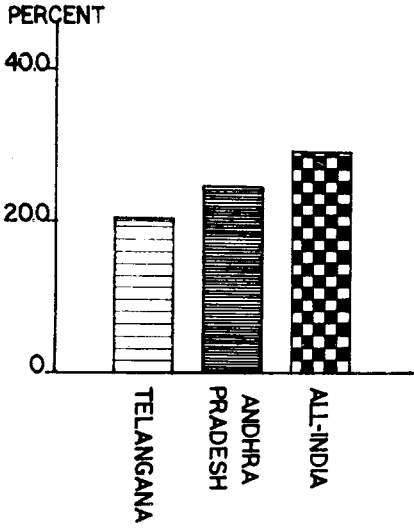
FACTORY WORKERS
PER LAKH POPULATION
1969



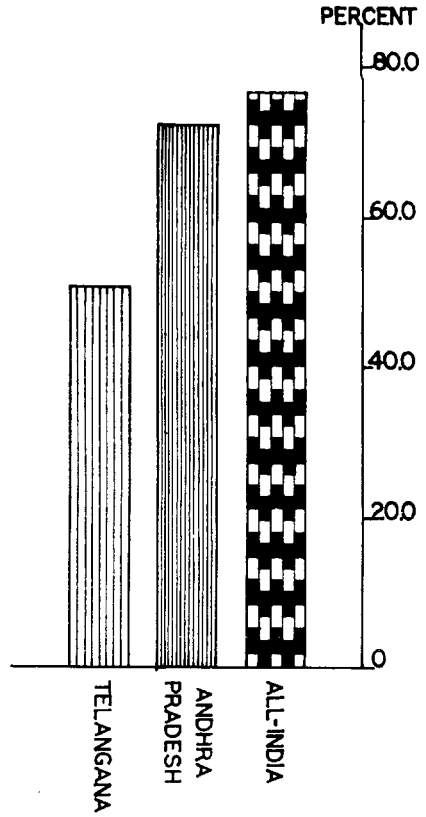
PERCAPITA
CONSUMPTION OF
ELECTRICITY



LITERATE
POPULATION
1971



ENROLMENT OF CHILDREN
IN 6-11 AGE GROUP
1968 - 69



PERSPECTIVE PLAN

At the first meeting of the Telangana Development Committee held on 26th June, 1969, it was recommended that action should be taken for preparing a perspective plan for the development of Telangana region taking into account the existing levels of development, its potentialities and the special problems of the region. The Committee also recommended that the areas that require special attention for accelerating economic development in the region were irrigation, rural electrification, credit, soil conservation and communications and that in these sectors adequate outlays should be made in the plan of the region. The State Government have approved this list of priority sectors and decided to take up the preparation of a perspective plan for each of these sectors taking into account the potentialities as well as special problems and their solutions. Accordingly, a tentative attempt was made for the preparation of a perspective plan for the above sectors other than credit. What was attempted was a rough outline to give an idea of the potential available in those sectors, especially in irrigation. These outline plans for the above priority sectors were got ready by the beginning of 1970.

In order to prepare a more comprehensive and integrated long range plan for the region based on the existing levels of development in the region, its potentialities and the special problems of the region, the Planning and Co-operation Department had taken up towards the end of 1970, the collection of relevant data on the various sectors of development both from the Heads of Departments and from the district and local levels. The objectives and scope of the perspective plan and the methodology that was proposed to be adopted were broadly identified. Broadly, the main objective is to prepare an integrated long-term development plan for the region for a period of 15 years indicating the physical programme and financial outlays required, based on which more detailed Five-Year Plans could be formulated at a later stage. The Plan would cover, among other things, the over-all strategy proposed for development including strategies for area development, the provision of infrastructure and organisational arrangements necessary to initiate, pro-

mote and sustain the desired activities for growth, and contingency plans in case the estimated resources fall short of expectations. Broadly, the perspective plan is proposed to be prepared on the basis of an area approach, the areas with common characteristics being demarcated for the adoption of an appropriate unified development strategy.

The State Government have also constituted a Technical Committee with Secretary to Government, Planning and Co-operation Department, as Chairman and some of the eminent economists, geographers *etc.*, in the country as Members to render advice to the Government on the preparation of a perspective plan for the region. The Technical Committee has considered various alternative approaches to a perspective plan of the region and the broad frame-work for the preparation of a plan covering a period of 15 years.

Alternative Approaches:

One alternative considered by the Committee was to adopt an approach based on demand projections for the region which would be similar in some important respects to the approach adopted for a National Plan. In this approach, the demand projections would have to be made over a 15 year period for some major agricultural and industrial commodities and services and production targets would be fixed in the perspective plan for the region and exports and the comparative costs of production within the region and outside. Once the production targets are set for the plan period, then the investment will be decided taking into account the estimates of marginal capital output ratios. If employment is also an objective, given the investment quantum in each line, targets of employment can be worked out for each possible technique. This requires estimates of capital-labour ratios of each technique. Such attempts in planning are possible but on further consideration it was felt that they would not be easy at the regional level where open economy principles operate.

A second approach considered, consisted in setting a desired income distribution as the target of the perspective plan and working out demand projections *etc.*, afresh for achieving the actual pattern of income distribution. This approach would be almost similar to

the first one, but for the additional constraint of a desired income distribution.

A third approach would be to arrive at investment possibilities taking into account the projection of public revenue and public borrowing over the next 15 years and the net resources available for investment. Thereafter, some other disaggregative approach for industry-wise and crop-wise investment would have to be adopted.

Yet, another approach considered was to examine the directions in which private investment has already been flowing into Telangana both from internal and from non-Telangana sources. These lines must obviously have been profitable and often more profitable here than elsewhere. These lines of investment would seem to have the support of the market, that is to say of demand on the one hand and low cost on the other. This approach assumes that the cropping pattern and the investment pattern as between other States and Andhra Pradesh and also between Telangana and other regions of Andhra Pradesh is, by and large, in line with resource endowments. The approach further assumes that if the people and institutions do not invest in some obviously profitable lines in Telangana this must be because, though endowments are there, initial resources are small and the infrastructure for improving the available endowment is not present. Thus, the plan would, in this view, have to aim at building up of the infrastructure.

After careful consideration, the Technical Committee felt that the demand, production and revenue projections would not be accurate with the available data and that they can at best serve as checks on other more practical approaches rather than serve as self-sufficient independent approaches, especially where regional planning for less than a State is involved.

The Technical Committee, therefore, was of the opinion that, since the lag in development in Telangana region was basically due to the inadequate infrastructural facilities which often require large initial resources, it would be more appropriate to draw up the perspective plan of the region as a plan of infrastructures so that public and private investments could then

proceed along a more natural resources endowment—based course. However, at the margin, some social considerations could be brought in to correct the investment patterns in the infrastructure itself.

Tentative approach adopted :

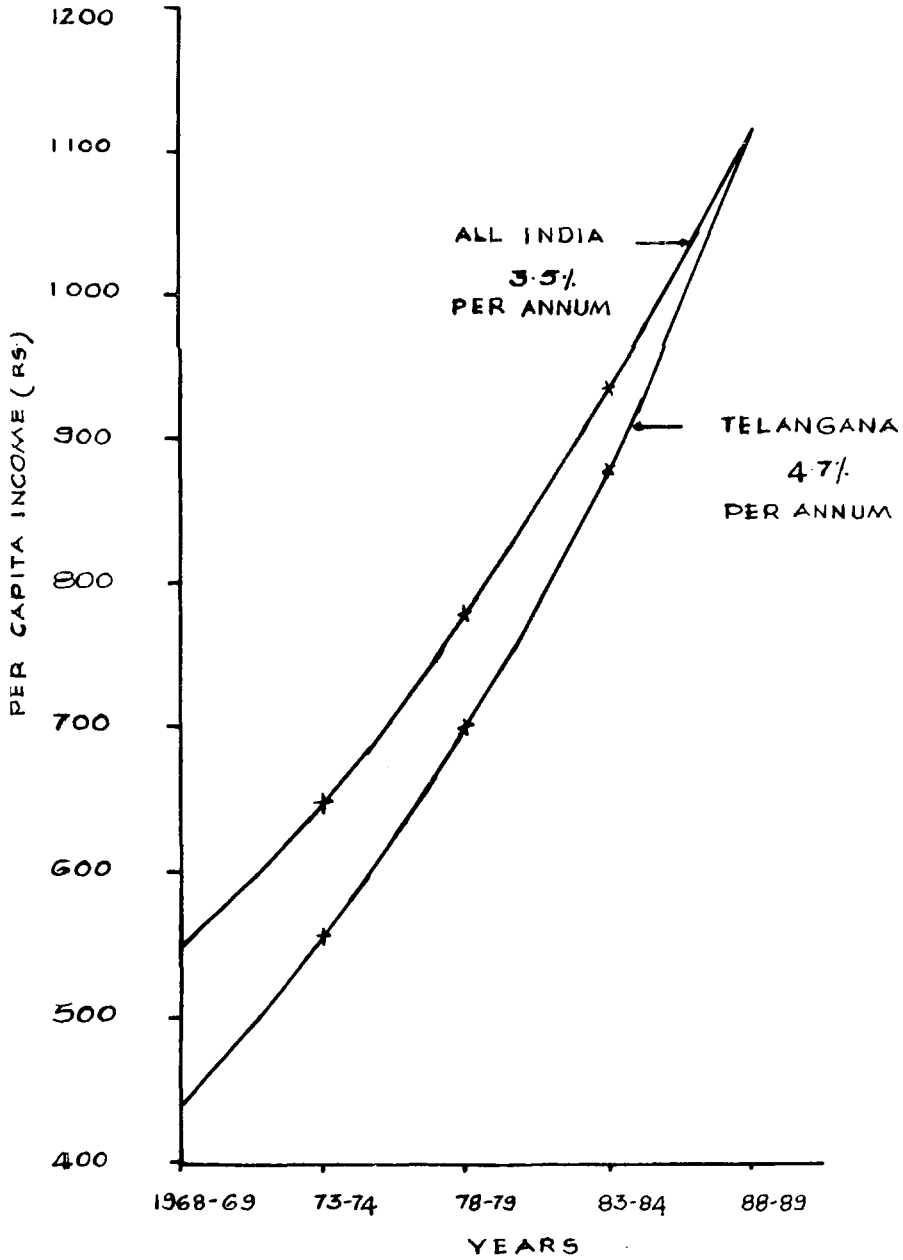
As for the over-all perspective of development in the region over a 15 year period, the Technical Committee decided that both the alternative approaches of macro-planning *viz.*, the approach based on increasing the income and consumption to specified limits over a period and the approach based on creating a certain level of employment over a period, should be studied and compared for arriving at a rational and realistic perspective. Some work in evolving the perspective on these lines has already been done.

Over-all Perspective :

In 1968-69 the per capita net domestic product was Rs. 450 in Telangana against Rs. 478 in Andhra Pradesh and Rs. 552 in All-India. Thus, the per capita net domestic product in the Telangana region was less than that in Andhra Pradesh which itself was less than the All India average. The Technical Committee felt that the ultimate well-being of the people depends on the over-all income generation of the region and that therefore, it would be desirable to step up the regional income of Telangana over a period of years, so that it would catch up with the All-India average in as short a time as possible. Considering the backwardness of the region and the financial resource constraint, the committee felt that it would not be unreasonable to expect that the income disparity in the Telangana region as compared to All-India should be wiped off by 1988-89 which is the last year of the VII Plan.

According to the national Fourth Plan document, the per capita net domestic product in the country which was Rs. 552 in 1968-69 would be stepped up to Rs. 643 by 1973-74, to Rs. 776 by 1978-79 and Rs. 844 by 1980-81. All these figures are at 1968-69 prices. The annual compound growth rate in per capita net domestic product envisaged in these projections works to 3.5 per cent. If the same order of growth in the per capita net domestic product is assumed for the successive years, then the per capita net domestic product

PERSPECTIVE PLAN
PROJECTIONS OF
PER CAPITA INCOME



in the country in 1988-89 would be Rs. 1,110 at 1968-69 prices.

Thus, therefore, the per capita net domestic product in Telangana which was Rs. 450 in 1968-69 has to be stepped up to Rs. 1,110 by 1988-89 or at an annual compound growth rate of 4.7 per cent. This would mean that the per capita net domestic product in Telangana would be stepped up to Rs. 558 by 1970-74, Rs. 702 by 1978-79 and Rs. 883 by 1983-84. This sort of growth in the per capita net domestic product would mean an increase of about 7 per cent annual compound growth rate in the regional income of Telangana against about 6 per cent visualised for the country as a whole. Considering the backwardness of Telangana and the over-all national objective of balanced regional growth, this sort of step up in the growth of the regional income of Telangana cannot be considered as ambitious. The growth in per capita net domestic product visualised for Telangana with comparative figures for All-India is shown in the following table:

Year	Per capita net domestic product (Rupees)	
	Telangana	All-India
1968-69	450	552
1973-74 (end of IV Plan)	558	643
1978-79 (end of V Plan)	702	776
1980-81	..	844
1983-84 (end of VI Plan)	883	*933
1988-89 (end of VII Plan)	1,110	*1,110

*Estimated.

An exercise has also been done to translate this aspiration of an increase in per capita net domestic product and the regional income of Telangana into concrete investment implications. The above order of increase in the per capita net domestic product would mean an increase in the level of regional income of the order of Rs. 277 crores in the Fourth Plan, Rs. 376 crores in the V Plan, Rs. 541 crores in the VI Plan and Rs. 743 crores in the VII plan as shown in the following table:

ADDITIONAL INCOME GENERATION IN TELANGANA REGION
(AT 1968-69 PRICES)

Year	Population (Millions)	Per capita net domestic products. (Rs.)	Total regional net domestic products. (Rs. crores)	Additional income (Rs. crores)
1968-69	..	450	660	..
1973-74	..	558	937	IV Plan 277
1978-79	..	702	1,313	V Plan 376
1983-84	..	883	1,854	VI Plan 541
1988-89	..	1,110	2,597	VII Plan 743

The Committee considered alternative capital-output ratios which should be assumed for working out the investment requirements in the succeeding plans in the Telangana region. In the National IV Plan the capital-output ratio assumed was of the order of 2 : 1 only. In the III Plan the experience of Andhra Pradesh has been that the capital-output ratio was higher than this. Taking this experience into account, and also the fact that the perspective plan of Telangana would concentrate mostly on building up of infrastructure which requires larger capital resources, the Technical Committee felt that it would be reasonable to adopt the capital out-put ratio of 3 : 1 in working out the investment requirements in the succeeding plans of Telangana. With this capital-output ratio the investment requirement in Telangana in the IV Plan would be Rs. 831 crores, Rs. 1,128 crores in the V Plan, Rs. 1,623 crores in the VI Plan and Rs. 2,229 crores in the VII Plan as shown in the following table :

Plan	INVESTMENT REQUIRED(AT 1968-69 PRICES)				(Rs. crores)	
					Investment required.	State share of invest- ments
	Additional income to be genera- ted				with capital output ratio 3:1	Assuming 50% step up from plan to plan
IV	277	831	170 (20.6)
V	376	1,118	255 (22.6)
VI	541	1,623	383 (23.6)
VII	743	2,229	575 (25.8)

This investment covers all the 3 sectors, viz., the State sector, the Central sector and the Private sector. Then comes the question of how much the State could invest in Telangana in the succeeding plans. In the successive National Plans, the share of the States' sector has been progressively coming down, mainly due to the fact that the States sources of revenue are not as buoyant as those of the Centre, with the result that the net resources that could be ploughed back

for investment from these sources were limited. This will be more so in the case of Andhra Pradesh with the special problems of backward areas, chronically drought affected areas etc. Thus, the outlay in the IV Plan for Andhra Pradesh may be only 50 per cent higher than that in the III Plan. If anything the difficulties in further stepping up investment would be more pronounced in succeeding plans, particularly due to the growing debt burden. These factors would indicate that the State would be in a position at best to step up its outlay from plan to plan by about 50 per cent. In other words, the investment in Telangana in the IV Plan which would be about Rs. 170 crores would go up to Rs. 255 crores in the V Plan, Rs. 383 crores in VI Plan and Rs. 575 crores in the VII Plan. The share of the State in the over-all investment requirement in these plans would be 20.6 per cent in IV Plan, 22.6 per cent in V Plan, 23.6 per cent in VI Plan and 25.8 per cent in VII Plan. The share of the State in Telangana outlays is by no means unreasonable considering the fact that the States' sector in the National Fourth Plan was only 26.5 per cent of the total outlay and that percentage is likely to come down further in the succeeding plans, if past experience is any guide.

Thus, the amounts which should be forthcoming in the central and private sectors for investment in Telangana region would be Rs. 661 crores in the IV Plan, Rs. 873 crores in the V Plan, Rs. 1,240 crores in the VI Plan and Rs. 1,654 crores in the VII Plan.

In connection with the preparation of the perspective plan for the region, a study on the economic regionalisation of Telangana *i.e.*, identification of homogeneous planning zones within the Telangana region, with a view to evolve a unified strategy of development for accelerating growth based on resource endowment was taken up with the computer facilities available with the Delhi school of Economics. The study is in an advanced stage. Another study on the settlement hierarchy in the Telangana region with a view to identify the growth points, growth centres and service centres in the region has also been taken up with the assistance of the experts of the National Institute of Community Development. When these two studies are completed, it would facilitate the

finalisation of the development strategy, both in respect of growth centres as well as areal zones within the Telangana region.

On the advice of the Technical Committee, the State Government have also constituted working groups for irrigation, power, communications, agriculture and industry for the preparation of perspective plans for these sectors. When these sectoral plans are ready, the Technical Committee would finalise the regional perspective plan, taking into account the development strategy envisaged for the different zones of development and the growth centres. The further work in the preparation of perspective plan is now in progress.

APPROACH AND STRATEGY

It will be evident from the review in Chapter III that the Telangana region is backward in many sectors either compared to the rest of the State or the All India average position. The gross value of out-put per acre in the region is far below that in the rest of the State as well as in the country. Though few major industrial units located in Hyderabad City create the impression that the region is fairly industrialised, the actual position is that the rest of the region has almost practically no industrial base as such. Consequently, even including Hyderabad City, the number of persons working in industrial units per lakh population in the region is less than that in the rest of the State and much less than the All India average position. The communication facilities in the region are inadequate and the surfaced road mileage, either in comparison to the population or the area, is below that in the rest of the State. The region is also backward in social service facilities such as education and health. The number of educational institutions in the region is not commensurate with the population and the enrolment also is proportionately less than that in the rest of the State, especially in primary education. The medical facilities in the region are generally satisfactory only in the twin cities of Hyderabad and Secunderabad, while in the rest of the region, they are below the level obtaining in the rest of the State or in the country as a whole.

The backwardness of the region, is however, not due to the lack of natural resources. As was pointed out in an earlier chapter, on natural resources, the region is well endowed with forests and minerals. The soils in the region are suitable for growing a variety of irrigated and unirrigated crops provided the nutrient and moisture status is kept up. The soils are also responsive to the application of chemical fertilisers. The region also offers a variety of locational advantages in the establishment of several types of resources based industries. But, in spite of these favourable factors, if the region still continues to be backward, it is primarily due to the inadequate investment in the development of the available potential. Some of the problems which merit consideration for improving the economy of the region are described below :

(1) The gross value of out-put per acre in the region is much below that in the rest of the State, because of two reasons. Firstly, the irrigated area in the region is much below that in the State as a whole. It is recognised that irrigation is by far the most important in-put for a rapid and sustained agricultural growth and therefore the development of the available irrigation potential in the region should receive a high priority in any scheme of development of the region. However the gross value of out-put per acre in Telangana is lower than that even in the regions where the percentage of irrigation is lesser still. Therefore, the second factor responsible for the low value of out-put per acre is that the cropping pattern in the region is heavily weighted in favour of low income yielding crops such as millets and pulses.

(2) Though the soils of the region are suitable for growing a variety of irrigated and unirrigated crops, they are however beset by the problem of severe erosion. This is particularly so in the south-western parts of the region. The soil conservation measures so far initiated have been totally inadequate compared to the magnitude of the problem.

(3) Though the soils of the region are responsive to the application of chemical fertilisers, they are more deficient in plant nutrients, than elsewhere with the result that higher doses of chemical fertilisers and organic manure have had to be applied in the agricultural lands of the region. This would require the supply of larger quantities of fertilisers, credit *etc.*, for ensuring that the soils of the region receive the required doses of plant nutrients.

(4) Though the region has a larger percentage of geographical area under forests compared to either the rest of the State or the country as a whole, the commercial exploitation of these forests is still below the optimum level.

(5) Excepting the industrial units in the twin cities of Hyderabad and Secunderabad and a few large assorted industrial units scattered in the region such as those at Sirpur, Bodhan, Warangal and Mancherial, the region lacks a well laid out industrial base consisting of either agro, mineral, forest or other

resource based industries or non-resource based industries. Consequently, the contribution of industries to the regional income is proportionately much smaller compared to that in the country as a whole.

(6) Though the region has a large livestock population, much of the stock is of low commercial value with the result that the out-put from livestock in the region is not commensurate with the total available stock.

(7) The region is fortunate enough in having a big demand centre like the twin cities of Hyderabad and Secunderabad. However, the requirements of consumer goods, either agricultural or industrial, of this centre are to a considerable extent met from outside the region.

(8) The communication facilities in the region are not only inadequate, but several areas in the region have not yet been opened up for inducting commercial marketing. This can be seen from the fact that as many as 45.8 per cent of the villages in the region are still approachable only by cart tracks or foot-paths.

(9) The region also suffers from low levels of educational infrastructure. The twin cities of Hyderabad and Secunderabad have adequate facilities in professional, technical and skilled courses, but the rest of the region still lags behind in these facilities.

(10) The local entrepreneurship is not built up adequately either for development of agriculture or for the establishment of industries.

(11) Due to the economic backwardness of the region, the savings capacity of the people in the region is also inadequate to meet the full requirements of capital for achieving a high rate of economic growth. Added to this, the investment in the central and private sectors has also not been comparable with what could be desired even on a *pro rata* basis.

However, the problems and potentialities of development vary in different parts of the region. A study to identify the homogeneous economic zones within the region so that a unified strategy of development suitable for each zone could be evolved has been taken up. These homogeneous zones are being identified

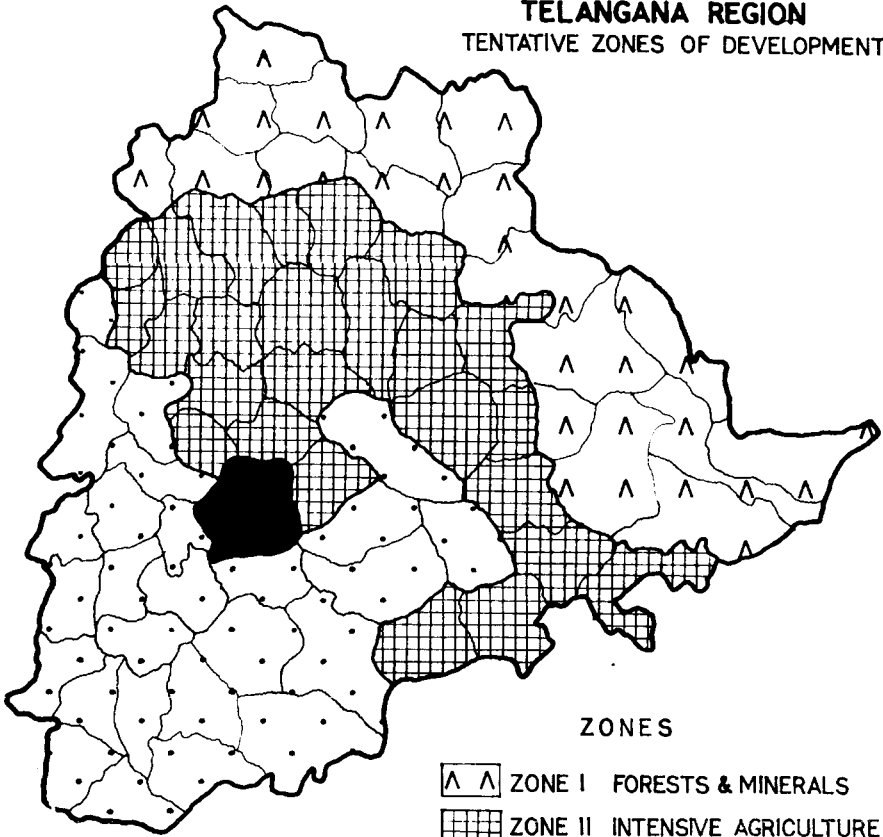
applying the factor analysis with the computer facilities available with the Delhi School of Economics. This study is in an advanced stage. However, from the available socio-economic data one can conceive of the following broad zones in the region.

The areas in the North and North-East of the region comprising parts of Adilabad, Karimnagar, Warangal and Khammam districts (Zone I of the Map) receive an annual rainfall of 40-45 inches and are covered with dry deciduous forests. Some of these areas are also rich in minerals such as Coal, Iron ore, Limestone etc. The acceleration of the exploitation of the mineral and forest resources and the establishment of forest based industries would greatly help in boosting up the income of the region. The development of these areas should also aim at the economic and social uplift of the tribal population living in this stretch of the region.





To the south of the forest region lies the intensive agricultural tract which comprises parts of Nizamabad, Medak, Karimnagar, Warangal, Khammam and Nalgonda districts (Zone II). The railway line between Vijayawada and Balharsha cuts across this tract which will be receiving extensive irrigational facilities under Pochampad Project in the North and Nagarjunasagar Left Bank Canal in the South. The mineral rich forest areas are also quite close to this tract and the infrastructure facilities for location of resource based industries are extremely favourable. The annual rainfall in this tract is well over 30 inches. This tract has great potential both for agricultural and industrial development. Nizamabad district and portions of Medak district in the west of this tract have good potential for development of agriculture. Already the agriculture in Nizamabad district has reached a fairly high level of development but there is still vast scope for increasing yields through the intensive application of improved technology.

Hyderabad Urban, Hyderabad East, Hyderabad West and Medchal taluks of Hyderabad district covering the metropolitan city and its environs would have to be treated as a unit for developmental purposes (Zone III). Already this tract contains a number of major, medium and small scale manufacturing units.

ANDHRA PRADESH
TELANGANA REGION
TENTATIVE ZONES OF DEVELOPMENT



ZONES

-  ZONE I FORESTS & MINERALS
-  ZONE II INTENSIVE AGRICULTURE
-  ZONE III URBAN INDUSTRIAL
-  ZONE IV SEMI-ARID DRY FARMING

This tract possesses the potential for being developed into a major industrial complex in the country.

In the south of the Telangana region lies the semi-arid tract covering Mahabubnagar district and parts of Medak, Hyderabad and Nalgonda districts and Jangoan taluk of Warangal district (Zone IV). The rainfall in this tract varies from 21 to 30 inches. The forests in this area are mostly of scrub type except in Achampet taluk of Mahabubnagar district. The mineral resources in this area are extremely limited. Soil erosion is a major problem in this tract. This area is the most backward in the Telangana region and poses many problems for its development. Any strategy of development of this area should aim at not only developing the limited agricultural resources and agro-based industries but also establishing non-resource based industries. In this semi-arid tract, the development of appropriate dry farming techniques is an essential pre-requisite for ensuring efficiency of cultivation.

In the light of the overall problems of the region and the potentialities of the various zones, the broad strategy of development of the region should consist of the following:—

(1) Since irrigation is the most important in-put for agricultural production and since the region has a low percentage of irrigated area, it is necessary that all the available surface irrigation should be developed as quickly as possible.

(2) It is estimated that the development of the entire surface irrigation potential available would only take the percentage irrigation in the region from the present 21 per cent to about 36 to 37 per cent of the cultivate area. It is therefore, necessary that simultaneously steps have to be taken to explore and develop the underground water potential to the maximum extent possible.

(3) The cropping pattern within the region requires diversification with emphasis on high income yielding crops. The region has sizeable area under black cotton soil and this should be made use of in growing commercial crops, such as cotton and tobacco more extensively than now.

(4) The application of chemical fertilisers and adoption of improved technology should be accelerated from the present low levels. Even in regard to irrigated crops, it is necessary that emphasis is laid on irrigated dry crops, so that the water resources available in the region could be used more extensively.

(5) To conserve water resources of the region, it is necessary to adopt improved methods of water management such as lining of canals, larger localisation for irrigated dry crops, growing of short duration crops, multiple cropping *etc.*

(6) The soil conservation programme should be taken up in a large way both to conserve the top soil as well as to conserve rain water for dry cultivation.

(7) The dry farming techniques should be developed and adopted, especially in those areas where the irrigation resources are low such as the tract in the south-western part of the region.

(8) The forest resources of the region should be exploited to their optimal level. This requires a sustained programme of afforestation with commercial species, planting of quick growing species *etc.*

(9) The Animal Husbandry Programme should be oriented towards upgrading of the livestock. Priority should be given for the development of dairying, poultry and sheep rearing and the marketing of these products.

(10) The region possesses large resources of coal, limestone and iron ore. The exploitation of these minerals is, however, not commensurate with the available reserves. The coal available in the region is of a non-coking type and not directly useful for conventional steel production. Experiments should, therefore, be carried out to use them in the manufacture of pre-reduced pellets containing 89 to 95 per cent of iron with the lower grade iron available in the region. Similarly, the possibilities of low temperature carbonisation of these coals should also be explored.

(11) Minerals such as quartzs, dolomites and graphite which are located in the region, but for which no prespecting has been taken up, should be explored quickly and their commercial exploitation expedited.

(12) The region offers good scope for establishing agro, mineral and forest based industries. These possibilities should be explored and an integrated programme for the development of these resources based industries should be drawn up.

(13) Adequate incentive should be offered in the form of developed sites, concessional supply of water and electricity *etc.*, for attracting large, medium and small industries in the private and central sectors in the region.

(14) The communication facilities in the region should be improved quickly with a view to connect all the villages with the important trading and commercial centres.

(15) The social service facilities, especially education and health, in the region requires greater attention.

PLAN IN OUTLINE

1. A total outlay of Rs. 200.96 crores is envisaged to be spent in the Telangana region in the Fourth Plan. This outlay does not include the expenditure by local bodies out of their own resources on developmental schemes nor the outlay under special development programme for the region. Expenditure on the maintenance of developmental services and institutions established during the earlier plans are also not included in this outlay and they are provided for in the normal budgets. Table 1 shows the outlay in the Fourth Plan in the Telangana region on the major heads of development with comparative figures for the State as a whole.

TABLE 1
OUTLAY IN FOURTH PLAN IN TELANGANA AND ANDHRA PRADESH,
ACCORDING TO MAJOR HEADS OF DEVELOPMENT.

Major Head of Development	Outlay in Fourth Plan in Rs. crores		
	Telangana	Andhra Pradesh	Outlay in Telangana as percentage of State outlay.
(1)	(2)	(3)	(4)
I. Agriculture and allied Sectors ..	20.70 (10.3)	60.07 (11.3)	34.4
II. Co-operation and Community Development	7.11 (3.5)	19.37 (3.6)	36.7
III. Major and Medium Irrigation ..	51.26 (25.5)	132.88 (25.1)	38.6
IV. Power	77.37 (38.6)	197.14 (37.2)	39.2
V. Industry and Mining ..	8.35 (4.1)	19.70 (3.7)	42.4
VI. Transport and Communications ..	3.53 (1.8)	16.43 (3.1) 12.07* (2.3)	21.5 29.2*
VII. Social Services	32.45 (16.1)	68.07 (12.9)	47.7
VIII. Miscellaneous	0.19 (0.1)	0.56 (0.1)	33.9
IX. Spl. provision for backward areas	—	15.78 (3.0)	—
All Sectors	200.96 (100.0)	530.00 (100.0)	37.9

*Excluding road-cum-rail bridge over Godavari at Rajahmundry.

Note.—Figures in brackets indicate percentage to total outlay.

2. It will be observed from this table that the pattern of priorities in the Fourth Plan in respect of Telangana is generally identical with that followed in the State as a whole. This cannot be otherwise as the region as well as the State as a whole are predominantly dependent on agriculture and therefore priority has to be given for the development of the infrastructure for sound agriculture. Similarly, both the region as well as the State have been lagging behind in industrialisation and therefore power, which is an essential input both for industry as well as for agriculture, should receive the highest priority in both the State Plan as well as the Regional Plan. Thus for agriculture, irrigation and power about 74.3 per cent of the Fourth Plan outlay has been earmarked in the Telangana region against 73.6 per cent in the State as a whole.

3. The percentage allocation for Industry and Mining has been of the order of 4 per cent of the total outlay in Telangana plan as against 3.7 per cent in the State plan. In this context, it may be necessary to clarify that the role of a State Government in industrialisation is relatively limited to the provision of infrastructure for promotion of industrial development, while the bulk of the investments on industrial units have to come either from the Central sector or the private sector. The outlay made in the State Plan, therefore, is essentially meant for developing industrial development areas, incentives for attracting industrial units *etc.*

4. However, in respect of transport and communications, the allocation in the Regional Plan is only 1.8 per cent of the total outlay while that in the State plan has been 3.0 per cent. This is primarily because in the State plan, provision has had to be made for the road-cum-rail bridge across the river Godavari in the Coastal Andhra region which accounted for a sizeable part of the outlay. If the provision for road-cum-rail bridge is excluded, then the outlay on this sector in the State plan will form only 2.3 per cent of the total plan outlay.

5. Under social services, however, the regional plan allocates a slightly higher percentage of the total

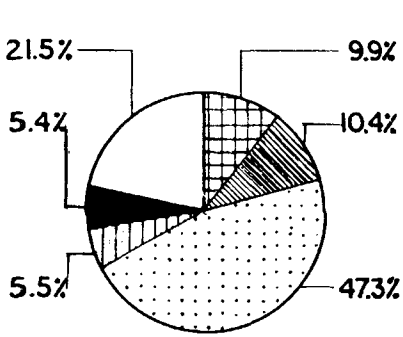
outlay at 16.2 per cent as compared to 13.0 per cent in the State plan. The region is backward in social service facilities, especially education facilities and therefore, the higher order of allocation for social services in the Regional plan is consistent with the need for removing the imbalances in this sector as early as possible.

6. Annexure-I shows the Fourth Plan outlay in Telangana and Andhra Pradesh according to the minor heads of development. It will be seen from this Annexure that the allocations for the various minor heads of development in the Telangana region are generally consistent with those in the State as a whole, excepting in the case of roads, education, urban water supply and urban development. The reason for the higher allocation for roads in the State plan as against the Regional plan has been explained earlier. The higher percentage allocation for general education in the Regional plan as against State plan has also been explained earlier. The higher allocation for urban water supply in the Regional plan was primarily due to the inclusion of Manjira water supply scheme phase-II for augmenting the water supply in the twin cities of Hyderabad and Secunderabad. The higher allocation for urban development in the Regional plan is essentially to meet the special problems of the capital City.

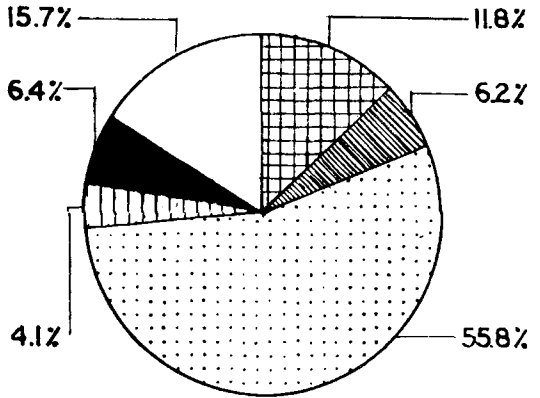
7. Table-2 shows the outlay in the Telangana region in the Fourth Plan and the outlay in the special development programme compared to the outlay in the Third Plan and the three Annual plans 1966-69.

ALLOCATION OF PLAN OUTLAYS IN TELANGANA

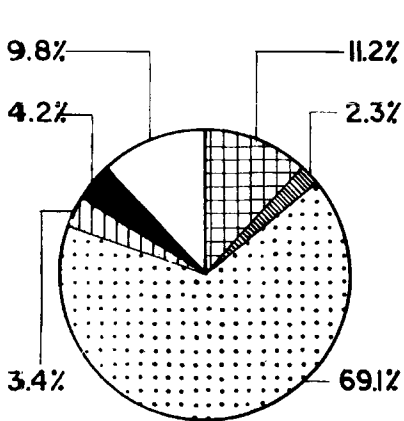
SECOND PLAN



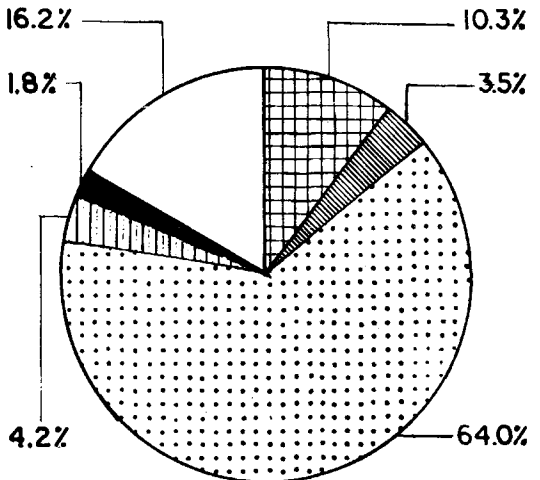
THIRD PLAN



ANNUAL PLANS 1966-69



FOURTH PLAN



 AGRICULTURAL PROGRAMMES.

 CO-OPERATION & COM. DEV.

 IRRIGATION & POWER.

 INDUSTRIES & MINING.

 TRANSPORT & COMMUNICATIONS.

 SOCIAL SERVICES & MISCELLANEOUS.

TABLE—2

OUTLAY IN FOURTH PLAN AND SPECIAL DEVELOPMENT PROGRAMME
IN TELANGANA WITH COMPARATIVE OUTLAY IN THIRD PLAN
AND THREE ANNUAL PLANS, 1966-69.

Major Head of Development	(Rs. crores)				
	Expenditure		Outlay		Total outlay in Fourth plan and special Development Programme.
	Third Plan	Annual Plans 1966-69	Fourth Plan	Special Development Programme.	
I. Agriculture and allied sectors ..	17.32 (11.8)	11.10 (11.2)	20.70 (10.3)	7.32 (16.8)	28.02 (11.4)
II. Co-operation and Community Development. ..	9.22 (6.3)	2.26 (2.3)	7.11 (3.5)	0.40 (0.9)	7.51 (3.1)
III. Major and Medium Irrigation ..	35.38 (24.1)	22.64 (22.9)	51.26 (25.5)	6.25 (14.3)	57.51 (23.5)
IV. Power ..	46.44 (31.7)	45.67 (46.1)	77.37 (38.5)	13.86 (31.7)	91.23 (37.4)
V. Industry and Mining ..	5.96 (4.1)	3.52 (3.6)	8.35 (4.1)	0.77 (1.8)	9.12 (13.7)
VI. Transport and Communications..	9.43 (6.4)	4.17 (4.2)	3.53 (1.8)	5.83 (13.3)	9.36 (3.8)
VII. Social Services ..	22.47 (15.3)	9.59 (9.7)	32.45 (16.2)	9.29 (21.2)	41.74 (17.0)
VIII. Miscellaneous ..	0.48 (0.3)	0.05 (0.0)	0.19 (0.1)	..	0.19 (0.1)
All Sectors ..	146.70 (100.0)	99.00 (100.0)	200.96 (100.0)	43.72 (100.0)	244.68 (100.0)

Note.—Figures in brackets indicate percentages to total of the column.

8. It will be observed from this table that the higher priority given for the development of agriculture, irrigation and power in the Fourth Plan, is in line with the pattern of priorities followed in the earlier plans. In the Fourth Plan, 74.3 per cent of the total outlay is earmarked for the above three sectors against 67.6 per cent in the Third Plan and 80.2 per cent in the three Annual plans. The slightly higher percentage outlay on these sectors in the three Annual plans was primarily due to the lower order of the plan outlays in those years coupled with spill-over commitment on major irrigation and power projects, because of which adequate outlays could not be provided for

the other sectors, especially social services. Compared to the earlier plans, however, the Fourth Plan outlay for social services was much higher at 16.2 per cent against 15.3 per cent in the Third plan and 9.7 per cent only in the three Annual plans.

9. If the special development programmes are also considered, the outlay on agriculture, irrigation and power in the Fourth Plan period will be Rs. 176.76 crores against Rs. 99.14 crores in the Third Plan or an increase by 78 per cent, while the total outlay in the Fourth Plan period, both under the normal plan as well as under the special development programme, shows an increase by 68 per cent compared to the Third plan outlay. The outlay on social services in the Fourth plan period both under the normal plan as well as under the special development programme will be of the order of Rs. 41.74 crores against Rs. 22.74 crores in the Third Plan or an increase by about 88 per cent. Thus, in the Fourth plan period not only an added emphasis is laid on priority sectors of irrigation, power and agriculture, but also on social services which could not receive adequate attention in the earlier plans due to the taking up of large irrigation and power projects.

10. Table 3 shows the outlays in the Fourth Plan in the Telangana region according to State-wide and regional schemes under the major heads of development.

TABLE—3

OUTLAY IN FOURTH PLAN IN TELANGANA ACCORDING TO
STATE-WIDE AND REGIONAL SCHEMES

Major Head of Development	Outlay in Fourth Plan in Rs. Crores			
	State- wide schemes	Regional Scheme	Total	Outlay on state-wide schemes as <i>per</i> centage of total
I. Agriculture and allied sectors ..	1.42	19.27	20.69	6.8
II. Co-operation and Community Development	0.15	6.96	7.11	2.1
III. Major and Medium Irrigation ..	0.15	51.11	51.26	0.3
IV. Power	56.40	20.98	77.38	72.8
V. Industry and Mining	3.41	4.94	8.35	40.8
VI. Transport and Communications ..	1.10	2.43	3.53	30.1
VII. Social Services	3.68	28.77	32.45	11.3
VIII. Miscellaneous	0.07	0.12	0.19	36.7
All Sectors ..	66.38	134.58	200.96	33.0

In the Region's Fourth Plan 33.0 per cent of the outlay will be spent on State-wide schemes including the share on Srisailam and Kothagudem power schemes and the remaining 67.0 per cent on regional schemes. If the power sector is excluded, the proportion of the outlay under the State-wide schemes will come down to 8.0 per cent only.

11. It will be observed that the outlay on State-wide schemes under industries, transport and communications is also proportionately higher than that in other sectors. This larger outlay on State-wide schemes is due to the provision made for the contribution of the State to the Andhra Pradesh Industrial Development Corporation and the Andhra Pradesh Road Transport Corporation.

12. An outline of the sectoral programmes and the important targets envisaged in the plan is given in the following paragraphs.

Agricultural and Allied Programmes :

13. The allocation for Agriculture and Allied Programmes in the Fourth plan is Rs. 20.70 crores against Rs. 17.32 crores in the Third plan period and Rs. 11.09 crores in the three Annual plans 1966-69. Out of the Rs. 20.70 crores outlay in the Fourth Plan, Rs. 2.50 crores is earmarked for Agricultural production programmes, Rs. 4.27 crores for Development of Ayacuts, Rs. 8.70 crores for Minor irrigation, Rs. 1.35 crores for soil conservation, Rs. 0.55 crore for Animal Husbandry programmes, Rs. 1.32 crores for Dairying and Milk Supply and Rs. 0.33 crores for Fisheries. It is to be noted that the most important input for Agriculture *viz.*, irrigation figures under another head of development in the plan while credit, another important input is outside the plan. The adequacy of the allocations has to be viewed in this context. With this outlay, food-grains production in the region is expected to increase from 19.92 lakh tonnes in 1968-69 to 28.63 lakh tonnes by the end of the plan; the production of oil-seeds from 2.48 lakh tonnes to 2.70 lakh tonnes; Cotton from 0.33 lakh bales to 0.43 lakh bales and Sugarcane (Gur) from 3.06 lakh tonnes to 3.49 lakh tonnes. The main objectives of the Fourth plan are to increase the Agricultural production in general, and food-production in particular. This is sought to be achieved by increasing the yield rates through the introduction of high-yielding varieties on an extensive scale, multiple cropping, intensive cultivation and by adopting package of improved practices. The programmes proposed in the plan are formulated with a view to meeting these objectives. Among the various programmes proposed, the high-yielding varieties programme and package programme for important commercial crops like Groundnut, Castor and Cotton deserve special mention. The strategy adopted for quick Agricultural Development is as follows:

- (1) Since water is the most important agricultural input necessary for high Agricultural production, it is proposed to take all necessary steps for increasing irrigation facilities by developing surface irrigation sources and exploiting ground-water resources.

- (2) Adopt the package of improved practices comprising of water management, high yielding varieties of seeds, pest control, fertilisers, etc.
- (3) Encouragement of short-term varieties for cereals and other food 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.
- (4) Quick development of commercial crops. Since the region has a good potential for crops such as Sugarcane, Oilseeds (especially Ground-nut) and Cotton, etc., it is proposed to draw up special package plans for the exploitation of these crops for export and for industrial purposes.
- (5) Ensure that the development of ayacut in areas where large irrigation potential is created is not delayed; and
- (6) Adoption of scientific water management to conserve water resources. Water management is proposed to be planned in such a manner that the same available water will be used for more area and crops. This is possible by a change in the cropping pattern and in the timing of sowing of crops considering the rainfall and irrigation facilities, available.

14. The Agro-Industries Corporation Limited, has been set up with the objective of promoting agro-industries and other ancillary industries in the State. The Corporation has established one tractor—hiring centre in each district in the region and one additional centre at Metpally in view of the heavy demand for machinery as a result of Pochampad Project. The targets for the Fourth Plan are levelling of 70,000 acres, sinking of 1,750 tube wells and revitalisation or deepening of 6,800 wells. The Corporation also proposes to sell 1,783 tractors and 2,280 pumpsets during the Fourth Plan.

15. Most of the dry lands in the State are in undulating terrain and are subjected to severe soil erosion

losses. Soil Conservation programmes are, therefore, proposed to be taken up on a large scale to reduce soil erosion losses and also to conserve water in the soil, reducing the run-off losses. The allocation for Soil Conservation in the plan is Rs. 135.30 lakhs as against Rs. 54.03 lakhs in the Third Plan and Rs. 48.65 lakhs in the three Annual Plans.

16. The largest outlay under agricultural sector is earmarked for Minor Irrigation. In keeping with the objective that greater emphasis should be given for ground-water under Minor Irrigation, as much as Rs. 4.35 crores has been allocated for exploitation of ground-water resources.

17. In view of the fact that a large irrigation potential is being created under Nagarjunasagar and Pochampad Projects during the Fourth Five-Year Plan period and since every effort has to be made to utilise this potential without much time lag, an outlay of Rs. 4.27 crores is earmarked for Ayacut Development.

18. Avenues for providing supplementary incomes to the rural population will be increased through intensive programmes of Cattle, Sheep and Poultry Development. These programmes will play a vital role in improving the nutritional standards. Out of the allotment of Rs. 55.20 lakhs made for Animal Husbandry programmes in this region, as much as Rs. 27.65 lakhs representing 50 per cent has been made for Animal Health Programmes followed by an allotment of Rs. 14.32 lakhs for Cattle Development. The highest allotment for Animal Health has become necessary because of the need to expand veterinary facilities in rural areas.

The Telangana region has rich potential in cheap green fodder. Since the region is endowed with cheap green fodder it has a comparative cost advantage in Dairying over others and since the city of Hyderabad provides a huge market for milk, the scope for development of Dairying in this region is more. Keeping this in view, an allotment of Rs. 131.59 lakhs is made for Dairy Development in this region. Out of this, as much as Rs. 102.93 lakhs will be spent on Central Dairy at Hyderabad. It is proposed to spend a sum of Rs. 57.93

lakhs out of this allotment, on increasing its handling capacity. Another sum of Rs. 12.66 lakhs will be spent on establishing Chilling Centres at Gajwel, Bhongir and Cooling Centres at Medak, Alair and Chityal in the Fourth Plan period. It is expected that by 1973, there will be surplus milk of about 30 thousand litres and in order to convert it into butter, ghee and milk powder, it is proposed to set up a milk powder unit at Hyderabad. For this purpose a sum of Rs. 45.00 lakhs out of the total provision for Central Dairy will be spent on this factory. The balance outlay of Rs. 16.00 lakhs will be spent on Intensive Milk Supply Scheme at Warangal, starting of fresh Chilling and Cooling Centres at Nizamabad and Karimnagar and establishment of a Rural Dairy Centre.

20. Keeping in view the fact that a larger portion of the richer forests of the State is located in this region, an allotment of Rs. 138.93 lakhs has been made for forestry development. The strategy of development of forests in this region consists in consolidating and increasing the production capacity of existing forests and replacement of uneconomic forest species by artificial regeneration of fast growing species with economic and industrial potential. Out of the outlay of Rs. 138.93 lakhs, Rs. 71.46 lakhs will be spent on Teak Plantations and Rs. 28.42 lakhs on quick growing species.

Co-operation :

21. In spite of impressive growth of co-operative credit during the earlier plans, the extent of credit provided by the co-operative sector or the population covered by co-operative credit societies is still much below the desired levels. The non-viability of the primary societies and the weak internal resources of both primary societies and some of the Central banks has resulted in bottlenecks in the flow of short-term credit. As regards long-term credit, though rapid strides have been made in financing land development, ayacut development, minor irrigation and other programmes, the loan finances have not flown to backward areas and weaker sections of population in the desired measure because of certain procedural deficiencies with regard to the securities to be offered and the loan eligibility.

22 An amount of Rs. 3.82 crores is provided in the Fourth Plan for schemes under Co-operation. The major programmes in the Fourth Plan will be strengthening of the credit institutions, financial assistance to Processing and Marketing units, share capital contribution to Sugar factories and loan assistance to co-operative societies of weaker sections. Out of the total provision of Rs. 3.82 crores, Rs. 2.15 crores will be spent on strengthening the co-operative credit institutions. Most of this provision will be spent on two schemes *viz.*, share capital contribution to the credit institutions and loan assistance to weak co-operative Central banks. These schemes will strengthen the financial viability of the co-operative institutions in the region and thereby increase their borrowing and lending capacity. It is expected that the level of disbursement of short and medium term credit will go up from Rs. 7.20 crores at the beginning of the Fourth Plan to Rs. 16.67 crores at the end of Fourth Plan, while the long term credit will increase from Rs. 6.32 crores to Rs. 50 crores.

23. With a view to developing the co-operative processing units in the region, an amount of Rs. 38.10 lakhs is provided in the Fourth Plan, about 90 per cent of which is earmarked for payment of share capital to the various processing units, existing as well as those likely to be set up. The units that are likely to come up are a Maize Starch Factory in Karimnagar, Castor Seed Crusher at Deverkonda, Modern Rice Mill in Pochampad Project area, an Ice-cum-Cold Storage Unit for Zaheerabad Fruit Growers etc. Under Sugar Factories, an amount of Rs. 35.50 lakhs is provided for share capital assistance to the proposed Sugar factory at Bheemasingi which is in the formation stage and the one likely to come up at Miryalguda.

24. Another important programme for which a substantial amount is provided in the Plan is 'Co-operatives for weaker sections'. The amount provided is Rs. 24.20 lakhs for providing loan assistance to various types of societies intended to help taxi and auto-rickshaw drivers, rickshaw-pullers, washermen, educated un-employed in urban areas etc. Under consumer co-operatives, an amount of Rs. 19.25 lakhs is provided for providing loan and share capital assis-

tance to various consumer stores in the region. An amount of Rs. 11.08 lakhs is provided for the appointment of staff in marketing and farming societies, while Rs. 8.97 lakhs is earmarked for co-operative training and education.

Irrigation :

25. The allocation for Major and Medium Irrigation in the Fourth Plan in Telangana region is Rs. 51.26 crores. For Nagarjunasagar Project, an allotment of Rs. 44.50 crores has been made in the State Plan and of this, the share of Telangana as per the principles enunciated by Bhargava Committee is Rs. 17.12 crores, It is expected that an additional irrigation potential of 1.65 lakh acres will be created in the Fourth Plan taking the cumulative potential in the region under this project to 3.05 lakh acres.

26. For Pochampad Project, an allotment of Rs. 30.00 crores has been made in the Plan. According to the agreement reached with the World Bank, an outlay of the order of Rs. 45.00 crores has to be made on this project in the Fourth Plan period. Out of this the Regional Committee have agreed to provide from the Telangana surplus a sum of Rs. 6.00 crores while the Government of India have agreed to give an additional assistance of Rs. 9.00 crores during the Fourth Plan period. An amount of Rs. 45.00 crores will thus be available for this project in the Fourth Plan period. It is expected that with this order of investment an irrigation potential of 1.3 lakh acres will be created by the end of Fourth Plan and 2.5 lakhs acres by June, 1976.

27. For completion of other Major and Medium Irrigation Schemes which have spilled over into the Fourth Plan, it is expected that an outlay of the order of Rs. 4.18 crores will be required and as against this requirement, an outlay of Rs. 3.52 crores has been made. As a result of these programmes, the additional potential to be created under major and medium irrigation projects including Pochampad and Nagarjunasagar Projects in this region during the Fourth Plan period will come to 3.34 lakh acres.

Power :

28. Development of power has been recognised to be indispensable for growth both in Agriculture and Industry. The highest proportion of allocation of 38.5 per cent of the total plan outlay in the Regional plan has been made for the power sector because of the large spill-over commitments in this sector. With the allocation of Rs. 197.15 crores for power sector in the State Plan, it is expected that Ramagundam Thermal Scheme and Kothagudem Stage III will be completed and benefits to the extent of 282 M.Ws. will be available from these projects during the plan period. A massive effort to make power available in the rural areas will be made during the plan period. It is expected that during the plan period 2,508 additional villages will be electrified in the Telangana region taking the total number of villages electrified at the end of the Fourth Plan to 4,300 representing 41 per cent of the total number of villages and towns in the region. Similarly, 72,000 additional agricultural pumpsets will be energised. For this purpose, massive assistance is expected from the institutional agencies also.

Large and Medium Industries :

29. In the development of industries, the role of State Government is relatively limited to the provision of infrastructural facilities while the bulk of the investments will have to come either from the Central sector or the private sector. It is for this reason that under the National Plan, the bulk of the allocations for large and medium industries have been provided in the central and private sectors, while the States sector's allocation under this Head was not even 5 per cent of the total outlay. In our State, the strategy adopted for the development of large, medium and small scale industries has, therefore, been to develop the infrastructural facilities in terms of land, water, power and communications in select areas, provision of incentives to attract private capital to the State, promotional and financing activities of the Andhra Pradesh Industrial Development Corporation especially through the medium of joint ventures and to attract central sector schemes by arranging concomitant facilities in the State,

30. In the Fourth Plan an allotment of Rs. 11.91 crores has been made for Large and Medium Industries for the State as a whole, out of which the share of Telangana comes to Rs. 5.40 crores. Of this, Rs. 2.99 crores will be spent on Development of Industrial Development areas, Rs. 0.37 crore on incentives and an amount of Rs. 1.99 crores towards State's contribution to the Andhra Pradesh Industrial Development Corporation. An important programme taken up by the State Government for encouraging the location of industries in the State was the establishment of industrial development areas. The aim of the scheme is to acquire and develop large areas of land at strategic places in the State which will be the growth centres for development in future. This scheme is expected to offer an incentive to the entrepreneurs by providing the infrastructure.

31. In attracting Central Sector Industrial Projects to the region, the advantages that the twin cities of Hyderabad and Secunderabad provide for locating industries should be fully utilised. The well-developed infrastructure, good climate, the cosmopolitan atmosphere are the great assets of the capital City.

32. The policy of the State Government has been to route all assistance to the private sector and industrial ventures through the Andhra Pradesh Industrial Development Corporation. The principal activities of the Corporation are rendering financial assistance to industries, participation in the private industries and direct promotion of select industries.

Transport and Communications:

33. An allocation of Rs. 260.36 lakhs is made for this sector of which Rs. 242.73 lakhs is earmarked for the road works implemented by the Chief Engineer (Roads and Buildings) and the balance for those to be implemented by Chief Engineer (Panchayati Raj). This allocation will be utilised for (1) Improvements to Hyderabad-Nagarjunasagar road, (2) Improvements to Peddavoora-Miryalaguda road, (3) Improvements to Nakrekal-Wazirabad road, (4) Improvement of dips on Karimnagar-Luxettipet road and (5) Improvements to Sangareddy-Toopran road.

Social Services :

34. The allocation for educational programmes in the plan for Telangana is Rs. 748.63 lakhs as against Rs. 1,644.00 lakhs for the State as a whole. In Telangana's Education programme, highest priority is accorded to Elementary Education for which an amount of Rs. 253.28 lakhs is provided. Next in the order of importance are Junior Colleges (Rs. 185.95 lakhs), Secondary Education (Rs. 126.60 lakhs) and Higher Education (Rs. 133.41 lakhs). With the programmes envisaged in the Plan, the percentage enrolment in classes I to V is expected to be 52.5 by the end of Fourth Plan as against 51.5 at the beginning of the Fourth Plan. In respect of Classes VI to VIII the target at the end of Fourth Plan is 24.2 per cent as against 22.8 per cent in 1968-69. The enrolment for Classes IX to XI is expected to increase from 11.3 per cent in 1968-69 to 13.2 per cent in 1973-74. The percentage of trained teachers in both the Elementary and Secondary Schools is expected to be cent per cent by the end of the Fourth Plan.

Technical Education :

35. The programmes during the Fourth Plan period of the Technical Education Department chiefly aim at (1) consolidation of the existing institutions and courses (2) quality improvement schemes and expansion of facilities mainly by diversification of sandwich courses and part-time courses. Under the scheme of quality improvement, it is proposed to establish curriculum development cell, give practical training for staff, establish liaison with industries, accord permission to the teaching staff to have consultative practice with industries and permit the professional Engineers employed in industries to have free access to the libraries of teaching institutions and to establish suitable machinery for maintaining liaison between industries and teaching institutions. The proposals to start sandwich courses and part-time courses and diversification of diploma courses are expected to be particularly helpful in this regard.

Medical :

36. An allotment of Rs. 130.73 lakhs has been made for the Development of Modern Medicine as against

the allotment of Rs. 348.25 lakhs for the State as a whole. In the Third Plan a great deal of emphasis was laid on Medical Education but the emphasis in the Fourth Plan has now shifted from Medical Education to improvement of services and facilities in hospitals and dispensaries particularly in rural areas. Thus, out of the allotment of Rs. 130.73 lakhs as much as Rs. 99.21 lakhs is allotted for hospitals and dispensaries.

Urban Water Supply and Drainage:

37. The Telangana region has one Corporation and 24 Municipalities. An allotment of Rs. 12.43 crores has been made for the Urban Water Supply in Telangana as against the allotment of Rs. 17.22 crores for the State. Of this, a sum of Rs. 3.20 crores has been allotted to schemes to be implemented by the Public Health Engineering Department and the balance of Rs. 9.23 crores is for the Manjira Water Supply and Hyderabad Water Supply Improvements Scheme to be implemented by the Chief Engineer (Roads and Buildings). By the end of 1968-69, twelve out of 24 Municipalities were covered with protected water supply schemes and during 1970-71, four more Municipalities were provided with such schemes outside the Plan. Thus, only 8 Municipalities had to be provided with water supply schemes. Full provision to the extent of Rs. 164.32 lakhs has been made in the Plan for undertaking Water Supply Schemes in these 8 Municipalities. In addition, a provision of Rs. 99.18 lakhs has been made for undertaking improvements to Hyderabad Drainage. Thus, it is expected that by the end of Fourth Plan period, all the Municipalities in Telangana region will be provided with water supply.

38. At present water is being supplied to the cities of Hyderabad and Secunderabad from Osmansagar system (24.4 M.G.P.D.), Himayatsagar system (22.0 M.G.P.D.) and Manjira Water Supply Scheme phase I (16.0 M.G.P.D.). The total supply potential available from the above three systems is of the order of 62.4 (M.G.P.D.) by the beginning of the Fourth Plan. It is estimated that the ultimate demand for water by 1981 would be to the tune of 95.65 M.G.P.D. It is proposed to supply the increased demands by executing Manjira Water Supply Scheme Phase II and by drawing an

additional quantity of 5 M.G.P.D. from the Osmansagar reservoir. Out of the sum of Rs. 9.23 crores earmarked for Urban Water Supply Schemes implemented by Roads and Buildings Department, a sum of Rs. 7.11 crores is earmarked for Manjira Water Supply Scheme Phase II, Rs. 1.50 crores for improvements to Hyderabad Water Works and Rs. 62.00 lakhs for the First Phase of Manjira Water Supply Scheme.

Rural Water Supply:

39. The problem of rural drinking water supply has been receiving increasing attention since the beginning of the Third Plan. Since then 9,035 villages and hamlets which did not have even one source of drinking water were provided with water facility. In the Fourth Plan an amount of Rs. 148.05 lakhs is provided for providing 3,569 villages and hamlets with drinking water sources. Thus, 12,604 out of 16,807 villages and hamlets in the region would be provided with sufficient drinking water sources leaving 4,283 villages and hamlets to be provided with drinking water sources by the end of Fourth Plan. Under protected water supply scheme, 446 villages were selected for implementing the scheme. Of this, 139 villages were taken up for providing protected water and 79 schemes were completed up to 31st March, 1969. An amount of Rs. 94.15 lakhs is provided in the Plan for protected water supply schemes and with this amount, all the spill-over schemes will be completed besides taking up 130 new schemes.

Welfare Schemes:

40. The Fourth Plan outlay for welfare schemes for Scheduled Tribes in Telangana region is Rs. 196.49 lakhs as against the total provision of Rs. 581.09 lakhs for the State as a whole. The main objectives under this head are to provide for the Tribals education, agricultural inputs, housing, drinking water facilities and medical aid. An amount of Rs. 77.22 lakhs is made for educational schemes Rs. 65.82 lakhs for economic upliftment schemes and the balance for health, housing and other schemes. No separate provision is earmarked for Communications as it is expected that these schemes will be taken up in the regular Plan Programme.

41. The total provision for welfare schemes for Scheduled Castes and other Backward Classes in the State's Fourth Plan is Rs. 245.22 lakhs of which Rs. 68.01 lakhs is made for schemes in Telangana. Out of this provision as much as Rs. 56.36 lakhs is meant for Scheduled Castes, while the balance of Rs. 11.65 lakhs is for other Backward Classes. Of the provision of Rs. 56.36 lakhs made for Welfare of Scheduled Castes, Rs. 37.08 lakhs will be utilised on educational schemes and the balance of Rs. 19.28 lakhs on schemes for economic uplift.

42. In the Fourth Plan, an amount of Rs. 30.60 lakhs is provided for Social Welfare Schemes in the State. Out of this, an amount of Rs. 19.40 lakhs is for the Social Welfare Schemes in the Telangana region. Out of the provision for Telangana, a sum of Rs. 15.50 lakhs is allotted for Women and Child Welfare and Rs. 2.65 lakhs for opening one orphanage at Warangal. Two such orphanages are already functioning in the region. An allotment of Rs. 1.25 lakhs is made for the Prisons Department for appointment of staff for probation work.

Special Development Programme:

43. Consequent on the determination of the unutilised Telangana surpluses by the Bhargava Committee, a special provision of Rs. 45 crores has been made for the accelerated development of Telangana from 1st April, 1968 to the end of Fourth Plan. To enable the State Government to complete this special development programme during the Fourth Plan period, the Central Government are giving suitable loan assistance to the State Government. Taking into account a minus saving of Rs. 1.28 crores in 1968-69 in Telangana, the net amount that will be available during the Fourth Plan period under special development programme is Rs. 43.72 crores. This is in addition to the share of Telangana in the State's Fourth Plan outlay. The Central Government have requested the State Government to furnish to them the programme for the utilisation of the amount of Rs. 43.72 crores dovetailing it into the State Plan so as to serve as a Plan of action for the remaining years of the Fourth Plan period.

44. The proposals for the Fourth Plan had been finalised having regard to the overall outlay available and the due share of Telangana in it, and without reference to the allocations likely to be available under special development funds. The allocations made in the Plan for the special development funds therefore take into account the allocations available for these schemes in the Telangana share of the Fourth Five-Year Plan, and it has been ensured that the special development fund allocations are in all cases additive to the Fourth Plan allocations.

45. A plan for the outlay of Rs. 43.72 crores under special development programme has thus been drawn up taking into account the allocations available for different sectors in the Fourth Plan, the felt needs in different directions and above all the utility of the programmes in building up permanent infrastructure in the region.

46. While preparing the programme for the utilisation of the special assistance, the guidelines indicated by the Telangana Development Committee, one of the High Powered Committees appointed by the State Government in pursuance of the eight point programme of the Prime Minister have been kept in view. So far as the first three years (1969-72) are concerned the schemes implemented and under implementation are based on the recommendations of the Andhra Pradesh Regional Committee. Keeping in view the trend and the level of investment during this period and the total amount still available, provision has been made for 1972-74. Funds for special development schemes in Telangana were being provided at the instance of the Andhra Pradesh Regional Committee even before 1969 and during that period certain road works and water works were taken up whose spill-over commitment has to be met. Provision has therefore been made in the special development programme for these inevitable spill-over requirements also.

47. It may however, be mentioned that this programme is likely to again undergo a change especially in the sectors like social welfare, roads and minor irrigation in view of the fact that the Andhra Pradesh

Regional Committee have subsequently decided to take up a larger programme of rural electrification for the year 1971-72 for which the spill-over commitments in 1972-74 will be larger than those indicated in this programme.

48. The programme-wise allocations of outlay of Rs. 43.72 crores in the special development programme are given in Annexure III. Out of Rs. 43.72 crores of special funds available in the Fourth Plan, as much as Rs. 30.53 crores will be spent on rural electrification, irrigation and communications. An amount of Rs. 13.68 crores will be spent on rural electrification, Rs. 6.00 crores on Pochampad Project and another Rs. 0.25 crore on the improvements to the distributaries of the Nizamsagar Project, Rs. 4.59 crores on minor irrigation and Rs. 5.83 crores on roads. Out of the balance amount, Rs. 4.11 crores will be spent for protected water supply schemes in the former 58 Town Committees in the region, Rs. 2.62 crores on the welfare of Scheduled Castes and Scheduled Tribes and Rs. 0.77 crore on the establishment of industries.

ANNEXURE I

STATEMENT SHOWING THE FOURTH PLAN OUTLAY IN TELANGANA AND ANDHRA PRADESH ACCORDING TO MINOR HEAD OF DEVELOPMENT

Head of Development	Andhra Pradesh		Telangana		
	Out-lay (Rs. lakhs)	% to total outlay	Out-lay (Rs. lakhs)	% to total outlay	Out-lay in Te- langana as % to state outlay
(1)	(2)	(3)	(4)	(5)	(6)
I. Agricultural Programmes :					
1. Agricultural Development ..	684.94	1.3	249.87	1.2	38.5
2. Training Centres ..	23.89	..	7.69	..	32.2
3. Land Development ..	66.34	0.1	14.36	0.1	21.6
4. Development of ayacuts ..	1,233.04	2.3	427.54	2.1	34.7
5. Minor Irrigation ..	2,562.49	4.8	869.99	4.3	33.9
6. Soil Conservation ..	370.12	0.7	135.30	0.7	36.5
7. Warehousing and marketing ..	16.09	..	5.31	..	33.0
8. Animal Husbandry ..	185.32	0.4	55.20	0.3	29.8
9. Dairying and milk supply ..	385.46	0.7	131.59	0.7	34.1
10. Forests ..	306.50	0.6	138.93	0.7	45.3
11. Fisheries ..	208.83	0.4	33.21	0.2	15.9
Sub-Total ..	6,007.02	11.3	2,068.99	10.3	34.4
II. Co-operation and Community Development :					
1. Co-operation ..	1,083.93	2.0	382.18	1.9	35.2
2. Community Development ..	852.74	1.6	328.60	1.6	38.5
3. Strengthening of Panchayats ..	0.45	..	0.15	..	..
Sub-total ..	1,937.12	3.6	710.93	3.5	36.7
III. Major & Medium Irrigation and Power :					
1. Multipurpose Nagarjuna Sagar Project ..	4,450.00	8.3	1,711.72	8.5	38.5
2. Major and Medium Irrigation including Flood control and equipment ..	8,837.71	16.7	3,414.30	17.0	38.6
3. Power ..	19,714.58	37.3	7,737.28	38.5	39.2
Sub-Total ..	33,002.29	62.3	12,863.30	64.0	39.0

Head of Development	Andhra Pradesh		Telangana		
	Out-lay (Rs. lakhs)	% to total outlay	Out-lay (Rs. lakhs)	% to total outlay	Out-lay in Te- langana as % to state outlay.
(1)	(2)	(3)	(4)	(5)	(6)
IV. Industry and Mining :					
1. Large and Medium Industries	1,190.70	2.2	540.16	2.7	45.4
2. Mineral development ..	65.19	0.1	24.70	0.1	37.9
(a) Metric System ..	85.00	0.2	32.47	0.2	38.2
3. Village and small scale Industries ..	629.52	1.2	237.68	1.1	37.7
(a) Director of Industries ..	277.28	..	128.79	..	..
(b) Handlooms ..	352.24	..	108.89	..	..
Sub-Total ..	1,970.41	3.7	835.01	4.1	42.4
V. Transport and Communications :					
1. Roads and Transport ..	1,575.22	2.9	343.63	1.8	21.8
2. Tourism ..	25.00	..	9.32	..	37.3
3. Others ..	42.68	0.1	..	..	..
Sub-Total ..	1,642.90	3.0	352.95	1.8	21.5
VI. Social Services :					
1. General Education ..	1,671.66	3.2	757.70	3.9	45.3
2. Technical education and cultural schemes ..	170.32	0.3	61.01	0.3	35.8
3. Medical ..	367.04	0.7	139.99	0.7	38.1
(a) Modern medicine ..	348.25	0.6	130.73	0.7	
(b) Indian Medicine ..	18.79	..	9.26	..	
5. Public Health ..	186.35	0.4	65.15	0.3	34.9
6. Urban Water Supply ..	1,722.55	3.3	1,243.54	6.2	72.2
7. Urban Development ..	258.71	0.4	141.98	0.7	54.9
8. Rural Water Supply and Sanitation ..	753.81	1.5	242.20	1.2	32.1
9. Housing ..	764.13	1.5	288.48	1.4	37.7
10. Welfare of Scheduled Castes and Backward Classes ..	245.22	0.4	68.01	0.3	27.7

Head of Development	Andhra Pradesh		Telangana		
	Out-lay (Rs. lakhs)	% to total outlay	Out-lay (Rs. lakhs)	% to Total outlay	Out-lay in Te- langana as % to state outlay
(1)	(2)	(3)	(4)	(5)	(6)
11. Welfare of Scheduled Tribes ..	581.09	1.2	196.49	1.0	33.8
12. Social Welfare ..	30.60	0.1	19.40	0.1	63.4
13. Labour and labour Welfare ..	52.54	0.1	20.64	0.1	39.3
14. Public Co-operation ..	2.67	..	0.87	..	32.6
Sub-Total ..	6,806.69	13.0	3,245.46	16.2	47.7
VII. Miscellaneous :					
1. Statistics ..	10.20	..	3.50	..	34.3
2. Publicity ..	37.73	0.1	12.11	0.1	33.1
3. Broadcasting ..	2.25	..	0.75	..	33.3
4. Evaluation ..	5.86	..	2.87	..	48.9
Sub-Total ..	56.04	0.1	19.23	0.1	34.3
Special Provision for backward areas ..	1,578.00	3.0	..	..	..
Grand Total Outlay ..	53,000.47	100.00	2,0095.87	100.00	37.9

Note.—Figures in brackets indicate percentage to total outlay.

ANNEXURE II

STATEMENT SHOWING FOURTH PLAN OUTLAY AND OUTLAY UNDER SPECIAL DEVELOPMENT PROGRAMMES WITH COMPARATIVE OUTLAY IN THIRD PLAN AND THREE ANNUAL PLANS, 1966-69 IN TELANGANA

(Rs. in lakhs)

Head of Development	Third Plan Expenditure in Annual Plans 1966-67 to 1968-69	Expenditure in Annual Plans 1966-67 to 1968-69	Fourth Plan out-lay	Outlay in Special Development programme	Total out-lay in Forth Plan and special development programmes
(1)	(2)	(3)	(4)	(5)	(6)
L. Agricultural Programmes :					
1. Agricultural production	297.60 (2.0)	238.24 (2.4)	249.87 (1.2)	..	249.87 (1.0)
2. Training Centres ..	27.20 (0.2)	1.09 (—)	7.69 (—)	..	7.69 (—)
3. Land Development ..	9.89 (0.1)	8.87 (0.1)	14.36 (0.1)	..	14.36 (0.1)
4. Consolidation of holdings.	17.79 (0.1)	..	..	..	..
5. Development of Ayacuts	74.89 (0.5)	125.00 (1.3)	427.54 (2.1)	..	427.54 (1.7)
6. Minor Irrigation ..	981.03 (6.7)	527.52 (5.3)	869.99 (4.3)	458.58 (10.5)	1,328.57 (5.4)
7. Soil Conservation ..	54.03 (0.4)	48.65 (0.5)	135.30 (0.7)	93.69 (2.1)	228.99 (0.9)
8. Warehousing and Marketing	6.84 (—)	1.67 (—)	5.31 (—)	.. (—)	5.31 (—)
9. Animal Husbandry ..	67.54 (0.5)	29.12 (0.3)	55.20 (0.3)	45.52 (1.0)	100.72 (0.4)
10. Dairying and Milk supply.	106.77 (0.7)	68.83 (0.7)	131.59 (0.7)	119.40 (2.7)	250.99 (1.2)
11. Forests ..	59.01 (0.4)	44.92 (0.4)	138.93 (0.7)	..	138.93 (0.5)
12. Fisheries ..	29.60 (0.2)	15.57 (0.2)	33.31 (0.2)	15.00 (0.5)	48.21 (0.2)
Sub-Total ..	1,732.10 (11.8)	1,109.48 (11.2)	2,068.99 (10.3)	732.19 (16.8)	2,801.18 (11.4)

(Rs. in lakhs)

<i>Head of Development</i>	<i>Third Plan Expenditure in Annual Plans 1966-67 to 1968-69</i>	<i>Expenditure in Annual Plans</i>	<i>Forth Plan outlay</i>	<i>Outlay in Special Development programme</i>	<i>Total outlay in Forth Plan and special development programmes</i>
(1)	(2)	(3)	(4)	(5)	(6)
II. Co-operation and Community Development :					
1. Co-operation ..	118.35 (0.8)	57.01 (0.6)	382.18 (1.9)	40.00 (0.9)	422.18 (1.7)
2. Community-Development	788.78 (5.4)	168.56 (1.7)	328.60 (1.6)	.. (—)	328.60 (1.4)
3. Strengthening of Panchayats ..	15.01	..	0.15	..	0.15
Sub-Total ..	922.14 (6.3)	225.57 (2.3)	710.93 (3.5)	40.00 (0.9)	750.93 (3.1)
III. Irrigation and Power :					
1. Multipurpose Nagarjunasagar Project.	2,600.00 (17.7)	1,417.00 (14.3)	1,711.72 (8.5)	..	1,711.72 (7.0)
2. Major and Medium Irrigation including Flood Control and Engineering Research.	937.84 (6.4)	847.22 (8.6)	3,414.30 (17.0)	625.37 (14.3)	4,039.67 (16.5)
3. Power ..	4,643.47 (31.7)	4,567.38 (46.1)	7,737.28 (38.5)	1,386.00 (31.7)	9,123.28 (37.3)
Sub-Total ..	8,181.31 (55.8)	6,831.60 (69.0)	12,863.30 (64.0)	2,011.37 (46.0)	14,874.67 (60.8)
IV. Industry and Mining :					
1. Large and Medium Industries ..	175.98 (1.2)	218.93 (2.3)	540.16 (2.7)	76.60 (1.8)	616.76 (2.6)
2. Mineral development ..	14.95 (0.1)	13.36 (0.1)	24.70 (0.1)	..	24.70 (0.1)
3. Metric System ..	..	..	32.47 (0.2)	..	32.47 (0.1)
4. Village and Small Scale Industries	286.82 (2.0)	60.49 (0.6)	128.79 (0.7)	..	128.79 (0.5)
5. Handlooms ..	118.54 (0.8)	59.32 (0.6)	108.89 (0.4)	..	108.89 (0.4)
Sub-Total	596.29 (4.1)	352.10 (3.6)	835.01 (4.1)	76.60 (1.8)	911.61 (3.7)

(Rs. in lakhs)

Head of Development	Third Plan Expenditure in Annual Plans 1966-67 to 1968-69	Expenditure in Annual Plans	Forth Plan outlay	Outlay in Special Development programme	Total outlay in Fourth Plan and special development programmes
(1)	(2)	(3)	(4)	(5)	(6)
V. Transport and Communications :					
1. Roads and Transport .	941.27 (6.4)	417.03 (4.2)	343.63 (1.8)	582.83 (13.3)	926.46 (3.8)
2. Tourism ..	2.02 (—)	0.02 (—)	9.32 (0.1)	..	9.32 (0.1)
Sub-Total .	943.29 (6.4)	417.05 (4.2)	352.95 (1.8)	582.83 (13.3)	935.78 (3.9)
VI. Social Services :					
1. General Education ..	835.66 (5.7)	204.00 (2.1)	757.70 (3.9)	154.12 (3.5)	911.82 (3.7)
2. Technical Education .	95.94 (0.6)	40.35 (0.4)	61.01 (0.3)	..	61.01 (0.2)
3. Scheme for educated unemployed ..	..	..	..	..	..
4. Medical ..	244.42 (1.7)	67.29 (0.7)	139.99 (0.7)	54.85 (1.2)	194.84 (0.8)
(a) Modern medicine ..	235.56 (1.6)	65.18 (0.7)	130.73 (0.7)	N.A.	130.73
(b) Indian Medicine ..	8.86 (0.1)	2.11 (—)	9.26 (—)	N.A.	9.26
5. Public Health ..	204.51 (1.4)	126.60 (1.3)	65.15 (0.3)	..	65.15 (0.3)
6. Urban Water Supply and Drainage.	537.87 (3.7)	380.79 (3.9)	1,243.54 (6.2)	410.80 (9.4)	1,654.34 (6.8)
7. Urban Development ..	12.31 (0.1)	3.26 (—)	141.98 (0.7)	..	141.98 (0.6)
8. Rural Water Supply and Sanitation ..	6.67 (0.1)	43.62 (0.5)	242.20 (1.2)	..	242.20 (1.0)
9. Housing ..	113.44 (0.8)	34.58 (0.3)	288.48 (1.4)	47.00 (1.1)	335.48 (1.4)
10. Welfare of scheduled castes and backward classes.	62.23 (0.4)	12.54 (0.1)	68.01 (0.3)	111.30 (2.5)	179.31 (0.7)
11. Welfare of scheduled tribes	51.95 (0.3)	23.87 (0.2)	196.49 (1.0)	142.48 (3.3)	338.97 (1.4)
12. Social Welfare ..	47.77 (0.3)	3.59 (—)	19.40 (0.1)	8.04 (0.2)	27.44 (0.1)

(Rs. in lakhs)

<i>Head of Development</i>	<i>Third Plan Expenditure in Annual Plans 1966-67 to 1968-69</i>	<i>Expenditure in Annual Plans</i>	<i>Fourth Plan outlay</i>	<i>Outlay in Special Development programme.</i>	<i>Total outlay in Fourth Plan and special development programmes</i>
(1)	(2)	(3)	(4)	(5)	(6)
13. Labour and Labour Welfare.	33.26 (0.2)	17.78 (0.2)	20.64 (0.1)	..	20.64 (0.1)
14. Public Co-operation ..	0.62 (—)	0.44 (—)	0.87 (—)	..	0.87 (—)
Sub-Total	2,246.65 (15.3)	958.71 (9.7)	3,245.46 (16.2)	928.59 (21.2)	4,174.05 (17.1)
VII. Miscellaneous :					
1. Statistics ..	6.20 (—)	2.94 (—)	3.50 (—)	..	3.50 (—)
2. Publicity ..	3.32 (—)	0.85 (—)	12.11 (0.1)	..	12.11 (0.1)
3. Broadcasting ..	6.46 (0.1)	1.44 (—)	0.75 (—)	..	0.75 (—)
4. Evaluation ..	..	..	2.87	..	2.87
5. Assistance to Zilla Parishads and Panchayat Samithis.	32.39 (0.2)	..	..	..	..
6. Development of Capital	..	..	..	..	..
Sub-Total ..	48.37 (0.3)	5.23 (—)	19.23 (0.1)	..	19.23
Grand Total outlay ..	14,670.15 (100.0)	9,899.74 (100.0)	20,095.87 (100.0)	4,371.58 (100.0)	24,467.45 (100.0)

Note :—Figures in brackets indicate percentage to total outlay.

ANNEXURE III

PROGRAMME FOR THE UTILISATION OF RS. 43.72 CRORES UNDER SPECIAL DEVELOPMENT PROGRAMME

(Rs. in lakhs)

<i>S. No.</i>	<i>Head of Development</i>		1969-60	1970-71	1971-72	<i>Total of Cols. (3-5)</i>	1972-73	1973-74	<i>Total 1969-74</i>	
	<i>Head of Department</i>	<i>Head of Department</i>								
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
I. Rural Electrification	436.00	300.00	300.00	1036.00	300.00	50.00	1386.00
II. Irrigation	49.76	204.76	339.43	593.95	304.00	186.00	1083.95
1. Pochampad Project	100.00	165.00	265.00	199.00	136.00	600.00
2. Minor Irrigation
(a) Chief Engineer, P.W.D.	26.56	79.39	150.80	256.75	105.00	50.00	411.75
(b) Chief Engineer, P. R.	23.20	15.00	8.63	46.83	..	..	46.83
3. Major Irrigation	10.37	15.00	25.37	..	..	25.37
III. Communications	175.47	152.36	120.00	447.83	85.00	50.00	582.83
(a) Chief Engineer, P. R.	132.46	130.00	110.00	372.46	85.00	50.00	507.46
(b) Chief Engineer, P.W.D.	42.01	22.36	10.00	74.37	..	..	74.37
(c) Municipal Roads.	1.00	..	..	1.00	..	..	1.00
IV. Protected Water Supply schemes	71.33	94.47	100.00	265.80	97.50	47.50	410.80
(a) Ex-Town Committees	55.03	84.51	90.00	229.54	90.00	40.00	359.54
(b) Municipalities	16.30	9.96	10.00	36.26	7.50	7.50	51.26

S.No.	Head of Development				1969-70	1970-71	1971-72	Total of Cols. (3-5)	1972-73	1973-74	Total 1969-74
	Head of Department										
(1)	(2)				(3)	(4)	(5)	(6)	(7)	(8)	(9)
V. Education	125.86	13.34	8.92	149.12	5.00	..	154.12
(a) Zilla Parishad School Buildings	103.10	2.69	..	105.79	..	..	105.79
(b) Buildings for Private Colleges	22.00	..	..	22.00	..	..	22.00
(c) School Buildings in Municipal areas	1.76	1.65	..	3.41	..	..	3.41
(d) Post-Graduate course for the teacher candidates at Osmania University	4.00	3.92	7.92	5.00	..	12.92
(e) Post-Graduate Centre at Warangal	5.00	3.00	8.00	..	..	8.00
(f) Other Post-Graduate Centres	2.00	2.00	..	..	2.00
VI. Soil Conservation	18.69	10.00	28.69	25.00	40.00	93.69
VII. Milk Supply schemes	6.42	24.98	38.00	69.40	25.00	25.00	119.40
VIII. Medical	1.39	10.46	18.00	29.85	15.00	10.00	54.85
IX. Fisheries	5.00	5.00	5.00	5.00	15.00
X. Co-operation and Credit	13.00	20.00	33.00	7.00	..	40.00
Assistance to Weak Co-operative Central Banks	13.00	20.00	33.00	7.00	..	40.00
XI. Housing :	2.00	45.00	47.00	..	..	47.00
(a) Share Capital Contribution to Andhra Pradesh Co-operative Housing Federation	2.00	..	2.00	..	..	2.00
(b) Scheduled Castes and Scheduled Tribes Housing Federation	45.00	45.00	..	..	45.00

S.No.	<i>Head of Development</i>				1969-70	1970-71	1971-72	<i>Total of Cols. (3-5)</i>	1972-73	1973-74	<i>Total 1969-74</i>
	<i>Head of Department</i>										
(1)	(2)				(3)	(4)	(5)	(6)	(7)	(9)	(9)
XII. Animal Husbandry	16.00	16.00	16.52	13.00	45.52
(a) Modern Slaughter House, Hyderabad	5.00	5.00	..	..	5.00
(b) I. C. D. Block	8.00	8.00	13.00	13.00	34.00
(c) Feed Mixing Plant, Karimnagar	3.00	3.00	3.52	..	6.52
XIII. Social Welfare :	27.45	74.37	70.00	171.82	45.00	45.00	261.82
(a) Harijan and General Welfare	18.80	22.50	30.00	71.30	20.00	20.00	111.30
(b) Tribal Welfare	2.68	49.80	40.00	92.48	25.00	25.00	142.48
(c) Women and Child Welfare	5.97	2.07	..	8.04	..	..	8.04
XIV. Industries :	32.00	32.10	64.10	12.50	..	76.60
(a) Azamjahi Mills	32.00	..	32.00	..	..	32.00
(b) Industrial Co-operatives	1.00	1.00	..	..	1.00
(c) Balanagar Industrial Estate, Hyderabad	7.00	7.00	..	..	7.00
(d) Laons under State Aid to Industrial Act.	2.00	2.00	..	..	2.00
(e) Andhra Pradesh Small Scale Industrial Development Corporation	0.60	0.60	..	..	0-60
(f) Electraonics Complex, Kishiyaguda, Hyderabad	1.50	1.50	..	..	1.50
(g) Co-operative Sugar Factory Miryalaguda	10.00	10.00	12.50	..	22.50
(h) Wool Spinning Mill, Mahabubnagar	5.00	5.00	..	..	5.00
(i) Co-operative Maize Starch Factory	5.00	5.00	..	..	5.00
Total	894.68	940.43	1,122.45	2,957.56	942.52	471.50	4,371.58

CENTRAL SECTOR AND CENTRALLY SPONSORED SCHEMES

Central Sector Schemes :

In the Fourth Plan quite a few schemes have been taken up in the central sector for tackling the problems of drought areas, weaker sections of the agricultural population *etc.* The most important of the schemes being implemented in the State are the rural works programme, the small farmers development agency, the marginal farmers development agency, and the crash scheme for rural employment. Out of the 4 central sector schemes, the rural works programme is being implemented in Mahbubnagar district, the small farmers and marginal farmers development agency schemes in Nalgonda district and the crash scheme for rural employment in all the districts of the region. The details of the schemes are described below.

Rural Works Programme :

The Government of India have initiated the Rural Works Programme in 1970-71 as a centrally sponsored programme in selected chronically drought affected areas with a view to mitigate the scarcity conditions by taking up labour intensive and production oriented works which cover 4 sectors *viz.*, minor irrigation, communications, afforestation and soil conservation. This programme is being implemented in five districts in the State *viz.*, Kurnool, Cuddapah, Anantapur, Chittoor and Mahbubnagar since December, 1970. In Mahbubnagar district, the rural works project area comprises 10 out of 12 taluks of the district *i.e.*, all taluks excepting Mahbubnagar and Kodangal. These 10 taluks were declared in 1969 by the State Government as chronically drought affected areas.

In the Fourth Plan period, an amount of Rs. 2 crores will be available from the Government of India for the rural works programme in Mahbubnagar district. The State Government, however, prepared a contingent plan for an amount of Rs. 2.94 crores in order to take into account the short-falls on some of the schemes and thus ensure that the total amount available will be fully spent. The distribution of this out-

lay over the various heads of development is given in the following table:

DISTRIBUTION OF OUTLAY UNDER RURAL WORKS PROGRAMME IN MAHBUBNAGAR DISTRICT ACCORDING TO HEAD OF DEVELOPMENT

(Rs. in lakhs)

Head of Development	Outlay in				
	1970-71	1971-72	1972-73	1973-74	Total
Minor Irrigation (P.W.D.)	3.67	28.33	27.00	36.15	95.15
Minor Irrigation (P.R.)	0.62	5.28	23.42	6.96	36.28
Soil Conservation	0.71	2.26	8.14	8.69	19.80
Afforestation	1.14	4.00	9.27	8.83	23.24
Communications (P.W.D.)	4.88	9.05	11.95	8.88	34.76
Communications (P.R.)	1.99	17.70	20.23	24.60	64.52
Tools, equipment and staff					20.00
	13.01	66.62	100.01	94.11	293.75

Minor Irrigation (P.W.D.):

Under Minor Irrigation (PWD) Programme a sum of Rs. 95.15 lakhs is proposed to be spent during the programme period of 4 years. About 237 works are proposed to be taken up under this programme.

Minor Irrigation (P.R.):

A sum of Rs. 36.28 lakhs is proposed to be spent during the four-year period of programme under Minor Irrigation (PR) Sector. The ayacut proposed to be stabilised under the programme is about 11,000 acres coming under various small tanks which are under the control of Zilla Parishads and Samithis creating a labour potential of 9.81 lakhs mandays.

Soil Conservation:

A sum of Rs. 19.80 lakhs is proposed to be spent under this programme mostly under bunding, bench-terracing and gully control works. Under bunding, it is proposed to cover 31,650 acres, under bench terracing 170 acres and under gully control works 17,500 acres. The programme is expected to cover about 60 villages and 3,182 families.

Afforestation:

A sum of Rs. 23.24 lakhs is proposed to be spent during the four-year programme period, particularly on soil conservation and moisture conservation and pasture development, farm forestry and afforestation programmes.

It is proposed to cover 3,340 hectares and distribute 4 lakhs of seedlings.

Communications (R&B):

It is proposed to spend a sum of Rs. 34.76 lakhs under Communications (R&B). During the programme period about 30 miles of roads are expected to be improved.

Communications (P.R.):

It is proposed to spend Rs. 64.52 lakhs during the entire programme period, with a labour potential of 15.74 lakhs man days. The programme mostly covers the completion of various incomplete village road works taken up under famine relief programmes in the past.

A sum of Rs. 20 lakhs is provided for meeting the cost of staff, tools and equipment required under the programme.

Small Farmers Development Agency:

It has been recognised that the benefits of modern technology have not flown to the small farmers in proportion either to their numbers or to their needs from the various programmes of rural development. The studies made by the All India Rural Credit Review Committee and several other Committees have also indicated that the inadequate flow of credit to small farmers is due not only to their lack of credit worthiness, but also to certain institutional and sociological factors. The All India Rural Credit Review Committee felt that a re-orientation in the relevant attitudes of the managements of Co-operative Credit Institutions and banks and their policies and procedures is required.

The imperative need for special measures to promote flow of credit to the small farmers like re-orientation of loan policies, coverage of more farmers by the Co-operative Societies, Special personnel to attend to the needs of the small farmers and the provision of risk cover to the financing institutions is now an accepted fact. With a view to make a determined effort to improve the flow of credit to the small farmers and also to evolve programmes for their economic improvement a special agency was recommended by the All-India Rural Credit Review Committee.

Following this recommendation, the Government of India sponsored two schemes, one for the development of small farmers and the other for the development of marginal farmers. The scheme for the development of small farmers envisages the provision of credit to the small farmers who are potentially viable and who with assistance can undertake investments in specific channels in a manner as would ensure their credit worthiness over a period. In other words, the small farmers who are only potentially viable today can, with greater availability of credit, undertake improvements to the lands and also intensive cultivation of high yielding varieties with improved in-puts and technology and secure adequate incremental income to be on their own within a specified period.

Under this scheme, 45 pilot projects are proposed to be selected all over the country and for each of which a small farmers development agency will be established as a registered society. The outlay on each project will be Rs. 1.50 crores and this amount will be placed by the Government of India at the disposal of Small Farmers Development Agency for the specific purpose of catalysing the flow of credit to 50,000 small farmers for undertaking intensive agricultural development programmes like sinking of wells, installation of oil engine and electric motor pumpsets, raising high yielding varieties and also taking subsidiary occupations like dairy-farming and poultry.

The funds required for providing the additional credit will come from the normal financing agencies operating in the area, but the Small Farmers Development Agency will utilise its funds to draw a specific

programme for the identified small farmer and ensuring that he gets adequate credit for the programmes so drawn up for his development. The Small Farmers Development Agency will in brief act as a catalyst in the flow of adequate credit to small farmers from the existing agencies.

Under the scheme, a small farmer is defined as one who is having a land holding of 2.5 to 5 acres of wet land or 2.5 to 8 acres of dry land with marginal adjustments up to 10 acres of dry in exceptional cases.

This scheme for small farmers is implemented in Andhra Pradesh in three districts viz., Srikakulam, Cuddapah and Nalgonda. The Small Farmers Development Agency, Nalgonda was registered on 21st November, 1970. A Project Officer—an I.A.S. Officer in the senior scale has been in position since March, 1971 and he is assisted by a Deputy Project Officer of the rank of a Deputy Collector and an Assistant Project Officer of the rank of a Deputy Registrar of Co-operative Societies. The Nalgonda Project envisages the provision of additional agricultural credit to the extent of Rs. 676 lakhs with a subsidy element of Rs. 88.80 lakhs to 50,000 small farmers in the taluks of Ramannapet, Nalgonda and Suryapet. The programmes undertaken under this scheme relate to provision of credit for reclamation of land, sinking of bore-wells, purchase of oil engines and electric motors, purchase of milch cattle, setting up of dairy farms, sheep farms and poultry farms. The programmes proposed to be undertaken by the Small Farmers Development Agency in Nalgonda district are given below:

<i>Programme</i>	<i>Provision of additional agricultural credit (Rs. lakhs)</i>
1. Crop loans	380.00
2. Sinking of wells	40.00
3. Deepening of old wells	60.00
4. Purchase of Oil engines and electric motors	120.00
5. Purchase of milch cattle	30.00
6. Raising improved variety of grass	2.50
7. Raising poultry Farms	5.00
8. Duck Rearing	10.00
9. Sheep Rearing	22.00
10. Construction of Rural Godowns	3.00
11. Supply of Pusa Food Grain beans	4.00
12. Loans for Rural Artisans	5.00

Marginal Farmers and Agricultural Labourers Development Agency:

The principal objective of the scheme for marginal farmers and agricultural labourers is to assist the marginal cultivators in making the maximum productive use of their small holdings by undertaking horticulture, animal keeping and dairying *etc.* The effort will be directed towards generating larger income by channelising credit, improved inputs into these activities. The marginal farmers and specially the landless agriculturists will also be assisted with greater employment opportunities by such rural works as may help in the maximum exploitation of the agricultural potential in the area. The Government of India have decided to have 40 projects all over the country in the Fourth Plan period. Each project will get a central assistance of Rs. 100 lakhs. The projects will be primarily market based and will be centred round areas of consumer demand so that there is scope for development of production. The scheme will cover at least 20,000 marginal farmers and agricultural labourers under each project. The scheme will cover the following categories of persons:—

- (a) Marginal farmers having a holding of not more than 1 hectare (2.5 acres). This limit will be generally for irrigated areas. In other areas, the limit may be raised depending on the availability of irrigation facilities, the type of soil, the cropping pattern and other relevant factors; and
- (b) Agricultural Labourers having a homestead and earning 50 per cent or more of their income from agricultural wages.

2. Even in this case, as in the case of small farmers, there will be a separate Agency registered under the Societies Registration Act, for administering the scheme. The grant available from the Government of India for the scheme will be placed at the disposal of this Agency for expenditure on subsidy and risk cover fund. The Government have decided to implement the scheme in the districts of Visakhapatnam and Nalgonda in Andhra Pradesh.

*Marginal Farmers and Agricultural Labourers Scheme,
Nalgonda:*

The Marginal Farmers and Agricultural Labourers Development Scheme, Nalgonda as approved by the Government in February, 1971 in G.O. Ms. No. 78, Planning and Co-operation, dated 8th February, 1971, envisages the provision of additional financial assistance to the extent of Rs. 259.85 lakhs covering the utilisation of grants to the extent of Rs. 86.78 lakhs. The schemes envisaged in the project report are to provide credit to 20,000 marginal farmers and agricultural labourers for sinking of irrigation wells, purchase of oil engines, electric motors, purchase of milch cattle, maintaining poultry, sheep rearing, carpentry, blacksmithy etc. Provision of Rs. 5.00 lakhs has also been made for the schemes to be taken up for the development of rural artisans. The Small Farmers Development Agency, Nalgonda is implementing the schemes for the development of marginal farmers and agricultural labourers also.

4. The programmes undertaken by the Marginal Farmers and Agricultural Labourers Development Agency in Nalgonda district are mentioned below:

<i>Programme</i>					<i>Provision of additional financial assistance (Rs. lakhs)</i>
1. Crop loans	..	..	..	..	36.00
2. Sinking of wells	..	..	..	..	48.00
3. Purchase of Oil engines and electric motors			..	..	48.00
4. Purchase of milch cattle	..	..	..	..	30.00
5. Raising Poultry farms	..	..	..	..	10.00
6. Sheep rearing	..	..	..	..	17.25
7. High Yielding varieties programme	..	..	..	..	21.60
8. Vegetable Development	..	..	..	..	11.00
9. Sprayers (hand operated and Power)	..	..	..	..	11.25
10. Rural Works	..	..	..	..	20.00
11. Floriculture	..	..	..	..	1.75
12. Loans for Rural Artisans	..	..	..	..	5.00

Crash Scheme for Rural Employment :

The Government of India have formulated a scheme known as "Crash Scheme for Rural Employment" in order to alleviate the prevailing conditions of unemployment and underemployment in rural areas. The main feature of the scheme is to provide labour intensive projects in all the districts of the region. The work project undertaken under this scheme is building up of rural infrastructure including road works, land reclamation and development of Panchayat lands, drainage and embankments *etc.*, water conservation-cum-ground water re-charging works *etc.*, minor irrigation works like construction and restoration of storage tanks *etc.*, and soil conservation or afforestation schemes requiring manual labour.

Centrally Sponsored Schemes :

Besides the above central sector programmes the region is also likely to benefit from many of the centrally sponsored schemes in Agriculture, Animal Husbandry, Forests and Social Services. These centrally sponsored schemes are briefly described below:—

The most important of the schemes for Agricultural development are those relating to integrated dry land agricultural development in Ibrahimpatnam area in Telangana region. Further the scheme for maximisation in production of Cotton in areas of assured water supply and scheme for maximisation of production of groundnut in general are important. There is also a scheme for farmers' training and education. The other centrally sponsored schemes for Agricultural development included in the plan are those relating to the development of Wheat and Cotton under wells, development of Castor; Soyabean demonstration; pilot projects for multiple cropping; Niger and Sun flower demonstration; Castor demonstration; laying demonstration plots for improved practices in cashewnut cultivation; production of cashew air-layers; and survey of cashewnut. Moreover schemes relating to the loans and share capital for the establishment of service centres and custom service in tractors and agricultural machinery are also centrally sponsored.

Soil Conservation schemes in the catchment area of river valley projects under Pochampad, Nagarjuna-

sagar and Nizamsagar are implemented in the region as centrally sponsored schemes in the Fourth Plan. Centrally sponsored schemes in the field of Animal Husbandry include schemes relating to Rinderpest eradication and a large scale sheep breeding farm at Mamidipalli. Under dairying and milk supply the All-India Co-ordinated Research Project for chilling and transportation of milk to city dairies is being implemented at Central Dairy, Hyderabad as Centrally sponsored scheme.

The centrally sponsored scheme for the development of Forests relate to research on the behaviour of fast growing tropical pines, propagation of Bamboos and nutritional aspects and growth rate of Eucalyptus trees.

There are three important centrally sponsored schemes for the development co-operatives. They are subsidies towards agriculture and credit stabilisation funds; subsidy for establishment of service centres and custom service in tractors and other agricultural machinery; and margin money requirements of co-operatives for distribution of chemical fertilisers.

In the field of community development the scheme relating to the applied nutrition programme is easily the most important. Other schemes are, composite programme for women and pre-school children, encouragement of economic activities at Mahila Mandals, incentive awards to Yuvak Mandals in non-applied nutrition programme Blocks and composite programme for women and pre-school children demonstration feedings.

A scheme relating to basic and fundamental research in Engineering Research department is being implemented as a centrally sponsored scheme in the irrigation sector.

Under Village and Small Scale Industries the rural industries project and loans to the industrial corporation are centrally sponsored schemes in the Fourth Plan. Besides these a scheme for survey of Village and Small Scale Industries is also included as a centrally sponsored scheme,

There is a centrally sponsored scheme for State roads of economic importance.

The most important of the centrally sponsored schemes relating to the development of general education are those relating to the maintenance and appointment of Hindi Teachers in Government and non-Government Secondary Schools, Telugu Academy-University level book production and National Scholarship schemes. The other schemes included under this head are farmers education and functional literacy projects; post graduate course, quality improvement scheme, curricular development works, etc., award of merit scholarship to the children of working Teachers of Primary and Secondary Schools; sports talent research scholarships to outstanding sportsmen and sportswomen studying in the schools; and financial assistance to Sanskrit Pandits who are in indigent circumstances. In the field of Technical Education there are schemes relating to the Regional Engineering Colleges at Warangal and construction of students hostels of Engineering Institutions.

The centrally sponsored schemes under Medical and Public Health are the domicile T.B. campaign, leprosy control programme and establishment of Post Graduate Departments in various Medical Colleges. Very significant schemes in public health programme relate to Family Welfare centres, eradication of Small-pox and Malaria, Cholera and Filaria control. Primary Health Centres are also included as centrally sponsored schemes in the Fourth plan. Family Planning constitutes the most important of centrally sponsored schemes in this field.

There is a scheme for a special investigation division for rural water supply under centrally sponsored schemes.

There are three important centrally sponsored schemes for the welfare of scheduled castes relating to scholarships for Post Matriculation studies; grants-in-aid to Zilla Parishads for Girls Hostels and house sites for persons engaged in unclean occupations.

The centrally sponsored schemes for the development of scheduled tribes are those relating to Girls Hostels, Scholarships for Post-Matric studies, Pre-Examination

Training, grants-in-aid and loans to Girijan Co-operative Finance Corporation, aid to Training and Research Institute, grant-in-aid to Panchayat Samithis for Tribal Development Blocks and special nutrition scheme for children. Special schools, Government Hostels and supply of Milch Animals, Bullocks, ploughs and carts are the schemes proposed for denotified tribes. In the field of welfare, in addition to the above, there are two centrally sponsored schemes, one for associate women workers' camps and the other for rural youth workers' camps.

Under Statistics and Surveys there are schemes for conducting assessment surveys for the determination of spread and yield rates of high-yielding varieties in cultivators fields and extent of adoption of improved practices such as application of fertilizers, plant protection measures *etc.*; Pilot Studies of World Agricultural Census; and Timely Reporting of Agricultural Statistics.

Part II—Sectoral Programmes

1. AGRICULTURE

1.1. The importance of agriculture for the economy of Telangana region needs no emphasis. More than half of the regional income of Telangana is derived from agriculture and allied sectors while more than 70 per cent of the population is dependent on this sector. Therefore any quick additions to the incomes of a majority of the people in the short run could only be obtained by the development of agriculture. Apart from this consideration, the development of agriculture would also help the acceleration of the development of the regional economy from a stagnant to a progressive stage by making available the physical surplus required by other sectors of the economy in the shape of food and raw materials and by providing the economic surplus which constitutes the material basis for economic development.

1.2. In the plans several steps have been taken to improve the agricultural sector in the region. Due to these programmes, there is now an increasing awareness of the need for improved inputs such as seeds and chemical fertilisers and for the adoption of improved techniques. The yield of irrigated crops such as those of Paddy in some of the areas have also been stepped up considerably and they now compare favourably with the corresponding yields in the delta districts. In spite of this development that has taken so far, however, even now the overall gross value of agricultural output per acre in the region is much lower than elsewhere in the State with the consequent result that the over-all regional income per capita is correspondingly lower than that in the State as a whole. This lower output per acre in the Telangana region is partly due to the inadequate irrigation facilities in the region and partly due to the cropping pattern which is weighted in favour of low income yielding Millet Crops.

1.3. The area under foodgrain crops in the Telangana region accounted for 77.6 per cent of the cropped area against 68.7 per cent only in Andhra region in 1967-68 while the area under Commercial Crops namely; Sugarcane, Tobacco, Oilseeds, Cotton and

Mesta was 18.8 per cent against 23.5 per cent in the Andhra region. Even among the foodgrain crops rice accounted for only 19.5 per cent of the cropped area in the Telangana region while it accounted for as much as 31.2 per cent in the Andhra region. The low income yielding Millet Crops accounted for as much as 57.8 per cent of the cropped area in the Telangana region against 37.8 per cent in the Andhra region.

1.4. Any strategy for the development of agriculture in the region should therefore aim at increasing the irrigation facilities to the maximum extent possible on the one hand and changing the cropping pattern with emphasis on high yielding commercial crops on the other. The supply of the necessary inputs such as chemical fertilizers, improved seeds, pesticides, credit, etc. and more vigorous extension work are the other necessary concomitants for agricultural development in the region.

Objectives :

1.5. The objectives of the Fourth Five-Year Plan for agricultural development in the region are:

- (a) to bring about increase in agricultural production primarily through increasing productivity per acre;
- (b) to introduce diversification of cropping pattern in order to provide more stable incomes and effectively meet the shortages in supplies of different commodities;
- (c) to give special emphasis to the problems of drought-affected, tribal and other backward areas by developing the necessary infrastructure and appropriate cropping pattern with special emphasis on improved seed and dry land agriculture;
- (d) to build in weightages in favour of weaker sections and small farmers in the matter of implementation of various agricultural programmes;
- (e) to adequately integrate the various supporting programmes and institutional arrange-

ments in terms of co-operative institutions, marketing and warehousing facilities, irrigation programmes, agricultural research etc., based primarily on area development approach; and

- (f) to specially orient the agricultural programmes taking cognisance of the various natural climatic factors.

Strategy:

1.6. The strategy for agricultural development implicit in the above objectives could be mentioned as follows:

- (a) optimum exploitation of the existing irrigation facilities created as well as the irrigation potential that will be created during the Plan under major and medium irrigation sources;
- (b) maximum emphasis on exploitation of minor irrigation sources and ground water especially in areas which are not having the benefit of major and medium irrigation sources. However, in respect of areas which are already endowed with substantial surface irrigation facilities a cropping pattern which could be profitably brought about by encouraging supplemental irrigation through tube wells in ayacut areas is also emphasized;
- (c) emphasis on a package of improved practices comprising scientific water management, high yielding varieties of seeds, plant protection and fertilisers;
- (d) encouraging short term varieties in irrigated areas to enable the agriculturists to obtain two crops where they are obtaining one now and three crops where they are obtaining two now;
- (e) encouraging short term drought resistant varieties in dry land area coupled with package of practices for dry land agriculture;
- (f) emphasis on cropping pattern that will increase food production coupled with produc-

tion of commercial crops of significance *viz.*, oil seeds, cotton, tobacco etc.;

- (g) provision of improved agricultural implements with a view to effectively enable the adoption of improved methods of cultivation with due regard for the farm economics;
- (h) special emphasis on soil conservation in dry areas with a view to save precious soil and also as a measure of moisture retention;
- (i) provision of adequate and integrated supporting measures in terms of marketing, processing and communications; and lastly
- (j) the promotion of research on important crops and on problem areas.

Review:

1.7. The total foodgrains production went up from 14.5 lakh tonnes in 1956-57 to 25.25 lakh tonnes in 1967-68 or an increase by 74 per cent as against the increase of 22 per cent in the State as a whole. The gross value of agricultural production, at constant (1960-61) prices increased by 43 per cent during 1960-61 to 1967-68 in Telangana region against 24 per cent increase in the State as a whole. Among foodgrains, the production of rice increased from 6 lakh tonnes in 1956-57 to 13 lakh tonnes in 1967-68 or an increase by more than 100 per cent.

1.8. The following statement shows the average yield per acre and the total outturn at the commencement of each of the Plan periods, for some of the important crops of the region as compared to the State average.

Crop	1955-56		1960-61		1967-68	
	Yield per acre (kg)	Total outturn (lakh tonnes)	Yield per acre (kg)	Total outturn (lakh tonnes)	Yield per acre (kg)	Total outturn (lakh tonnes)
1. Rice A) Tel.	286	5.55	393	7.70	559	13.51
b) A. P.	460	30.90	501	36.61	557	46.74
2. Jawar a) Tel.	144	4.92	206	7.59	186	6.95
b) A. P.	192	11.50	201	13.56	195	11.98

3. Ground- nut	a) Tel.	228	2.49	198	0.59	259	2.06
	b) A. P.	354	10.87	350	6.94	307	10.39
4. Castor	a) Tel.	72	0.52	78	0.48	87	0.56
	b) A. P.	74	0.62	78	0.57	83	0.62
5. Sugar- cane	a) Tel.	2570	1.33	4885	2.79	2926	2.33
	b) A. P.	3005	5.26	3597	8.13	3318	10.10
6. Cotton	a) Tel.	17	0.24	15	0.13	49	0.68
	b) A. P.	23	1.28	26	1.16	36	1.57
7. Toba- cco	a) Tel.	279	0.11	345	0.12	389	0.24
	b) A. P.	337	1.34	320	1.13	345	1.77

1.9. The area under commercial crops (Sugarcane, Tobacco, Oilseeds, Cotton and Mesta) is also substantial which was over 23.33 lakh acres forming 18.8 per cent of the gross cropped area in the year 1967-68. However, as mentioned earlier, the percentage area under these crops is some what less than that in the Andhra region where the corresponding percentage is 23.5. Important among the commercial crops are Groundnut, Castor, Seasmum, Cotton and Sugarcane. Tobacco has been introduced in recent years in the region and was cultivated in about 0.73 lakh acres in 1968-69. The exploratory trials towards enlarging the scope of Tobacco cultivation in larger areas are still under way.

1.10. The high-yielding varieties of crops are being increasingly adopted in the irrigated areas of Nizamabad and other pockets in the region. But the region as a whole has yet to make a break-through in the cultivation of high-yielding varieties.

Fourth Plan Programmes :

1.11. Programmes under agricultural development consist of schemes sponsored by both Central and State Governments. The Central sector schemes have the main objective of achieving national targets of agricultural production and also supplementing the State Plan Schemes. It is therefore, relevant to des-

cribe the salient features of the Central sector schemes before elaborating the State Plan Schemes.

1.12. The Central sector schemes mainly consist of research and extension of improved practices of selected crops. Besides, there are also two general schemes *viz.* farmers training in high-yielding varieties cultivation and multiple cropping practices. There are altogether 14 schemes a few of which were continued from earlier plans.

1.13. The crops covered by research and extension schemes are Groundnut, Castor and Soyabean in the category of Oilseeds, Cotton and Tobacco. There are 6 schemes under Oilseeds development, one scheme under Cotton development and one under Tobacco. Oilseeds development schemes aim at popularising a package of improved practices on Groundnut, Aruna Castor and Soyabean cultivation in the region. Development programme for cotton envisages (i) Popularising irrigated cotton in rice fallows, (ii) intensive cultivation of rainfed cotton, (iii) Foliar spraying of urea on cotton crop. Besides, there are schemes for development of extra long staple cotton for Nagarjunasagar Project area and extension of Sea-Island cotton under wells. There is also a scheme for plant protection for cotton. There is a scheme for Tobacco development for its extension to light soils.

1.14. Under farmers training programme, 2 Training Centres have been established in the region. In each of these centres 250 farmers/farmer women/young farmers are to be trained every year. The course covers all improved practices for increasing agricultural productivity.

1.15. A scheme for evolving suitable crop rotation for raising multiple number of crops in the same area in a year and popularising them is taken up in one selected Block in the region. The scheme will benefit small farmers by way of getting more income from their small holdings.

1.16. The agricultural programmes consisting of research and extension of improved practices will be effective only in the presence of certain infrastructure

facilities like irrigation, soil conservation, land development, credit and marketing facilities. Hence the outlays proposed for the development of these infrastructure facilities are necessary for a proper appreciation of the agricultural programmes. The outlays proposed in the region's Fourth Plan are as follows:

Rs. in lakhs.

(i) Irrigation (Major, Medium and Minor).	5,996.01
(ii) Co-operation.	382.18
(iii) Land Development.	14.36
(iv) Soil Conservation.	135.30
(v) Development of Ayacuts.	427.54
(vi) Warehousing and Marketing.	5.31

With the above order of outlays in the Fourth Plan the additional production potential targets programmed in the case of principal crops are as shown below:

Crop.	Unit.	Production at the beginning of the IV Plan (1968-69)	Addl. Production Potential targetted for the IV Plan
1. Foodgrains	Lakh Tonnes..	19.92	8.71
2. Sugar Cane (gur)	„ ..	3.06	0.43
3. Oil Seeds	„ ..	2.48	0.22
4. Cotton (lint)	Lakh bales ..	0.33	0.10
5. Tobacco	Mn. Kg. ..	25.60	1.95

1.17. An amount of Rs. 249.87 lakhs is provided for agricultural production programmes in the Fourth Plan. The efforts in the earlier Plans for popularising the use of improved seeds and application of chemical fertilizers have resulted in the large scale consumption of these two inputs. However, the plant protection measures have not been given their due importance. With the result the cultivators as well as the Government are now feeling the loss of crop due to frequent pest attack. Plant protection has therefore, assumed the importance of a specialised subject now. Hence the Fourth Plan lays special emphasis on the extension of plant protection and pest control for which an amount of Rs. 23.34 lakhs is provided in the Plan. Next in the order of importance is the scheme meant for the establishment of soil testing laboratories for which an amount of Rs. 10.98 lakhs is earmarked in the Plan. Though it is realised that improved seeds will increase the yield rates the supply of quality

seed is limited. As such the production of foundation seed and their multiplication is accorded higher priority next only to plant protection. An amount of Rs. 9.46 lakhs is provided for seed farms and seed multiplication. Among other schemes, popularisation of high-yielding varieties, multiple cropping, application of optimum doses of fertilizers, are the more important schemes included in the Plan.

Agricultural Production:

1.18. The total provision for various Fourth Plan programmes under this head is Rs. 249.87 lakhs. Four heads of departments operate the programmes and the break-up of provision among different departments and as compared to the other regions will be as follows:

	Department	Coastal Andhra	Rayala seema	Telangana	Total A. P.
1,	Director of Agriculture	97.90	94.51	90.03	282.44
2,	Agricultural University	51.63	50.34	110.60	212.57
3,	Agro-Industries Corporation	61.31	27.76	43.67	132.74
4,	Registrar of Co-operative Societies	11.17	4.45	5.57	21.19
	Total:	222.01	177.06	249.87	648.94

A brief description of the important schemes is given separately under each department in the following paragraphs.

Director of Agriculture:

1.19. There are 6 State-wide Schemes for which an amount of Rs. 17.37 lakhs is provided. Of this provision, the share of Telangana is Rs. 6.15 lakhs. The 6 State-wide Schemes are (i) Scheme for Training of Officers and Assistants in Plant Protection, (ii) Establishment of Pesticides Testing Laboratory at Rajendranagar, (iii) Integrated Scheme for local manurial resources, (iv) Scheme for Internal cost of Foreign experts, (v) Survey of Cash Crops and (vi) Establishment of field information and propaganda unit at Hyderabad. A brief description of these schemes is given below:

1. *Scheme for Training of Officers, Assistants etc. in Plant Protection.*—In the agriculture extension

work, plant protection has now assumed the importance of a specialised subject. This has been mainly due to the introduction of high-yielding and hybrid varieties of crops which essentially need systematic adoption of plant protection measures. Further, the general assessment is that timely and effective control of pests and diseases would result in an increased production from 15% to 20%. Therefore, for successful cultivation of crops it is imperative that the field staff engaged in plant protection activity and also the general extension activity should be adequately trained, from time to time, in the latest techniques of plant protection measures; whereupon, the trained field staff would be in a better position to tackle the problems on the field effectively besides educating the cultivators in the methods of pest and disease control at various stages of crop growth.

The need for having a plant protection training centre was keenly felt and as a consequence, a State level Training Centre was established at Hyderabad during the year 1965-66. In the present context of increasing agricultural production through the adoption of intensive cultivation practices there is every need to continue the functioning of the Training Centre and strengthen it suitably in order to impart training to the Agricultural Officers, Agricultural Assistants and Village Level Workers in the science and technology of crop protection including the methods of pest and disease control.

Apart from the courses conducted in this Institute, training programmes are also conducted in the districts for the benefit of field staff and farmers besides conducting training courses for young farmers for a period of five days.

2. *Establishment of Laboratory for testing pesticides at Rajendranagar, Hyderabad.*—Pesticides play a major role in the endeavour to achieve increased production. There is now a growing awareness among the cultivators to adopt plant protection scheduled in a systematic manner which has a direct bearing in the cultivation of high-yielding and hybrid varieties of crops. Even though the application of P.P. Chemicals adds to the cost of cultivation, the farmers are prepared to go in for the use of P.P. Chemicals in view

of its obvious advantages. It is therefore, very necessary that the farmers are assured of the supply of quality pesticides and fungicides that are more efficacious, free from the danger of using poisonous chemicals of substandard nature. Pesticides worth more than Rs. 3 crores are being used by the farmers.

A standardised procedure has been evolved to analyse the different popular chemicals and the pesticides testing laboratory is following this in its analysis. There is, however, a need to further strengthen the laboratory with the equipment required for the "residue analysis" item of work. The required equipment will be purchased during the Fourth Plan period.

Studies conducted over the efficacy of the pesticides have revealed that some of the major pests are becoming immune to the commonly used pesticides. It is, therefore, felt necessary to undertake bioassay studies of important pesticide chemicals over the live insects which would facilitate in recommending the right type of pesticides. A bioassay unit is, therefore, proposed to be attached to the existing pesticides testing laboratory during the Fourth Plan.

3. *Integrated Scheme for Local Manurial Resources.*—This is an incentive scheme wherein subsidy is offered to the Municipalities and notified Panchayats which produce the maximum additional quantity of quality urban compost. This scheme will be helpful in increasing the total production of urban compost.

4. *Scheme for Internal Cost of Foreign Experts.*—This is purely a staff scheme intended to avail the expert advice of the specialists in the fields of Seed Production, Plant Protection, Soil Fertility, Water use Management and Agricultural implements. A team of five foreign experts drawn from the respective fields are helping in the "Food Production Drive" in the State. These foreign experts are here under the U.S.A. I.D. Programme. The experts undertake intensive tours in the districts and hold frequent discussions with the District Officials concerned to solve the field problems. The term of the team however, would cease by September, 1971.

5. *Survey of Cash Crops (chillies and other spices).*—Simultaneous to the efforts that are being

made towards improving the yield rates of the important food and non-food crops need has been felt to develop the chillies and other spices crops of the State. In order to develop these crops on scientific lines it is essential to collect the basic statistics on these crops. A survey of cash crops is proposed during the Fourth Plan with the following objectives:

- (i) To estimate the average yield per acre of chillies and turmeric crops;
- (ii) To estimate the production of the above crops for the State as a whole and for the districts in which it is a major crop; and
- (iii) To collect data on cost of cultivation.

6. *Establishment of Field Information and Propaganda Unit at Headquarters.*—With the transfer of the Publicity Wing of the Department of Agriculture to the Information and Public Relations Department, difficulty is being experienced in getting the material relating to the departmental activities printed, and published quickly. It is, therefore, felt necessary to set up a 'Printing Press' to get the material printed in time. Hence, this scheme is proposed to facilitate the effective dissemination of the departmental activities through the printing of a Bi-monthly Telugu journal 'Vyavasaya Vartalu' pamphlets, brochures etc. This will go a long way in providing the farmers with upto date information in time on new farming techniques through pamphlets etc.

REGIONAL SCHEMES:

(i) *Plant Protection and Pest Control:*

1.20. The highest priority is accorded to pest control programme in the region by providing maximum amount viz. Rs. 23.34 lakhs for three different schemes intended for plant protection and pest control. Under these schemes one additional mobile squad for each district will be established and the pesticides testing laboratory at Rajendranagar and the Plant Protection Organisation in the region will be further strengthened. The total area proposed to be covered under various plant protection measures is 92.91 lakh acres by the end of the Fourth Plan.

(ii) Seed Farms and Seed Multiplication :

The foundation seed produced in the State Seed Farms will be further multiplied in the seed villages through registered growers. The registered seed so produced is distributed to the farmers. At present there are 14 Seed Farms in the region covering an area of 1,297 acres—482 acres wet, 300 acres irrigated dry and 515 acres dry. More area is proposed to be brought under State Seed Farms through reclamation and also by establishing new Seed Farms. It is also proposed to construct staff quarters and office buildings for the staff working in the Farms in addition to the provision of irrigation facilities through bore wells, dug wells and installation of electric motor pumpsets.

(iii) Soil Testing Laboratories :

Soil analysis is important for evolving appropriate manurial and fertilizer schedules. It also helps in recommending proper cropping pattern particularly after the introduction of multiple cropping. There are soil testing laboratories in all the districts which are assigned with a target of analysing 6,000 soil samples per annum per laboratory. These soil testing laboratories will be strengthened in the Fourth Plan. In addition one mobile soil testing van will be attached to the soil testing laboratory at Rajendranagar to undertake tours all over the region, analyse soil and water samples and make suitable recommendations on the spot.

(iv) Oilseeds Development Scheme :

The scheme envisages the multiplication of improved and high-yielding varieties of groundnut as well as Castor seed in the State Seed Farms and distribution of the same to the cultivators in sufficient quantities. Part of the provision under this scheme will be utilised for the purchase of plant protection equipment for effective control of pests and diseases on soil seeds crops.

(v) Pilot Project for introduction of Cotton :

There are good prospects of bringing new area under Cotton crop particularly Sea-Island, M.C.U. 5,

H.4 and Sujata varieties of Cotton in project areas. These varieties are of superfine quality with extra long staple lengths and are fetching good price in the market. This pilot project is introduced both as a State Plan Scheme and as a Centrally Sponsored Scheme.

(vi) Fruit Development Scheme (Establishment of Progeny Orchards):

This is a new scheme proposed in the Fourth Plan which envisages supply of quality pedigreed fruit plants to the cultivators. Under this scheme progeny orchards will be established at Malthumeda in Nizamabad district taking good progeny from the cultivators and the A.P.A.U. After multiplication the fruit plants will be supplied to the orchard growers.

(vii) Demonstrations:

For the popularisation of any improved practice, demonstrations should be conducted on a large scale and that too, on cultivators' fields. Since scientific and technological changes in agriculture are yet to take deep roots in this region it is highly essential to conduct different kinds of demonstrations to bring home to the cultivators the advantages of modern methods of farming. This scheme envisages laying out of demonstrations in raising profitable crops on a large scale.

(viii) Subsidised distribution of Agricultural Implements:

This is a new scheme proposed with the object of popularising the improved agricultural implements. The efficiency of the implements will be demonstrated and the implements distributed to the cultivators on subsidised rates. The implements initially selected for popularisation are (1) Victory plough, (2) Disc harrow, (3) Seed-cum-fertilizer drill, (4) Bullock dozer, (5) Ridge plough, (6) Hand operated maize sheller, (7) Rampalak, (8) Ordinary M.B. plough, (9) Winnower and (10) Duck foot harrow.

(ix) Strengthening of District Administration:

As per the recommendations of the M. T. Raju Committee, the area of operation by Agricultural

Officers should be reduced and concentrated efforts should be made for intensive agricultural development. The scheme is proposed to appoint one Officer of the cadre of District Agricultural Officer for each one of the Revenue Divisions.

(x) *Intensification of Administration under Nagarjunasagar Project:*

The scheme aims at strengthening the extension activities in the project area by laying out demonstration plots on the package of practices for different crops along with proper use of fertilisers and effective soil and water management practices. The staff working under the scheme will also help the ayacutdars in processing their loan applications for obtaining agricultural loans from the Land Mortgage Banks.

(xi) *Administration under Pochampad including Soil and Water Management:*

The Central Land Mortgage Bank authorities are giving institutional finance for the development of ayacut lands under the Project. Cultivators need guidance in matters of land levelling, formation of field channels, raising of profitable crops etc. This work will be attended to by the staff provided under the scheme who will also prepare soil maps etc.

(xii) *Soil Survey under Pochampad:*

The total area that will be irrigated under Pochampad Project is 6.8 lakh acres. It was originally estimated that this area would be available to the left side of Maner river. But after actual block levelling and reclamation, it was found that the area available for localisation was only 4 lakh acres. Hence it has become necessary to include areas lying to the right side of the Maner river which extends into Warangal district. This area requires to be surveyed. The results of the survey will be helpful in suggesting the suitability of land for agricultural purposes.

(xiii) *Pre-Irrigation Survey and Soil Testing under Pochampad:*

This is essentially a soil survey scheme intended for suggesting suitable cropping pattern for the areas

newly brought under irrigation. Simultaneously, the scheme also undertakes soil testing work.

(xiv) Special Propaganda Staff:

For the important irrigation projects of the region like Kadam and R.D.S., Alampur some special staff is needed to carry out intensive propaganda for bringing the reclaimed area under cultivation and for recommending adoption of improved agricultural practices. In order to help the tempo of the development work in the ayacut areas, this scheme is proposed, under which special staff will be appointed to carry out extension work.

(xv) Cashewnut and Fruit Development Scheme:

Long term loans repayable in easy instalments with reasonable rates of interest will be issued to the intending growers for raising cashewnut and other fruit gardens. An amount of Rs. 4.32 lakhs which is Telangana's share, is provided for participation in debentures floated by the A.P.C.C.L.M.B.

Agricultural University:

1.21. Agricultural education, research and extension are the responsibilities of the Andhra Pradesh Agricultural University which came into existence in July, 1964. The University receives assistance on the same pattern as traditional Universities receive from the University Grants Commission. The University however needs matching grants under the Plan from the State Government, in addition to the assistance given by the Indian Council of Agricultural Research.

1.22. The Fourth Plan outlay for the schemes of the Agricultural University is Rs. 2.18 crores of which the share of Telangana is Rs. 1.10 crores. The programme of the University can be broadly divided into three components *viz.*, Education, Research and Extension. The provision earmarked for Education is Rs. 88.65 lakhs while the balance of Rs. 21.95 lakhs is meant for Research Schemes. All the schemes under 'Extension' are financed by the Government of India.

1.23. The University is maintaining 6 Colleges for under-graduate courses in the faculties of Agriculture, Veterinary Science and Home Science and a College of Basic Science at Hyderabad. Of these, an Agricultural College, a Veterinary College, a Home Science College and the College of Basic Sciences all located at Hyderabad are within the region. The admission capacities of all these colleges put together are 400 pupils in the faculty of Agriculture, 120 in Veterinary Science and 80 in Home Science all leading to a Bachelor degree. In all these faculties not less than 35 per cent of the total seats will be allotted for Telangana region.

1.24. There is already post-graduate course in Agriculture at the Agricultural College, Rajendranagar. The University proposes to introduce post-graduate course in the Veterinary College at Rajendranagar during the Fourth Plan for which the I.C.A.R. provides assistance under major non-recurring items like buildings, equipment etc. while the recurring expenditure is provided for in the Plan.

1.25. The University conducts research programmes both in its constituent colleges and in the field research stations. The Agricultural Research Institute at Rajendranagar is the main centre of all research activities. In all, there are 14 research stations functioning in the region. The I.C.A.R. has sanctioned many massive All-India Co-ordinated Research Projects under several crops and also under Animal Husbandry which will give a fillip to the research activities in the region. The amounts provided in the Plan are meant for only providing facilities like land, laboratories and leave salary contribution for the staff etc.

1.26. The University has a Directorate of Extension at Apex and Extension Education Wings in all the constituent colleges for imparting instructions and practical training to under-graduate and graduate students. There is an Extension Education Institute at the Agricultural College, Rajendranagar which is run by the University as an integral part of the college and financed by the Government of India for conducting refresher courses and inservice training to the professional people in the field of Extension Education.

Agro-Industries Corporation :

1.27. 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. 4.00 crores of which Rs. 3.49 crores has been subscribed. 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 service facilities.
- (h) Miscellaneous trading activities such as meeting the demands for services and supplies in the Agro-Industrial sector.

1.28. The Corporation has established one Tractor Hiring Centre in each district in the region and one additional centre at Metpally in view of the heavy demand for the machinery. The machinery deployed all over the region was 82 bulldozers and crawler tractors, 38 wheeled tractors, 17 power drills and 25 revitalisation units. The targets for the Fourth Plan are levelling of 70,000 acres, sinking of 1,750 tube wells and revitalisation or deepening of 6,800 wells. The Corporation proposes to sell 1,783 tractors and 2,280 pumpsets during the Fourth Plan.

1.29. The Corporation has already established consultancy services in food technology and for selection of sites for bore wells and tube wells.

2. MINOR IRRIGATION

2.1. Minor Irrigation programmes have the advantage of requiring less capital outlay, having shorter gestation, providing relatively more employment, utilising local labour and local material and above all they have greater capacity to disperse the facilities over a wider area. The Minor Irrigation programmes have to be conceived in terms of an integrated approach keeping in view the other schemes of irrigation.

Objectives and Strategy:

2.2. The objectives of Minor Irrigation development in the region are:—

(a) to increase the irrigated area through restoration of Minor Irrigation tanks and construction of new tanks.

(b) to give importance to lift irrigation schemes with a view to augmenting irrigation facilities.

(c) to undertake a scientific well-sinking programme.

2.3. The strategy of Minor Irrigation development is in terms of exploiting surface irrigation facilities in the scarcity areas on a priority basis and emphasising ground-water development with the help of institutional finance through Land Mortgage Banks. The programme also includes provision of loan assistance for oil engines and energisation of wells with a view to encourage more efficient and scientific exploitation of ground-water resources.

Review:

2.4. During the Third Plan period, an amount of Rs. 28.93 crores was spent on Minor Irrigation schemes in the State. Out of this Rs. 9.81 crores was spent in Telangana region. In the three Annual Plan years 1966-69, an expenditure of Rs. 5.61 crores was incurred on minor irrigation programmes in this region.

Fourth Plan Programmes:

2.5. A provision of Rs. 8.70 crores has been made for Minor Irrigation schemes in the Fourth Plan of

Telangana. Keeping in view the need for giving higher priority to ground-water development, out of Rs. 8.70 crores as much as Rs. 4.35 crores has been provided for this item and Rs. 4.35 crores for surface water resources. Out of the amount of Rs. 4.35 crores allotted for surface water exploitation as much as Rs. 3.86 crores is provided for works under Chief Engineer (Minor Irrigation). Similarly, under ground-water resources, an amount of Rs. 22.33 lakhs is made for Tube-wells programme implemented by Chief Engineer (Minor Irrigation). An outlay of Rs. 339.19 lakhs is provided towards contribution to the debentures to be floated by the Land Mortgage Banks which will be routed through the Registrar of Co-operative Societies, while another sum of Rs. 66.00 lakhs is provided for Director, Ground-water. The following table shows the break up of the allocation for individual schemes together with the physical target.

SCHEME	Provision (Rs. in crores)	Additional gross area likely to be irrigated (In lakh acres)
I. Surface water Exploitation		
1. Restoration of Minor Irrigation works Chief Engineer (Minor Irrigation)	3.86	0.77 (stabilisation) 0.99 (New)
2. Restoration of Minor Irriga- tion sources under Panchayat Raj institutions [Chief Engineer, (Panchayat Raj)]	0.49	0.12 (stabilisation)
II. Exploitation of groundwater sources		
1. Tube wells scheme by Chief Engineer (Minor Irrigation)	0.23	—
2. Ground water unit	0.66	—
3. Loans for sinking of wells supply of oil engines, electric motor pumpsets (Registrar of Co operative Societies)	3.39	2.38
4. Special contribution to Zilla Development works	0.07	
Total	8.70	0.89 (stabilisation) 3.37 (New)

2.6. The total Fourth Plan ceiling fixed for Chief Engineer (Minor Irrigation) is Rs. 409.22 lakhs. Out of this, an amount of Rs. 318.76 lakhs is proposed to be spent on surface Minor Irrigation schemes, Rs. 22.33 lakhs on Tube well programme, Rs. 15.37 lakhs on Lift Irrigation schemes and Rs. 52.76 lakhs on Investigation of new Minor Irrigation schemes.

Tube well programme :

Under exploratory tube well programme 40 wells, at the rate of 10 wells in each district, are proposed to be constructed in the districts of Khammam, Karimnagar, Adilabad and Warangal. The estimated cost of 40 wells will work out to Rs. 22.33 lakhs which is provided in the Fourth Plan.

Minor Irrigation Schemes :

An amount of Rs. 3.75 lakhs for spill-over schemes and Rs. 11.62 lakhs for New Schemes have been provided in the Fourth Plan.

Minor Irrigation Schemes :

At the beginning of 1970-71 there were 386 spillover works which required Rs. 272.00 lakhs for completion which has been provided in the Fourth Plan. In view of the inadequate funds, only small provision is made for new schemes. By completing the spill-over schemes, a potential of 1.75 lakh acres, comprising 76,580 acres stabilisation and 98,940 acres additional irrigation will be created.

2.7. The amount proposed to be spent by the Chief Engineer (Panchayati Raj) during the Fourth Plan period in this region is Rs. 49.40 lakhs and with this outlay it is proposed to stabilise 12,490 acres.

Minor Irrigation (Wells):

The Land Mortgage Banks will be providing long-term loans to the tune of Rs. 34.75 crores during the Fourth Plan period for sinking 53,930 wells and for installing 8,700 oil engines and 29,140 electric motor pumpsets.

Special Development Programme :

2.8. In addition to the above Fourth Plan Programmes under Minor Irrigation, for which an outlay of Rs. 8.70 crores was made in the Plan, an additional amount of Rs. 4.59 crores will be available for Minor Irrigation Schemes under Special Development Programme. Out of this provision, an amount of Rs. 4.12 crores is earmarked for Minor Irrigation Schemes of the Public Works Department. It is expected that with this outlay, an extent of 47,790 acres of ayacut will be stabilised and 54,490 acres of additional ayacut will be created in the region as a whole.

The balance amount of Rs. 46.83 lakhs is provided for the Minor Irrigation works under Panchayati Raj.

3. SOIL CONSERVATION & LAND DEVELOPMENT

Soil Conservation :

3.1. Most of the dry lands in the Telangana region, being located in undulating terrain, are subjected to various degrees of soil erosion and run off losses. The yield potential from these areas is being gradually reduced due to loss of fertile top soil and unless this is prevented, the other inputs like improved seed, fertiliser and better cultivation practices will not have any optimal impact on crop production. In nature, it usually takes about 1,000 years to build up one inch of top soil whereas due to soil erosion it is being lost in less than a decade which we cannot afford to loose. The soil erosion has also been causing rapid siltation of the tanks, thus reducing their irrigation potential.

3.2. Soil conservation measures will be useful in both red as well as black soils. The red soils due to their poor texture cannot retain rain water, whereas black soil can retain moisture. But if the moisture availability in the black soils is not adequate, the crop suffers due to non-penetration of roots caused by compactness. Even the deep rooted crops like cotton and sugarcane can penetrate upto 20 inches depth only. Thus low moisture retention and low moisture availability are both harmful for crop growth. In the Northern parts of the Telangana region, the rainfall is fairly high and the soils are generally black cotton soils. However, in the southern and western parts of the region, excepting for a strip of black soil along the western border, the soils are red soils and the rainfall is also low. The problem of soil erosion is rather severe in this area and requires immediate conservation measures.

3.3. The soil conservation programmes aim at conserving the natural resources of water and soil and thus make the land more productive. These measures would also help in recharging the underground water and provide copious water in the wells, particularly in the lower regions of the catchment.

3.4. There are several types of soil conservation measures such as contour bunding, stone terracing,

gully control works, pasture development, afforestation, farm ponds and stream bank protection, each of which having a specific role to play in preventing soil erosion and in conserving rain water. For instance, contour bunding will be particularly helpful in low rainfall areas for retaining more water for crop production. The afforestation and pasture development programmes will help in increasing the precipitation prospects besides prevention of soil erosion. The gully control works will be helpful in conservation of soil and moisture, while the retention dams would be helpful for prevention of silt flow into the tanks and in recharging of ground-water for copious supply in the wells in those areas where the water table is low.

3.5. In 1970, the Agriculture Department has taken up a quick reconnaissance survey to assess the extent of soil erosion in different parts of the region and the measures required to remedy the situation. This survey was conducted in all the Telangana districts excepting Nizamabad and Adilabad. In these two districts the survey was not taken up partly because of the lack of necessary field organisation for conducting the survey and partly because the problem of soil erosion itself is relatively small in these two districts. The area that requires soil conservation measures in the 7 districts, in which the reconnaissance survey was completed, has been estimated to be about 97 lakh acres.

Objectives:

3.6. The Fourth Plan objectives of soil conservation in Telangana region are:—

- (1) to improve the productivity of dry farming area by covering those areas on a priority basis with soil conservation and increasing moisture retention of the soil;
- (2) to create employment in drought-affected areas; and
- (3) to reduce silting of irrigation reservoirs.

Strategy:

3.7. The strategy of soil conservation programme is to take up soil conservation on priority basis in dry

farming areas and catchment areas of irrigation projects like Pochampad. For this the Co-ordination between forestry and soil conservation measures is to be ensured. The types of measures for soil conservation like bunding, terracing etc., may have to be decided on the basis of soil and topographical conditions. The State sector programmes are to be supplemented by central sector schemes like Rural Works Programme etc., for extending soil conservation to larger areas.

3.8. In order to derive full benefits, soil conservation measures have to be taken up on catchment basis and as a part of an integrated farm development programme. It is therefore proposed to take up the soil conservation measures on river basin or sub-basin basis and especially in those areas where irrigation projects either major, medium or minor are already existing or are contemplated in the near future so as to ensure optimal water management and top soil preservation. For taking up soil conservation on a catchment basis the Co-operation of all cultivators in the catchment is necessary which is found wanting in some cases. Hence, a legislation is contemplated to make it obligatory for all cultivators in a catchment area to take up soil conservation measures. The legislation is already at an advanced stage and is likely to be passed during the Fourth Plan period.

Review :

3.9. Recognising the need for soil conservation in the region, a beginning was made in the First Plan itself which was continued in the Second Plan and was gradually stepped up in Third Plan and also in the subsequent three Annual Plans. An amount of Rs. 102.68 lakhs was spent in the Third Plan and the subsequent Annual Plans on various soil conservation measures. The total area covered under soil conservation programmes upto the beginning of the Fourth Plan was 2.17 lakh acres.

Fourth Plan Programme :

3.10. An amount of Rs. 135.30 lakhs is provided in the Fourth Plan for soil conservation programmes in

the Telangana region. Of this, an amount of Rs. 4.50 lakhs will be spent on soil and water management staff under Pochampad Project. The balance amount will be spent on various soil conservation schemes bringing an area of 2.28 lakh acres under soil conservation measures during the Fourth Plan.

Special Development Programme :

3.11. In addition to the above Fourth Plan provision of Rs. 137.04 lakhs available for soil conservation works during the Fourth Plan period, an amount of Rs. 93.69 lakhs is likely to be available under the Special Development Programme. With this additional provision under the Special Development Programme an additional 1.61 lakh acres will be brought under soil conservation measures during the Fourth Plan period thus taking the total area covered under soil conservation measures both under normal plan as well as Special Development Programme, to about 3.89 lakh acres.

Land Development :

3.12. The objective of Land Development Programme is to assist the farmers and the Farming Societies by way of providing loans and subsidies for long-term investment in Agriculture and Land Development.

3.13. An amount of Rs. 9.89 lakhs during the Third Plan and Rs. 8.63 lakhs during the subsequent three Annual Plans was spent on Land Development Schemes in Talangana Region.

3.14. The total provision in the Fourth Plan is Rs. 14.36 lakhs. There are only two schemes proposed under this head which are State-wide in nature. The first scheme relates to the ordinary debenture participation in debentures floated by the Andhra Pradesh Co-operative Central Land Mortgage Bank for which an amount of Rs. 11.70 lakhs is provided towards Telangana's share. The Bank proposes to advance loans for the purchase of tractors and power tillers at the rate of Rs. 5,000 per power tiller and Rs. 25,000 per tractors. In all, loans will be issued for 1,300 tractors

and power tillers in the region. The second scheme relates to reclamation of Government waste lands and re-settlement of land-less agricultural labourers by starting Co-operative Joint Farming Societies. The Joint Farming Societies will be provided with financial assistance at the rate of Rs. 300 (50 per cent loan and 50 per cent subsidy) per acre for reclamation and Rs. 750 (25 per cent loan and 75 per cent subsidy) per family for resettlement charges. The total provision for this scheme in the Fourth Plan is Rs. 2.66 lakhs.

4. DEVELOPMENT OF AYACUTS

4.1. A desirable rate of growth in Agriculture sector cannot be achieved unless there is optimum efficiency in the development of ayacuts under all irrigation projects in the State. 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 surveys, production of improved seed *etc.*, 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.

4.2. At the end of 1968-69, against a potential of 3.61 lakh acres created in the Talangana region, an extent of 2.92 lakh acres were brought under utilisation. Thus, a potential of 0.69 lakh acres, created upto the end of 1968-69 has yet to be utilised. Adding to this, the additional potential of 3.61 lakh acres to be created in Telangana region during the Fourth Plan period, the total potential to be utilised during the Fourth Plan period will come to 4.30 lakh acres. In the context of vast ayacut yet to be developed this programme assumes utmost importance.

Objectives :

4.3. One of the basic objectives of the Fourth Five-Year Plan is the early completion of spill-over schemes and utilisation of potential created under these projects. When larger sums of money are being spent in providing new irrigation facilities at a faster rate, it is necessary that irrigation potential created should be utilised fully and expeditiously. An additional irrigation potential of 3.61 lakh acres will be created during the Fourth Plan period. Out of this, the additional potential under left bank canal of Nagarjunasagar project will be 1.68 lakh acres, Pochampad 1.30 lakh acres and 0.63 lakh acres under other Major and Medium Irrigation schemes of Telangana region,

Review :

4.4. A provision of Rs. 66.56 lakhs was made for ayacut development in Telangana region when the Plan was revised in 1963. However, the expenditure incurred to the end of 1964-65 was small due to foreign exchange difficulties in 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. 74.89 lakhs was finally spent on ayacut development during the Third Plan period. During 1966-67, the outlay for Ayacut Development Programme was Rs. 76.12 lakhs out of which the expenditure was Rs. 65.62 lakhs. The provision made for ayacut development in 1967-68 was Rs. 41.96 lakhs and against this an expenditure of Rs. 27.98 lakhs only was incurred due to delay in the acquisition of machinery. The outlay for Ayacut Development Programme in 1968-69 was Rs. 55.52 lakhs, against which an expenditure of Rs. 31.40 lakhs was incurred.

Fourth Five-Year Plan Programmes :

4.5. The total outlay on schemes of Ayacut Development Programme, in Telangana during Fourth Plan will be Rs. 427.54 lakhs. The Department-wise break-up of this outlay is as follows:—

	<i>Rupees in lakhs</i>
1. Director of Agriculture	... 20.63
2. Board of Revenue	... 126.46
3. Chief Engineer (Major Irrigation)	... 12.94
4. Registrar of Co-operative Societies	... 250.99
5. Director of Animal Husbandry	... 11.21
6. Agricultural University	... 2.40
7. Inspector-General of Registration (Stamps)	... 2.91
Total	... 427.54

NAGARJUNASAGAR PROJECT :

Localisation :

4.6. The total extent of land to be localised under Nagarjunasagar left canals is 8.80 lakh acres. The entire extent has been localised except 52,000 acres. At present no localisation units are functioning. The provision so far made till 1971-72 is to meet the ¾th State's share of cost on localisation. The outlay proposed during 1972-73 and 1973-74, is to meet the cost of one localisation unit proposed to be opened under left canal for Lift Irrigation Schemes. An outlay of Rs. 3.90 lakhs has been made for this purpose.

Acquisition of land for field channels :

4.7. Provision under this head is utilised for payment of compensation for land acquired for excavation of field channels. The total land acquisition programme in left bank covers 6,000 acres. An outlay of Rs. 1.63 lakhs has been made for this purpose.

Excavation of field channels :

4.8. According to section 3 of Andhra Pradesh Irrigation (Construction and Maintenance of Water courses) Act, 1965, the construction of field channels is the obligation of the owners of the lands. But in respect of Nagarjunasagar Project, as the ayacutdars did not come forward to take up the work, the work of excavation of field channels was entrusted to the Chief Engineer (Nagarjunasagar) Canals. The Chief Engineer completed this work according to the programme for each year by meeting the expenditure initially from project funds. The actual expenditure met from the project funds is reimbursed later. For creating an additional irrigation potential of 0.32 lakh acres in 1971-72, it is programmed to excavate field channels for 214 miles under left bank. An outlay of Rs. 35.13 lakhs has been made in the Plan.

Ayacut Roads :

4.9. Under Nagarjunasagar Project left canals, an irrigation potential of 2.56 lakh acres has already been created and water released. By 7/71 irrigation

potential is programmed to be created for entire ayacut of 2.83 lakh acres in the blocks 1 to 13 of Left Canals. The total length of ayacut roads proposed to be laid in blocks 1 to 13 is 676 miles costing Rs. 154 lakhs for forming earth work construction of structures and acquisition of land. So far, roads for a length of 54 miles have been taken up incurring an expenditure of about Rs. 11.50 lakhs for formation of earth work and few structures. These works are under various stages of completion. A total outlay of Rs. 29.60 lakhs has been made for this purpose in the Plan.

POCHAMPAD PROJECT :

Localisation :

4.10. According to the Master Plan of Pochampad Project, an extent of 5.7 lakh acres is proposed to be localised. During the year 1966, one localisation unit with two non-gazetted teams started functioning from 3rd June, 1966. By the end of 1970-71, an extent of 3.33 lakh acres has been localised.

4.11. The post of Special Deputy Collector, Localisation Unit at Jagtial was vacant for the period from June, 1970 to November, 1970 and the Special Agricultural Officer was on leave from November, 1970 to February, 1971.

4.12. The balance of 2.28 lakh acres may be finalised by the present unit in two years i.e., 1971-72 and 1972-73. Further, the localisation unit has to attend to the localisation of Anti-malarial zone and the distributory wise revision in irrigation pattern from distributories 30 to 83. In addition, the area proposed under the command beyond Manair is also to be localised on receipt of proposals from the P.W.D. Thus there would be sufficient work load for one Localisation unit upto 1973-74. An amount of Rs. 9.80 lakhs is made for this purpose in the plan.

(a) Excavation of field channels :

4.13. The excavation of field channels in Pochampad project is entrusted to the Chief Engineer, Pochampad Project. The expenditure on this item is initially met from the project funds and is reimbursed later

from the ayacut development funds. An outlay of Rs. 20.80 lakhs is made in the Plan.

(b) Ayacut Roads :

To start the preliminaries and take up investigation the Chief Engineer (Roads and Buildings) required two divisions costing Rs. 20.60 lakhs. However, the provision available for this scheme in the Plan is only Rs. 14.10 lakhs.

Seed Farms :

4.14. 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 requirements of improved seeds one seed Farm under the left bank canal has been established. This was started during 1967-68 and require to be developed. An outlay of Rs. 3.31 lakhs has been made in the Plan.

Administration under the Nagarjunasagar Project :

4.15. With a view to Planning an overall development of all Agricultural activities and for fuller utilisation of the vast irrigation potential created under Nagarjuna Sagar Project a well knit extension organisation has been created. An outlay of Rs. 5.06 lakhs has been provided in the Plan for this purpose. Towards appointment of special staff for undertaking propaganda under Kadam, Rajolibanda Diversion scheme, and also for undertaking pre-irrigation and soil survey under Pochampad, an outlay of Rs. 12.75 lakhs has been made.

5. ANIMAL HUSBANDRY

5.1. Telangana is endowed with rich potential for development of animal husbandry. North and Central portions of Telangana region have good rainfall and large area under forest. It is strategically important for the Telangana region to develop these resources of cheap fodder for specialising in livestock products.

5.2. The growth of population per capita income and urbanisation increase demand for livestock products. Hence economic production of livestock products in the region helps the region to obtain higher levels of income with minimum investment.

5.3. Further it is one of the few sectors which enables equitable distribution of additional income generated by development. Small and marginal farmers, agricultural labourers and other low income group people can be made to benefit by taking to dairying and sheep and poultry farming. Apart from this, the southern districts of Telangana which do not have good rainfall and whose agricultural development is limited due to lack of vital water input, have to specialise in sheep farming to achieve higher levels of income.

Objectives:

5.4. The objectives of animal husbandry programmes in the Fourth Plan are:—

- (i) To extend veterinary aid and animal health facilities to larger population of live-stock;
- (ii) To improve the productivity of cattle, sheep and poultry by cross-breeding with exotic breeds.
- (iii) To provide incentives for economic live-stock farming by developing organised marketing facilities for live-stock products;
- (iv) To develop feed and fodder for increasing the supply of balanced and nutritious feed for live-stock;
- (v) To take advantage of the rapidly increasing demand for milk in Hyderabad metropolitan

area and other urban areas and increase its production by cross breeding of milch cattle; and

- (vi) To take advantage of increased demand for meat, mutton and eggs and to increase their production, by upgrading sheep and encouraging poultry farming.

Strategy :

5.5. The programme for extending animal health and veterinary aid to larger population of live-stock is given highest priority in the Fourth Plan. This is sought to be achieved by increasing the number of dispensaries under "own your dispensary" scheme and upgrading the existing dispensaries and hospitals.

5.6. The objective of improving productivity is sought to be achieved by cross breeding of local breeds with exotic animals. This is proposed to be done in compact areas where the other infrastructural facilities like feed, fodder and marketing of live-stock products are available.

5.7. Intensive cattle breeding will be under-taken by organising Intensive Cattle Development Blocks in milk-shed areas and Key Village Blocks in promising areas outside the milk shed areas. The milk shed areas will be delineated to coincide with dairying programmes.

5.8. Improvement of local breeds of sheep is sought to be achieved by cross breeding the local variety with better varieties of Indian breeds like Nellore and Bellary types and imported exotic varieties. This activity will be undertaken in sheep concentrated areas. Commercial poultry is to be developed in and around urban areas. A beginning will be made for organised marketing of animal husbandry products.

Review :

5.9. The region has a total livestock population of about 129 lakh animals which is the highest among the three regions of the State. Cattle (47.34 per cent of the total livestock) Buffaloes (16.05 per cent) and

sheep and goats (35.08 per cent) are the important live-stock of the region. There are nearly 45 lakh birds of which 44 lakhs are fowls. It is of concern to note that uneconomic live-stock in the region which are nearly 2.5 lakhs in population are highest in the three regions of the State. It is necessary to reduce these number to save feed and fodder for other economic livestock.

5.10. An intensive cattle development project was started in Hyderabad in 1964-65 to augment milk production in the Hyderabad milk-shed area. The Project covers an area of 1,305 square miles and 345 villages in four districts. The area has 1.10 lakh breedable live-stock population. This scheme aims at increasing the milk production by 30 per cent in a 5 year period.

5.11. There are about 447 veterinary institutions, 13 key village blocks, 132 artificial insemination centres and 2 sheep units functioning in the region at the beginning of the Fourth Plan.

Fourth Plan Programmes :

5.12. An amount of Rs. 55.20 lakhs has been provided for Animal Husbandry programmes in the Fourth Plan. Of this, nearly Rs. 11.91 lakhs will be spent on State-wide schemes. Regional Schemes cost about Rs. 43.29 lakhs. Programme-wise details of the outlay proposed is shown in the following table:—

S. No.	Scheme	Outlay on		
		State-wide Schemes	Regional Schemes	All Schemes
1.	Cattle Development	0.07	14.25	14.32
2.	Feed & Fodder Development	—	1.01	1.01
3.	Sheep Development	—	2.65	2.65
4.	Poultry Development	0.26	5.60	5.86
5.	Animal Health	10.04	17.61	27.65
6.	Education, Research and Training	1.21	1.58	2.79
7.	Administration and Miscellaneous Schemes	0.33	0.59	0.92
Total :		11.91	43.29	55.20

5.13. The details of the programmes are discussed below:—

State-wide Schemes :

5.14. Under State-wide schemes, the existing Veterinary and Biological Research Institute at Hyderabad will be expanded to produce vaccine and conduct research. The share of Telangana on this scheme is Rs. 5.54 lakhs. Development of an organisation for manufacturing improved poultry feed and marketing of eggs at State level and importing of Helmentic drugs are important among other State-wide schemes.

REGIONAL SCHEMES :

Cattle Development Programmes :

5.15. Cattle development programmes costing about Rs. 14.25 lakhs are proposed to be taken up in the region. It is proposed to extend the coverage of Intensive Cattle Development Project at Hyderabad by adding one more Regional Cattle Development block at a cost of Rs. 9.26 lakhs. In other areas, three new key village blocks and strengthening of existing areas with four Sub-Centres will be taken up at a cost of Rs. 3.15 lakhs. Three of the five existing live-stock farms will be strengthened. It is proposed to expand the capacities of Feedmixing plant at Bhongir from 50 tonnes per day to 100 tonnes per day at a cost of Rs. 1.01 lakhs.

Sheep Development Programme :

At present there are two sheep breeding units at Mahbubnagar and Nalgonda. 12 sheep and wool extension centres and one sheep supervisory unit are also functioning in the region. It is proposed to strengthen three of the sheep and wool extension centres at a cost of Rs. 2.65 lakhs.

Poultry Development Programme :

Under the crash programme during Third Plan, an intensive Poultry development block was started at

Hyderabad. Another block was started at Warangal in the year 1968-69. The salient feature of the scheme were to supply improved birds, feeds and organise marketing of poultry products. It is proposed to strengthen the existing two units and open four new sub-centres at a cost of Rs. 5.60 lakhs.

Animal Health Programmes :

An amount of Rs. 17.61 lakhs is proposed to be spent on Animal health programmes. Out of this amount, Rs. 10.90 lakhs is proposed to be spent for expanding veterinary aid facilities. The amount will be utilised for opening 15 dispensaries under 'own your veterinary dispensary' scheme and for up-grading 12 of the existing dispensaries.

Liver Fluke disease was prevalent among cattle in irrigated areas of Nizamabad District. This was controlled by taking up Antiliver fluke scheme. As a result, the percentage of attacks in Nizamabad district came down from 80 to 15. In view of the success of the scheme, a similar scheme is proposed to be taken up at a cost of Rs. 4.50 lakhs in newly irrigated areas under Nagarjunasagar Project in Nalgonda district with a view to prevent the occurrence of this disease in that area.

Special Development Programme :

5.16. In addition to the above Fourth Plan Programmes, an amount of Rs. 45.52 lakhs is likely to be available for Animal Husbandry development under the Special Development Programme. With this amount, it is proposed to take up the following three schemes:—

1. Establishment of a second Intensive Cattle Development Block;
2. Establishment of a Feed Mixing Plan at Karimnagar; and
3. Establishment of a modern slaughter house at Hyderabad.

5.17. The Intensive Cattle Development Block will cover the milk shed areas of Warangal with four

Regional Cattle Development Blocks, covering one lakh breedable cows and buffaloes. In order to achieve this, 64 Regional Cattle Development Sub-Units will be established spread over Warangal, Karimnagar and Medak districts.

5.18. There is one Feed Mixing Plant functioning at Bhongir in Nalgonda district which is catering to the needs of the Intensive Cattle Development Block in parts of Hyderabad and Nalgonda districts. With an accelerated development of dairying and milk supply in the Telangana region, there is a great need for another Cattle Feed Mixing Plant. It is therefore, proposed to have a second plant at Karimnagar.

5.19. It is proposed to establish a modern slaughter house at Hyderabad, for which a Corporation will be formed, the Members being the Government of India, the State Government and the Municipal Corporation of Hyderabad. The contribution of the State Government for this Project is expected to be Rs. 16.75 lakhs. In order to facilitate taking up of this scheme early, the Andhra Pradesh Regional Committee has agreed to provide an amount of Rs. 5 lakhs from the Special Funds.

6. DAIRYING AND MILK SUPPLY

6.1. Dairying is one of the potential industries which can be developed as an export industry in the Telangana region. Regions with cheap green fodder have a comparative cost advantage in Dairying over others. The Telangana region has a rich potential in cheap green fodder.

6.2. The annual rainfall in four of the nine districts in the Telangana region *viz.*, Adilabad, Nizamabad, Khammam and Warangal district is more than 1,000 m.m., or 40 inches. The rainfall is less than 750 m.m. or 30 inches per annum in only two districts *viz.*, Mahaboobnagar and Nalgonda. Besides, there are considerable areas with assured irrigation under Nizamsagar, Nagarjunasagar and Pochampad irrigation projects and many medium and minor irrigation sources. All these facilities help economic production of green fodder.

6.3. Nearly 24 per cent of the total geographical area is under forest which is a readily available source of green fodder. There is also nearly 16.06 lakh acres of area under permanent pastures which works out to 196 acres per 1,000 cattle population as compared to Coastal Andhra 124 acres and Rayalaseema 97 acres. There are 27.35 lakhs milch animals of which cows account for nearly 70 per cent of the total.

6.4. However, in spite of the above facilities for economic production of milk, the region's milk production is very much below its potential. One of the principal causes of the under-utilisation of this potential is lack of marketing facilities and an incentive price for milk in the rural areas. On the other hand, growing urban complexes in the region like Hyderabad metropolitan area, Warangal city *etc.*, are experiencing scarcity of milk, resulting in a high price.

Objectives :

6.5. The objectives of dairying and milk supply programmes in the Telangana region are:—

- (1) to meet the growing demand for milk and milk products in Hyderabad city and other urban areas of the region;

- (2) to develop dairying as a principal supplementary occupation in rural areas particularly for the landless labour and small farmers;
- (3) to develop dairying as an export industry in the long run by developing surpluses in the milk production of the region.

Strategy :

6.6. The strategy for achieving the above mentioned objectives in the region will be—

- (1) to establish a number of chilling centres in Hyderabad milk shed area to feed the Hyderabad Central Dairy and meet the demand for milk in the twin cities of Hyderabad;
- (2) developing Hyderabad dairy by establishing a Milk Powder Factory to manufacture milk powder and other products to utilise surplus milk in the flush season for slack season requirements and reduce dependence on Vijayawada milk powder factory;
- (3) establishing milk cooling and chilling centres in district headquarters and other important towns to meet initially their demand for milk;
- (4) grouping the milk chilling and cooling centres into an integrated milk project area to pool their surplus milk and convert it into milk products for export;
- (5) undertaking milch cattle development schemes around milk chilling centres by establishing intensive cattle development blocks to groups of chilling centres and increase milk production in rural areas; and
- (6) to organise dairy co-operatives for the benefit of landless labourers and small and marginal farmers and aid them to acquire milch cattle.

Review :

6.7. At the beginning of the Fourth Plan a central dairy at Hyderabad and chilling centres at Warangal

and Shadnagar and cooling centres at Bhongir and Kadthal were functioning. Hyderabad Central dairy was handling 49 thousand litres of milk per day on an average while Warangal Chilling Centre was handling 500 litres per day. The other Chilling and Cooling Centres were sending their milk to Hyderabad Central dairy. A sum of Rs. 171.20 lakhs was spent on these schemes since the beginning of the Third Plan upto the beginning of the Fourth Plan.

6.8. The milk procured from surrounding areas of Hyderabad Central dairy was not sufficient to meet the dairy requirements of the Hyderabad City. Hence it was proposed to collect surplus milk from Vijayawada milk shed area and transport it to Hyderabad to make up the deficit. In this context the Hyderabad—Vijayawada Integrated Milk Project was contemplated at an estimated cost of Rs. 4.35 crores. Under this project about 10 thousand litres were transported daily from Vijayawada milk shed area to Hyderabad city. But, meanwhile, the developmental efforts in the Hyderabad milk shed area resulted in a substantial increase in the procurement of milk in the area. At this rate, it is anticipated that surpluses in the milk procurement may grow even beyond the handling capacity of the present Central dairy. Hence it is now felt that there would be no need to transport milk from Vijayawada milk shed area to Hyderabad city.

Fourth Plan Programmes :

6.9. An amount of Rs. 131.59 lakhs is provided in the Fourth Plan for Milk Supply and Dairying Schemes in Talangana region. The Central Dairy at Hyderabad and the Chilling Centre at Warangal will be strengthened and expanded further during the Fourth Plan. In addition, Nizamabad, Adilabad, Karimnagar and Nirmal Towns will also be supplied with milk from Government Dairies.

Central Dairy, Hyderabad :

This dairy is mainly intended to serve the milk requirements of the twin cities of Hyderabad and Secunderabad. It is envisaged to make this dairy self-sufficient by dispensing with the need for transporting

milk from Vijayawada. An amount of Rs. 102.93 lakhs is provided for expanding the Central Dairy at Hyderabad. The milk handled at the dairy will be raised from 49 thousand litres per day to 150 thousand litres per day. In addition to the existing chilling centre at Shadnagar, the Cooling centre at Bhongir will be converted into a Chilling Centre and a new chilling Centre will be established at Gazwel. Besides these Chilling Centres, Cooling Centres will be started at Medak, Alair and Chityal in the Fourth Plan period at a cost of Rs. 10.30 lakhs, to supply milk to Central Dairy at Hyderabad. An amount of Rs. 57.93 lakhs will be utilised for increasing the handling capacity of the Hyderabad Central Dairy. It is expected that by 1973 there will be surplus milk of about 30 thousand litres between peak procurement of milk and average sales of Central Dairy, Hyderabad. It is proposed to start a milk powder factory at Hyderabad with 4.5 tonnes per day capacity along with butter and ghee sections. An amount of Rs. 45 lakhs, will be spent on this factory.

Intensive Milk Supply Schemes, Warangal Dairy:

This Dairy started functioning in the year 1968-69 and is handling 500 litres of milk on an average, per day. An amount of Rs. 7.75 lakhs is provided to raise its capacity to 12.5 thousand litres per day.

Nizamabad and Karimnagar Chilling Centres:

In order to supply milk to Nizamabad and Karimnagar towns, a chilling centre and a cooling centre will be started at Nizamabad and Karimnagar respectively. The Nizamabad Chilling Centre will cost Rs. 2.93 lakhs and will ultimately handle 18 thousand litres per day. The Karimnagar Cooling Centre costs Rs. 2.50 lakhs and will handle 4 thousand litres per day.

Rural Dairy Centres:

Rural dairy centres are to be started to cater to the needs of small towns and export any surplus milk of dairies to nearest urban dairy. It is proposed to start one cooling centre at Mulug with an outlay of Rs. 1.80 lakhs and another at Nirmal with a cost of Rs. 2.50

lakhs. Each of these Centres will handle 4 thousand litres per day. The surplus milk from Mulug will be supplied to Warangal dairy and that at Nirmal to Adiabab.

Special Development Programme :

As already mentioned earlier, the Dairying and Milk Supply Programmes have an important role in the development of Telangana region, especially the rural areas. Having realised the potentialities for the development of Dairy industry and its strategic role in the development of rural economy, the Andhra Pradesh Regional Committee has been providing funds for supplementing the normal plan provision to accelerate the Dairy development in the region. Over the Fourth Plan period, an amount of Rs. 119.40 lakhs is likely to be available under Special Development programme. The amount is proposed to be utilised for starting straight away a chilling centre at Suryapet and four Cooling Centres at Kothagudem, Kalwakurthy, Mahabubnagar and Pargi. The Cooling Centres established earlier under normal Plan at Medak Karimnagar, Nirmal and Chityal will be converted into chilling centres under the Special Development Programmes in the latter years of the Fourth Plan. In addition, a bottling Plant will be added to the Warangal Dairy under this programme.

7. FORESTS

7.1. Forests constitute an important natural resources as they (1) maintain meteorological and ecological balance, (2) provide raw material for a number of industries, (3) Supply cheap fuel and fodder to rival economy and (4) Conserve soil and moisture besides being a source of attraction for tourists. Forests development should aim at realising the above benefits to the economy besides conserving them.

7. 2. The National forest policy lays down that the proportion of land to be kept permanently under forests should be $\frac{1}{3}$ rd of the total land area increasing to about 60 per cent in mountainous tracts liable to erosion and decreasing to a minimum of 20 per cent in the plains. The forest area in Telangana constitutes 24 per cent of the total geographical area and extends over an area of 27.3 lakh hectares. The region accounts for 45 per cent of the total forest area and 72 per cent of the revenue from forest in the State.

7.3. The forests in the region broadly belong to two types *viz.*, dry deciduous forests and scrub forests. The dry deciduous forests are found mostly in Adil-Nizamabad, Karimnagar, Medak, Warangal and Khammam districts. The annual rainfall in these districts varies between 40-45 inches. This area is highly favourable for commercial plantations like Teak *etc.* The scrub forests consist of low type of thorny growth they are found mostly in Hyderabad, Nalgonda and Mahbubnagar districts.

7.4. The forests in Telangana are divided into four circles for administration. They are Adilabad, Hyderabad, Kothagudem and Warangal. Adilabad and Warangal circles covering 45 per cent of the forest area in the region are richest in the State. The value of forest produce of all types *viz.*, Timber, Fuel, Bamboos, Beedi leaves *etc.*, of the Telangana region was Rs. 497.50 lakhs in 1968-69. The value of Timber produced in the region in 1968-69 was Rs. 243.39 lakhs which was nearly 80 per cent of the total value of timber produced in the State in 1968-69. Beedi leaves and other minor

produce were the next important products of the forest in Telangana. Their production in 1968-69 was valued at Rs. 217.22 lakhs constituting 84 per cent of the State. The average value of forest produce per square mile of forest area in Telangana was far higher at Rs. 4,300 per square mile than that for the State which was only Rs. 2,300 per square mile in 1968-69. These facts bring out clearly the high productivity of Telangana forests. The need is to conserve them and scientifically exploit them to derive maximum benefit from out of them.

Objectives :

7.5. The objectives of forest development Plans in Talangana are:—

- (1) to conserve and consolidate the existing forests; and
- (2) extending the tree growing forests by planting fast growing species which provide industrial raw materials.

Strategy :

7.6. The strategy for achieving the above objectives consists of:—

- (1) Survey of forest surface to enable scientific development of forests; (This is covered in Central sector);
- (2) Conserving the existing forests by artificial regeneration;
- (3) Planting of quick growing species in scrub forests;
- (4) Consolidating forest areas and intensifying forest management including communication and forest protection; and
- (5) Emphasising research for evolving suitable fast growing species for the region,

Review :

7.7. A sum of Rs. 103.93 lakhs was spent on development of forest in the beginning of the Third Five-Year Plan. Plantation programmes were given highest priority. They were raised in 12,584 hectares during the period 1961-69. Communications were developed considerably during the Third Plan by laying 1,422 Kms. Afforestation was carried out in an area of 3,572 hectares. A forest research survey was carried out in Mahbubnagar district in 1968-69.

Fourth Plan Programmes :

7.8. The provision for development of forests in the Telangana region in the Fourth Plan is Rs. 138.93 lakhs. The region's share in the State-wide schemes is Rs. 15.72 lakhs. The balance of Rs. 123.21 lakhs will be spent on regional schemes.

STATE-WIDE SCHEME :

Zoological Gardens :

A master plan for the establishment of Zoological gardens at Hyderabad at a cost of Rs. 120 lakhs was prepared during the Third Plan. A sum of Rs. 45.42 lakhs was spent on this project upto the end of third plan. The park was declared open to public in October, 1963. A sum of Rs. 11.53 lakhs was spent in the subsequent three Annual Plans, 1966-69. An outlay of Rs. 34.35 lakhs is provided for its further development in the Fourth Plan, out of which the share of Telangana will be Rs. 11.45 lakhs.

Intensification of Forest Management :

An amount of Rs. 7.50 lakhs is earmarked in the State's Fourth Plan to establish a working plan unit and resources survey division. The share of Telangana in this State-wide scheme is Rs. 2.49 lakhs.

In addition to the above two major State-wide schemes, it is proposed to spend Rs. 4.36 lakhs on forest education and Rs. 1.00 lakh on Forest Research Schemes, out of which the share of expenditure debitable to Telangana will be Rs. 1.78 lakhs.

Regional Schemes :

7.9. The scheme-wise allocation of the outlay for regional schemes is shown in the following table :

Scheme-wise allocation of plan outlay for Regional Schemes
Telangana region

Sl. No.	Scheme	(Rs. in lakhs)	
		Outlay proposed	Area to be covered in hectares
1.	Teak Plantation	71.46	9085
2.	Bursea Plantation	1.35	100
3.	Quick growing species	28.42	4288
4.	Forest Consolidation	5.43	X
5.	Game sancturies	5.08	X
6.	Forest Education	6.00	X
7.	Forest Research	2.35	X
8.	Buildings	3.12	X
Total		123.21	

Teak Plantation :

Telangana forests are rich in Teak plantations. An additional area of about 9,085 hectares is proposed to be planted by Teak in the Fourth Plan at a cost of Rs. 71.46 lakhs.

Bursera Plantation :

An area of 100 hectares is proposed to be brought under this plantation at a cost of Rs. 1.35 lakhs. This is an experimental plantation taken up in Telangana only.

Planting of quick growing species :

Eucalyptus and Bamboo trees are proposed to be planted under this scheme in an area of about 4,288 hectares. The cost of the scheme is Rs. 28.42 lakhs.

Forest Consolidation :

The scheme is intended to carry out works of survey and demarcation of forest areas and settlement of illicit Cultivation and clearance of notifications under

various sections of the Forest Act etc. An amount of Rs. 5.43 lakhs is provided for this work.

A game sanctuary at Pakhal in Warangal district is proposed to be developed in the region at a cost of Rs. 4.60 lakhs. There is a forest school at Yellandu. Its intake of Foresters is proposed to be stepped up at a cost of Rs. 5.08 lakhs. An amount of Rs. 2.35 lakhs is proposed to be spent on Forest research and Rs. 3.12 lakhs on forest buildings in the region.

8. FISHERIES

8.1. The Telangana region does not have any coastline and therefore, there is no question of marine fisheries development in the region. There is, however scope for the development of inland fisheries in the reservoirs of Nagarjunasagar, Pochampad, Nizamsagar and irrigation tanks in the region. There are about 27,000 irrigation tanks and ponds, which offer large scope for the development of fresh water fish in a big way.

Objectives and Strategy :

8.2. Unlike in the State Plan, where the primary objective was to develop marine fisheries for which about 2/3rds of the total plan provision has been set apart, the major objective in the region's Fourth Plan is to lay maximum emphasis on improvement to fish farms, nurseries and production of fish seed for the development of inland fisheries. Training in fisheries and loan assistance to Fishermen Co-operatives are also envisaged in the plan.

Review :

8.3. The total expenditure incurred on the development of fisheries in the region was Rs. 29.60 lakhs during the Third plan and Rs. 15.57 lakhs during the subsequent three Annual Plans. Cold storage plants were established at Nagarjunasagar project and Nizamsagar and one shell ice making plant was established at Hyderabad. Under the Expanded Nutrition programme, Community Development Blocks were selected for the production of fish and its free distribution to select beneficiaries (school children and expectant mothers) while 14 Blocks were selected for intensive development of fisheries which were given grant-in-aid of Rs. 2.32 lakhs during the Third Plan and Rs. 3.14 lakhs during the subsequent three Annual Plans. Fishery requisites such as nets, crafts etc., worth Rs. 5.23 lakhs during the Third Plan and R. 2.48 lakhs in the subsequent Annual Plans were supplied to the fishermen. For the development and exploitation of fish in Nagarjunasagar and other reservoirs a sum of Rs. 12.93 lakhs was spent during the Third

Plan and subsequent three Annual Plans. A departmental training centre was also established at Warangal for training Fishermen in better techniques.

Fourth Plan Programmes :

8.4. The total provision for fisheries development programme in Fourth Plan is fixed at Rs. 33.21 lakhs as against Rs. 156.01 lakhs for Coastal Andhra and Rs. 19.61 lakhs for Rayalaseema. The Development of marine fisheries centre, Kakinada alone accounts for Rs. 101.64 lakhs of the total outlay for Coastal Andhra.

State-wide Schemes :

8.5. The development of reservoir fisheries in Nagarjunasagar and other reservoirs is treated as a State-wide scheme for which an amount of Rs. 2.00 lakhs is provided in Telangana. Under this scheme, the research units at Nagarjunasagar and Pochampad are being continued and experimental-cum-exploratory survey units are being set up. The Divisional Offices and the Directorate will be strengthened with necessary staff in connection with accelerating the seed production, development of reservoir fisheries, welfare of fishermen and collection and compilation of statistical data.

Regional Schemes :

8.6. Improvement to Fish Farms and Nurseries will be undertaken on a large scale for production of fish seed. The fishermen will continue to receive training in the Departmental Training Centre, Warangal. Loans will be given to fishermen co-operative societies for purchase and distribution of fishery requisites at subsidised rates to fishermen. The small fishermen will be given subsidy at the prescribed rates for the purchase of indigenous craft and for other ameliorative needs. Out of the total outlay for fisheries, an amount of Rs. 23.00 lakhs will be spent on improvement of Fish farms, Nurseries and production of seed while an amount of Rs. 2.00 lakhs will be spent on training programmes and Rs. 2.71 lakhs towards loans to fishermen's Co-operatives.

Special Development Programme :

Besides the amounts provided in the normal plan, an amount of Rs. 15.00 lakhs is provided for the development of fisheries under the Special Development Programme. It is proposed to effect certain improvements to Fish Farms at Manair and Shanigram in Karimnagar district, Koilsagar in Mahbubnagar district and Nizamsagar in Nizamabad district. It is also proposed to supply nylon yarn, fishing craft and fish seed at subsidised rates to the fishermen. Besides, the above two schemes there is a scheme intended for establishing Fish Seed Farms at Kadam in Adilabad District and Kinnerasani in Khammam district.

9. WAREHOUSING AND MARKETING

9.1. Plans for increasing agricultural production need to be adequately supported by development of storage and marketing facilities. Telangana has the benefit of having had regulated markets for a long time covering all the agricultural commodities. They were covered by "Agricultural Markets Act, 1930" which was replaced in 1967 by "Andhra Pradesh (Agricultural produce and Livestock) Markets Act, 1966".

9.2. The objectives of the programmes relating to warehousing and marketing are to effectively implement the statutory provisions of the Markets Act and provide grading facilities for important commodities.

Review :

9.3. The Director of Marketing looks after the development and regulation of marketing of agricultural commodities and livestock products in the region. Besides regulating the marketing of agricultural produce, the department conducts also market surveys, undertakes grading of agricultural produce at farmers' level and in regulated markets and collects and publishes market intelligence news. Development of warehousing facilities are attended by the Andhra Pradesh State Warehousing Corporation" which was established in 1968 with an authorised share capital of Rs. 2 crores to be shared equally by the central warehousing corporation and the State Government.

9.4. A sum of Rs. 8.51 lakhs was spent in the Third Five-Year Plan and the subsequent three Annual Plans for the development of warehousing and marketing facilities in the Telangana region.

9.5. There were 61 market yards notified under the new Act in the region at the beginning of the Fourth Plan. The provisions of the Act were implemented in the region by one Assistant Director. Facilities for grading of Agriculture commodities were provided at 5 markets in the region during the Third Plan. Andhra Pradesh State Warehousing Corporation purchased/constructed godowns in the region with a capacity of 6,445 metric tonnes,

Fourth Plan Programmes :

9.6. An amount of Rs. 5.31 lakhs is provided in the fourth plan for warehousing and marketing schemes in the region. Of this, an amount of Rs. 4.87 lakhs is meant for State-wide schemes and the balance is proposed to be spent on regional schemes.

State-wide Schemes :

9.7. The present organisational set up of one Regional Assistant Director for each region is found inadequate to improve marketing facilities and enforce the provisions of the new Act. Hence the Marketing Department is proposed to be strengthened by appointment of Assistant Directors with requisite staff in each district at a total cost of Rs. 6.22 lakhs. Of this, the share of Telangana works to Rs. 2.60 lakhs. The Engineering cell in the Marketing department is also proposed to be strengthened to expedite construction works undertaken by the Market Committees. The share of Telangana on this scheme is Rs. 0.62 lakhs. The State Warehousing Corporation will be provided with an amount of Rs. 5.94 lakhs towards share capital contribution of which Telangana's share is Rs. 1.46 lakhs.

REGIONAL SCHEMES :

Cotton Grading :

9.8. Quality grading of agricultural commodities facilities improvement in the quality of products and fetches also good price for the producer. At present grading is undertaken in respect of groundnut, castor, Turmeric, Jaggery and Onions. This has resulted in increasing quality consciousness among the farmers. It is therefore, proposed to extend grading facilities to cotton in the region at a cost of Rs. 44.0 thousands.

10. CO-OPERATION

10.1. Co-operation is one of the principal means for bringing about fundamental changes in the economy. The Five-Year Plans have given an important place to Co-operation as a major form of organisation in many branches of economic activity especially in agriculture, small scale industry, marketing and processing, distribution and supplies. For rapid development in the normal sector it is necessary to have a rapidly growing Co-operative structure with special emphasis on the needs of the agricultural community and consumers. Since the beginning of the First Plan several programmes were implemented for increasing Co-operative Credit and Supplies, Marketing and processing, consumers co-operatives, industrial and other co-operatives. All these programmes aimed at the development of a strong co-operative structure. The co-operatives were strengthened through various measures like increasing the number of societies to cover a larger number of villages hitherto not covered by Co-operative societies, increasing the disbursement of short, medium and long term loans, strengthening of Co-operative marketing, employment of Co-operative processing activity, organisation of the co-operatives to the benefit particularly the weaker sections of the community, strengthening the cooperative consumer movement and providing training and education for the personnel required for the co-operative movement.

10.2. Before defining the objectives and strategy of co-operatives in the Fourth Plan, a brief survey of the strength and weaknesses of the co-operative system in the region would be relevant. The major activity of the Co-operatives in the region is credit. The most important source of institutional credit for the agriculture sector of the economy is co-operatives. There has been an impressive growth of Co-operative credit. Even so, the present position is that either in the matter of coverage of rural population or the extent of credit provided the co-operative sector cannot be said to have acquired a commanding position. Barely 4% of the rural population are members of the primary co-operative societies. The borrowing members are less than half of the total members. Further, the

credit that has been actually provided by the co-operatives is very meagre compared to total credit requirements and is estimated to be less than 1/10th of the total short term credit requirement. Even with regard to the sections to which this credit has flown, indications are that the agricultural credit through the co-operatives has really flown to the more prosperous areas and more prosperous sections of the population. The non-viability of the societies is yet another problem and the process of amalgamation proposed is a formidable one. The control of the Co-operatives by certain vested interest is yet another aspect which requires examination. The weak internal resources of both primary and some of the central banks has resulted in bottle-necks in flow of short term credit.

10.3. In terms of long term credit rapid strides have been made especially in financing land development, ayacut development and minor irrigation programmes. Even here, weakness that has been found relates to the fact that the resources have flown to more prosperous areas and more prosperous sections of the population. Apart from the fact that the control of these societies is weighted in favour of such a development, there have been certain procedural deficiencies which have also led to this situation.

10.4. A number of irrigation projects and programmes have been taken up which involve either direct participation of the co-operatives or supporting facilities through the co-operatives for full realisation of the benefits. Hence, priority has to be given to support the required projects and programmes and as such the possibilities for new ventures are restricted to the balance of resources available. Implicitly some of the possibilities for new ventures are restricted to encourage consumer co-operatives and co-operative farming seem to assume a slightly lesser priority than what would have been otherwise possible.

Objectives:

10.5. The objectives of co-operatives in Telangana Fourth Five-Year Plan are:—

- (a) to effectively utilise the co-operative form of organisation as a channel for short, medium

- and long term credit to support the agricultural sector;
- (b) to develop the processing and marketing facilities in the co-operative sector as an aid to profitable and progressive agriculture;
 - (c) to ensure through appropriate legal and administrative action, that interests of social justice are served by making available the resources through co-operative institutions to small farmers and marginal farmers in the agricultural sector;
 - (d) to organise and promote co-operatives specially designed for weaker sections such as Taxi Drivers, Auto-rickshaw Drivers, Rickshaw Pullers, Washermen *etc.*; and
 - (e) to make best use of the co-operative form of organisation to attract institutional finance to all productive and profitable activities especially involving small farmers, marginal farmers and weaker sections.

Strategy:

10.6. The strategy of development of co-operative form of organisation is inevitably interlinked with the general programmes of development. The strategy will be:—

- (a) to press the co-operatives into maximum use in ayacut development including land development to ensure optimum utilisation of the irrigation potential created;
- (b) to strengthen the co-operative structure especially through amalgamation of primary credit societies and financial support to weak central banks;
- (c) to provide a clear-cut definition of the small farmers and the weaker sections and insist on certain percentage of representation to these sections in the management of various co-operatives through legislative measures and also ensure that priority is given to these sections in respect of flow of co-operative

credit by insisting that almost whole of the resources should flow to these sections;

- (d) to ensure that co-operation plays an important part in the multi agency approach to the developmental process of agriculture and allied activities wherein the co-operative activities are significantly co-ordinated and integrated with the activities of the commercial banks, dairy development, small farmers' development schemes *etc.*;
- (e) to allow for the appropriate expansion and strengthening of co-operative processing and marketing facilities in keeping with the production programmes; and
- (f) continuance of the emphasis on the co-operative farming and consumer co-operatives.

Review :

10.7. Co-operative movement in Telangana has made rapid strides since the beginning of the Second Five-Year Plan. The growth of co-operative credit institutions is very impressive, while there is satisfactory progress in the development of other forms of co-operative intitutions also the number of Primary Agricultural Credit Societies in the region has grown more than double from 3,074 in 1956-57 to 6,417 in 1968-69. The increase in membership is much more impressive which has grown from 1.16 lakhs in 1956-57 to 4.94 lakhs at the end of 1968-69. The average membership per society, which was 38 in 1956-57, increased to 77 by the end of 1968-69. The volume of short and medium term credit made available to the cultivators also increased substantially during this period from Rs. 61 lakhs to Rs. 7.20 crores. At the beginning of the Fourth Plan 88 per cent of the villages were covered by the Agricultural Credit Societies.

10.8. The progress is similarly impressive even in regard to the disbursement of long term credit. The number of Primary Land Mortgage Banks in the Telangana region increased from 12 in 1956-57 to 66 in 1968-69, while the membership increased from a mere 10 thousand to 1.83 lakhs. The quantum of long term

loans issued by the Land Mortgage Banks in the region was stepped up from Rs. 15.32 lakhs in 1956-57 to Rs. 6.32 crores in 1968-69.

Marketing :

10.8. There was also remarkable progress in the field of Co-operative Marketing with the result that in 1968-69 there were 92 primary marketing societies with a membership of 1.23 lakhs in the region. The share capital of these societies was of the order of Rs. 86.40 lakhs, while the working capital was Rs. 2.23 crores. There were District Marketing Societies in all the districts with a total membership of 2,897, a share capital of Rs. 29.97 lakhs and a working capital of Rs. 4.08 crores.

The District Co-operative Marketing Societies were given a monopoly in the distribution of Chemical fertilisers and other agricultural inputs. These societies give produce loans to the cultivators with a view to retain their produce for a better price. The Co-operative Marketing Federation took up procurement of foodgrains through the District Marketing Societies in the region. The Marketing societies were given a loan assistance for the construction of 277 godowns in the region. The marketing societies were also encouraged to establish processing industries with the result that 40 rice mills were installed in the region at the beginning of the Fourth Plan.

Sugar Factories :

10.9. Besides the installation of Rice Mills, installation of Sugar Factories also was taken up in the Co-operative sector. Licences were granted to 2 Co-operative Sugar Factories at Zaheerabad and Bheem-singi. However, the proposal to start a Co-operative Sugar Factory at Zaheerabad was dropped consequent on the Nizam Sugar Factory at Bodhan setting up a unit of its own at Zaheerabad. The Factory at Bheem-singi is still in the formation stage.

Farming :

Another field in which Co-operatives were developed was the Co-operative Farming. There were 57

Co-operative Farming Societies with 1,653 members on their rolls at the beginning of the Fourth Plan. The total agricultural land held by them was 8,632 acres. These societies were assisted by the Government through share capital of contribution of Rs. 0.83 lakh and other medium and long term loans of about Rs. 10.62 lakhs for the reclamation of land and construction of godowns.

Co-operatives for Weaker Sections :

10.10. In order to improve the conditions of the weaker sections of the community, Co-operatives were organised in several other activities. As a result, 7 Rickshaw Pullers Societies, 6 Washermen Societies, 1 Taxi Drivers Society, 2 Printing Societies and 165 Labour Contract Societies were functioning by the beginning of the Fourth Plan. The financial assistance, mostly in the form of loans and subsidies, provided by these societies was of the order of Rs. 19.99 lakhs during 1956-57 to 1968-69.

Consumer Co-operative Stores :

10.11. With a view to hold the price line and to supply essential and scarce commodities to the general public, Cooperative Consumers Stores were organised in the region. There were 230 Primary Consumers Stores inclusive of 12 Government Employees Stores functioning at the beginning of the Fourth Plan. The total membership was 0.75 lakh with a paid-up share capital of Rs. 41.25 lakhs. All these stores were provided with a financial assistance of Rs. 2.08 lakhs towards share capital contribution. Besides, 9 Central Co-operative Stores (including Super Bazars) were also organised which had a membership of 23,230 and a share capital of Rs. 36.33 lakhs.

Co-operative Training and Education :

10.12. There is one Co-operative Training Institute imparting training to the departmental as well as institutional staff. This is run by the State Co-operative Union for imparting training to the direct-recruitment Junior and Senior Inspectors and for non-officials. Training was also imparted to the members

of the Co-operative Societies through Member Education Scheme. By the end of 1968-69, 1,869 Junior Personnel and 1.62 lakhs of non-official members were trained to man the various Co-operative organisations

Fourth Plan Programmes:

10.13. The long term perspective of the programmes under 'Co-operation' is strengthening the Co-operative structure through formation of viable units and covering all the villages with co-operatives and taking action with regard to the various factors which are contributing to the flow of co-operative credit being interrupted. The major programmes in the Fourth Plan will be strengthening of the credit institutions so as to enable provision of sufficient credit to the agriculturists, and the development of Co-operative Marketing and processing of agricultural produce. Maximum emphasis is given to credit which accounts for more than 50 per cent of the total allocation. Next major item is Marketing and Processing which is identified as one of the crucial problems in the context of agricultural development in the region, and which has been allocated 19.5 per cent of the outlay under the sector. Other major programmes in the Fourth Plan are Sugar Factories (10.6 per cent), Co-operatives for weaker sections (6.3 per cent) and Consumers Stores (5.4 per cent).

Programmes	(figures in Rs. lakhs)			
	Coastal Andhra	Rayala-seema	Telan-gana	Total for Andhra Pradesh
1. Credit	225.65	119.48	215.22	560.35
2. Marketing and Processing	77.70	29.12	65.43	172.35
3. Sugar Factories	73.55	48.70	35.50	157.75
4. Farming	1.84	0.47	0.84	3.15
5. Consumer Stores	24.22	12.76	19.25	56.23
6. Weaker Sections	12.51	7.90	21.78	42.19
7. Training and Education	19.24	7.42	12.22	38.88
8. Administration & Miscellaneous	31.02	9.86	11.84	52.72
Total	465.83	235.71	382.08	1083.62

The outlay in each of the regions indicated above include the share of the region in the State-wide schemes and the cost of the regional schemes to be implemented in the region.

State-wide Schemes :

10.14. In all, an amount of Rs. 41.62 lakhs will be utilised on 9 different schemes which are State-wide in nature. The following are the 8 schemes proposed to be implemented in the Fourth Plan with the outlay mentioned against each :

<i>Scheme</i>	<i>Outlay Rupees in lakhs</i>
(i) Payment of subsidy to Andhra Pradesh State Co-operative Central Land Mortgage Bank for creation of common cadre ...	22.00
(ii) Loan assistance to Andhra Pradesh Staff Co-operative Society ...	3.57
(iii) Share capital contribution to Andhra Pradesh Co-operative Marketing Federation ...	2.50
(iv) Managerial subsidy to Apex Marketing Federation for the establishment of promotional and assessment cell ...	1.32
(v) Establishment of Planning Cell in Registrar's Office ...	1.76
(vi) Education of members and office bearers ...	7.82
(vii) Payment of subsidy to Andhra Pradesh Co-operative Union ...	2.60
(viii) Assistance to Junior Co-operative Training Centres ...	0.05
Total ...	41.62

It will be seen that the schemes listed above relate to assistance for Co-operative development, development of Marketing, Consumer Co-operatives, Training and Education. The share of Telangana in the cost of the above State-wide schemes is Rs. 13.55 lakhs.

Regional Schemes :

10.15. The outlay proposed for regional schemes in the Fourth Plan is Rs. 368.06 lakhs. The details of the schemes on which the proposed outlay would be utilised are discussed in the following paragraphs.

Credit :

10.16. Most of the banks are financially weak and consequently the short-term loaning programme in most of the districts in the Telangana region has not been satisfactory. The poor performance of the banks is mainly due to the lack of adequate internal resources and the high level of over-dues. The overdues with Co-operative Banks have been increasing year after year. Although there was a slight decrease in 4 out of 10 Banks the over-all position is not satisfactory. The Banks have not been able to build up sizeable deposits with the result they have not been able to absorb the shock of overdues. Though the Reserve Bank of India is prepared to sanction credit limits to the extent required, the Banks have not been able to take advantage of this as they are not in a position to comply with the restrictions relating to non-overdue cover stipulated by the Reserve Bank of India. The non-overdue cover lays down that a Co-operative Central Bank should show loans outstanding against societies, which are not overdue, to the extent of drawals from the Reserve Bank of India. As there is no improvement in the outstanding loans and as the overdues are showing an increasing tendency, the eligibility to draw funds from the Reserve Bank of India is consequently showing a declining trend. The Reserve Bank of India has therefore, examined this position and suggested that a rehabilitation programme should be drawn up for the weak Co-operative Central Banks. Under this programme, it has been suggested that long-term loan assistance may

be provided to these banks so that they may get over the difficulty in providing non-overdue cover while taking simultaneously steps to reduce overdues and to increase deposits.

10.17. The provision under 'Credit' is Rs. 206.43 lakhs. The major amounts are provided under two schemes *viz.*, share capital contribution to credit institutions (Rs. 122.66 lakhs) and loan assistance to weak Co-operative Central Banks (Rs. 71.65 lakhs). These two schemes together account for nearly 94 per cent of the total provision under this head. The other schemes proposed are Managerial subsidy to potentially viable societies, grant for special bad debt reserve of village societies and central banks which has become necessary in view of the direction of the Reserve Bank of India that certain percentage of the credit limits shall be earmarked for the disbursement of loans for small farmers and weaker sections involving higher risks and subsidy for appointment of additional supervisory staff by the Central Banks and for opening branches.

The proposed level of disbursement of short and medium term credit by the end of Fourth Plan is Rs. 16.67 crores for Telangana region, while the target fixed under longterm credit for the Fourth Plan is Rs. 50 crores.

Marketing :

10.18. The outlay on development of Co-operative Marketing in the region is Rs. 26.03 lakhs. Nearly 88 per cent or Rs. 26.06 lakhs is earmarked for assistance to the Marketing Societies for the construction of godowns as the requirement of storage capacity is likely to increase by the end of Fourth Plan. An amount of Rs. 2.61 lakhs will be utilised for share capital contribution to the Primary and District Marketing Societies. This is in accordance with the suggestion made by the All-India Rural Credit Review Committee that the share capital of Marketing Societies should be increased in a phased manner. The balance amount of Rs. 0.36 lakh will be contributed to the Price Fluctuation Fund of the Marketing Societies.

Processing :

10.19. With a view to developing the Co-operative Processing units in the Telangana region an amount of Rs. 38.10 lakhs is provided in the Fourth Plan. About 90 per cent or Rs. 34.40 lakhs is earmarked for payment of share capital and loans to the various processing units existing as well as those which are likely to come up in the region. The units that are likely to come up are a Maize Starch Factory in Karimnagar, Castor Seed Crusher at Devarakonda, Cotton Processing and Turmeric processing units in Adilabad district, Modern Rice Mill in Pochampad project area, Cattle feed plant and a cold storage unit in Warangal district and an Ice Plant to the cold storage unit for the Zaheerabad Friut Growers' Society. The balance amount will be utilised for payment of managerial subsidy and share capital for Margin Money to processing units.

Sugar Factories :

10.20. An amount of Rs. 35.50 lakhs is provided for share capital assistance to the proposed Sugar Factory at Bheemsiingi, which is in the formation stage, and the one likely to come up in Miryalaguda by the end of the Fourth Plan.

Farming :

10.21. The Fourth Plan provision under 'Co-operative Farming in the region is Rs. 0.84 lakhs which is intended for assistance to the societies towards land reclamation charges at Rs. 300 per acre and by way of subsidy and loan towards resettlement charges at Rs. 700 per acre.

Consumer Stores :

10.22. The outlay proposed under this head is Rs. 19.25 lakhs. A major portion of this i.e., Rs. 17.38 lakhs will be given as loan for the construction of godowns (Rs. 3.00 lakhs), share capital contribution (Rs. 5.70 lakhs) and managerial subsidy to the existing 9 Central Co-operative Consumer Stores in the region. An amount of Rs. 0.25 lakh will be given as manage-

rial subsidy and Rs. 1.30 lakhs as share capital contribution to Primary Consumer Stores. The balance will be spent for training of non-official General Managers.

Co-operatives for Weaker Sections:

10.23. An amount of Rs. 24.20 lakhs has been earmarked for various schemes to benefit the weaker sections of the society. There are 8 schemes meant for different classes of people which are listed below:

<i>Schemes</i>	<i>Rupees in lakhs</i>
(i) Loan assistance to washermen Societies ...	0.08
(ii) Loan assistance to Printing Societies ...	2.72
(iii) Loan assistance to Auto-rickshaw Drivers' Societies ...	3.80
(iv) Loan assistance to Taxi Drivers' Societies ...	7.77
(v) Loan assistance to Societies for Destituted Widows and disabled persons ...	2.52
(vi) Loan assistance to Labour Contract and Forest coupe Societies ...	2.87
(vii) Loan assistance to Rickshaw Pullers' Societies ...	2.02
(viii) Loan assistance to Co-operatives for educated unemployed in Urban areas ...	2.42
Total ...	24.20

Training and Education:

10.24. Under training programme the non-official trainees will be paid a stipend of Rs. 40 per mensem. In order to meet the cost of stipends and other expenses for education and training of non-official members and Junior personnel an amount of Rs. 8.97 lakhs is provided for the region.

Administration :

10.25. An amount of Rs. 8.49 lakhs is provided for the appointment of additional departmental staff to Co-operative Marketing and Farming Societies and also for the staff at taluk level.

Special Development Programmes :

10.26. In the Fourth Plan period it is programmed to provide an assistance of Rs. 71.65 lakhs as long-term loans to the Weak Co-operative Central Banks to get over the difficulty in providing non-overdue cover from normal plan provision. Since this is not adequate to achieve the desired results an amount of Rs. 40 lakhs has been earmarked under the Special Development Programme.

11. COMMUNITY DEVELOPMENT

11.1. The Community Development Programme was first introduced in Andhra Pradesh on 2nd October, 1952. This programme covered the entire rural area in the State by the end of March, 1964.

Review:

11.2. During the Second Five-Year Plan period the Community Development Programme has consolidated itself. A basic reappraisal and reorganisation of the programme took place during this period on the basis of the recommendations of the Study Team led by Sri Balwantarai Mehta. In December, 1959 this reorganisation brought about a change in the administration as well as the financial frame work of the programme. The original classification of the Blocks as National Extension Service Blocks, Community Development Blocks, and the post-intensive Blocks was revised and only two phases of five years each was introduced, first phase which was one of the more intensive development being called 'stage I' and the second phase which was a post intensive stage was called 'Stage II' of the Block. Prior to Stage I, one year period of pre-extension work was also introduced. On this basis the State was delimited into 448 Blocks.

11.3. In the light of the experience gained in the administration of the Panchayat Samithi Blocks the State Government decided in 1965 to examine whether there was any scope for more effective utilisation of Community Development and other funds allotted to Panchayat Samithis, if necessary by territorial reorganisation of Blocks and by pruning staffing pattern where necessary. A High Power Committee was appointed to go into the question of territorial reorganisation of Blocks with a view to achieving economy in expenditure, consistent with efficiency of administration and without adversely affecting the tempo of developmental activity. In pursuance of the recommendations of this Committee the total number of Blocks in the State was reduced from 448 to 321. Out of the 321 delimited blocks, 110 blocks are in Telangana region. The staffing pattern of the reorganised blocks has also been modified suitably on pragmatic basis

depending on the work load so as to enable the Panchayat Samithis to discharge successfully the enhanced responsibility. The distinction between Stage I, Stage II and Post Stage II of the Community Development Blocks was given up as the reorganised Blocks comprised of population drawn from all the categories. The distribution of funds to the reorganised Blocks is done on the basis of their classification as 'Advanced', 'Ordinary', 'Backward', and 'Tribal Blocks' depending upon their level of development. Funds are allotted on varying per capita basis in inverse proportion to the level of development achieved by the Blocks so that Blocks which are less developed get larger funds compared to others which are better off.

11.4. With effect from 1965, funds to the Panchayat Samithis are being released in lumpsum with reference to the formulæ enunciated by the High Power Committee for all developmental activities under the Community Development Programme. The Panchayat Samithis have been empowered to utilise the funds according to the felt needs of the area.

11.5. During Annual Plans of 1966-67 and 1967-68, an expenditure of Rs. 69.10 lakhs and Rs. 38.34 lakhs respectively was incurred in the Telangana region under Community Development Programme. The expenditure incurred in 1968-69 was Rs. 54.45 lakhs.

Fourth Plan Programme:

11.6. In the Fourth Plan, an amount of Rs. 853.19 lakhs is provided for community development programmes in the State as a whole, out of which Rs. 328.75 lakhs is allocated for the Blocks in the Telangana region.

12. IRRIGATION

12.1. Improvement of productivity in Agriculture is closely linked with augmentation of Irrigation facilities. Being predominantly an agricultural area with about 70 per cent of the population depending on agriculture, one of the main strategies of rapid economic development of the region is to exploit the available irrigation potential as quickly as possible both for achieving a rapid increase in the per capita income and also for laying foundations for the future diversification of the economy of the region.

Objectives :

12.2. The objectives of the irrigation development in the fourth plan are:—

- (1) to ensure maximum utilisation of the irrigation potential already created;
- (2) to ensure completion of the large irrigation projects already taken up especially Nagarjunasagar and Pochampad Projects; and
- (3) to complete the major and medium Irrigation projects already taken up in the earlier plan period.

Review :

12.3. A statement showing the Major and Medium Irrigation projects taken up in the Telangana region in the First, Second, Third Plans and the three Annual Plans, 1966-69, and the proposals in the Fourth Plan is given in Annexure.

12.4. The Irrigation plan of Telangana under the Third Five-Year Plan consisted of one multi-purpose river valley project *viz.*, Nagarjunasagar Project and 2 spillover Major and Medium Irrigation Projects and 9 new schemes. Out of the 12 spillover schemes, 7 Schemes have been physically completed during the Third Plan period. The important works in execution at the end of the Third Plan were Pochampad and Kadam projects. The Pochampad Project was started in 1963. In respect of Kadam Project, all the Civil

works were completed by the end of Third Plan. Out of an amount of Rs. 93.01 crores spent on Major and Medium Irrigation schemes in the State in the Third Plan period the amount spent in Telangana was Rs. 35.38 crores comprising Rs. 26.00 crores being Telangana's share of Nagarjunasagar Project, Rs. 4.38 crores on Pochampad and the balance on other Major and Medium Irrigation schemes. The total irrigation potential created in the Telangana region under the Major and Medium Irrigation Projects during the First, Second and Third Plan periods was of the order of 2.08 lakh acres while the actual utilisation at the end of the Third Plan being 87,790 acres representing 42 per cent of the potential created.

12.5. During the three Annual Plans, 1966-69, an expenditure of Rs. 22.64 crores out of the total expenditure of Rs. 59.36 crores on Major and Medium Irrigation in the State was spent in Telangana comprising Rs. 14.17 crores being Telangana's share on Nagarjunasagar Project, Rs. 5.63 crores on Pochampad Project and the balance on other Major and Medium Irrigation Projects. During this period, an additional irrigation potential of 1.99 lakh acres was created. Of this, the potential created under Nagarjunasagar Left Canal was 1.40 lakh acres while the corresponding utilisation under Nagarjunasagar Project being 2.06 lakh acres which includes an extent of 66,000 acres where a double crop was raised.

Fourth Plan :

12.6. Out of the outlay of Rs. 132.88 crores allotted for Major and Medium Irrigation in the State, the provision for Telangana is Rs. 51.26 crores. The following table will show the distribution of this outlay.

Head of Development	Expenditure in III Plan	(Rs in lakhs)	
		Expenditure in the three Annual Plans (1966-69)	Outlay proposed in the Fourth Plan.
I. Irrigation :			
(a) Continuing	3505.55	2249.41	5063.72
(b) Nagarjunasagar Project	2600.00	1417.00	1711.72

(ii) pochampad	437.65	568.04	3000.00
(iii) Other Projects	467.90	269.37	352.00
(b) <i>New</i>	13.58	2.96	..
(c) Provision for Land Acquisition	..	..	0.78
(d) Flood Control and Drainage	..	..	10.00
(e) Investigation and Engineering Research	18.71	11.89	51.32
Total	3537.84	2264.26	5126.02

12.7. It will be seen from the above that the Irrigation Plan in the Fourth Plan of Telangana is almost entirely a spill over Plan. For completion of Major and Medium Irrigation Schemes other than Nagarjunasagar and Pochampad which have spilled over into the Fourth Plan, an outlay of the order of Rs. 4.18 crores was required. As against this, an allotment of Rs. 3.52 crores has been made. For Pochampad Project an allotment of Rs. 30.00 crores has been made while in respect of Nagarjunasagar Project the share of Telangana, as per the principles enunciated by Bhargava Committee, is Rs. 17.12 crores. Thus out of the total of Rs. 51.26 crores allotted for the development of Irrigation sector in Telangana region as much as Rs. 50.64 crores is allotted on spill over schemes. The additional Irrigation potential to be created in this region during the Fourth Plan period would come to 3.3 lakh acres taking the cumulative potential at the end of Fourth Plan period to about 7.40 lakh acres.

12.8. The details of the schemes to be taken up during the Fourth Plan period are given below:—

Nagarjunasagar Project:

12.9. The project in execution comprises the construction of a masonry Dam (with spill way crest level at SL+546 with crest gates upto E.L.+590) across the river Krishna, and construction of 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 on second crop in Krishna Delta) in Nalgonda, Khammam, Krishna, Guntur, Kurnool and

Nellore districts of Andhra Pradesh. The Nagarjunasagar Dam is situated in $1\frac{1}{2}$ miles down stream of Nandikonda village in Miryalaguda Taluk in Nalgonda District. The Right Canal takes off from the head regulator located in Dam while the Left Canal takes off from the fore-shore of Nagarjunasagar Reservoir at its Left Flank above 6 miles away from the Main course of the river.

12.10. The Nagarjunasagar Project is a project of national importance which was taken up in the year 1955-56. During the Third Plan period the work on the project progressed satisfactorily according to the programme drawn up under the accelerated programme of construction launched upon in the second half of 1964-65, with a view to creating an irrigation potential of 5.79 lakh acres by the end of June, 1966. During the Third Plan period, an expenditure of Rs. 65.00 crores was incurred on the project taking the total expenditure incurred upto the end of Third Plan period to Rs. 104.18 crores. The share of Telangana out of this expenditure upto end of Third Plan was Rs. 40.48 crores. Similarly, out of the total expenditure of Rs. 42.50 crores incurred on the project during the three Annual Plans 1966-69, the share of Telangana came to Rs. 14.17 crores. Thus, the share of Telangana out of the total expenditure upto March, 1969 on this project came to Rs. 50.16 crores. The following is the progress of work to the end of 31st March, 1969.

Dam :

12.11. Masonry and Concrete for Masonry Dam was completed. Earth work banking for earth dam was also completed.

Left Canal :

12.12. All works necessary for letting out water in the first 58 miles of the main canal and in the branches and Distributories in Blocks 1 to 9 and also in Blocks 10 to cover an ayacut of 1.4 lakh acres were completed and irrigation potential created to that extent. The area brought under utilisation under Left canal, however comes to 2.06 lakhs acres which included an extent of 66,000 acres where double crop was raised.

Fourth Plan :

12.13. In the State's Fourth Plan, an outlay of Rs. 44.50 crores is made for Nagarjunasagar Project for the State as a whole. Of this, a sum of Rs. 3.67 crores is for Nagarjunasagar Dam, Rs. 18.20 crores is for Nagarjunasagar Right Canal and Rs. 22.63 crores is for Nagarjunasagar Left Canal. Out of this allotment, the share of Talangana region, as per the principles determined by Bhargava Committee, comes to Rs. 17.12 crores.

Left Canal :

12.14. With an outlay of Rs. 22.63 crores on Left Canal, the works on main canal upto mile 85 and the distributory system upto Block 15 will be completed to the extent necessary to create an irrigation potential of 3.08 lakh acres by July, 1973 in this Canal area.

Pochampad Project :

12.15. The Pochampad Project was originally sanctioned for Rs. 40.10 crores and the work on the Project was started in 1963 and the preparation of the detailed designs of the dam and specifications was entrusted to Central Water and Power Commission in 1964. After conducting canal and localisation survey, it was found that the area available upto Manair river was only 4.58 lakh acres as against the total proposed ayacut of 5.70 lakh acres. In order to obtain the balance ayacut of 1.12 lakh acres, it has become necessary to cross Manair river beyond the 88th mile of the canal. Various alternatives for crossing Manair river were considered and it was decided that the best proposal would be to construct a dam across the river Manair. The canal is also proposed to be extended further for 35 miles. (total length would be 123 miles), to achieve the balance area of 1.12 lakh acres of ayacut. It has also been decided to line the main canal throughout its length in view of the fact that the main canal runs through gravelly terrain to avoid seepage losses which will be heavy.

12.16. With a view to expediting the pace of execution of the Project, the assistance of the World Bank

was sought. The Bank has sent a Reconnaissance Team first in the month of January, 1969 and again in November, 1969. After detailed discussions with the State Engineers, the Bank agreed to finance the Project. The salient features of the Project that were agreed to by the World Bank are as under:—

- (1) The cost of the Project, as per revised estimate as submitted by the State Government to the Government of India, is Rs. 90.25 crores, for developing an ayacut of 5.70 lakh acres. As it is not physically practicable and possible to complete the entire balance work on the project in a span of 5 years, and as the World Bank advances loans to such projects for not exceeding 5 years, it was suggested that, a part of the project called phase I may be taken up for financial assistance by World Bank, which could suitably be completed within 5 years;
- (2) Keeping the progress of work in the dam and canal in view, it was decided that this phase I of the project should comprise of:—
 - (a) Excavation of canal upto the off-take of major branch canal D/83 (Revised mileage of main canal mile 71/7) for creating a potential of 2.50 lakh acres (from out of 5.70 lakh acres) by June, 1975.
 - (b) Raising the height of the dam sufficiently to enable the diversion and storage of water for 2.50 lakh acres. From regime tables worked out, it was observed that by raising the crest level of the spillway to +1037 and Earth dam Min. +1078. it is possible to achieve the above objective by June, 1975;
 - (c) To complete the lining of the main canal also along with the excavation of canal by June, 1976 upto mile 71/7;
 - (d) Completion of distributory system upto and part of distributory 83, to create an Irrigation potential of 2.50 lakh acres by June, 1976;

- (e) Construction of field channels and field drainage for the above ayacut;
- (f) Construction of Market Roads in the ayacut area; and
- (g) Follow-up action for development of ayacut in various spheres by other departments of the Government.

12.17. The cost of this project for implementing the first phase is estimated at Rs. 67.90 crores. The World Bank has also stipulated that the provision in the Fourth Plan for this Project should be Rs. 45.00 crores, and the potential of 2.50 lakh acres be created by June, 1975 by completing the canal upto mile 71/7. The provision made in the State Plan for this project is Rs. 30.00 crores. The gap of Rs. 15.00 crores in the Plan provision is proposed to be met by obtaining an additional assistance of Rs. 9.00 crores from the Centre over and above the Central assistance agreed to for the State's Fourth Plan, and also to meet the balance of Rs. 6.00 crores from Telangana surpluses. The following table will show the irrigation potential to be created under this project by June, 1975.

Sl. No.	Year	Gross potential (without lining of main canal)		Restricted potential due to stoppage of water to ID ayacut during lining of main canal	
		Acres	Wet	ID	Total
1.	7/70	41,127	26,571	—	26,571
2.	6/71	41,127	26,571	—	26,571
3.	6/72	41,127	26,571	2,831	29,402
4.	6/73	1,24,000	46,425	14,556	60,981
5.	6/74	1,50,000	52,747	77,575	130,322
6.	6/75	2,50,000	84,230	97,253	181,485
7.	7/76	2,50,000	84,230	1,65,770	250,000

Swarna Project, Adilabad District:

Estimated cost: Rs. 152.94 lakhs.

Expenditure incurred to end of 1968-69: Rs. 45.31 lakhs.

12.18. This is a medium irrigation scheme continuing from Second Plan. An amount of Rs. 98.50 lakhs

spilled over into the Fourth Plan against which Rs. 84 lakhs is proposed to be spent during the Fourth Plan so that this scheme may be substantially completed. The scheme when completed will irrigate an extent of 7,000 acres.

Ukkachettivagu Project, Mahboobnagar District :

12.19. An outlay of Rs. 95.00 lakhs is provided in the Fourth Plan to complete the project in this plan period itself. The project envisages the creation of an irrigation potential of 4,700 acres.

Kadam, Adilabad District :

Estimated Cost: Rs. 798.36 lakhs.

Expenditure to end of 1968-69: Rs. 773.09 lakhs.

12.20. It is a major irrigation project continuing from First Plan. Work on the project is almost completed. An amount of Rs. 16 lakhs is required in the Fourth Plan to complete the balance works. Subsequently, the scheme for excavating Khanpur channel to augment supplies to Kadam reservoir has been sanctioned. This will cost Rs. 38 lakhs. Provision is made for this work also under Kadam project in the Fourth Plan. Total outlay of Rs. 54.00 lakhs is thus made in the Plan for this project.

Special Development Programme :

12.21. Besides the amount of Rs. 49.91 crores provided in the State's Fourth Plan for major and medium irrigation schemes in the Telangana region, an amount of Rs. 6.25 crores is provided for this head under the Special Development Programme. Out of this, Rs. 6 crores is earmarked for the Pochampad Project to meet the agreement reached with the World Bank to spend an amount of Rs. 45 crores on this project during the Fourth Plan period, while Rs. 25 lakhs is provided for taking up the improvements to the distributories of the Nizamsagar Project.

Improvements to Nizamsagar Project :

12.22. The utility of Nizamsagar Project has been reduced on account of the silting of the reservoir,

Whereas the project was originally designed to irrigate 2.75 lakh acres, according to the localisation now being made, the tentative cropping pattern is for an ayacut of 2.31 lakh acres. Several measures are under contemplation to increase the reservoir capacity. Besides, improvements to the main canal and remodelling of distributories are also necessary. It is estimated that an amount of Rs. 3.00 crores is required excluding the Singoor Project to carry out the improvements, of which Rs. 75 lakhs is for remodelling of distributories. There are several unauthorised cuts. The drops and outlets are damaged and out flanked. There is considerable silting up and the distributories are not to proper section.

12.23. In view of the urgency of repairs to be carried out to the distributories and lack of provision in the normal plan, the Andhra Pradesh Regional Committee had recommended that pending the execution of the larger scheme, work be started on the distributories and an amount of Rs. 25 lakhs sanctioned. Accordingly, detailed estimates for improvements to 56 distributories having an ayacut of 400 acres and above had been prepared and work started.

<i>Name of the Project.</i>	<i>Total estimated cost.</i>	<i>Upto the end of 1968-69</i>	<i>Outlay proposed in the IV Plan</i>
			(Rs. in lakhs)
1. Nagarjunasagar .. ..	..	5,465.26	1711.72
2. Kadam Project including Khanpur Channel	836.36	773.09	65.47
3. Pochampad	9,025.00	1,027.12	3000.00
4. Rajolibanda Diversion Scheme	383.00	360.18	25.39
5. Koilsagar	91.27	86.57	..
6. Bhemunipalli Project	8.98	7.78	..
7. Saralasar	35.54	35.19	..
8. Sirala Project	2.82	2.82	..
9. Musi Project	380.00	318.05	25.69
10. Jutpalli Project	23.00	23.64	..
11. Laknapur Project	35.60	48.28	89.69
12. Swarna Project	152.94	45.31	..
13. Salvagu Project	40.57	40.23	12.08
14. Nellavagu Project	74.20	62.32	..
15. Ramadugu Project	35.06	35.96	..
16. Kotipallivagu Project	105.00	67.26	25.12
17. Lankasagar Project	80.15	53.18	25.25
18. Ukkachettivagu Project	95.20	0.31	85.00
19. L. S. for Schemes completed in the previous plans .. ..	..	..	0.73
20. Flood Control Schemes .. ..	..	..	10.00
21. Investigation of Schemes .. ..	..	26.68	36.53
22. Engineering Research (Share of Telangana) .. ..	..	15.11	14.94
23. Metric System .. ..	..	..	0.29
Total .. ..	..	..	5,126.04

<i>Ultimate potential</i>	<i>Potential created up to the end of III Plan.</i>	<i>Potential created upto the end of 1968-69</i>	<i>Potential proposed to be created up to the end of IV Plan.</i>	<i>Utilisation at the end of III Plan.</i>	<i>Utilisation up to the end of 1968-69</i>	<i>Utilisation proposed in the IV Plan Period.</i>
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(In thousands acres) Cumulative.

..	..	140.00	308.00	..	206.00*	297.00
87.00	69.10	58.00	87.00	17.77	23.43	62.00
570.00	..	..	130.00	..	..	130.00
87.50	70.00	83.09	87.50	35.27	18.77	87.50
14.50	14.50	14.50	14.50	7.15	7.15	7.15
1.90	1.90	1.90	1.90	1.06	0.82	1.20
4.20	4.20	4.20	4.20	2.20	2.10	4.20
..
41.80	41.80	41.80	41.80	19.77	29.39	41.80
2.45	1.80	2.45	2.45	0.58	1.45	2.45
2.60	..	2.60	2.60	..	..	2.60
7.00	..	..	7.00	..	..	..
2.85	2.85	2.85	2.85	1.97	2.85	2.85
5.90	..	2.00	5.90	..	..	5.90
5.00	1.40	5.00	5.00	2.02	..	5.00
9.98	..	1.00	9.98	9.00
5.10	..	2.04	5.10	4.05
6.70	6.70

207.55	3,61.44	7,22.48	87.79	291.96	6,62.70
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*Including 66 thousand acres under second crop.

13. POWER

13.1. Power is indispensable for growth both in Agriculture and Industry. Impressive as the progress in this sector in the last few years of planned development has been, yet it has to be stressed that the per capita consumption of power in the State is very low when compared to other States and that the maintenance of minimum rates of growth in Agriculture and Industry will call for largest outlays on power schemes for augmentation of power supply. The per capita consumption of power in Andhra Pradesh which was 2.5 K.w.h. at beginning of the First Plan rose to 16.7 K.w.h. and 26.5 K.w.h. at the end of Second and Third Plan periods. At the beginning of the Fourth Plan, it was 44 K.w.h. compared to the All-India average of 76 K.w.h.

13.2. While this is the situation obtaining in the State as a whole, the per capita consumption of power in the Telangana region was even less at 34.4 K.w.h. at the beginning of the Fourth Plan. In order to step up the consumption of power it is necessary that power consumption under Agriculture and Industries should considerably be stepped up. The policy of the State Government has been to vigorously carry on Rural Electrification Programme as well as the programmes of energisation of pumpsets. As a result of this, it is hoped that power consumption in rural areas for agricultural purposes will considerably increase. The State Government have also been taking up vigorous steps to accelerate the pace of industrialisation especially in Hyderabad, Kothagudem and Ramagundam growth complexes where infra-structure facilities necessary for industrialisation is being provided. It is hoped that as a result of these measures, the consumption of power both under Agriculture and Industries will considerably increase, thereby raising the per capita consumption of power in the region also.

Objectives and Strategy:

13.3. The objectives and strategy of power development may be summarised as follows:

- (a) to complete the schemes for generation which have been taken up, on a priority basis;

- (b) to make a beginning with regard to certain new schemes for power generation;
- (c) to ensure dependable distribution through strengthening of integrated grid-system by construction of more trunk transmission lines and major sub-stations; and
- (d) to strengthen the distribution system by constructing a number of sub-transmission and primary distribution lines and sub-stations so that the consumers get reliable supply on satisfactory voltages.

13.4. In respect of generation schemes it is the technical factors that determine the location and the capacity and these schemes are not of any special regional significance in view of a grid-system. However, in Telangana region, greater emphasis will be laid on rural electrification in view of greater dependence on ground-water development.

Review:

13.5. A brief description of the generation schemes taken up in the previous Plans is given in the chapter on "power" in the State Plan.

Fourth Plan Programmes:

13.6. The load demand is increasing rapidly in the State. The peak demand in 1969-70 was 524 M.W. and the Sixth Annual Electric Power survey indicated that the peak load demand at the end of Fourth Plan would be 1,087 M.W. To meet a peak demand of 1,087 M.W. in 1973-74, the system must have an installed capacity of the order of 1,440 M.W. With the completion of Ramagundam Thermal Scheme and the Kothagudem III Stage, it would be possible to add 282.5 M.W. during the Fourth Plan period. With this addition, the net installed capacity would increase to 863 M.W. after taking into account that the gas turbo sets of 20 M.W. will be kept as stand-by sets. The firm capacity of the system would, however, be about 651 M.W. only. This would result in a large deficit of about 436 M.W. Although arrangements are at present made for the purchase of power from

Mysore, it is unlikely that there would be surplus power in Mysore State by 1973-74. Hence, the State could not for long depend on adjoining States to make up the deficits in its power generation and it should take all possible measures for early completion of generation schemes, failing which the development of the State would receive a set back. The policy of the State to over-come this situation is to accelerate the pace of execution of Lower Sileru Project and also to take up new schemes like (1) Andhra Pradesh Power House at Balimela, (2) Upper Sileru Hydro-Electric Scheme Stage II and (3) Nagarjunasagar Pumped Storage Hydro-Electric Schemes. These three schemes require comparatively small capital outlays and can be completed quickly within 4 to 5 years duration. It is also proposed to take advance action for establishment of a major Thermal Station in the Telangana region in the Fifth Plan period. An outlay of Rs. 112.98 crores is allotted in the Fourth Plan for generation schemes in the State. Out of this, the share of Telangana on generation schemes, as per the principles enunciated by Bhargava Committee, comes to Rs. 44.00 crores. Adding to this, the outlay on Transmission, Distribution and Rural Electrification Schemes, the overall outlay on power development in Telangana region comes to Rs. 77.37 crores. The scheme-wise break-up of this outlay is as follows:

(Rupees in lakhs)

<i>Sub-Head of Development</i>	<i>Outlay</i>
I. Generation: (a) Spill-over Schemes:	
1. Kothagudem Stage I.	154.55
2. Ramagundam B Station.	552.84
3. Kothagudem Stage II.	96.96
4. Kothagudem Stage III.	2,366.40
5. Srisaillam Hydro-Electric Scheme.	700.66
(b) New Schemes:	
1. Advance action on Fifth Plan Schemes.	500.00
Total Generation.	4,371.41

II. *Transmission and Distribution:*

1. Transmission.	1,008.63
2. Rural Electrification.	2,328.27
III. Investigation.	28.97
	<hr/>
Grand Total.	7,737.28

13.7. A brief description of the Fourth Plan generation schemes located in Telangana region is given below:

Kothagudem Thermal Scheme Stage I.—The power house with 2×60 M.W. units is in operation since 1966-67. The provision in the Fourth Plan period is for payments for the foreign exchange debits, the amount required for completion of the Kinnerasani Dam works and for the balance works of the power house and transmission works.

Ramagundam Thermal Scheme.—This scheme envisages installation of one 62.5 M.W. Thermal unit at Ramagundam. The Power House is scheduled for commercial operation from August 1971. The anticipated revised estimated cost of this project is Rs. 14.00 crores. Provision is made in the Fourth Plan for completion of all the works on this scheme.

Kothagudem Thermal Scheme Stage II.—The 2×60 M.W. Thermal units of this scheme are in operation since 1967. The provision in the Fourth Plan is towards foreign exchange debits and for balance works payment only.

Kothagudem Thermal Scheme Stage III.—This scheme envisages installation of 2×110 M.W. Thermal units near Kothagudem in continuation to the first and second stage works. The first unit is scheduled for commissioning in March/April 1972 and the second unit in July, 1972. The estimated cost of this project is Rs. 43.80 crores. A provision of Rs. 35.50 crores is made in the Fourth Plan. Of this, the share of Telangana region is Rs. 23.66 crores. Out of the foreign exchange requirements of Rs. 25.00 lakhs, Rs. 15.00 lakhs is towards steel plates proposed to be imported during 1971-72 and the balance of Rs. 10.00 lakhs is

towards value of H.P. Steam Piping and Ash Handling Plant and for other minor items.

Advance action on Fifth Plan Schemes:

13.8. It is proposed to take advance action on Fifth Plan Generation Schemes so that preliminary works can be completed in the Fourth Plan itself. The provision made in the Fourth Plan is towards preliminary works of a major Thermal Scheme either at Kothagudem or Ramagundam or at any other suitable load centre in the State.

Fourth Plan Transmission Scheme:

13.9. This scheme provides for construction of a number of trunk transmission lines and major sub-stations, installation of synchronous condensers, PLC equipment, enhancement of power transformer capacity at various load centres etc., required for strengthening the grid commensurate with the increasing generating capacity and connected load. The following transmission lines and sub-stations are proposed to be constructed in the Telangana region during the first phase. The remaining works are likely to spill-over to the Fifth Plan:

220 K.V. Lines:

1. Kothagudem-Hyderabad (209 KM).
2. Kothagudem-Gundala (125 KM).

132 K.V. Lines:

1. Ring main lines around the twin cities (37 KM).
2. Hyderabad-Mahabubnagar (86 KM).
3. Ramagundam-Pochampad (9,118 KM).
4. Nagarjunasagar-Nalgonda (60 KM).
5. Kothagudem-Khammam (73 KM).
6. Hyderabad-Sangareddy (60 KM).

132 K.V. Sub-stations:

Mahabubnagar, Nalgonda, Moula Ali, Pochampad, Chandrayanagutta, Khammam and Sangareddy.

Fourth Plan Distribution Scheme:

13.10. This is part of the Fourth Plan Transmission and Distribution Scheme. This scheme provides for the sub-transmission and distribution works of all categories except agricultural services coming under Rural Electrification. The works relating to release of supply for Bulk Loads are also included in this scheme. It is also proposed to construct additional sub-transmission and distribution lines and substations commensurate with the load development so that reliable supply at satisfactory voltages is available to the consumers.

Rural Electrification:

13.11. Rural Electrification has a high priority in the development of the Telangana region since Telangana had started with a narrow base of development in this regard, the number of villages and towns electrified in 1956-57 being only 18 as against 545 in the rest of the State. Even till the beginning of the Fourth Plan, the percentage of villages electrified was only 17.3 as against 23.4 in the rest of the State. It is therefore, necessary to step up rural electrification in Telangana in a substantial way in the Fourth Plan, so that by the end of this period Telangana would not only wipe out the lag but would even gain a lead over the rest of the State.

13.12. In the Telangana region, there are 10,376 towns and villages. 1,792 towns and villages were electrified as on 31st March, 1969. The agricultural pumpsets energised by that date were 41,885. It is proposed to electrify 2,508 villages additionally in the Fourth Plan and to energise about 72,000 agricultural pumpsets. Thus, at the end of the Fourth Plan, the total number of towns and villages electrified in the region will be 4,300 forming about 41 per cent of the total and the number of pumpsets energised will be about 1,15,000. In the State as a whole, it is expected that 39 per cent of the towns and villages would have been electrified by the end of the Fourth Plan.

Special Development Programme:

13.13. The above programme of electrifying villages during the Fourth Plan will be financed partly

from plan funds and partly from Special Development Programme funds. In the Fourth Plan an outlay of Rs. 19.98 crores was made for the purpose, while it is expected that an amount of Rs. 13.86 crores will be forthcoming from the Special Development Programme funds. Out of the 2,508 villages proposed to be electrified during the Fourth Plan period 1,314 villages will be electrified with the funds provided in the State's Fourth Plan and 1,194 villages with the provision made in the Special Development Programme.

14. LARGE AND MEDIUM INDUSTRIES

14.1. The contribution from the Industries and mining sector to the regional income of Telangana was 11.3 per cent in 1968-69 as against 8.9 per cent in the State as a whole and 17.5 per cent in All-India. Thus, this region is slightly better off than the other regions in the State in the matter of industrial development, primarily because of Hyderabad city but even so the level of industrial development of the region is far below All-India level.

14.2. On account of the availability of larger infra-structural facilities in this area and also as the region had a fairly wide base for industries, this sector has a great role to play in stepping up the economy of this region.

Objectives and Strategy:

14.3. The objectives of the Large and Medium Industrial Development are—

- (1) to develop large and medium industries for the purpose of diversification of the economy; and
- (2) to help a more balanced regional development by appropriate location of these activities.

14.4. The strategy that is adopted comprises of the provision of infra-structural facilities interms of land, water, power and communications in select areas, promotional and financing activities by the Andhra Pradesh Industrial Development Corporation especially through the medium of joint ventures, provision of incentives to attract private capital to the State and lastly attract Central Sector Schemes by arranging concomitant facilities in the State.

Review:

14.5. In 1956 itself, the Telangana region had a fairly well diversified base of Industries. Prior to 1956, the Government through the Industrial Trust Fund had promoted a number of Industries with Government share ranging from 50 to 70 per cent. Of

these the Singareni Collieries Company Limited, with a share capital of Rs. 300 lakhs, the Nizam Sugar Factory with a share capital of Rs. 146 lakhs, the Hyderabad Alwyn Metal Works Limited with a share capital of Rs. 59 lakhs, the Hyderabad Chemicals and Fertilizers with a subscribed capital of Rs. 25.62 lakhs and the Praga Tools Company with a paid-up capital of Rs. 150.54 lakhs and the Azam Jahi Mills with a paid-up share capital of Rs. 72 lakhs were companies in which the Government had a controlling interest. Thus at the time of the formation of Andhra Pradesh, the Telangana region had a good base for industrialisation. On account of this factor and also having regard to the fact that the infra-structural facilities have been well developed in Hyderabad city, the pace of industrialisation in Telangana is being accelerated so that the contribution of the secondary sector to the total income of the region might grow up rapidly. The expenditure incurred during the Third Plan and in the subsequent three Annual Plans under this head of development was Rs. 175.98 lakhs and Rs. 198.93 lakhs respectively.

Fourth Plan Programmes:

14.6. The Fourth Plan strategy in the Industrial sector consists in developing certain growth areas by providing the necessary infra-structural facilities and to offer incentives for attracting capital and entrepreneurs to establish new large and medium scale industries in the State. Keeping this in view, an allotment of Rs. 11.91 crores has been made for large and medium industries for the State as a whole, out of which the share of Telangana comes to Rs. 5.40 crores. Of this, Rs. 2.99 crores will be spent on development of Industrial Development areas, Rs. 0.37 crore on incentives and the balance of Rs. 1.99 crores towards the region's share in State's contribution to the Andhra Pradesh Industrial Development Corporation.

14.7. An important programme taken up by the State Government for encouraging the location of industries in the State is the establishment of Industrial Development areas. The aim of the scheme is to acquire and develop large areas of land at strategic

places in the State which will be the growth centres for development in future. This scheme would avoid the setting up of industries in a haphazard way and would help the entrepreneurs. The progress achieved under this scheme so far is explained below:—

Lands have been acquired in the following places in and around Hyderabad for the establishment of Industrial Development areas and Central Sector Projects.

<i>Name of the area</i>	<i>Area acquired (acres)</i>
Uppal.	446
Moulali.	316
Nacharam.	700
Cherlapalli.	2,683
Kanchanbagh.	601
Jeedimetla and Kutballapur.	1,545
Kukatpalli.	1,100
Balanagar.	453
Ramachandrapuram.	6,455
Total.	14,299

14.8. Development works such as laying of roads, water lines etc. have been undertaken in the Industrial Development areas of Uppal, Moula Ali and Nacharam. An extent of about 13,150 acres of land has been allotted to private entrepreneurs and Central Sector Projects like Modern Bakeries, Atomic Energy Complex, Second Cable Factory, D.M.R.C., H.M.T., Synthetic Drugs Project, Bharat Heavy Electricals Limited and Bharat Dynamics. About 60 Private Industries have also come up in the above area, with a capital investment of Rs. 19.56 crores. The lines of manufacture cover Pharmaceuticals, Chemicals, Machine Tools, Cotton Yarn, Laminated springs, Railway Signalling Equipment, Starch and Insecticides.

14.9. During the remaining years of the Fourth Five-Year Plan, it is proposed to take up development works, such as laying of roads, water lines, drainage

works etc. In the Industrial Development areas of Kukatpalli, Jeedimetla, Balanagar and Cherlapalli. An additional area of 1,000 acres of land is also proposed to be acquired and developed around Hyderabad to cater to the growing needs of Industries.

Ramachandrapuram :

, 14.10. The Bharat Heavy Electricals Limited is surrendering an area of about 3,000 acres out of the total area of about 6,000 acres allotted to them as it is not required by them. It is proposed to develop this area after being taken over from the Bharat Heavy Electricals Limited.

Ramagundam :

14.11. The Fertiliser Corporation of India requires an area of 900 acres for the Ramagundam Fertiliser Factory. As part of its offer to provide land free of cost for the Project, the State Government have to make available this land. Out of this land, an extent of 424 acres is under the possession of Messers Singareni Collieries and the remaining land has to be acquired. Besides this, an area of about 2,000 acres has already been acquired and it has to be developed to make available to prospective industrialists.

Kothagudem :

14.12. About 950 acres which was originally acquired for Messers Hindusthan Allied Chemicals Limited for their proposed fertiliser factory has been taken back to set up Industrial Development area. This area will be developed to make available to the Industrialists.

Nagarjunasagar (Left Canal) :

14.13. It is proposed to get an extent of 226 acres of land of Bandla Quarry Camp, Vijayapuri from Chief Engineer (Nagarjunasagar Canals) and develop it as an Industrial Development area.

14.14. An allotment of Rs. 299.02 lakhs has been made for the development of industrial areas in Telangana.

Incentives for setting up Industries:

14.15. The following incentives are offered for the industries established after 1st January, 1969 in the State:—

- (a) Refund of State Sales Tax on raw materials, machinery and finished goods subject to a maximum of 10 per cent of paid-up equity capital in the case of public limited companies and actual capital outlay in the case of others;
- (b) Subsidy on power consumed for production to the extent of 10 per cent in case of medium and large scale industries and 12½ per cent in case of small industries;
- (c) Exemption from payment of water rate; and
- (d) Limiting the liability of land revenue or taxes on land to the same rate it used to be before the establishment of the industry.

14.16. The Planning Commission have declared seven districts of the region *viz.*, 1. Nalgonda, 2. Medak, 3. Mahbubnagar, 4. Karimnagar, 5. Warangal, 6. Khammam and 7. Nizamabad as backward for the purpose of granting concessional finance by the financial institutions. These concessions include lower rate of interest, deferred payments etc.

14.17. In addition to the above incentives available for setting up industries in the region, the State Government have also been offering additional incentives to new industries set up in the ayacut areas of Nagarjunasagar and Pochampad Projects, Ramagundam-Kothagudem area and the above seven districts declared as backward for setting up industries by the Planning Commission:—

- (i) Sale or lease of Government land at concessional rates; and
- (ii) Grant of financial assistance on a priority basis by the State Financing Institutions.

Under incentives scheme an amount of Rs. 37.10 lakhs is provided for meeting the cost of refund of

State Sales-tax, Power Subsidies etc. in the Fourth Plan.

Central Sector Projects :

14.18. In attracting the Central Sector Projects to our State, full advantage is being taken of the fine points in favour of the twin cities of Hyderabad and Secunderabad for locating industries. The well-developed infra-structure, good and healthy climate, the cosmopolitan atmosphere of the Capital were great assets. This coupled with the efforts of the State Government have led to the establishment of a number of projects in Hyderabad. In fact, except for industries which require a port location, a majority of the remaining central sector projects in the State were located in Hyderabad area. The Bharat Heavy Electrical Plant, the Hindustan Machine Tools Factory, the Synthetic Drugs Project, the Electronic Complex of the Atomic Energy Commission, and MIG Unit of the Hindustan Aircraft are the major industrial units. The total investment in these projects is of the order of Rs. 65 crores providing employment to over 15,000. Besides these, a number of Central Government Research Centres have been established in Hyderabad. Notable among these are the Geophysical Laboratories, the Defence Electronics Laboratories, the Defence Metallurgical Laboratories, etc., the National Institute of Community Development and Small Industries Extension Training Centre. In addition to this, the Government of India have also since decided to locate a coal based fertiliser factory at Ramagundam, besides establishing a second cable factory and Bharat Dynamics Factory in Hyderabad. These are projects which, by their heavy nature, have a high growth potential and there is no doubt that over the coming years these industries, by themselves, would grow to provide greater employment opportunities. In providing land free of cost to these projects totalling about 9,800 acres and infra-structural facilities, the Government have spent over Rs. 1.57 crores. This amount does not, however, include cost of Government lands.

Private Sector Projects :

14.19. The policy of the State Government has been to route all assistance to the private sector industrial

ventures only through the Industrial Development Corporation. The Andhra Pradesh Industrial Development Corporation was set up in 1960 for accelerating the tempo of industrialisation in the State, with an authorised capital of Rs. 10 crores. The present paid-up share capital is of the order of Rs. 5.62 crores. The State Government is the only contributor/subscriber to the share capital of the Corporation. The Industrial Development Corporation is a novel institution in the State for, it combines Government initiative, encouragement and finances with private enterprise in order to step up industrial activity in the State. The principal activities of the Corporation are rendering financial assistance to industry, participation in the private industry and direct promotion of selected industries. The functions of the Corporation are to:

- (1) provide finance in the form of long or medium term loans;
- (2) guarantee loans from other financial institutions and also guaranteeing deferred payment for the import of plant and equipment;
- (3) underwrite new issues of shares;
- (4) participate in the share capital of new industrial projects without controlling interest;
- (5) promote industries directly; and
- (6) acting as holding company for specific projects.

14.20. The Corporation sanctioned during the Third Five-Year Plan financial assistance to 38 industries in the State as a whole by way of underwriting, investments, guarantee and loans, the aggregate of which comes to Rs. 8.40 crores. Out of this amount the Corporation invested during this period Rs. 2.12 crores in various industries. The employment potential generated up to the end of the Third Five-Year Plan was of the order of 11,000 persons.

14.21. The percentage of total investments made by the Corporation in the State in each of the following industries is as under at the end of the Third Five-Year Plan period:

Fertiliser industry	...	46.11%
Textiles industry	...	20.65%

Chemical industry	...	11.45%
Engineering industry	...	8.90%
Cement industry	...	4.64%
Non-Engineering industry	...	0.94%
Pharmaceuticals industry	...	0.94%
Sugar Industry	...	0.94%
Miscellaneous industries	...	5.43%

In the matter of direct promotion of industries which is another main object of the Corporation, the Corporation played an important role during the Third Five-Year Plan period. The Corporation after a judicious investigation of the economic viability and technical feasibility of certain projects selected a few worthwhile projects for direct promotion. Since the object of the Corporation was to foster the growth of industries in the State, an important consideration that weighed with the Corporation was to establish more number of new industries with the available resources of the Corporation and also encourage the private entrepreneur to set up industries in the State. Such a course of action visualised by the Corporation culminated in the promotion of joint ventures in collaboration with private sector industry. The Corporation promoted three public limited Companies in association with private entrepreneurs for the manufacture of (1) Ball Bearings; (2) Glass products; and (3) High Tension and Low Tension Insulators. Out of these three Companies the project promoted for H.T. and L.T. Insulators could not materialise due to the difficulty in obtaining foreign technical collaboration. The other two companies viz., M/s Indo-Nippon Precision Bearings Ltd., and M/s Associated Glass Industries Limited have come into existence. The present position of these two Companies is as under:—

Indo-Nippon Precision Bearings Limited:

14.22. This project was originally promoted as a joint venture in association with a private party, but later on as a result of difficulties connected with the raising of capital from financing institutions coupled with the adverse effects of devaluation, the project had

to go through an unusually long gestation period. The capital outlay of the project is of the order of Rs. 3.58 crores. M/s Koyo Seiko are the technical collaborators of this project. The collaborators have also invested 12 per cent of the share capital in the Company. The Company has now become a Government company after the private entrepreneur withdrew voluntarily from the Company. The factory has gone into production and the products have come into the market. Another important feature of this project is that the foreign collaborators have also appointed this Company as their Sole Selling Agents for their products which are still imported in the country. The Corporation's total investment in this unit is of the order of Rs. 164.95 lakhs.

Associated Glass Industries Limited:

14.23. This is a very important industry designed for the manufacture of hallow-ware and crystal ware product of a sophisticated nature. The collaborators of this project are M/s Komplex of Hungary. The capital outlay of the project is of the order of Rs. 3.50 crores. The plant and equipment have been received and installation work has commenced. The plant is likely to go into production by the end of 1971. The Corporation's investment in this Company is of the order of Rs. 40 lakhs.

14.24. Apart from the above two Companies, the Corporation had to take up another unit by name Republic Forge Company Limited at Hyderabad for which the Corporation gave a deferred payment guarantee to M/s Seri Renault of France for the supply of plant and equipment. The inability of the Company to fulfil the obligations resulted in the Corporation having to take over the Company which is now being run as a State Sector Unit. This plant has already gone into production and the products are in the market. The Corporation's investment by way of share capital is Rs. 50 lakhs, by way of loans Rs. 183.63 lakhs and a guarantee for Rs. 103.37 lakhs.

14.25. The notable achievement of the Corporation during the Third Five-Year Plan is one of preparing a ground for setting up industries and creating a conge-

nial atmosphere for the healthy growth of industries in the State. It was estimated that the total cost of the projects set up in the State with the financial assistance from the Corporation during the Third Plan period amounted to Rs. 52 crores of which the Corporation has itself given about Rs. 2.50 crores.

14.26. Subsequent to the Third Five-Year Plan the Corporation's line of activity has slowly changed based upon the experiences gained during the Third Five-Year Plan period. Although the number of industries approaching for financial assistance remained steady the activity of setting up new industries with larger outlay did not seem to attract attention and enough response from the private entrepreneurs. That apart considering the resources position of the Corporation and the responsibilities attached to it, were also some of the factors necessitating the Corporation to determine a new line of approach during the subsequent years. Therefore, the line of medium type of industry was considered more prospective and encouraging from all points of view *i.e.*, less outlays and quicker maturity.

14.27. The efforts of the Corporation in pursuing this policy proved to a greater extent successful, and the following medium sized joint ventures came into existence. Another important aspect was that most of the medium sized industries came within the capacity of certain technocrats with finances and zeal to start industries on their own in association with the Corporation. This policy of the Corporation has resulted in setting up the following projects in the Telangana region subsequent to the Third Five-Year Plan period. In these projects the management is shared equally by the Corporation and the private entrepreneur on the basis of equal investment although day to day management is entrusted to the private entrepreneurs.

(1) *M/s. Gangappa Cables Limited.*—This project was set up in association with a private party for the manufacture of 600 tonnes of winding wires per annum in Hyderabad. The capital outlay of the project is Rs. 50 lakhs. The investment of the Corporation is of the order of Rs. 11.60 lakhs on equity basis with the private party.

(2) *M/s Alkali Metals Private Limited.*—This project has been designed to manufacture 240 tonnes of Sodium Metal per annum in Hyderabad. The capital outlay of the project is about Rs. 13 lakhs. The Corporation's investment is Rs. 2.5 lakhs. The unit is set up entirely with indigenous equipment and know-how and is the first of its kind in the country for manufacture of this product.

This project was set up as an ancillary to the Indian Drugs and Pharmaceutical Unit at Hyderabad.

(3) *M/s Kumar Chemicals and Fertilisers Private Limited.*—This is another unit set up in association with a private party for the manufacture of 1,500 tonnes of Potassium Carbonate, Bi-Carbonate and other chemicals used by the Pharmaceutical Industry. The capital outlay of the project is about Rs. 21.00 lakhs. The Corporation's investment is Rs. 3.5 lakhs. The plant has gone into production.

(4) *M/s Ferro Electrics Private Limited.*—This is another joint venture set up to manufacture 100 tons of Ferrite Rods per annum with indigenous know-how obtained through National Physical Laboratory. The capital outlay is Rs. 15 lakhs. The Corporation's investment is Rs. 2.5 lakhs.

Andhra Mechanical and Electrical Industries Limited :

14.28. This is a project set up in Hyderabad in association with M/s Industrial Agricultural and Engineering Company (Hyderabad) Private Limited, a well known Engineering firm for the manufacture of Switchgear items. The capital outlay is Rs. 25 lakhs. The Corporation's investment is about Rs. 3 lakhs only. The plant has gone into production.

14.29. The Corporation being a continuing scheme under the Five-Year Plans of the State Government has been receiving resources or its programme of industrial development by way of share capital contribution from the Government. Up to the end of March, 1971, the total amount contributed by the Government so far since its inception to the share capital of the Corporation is Rs. 5.62 crores. Till the end of March, 1971 the total investment of loans and advances by the

Corporation both in assisted and promoted companies were approximately of the order of Rs. 780.23 lakhs besides furnishing a guarantee to the extent of Rs. 103.37 lakhs to Republic Forge Company Limited.

14.30. The Corporation has on hand proposals for setting up the following projects during the last three years of the Fourth Plan.

	(Rs. in crores.)
(1) Automobile Tyres and Tubes ...	8.00
(2) Nylon Filament Yarn ...	12.00
(3) Electric Components ...	2.00
(4) Scooters ...	1.50
(5) Pig Iron Project ...	2.00

14.31. On account of the availability of excellent infrastructural facilities and the Cosmopolitan atmosphere prevailing in the Capital, it is hoped that most of the above mentioned industries, if not all, will be located in and around Hyderabad in the Fourth Plan period.

Special Development Programme :

14.32. The special development programme envisages an investment of Rs. 76.60 lakhs during the Fourth Plan period. The details of the schemes are given below :

Azamjahi Mills Limited :

14.33. The factory is located at Warangal, the next largest town in the Telangana region. In 1970-71, since the mill was facing an acute financial crisis, the Government of India was requested to arrange for the take-over of the mill by the National Textile Corporation. In the meanwhile the conditions of the mill went from bad to worse and if some financial accommodation was not granted there was the apprehension of the mill closing down and throwing out of employment thousands of workers in a sensitive area of the Telangana region. The State Government had invested Rs. 1.50 crores besides standing guarantee for Rs. 2

crores. On the recommendations of the Andhra Pradesh Regional Committee, Government had sanctioned an amount of Rs. 32 lakhs, as loan to the mill. The mill has since been taken over by the National Textile Corporation.

Loan Assistance to Industrial Co-operatives:

14.34. In the Telangana region there are about 60 industrial co-operatives, but they are lying dormant for want of financial assistance. To re-activise some of them, on the proposal of the Registrar of Co-operative Societies an amount of Rs. 1.00 lakh has been sanctioned as loan assistance to be given @ Rs. 500 per society to 20 societies in 1971-72.

Loan assistance to Balanagar Co-operative Industrial Society, Hyderabad:

14.35. In the year 1963 a Co-operative Industrial Estate was started at Balanagar, Hyderabad. At present 47 units are functioning and are engaged in engineering industries, pharmaceuticals and chemicals, paints and varnishes, electronics etc. In the current year the society has secured on lease 150 acres of land behind the Telangana Spinning Mills on the Narsapur Highway for development by providing infra-structure facilities. The estimated cost of developing the land is Rs. 17.96 lakhs. Already, 79 applications have been received for allotment of plots. However, on account of paucity of resources the society wanted to take up the development this year of only half the land which may amount to Rs. 9 lakhs. Since it would not be able to raise an amount of this order it has requested for an assistance of Rs. 7 lakhs in 1971-72. Orders have been passed by the State Government providing this amount in 1971-72. There is no additional financial commitment for the next two years.

Loans under State aid to Industries Act:

14.36. The provision in the Annual Plan for 1971-72 for the State is Rs. 2.50 lakhs out of which Telangana's share is about a third. With this meagre amount it is hardly possible to give any loans to the small scale

and cottage industries in the region. Therefore, an amount of Rs. 2 lakhs has been sanctioned from the special funds for this purpose in 1971-72.

Preparation of Feasibility Reports :

14.37. The Andhra Pradesh Small Scale Industrial Development Corporation, Hyderabad has proposed a scheme for the preparation of feasibility reports. In a backward region like Telangana even after conducting a techno-economic survey, it is not always possible to convince an entrepreneur to set up a particular industry in a particular place. Many of them do not know enough about what, where and how to manufacture. An entrepreneur needs to know the existing and future demand, the present installed capacity and actual production in a given industry before making up his mind. While the large scale industries can afford the cost of getting feasibility reports drawn by technical consultants the small scale industrialists cannot. It is therefore necessary that after identifying the industry and location, the preliminary techno-economic reports are translated into a more detailed and expensive feasibility reports. Only on the basis of such detailed feasibility reports, the entrepreneur can be convinced of the success of the schemes. An allotment of Rs. 0.60 lakh has been made for the preparation of 12 feasibility reports at a cost of Rs. 5,000 each.

Establishment of an Electronics Complex at Kishoiguda, Moulali, Hyderabad :

14.38. At Moulali there is already an Electronics Corporation of India Limited, functioning. Several industrialists are coming forward for the manufacture of electronic components. It is intended to develop 70 acres of land at a cost of Rs. 9.13 lakhs. After the land is developed, it will be leased to industrialists and the receipts are estimated at Rs. 7.52 lakhs. As the Andhra Pradesh Small Scale Industrial Development Corporation has agreed to take over the task of developing the land with assistance from financing institutions the State Government has sanctioned a sum of Rs. 1.50 lakhs, being roughly the difference between the cost of development of the land and the anticipated receipts.

Co-operative Sugar Factory at Miryalguda :

14.39. Steps are being taken to localise the requisite area under the Nagarjunasagar Project for sugarcane cultivation around Miryalguda in Nalgonda district. Concurrently, the State Government have taken steps to establish a sugar factory in the co-operative sector in that area.

14.40. The Government of India have issued a letter of Intent for the establishment of a Co-operative Sugar Factory at Miryalguda in Nalgonda district. Certain conditions as laid down therein have to be fulfilled within 8 months. One of the conditions is that the factory has to raise share capital of Rs. 20 lakhs from its members. The promoters could so far collect a share capital of about Rs. 1.60 lakhs. According to the prescribed pattern of financial assistance, a Co-operative Sugar Factory is normally eligible for the following assistance.

(Rs. in lakhs)

(i) Share capital to be contributed by the members	...	45.00
(ii) Share capital to be contributed by State Government (with 100 per cent loan from N.C.D.C. within the State Plan ceiling).		45.00
(iii) Block loan from Central Financing Institutions	...	140.00
(iv) Loan from other financing agencies	...	10.20
Total	...	240.20

14.41. The proposed co-operative sugar factory is located in a backward area. It would, therefore, be very difficult to raise the required share capital from members themselves within the prescribed time. To facilitate them to contribute towards the share capital of the proposed society, financial assistance in the form of share capital loan has to be provided to all the intending members of the society within its area of operations (within a radius of 20 miles from the factory) and this loan will be recovered subsequently

in 10 equal annual instalments from their cane bills. Towards this end, the Andhra Pradesh Regional Committee has agreed to allot Rs. 10 lakhs this year and Rs. 12.5 lakhs next year. The amount from this year has been sanctioned but it will be released only when a corresponding amount is collected from the members of the society.

Co-operative Wool Spinning Mill at Mahbubnagar:

14.42. Andhra Pradesh is one of the largest wool producing States in the country. Within the State, the major production is in Mahbubnagar, Karimnagar, Warangal and Nizamabad districts in the Telangana region. Mahbubnagar district alone has a sheep population of 15 lakhs, producing nearly 12 lakh pounds of wool. But unfortunately there is not even a single spinning mill in the State to produce yarn by mechanical process.

14.43 In order to effectively utilise the wool produced in Mahbubnagar district, it is proposed to set up a wool spinning plant at Mahbubnagar. The unit will have an installed capacity of 528 spindles, working 2 shifts of 8 hours each. Wool required by the plant will be 3.36 lakh pounds per annum, against 12 lakh pounds available in the district alone, so that the entire wool required would be purchased from the sheep rearers of Mahbubnagar district. A Co-operative Society has been registered at Mahbubnagar for starting the wool spinning factory with the area of operation extending to the entire State. The authorised share capital of the society is Rs. 25 lakhs made up of 25,000 shares of Rs. 100 each. The membership is open to wool weavers co-operative societies and other wool weavers.

14.44. The total estimated cost of the project is Rs. 24.26 lakhs, of which the capital investment is Rs. 13.77 lakhs. The machinery suppliers *viz.* M/s Befoma, Poland are agreeable to supply the machinery on deferred payment basis. But 15 per cent of the cost of the machinery has to be paid in advance and the balance in sixteen instalments. The technical expert in the Office of the Textile Commissioner, Bombay, has given a favourable opinion regarding the

economic viability of the unit. Accommodation has been secured in the industrial estate at Mahbubnagar. Water and power are also available. Taking all these factors into account, the Andhra Pradesh Regional Committee has recommended that an amount of Rs. 5 lakhs might be given as loan to this society in 1971-72. The State Government has sanctioned the loan.

Co-operative Maize Starch Factory at Karimnagar :

14.45. According to a feasibility report prepared by a chemical technologist at Hyderabad who has had previous experience at Anil Starch Factory, Ahmadabad, a Starch Factory at Karimnagar will be viable unit. It is found that the quality of maize produced in the Karimnagar district is superior to that grown in other areas. The location of the proposed factory is at Karimnagar, because this district has the largest area under cultivation of maize. Action is being taken to get a detailed project report prepared by one of the consultancy agencies viz., Servotech, Bombay or Desmet (India) Private Ltd., Bombay. Since it is necessary to obtain prior permission of the National Co-operative Development Corporation for the preparation of project report, so as to obtain 100 per cent assistance towards the cost of preparation of the report, the quotations received are being sent to National Development Corporation for advising the State Government, the agency through which the project report should be got prepared. A co-operative society was registered in 1970 to instal and run the proposed starch factory. The area of operations extends to the districts of Karimnagar, Niamabad, Warangal, Medak and Adilabad. The authorised share capital at present is Rs. 30 lakhs.

14.46. So far as the raising of funds is concerned, 70 per cent of the cost of schemes will be met as loan from the National Co-operative Development Corporation. The remaining amount of Rs. 14.50 lakhs has to be raised as share capital by the society from the members and includes contribution from the Government. In the Annual Plan for 1971-72, an amount of Rs. 13.50 lakhs, has been provided. An amount of Rs. 57,000 has so far been raised as share capital from the members. It is expected to raise another Rs. 1

lakh from them. Considering the backward nature of the tract, it may not be possible to raise the balance required from the members. Therefore, the Andhra Pradesh Regional Committee have agreed to allocate Rs. 5 lakhs this year as share capital loan to this society.

15. VILLAGE AND SMALL SCALE INDUSTRIES

15.1. Village and Small Scale Industries deserve special attention because they offer large employment potential at relatively low per unit investment and of quick maturing. They have possibilities of wide dispersal, thus ensuring homogeneous development of the State and reduction in regional disparities. This employs simple techniques of production and the machinery and equipment required for them is easily available.

Objectives and Strategy :

15.2. The objectives of village and small industries development are:—

- (a) to promote labour intensive Small Industries especially in scarcity areas with a view to provide employment and ensure balanced regional development;;
- (b) to encourage the development of Small Industries in important industrial centres like Hyderabad to enable the development of Small Industries as ancillary to large industries;
- (c) to promote a number of small industries primarily with the object of initiating a process of diversification and industrialisation of the economy.

15.3. The Strategy adopted for the development of Small Industries are:—

- (a) provision of tool room workshop facilities for training;
- (b) provision of physical infrastructural facilities in terms of industrial estates and assisted private industrial estates in growth centres;
- (c) to provide on a marginal scale, financial assistance and incentives;

Review :

15.4. The schemes taken up under the Small Scale Industries are intended to augment the production of

consumer goods in the State. The schemes under Small Scale Industries implemented during the Third Plan period can be classified into the following categories:—

- (1) Production-*cum*-Training Centres;
- (2) Production schemes of Pilot Character initiated departmentally; and
- (3) Grant of loans to Private concerns under the State Aid to Industries Act.

15.5. During the Third Plan period, as against a revised outlay of Rs. 5.73 crores for this sector an expenditure of Rs. 5.32 crores was incurred in the State as a whole. The share of Telangana in this Plan comes to Rs. 2.87 crores. In the three Annual Plan years an amount of Rs. 1.11 crores was incurred and the share of Telangana comes to Rs. 0.56 crore. An account of the progress achieved under Village and Small Scale Industries in the Telangana region is given below.

15.6. Some of the projects taken up to modernise the Small Scale Sector in the Telangana region are the pilot production Centres for the manufacture of radio spare parts and receivers, small gauge insulator and Copper wire and fractional horse-power motor unit, furniture mill-wood work unit *etc.* In order to service a large number of foundry and Engineering Industries coming up around Hyderabad, a tool-room composite servicing workshop has been set up in the Industrial Estate, Sanathnagar. The idea behind this scheme was to impart training facilities to technical personnel in tool, die and mould-making and to provide servicing facilities to Small Scale Industrial Units in designing and developing machine tools and recommending measures for standardisation of components. To utilise the forest resources and popularise the use of seasoned wood, a saw mill-*cum*-timber mill was set up at Nirmal. Also a comprehensive plan for the development of leather units and the Village leather industry is being implemented through the Leather Advisory Board. The handicrafts of Telangana namely Bidri-ware, Nirmal-ware, Pochampalli fabrics have been popularised through the cottage industries Emporium at Hyderabad and Delhi. The implementation of the programme of setting up of Industrial

Estates has made rapid progress in Telangana region. The total amount spent on these Industrial Estates during the Second Plan period was of the order of Rs. 70.45 lakhs. During the Third Plan period, an amount of Rs. 190.30 lakhs was spent on the programme. At the beginning of the Fourth Plan, 14 Industrial Estates, 2 Assisted private industrial estates and 1 rural industrial estate have been established in the region. They are located in the following places :

Industrial Estates :

1. Sanathnagar.
2. Chandulal Baradari.
3. Moulali.
4. Vikarabad.
5. Patancheru.
6. Mahabubnagar.
7. Suryapeta.
8. Karimnagar.
9. Nirmal.
10. Mancherial.
11. Nizamabad.
12. Kothagudem.
13. Warangal.
14. Balanagar (Co-operative Industrial Estate).

Assisted Private Industrial Estates :

Jangam.

Sanathnagar.

Rural Industrial Estates :

Visannagar.

Fourth Plan :

15.7. The following table shows the expenditure on village and small scale industries incurred in the Telangana region, during the Third Plan and in the

three Annual Plans and the outlay proposed in the Fourth Plan :

	(Rs. in lakhs)		
	Expenditure incurred in Third Plan period	Expenditure incurred during 1966-69	Outlay proposed in Fourth Plan
1. Small Scale Industries	70.11	12.58	65.38
2. Industrial Estates	190.30	23.47	31.85
3. Handicrafts	6.23	4.36	17.02
4. Industrial Co-operatives	2.16	0.17	1.25
5. Leather Industry	11.34	12.19	12.47
6. Khadi and village Industry	2.56	0.07	0.82
7. Rural Industries		2.70	
8. Sericulture	4.06	0.45	1.98
Total	286.76	55.99	130.77

Small Scale Industries :

15.8. One of the important schemes proposed to be taken up during the Fourth Plan under Small Scale Industries is the strengthening of the Tool-Room workshop. Out of the total allotment of Rs. 65.38 lakhs for this head of development as much as Rs. 36.06 lakhs has been allotted for this scheme. As already mentioned, this centre has been established to undertake making and supplying of cutting tools, cutting dies, gips and fixtures involving High Degree of Technical skill and precision. To train the staff of the unit in advanced methods of manufacture of sophisticated pressure Die-Castings, one pressure die-casting expert has been deputed to the workshop. The centre has already made pressure die casting dies for several firms including M/s. Hyderabad Usha works and Electronic Corporation of India. Under the expansion programme, it is proposed to purchase one more pressure die-casting machine of 250 tonnes capacity and Tool-Milling Machine with Jig boring and jig grinding

attachments. To meet the demand for pressure die-castings, the unit has been working second shift. The unit has also been imparting training to the graduate apprentices in the following trades:—

- (1) Tool Design, Drawing and Estimates.
- (2) Planning and production of tools, dies *etc.*
- (3) Manufacture of components with Dies and tools.

Since there is not much encouragement from the graduate apprentices for availing this training facility, it is proposed to extend this training facility to the L.M.E., and I.T.I., candidates.

15.9. Under the scheme for quality marking in light Engineering goods at Sanathnagar it is proposed to undertake quality Marking of light-engineering products in order to improve the quality and attain saandardisation and uniformity in the quality of products. It is proposed to introduce quality marking in respect of the following items, (1) Buckets, (2) Agricultural implements, (3) Cycle parts, (4) Auto-spares and (5) Sheet moulding. The technical staff of this unit have contacted the local Small Scale Manufacturers and explained to them the advantages of enrolling themselves as members under this scheme. So far 15 units have joined the scheme and 4 more are expected to do so. Products tested are affixed with the "Quality Symbol" and some have come to the market also.

15.10. Lack of testing laboratory facilities is one of the impediments in the manufacture of quality products by Small Scale Industrial Units. With a view to remedying this, action was taken to set up a testing laboratory at Hyderabad. In order to make use of advanced technology available in the country and to establish new Industries with sophisticated machinery, Mechanical and Electronic wings have been set up in the Directorate of Industries to help the entrepreneurs. These wings will act as liason between the small entrepreneurs and technical Institutes. With a view to stimulate the growth of Small Scale Industries at the District level, seminars and Conferences were conduc-

ted at Medak, Mahboobnagar, Karimnagar and Warangal to study the problems of the Small Scale Industries Units and to suggest measures for their utilisation. The main programme taken up under this sector are running of departmental units to provide servicing facilities by way of tool-room, testing of raw materials and seasoning of timber besides quality marking of the Small Industries products. The Department of Industries also extends financial assistances to a limited extent particularly to such of the Small Units which normally find it difficult to get the same from Commercial banks.

Industrial Estates :

15.11. Government assistance especially in the matter of procurement of raw materials, land, construction of factory and office buildings, procurement of raw materials, machinery etc., and the introduction of modern technology are necessary for effective development of Small Scale Industries. A prospective Industrialist is often tempted to start his venture in congested urban areas where facilities for industrial development are already available. This defeats the very objective of decentralisation of industries and creation of additional employment opportunities in the rural and semi-urban areas. Another problem confronting the small industrialists is lack of adequate finance for initial investment. The scheme of industrial estates was conceived with a view to solving the above problems by providing facilities such as water electricity, transport, banks, post office, railway sidings, watch and ward etc., that are available in urban industrial localities. Besides creating the necessary atmosphere for the advancement of small scale industries, the industrial estates bring a number of different industrial units together and thereby facilitate the establishment of common servicing centres, introduction of modern techniques, collective purchase of raw materials and sale of finished goods.

15.12. The Industrial Estates are broadly of two categories conventional estates and assisted private industrial estates. In the case of the former ready-built factory buildings are constructed by Government and allotted to the entrepreneurs and in the case of

the latter developed plots are given with facilities of water, power, drainage, ware-housing *etc.*, being provided in both the cases. During the Fourth Plan period it is proposed to take up and complete the balance of Civil works like development of vacant areas and completion of roads in the industrial estates. In order to provide adequate water supply facilities in these Industrial Estates it is also proposed to take steps for augmenting the existing water supply facilities.

15.13. In all 398 sheds are available in the industrial estates in the region. So far 350 units have been occupied and 250 units are already working. Out of 363 developed plots 223 have been occupied and 110 units are working.

15.14. The Departmental Officers at district level are endeavouring to revitalise the Industrial Estates by inducing the entrepreneurs to set up small scale industries suited to the needs of the area, through intensive campaign giving publicity to the incentives available to small scale industries. Since Medak district is having cash crops like sugarcane, potatoes, ginger, onions and garlic and since the entrepreneurs are interested in setting up agro-based industries, the Medak Zilla Parishad has resolved to have an Industrial estate at Zaheerabad. The Government has sanctioned the establishment of a Rural Industrial Estate at Zaheerabad and a provision of Rs. 10.00 lakhs is made in the Plan for this purpose.

Handicrafts :

15.15. The Telangana region produces a variety of handicrafts, many of which are unrivalled in their beauty, skill of workmanship and uniqueness of design and earned for themselves the appreciation both in the home and foreign markets. The important handicrafts of the region are Pile Carpets. Wooden toys of Nirmal, Bidri-ware, Himroo and Nirmal work of Hyderabad, Silver Filigree work of Karimnagar. Grass mats of Mahboobnagar and other parts, Tie and Dye Weaving of Pochampalli, Stone carving of Durgi and Beaded Embroidery of Pembarthy and Nalgonda.

15.16. During the Third Plan period and the subsequent three Annual Plans, emphasis was laid on

training, design aspect and quality improvement and provision of financial assistance in the shape of working capital loan and grants towards managerial assistance to the Handicrafts Co-operative Societies. In proposing the schemes in the Fourth Plan, the growing demands for the Handicrafts articles and their export potentials have been kept in view. The need for expanding the production and for improving the designs so as to keep pace with the changing tastes have also been given due consideration. A provision of Rs. 17.02 lakhs is made in the Fourth Plan for all schemes related to the development of handicrafts. A brief account of the schemes included in the Plan are discussed below.

15.17. The production programmes of Handicrafts is almost in the Co-operative fold. The Handicrafts Co-operatives are in need of financial assistance not only to maintain the tempo of production but also to expand it. The financial assistance and the marketing facilities that are being provided by the Department are the two main factors responsible for the satisfactory working of the Co-operative Societies. The scheme for provision of working capital assistance to the Handicrafts Co-operative Societies is being continued in the Fourth Plan.

Common Facility Centres :

15.18. The next important type of assistance given to the artisans is in the shape of setting up common Facility Centres. In these Centres facilities like Small Machines such as lathes shaping and buffing machines, looms and tools, Dyeing and carding equipment *etc.*, are provided. The popularity of the Centres so far established and the active manner in which the equipment and facilities offered through these Centres have been utilised by the artisans has given rise to a demand for more. It is therefore, proposed to provide the common facility Centres, to as many Crafts as possible in the Fourth Plan.

Training :

15.19. Training of artisans has been an essential feature of the programme of development in Handi-

crafts sector from the beginning. The training programme has two fold objectives, viz., the revival of traditional crafts on the one hand and training of artisans in crafts, the product of which have greater demand, both within and outside the country. There are at present 3 training centres in Telangana. It is proposed to continue these training centres in the Fourth Plan and also to expand them wherever necessary.

Quality Marking :

15.20. Andhra Pradesh is the Second State to introduce quality marking in Handicrafts. Goods valued at over Rs. 14 lakhs are being quality marked each year. There are at present two quality marking centres in Telangana. In view of the fact that considerable portion of the products are being exported and since some of the exporters insist on quality marking it is proposed to continue these Centres during the Fourth Plan period.

Schemes for construction of show room buildings for Handicrafts emporium :

15.21. The need for well equipped show rooms with adequate scope for display situated in important marketing centres has become more important than before since the development of marketing techniques have come to play an important role in increasing the sales. As most of the emporia run by the Department are short of accommodation and do not have sufficient scope for putting up proper displays, it is proposed to construct show rooms for the emporia run by the department.

Hyderabad Tanneries and Utility leather Goods Centre Musheerabad :

15.22. Hyderabad Tanneries and Hyderabad Utility Leather Goods Centre, Musheerabad, previously working under the direct control of Industries department, have been transferred to Andhra Pradesh Small Scale Industrial Development Corporation during 1967. An amount of Rs. 10.78 lakhs is, however made in the Plan for maintenace of the above centre from out of the provision made in the Plan for leather industry.

Loans to leather artisans cobblers and Tanners etc.:

15.23. With a view to providing financial help to the deserving leather artisans, cobblers and tanners every year, loan assistance is being provided by the Government. It is proposed to continue this scheme in the Fourth Plan.

Industrial Co-operatives and Khadi and Village Industries:

1. *Industrial Co-operatives:*

(i) *Managerial Assistance to select Industrial Co-operatives:*

15.24. Under this scheme the services of Co-operative Sub-Registrars and Senior Inspectors are placed at the disposal of the Societies which are in need of constant guidance. The salary of the Manager will be borne by Government and the Society on a tapering basis. It is proposed to extend this assistance to 15 Societies during the Fourth Five-Year Plan.

(ii) *Share Capital Loans to Members:*

15.25. During the last 3 years of the Fourth Five-Year Plan, it is proposed to revive 50 dormant Societies each year by enabling the Societies to raise their borrowing capacity by sanctioning share capital loan of Rs. 100 to each member.

(iii) *Concessional rate of Interest:*

15.26. The scheme envisages subsidising the difference of interest between the concessional rate and the usual rate of interest at which the Co-operative Banks advance loans to the Industrial Co-operatives.

(iv) *Khadi and Village Industries:*

15.27. During the years 1968-69 and 1969-70, Government have permitted the Khadi Board to dispose of the accumulated stocks allowing 5 per cent additional rebate while agreeing to reimburse the amount involved. The Khadi Board has claimed an amount of Rs. 2.14 lakhs under this account, out of which an amount of Rs. 50,000 was paid so far. Provision was made to pay off the out-standing balance in 3 instalments during 1971-72 to 1973-74. The share of Telangana in respect of this item comes to Rs. 0.82 lakh.

16. HANDLOOMS

16.1. The handloom industry is by far largest and the most Important Cottage Industry in the State as well as in the Telangana region. There are about 5 lakh handlooms in the State out of which about 1.2 lakhs are in the Telangana region. The total value of cloth produced by handlooms in the region at the beginning of the Fourth Plan is estimated at Rs. 6 crores per year. Due to implementation of several development schemes, the economic condition of the weaver has steadily improved over the plan periods. The development of this industry has a significant contribution to make in realising the objectives of the Plan in regard to expanded employment, larger production and more equitable distribution of income.

Objectives :

16.2. The main objectives of the programmes included in the Fourth Plan are:—

- (1) To increase the production of handloom cloth thereby creating employment potential and improve the standard of living of the weavers through the progressive increase in their wage-earning capacity;
- (2) To bring the bulk of handlooms into the Co-operative fold by organising weavers Co-operative Societies;
- (3) To improve the quality of cloth produced on handlooms by providing requisite technical guidance; and
- (4) To improve the methods and means of marketing of cloth produced on handlooms.

Review :

16.3. The policy of the Government has been to encourage the development of handloom industry on a Co-operative basis. An amount of Rs. 360.81 lakhs in the Third Plan and Rs. 180.66 lakhs in the Three Annual Plans 1966-69 was spent on the development of Handloom industry in the State as a whole. Out of this, the expenditure in Telangana region was

Rs. 118.5 lakhs in the Third Plan period and Rs. 59.32 lakhs in the three subsequent annual plans.

Fourth Plan Programmes :

16. An outlay of Rs. 342.82 lakhs is provided for the development of Handlooms in the State in the Fourth Plan. Out of this, the outlay in Telangana region will be Rs. 106.91 lakhs. All the schemes are regional schemes.

It is expected that by the end of the Fourth Plan, the number of handlooms in the region will go up to 2 lakhs. A major part of the outlay in the Fourth Plan will be spent on granting of rebate on handloom cloth sales, development of power looms, and improvement of techniques. The schemes included in the Fourth Plan are briefly described below—

(a) *Rebate Scheme.*—Among the factors responsible for promotion of marketing of handloom cloth through co-operative channels, special importance should be assigned to the scheme of rebate on sales. The rebate scheme is intended to reduce the price gap between the prices of handloom cloth and mill cloth. As it has not been possible to provide within the plan ceilings the full amount of rebate allowed by societies for reimbursement this scheme has been kept in abeyance with effect from 1st June, 1967. However, on certain special occasions, the State Government have been permitting the weaver's Co-operative Societies to allow special rebate at 10 per cent. A provision of Rs. 189.78 lakhs has been made in the plan for this scheme for the State as a whole. Out of this, the share of Telangana comes to Rs. 52.21 lakhs.

(b) *Power Looms.*—In the matter of installation of power looms in the co-operative sector, the progress in the past has not been very encouraging. However, a larger number of Co-operative Societies are now coming forward to instal powerlooms and in order to provide financial assistance for this purpose, an amount of Rs. 44.20 lakhs is provided in the Fourth Plan. Out of this, Rs. 17.36 lakhs will be spent in Telangana. As it is not found possible to provide adequate funds in the plan for sanction of loans to weavers co-operative societies for installing powerlooms, institutional financing agencies like Industrial Development Bank

of India are also being approached to provide part of the funds required by the societies for capital investment.

(c) *Improved appliances and Technical assistance.*

—The weakness of the handloom industry, particularly in Andhra Pradesh, is that production of cloth is not with reference to the changing tastes of the consuming public. This situation is partly due to the use of out-dated tools. Since the weavers were not able to afford to purchase improved appliances, financial assistance is being provided to them under this plan scheme to purchase improved appliances such as frame looms, dobbies, jacquards, Healds and Reeds. To improve the quality of cloth, the weavers co-operative societies have also been assisted for establishing small dye units and Hydro extractors. It is proposed to provide assistance to weavers co-operative societies during Fourth Plan for establishing screen printing unit, wool, spinning plant, besides giving assistance under normal technical schemes. The total provision in the Fourth Plan under schemes relating to technical assistance is Rs. 23.97 lakhs, out of which Rs. 5.17 lakhs will be spent in Telangana.

(d) *Share Capital loans to members of Weavers Co-operative Societies.*—The principal objective as now envisaged for this sector is that the proportion of Cotton Handlooms in Co-operative fold should be increased from about 50 per cent at the commencement of the Fourth Plan to 70 per cent by the end of the plan and also to increase their annual production from about Rs. 1.87 crores at present to Rs. 2.5 crores by the end of the plan. The production of cloth by the handlooms in the co-operative sector is not commensurate with the number of handlooms in the Co-operative fold. This is mainly due to the inability of the weavers co-operative societies to find adequate working capital. Steps are being taken to ensure that these societies obtain their working capital requirements under the Reserve Bank of India scheme of finance to Weavers Co-operative Societies. But on account of their weak financial position they have not been able to satisfy the norms laid down by the Reserve Bank of India for sanction of credit limits. One of the reasons for their weak financial position is their

inadequate capital base arising out of the incapacity of weaver members to contribute sizeable amounts towards the share capital of their society. The weavers belong to the weaker sections of the community. They have to be assisted for contributing to the share capital of their society, so that the society can pool adequate share capital to carry on its business and also to provide work to its members and to make itself eligible for higher credit limits from the financing agencies. To this end, loans will be provided to the members, not exceeding Rs. 75 per member, so as to enable every member to hold shares worth Rs. 100. It is also programmed to have State participation in select weavers co-operative societies so that the dormant weavers co-operative societies or weaver co-operative societies where majority of members are Harijans are revived. An amount of Rs. 3.31 lakhs is provided for the scheme in the Fourth Plan. Of this the share of Telangana comes to Rs. 0.70 lakh.

(e) *Marketing Schemes*.—Marketing is the crux of the problem as far as handloom industry is concerned. On account of their weak financial position the weavers co-operative societies have not been able to streamline and strengthen their marketing organisation. The Apex and primary weavers co-operative societies have therefore been assisted by way of grant to set up sales depots within and outside the State. The subsidy is sanctioned on a sliding scale covering maximum of four years subject to the depots satisfying certain norms prescribed with regard to quantum of sales. There are about 344 depots opened by weavers Co-operative Societies under plan schemes but still marketing arrangements for the cloth produced in the co-operative sector is inadequate. Therefore, 50 more new depots have been proposed to be opened in the Fourth Plan with an outlay of Rs. 8.32 lakhs, out of which Rs. 3.25 lakhs will be spent in Telangana.

(f) *Thrift Fund Scheme*.—To ensure loyalty of weavers to the societies, a scheme of sanctioning matching contributions to their thrift fund has been under implementation since the year 1965-66. A weaver member admitted to the scheme has to necessarily contribute to his thrift fund account six paise for every rupee of wage he earns against which matching contribution

of two paise by the Societies and four paise by Government is being sanctioned. This amount is separately credited in a bank and temporary advance which are recoverable can be sanctioned to the members in times of emergency. Every year an expenditure of Rs. 50,000 was being incurred in implementing this scheme. So far only 23 societies have been covered under the scheme. Even in these societies only limited number of weavers have been admitted. In order to expand the activities under this scheme an amount of Rs. 5.31 lakhs is provided in the Fourth Plan, out of which Rs. 1.95 lakhs will be spent in Telangana.

(g) *Housing Colonies*.—While tackling the technical and economic problems of the handloom industry Government have not overlooked the need for improving the living conditions of the weavers. The Government have sponsored a number of housing schemes for the benefit of the weavers. Under this scheme, 2/3rd of the cost of the house will be given as loan and the balance as grant. The amount of assistance will have to be released in instalments with reference to the progress in construction work. A provision of Rs. 7.66 lakhs has been made for the purpose in this Fourth Plan for the State as a whole out of this a sum of Rs. 3.88 lakhs will be spent in Telangana.

State participation in Co-operative Spinning Mills:

The main raw material of the handloom industry is cotton yarn. With a view to supplying yarn of good quality at reasonable prices, Government have sanctioned the establishment of Co-operative Spinning Mills in the State. The Industrial Finance Corporation while sanctioning working capital loans to the Co-operative Spinning Mills stipulated that they can draw the funds with reference to share capital collected by them. The Spinning Mills could not collect adequate share capital so as to draw the funds sanctioned by the Industrial Finance Corporation to the full extent. To enable the spinning mills to draw the funds from the Industrial Finance Corporation, assistance by way of share capital contribution is being sanctioned to these mills. A provision of Rs. 12.50 lakhs is made under this scheme in the Fourth Plan. Of this, an amount of Rs. 4.16 lakhs will be spent for Telangana.

(i) *Wool Technical Schemes.*—In Telangana nad Rayalaseema areas, about 80 lakhs lbs., of wool is produced, bulk of which is generally exported to States like Punjab where it is mixed with finer varieties of wool for being spun into yarn. On account of the export of wool to other States, the wool weavers in the State have not been able to find work throughout the year. The woolen fabrics being produced have also not been able to find a market. To enable the wool weavers to earn better wages and ameliorate thier economic conditions it is proposed to set up a wool spinning plant in Mahbubnagar. Besides the above working capital loans will be sanctioned to the Apex and Primary Wool Weavers Co-operative Societies. A provision of Rs. 8 lakhs is made in the plan for this scheme out of which Rs. 7 lakhs is for Telangana.

17. MINERAL DEVELOPMENT

17.1. The Telangana region is fairly rich in minerals, the most important of which is coal. Other minerals found are iron ore, limestone, quartz, clays, barytes, manganese and graphite. The estimated reserves and production of the principal minerals are as follows:—

	<i>Estimated reserves (in million tons)</i>	<i>Production (in 000) tonnes)</i>
		1969-70
1. Coal	3,000	3,700.00
2. Iron Ore	48.02	10.78
3. Clays	5.2	3.07
4. Graphite	Not estimated	0.48
5. Limestone	5.67	471.34
6. Quartz	7.8	1.14
7. Baryates	0.07	0.65
8. Manganese	Not estimated	1.46

It is thus seen that considerable gaps exist between the availability of minerals reserves and their actual exploitation.

17.2. A brief description of the important minerals is given in the following paragraphs.

Coal:

Coal occurs in the region in a broad belt along the Godavari basin, covering parts of Adilabad, Karimnagar Warangal and Khammam Districts. It is now mined at Kothagudem and Yellandu in Khammam District, Ramagundam in Karimnagar District and Ramakrishnapur and Bellampalli in Adilabad District. The production of coal in the year 1969-70 was 3,700 lakh tonnes, valued at Rs. 14.22 crores.

Iron Ore:

High-grade iron-ores, combined with low-grade ores, are found in Khammam and Warangal districts.

Iron ore also occurs in Karimnagar and Adilabad districts. But these ores are of low grade. Nearly one fourth of the iron ore mined in the State comes from Khammam district. The production of iron ore in 1969-70 was 10,788 tonnes valued at Rs. 80,000.

Clay:

Good quality clays, useful as ceramic raw material, are found in Adilabad district. Clay also occurs in Nalgonda, Mahbubnagar and Medak districts. The production of clays in the Region in 1969-70 was 3,070 tonnes, valued at Rs. 30,000.

Graphite:

Graphite occurs in Kothagudem and Bhadrachalam taluks in Khammam district. Mining is presently going on at Jeediguppa, Kaltunuru and Kaverigundla. Graphite finds extensive use in the manufacture of crucibles and as dry lubricant and as an electrical conductor. Graphite also finds application in dry batteries, paints and pencils. The production of graphite during the year 1969-70 was 483.5 tonnes, valued at Rs. 7.24 lakhs.

Limestone:

Cement-grade limestone deposits occur in parts of Adilabad, Karimnagar, Hyderabad, Nalgonda and Mahabubnagar districts. The limestones of Mancherial (Adilabad) are noted for their extensive use in cement industry. Also, flux grade limestone for use in steel metallurgy and high grade limestone suitable for manufacture of chemicals, paper and sugar and allied industries is found at Ara in Adilabad. The production during the year 1969-70 was 4.71 lakh tonnes, valued at Rs. 21.20 lakhs.

Quartz:

Quartz of high chemical purity is found in and around Hyderabad city, and some of it, which is of an exceptionally fine grade, can be used even in optical glass manufacture.

17.3. The other minerals of Telangana region, though not found in good quantity, are mica, soapstone, garnet and chromite.

17.4. During the Third Plan period, greater emphasis was laid on mineral surveys to facilitate prospecting and exploratory work and for expansion of the chemical laboratory. The total expenditure incurred during the Third Plan under the scheme: 'Mineral Development' in Telangana region was Rs. 1.65 lakhs.

17.5. No expenditure was incurred on plan schemes during the year 1966-67. During the year 1967-68 and 1968-69 the expenditure incurred was Rs. 0.36 lakh and Rs. 0.67 lakh respectively.

17.6. In view of the changing economics and improving technological advances, several mineral occurrences hitherto considered poor now deserve reassessment both in respect of quality and quantity. Besides proving new deposits, even those deposits about which a general idea is available will have to be explored in detail to ensure conservation of better quality material and for its proper utilisation in specific industries.

17.7. The stress has also shifted to the quality control of different raw materials. The ores are not uniformly good and some of them might need beneficiation for use in the industry or export. It is in this context that intensified mineral exploration programmes will have to be taken up in the State. Survey and prospecting and systematic sub-surface studies are necessary to determine the extent of deposits on the surface and at depths and their variations in quality. Trenching and pitting, as well as exploratory drilling, are essential for this. As the mineral-bearing areas in the Telangana region are very large and the demand for minerals from the industrial sector is growing considerably, a programme of mineral exploration should be drawn up to explore fully the potentialities of mineral occurrences which would facilitate drawing up plans for exploration and thus ensure systematic development of the deposits. Having the above strategy in view, an outlay of Rs. 4.67 lakhs has been provided for the Telangana Region in the Fourth

Five-Year Plan for taking up the schemes of mineral development. It may be pointed out here that this allotment of Rs. 4.67 lakhs is out of a total amount of Rs. 14.01 lakhs provided for State-wide scheme for the State as a whole. The scheme-wise breakup of the allocation is Rs. 4.01 lakhs for intensification of Mineral Surveys and Rs. 0.59 lakh for co-ordination and research work.

17.8. No provision has been made under regional scheme in Telangana.

17.9. 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. In the three Annual Plans 1966-69, a further sum of Rs. 37.00 lakhs was invested by the State Government in the equity share capital of the Corporation, the Telangana share being Rs. 9.13 lakhs.

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

17.11. The investment of the State Government in the Andhra Pradesh Mining Corporation during the Fourth Plan period will be Rs. 51.15 lakhs. The share of Telangana region in this outlay will be Rs. 20.03 lakhs.

17.12. Under the perspective plan the Corporation has prepared the following schemes to be taken up in Telangana region.

Fibre Glass:

17.12. The Corporation is having two mining leases for quartz in Choulpalle and Elkatta near Shadnagar, Mahabubnagar district. The quartz mined presently is being used for processing into glass sand, foundry sand and for use in the manufacture of asbestos

cement products as a filler. The monthly production is 1,500 tonnes and it has got capacity to produce 4,000 tonnes a month.

17.14. Before the Corporation takes it, it was decided to obtain a feasibility report which is estimated to cost Rs. 50,000 from a Consultancy organisation. If the proposal is found feasible a unit for manufacture of fibre glass can be set up.

Class Sand:

17.15. The Corporation is presently engaged in mining of quartz and processing of the same to glass sand near Shadnagar, Mahabubnagar district. The present production is of the order of 9,000 tonnes per annum valued at Rs. 5 lakhs. The quartz deposits occurring in and around Hyderabad and Mahbubnagar districts are known to be of a very superior quality and glass sand processed out of this has a great demand particularly from the South and West-Indian markets where major glass factories are located. The proposal for expansion of the glass sand processing unit from 9,000 tonnes per annum to 30,000 tonnes per annum is under consideration. The value of the increased production is estimated to be Rs. 16 lakhs. The expansion programme would cost an additional investment of Rs. 10 lakhs in civil construction and equipment.

Copper Mining and Copper-based Industry:

17.16. It is proposed that a detailed feasibility study be made through a consultancy organisation about the utilisation of the ore in manufacture of copper based chemicals. This is estimated to cost Rs. 50,000 and a report would be available within 6 months from the date of appointment of the consultants. The study would be in the nature of promotional work.

17.17. If the proposal is found feasible, a mining unit and a concentrator will be considered at a capital cost of Rs. 50 lakhs. Based on the mine, a unit for manufacture of copper based chemicals of import substitution value will be worked out.

Quartz for Manufacture of Ferro-Silican :

17.18. M/s. Hyderabad Tools Ltd., Hyderabad have a proposal for setting up of a Ferro Silican Plant near Kothagudem. One of the important raw materials in the manufacture of ferro silican is quartz and the company's requirements would be 20,000 tons per annum from about middle of 1972. The Corporation has an area near Pocharam about 35 miles from Kothagudem in Khammam district where quartz of the required specifications is available along with the barytes. The company has already been requested formally to enter into an advance contract with the Corporation for supply of this raw material. It is estimated that capital investment for civil construction and equipment would Rs. 2 lakhs.

18. ROADS AND ROAD TRANSPORT

18.1. The important of roads and road transport for the economic development of Telangana region needs no emphasis. There are vast areas still undeveloped for want of communication facilities. Even the areas with rich mineral and forest resources and potentialities for industrial development are not having good communication facilities. At the time of formation of Andhra Pradesh the Telangana region was relatively much more backward in road communications. Significant progress has been achieved in increasing the road length through concredited efforts made during the second and third plans and the subsequent Annual Plans 1966-69. However, the length of surfaced roads in the region is still proportionately less than that in the rest of the State.

Objectives and Strategy :

18.2. The Fourth Plan objectives are to:

- (a) Complete important spill-over schemes relating to arterial roads which are mostly in the nature of improvements to the existing surface and construction of bridges at crucial points;
- (b) Take up important arterial roads and construction of bridges at the important missing links;
- (c) Ensure full utilisation of Central Sector schemes under National Highways;
- (d) Complete the rural road works already started to enable connecting the villages with Market Centres effectively;; and
- (e) Improve the services provided by the Andhra Pradesh Road Transport Corporation, for passenger traffic.

Review :

18.3. The total Third Plan expenditure under this sector was Rs. 941.27 lakhs while the expenditure

incurred during the subsequent three Annual Plans was Rs. 359.17 lakhs in the region towards the improvement of communication facilities. The length of roads maintained by all agencies in the region was 20,359 Kms., at the end of 1968-69 forming about 37.5 per cent of the total road length in the State. But the proportion of unsurfaced roads is more in Telangana region compared to the rest of the State as shown below:

<i>Road length in Km</i>			
Region	Surfaced	Unsurfaced	Total
Andhra	25,227	8,645	33,872
Telangana	9,428	10,931	20,359
	34,655	19,576	54,231

18.4. The road length per lakh population works out to 129 Kms., in Telangana against 123 Kms. in Andhra region. But in terms of road length available per thousand square Kms., Andhra region fares better with 212 Kms., as compared to Telangana with 177 Kms., of roads.

18.5. The Telangana region is an extensive plateau with highly terrain over large areas. There are numerous nullahs and streamlets traversing the area and whenever there is heavy rainfall, breaches occur to the causeways, culverts and bridges. Though there are good road communications connecting district headquarters and major taluk headquarters, there are wide gaps in the net work of rural roads. So, removing of certain bottlenecks, taking up a few arterial roads and roads connecting the villages with Market Centres is essential. These aspects are also taken into consideration while drawing up the road programme for Fourth Plan.

Fourth Plan Programme :

18.6. About 44 per cent of the allocation under Roads in the Plan is earmarked for spill-over commitments.

18.7. In the State's Fourth Plan, an amount of Rs. 1,268.84 lakhs is provided for Roads. Out of this, the provision for Telangana is Rs. 250.80 lakhs. The

proportionately larger allocation for roads in the Andhra region is due to the commitment for Road-cum-Rail bridge across river Godavari at Rajahmundry for which an amount of Rs. 426.25 lakhs has to be provided in the Fourth Plan towards State's share on this scheme.

18.8. The allocation for Roads in the Fourth Plan is low but this has become unavoidable due to the overall priorities and the heavy commitments under other sectors. In view of the importance of this sector for the region this allocation has been substantially augmented by an allocation of Rs. 5.83 crores from the Special Development funds for Telangana. The Plan allocation in this sector is also likely to be supplemented by increased allocations available under National Highways and by provision of additional funds for it by local bodies and under the Rural Works Programme.

18.9. Out of the provision for Roads in Telangana Rs. 234.45 lakhs is earmarked for the road works proposed by the Chief Engineer (Roads and Buildings) and the balance for those to be implemented by the Chief Engineer (Panchayati Raj). Of the provision made for the Chief Engineer (Roads and Buildings) again, Rs. 109.92 lakhs is meant for the spill-over works which were started but could not be completed during the Third Plan and subsequent Annual Plans due to paucity of funds.

18.10. Important road schemes among these are:—

- (i) Improvements to Secunderabad—Kukatpally road.
- (ii) Formation of road between Burgampad and Eturnagaram.
- (iii) Improvements to Veligonda—Thorur road.
- (iv) Formation of road between Nimmikal and Dantalapalli.
- (v) Formation of road from Utnur to Indanapalli; and
- (vi) Formation of road from Nagarkurnool to Kollapur.

18.11. There are also several bridge works among spill-over schemes viz.:—

- (i) Bridge across river Sabari on Maredumilli—Chintur Road;
- (ii) Bridge across Manair river on Venkatapur—Mahadevpur Road;
- (iii) Bridge across Manjira river on Bichkonda—Bansawada Road; and
- (iv) Bridge across Kadam river at Pembli and a bridge across Palakeruvagu.

18.12. From among the new schemes proposed, there is a State-wide scheme meant for the purchase of machinery and equipment. The share of Telangana in the cost of this scheme will be Rs. 14.77 lakhs.

18.13. Besides the above State-wide scheme, the following are important new improvement works proposed to be taken up in the Telangan region.

1. *Improvements to Hyderabad—Nagarjunasagar Road.*—This is an important Major District Road connecting Hyderabad with Nagarjunasagar Project. Because of the tourist importance of the Nagarjunasagar Dam and its Island Museum, the traffic on this road has increased considerably. The road is sinking due to inadequate crust. It is proposed to improve the existing road for about 3 miles in this Plan period at a cost of Rs. 1.00 lakh. The approximate total cost of the scheme is Rs. 52 lakhs.

2. *Improvements to Peddavooru—Miryalguda Road.*—This serves as an important link between N.H.9 and Hyderabad—Nagarjunasagar road and incidentally serves the Ayacut area of Nagarjunasagar. It is proposed to improve the existing road by suitably strengthening the crust to improve the marketing facilities for the produce in the Nagarjunasagar Ayacut area. It is proposed to improve the road for about 7 miles at a cost of Rs. 4.93 lakhs in the Fourth Plan. The total cost of the scheme is estimated to be Rs. 20.00 lakhs.

3. *Improvement to Nakarkallu—Wazirabad Road.* This is also an important link road connecting

National Highway 9 passing through the Ayacut areas of Nagarjunasagar. It is proposed to strengthen the existing crust, so as to improve the marketing facilities for the produce in the Nagarjunasagar Ayacut area. The approximate cost of the scheme is Rs. 20 lakhs. It is proposed to improve about 7 miles of this road by Fourth Plan end at a cost of Rs. 4.65 lakhs.

4. *Improvements to dips on Karimnagar—Luxettipet Road.*—This is a very important State Highway connecting Karimnagar with Chanda of Maharashtra via, Mancherial, a growing industrial centre. There are several dips on this road, which are causing inconvenience to traffic during rainy season. It is therefore, proposed to construct culverts and small bridges on this road. The approximate cost of the scheme is Rs. 15 lakhs. An amount of Rs. 1.00 lakh is provided in this Plan.

5. *Improvements to Sangareddy—Toopran Road.*—This is an important link road connecting National Highway 7 and National Highway 9 and several villages enroute. The existing road has to be improved to cater to the needs of future traffic plying on this road. It is proposed to improve about 6 miles of the road at a cost of Rs. 6.04 lakhs. The total cost of the scheme is Rs. 22.00 lakhs.

18.14. More important among other new works proposed are:—

- (i) Upgrading of Karimnagar—Venkatapur road;
- (ii) Upgrading of Mustabad—Siddipet road;
- (iii) Construction of cross-drainage works on Jangoan—Duddeda road;
- (iv) Upgrading of Narasampet—Mallampalli road;
- (v) Upgrading of Nellikuduru—Kesamudram road;
- (vi) Construction of high level cause-way across Phulong river and improvements to Navipet—Nandipet road;
- (vii) Metalling of Thakkadapalli—Juckal road;

- (viii) Improvements to Medak—Budamatpalli road;
- (ix) Construction of road from Jawala to Sonari *via.*, Tanuru; and
- (x) Metalling the balance portion and block topping of Makthal—Narayanapet road.

18.15. In addition to the road works that will be implemented by the Chief Engineer (R&B) an amount of Rs. 16.35 lakhs is provided to cover the spill-over commitment on the road works undertaken by the Chief Engineer (Panchayati Raj)

Special Development Programme :

18.16. An amount of Rs. 5.83 crores will be available for construction of roads under the Special Development Programme over the Fourth Plan period. Out of this, Rs. 5.07 crores have been earmarked for the road works of the Panchayati Raj Institutions. Out of the balance amount, Rs. 74.37 lakhs will be spent on Public Works Department road works and Rs. 1.00 lakh is for Kagaznagar Municipality road works for construction of internal roads.

Roads (Panchayati Raj):

18.17. In 1961-62 the Andhra Pradesh Regional Committee had prepared a programme of road works at the rate of Rs. 75 lakhs per Zilla Parishad. The number of road works taken up was 1,404 at an estimated cost of Rs. 727.34 lakhs. Out of these, 590 road works were completed by the end of March, 1969 leaving 814 as spill-over works. The total expenditure incurred upto the end of March, 1969 was Rs. 563.73 lakhs. The amount yet required over and above the expenditure incurred upto 31st March, 1969 to bring all the spill-over road works to a traffic-worthy condition was Rs. 843.34 lakhs. The provision in the Fourth Plan of Rs. 16.35 lakhs is not sufficient to meet a requirement of this order.

18.18. In 1969-70, it was decided by the Andhra Pradesh Regional Committee that no new works should be taken up in the Fourth Plan period and that the

spill-over works should be completed in the first instance in the following manner:—

- (i) Cross drainage works should be completed on the already formed roads from special funds;
- (ii) The incomplete formation of a road taken up from special funds should be completed to the next village and the gaps filled up; and
- (iii) Metalling work to be taken up on the roads already formed where it is essential i.e., in black cotton soil tracts etc., where without metalling the roads will not be fit for use even by carts.

With the provision made from the Special Development Programme, it is expected that all the above spill-over works will be completed by the end of the Fourth Plan period, involving the formation of 567 miles of new roads, 1,237 miles of metalling and 3,090 cross drainage works.

Roads (Public Works Department):

18.19. The Andhra Pradesh Regional Committee had originally approved a programme of Public Works Department roads costing Rs. 491.76 lakhs which was subsequently revised to Rs. 566.38 lakhs. Out of this, the expenditure incurred upto the end of March, 1969 was Rs. 471.13 lakhs. The amount required for completing the spill-over works in the Fourth Plan is Rs. 95.25 lakhs.

18.20. The Andhra Pradesh Regional Committee provided Rs. 74.37 lakhs for the Public Works Department roads with the stipulation that all the spill-over works in Public Works Department should be completed during the Plan period meeting the balance requirements from the Normal Plan Funds.

Road Transport:

18.21. An amount of Rs. 2.85 crores is provided in the Fourth Plan towards loan assistance to the Andhra Pradesh Road Transport Corporation for the purchase of passenger vehicles, equipment etc. Of this provision Telangana's share will be Rs. 0.96 crore which is meant for improving the mobility of passenger traffic in the twin cities of Hyderabad and in other areas of operation of the Corporation.

19. GENERAL EDUCATION

19.7. Education is necessary for promoting social change and economic growth as well. It secures returns in the form of skilled manpower geared to the needs of development and also creates the right attitudes and climate for development.

19.2. As regards educational facilities and enrolment, Andhra Pradesh State itself is backward as compared to other States. Within the State again, Telangana region is backward as compared to the other two regions of the State both in regard to educational facilities and percentage enrolment in various school age groups. The total number of schools in Telangana in 1968-69 was 12,929 as against 42,475 in the State as a whole. In the same year the enrolment of children in class I—V formed only 51.3 per cent to the population in the corresponding age group as compared to 86.9 per cent in Coastal Andhra and 78.6 per cent in Rayalaseema. Similarly, the percentage enrolment of children in class VI to VIII in the region was only 22.8 against 26.4 in Coastal Andhra and 24.5 in Rayalaseema. But the position of Telangana regarding enrolment in higher classes *viz.*, IX to XI was better with 13.1 per cent than Rayalaseema with 11.3 per cent and was nearer to Coastal Andhra with 13.4 per cent. It is of interest to note that the disparity in the enrolment of children between Telangana and other regions is higher than that in the number of institutions. Hence the programmes for increasing the enrolment in the existing institutions should be given priority over that of increasing the number of institutions. This will enable the fuller utilisation of facilities and reduce wastages.

Objectives and Strategy:

19.3. The objectives of Fourth Plan Programmes are:—

- (i) to increase the percentage enrolment both in the primary and secondary schools through the provision of facilities like buildings and equipment and upgrading of upper primary schools to High School and particularly, at

the primary level through the provision of better quality mid-day meals by way of establishing Central Kitchens;

- (ii) to improve the standards of education and discipline by strengthening and upgrading the staff selectively;
- (iii) to introduce a revised pattern of education through introduction of an Intermediate Course involving establishment of a number of Junior Colleges with a view to provide higher standards of general education dispersed over a wider area;
- (iv) to open new Colleges and next higher classes in the existing colleges and to provide buildings where necessary;
- (v) to strengthen the existing Post-Graduate Centre at Warangal and start Post-Graduate Course in a few Government Colleges; and
- (vi) to increase the supply of trained Teachers by maintaining additional Training Colleges, strengthening the Government Colleges of education and deputation of teachers in service for training.

Review :

19.4. The total Third Plan outlay on educational programmes in the region was Rs. 8.36 crores as against Rs. 17.97 crores for the State as a whole. During the subsequent three Annual Plans, the expenditure incurred was Rs. 2.03 crores out of the total expenditure of Rs. 5.39 crores incurred in the State as a whole. The outlay on educational programmes during the earlier plans had resulted in a substantial growth in the number of educational institutions in the region.

19.5. The number of Primary Schools increased from 7,684 in 1956-57 to 10,572 in 1968-69 or an increase by 37.7 per cent while the enrolment in these schools increased from 5.0 lakhs to 5.7 lakhs or by 14.0 per cent during the corresponding period. The middle/upper primary schools increased from 169 in 1956-57 to 1,166 in 1968-69 or by more than six times while

the enrolment in these schools increased from 66.7 thousands to 262.6 thousands or by about three times. The number of high schools in the region increased from 105 in 1956-57 to 1,191 in 1968-69, while the enrolment rose from 82.1 thousands to 5.02 lakhs. In spite of this sizeable increase in the educational institutions, the region still lags behind the other two regions of the State. A recent study conducted by the State Bureau of Economics and Statistics revealed that a majority of the children enrolled in Ist standard discontinued their studies before they completed their primary standards.

Fourth Plan Programmes :

19.6. In view of the above position, greater emphasis is given in the State's Fourth Plan to expansion of educational facilities in Telangana region. The Fourth Plan educational programmes in the region cost Rs. 764.34 lakhs as against R. 1,670.05 lakhs for the State as a whole. In Telangana region's Education Programmes, highest priority is accorded to Elementary education, for which, an amount of R. 262.49 lakhs is provided. Next in the order of importance are Junior Colleges (Rs. 187.14 lakhs), Secondary education (Rs. 131.31 lakhs) and Higher education (Rs. 117.17 lakhs).

19.7. The programme-wise break-up of Fourth Plan provision in the Telangana region *vis-a-vis* the other two regions of the State is as follows:—

Programme	(Rs. in lakhs)			
	Coastal Andhra	Rayala-seema	Telangana	Andhra Pradesh
I. State-wide schemes	32.79	24.06	23.40	70.25
II. Regional schemes :				
(a) Elementary Education	187.45	19.99	262.49	569.93
(b) Secondary Education	96.95	37.34	131.31	265.00
(c) Junior Colleges	107.15	58.28	187.14	352.57
(d) Higher Education	148.01	76.51	117.17	341.69
(e) Teachers Training	9.32	5.05	33.36	47.76
(f) Other Educational Schemes	8.48	4.33	9.47	22.28
Total Regional Schemes	557.36	301.50	740.94	1599.80
Grand Total	590.15	315.56	764.34	1670.05

State-wide Schemes:

19.8. All the State-wide schemes come under the category of "Other educational schemes" of which the region's share works out to Rs. 23.40 lakhs. The schemes included are maintenance of, Telugu Academy strengthening the Departments of State Council for Educational Research and Training for improving the quality of education in schools, State-level student festivals, expansion of physical education facilities and strengthening of education machinery.

19.9. For Elementary Education in the Telangana region, an amount of Rs. 262.49 lakhs is provided. This includes Rs. 50.54 lakhs for appointment of additional teachers, Rs. 48.45 lakhs for conversion of Single Teacher Schools to Plural Teacher Schools, Rs. 29.00 lakhs for upgrading of primary schools to Upper-Primary Schools and Rs. 10.40 lakhs for appointment of Language Panidts and B.Ed., Head Masters by upgrading the Secondary Grade posts. Expansion and improvement of mid-day meals scheme accounts for Rs. 16.20 lakhs, in addition to the establishment of Central Kitchens for which Rs. 70.00 lakhs is provided. Supply of furniture and equipment (Rs. 9.50 lakhs) construction of school buildings (Rs. 10.00 lakhs) and establishment of District Institute for education (Rs. 22.50 lakhs) are the other major schemes included in the Plan.

10.19. In respect of Secondary Education, the total provision is Rs. 131.31 lakhs. For new schools, additional sections in existing schools and in upgrading of Primary Schools etc., an amount of Rs. 40.69 lakhs is provided. For upgrading posts, appointment of Language Pandits and certain other staff Rs. 40.30 lakhs is provided. For establishment of Residential Schools, Rs. 10.00 lakhs is provided. An amount of Rs. 29.01 lakhs is provided for the construction of school buildings and supply of books, furniture and equipment. The other items of importance are organising Science Teacher Workshops (Rs. 4.67 lakhs) and maintenance of extension service (Rs. 2.59 lakhs).

19.11. In respect of Junior Colleges, an amount of Rs. 187.14 lakhs is provided which includes Rs. 165.14

lakhs for running the Colleges, Rs. 15.00 lakhs for furniture and equipment and Rs. 5.00 lakhs for construction of buildings.

19.12. In respect of Higher Education, Rs. 117.17 lakhs is provided which includes Rs. 43.96 lakhs for buildings, and Rs. 30.15 lakhs as grants to University for Post-Graduate Centres, Rs. 8.00 lakhs for starting of Post-Graduate Courses in affiliated colleges and Rs. 23.17 lakhs for opening of new colleges and higher classes. For Teachers' training as much as Rs. 36.36 lakhs has been provided.

19.13. In physical terms, the percentages of enrolment in Classes I—V is expected to be 52.2 by the end of Fourth Plan as against 51.3 at the beginning of the Fourth Plan. In respect of classes VI to VIII the target at the end of Fourth Plan is 24.2 per cent as against 22.8 per cent in 1968-69. The enrolment for classes IX to XI is expected to increase from 11.3 per cent in 1968-69 to 13.2 per cent in 1973-74. The percentage of trained teachers both for Elementary and Secondary schools, is expected to increase by 100 per cent by the end of the Fourth Plan.

Special Development Programme :

19.14. In the Special Development Programme, an amount of Rs. 154.12 lakhs is provided for the schemes under education, the break-up of which is as follows:—

	<i>Amount Provided Rupees in lakhs</i>
(a) Zilla Parishad School buildings	... 105.79
(b) Buildings for private Colleges	... 20.00
(c) School buildings in Municipal areas	... 3.41
(d) Post-graduate courses of the teacher candidates at Osmania University	... 12.92
(e) Post-graduate Centre at Warangal	... 8.00
(f) Other Post-graduate Centres	... 2.00

(a) *Construction of Zilla Parishad School Buildings (Primary and Secondary):*

19.15. The Panchayati Raj Institutions had taken up earlier the construction of a number of school buildings but some of them remained incomplete on account of lack of funds. Therefore, in 1969-70, an amount of Rs. 103.10 lakhs was sanctioned as grant-in-aid to the Zilla Parishads for completion of such buildings, both primary and secondary, without any further commitment. The entire amount was spent and 458 school buildings were completed in all respects. In 1970-71 an amount of Rs. 2.69 lakhs was sanctioned to the Zilla Parishads for the completion of incomplete school buildings and hostels for girls.

(b) *Construction of College Buildings:*

19.16. Although a number of private and aided Degree Colleges were started in the mufasil areas in Telangana, the managements of these Institutions were not able to raise sufficient funds to construct pucca buildings for the colleges. Therefore, on the recommendation of the Andhra Pradesh Regional Committee, the Government had sanctioned an amount of Rs. 22 lakhs to 12 colleges in 1969-70 for construction of buildings. In Nizamabad, the State Government permitted the grant to be utilised for the construction of a hostel for the students of the Women's College, the lack of which was being acutely felt there.

(c) *School Buildings in Municipal Areas:*

19.17. In the municipal area of Khammam and Nizamabad, an amount of Rs. 1.76 lakhs and Rs. 1.65 lakhs respectively was spent in 1969-70 and 1970-71 for construction of Government school buildings. The amounts were spent in full and two schools at Khammam, seven at Nizamabad and the construction of additional classes at the Government High School, Nizamabad were completed.

(d) *Post-graduate Course for Teacher candidates in the Osmania University:*

19.18. An adequate number of local Post-graduates in the Physical Sciences were not available to man the Junior Colleges started in Telangana in 1970-71 and

also the Degree Colleges started earlier. To remedy this, the Andhra Pradesh Regional Committee had recommended, in consultation with the Osmania University, that an amount of Rs. 4 lakhs be made available to the Osmania University to start Post-graduate Courses in the physical sciences for the benefit of Graduate Teachers of Telangana region, who had put in not less than 5 years of service and were not more than 45 years of age. The Osmania University has to reimburse the grant to Government as soon as its financial position improves. The first batch of students had been admitted in 1970-71 in M.Sc., (previous) for physics and chemistry.

(e) *Post-graduate Centre, Warangal:*

19.19. There is only one University *viz.*, the Osmania University in the Telangana region at Hyderabad, started long ago, offering Post-graduate courses. Post-graduate courses were not started at other colleges in the region. To meet this need in 1967-68, a Post-graduate Centre was established at Warangal, which is rapidly assuming importance as the next biggest educational centre in Telangana. The intention of starting the Post-graduate centre is to convert it eventually into a full-fledged University. The Centre is jointly financed by the University Grants-Commission and the State Government, but on account of financial stringency adequate funds were not available for the building programme. On the recommendation of the Andhra Pradesh Regional Committee, a grant of Rs. 5 lakhs was sanctioned in 1971-72 for the construction of laboratory buildings. An amount of Rs. 3 lakhs has been provided for 1971-72 as recommended by the Andhra Pradesh Regional Committee.

(f) *Other Post-graduate Centres:*

19.20. Hyderabad and Warangal are the only two places where facilities for Post-graduate education are available in Telangana. With a view to extend these facilities to more centres, a provision of Rs. 2 lakhs has been made for 1971-72.

20. TECHNICAL EDUCATION

20.1. The primary aim of the schemes under technical education during the previous Plans had been to create adequate teaching facilities to meet the technical manpower requirements of the State and country. In order to achieve this aim, expansion of technical institutions was taken up in the Second and Third Five-Year Plans but the job opportunities for the technical personnel could not keep pace with the fast expansion of technical education with the result that a serious situation of unemployment of technical personnel was noticed after the Third Plan necessitating a curtailment of admission in degree and diploma institutions in certain courses. This aspect has been taken into account while drawing up the Fourth Plan wherein more emphasis will be laid on improving the quality and standards of technical education and of establishing facilities in lines for which such facilities are not at present available in the region.

20.2. The number of technical institutions and the intake capacity developed over the Plans in Telangana is as follows: —

Item	Unit	Position at the end of First Plan	Position at the end of Second Plan	Position at the end of Third Plan	Position at the beginning of the Fourth Plan
Degree Courses :					
(a) Institutions	No	1	2	3	3
(b) Intake capacity	No	200	460	785	580
Diploma level					
(a) Institutions	No	2	7	8	8
(b) Intake capacity	No	240	1070	1460	1270

20.3. In the Fourth Plan the outlay on schemes of Technical Education in Telangana region is Rs. 60.27 lakhs. Out of this, a sum of Rs. 14.88 lakhs is for State-wide schemes and Rs. 45.41 lakhs for regional schemes.

20.4. The programmes for Technical Education in the Fourth Plan aim at:—

- (t) Consolidation of the existing institutions and courses;

- (b) Quality improvement; and
- (c) Expansion of facilities mainly by diversification of sandwich courses and part-time courses.

Under the Fourth Plan, no new institution is proposed to be started at the degree level. The proposed expansion in intake capacity will be in the existing institutions only. At diploma level only 2 new institutions are proposed to be started and the intake capacity will be increased by 207.

Quality Improvement :

20.5. Quality improvement has been given top priority in the programmes of the Fourth Plan. The schemes proposed include curriculum development cells, practical training for staff, liaison with industries, permission to the teaching staff to have consultative practice with industries, permission to the professional engineers employed in industries to have free access to the libraries and teaching institutions, setting up of suitable machinery for establishing and maintaining liaison between industries and teaching institutions for surveying, planning and placement of teachers and students for practical training and for starting sandwich courses and part-time courses. Some of the schemes have already been put on ground.

Diversification of Courses :

20.6. The expansion of physical facilities proposed during the Fourth Plan is mainly by diversification of the diploma education. The State Government has constituted a Committee consisting of Industrialists, Principals of Polytechnics and Director of Technical Education to examine this question for the State as a whole and submit its recommendations to Government. The Committee's report is nearing completion and it would be possible to implement some of its recommendations from the academic year 1971-72 in both the regions i.e., Telangana and Andhra. Under the scheme of diversification of courses for chemical engineering, food technology, electronic communication and commercial practice are proposed to be started in the year

1971-72 mostly in the existing institutions of the Telangana region.

Sand-wich Part-time Courses :

20.7. A proposal to start for the first time sand-wich type of courses in electrical engineering and electronic engineering at the Government Polytechnic, Hyderabad under the INDO-USSR Credit Agreement of 1966 is under consideration as a fore-runner of these full time and short-term courses. The teachers who have to handle diploma courses are being deputed to U.S.S.R. for training under Russian Experts.

20.8. Part-time courses are at present offered at the Government Polytechnic, Hyderabad, in Telangana in Electrical, Mechanical and Civil Engineering, subjects. Additional units are proposed to be added to the existing three institutions during the year 1971-72 with an intake of 10.

20.9. Provision has also been made for opening such courses according to need in the later years of the Fourth Plan.

State-wide Schemes :

20.10. Out of the sum of Rs. 13.02 lakhs provided for State-wide schemes in Telangana, Rs. 2.97 lakhs will be spent on quality improvement schemes, Rs. 3.36 lakhs on Institute of Printing, Textile and leather etc. Technology Rs. 2.06 lakhs on Educational Administration, and Rs. 1.95 lakhs on part-time degree and diploma courses and correspondence courses and Rs. 1.93 lakhs for starting Central Institute of Commerce.

Regional Schemes :

20.11. The outlay provided for regional schemes of Telangana is Rs. 45.58 lakhs. Schemes having major share in the outlay are development of Degree Institution, (Nagarjunasagar Engineering College, Hyderabad) with an outlay of Rs. 19.85 lakhs, Sand-wich Polytechnic at Hyderabad with an outlay of Rs. 4.50 lakhs, Development of Polytechnics at a cost of Rs. 4.76

lakhs, strengthening the College of Fine Arts and Architecture, Hyderabad at a cost of Rs. 3.01 lakhs, strengthening the Government Music College, Secunderabad at a cost of Rs. 2.59 lakhs.

Physical Targets :

20.12. The physical targets of institutions and intake at degree and diploma level in Telangana region and in the State as a whole in the Fourth Plan are as follows:—

Item	1969-70		1973-74	
	Telan-gana	Andhra Pradesh	Telan-gana	Andhra Pradesh
1. Engineering College				
(a) No. of Institutions	3	7	3	7
(b) Intake capacity	580	1120	780	1740
2. Polytechnics :				
(a) No. of Institutions	8	22	10	17
(b) Intake capacity	1270	3273	1477	3893

21. MEDICAL SERVICES

21.1. The importance of providing efficient medical and health services for the well being of the people of the State needs no emphasis. The developmental activities in medical and health sector during the previous plans have resulted in a significant improvement of the standards of health in the State. The life expectancy in the State which was 37.8 and 36.0 years respectively for males and females during 1951-61 shown a marked increase to 54.3 and 53.1 years at present. This is obviously due to better medical and health services. Even so, excepting for the metropolitan city of Hyderabad, the medical services in the rest of the region, particularly in the rural areas, are very inadequate.

21.2. According to a survey conducted by the Planning and Co-operation Department in 1970, in the region as a whole, out of 10,278 inhabited villages, only 24.1 per cent have medical facility, either Government or private, located within the villages while another 33.9 per cent of the villages have this facility within a distance of five miles from the villages. The remaining 42 per cent of the villages are farther away from medical facility and out of them, as many as 16.4 per cent have this facility beyond 10 miles from the villages.

21.3. The villages with a larger population are somewhat better off in regard to medical facility than those with smaller population size. Thus while 69.6 per cent of the villages in the population size group 2,000 and above have medical facility, either Government or private, located within the village, the corresponding percentage is only 3.3 in villages of less than 200 population size group, 7.4 in those with 200—499 population, 16.2 in 500—999 population group and 36.5 in 1,000-1,999 population size group.

Objectives :

21.4. The objectives of the plan for the sector are :—

1. To expand medical services, particularly those serving the rural areas;

2. To strengthen the district and taluk head-quarter hospitals;
3. To provide specialised services in a decentralised manner so that a larger population could be served;
4. To strengthen teaching hospitals and expand the training programmes for medical and para medical personnel;
5. To expand the laboratory and diagnostic services; and
6. To give assistance to the Indian systems of medicine and Homeopathy.

MODERN MEDICINE :

Review :

21.5. During the Second and Third Plan periods the developmental activities in this sector were concentrated in the field of medical education by increasing intake capacity in medical colleges and creating adequate facilities for the training of para-medical personnel. Though considerable progress has been recorded in the field medical education there has not been equally good progress in the medical care at district and taluk levels.

21.6. The number of medical colleges, the admission capacity and the bed strength in Telangana region during the first three plans are given in the table below :—

<i>Item</i>	<i>Unit</i>	<i>Position at the end of Second Plan</i>	<i>Position at the end of Third Plan</i>	<i>Position at the beginning of the Fourth Plan (1969-70)</i>
Medical Colleges	No.	3	3	3
Intake capacity	No.	325	420	450
Bed strength	No.	6643	8459	9112

The total expenditure on this sector in the Third Plan for Telangana region was Rs. 235.56 lakhs and in the Annual Plans 1966-69 it was Rs. 65.18 lakhs.

Fourth Plan Programmes :

21.7. An amount of Rs. 130.73 lakhs has been provided for the development of modern medicine in Telangana region during the Fourth Plan. Out of the above provision, Rs. 5.73 lakhs is the share of Telangana region in the State-wide schemes and Rs. 125.60 lakhs for regional schemes.

21.8. During the Fourth Plan, it is proposed to lay greater stress on facilities for institutional and domiciliary services and treatment and training programme for medical and para-medical personnel. It is also envisaged to provide laboratory and diagnostic services and improve rural medical services.

21.9. All the taluk headquarters dispensaries are proposed to be upgraded by providing additional beds.

21.10. At the college of nursing, Hyderabad, 15 additional seats would be provided during the course of the fourth plan under the training programme of Pupil Nurses, Auxiliary Midwives and B.Sc., Health visitors.

State-wide Schemes :

21.11. Under State-wide schemes there is only one scheme of additional staff nurses with a cost of Rs. 18.62 lakhs of which the share of Telangana is Rs. 5.73 lakhs. Under this scheme, posts of additional staff nurses have been proposed to be created in teaching and district hospitals to meet the deficiency in accordance with the recommendations of the Central Council of Health and also the Indian Nursing Council.

Regional Schemes :

21.12. The regional schemes in Telangana have an outlay of Rs. 125.00 lakhs. It is proposed to spend Rs. 12.65 lakhs for the improvements to Gandhi Medical College, Rs. 12.90 lakhs on Gandhi Hospital, Rs. 10.50 lakhs on Osmania General Hospital, Rs. 58.30

lakhs on district and taluk headquarters' hospital, As. 6.79 lakhs on Osmania Medical College, Rs. 4.89 lakhs on E.N.T. Hospital and Rs. 3.70 lakhs for Mahatma Gandhi Memorial Hospital, Warangal. The other schemes included are establishment of dental clinics, eye clinics, blood banks and Central sterilisation units etc.

21.13. Certain important physical targets envisaged under medical services during the fourth plan for Telangana region and the State as a whole are given in the table below:—

Item	At the beginning of the Fourth Plan <i>i.e.</i> 1969-70		At the end of the Fourth Plan 1973-74	
	Telangana	Andhra Pradesh	Telan- gana	Andhra Pradesh
1. Seats in medical colleges	450	1150	450	1200
2. No. of hospital beds	9112	20025	9540	22061
3. Population per one hospital bed .. —	1762	2167	1676	1997
4. Population per one doctor	3740	4577	3600	4400
5. Population per one nurse	8553	9193	8500	9000

Special Development Programme :

21.14. An amount of Rs. 54.85 lakhs will be available for Medical schemes under Special Development Programme during the Fourth Plan period. In 1969-70 an amount of As. 1.75 lakhs was provided from Speacial Telangana Development Funds for construction of hospital buildings at Karimnagar (Rs. 1.00 lakh), Narsampet (Rs. 0.40 lakh) and Jangoan (Rs. 0.35 lakh). An additional amount of Rs. 0.56 lakh was provided during 1970-71 and the improvements to the hospital buildings in all the three places were completed.

21.15. During 1970-71 Rs. 11.38 lakhs was allotted for medical schemes including Rs. 0.92 lakh for hospital buildings taken up during 1969-70, and Rs. 1.40 lakhs for the homeopathiv hospital, Hyderabad. The

expenditure was Rs. 10.46 lakhs. Out of Rs. 2.50 lakhs provided for construction of the district head-quarters hospital buildings at Adilabad and Nizamabad and an hospital buildings at Adilabad and Nizamabad, an expenditure of Rs. 1.69 lakhs was incurred on the construction of materianity ward of district headquarters hospital, Nizamabad and an amount of Rs. 0.50 lakh was utilised for acquiring land for the district head-quarters hospital, Adilabad. An amount of Rs. 5.00 lakhs was released as grant for construction of hostel buildings for Kakatiya Medical College, Warangal and it was utilised by July, 1971 for construction of the Women's hostel, ground and first floor; Men's hostel ground floor and the kitchen block. An amount of Rs. 1.53 lakhs swas spent for the purchase of equipment for clinical, physiology and biochemistry departments at the Gandhi Medical College, Hyderabad.

21.16. For the year 1971-72, the Andhra Pradesh Regional Committee has approved a programme of Rs. 18.00 lakhs the break-up of which is as follows:—

Rupees in lakhs

1. Improvements and extensions to Taluk Hospitals ...	9.00
2. Construction of 30 bedded hospital buildings at Kalwakurthy (Mahboobnagar district) and Metpalli (Karimnagar district) ...	2.00
3. Construction of district head-quarters hospital buildings at Adilabad and Nizamabad ...	2.50
4. Construction of buildings for pharmaeology and pathology departments in Gandhi Medical College, Hyderabad ...	2.00
5. Construction of a new Annexe at ENT Hospital, Hyderabad ...	1.25
6. Construction of a out patient blocks in the Mahatma Gandhi Memorial Hospital, Warangal ...	1.25
Total ...	18.00

21.17. In regard to item 1 above the Andhra Pradesh Regional Committee has stipulated that the assistance from this programme be provided if local contributions to the extent of 25 per cent of the estimated cost are forthcoming. So far as the other schemes are concerned the Regional Committee has recommended that the Director of Medical and Health Services be asked to provide for the spill-over commitments from the normal plan provision of his department.

Indian Medicine and Homeopathy :

21.18. Ayurvedic, Unani, Homeopathy, Yoga and Naturopathy system of medicines are dealt with by the Director of Indian Medicine and Homeopathy. The primary objective of the development in this branch of development is provision of a number of dispensaries and necessary clinical training facilities for the students. Special emphasis is given to opening up of dispensaries in Telangana.

Review :

21.19. The main features of development activities specially in Ayurvedic and Unani system of medicines during the second and third five-year plans were opening of research wards, dispensaries, providing additional beds to the hospitals for clinical teaching, facilities to the students of ayurvedic and unani colleges.

21.20. The provision and expenditure for Telangana region and the State as a whole during the annual plans for 1966 to 1969 are given below :—

Year	Provision		<i>Rs in lakhs</i> Expenditure	
	Telangana	Andhra Pradesh	Telangana	Andhra Pradesh
	1966-67	2.34	3.00	0.43	0.99
1967-68	1.09	2.25	0.97	2.09
1968-69	0.99	2.20	1.01	2.14

Fourth Plan Programmes :

21.21. A sum of Rs. 9.26 lakhs has been provided for Telangana region out of the total outlay of Rs. 18.79

lakhs for development of different systems of medicines handled by the department of Indian Medicine and Homeopathy in the fourth plan. The share of Telangana in State-wide schemes is Rs. 0.09 lakh. The remaining amount of Rs. 3.19 lakhs is for regional scheme *i.e.*, opening of dispensaries of Indian medicine and homeopathy. It is proposed to open 8 dispensaries of indigenous system of medicine in the region.

22. PUBLIC HEALTH

22.1. The emphasis of the public health programmes was in the past essentially on the eradication of the more important epidemic or endemic diseases such as malaria, small pox etc. A new orientation is sought to be given in the Fourth Plan by emphasising the strengthening of permanent institutional arrangements in terms of primary health centres, analytical laboratories, production of vaccines and training programme for staff.

Fourth Plan Programmes :

22.2. A provision of Rs. 65.15 lakhs has been made for public health programmes in Fourth Five-Year Plan for Telangana region. The share of Telangana region in State-wide schemes is Rs. 13.80 lakhs and the provision for regional schemes is Rs. 51.35 lakhs.

State-wide Schemes :

22.3. Eight schemes have been proposed with an outlay of Rs. 42.25 lakhs for public health programmes out of the total outlay of Rs. 186.35 lakhs for the public health for the State as a whole. The share of Telangana region in the provision of Rs. 42.25 lakhs made for the State-wide schemes is Rs. 13.80 lakhs. The major schemes included are strengthening the State food and analytical laboratory at Institute of Preventive Medicine, Hyderabad, production of small pox freeze dried vaccine, staff scheme for strengthening of Directorate, immunisation programme with polio vaccine and training in Diploma in Public Health Course.

Regional Schemes :

22.4. A sum of Rs. 144.10 lakhs has been provided for regional schemes of public health programme for the State as a whole. Out of this the provision for Telangana Regional Schemes is Rs. 51.35 lakhs. Schemes having major share in outlay are strengthening of district offices with an outlay of Rs. 10.86 lakhs, building programmes for primary health centres at a cost of Rs. 6.82 lakhs, food and drugs schemes at a cost of Rs. 7.78 lakhs, opening of primary health centres at a cost of Rs. 3.44 lakhs and strengthening of State Health Transport Organisation at a cost of Rs. 4.71 lakhs.

Physical programme:

22.5. The training programme of auxiliary health personnel is proposed to be continued during the Fourth Plan also. During the year 1969-70, 4 officers from Telangana region out of the total of 12 officers for the State as a whole were deputed for training in Diploma in Public Health Course in Osmania Medical College, Hyderabad. The programme was discontinued in the year 1970-71. During the year 1971-72 it is proposed to start the course again.

22.6. The scheme of immunisation programme with polio vaccine envisages immunisation of children of the age-group of 0-5 years with polio vaccine. The scheme is proposed to be taken up in twin cities of Hyderabad and Secunderabad and in districts at block levels.

22.7. The State Food and Analytical Laboratory at Institute of Preventive Medicine, Hyderabad is proposed to be strengthened by providing additional equipment, chemicals and staff.

22.8. Under the regional schemes of Auxiliary and Health Personnel, a Sanitary Inspector's Course is proposed to be taken up at Gandhi Medical College with an intake capacity of 100 candidates.

22.9. The particulars of physical targets under certain important sectors of development under public health programme are as follows:—

S. No.	Scheme	Unit	Physical Targets during the Fourth Plan	
			Telangana	Andhra Pradesh
1.	Training of Auxiliary and Health Personnel			
	(a) officers	No.	9	28
	(b) Sanitary Inspectors	No.	500	1000
2.	Immunisation of children with Polio Vaccine, 0-5 age group	No. in lakhs	1.85	5.50
3.	School Health Services Children 6-16 age group	No. in lakhs	16.00	50.35
4.	Opening new primary Health Centres.	No.	12	39

23. URBAN WATER SUPPLY AND DRAINAGE

23.1. The Telangana region has one Corporation and 24 Municipalities. At the beginning of the Fourth Plan, only 12 of these Municipalities and the Corporation have protected water supply facilities. Even in the 12 Municipalities having protected water supply, this facility required improvement in 7 of them. Since provision of water supply and drainage facilities are the most essential civic amenities, it is necessary that all the Municipalities are covered with protected water supply schemes urgently.

Objectives :

23.2. The objectives of the Fourth Five-Year Plan under this sector are :

- (1) To cover all the Municipalities in this region with protected water supply schemes taking advantage of the Plan allocations as well as the institutional finances particularly from the Life Insurance Corporation; and
- (2) to augment the water supply potential in the twin cities by taking up the Manjira Water Supply Stage II Scheme.

Review :

23.3. During the Third Plan period, out of the amount of Rs. 10.25 crores spent on Urban Water Supply Schemes in the State, the amount spent in Telangana was Rs. 5.38 crores. Of this the amount spent on Manjira Water Supply Scheme Phase I alone was Rs. 4.18 crores. By the end of the Third Plan, 10 out of 24 Municipalities in the region were provided with protected water supply facilities. During the Annual Plans of 1966-67, 1967-68 and 1968-69, only spill-over schemes from Third Plan were in progress and no new schemes could be taken up as the outlay earmarked during the Annual Plans was not sufficient even to keep the tempo of progress on continuing schemes. However, the water supply schemes of Bhainsa and Sadasivpet were completed during 1968-69 with the funds provided from the special development programme in the region. Thus, by the end of

1968-69, 12 out of the 24 Municipalities were covered with protected water supply schemes. Of the remaining 12 Municipalities, one more Municipality, namely Zahirabad has been provided with protected water supply facilities during 1970-71 under the special development programme and 3 more Municipalities namely, Medak, Suryapet, and Nirmal are being provided outside the Plan sector.

Fourth Five-Year Plan Programmes :

23.4. An amount of Rs. 17.23 crores is provided in the Fourth Plan for Urban Water Supply and Drainage Schemes in the State. Out of this provision, the provision for the schemes in Telangana is Rs. 12.44 crores comprising Rs. 3.20 crores allotted to schemes to be implemented by Public Health Engineering Department and the balance of Rs. 9.24 crores for the Manjira Water Supply and Hyderabad Water Supply Improvement Schemes to be implemented by the Chief Engineer (Roads and Buildings). The break-up of this outlay is as follows:—

(Rs. in lakhs)

P.H. Engineering Department

1. Spill-over Water Supply Schemes.	56.50
2. Hyderabad Drainage Improvements.	99.18
3. New Water Supply Schemes.	164.32

R and B Department

4. Improvements to Hyderabad Water Works including Rajendranagar Water Supply Schemes.	150.97
5. Manjira Water Supply, Phase I.	61.58
6. Manjira Water Supply, Phase II.	711.00

Total. 1,243.55

23.5. For providing protected water supply in the remaining 8 Municipalities and for taking up Water Supply Improvements in 2 Municipalities viz., Bodhan and Adilabad an amount of Rs. 164.32 lakhs is provided in the Fourth Plan while an amount of Rs. 51.26

lakhs is expected to be available from the Special Development Programme as explained in detail in a latter para.

23.6. Full provision has thus been made for (1) 3 Spill-over Schemes (Warangal Water Supply Improvement, Khammam Water Supply Improvement and Remodelling Secunderabad Water Supply Scheme), (2) 8 New Water Supply Schemes (Gadwal, Narayanpet, Bhongir, Siddipet, Jagtial, Mancherial, Kagaznagar, and Jangaon), (3) 2 Water Supply Improvement Schemes (Bodhan and Adilabad). The amount left over after providing for the above schemes, is Rs. 99.18 lakhs which is allotted for taking up improvements to the existing Hyderabad Drainage System.

Chief Engineer (Roads and Buildings):

23.7. At present water is being supplied to the cities of Hyderabad and Secunderabad from Osmansagar system, Himayatsagar system and Manjira Water Supply Scheme, Phase I. The total supply potential available from the above three systems is of the order of 62.48 million gallons per day.

23.8. It is estimated that the demand for water in the Hyderabad Corporation area by 1981 would be to the tune of 95.50 million gallons per day for an anticipated population of 22.00 lakhs. It is proposed to meet the additional demand by executing Manjira Water Supply Scheme, Phase II, and by drawing an additional quantity of 5 million gallons per day from the Osmansagar reservoir by improvements to Hyderabad Water Works. The schemes included in the Fourth Plan are discussed below:

Improvements to Hyderabad Water Works:

23.9. To meet the immediate requirements of water for the twin cities during pre-Manjira Phase II period, it is proposed to draw an additional quantity of 5 million gallons of water per day from Osmansagar. The scheme consists of the following:—

(1) construction of R.C.C. intake well of 20 ft. internal diameter at Osmansagar;

(2) laying 33" diameter R.C.C. pipe line from intake well at Osmansagar to distribution chamber at Shaikpet, to carry 5 million gallons of raw water per day;

(3) laying 27" diameter R.C.C. pipe line from Shaikpet to Asifnagar filters to carry 5 million gallons of raw water per day;

(4) to lay a 24" diameter P.S.C. line for Asifnagar filter to Red Hills High Level Reservoir to carry 5 million gallons of treated water per day; and

(5) construction of additional filter beds at Asifnagar to treat 6 million gallons of raw water per day.

Manjira Water Supply Scheme, Phase I:

23.10. An amount of Rs. 62 lakhs is provided in the Fourth Plan for completing the Spill-over Works under Phase I of Manjira Water Supply Scheme.

Manjira Water Supply Scheme, Phase II:

23.11. Under Manjira Water Supply Scheme, Phase I a barrage was constructed across river Manjira. At present a quantity of 16 million gallons per day is being drawn through phase I pipe lines. It is proposed to draw the balance through Manjira Water Supply Scheme, Phase II. The scheme mainly consists of the following:—

(1) pumping main including pump houses, etc., to pump additional quantity of 33 million gallons of filtered water per day;

(2) treatment works near the barrage to treat 33 million gallons per day of raw water to yield 33 million gallons per day of filtered water;

(3) service reservoir at Hydernagar and Alwal of 5 million gallons per day capacity each; and

(4) gravity main and necessary distribution system.

23.12. The estimated cost of Manjira Water Supply Scheme, Phase II is Rs. 11.95 crores. However, an amount of Rs. 7.11 crores is provided in the Fourth

Plan. With this outlay, it is expected that the installation of pumping main, pumps and motors and treatment works will be completed by the end of the Plan and a portion of the filtered water will reach up to Lingampalli from where it can be supplied through the existing gravity main of Manjira Water Supply Scheme, Phase I. The Scheme is proposed to be completed in all respects in the Fifth Plan.

Special Development Programme :

23.13. An amount of Rs. 410.80 lakhs will be provided in the Special Development Programme for protected water supply schemes, the break-up of which is given below :

	<i>Amount provided (Rs. in lakhs)</i>
1. Protected Water Supply Schemes in the former 58 Town Committees	359.54
2. Water Supply Schemes in Municipalities	51.26
Total ...	410.80

Protected Water Supply Schemes in the 58 former Town Committees :

23.14. The Andhra Pradesh Regional Committee had sponsored in 1965-66 a comprehensive schemes for the supply of protected water in all the 58 former Town Committees which are now Gram Panchayats. The State Government sanctioned the scheme in January, 1965. Since detailed investigations of all the schemes would have taken some time, line estimates were prepared aggregating to Rs. 407.78 lakhs for which administrative sanction was given. After detailed investigation of 28 schemes the estimate was revised to Rs. 546.28 lakhs which is inclusive of 15½% charges to meet the expenditure on establishment, tools and plant, etc. After completion, 12½% of the total cost of a scheme including 15½% centage charges will be treated as loan to the Panchayat and the balance of 87½% will be treated as grant. After completion, the schemes will be handed over to the Panchayats which will execute an agreement bond

agreeing to maintain the scheme and repay the loan within a period of 30 years.

23.15. Till the end of 1968-69, 13 schemes were commissioned and an expenditure of Rs. 186.67 lakhs was incurred. The programme for the Fourth Plan period envisages the completion of all the 58 schemes at an estimated cost of Rs. 546.28 lakhs (Cumulative). In the current programme prepared for the utilisation of unutilised Telangana surpluses, an amount of Rs. 359.54 lakhs has been provided for these schemes. The Schemes have been so designed as to provide adequate water supply till 2,001 A.D. No provision has been made in the normal plan for these schemes since the entire expenditure is being met from the special funds.

Water Supply Schemes in Municipalities :

23.16. In the Telangana region there are 24 municipalities and one Corporation of which the Corporation and 13 Municipalities are covered with protected water supply schemes. The water supply schemes in 3 more municipalities viz., Medak, Suryapet and Nirmal are being executed outside the plan. The Medak water supply scheme is under execution with 75 per cent loan from Government whereas the water supply schemes of Nirmal and Suryapet are being executed with L.I.C. loan assistance and municipal contribution.

23.17. Out of 13 municipalities covered so far with protected water supply schemes, it is considered that the water supply position in 6 municipalities of Nalgonda, Sangareddy, Sadashivpet, Zaheerabad, Tandur, and Bhainsa is adequate and no further improvements to the already existing schemes are needed. The water supply schemes of the other 7 municipalities of Warangal, Khammam, Nizamabad, Bodhan, Adilabad, Karimnagar and Mahboobnagar require certain improvements to cater to the needs of the present population. The comprehensive water supply improvements scheme for Mahboobnagar town is deferred for the present due to paucity of funds. Regarding water supply improvements to Warangal town, Stage II-A of the scheme costing Rs. 40.78 lakhs was taken up with plan funds and envisages construction of 3 service reservoirs, conveying mains, distribution systems etc,

The cost of stage II-B of the scheme to tap water from Manair Dam to be constructed in Karimnagar district is estimated at Rs. 3.87 crores. But this will not be taken up in the Fourth Plan on account of lack of financial resources as well as the pending inter-state water dispute. It is also proposed to take up water supply improvement schemes of Karimnagar and Nizamabad Municipalities outside the plan in addition to water supply schemes of three municipalities viz., Medak, Suryapet and Nirmal which are already under execution. This leaves 8 Municipalities for which protected supply has to be provided for the first time.

23.18. According to the current pattern of financing of the water supply schemes by the L.I.C., the municipalities have to provide one-third cost of the scheme to be eligible for two-thirds loan from the L.I.C. But considering the weak financial position of the municipalities in the Telangana area, the Andhra Pradesh Regional Committee had recommended in 1969 that while they would provide half of the municipality contribution from the unutilised surpluses, the Government might provide the other half from the normal plan funds; otherwise they felt the municipalities might not be able to avail of the loan facilities extended by the L.I.C. An amount of Rs. 51.26 lakhs is provided under Special Development Programme for protected water supply schemes in Municipalities and with this outlay and the outlay made in the Fourth Plan, all the remaining 8 Municipalities will be provided with protected water supply by the end of the Fourth Plan, while improvements to the water supply in Adilabad and Bodhan will also be completed.

24. RURAL WATER SUPPLY

24.1. A survey conducted in the State at the beginning of the Third Plan has revealed that none of the villages in the Telangana region had adequate drinking water facilities. There were 16,887 villages and hamlets of which 13,490 villages and hamlets did not have even one good service for drinking water and rest 3,397 did not have adequate water from existing sources. Apart from this, some of the villages having some water sources have the problem of pollution of the source or the unsuitability of the water for drinking purposes. These villages have also to be provided for by transporting water from long distances through pipes after necessary treatment.

24.2. The problem of rural drinking water supply began receiving adequate attention only during the Third Five-Year Plan period. Since then, 9,035 villages and hamlets which did not have even one source of drinking water were provided with adequate sources of drinking water. Under the Protected Water Supply Scheme, 446 villages were selected for implementing the scheme. 139 villages were taken up for providing protected water and 79 schemes were completed upto 31st September, 1969.

The Fourth Plan: Rural Water Supply Scheme:

24.3. An amount of Rs. 148.05 lakhs were provided in the Fourth Plan for Rural water supply schemes for providing 3,569 villages, and hamlets with drinking water sources. Thus, 12,604 villages and hamlets would be provided with sufficient drinking water sources leaving 4,283 villages and hamlets to be provided with drinking water sources by the end of IV Plan.

Protected Water Supply Schemes:

24.4. An amount of Rs. 94.15 lakhs is provided for these schemes in Telangana. With this amount 69 spill-over schemes will be completed and 130 new schemes are proposed to be taken up during the Fourth Plan.

25. HOUSING

25.1. No reliable data is available about housing conditions in the Telangana region. However, it is common knowledge that the housing conditions in Telangana are not satisfactory both in rural and urban areas. It is observable that the investment in housing in rural areas is particularly low due to the low per capita rural income and savings. Though there is some housing activity available in urban areas, it is not commensurate with their growing needs.

25.2. Housing is one of the sector where private investment has a major role to play. Any significant improvement in the housing conditions could, therefore, be expected only with the general improvement of the economic conditions of the people and their savings capacity. The role of Government is relatively restricted to making necessary provisions for attracting Institutional finance, particularly from Life Insurance Corporation and the construction of houses or giving loan assistance for house construction of weaker sections of the community.

25.3. The villages in the Telangana region require a layout to be prepared according to model designs keeping in view their growth potential. These layout plans have to be implemented by providing basic amenities, such as water and sanitation facilities, and formation of streets. Private building and renewal activity has to be stimulated through co-operative effort. House sites have to be allotted to weaker sections of the society and they should be assisted for constructing their own houses. Special housing schemes in favour of scheduled castes and other backward areas should be integrated into the village lay-outs.

25.4. Several of the urban areas in Telangana region are also growing rapidly due to growing investment in other production sectors like commerce and industries. The urban areas particularly in newly irrigated areas under Nagarjunasagar project and Pochampad project are likely to receive new impetus for growth due to changed economic base of their hinterland areas. Hyderabad metropolitan area and its suburbs are already experiencing the ill effects of rapid growth on housing and other sanitary facilities.

Objectives and Strategy:

25.5. Keeping in view the housing requirements of the rapidly growing urban areas in the region and the need for general improvement of housing facilities in the region as a whole, the following objectives for housing programmes in the region are formulated. The objectives are—

(i) Improvement of the housing and sanitary conditions in rapidly growing urban areas by (1) assisting low income groups and industrial workers in urban areas by loan assistance and sale of ready made houses on hire-purchase terms, (2) taking up slum clearance work;

(ii) providing house sites and housing facilities in the rural areas particularly to scheduled castes and tribes; and

(iii) stimulating development of selected village as per planned layouts by providing assistance for house building and other sanitary facilities.

25.6. The above objectives are sought to be achieved by (1) giving loans to co-operative house building societies through a federation of these societies in the State, (2) constructing flats for slum dwellers in the urban areas, (3) construction of houses for low and middle income groups by the Andhra Pradesh Housing Board for sale on hire-purchase terms, and (4) special programmes for provision of house sites and houses for scheduled castes and tribes.

25.7. Most of the investment required for achieving the above objectives is expected to come from institutional finance outside the Plan. Thus the effort for providing housing in the Plan is only partial and a number of other institutions like State Housing Federation, Scheduled Castes and Scheduled Tribes Housing Federation and State Housing Board are likely to pay a major role.

Review:

25.8. The State Government have constituted Andhra Pradesh Housing Board, replacing the previous

City Improvement Board of Hyderabad, with wider powers and jurisdiction. Though the Board has mainly attended to construction of houses to low income group for sale on hire purchase terms in Hyderabad city, considerable expenditure was also incurred on slum clearance schemes in Hyderabad. The Housing Board has spent so far Rs. 33.90 lakhs on low income group housing and Rs. 1.71 lakhs on slum clearance in Hyderabad city from State Plan funds in the Third Five-Year Plan and subsequent annual plans upto 1968-69. Hyderabad Municipal Corporation has also incurred about Rs. 61.33 lakhs during the Third Five-Year Plan and subsequent annual plans upto 1968-69 on slum clearance schemes. Besides this, the Commissioner of Labour has spent Rs. 61.33 lakhs on housing for industrial labour. In other urban towns, Director Municipal Administration incurred an expenditure of Rs. 9.67 lakhs.

25.9. Rural housing project was taken up by the Director of Town Planning to develop selected villages in a planned manner by providing housing and other amenities. 198 villages were selected for implementing the scheme. So far, an expenditure of Rs. 2.48 lakhs was incurred in 103 villages, where 2,161 houses were constructed, 7.14 K.Ms., of streets were formed and 3.06 K.Ms. of drains were constructed.

25.10. Thus the total expenditure incurred on housing in Telangana in the period 1961-69 is nearly Rs. 190.35 lakhs which is the highest among the three regions. However, it may be noted that most of the expenditure incurred was only in Hyderabad City.

Fourth Plan Programmes :

25.11. An amount of Rs. 293.16 lakhs is provided for Telangana region for housing schemes in the Fourth Plan. Of this, an amount of Rs. 171.24 lakhs is proposed to be obtained as loan from the Life Insurance Corporation of India. This amount will be allotted among different schemes as per their requirements in each year. The break-up of the State Plan funds only was indicated scheme-wise in the following paragraphs.

Slum Clearance Scheme :

The scheme is intended to construct houses for slum dwellers and clear the slums. The scheme is implemented by Hyderabad Municipal Corporation and Director of Municipal Administration in other Municipal Towns. An amount of Rs. 99.41 lakhs is provided for Telangana under this head. Of this, an amount of Rs. 87.60 lakhs are to be spent in Hyderabad and the rest Rs. 11.81 lakhs in other towns of Telangana. It is proposed to develop 726 open developed plots in the Municipal Towns other than Hyderabad City.

Industrial Labour Housing Scheme :

The scheme is intended to construct houses for labourers working in Industries. It is implemented by Commissioner of Labour. An amount of Rs. 4.46 lakhs is provided for this in the Telangana region. It is proposed to construct 200 single room tenements in Sirpur Kagaznagar, 50 two room tenements in Peddapally of Karimnagar district, 100 single room tenements for labourers in Allwyn metal works in Hyderabad.

Low Income Group Housing Scheme :

The scheme is intended to provide loan assistance for house construction, to low income group people whose income is less than Rs. 7,200 per annum. One of the schemes is to give loans to low income group households for constructing houses through Co-operative Housing Societies. This scheme is implemented by the Registrar of Co-operative Societies and an amount of Rs. 4.40 lakhs provided for this scheme in the region. The Andhra Pradesh Housing Board constructs houses and sells them on hire purchase terms. An amount of Rs. 11.47 lakhs is provided for this scheme.

Village Housing Project :

25.12. The objective of this project is to develop selected villages in a planned manner and provide housing and other amenities. Zilla Parishads have selected Panchayat Samithis which in turn, selected

198 villages. So far, the scheme was taken up in 103 villages and it is proposed to continue this scheme in the Fourth Plan with a provision of Rs. 2.48 lakhs.

Special Development Programme:

25.13. An amount of Rs. 47 lakhs is provided under the Special Development Programme to accelerate housing activity in the private sector. It is proposed to contribute Rs. 2 lakhs as share capital to Andhra Pradesh Co-operative Housing Societies Federation. This amount of Rs. 2 lakhs together with Rs. 1 lakh from normal plan funds, will enable the Housing Federation to obtain loans from L.I.C. and disburse Rs. 67.80 lakhs in mufasil areas of Telangana and Rs. 77.45 lakhs in the twin cities.

25.14. It is also proposed to contribute Rs. 45 lakhs as share capital to the Andhra Pradesh Scheduled Castes and Scheduled Tribes Housing Federation to enable it in turn to obtain loans from L.I.C. and construct houses to scheduled castes and tribes. It is proposed to construct 24,996 houses in Telangana at a cost of Rs. 450 lakhs for scheduled castes and scheduled tribes. It is proposed to construct 24,996 houses in Telangana region during the Fourth Plan.

26. WELFARE OF SCHEDULED TRIBES

26.1. The population of Scheduled Tribes in Telangana was 2.89 lakhs, according to 1961 census, constituting 21 per cent of the total tribal population in the State. The Banjaras (Sugalis) who are listed as a Scheduled Tribe in the Andhra region are not listed as such in the Telangana region. They however, number about 7.00 lakhs and are also taken into account for all tribal welfare programme. Next to the Banjaras, numerically the largest tribes are the Gonds and Koyas. Andhs, Bhills, Chenchus, Kolams, Pradhans and Thotis are the other tribals found in this region. In every respect Gonds, Koyas and the Banjaras are relatively more advanced than the other tribals enumerated above. While Gonds, Koyas and others are concentrated in the Scheduled areas and certain pockets outside Scheduled areas, the Banjaras are found both in the Scheduled areas and outside the Scheduled areas as well.

26.2. The Scheduled area in this region extends over about 10,000 sq. Kms., with 950 villages, the maximum number of villages being 415 in Adilabad, followed by 323 in Khammam, 152 in Warangal and 60 in Mahabubnagar, and is roughly $\frac{1}{3}$ rd of the total Scheduled area of the State. There are 4 Tribal development Blocks *viz.*, Wankidi and Utnoor in Adilabad district, Eturnagaram in Warangal district and Aswaraopet in Khammam district. Besides these Tribal Development Blocks there are 4 Tribal Blocks, *viz.*, Burgampahad and Sudimalla in Khammam district and Atchampet in Mahbubnagar district. About one lakh Scheduled Tribes population is found in the above Blocks and the remaining population of scheduled tribes is concentrated in pockets of Scheduled area outside the Tribal Development Blocks and in the plains area.

26.3. Literacy among the tribals is very low being only 2.7 per cent as compared to 17.34 per cent in the total population in the region. According to 1961 census the percentage of workers among tribals engaged in agriculture in the important districts is as follows:—

Adilabad	...	...	56.7
Mahbubnagar	....	...	44.2

Khammam	...	...	58.1
Warangal	...	...	57.9

26.4. The subsidiary occupation of the Scheduled Tribes in this region is collection of minor forest produce. Land in the Scheduled areas of this region is surveyed and settled and patta rights are enjoyed by the tribals. Shifting cultivation or 'podu' as it is popularly known is practised to a very limited extent. The tribal areas represent typical example of agrarian economy with low yield, poor earnings and under-employment. The scope to develop the tribals of this region as agriculturists, is however, good as most of them are already settled in agriculture.

Objectives:

26.5. The objectives of the tribal development plan are:—

- (a) to emphasize programmes of permanent economic uplift of the tribals resulting in higher standards of living;
- (b) to provide the necessary facilities for exploitation of the identified economic base especially agriculture in terms of land assignments, land tenures, tenancy regulations *etc.*;
- (c) to ensure adequate educational, health and housing facilities both within the plan and outside the plan through the proposed Housing Corporation;
- (d) to ensure that the day to day requirements of the tribals are provided at reasonable prices and also to ensure reasonable price for the agricultural and minor forest produce of the tribals by strengthening the Girijan Co-operative Corporation;
- (e) to provide essential facilities for agricultural development of the tribals in terms of plough bullocks, agricultural implements and short-term inputs *etc.*;
- (f) to diversify the economy of the tribals by encouraging animal husbandry programmes,

taking up trades by the tribals and also training them in a number of avocations; and

- (g) to ensure adequate integration of the State Plan Programmes with a variety of Central sector programmes for tribal development.

Strategy:

26.6. The strategy for the development of tribals in the Fourth Plan takes into account the various tribal groups spread over different areas with different Socio-economic levels. The programmes appropriate to their background have been worked out in keeping with the broad strategy. This has resulted in diversification and re-orientation of the programmes meant for the development of the tribals in the earlier plans. More emphasis is laid on the economic uplift programmes mainly, Agriculture and taking up activities resulting in permanent asset formation such as irrigation facilities. A more profitable agriculture is intended to be brought about through additional emphasis on the supply of short-term inputs like seed, fertilizers etc., the provision of bullocks and agricultural implements. Concurrently, the provision of basic socio-economic facilities in terms of Education and Housing will also be taken up. A crash programme for housing is intended to be executed not only through normal plan funds but also with the help of the proposed Housing Corporation for Scheduled Castes and Scheduled Tribes. The re-orientation in education facilities is in terms of greater allocation for Ashram Schools, School buildings and Hostel buildings and other facilities.

26.7. In agency areas special Legislative measures to afford relief from exploitation of tribals by the non-tribals in terms of land transactions and credit have been taken up. More specifically, the reforms in the protective Legislation to plug the loop holes in the laws are the following:—

1. Assignment of land to non-tribals has been totally prohibited in the Scheduled areas;
2. Survey and settlement in un-surveyed scheduled areas has been undertaken as per the

Andhra Pradesh Scheduled areas Ryotwari Settlement Regulation, 1970;

3. Intermediary Tenure has been abolished by law (Andhra Pradesh Muttas Abolition and Conversion into Ryotwari Regulation 1970). Pending regular survey and settlement, the Collectors are issuing provisional pattas by getting the land under the occupation of each Tribal, measured.
4. The Andhra Pradesh Land Transfer Regulation 1959 has been suitably amended and now there is absolute prohibition of transfer of immovable property in Scheduled areas to persons other than Tribals;
5. Debt Relief and Regulation of Private Money Lending are also covered by suitable Legislation; and
6. Arrangements have also been made to provide alternative institutional credit as a corollary to the Debt Relief and Money Lending Regulations.

26.8. Most of the tribals live under perpetual indebtedness to money lenders and petty traders from the plains. The traders were supplying the tribals with their daily requirements in exchange of minor forest produce to the disadvantage of the tribals. The minor forest produce and agricultural produce being seasonal and perishable, the tribals had no option but to sell the produce in Shandies to the merchants at uneconomic prices. With a view to prevent this exploitation by petty traders the Girijan Co-operative Corporation was established in the State which operates in the Telangana region also. The Corporation mainly serves as a welfare institution and protects the economic interests of the tribals. It offers better prices for the agency produce to the tribals and supplies them their daily requirements on no profit—no loss basis. The Corporation also advances loans at nominal interest to the tribals under various categories. An amount of Rs. 3 lakhs is provided towards assistance to the Corporation to expand its activities in the region during the Fourth Plan period.

Review :

26.9. Several Welfare measures were initiated to improve the socio-economic conditions of the tribals during the previous plans, which were aimed at achieving integrated development of tribal areas in all sectors such as Agriculture(Animal Husbandry, Communications, Education, Cottage Industries etc. It was during the Third Plan that significant progress, was achieved in this region. Four Tribal Development Blocks were also started during this period in the tribal areas. In the plans a major portion of the outlay was incurred on communications because of its importance in the improvement of economic conditions of the tribals. An amount of Rs. 31.10 lakhs was spent in the Third Plan alone for the development of communication facilities. The tempo was maintained in the subsequent three Annual Plans by incurring an expenditure of Rs. 15.53 lakhs. Education is another important factor in changing the outlook of the tribals. In order to provide educational facilities an amount of Rs. 5.27 lakhs was spent in the Third Plan. In the subsequent Annual Plans, 1966-69, an amount of Rs. 3.11 lakhs was spent on Education Schemes. As a result, 63 Government hostels with a strength of 3,044 boarders and 48 subsidised hostels with a strength of 1,352 boarders were functioning in the region at the beginning of the Fourth Plan. There were 31 Ashram schools and 324 primary schools in the tribal areas of the region. 213 scholarships were given in addition to books, stationery and clothing allowance to 25,810 students.

26.10. Besides providing communication and educational facilities, considerable attention was also paid to the economic upliftment of the tribals since the First Five-Year Plan and various schemes aimed at raising the standards of tribals were implemented. These schemes included opening of forest based cottage industries, opening of pilot farms, supply of seeds and manures, training of tribals in horticulture, supply of ploughs and bullocks, introduction of improved agricultural practices and prevention of 'podu' cultivation.

Fourth Plan Programmes :

26.11. The Fourth Plan outlay for welfare schemes for scheduled tribes in Telangana is Rs. 196.49 lakhs as

against the total provision of Rs. 581.09 lakhs for the State as a whole. Of this outlay, an amount of Rs. 77.22 lakhs is earmarked for educational schemes, Rs. 65.82 lakhs for economic uplift schemes and the balance for Health, Housing and other schemes. No provision is earmarked for communications under this head as the Central Working group recommended that these schemes shall be taken up under the regular plan programmes.

26.12. The programmes included in the Fourth Plan and their objectives are detailed in the following paragraphs.

State-wide Schemes :

26.13. There is a State-wide scheme under which scholarships will be awarded to post-matric students, the rate of scholarship depending upon the class and course. Telangana's share of provision under this scheme is Rs. 3.66 lakhs out of Rs. 11.83 lakhs for the State. All the tribal students studying in post-matric classes will be given scholarships.

REGIONAL SCHEMES :

Education :

26.14. An amount of Rs. 5.47 lakhs is earmarked for the purpose of providing slates, books and clothes at the rate of Rs. 20 per student. The total allocation for the "Hostels for Tribals" scheme is Rs. 30.61 lakhs. Under this scheme, 15 new hostels will be started besides the maintenance of the existing 18 hostels for tribal students. Rs. 27.39 lakhs is earmarked for the maintenance of 5 existing Ashram Schools and opening of 30 Ashram Schools as also the construction of Ashram School buildings in this region. An amount of Rs. 2.25 lakhs is provided for starting of one Central Hostel in this region. The strength of this hostel will be 100 where bright tribal children will be admitted and given special coaching facilities so as to bring them on par with non-tribal students. Rs. 4.00 lakhs is provided for free supply of nationalised text books, on account of the discontinuance of the practice of supplying the same under the "Gift scheme". An

amount of Rs. 1.85 lakhs is provided for Financial assistance to tribals seeking employment, admission in Nursing and Veterinary courses in this region so as to enable them to perform journeys necessary for the purpose.

Economic Uplift:

26.15. Tribals who have been assigned land and those who are not in a position to cultivate land already under their possession due to lack of plough bullocks will be supplied with a pair of bullocks and a plough free of cost. An amount of Rs. 7.45 lakhs is provided for supplying 1,976 pairs of plough bullocks to cultivating tribals in the region. Rs. 10.93 lakhs is provided for taking up small Minor Irrigation Works which do not fall within the purview of the Public Works Department. Under a scheme 'Colonisation' Rs. 15.70 lakhs is provided for this region. The tribals will be settled in colonies and provided with agricultural lands and irrigation facilities. An amount of Rs. 6.75 lakhs is provided towards financial assistance to Girijan Co-operative Corporation for extension of its activities in the region.

Under Animal Husbandry Programme, Rs. 2.60 lakhs is earmarked for starting 6 Rural Veterinary Dispensaries during the Fourth Plan. Another amount of Rs. 3.50 lakhs is earmarked for starting 3 Minor Veterinary Dispensaries in tribal areas in the region. A scheme for sanction of grants to tribals for setting up trades like provision stores, tea shops, Cycle shops etc., is introduced in the Fourth Plan to diversify the occupational pattern of tribals for which an amount of Rs. 6.45 lakhs is set apart. An amount of Rs. 0.47 lakh is provided for the survey and settlement operations of the scheduled areas of this region. Under agricultural schemes an amount of Rs. 9.50 lakhs is provided for free supply of agricultural inputs like seeds, fertilizers etc., to the cultivating families of tribals.

Health, Housing and other Schemes:

26.16. An amount of Rs. 16.34 lakhs is earmarked for providing financial assistance at the rate of Rs. 500 per family for the construction of houses. 3,200

families will be accommodated under this. An amount of Rs. 12.71 lakhs is provided for free supply of 3,135 pairs of plough bullocks to tribals. An amount of Rs. 12.30 lakhs is provided for the construction of drinking water wells. Two Ten-bedded Hospitals with buildings will be opened in the tribal areas of this region. The provision made for this purpose is Rs. 10.20 lakhs. Three Mobile Medical Units will be started at a cost of Rs. 3.10 lakhs in the tribal areas of the region. An amount of Rs. 0.50 lakh is provided for training of tribals as Village Officers.

Special Development Programme :

26.17. An amount of Rs. 142.48 lakhs is provided for the welfare of scheduled tribes under the Special Development Programme in addition to the normal plan provision. Of this, Rs. 67.00 lakhs is earmarked for welfare schemes for the de-notified tribes. The schemes proposed are housing, drinking water wells, construction of buildings for hostels and supply of plough bullocks. The balance amount is intended for the betterment of the notified tribes. The schemes included are Minor Irrigation works, rural electrification, roads, Ashram Schools and Hostels etc. An amount of Rs. 17.00 lakhs is provided as 'revolving fund' for the issue of short-term loans through the Girijan Co-operative Corporation.

27. WELFARE OF SCHEDULED CASTES AND OTHER BACKWARD CLASSES

27.1. It is not possible to achieve any measure of social justice in our society without raising the social and economic standards of the Scheduled Castes and other Backward Classes which form the bulk of the lower income groups in the society.. In order to raise the social, educational and economic standards of backward classes, special schemes have been taken up in the earlier plans. The Scheduled Castes formed 17 per cent of the population of the region as against 12.1 per cent in Andhra region as per 1961 Census. The Scheduled Castes population in the Telangana region was 21.66 lakhs forming 43.6 per cent of the total Scheduled Castes population in Andhra Pradesh.

27.2. According to the 1961 population Census, literacy among the Scheduled Castes in the region was 9.0 per cent compared to 17.3 per cent among the total population. There were 3,096 matriculates among Scheduled Castes in Telangana as against 9,258 in Andhra region. As regards occupational pattern, 78.0 per cent of the workers were engaged in agriculture—29.5 per cent as cultivators and 48.5 per cent as agricultural labourers. Though the proportion of total workers engaged in agriculture in Telangana is same as that in the rest of the State, the proportion of cultivators varied widely in that, the cultivators in Telangana formed 29.5 per cent to the total workers as against 14.0 per cent in Coastal Andhra and 22.8 per cent in Rayalaseema.

Objectives and Strategy :

27.3. The Fourth Plan objectives are:—

- (1) To strengthen and expand educational facilities through special schools, establishing more hostels, award of fellowships, book grants *etc.*, with a view to give greater opportunities for permanent uplift and absorb them in the stream of national life.
- (2) to emphasize programmes of economic uplift, first by providing land for cultivation—Government land and land made available through effective implementation of land legislation, second by making maximum use

of co-operatives and institutional finances, and third, within the plan, by providing physical inputs like bullocks etc.

- (3) to provide adequate housing facilities by establishment of a Housing Corporation.

Review :

27.4. The levels of well-being among Scheduled Castes and other Backward Classes have not risen considerably and the process of their integration with the rest of the communities has not been rapid enough. The programmes meant for Scheduled Castes fall under three categories *viz.*, Education, Economic uplift and others including Health and Housing while those intended for Backward Classes are mainly education schemes barring a few schemes under economic uplift.

27.5. The expenditure incurred on the programme under this head during the Third Plan and the subsequent Annual Plans during 1966-69 was Rs. 61.91 lakhs on Scheduled Castes and Rs. 12.99 lakhs on Backward Classes. Out of Rs. 61.91 lakhs spent for Scheduled Castes Rs. 50.36 lakhs was on education schemes, Rs. 0.80 lakhs on economic uplift schemes and the rest on Health, Housing and other schemes. From out of the amount incurred on programmes meant for other Backward Classes, Rs. 12.41 lakhs was on education and the rest was on economic uplift schemes.

27.6. At the beginning of the Fourth Plan there were 168 Government Hostels, 9 Training-cum-production Centres, and one Home for the aged and disabled functioning in the Region. The comparative position of Telangana *vis-a-vis* the other regions in the State as regards the number of institutions functioning is as follows:—

Institution:	Coastal Andhra	Rayala-seema	Telangana	Total
1. High Schools	4	..	..	4
2. Elementary Schools	373	156	..	529
3. Government Hostels	98	51	168	317
4. Training-cum-production centres	10	6	9	25
5. Homes for the aged & disabled	1	..	1	2

27.7. Besides the above institutions operated for the betterment of Scheduled Castes and other Backward Classes children, there is a stipend scheme under which pre-matric scholarships are issued to deserving students both belonging to Scheduled Castes as well as other Backward Classes.

27.8. Under the pre-matric stipend scheme 4,272 pre-matric scholarships were given to the Scheduled Castes students while 4,301 scholarships were granted to other Backward Classes students during the Third Plan and the subsequent Annual Plans . Monetary aid was also given to 1.02 lakhs primary classes students belonging to Scheduled Classes and 0.53 lakh students of Backward Classes. In addition to the provision of free boarding facilities in the Government Hostels 7,492 boarding grants were given to those staying in private hostels. Under the economic uplift programme for Scheduled Castes, 444 pairs of plough bullocks and carts were supplied free of cost and 1,934 persons were given monetary aid for starting cottage industries.

Fourth Plan Programmes :

27.9. The total provision for welfare schemes for Scheduled Castes and other Backward Classes in the State Fourth Plan is Rs. 245.22 lakhs of which Rs. 68.01 lakhs is meant for schemes in Telangana. Out of this provision of Rs. 68.01 lakhs, as much as Rs. 56.36 lakhs is meant for Scheduled Caste while the balance of Rs. 11.65 lakhs is for other Backward Classes. Besides normal plan provision some additional amounts are likely to be available for Housing for Scheduled Castes from the funds for Special Development Programmes in this region.

Scheduled Castes Programme :

27.10. There are six educational schemes namely (1) Stipends and scholarships to students studying in Industrial Training Institutes, (2) Maintenance of Government Hostels, (3) Monetary aid for clothing, (4) Book banks, (5) Construction of Government Hostel buildings and (6) Nutrition costing Rs. 37.08 lakhs and three economic uplift schemes viz., (1) Interest Free Loans, (2) Supply of Milch cattle and (3) Assis-

tance to Agriculturists costing Rs. 11.00 lakhs which are being implemented for the welfare of Scheduled Castes.

27.11. Under education schemes to Scheduled Castes students 1,637 pre-matric scholarships will be given for those studying in Industrial Training Institutes and 26,000 Government Hostel students will receive monetary aid for clothing during the Fourth Plan. For the benefit of the Scheduled Castes students 118 new Government Hostels will be opened. Book Banks will be established in 18 hostels which are run exclusively for the benefit of Scheduled Castes students of post-matric classes and three Government Hostel buildings will be constructed during the Fourth Plan period. Under the scheme 'Nutrition' CARE food will be supplied to 1.82 lakhs students of the Government and subsidised Hostels irrespective of the age group along with an equal number of pre-school age children and pregnant and lactating women.

27.12. Under the economic uplift schemes loans will be given to 216 Scheduled Castes persons particularly educated unemployed. Milch Cattle will be supplied to 359 families and assistance will be given to 434 Scheduled Caste agriculturists.

Backward Classes Programme :

27.13. There are three education schemes *viz.*, (1) Pre-matric stipends to the students of Industrial Training Institutes, (2) Government Hostels and (3) Nutrition and one economic uplift scheme *viz.*, Supply of Milch Cattle which are being implemented for the welfare of Backward Classes.

27.14. Under the above schemes, 820 students studying in Industrial Training Institutes will be sanctioned stipends and about 44 Government Hostels will be opened exclusively for the benefit of the students of other Backward Classes. Care food will be supplied to 25,200 students. Milch Cattle will be given to 168 families.

Special Development Programme :

27.15. A sum of Rs. 111.30 lakhs is likely to be available from the Special Development Programme

for the Welfare Programmes of Scheduled Castes. Of this, an amount of Rs. 67.02 lakhs is meant for economic uplift programmes, such as distribution of milch cattle, plough bullocks, sewing machines, assistance for the purchase of electric motors and agricultural implements *etc.* Under this programme, assistance will be given for the purchase of 586 electric motors and for digging of 1,014 irrigation wells. In addition, 6,800 families will be benefited from the distribution of milch cattle and plough bullocks. The balance amount will be utilised for construction of buildings for hostels, schools, health centres *etc.*

28. SOCIAL WELFARE

28.1. The programmes under Social Welfare aim at welfare and development of the weaker and more vulnerable sections of the population, social reform and provision of social assistance through taking up certain supplementary welfare services mainly at the local level and supporting voluntary agencies for eradication of social evils. The Director of Women Welfare, Director of Social Welfare and Inspector-General of Prisons operate these programmes.

28.2. As a result of the concerted efforts made in the previous plans a number of welfare institutions are functioning in the region. In the Third Plan period, programmes were also taken up for the development of basic services for education and rehabilitation of the physically handicapped and the extension of welfare services for women and children in rural areas.

28.3. In the Fourth Plan, an amount of Rs. 30.60 lakhs is provided for social welfare schemes in the State. Out of this, an amount of Rs. 19.40 lakhs is for the social welfare schemes in the Telangana region. The schemes included in the Fourth Plan are described below :—

Women and Child Welfare :

28.4. There were 17 Children's homes, 16 Creches, 11 Balvihars, 2 State homes, 1 Service home, 1 Tailoring centre and 2 Vocational Training Centres functioning in Telangana region at the beginning of the Fourth Plan. The comparative position of Telangana *vis-a-vis* the other regions in the State as regards social welfare institutions is as follows :—

Region	Children's homes	Creches	Balavhars	Service home	State homes	District Tailoring Centres	Vocational Training Centres
Coastal Andhra	11	10	8	3	1	..	2
Rayalaseema	9	8	9	1	1	1	3
Telangana	17	16	11	1	2	1	2
Andhra Pradesh	37	34	28	5	4	2	7

28.5. In the Fourth Plan out of Rs. 19.40 lakhs provided for social welfare schemes, as much as Rs. 15.50 lakhs is meant for women and child welfare. An amount of Rs. 4.91 lakhs will be spent for acquiring one jeep for use in the region besides opening 2 Children's homes and 5 Creches. It is also proposed to take up a scheme for providing employment to women through the opening of tailoring centres at all the district head-quarters except Hyderabad, where it is already existing, at a cost of Rs. 4.25 lakhs over the plan period. The remaining amount of Rs. 6.34 lakhs will be spent for opening 15 Women Welfare branches and 5 Creches in the tribal areas. The women welfare branches proposed in the tribal areas will serve as nuclei for integrating all activities for the social and economic uplift of the tribal women.

Other Social Welfare Programmes :

28.6. Out of the provision for social welfare schemes in Telangana, an amount of Rs. 2.65 lakhs is provided for opening one orphanage at Warangal by the Director of Social Welfare. Two such orphanages are already functioning in the region.

28.7. The Inspector-General of Prisons is in-charge of some of the Social Welfare schemes connected with the eradication of beggary, juvenile delinquency *etc.* During the Second and Third Five-Year Plans, one Junior certified school and one Senior certified school for boys and one Girl's certified school and a Remand Home for girls were started at Hyderabad. During the Third Plan, Welfare Officers were appointed in jails and the probation services were developed in phases. A scheme for control and eradication of juvenile vagrancy and begging was also started during the last phase of the Third Plan. Beggar homes were run and Welfare Extension projects were continued during the Third Plan. By 1968-69 Probation Officers were appointed in all the districts. Certain facilities for the children of female prisoners were also made available at the Central Jail, Hyderabad.

28.8. Several other schemes meant for the welfare of the weak and vulnerable sections of the society were also implemented during the Third Plan period.

An old age pension scheme was implemented in the region.

28.9. There is only one scheme that too, a State-wide scheme to be implemented by the Inspector-General of Prisons during the Fourth Plan. Under this the field staff for probation will be strengthened at a cost of Rs. 0.87 lakh.

Special Development Programme :

28.10. An amount of Rs. 8.04 lakhs was made available during the first two years of the Fourth Plan under the Special Development Programme for construction of buildings for children's homes, Mahila Mandalis etc., and establishment of Balwadis and creches.

29. CRAFTSMEN TRAINING AND EMPLOYMENT SCHEMES

29.1. The programmes under this sector consist of three groups. The first group includes Labour Welfare schemes, Administrative machinery for conciliation of disputes and assistance to trade unions. The second group comprises schemes for setting up employment exchanges collection of employment market information and establishment of vocational guidance units. The third group consists of the schemes for training of Craftsmen.

Objectives :

29.2. The objectives in the Fourth Plan are:—

- (a) to provide medical facilities to industrial workers and their families by appropriate contribution to E.S.I. schemes.
- (b) to establish vocational guidance units at Adilabad, Nalgonda and Sangareddy; and
- (c) to introduce in Industrial Training Institutes more popular and employable trades like Tractor Mechanics, Motor Mechanics, Tool and Die making mechanics etc.

Review :

29.3. Out of an expenditure of Rs. 36.01 lakhs in the State's Third Plan, an amount of Rs. 33.26 lakhs was incurred in Telangana under this head. Of this, an expenditure of Rs. 26.43 lakhs on Craftsmen Training schemes, Rs. 4.72 lakhs on Labour and Labour Welfare schemes and Rs. 1.62 lakhs towards the State's share of E.S.I. was incurred. During the three Annual Plan years, an expenditure of Rs. 17.78 lakhs was incurred in the Telangana region on these schemes.

Fourth Plan Programmes :

29.4. An outlay of Rs. 20.64 lakhs in the Telangana region is provided for this sector in the Fourth Plan,

the break-up of which according to the programmes is as follows:—

	<i>Allotment in the Plan</i> <i>Rupees in lakhs</i>	
Craftsmen Training Schemes	...	13.79
Employment Service Schemes	...	2.25
Labour and Labour Welfare schemes	...	1.57
E.S.I. Scheme	...	3.03
Total	...	20.64

29.5. No expansion of Industrial Training Institutes either in number or in capacity is proposed to be taken up. Trades like carpentry, Blacksmithy, fitting, etc., have since been found to be over-crowded. It is, therefore, proposed to introduce in the existing institutions certain popular and employment oriented trades like tractor mechanics, Motor Mechanics, Tool and Die making Mechanics. To mitigate rising unemployment, especially among the educated ones, vocational guidance giving advice on choice of proper career and furnishing information on various occupations of which they have little information, has assumed considerable importance. Vocational guidance units are proposed to be started at Adilabad, Nalgonda and Sangareddy.

29.6. With a view to organise the labour statistics in a scientific manner, it is proposed to establish a statistical cell in the office of the Commissioner of Labour. It has been decided to have a separate machinery to deal with the Acts, viz., "The payment of Bonus Act, 1965", "Trade Unions Act, 1926", "The Workmen Compensation Act, 1923". It is proposed to appoint one Labour Employment Officer at Hyderabad to attend to this work.

30. STATISTICS

30.1. All the schemes under this head are State-wide schemes and there are no regional schemes.

30.2. During the Third Plan period 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, Taluk Statistical Assistants were appointed in all the taluks of the region. During 1966-69 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.

30.3. The main objective of the schemes proposed in the Fourth Plan 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 distributive trade, goods traffic by road, housing facilities and working class family budget enquiries besides strengthening the Bureau for overall Planning purposes. The Fourth Plan outlay proposed for all the schemes of the Bureau of Economics and Statistics is Rs. 10.20 lakhs, of which the share of the region will be Rs. 3.50 lakhs.

