



GOVERNMENT OF GUJARAT

**SIXTH FIVE YEAR PLAN
(DRAFT)**

1980-85

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**GENERAL ADMINISTRATION DEPARTMENT
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**Sub, National Systems Unit,
National Institute of Educational
Planning and Administration
17-B, SriAurobindo Marg, New Delhi-110028
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P R E F A C E

This volume incorporates the State's development programmes for the State's Sixth Five Year Plan. The programmes envisage a total outlay of Rs. 3760 crores which is more than the total of the outlays (Rs. 2833 crores) in the III, IV and Vth Five Year Plans put together. Even allowing for the price rise, this would represent a considerable step up in the tempo of development. It is hoped that this scale of outlay will enable us to make a significant advance towards the fulfilment of the broad objectives spelt out in the Plan, particularly those relating to the uplift of the weaker sections, provision of minimum needs, creation of a sound infrastructure, and generation of employment on an adequate scale.

A new feature of this Plan is the outlay of Rs. 200 crores proposed for decentralized planning through District Planning Boards. This has already evoked a tremendous response from all districts. We hope that this exercise in decentralized planning will generate widespread local participation in the formulation of projects and public contributions in the financing of local schemes.

In the ultimate analysis, the success of each Plan depends on the zeal and enthusiasm with which its projects are implemented and the degree of people's participation. We hope that this Plan will enjoy the fullest cooperation and support from all sections of the people in the State.

Sachivalaya, Gandhinagar.
2nd April, 1981.

H. K. L. Capoor
Chief Secretary to Government

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“Planning is a continuous movement towards desired goals and because of this, all major decisions have to be made by agencies informed of these goals and the social purpose behind them. Even in considering a five-year period, forward and long-term planning has always to be kept in view. Indeed, perspective planning is of the essence of the planning process. As this process develops, there is a certain rhythm of expansion in the development of the people, and a sense of enterprise and achievement comes to them. They are conscious of a purpose in life and have a feeling of being participants in the making of history. Ultimately it is the development of the human being and the human personality that counts. Although planning involves material investment, even more important is the investment in man”.

—JAWAHARLAL NEHRU

CHAPTER—I

PROGRESS UNDER PLANS—AN OVERVIEW

1.1.1. Two decades of development since Gujarat State came into being on 1st May 1960 provides a changing Scenario for the next two decades of development. The economy of Gujarat was labouring under a number of serious constraints and bottlenecks when the new State was ushered in. Since then, progress has been registered in many sectors of the economy reducing the rigours and ferocity of some of the bottlenecks. In this chapter we propose to outline the profile of development emerging from the last two decades as will provide an intelligible background for the objective and strategy of the Sixth Plan.

1.1.2. The Third Five Year Plan 1961-66 was the first determined effort to initiate development in different regions of the State in a systematic manner. The State Plan expenditure for the period 1961-80 aggregates to Rs. 2833 crores as under :—

(Rs. in crores)

(1) Third Plan (1961-66)	240
(2) Three Annual Plans (1966-69)	211
(3) Fourth Plan (1969-74)	545
(4) Fifth Plan (1974-78)	1005
(5) Annual Plans (1978-80)	832

1.1.3. Thus, expenditure incurred during the period 1961-80 on the implementation of projects and programmes included in the State Plan was Rs. 2833 crores. Bulk of this has been provided from the State's own budgetary resources. The share of central assistance was around Rs. 600 crores. The State Government's record in the matter of additional resources mobilisation has been uniformly good.

1.1.4. The State has made remarkable progress in several sectors of its economy since 1960-61. The progress achieved so far when viewed against the background of slender base of the economy at the commencement of the planning is remarkable. The production base has been strengthened, infrastructure facilities have been considerably expanded and the coverage of social services and amenities has been widened within the limit of available resources. The level of achievement reached in selected spheres of development is dealt with in subsequent paragraphs.

1.2. State Income

1.2.1. The growth rate of 3.3% per annum was achieved during the Third Plan. The performance of the economy during the Fourth Plan was better with a growth rate of 5%. The following table shows the rate of growth of the State domestic product together with sectoral and per capita growth rates as per revised series (at 1970-71 prices.).

Plan Period	Percentage Annual Growth Rate				
	Primary	Secondary	Tertiary	Total	Per Capita Income
1	2	3	4	5	6
1. Third Plan (1961-62 to 1965-66)	1.7	4.9	4.0	3.3	0.7
2. Three Annual Plans (1966-67 to 1968-69)	0.2	2.1	2.3	1.5	(—)1.1
3. Fourth Plan (1969-70 to 1973-74)	5.6	5.2	4.8	5.0	2.5
4. Fifth Plan (1974-75 to 1977-78)	2.7	5.3	5.7	4.4	1.8
5. 1978-79 and 1979-80	1.0	0.6	5.6	2.6	0.5

1.3. Demographic Features

13.1. The population of the State according to 1961 census was 206 lakhs which rose to 267 lakhs in 1971 and 340 lakhs in 1981. The trends in the growth of population are indicated in the following table :

Census year	Population (In lakhs)	Percentage Increase		Density [Population per sq. kms.]
		Decadal	Over 1901	
1	2	3	4	5
1901	91	..	..	46
1911	98	7.8	7.8	50
1921	102	3.8	11.9	52
1931	115	12.9	26.3	59
1941	137	19.3	50.7	70
1951	163	18.7	78.8	83
1961	206	26.9	126.9	105
1971	267	29.4	193.6	136
1981 (provisional)	340	27.2	273.6	173

13.2. The decennial population growth of 27.2% in 1971-81 of the State has been higher than the All-India average of 24.75%. However, there has been a definite downward trend in the growth of population as compared to the population growth in 1961-71 decade.

13.3. The birth rate which was 45.7 per thousand population during 1951-60 has declined to 35.8 in 1978 whereas death rate has also gone down from 23.5 in 1951-60 to 12.7 in 1978. The estimates based on sample registration system are as under :

Sr. No.	Year	Live birth rate	Death rate
1	2	3	4
1	1951-60	45.7	23.5
2	1970	41.2	18.1
3	1971	41.0	17.1
4	1972	40.4	15.9
5	1973	35.3	15.9
6	1974	38.4	13.0
7	1975	37.2	15.9
8	1976 (P)	36.9	15.6
9	1977 (P)	35.9	15.4
10	1978 (P)	35.8	12.7

1.3.4. The level of infant mortality during 1975 was 154 infant deaths per 1000 live births. This is higher than All-India average of 139.

1.3.5. The expectation of life for males and females in Gujarat State was 40.8 and 39.2 respectively in 1960. This has recorded an increase and by 1978 expectation of life for males and females has been 52.1 and 51.8 respectively.

1.4. Sectoral Profiles

Agriculture :

1.4.1. The agricultural production in the State has shown an impressive increase as can be seen from the following table which indicates annual average production of different crops.

Period	Foodgrain (in lakh tonnes)	Oilseeds (in lakh tonnes)	Cotton (in lakh bales of 170 kgs. each.)
1	2	3	4
1951-56	18.75	4.40	8.83
1956-61	20.28	11.07	11.17
1961-66	25.79	13.58	15.23
1966-69	28.11	11.31	15.48
1969-74	37.19	13.87	20.18
1974-78	35.82	18.03	17.69
1978-80	42.46	20.16	19.43

1.4.2. The compound rate of growth for the period 1960-61 to 1978-79 for the production of foodgrains, oilseeds and cotton has been 3.30, 1.90 and 1.00 respectively

1.4.3. Higher production has largely been attributed to increase in productivity. The average yields of different crops during Plan periods are reflected in the table below :

Period	Total food-grains.	Total oilseeds	(Kg. per hectare).	
			Cotton	Tobacco
1	2	3	4	5
1951-56	336	362	109	683
1956-61	407	586	108	691
1961-66	538	581	147	965
1966-69	542	524	156	1026
1969-74	714	675	174	1284
1974-78	763	831	165	1582
1978-80	946	858	190	1792

1.4.4. Increases in the yield of major crops have been due to number of factors such as improvements in agricultural practices, use of fertilizers, pesticides, better seeds as well as expansion of irrigation facilities etc.

Irrigation

1.4.5. Before the commencement of planning very little had been done to exploit the irrigation

potential of the State. The minor irrigation potential which was only 3.97 lakh hectares in 1950-51 had increased to 7.24 lakh hectares in 1960-61. This has now gone up to around 17.32 lakh hectares in 1979-80. In case of major and medium irrigation, potential of 2.48 lakh hectares was created by 1960-61 which has now risen to over 10 lakh hectares. Progress achieved since 1950-51 till 1979-80 is summarised in the following table:—

(In lakh hectares).

	1950—51		1960—61		1973—74		1977—78		1979—80	
	Poten- tial	Utili- sation	Poten- tial	Utili- sation	Poten- tial	Utili- sation	Poten- tial	Utili- sation	Poten- tial	Utili- sation
1	2	3	4	5	6	7	8	9	10	11
Major and Medium Irrigation	...	..	2.48	0.66	6.22	4.01	9.24	5.01	10.12	5.29
Minor Irrigation	3.97	3.97	7.24	6.79	15.40	13.00	16.59	14.27	17.34	14.67

Power.

1.4.6. In 1961 electricity was available in a few pockets of the State mostly in urban and semiurban areas. Even by 1960-61, the generating capacity in the State was only of the order of 315 MW which has since increased to 2384 MW in 1979-80. The number of village areas electrified which was 823 in 1960-61 has increased to 10867 in 1979-80. The following table shows the level reached at the end of 1979-80.

	Installed capacity (MW)	Villages electrified (No)	Pumpsets energised (No)
1960—61	315	823	5401
1973—74	1127	5680	101983
1977—78	1907	8121	156028
1979—80	2384	10867	202853

Industry.

1.4.7. Till 1960, industrial economy of Gujarat rested primarily on the textile industry and textile ancillaries came into existence. But these had

only a marginal impact on the economy of the State. But with the discovery of oil and gas, the setting up of a refinery, fertilizer factories and petrochemical complex the economic horizon has widened considerably the scope for a wide spectrum of industries in the State. Along with this, salt production and mineral exploration received added impetus.

1.4.8. On 31st December, 1960 there were 3647 working factories providing employment to 3.30 lakh persons. The number of these factories and the number of persons employed therein rose to 6939 and 5.01 lakhs respectively by the end of 1973 and to 9892 and 5.89 lakhs respectively at the end of 1978. The productive capital in the registered factories sector in 1961 was Rs. 245.79 crores and goods worth Rs. 420.23 crores were produced. The corresponding figures for 1976-77 were Rs. 1969.99 and 3531.43 crores. The net value added was Rs. 121.33 crores at the end of 1961. This rose to Rs. 687.49 crores at the end of 1976-77. This represents nearly six fold increase in the net value added in a span of sixteen years. Thus, Gujarat has occupied the second place in the country next only to Maharashtra.

1.4.9. Correspondingly there was also momentum in the registration of small scale industry units in the un-organised sector. The total number of small scale units registered with Industries Department in 1961 was 2169. This increased to 18093 in 1971 and over 41,000 by the end of June, 1980.

Road Development

1.4.10. In 1950-51 road length was 13154 kms. i. e. only 7 kms. per hundred sq. kms. This was 12 km. per hundred sq. kms. in 1960-61, 20 km. in 1973-74 and 23 km. in 1978-79.

The following table shows the increase in the surfaced and unsurfaced road length from 1950-51 to 1979-80.

(In Kms.)

Sr. No.	Year	Surfaced	Unsurfaced	Total
1	2	3	4	5
1	1950-51	6,621	6,533	13,154
2	1960-61	11,930	10,699	22,629
3	1973-74	21,632	17,349	38,981
4	1977-78	26,252	16,107	42,359
5	1978-79	27,519	15,737	43,256
6	1979-80	29,895	15,213	45,108

Road Transport

1.4.11. Nationalisation of the passenger road transport services has been completed since 1969-70. The passenger traffic on roads in Gujarat State has been increasing at the compound rate of 13% as against 10% in the country as a whole. The Gujarat State Road Transport Corporation provides direct services to 89.7% of the towns and villages covering 94.8% of the State's population. All villages with population above 1000 excluding those not connected by a motorable road, have been provided with direct services.

Education

1.4.12. The educational facilities in the State at the primary, secondary and collegiate levels as also in the fields of technical education have witnessed a tremendous expansion over the last 28 years of planned development. The number of primary schools which was 11189 at the beginning of the First Plan has increased to 23,000 by the end of 1978-79. The number of secondary schools have registered an increase from 333 in 1950-51 to 2907 in 1978-79. The number of colleges also increased at a fast pace from 101 in 1960-61 to 370 in 1978-79. 5 Universities have also been set up by the end of the Fourth Plan period for imparting higher education in the State. There were three institutions for degree courses and 6 institutions for diploma courses in engineering in 1950-51. These have gone upto 7 and

19 respectively by the end of Fifth Plan. The industrial training institutes were not in existence during the First Plan period. By the end of the year 1979-80, 22 ITIs have been established with an intake capacity of 8040. The intake capacity in 7 engineering colleges and 19 diploma courses institutions has risen to 1885 and 3705 respectively.

Health

1.4.13. The rural health services are provided through the net work of 251 primary health centres and 2500 sub-centres.

1.4.14. The number of allopathic doctors registered with the Gujarat Medical Council as on 31st December, 1971 was 7002 which increased to 13259 in 1979. The doctor : population ratio which was 1 : 3800 in 1971 has been 1 : 2414 in 1979.

Scheduled Castes and Tribes

1.4.15. A variety of measures have been taken for the upliftment of the scheduled castes and tribes. The State Government has set up a Scheduled Tribes Development Corporation, Scheduled Castes Economic Development Corporation and also Gujarat Backward Class Board to promote their economic upliftment. The Tribal Area Sub-Plan is being implemented systematically since 1976-77, while steps have also been taken to prepare a separate Component Plan for the Scheduled Castes in the State. Large supplementary provisions are made for them in the Plan. Substantial funds have already been spent on extending concessions to them in the sphere of education. The number of students benefitted by Pre-SSC scholarships in 1960-61 was 10038. This had gone up to 41116 in 1979-80. Likewise, the number of students benefitted by post-SSC scholarships which was 1963 in 1960-61, has increased upto 27081 in 1979-80. Specific Programmes for the development of socially, economically and educationally backward classes have also been initiated.

1.5. Problems and Lags

1.5.1 Despite an impressive record of progress in different sectors of the State economy a number of lags and bottlenecks continue to persist. A brief review of these lags and bottlenecks has been attempted in the following paragraphs.

1.5.2 The problems of poverty and un-employment continue to pose serious challenges. Gains arising from agricultural development have not percolated in any large measures to the small and marginal farmers and the landless agricultural labourers. In view of the very limited potential of assured irrigation, agriculture in the State is still prone to the vagaries of the monsoon. Much remain to be done in the field of animal husbandry, dairying and fisheries which can provide subsidiary occupations

and augment rural incomes. The pace of diversification and dispersal of industries into the non-urban areas and backward regions of the State has not gathered the desired momentum. The production as well as employment potential of the labour intensive sector of village and cottage industries has not yet been tapped adequately. In regard to the development of the infrastructure apart from the low proportion of the area under irrigation considerable leeway is yet to be made in road development and rural electrification. In the sphere of social services, notwithstanding the impressive performance in school enrolment, the rate of drop-outs at the primary stage continues to be high. Enrolment of girls and tribal children is also lagging behind. There is also need to step up the effort to promote adult literacy and achieve substantial vocationalisation of education in the State. The spread of medical and health facilities in rural areas is uneven and very inadequate in the remote rural areas and in tribal region. More than 5000 villages in the State still do not have safe and dependable sources of drinking water. The problem is becoming more acute in view of growing salinity and pollution in certain areas. The problems of the urban areas of the State too have grown in magnitude and complexity. The influx of population from the rural areas has caused a tremendous pressure on urban housing, water supply and sanitation systems and other civil services.

1.5.3. The magnitude of the problems facing the State and serious lags in the crucial fields of development are broadly indicated in the subsequent paragraphs.

Poverty

1.5.4. It has been estimated that about 44.64 percent of the Rural Population and 50.09 percent of the urban population was living below the desirable minimum level in the year 1979-80. Thus, out of the total estimated rural population of 220 lakhs in 1979-80, a population as large as 98 lakhs was living below the poverty line. Likewise, out of the estimated urban population of 94.50 lakhs, the majority, i.e. 47.33 lakhs was living below the poverty line.

1.5.5. According to an earlier study conducted by the State Bureau of Economics and Statistics, there are substantial variations within the State. The incidence of poverty is highest (75.75%) in the eastern hilly areas and lowest (32.11%) in the Saurashtra region. The percentage of population living below the poverty line to the total population in each of the sub-regions of the State is as under:-

Eastern Hilly Areas	..	75.75%
South Gujarat Plains	..	63.52%
Middle Gujarat Plains	..	40.75%
Dry Areas in the North	..	53.06%
Saurashtra Region	..	32.11%

Unemployment

1.5.6. The total number of the unemployed and the under employed as on 1st April, 1980 based on the projections of data (27th Round) of the National Sample Survey was as follows :-

(a) Unemployment in 1980—1.77 lakhs

(b) Underemployment in 1980—7.90 lakhs

1.5.7. Considering that employment of about 120 days of work would be necessary to provide full employment to the under employed (7.90 lakhs) it is estimated that 3.47 lakh person years of employment will be needed. This indicates that the backlog of requirement of person years of employment for unemployed and under employed at the beginning of Sixth Plan 1980-85 would be about 5.24 lakh person years. This requirement will work out to be around 15.72 lakh person years for the plan period 1980-85.

1.5.8. The estimated total increase of the new entrants during the Sixth Plan 1980-85 is likely to be of the order of 12.74 lakhs indicating an annual increase of 2.55 lakhs during the Sixth Plan period. Thus, the total requirement of person years of employment comes to about 5.4 million (15.72 lakh person years for backlog plus 38.22 lakh person years for new entrants).

1.5.9. The situation in respect of educated unemployed, especially matriculates is likely to worsen. The number of job seekers on the live register of employment exchanges has gone up from 2.42 lakhs in 1973 to 4.27 lakhs by the end of December, 1979 indicating an average annual increase of 12.74 percent. Placements, in contrast shows a declining trend. Only 24,793 persons were placed in jobs in 1973 and 20,665 in 1979, by Employment Exchanges—the placements constituted only 9.76% and 8.83% of registrants in respective years.

1.5.10. The number of job seekers especially of the category of the S.S.C./ matriculates has gone up from 81,419 to 1,84,934 indicating an increase of 127.14% which would work out to an average annual increase of 21.19%. Similarly, job seeking graduates in arts, commerce and science on the live registers of employment exchanges increased from 20,364 in 1973 to 34,488 in 1979 showing an average annual increase of 11.56%. Placements through employment exchanges for both these categories was around 10% of registrants.

Population Growth

1.5.11. The rate of growth of population in Gujarat has been one of the highest in the Country. The decennial growth rate for the period 1971-81 was 27.21 per cent as against 24.75 per cent for the entire Country.

Scheduled Castes and Scheduled Tribes Population

1.5.12. The population of scheduled castes and scheduled tribes is around 21 per cent of the total population of the State. The scheduled castes account for 6.84 per cent and the scheduled tribes 13.99 percent of the population. Ahmedabad and Surendranagar districts have relatively high percentage of scheduled castes viz. 11.9 and 10.4 percent respectively. The other districts which are above the State average are Amreli, Junagadh, Kachchh, Banaskantha and Mahesana. The tribal population is concentrated along the eastern hilly belt. The districts of Dangs, Valsad, Surat, Bharuch, Panchmahals and Vadodara together account for over 90 percent of the total scheduled tribes population of the State. Thus while the Southern districts of the State account for large share of the scheduled tribes population, the districts in the North Gujarat and Saurashtra have over 70 per cent of the scheduled castes population of the State. Special Component Plan for scheduled castes is being prepared for accelerating the pace of development of these classes. Another 21 per cent of the population constitutes socially, economically and educationally backward classes.

Agricultural Labourers

1.5.13. According to the 1971 census the State has nearly 18.88 lakh agricultural labourers, representing 22.49% of the total number of workers in the State. There is concentration of agricultural labourers in some of the districts of the State. Bharuch district having the highest percentage 47.4% and Panchmahals district with only 7.8%. The southern districts of Vadodara, Bharuch, Surat, and Valsad between them have about 40% of the total strength of agricultural labourers. About 48 percent of the agricultural labourers belong to the scheduled castes and scheduled tribes.

Forests

1.5.14. Forests form only about 10 percent of the total land area of the State as against the Country's average of about 24 percent. The productive forests area is even less than 50 percent. There is also considerable imbalance in the distribution of forests in the State. Practically the whole of the Dangs district (around 95% of the area) is under forests. Surat, Valsad, Bharuch and Panchmahals Districts each have around 1/4th of land area under forests, while the remaining districts are very deficient in their forest cover.

Tribal Areas

1.5.15. The tribal area is situated in the eastern hilly belt of the State spread over 8 districts viz. Sabarkantha, Panchmahals, Vadodara, Bharuch, Surat

Valsad, Dangs, and Banaskantha. The Tribal Area Sub-Plan of the State covers 32 talukas having a majority of tribal people. In addition 15 pockets of tribal concentration are also included in the Sub-Plan. The total area covered under the Sub-Plan is 27,189 sq. kms. constituting 13.87 percent of the total area of the State. The tribal population of the sub-plan area is 30 lakhs which is 68.18 percent of the total population of the sub-plan area and 81 per cent of the total tribal population of the State. A systematic beginning for the development of these areas has started since 1976-77 with the implementation of the Tribal Area Sub-Plan. Stupendous efforts will be necessary to bring this area on par with the adjoining areas and to raise the living-standards of the people residing therein above the poverty line.

Arid and Desert Areas

1.5.16. Large areas of the State fall within the arid or semi arid zones. According to the Irrigation Commission, 58 talukas of the State covering 35% of the total area and 24% of the State's population are drought prone. 13% of the total drought prone area of the Country lies in Gujarat. Recurrent droughts in large parts of the State have been one of the most distressing features of the State's economy. Apart from the loss of production and the depletion of cattle wealth, the impact of drought is shattering on the agricultural economy. Acute shortage of drinking water and fodder further aggravate the problem. The financial resources of the State are put to severe strains on account of the large scale relief measures, which have to be undertaken.

1.5.17. The State will have to continue to take concerted measures for restoring the ecological balance with the ultimate objective of reducing the severity of droughts through appropriate investments and technology. The problem of development of the desert areas in Kachchh and Banaskantha possess an even greater challenge and calls for substantially large magnitude of investment.

Border Areas

1.5.18. Gujarat like Rajasthan and Punjab is a border State and as such the proper development of the border area is of crucial importance in the interest of national security. Most of the border areas have the characteristics of the arid and desert areas and suffer from poor soil fertility and scarcity of water resources. If the economic base of these areas is to be strengthened and migration trends are to be controlled, larger investments would have to be made to enable the diversification of the productive activity in these areas at a rapid pace.

Coastal Areas

1.5.19. The State has the longest coastline in the country, about 1600 kms. which is about 1/3rd of the entire coastline of the country. The low lying areas along the coastline are inundated by seawaters. This adversely affects agricultural development in the areas. The process of reclamation of khar lands for cultivation is slow and costly. In addition, the over drawal of ground water resources for irrigation along certain parts of the coastal areas particularly in Junagadh and Amreli districts has caused the problem of salinity ingress which is assuming serious proportions. The problem of drinking water is also acute in this and some other parts of the coastal areas. While these are the typical problems of the coastal areas, there are prospects of development in several directions.

Irrigation

1.5.20. Only around 16 percent of the culturable area is under irrigation as against 23% for the entire country. Of the total irrigated area around 73% is irrigated by surface wells, 16% by canals, 7% by tubewells, 3% by tanks and 1% by other sources.

1.5.21. With the progress of irrigated agriculture in the State the problem of water logging has begun to assume importance. Silting up of reservoirs has also become acute especially in the last few years after the unprecedented floods in the Gujarat and Saurashtra regions. The resultant loss to effective capacity of reservoirs is causing concern to the State. Ground water extraction in several areas has been so intense that the draft has far exceeded recharge and consequently the water table has been going down steadily at several places.

Power Development

1.5.22. Power planning in Gujarat is becoming increasingly complex. The peak demand for power at the end of 1984-85 is expected to be of the order of 3186 M. W. and to meet this demand an installed generating capacity of 4822 M. W. will be required. The net installed capacity at the end of 1979-80 is of 2300 M. W. Therefore to meet the energy needs in 1984-85, the generation capacity will have to be increased to 4822 M. W. The critical problem in Gujarat is that barring 300 M. W. of hydel power capacity i. e. Ukai 4x75 M. W. the rest of the generating capacity is thermal based. Under the Narmada Tribunal's Award, the State's share of power generation is only 16%.

1.5.23. Gujarat is situated far away from the coal fields and has to pay heavily as freight. Besides, the supply of coal is both inadequate and irregular due to the problems of transportation. The possible alternatives would be setting up of a coal pit head power station, coal slurry pipe line and transport by sea.

1.5.24. The generation centres are located in the south and eastern parts of the State and the evacuation of power from these centres over long-distances to Saurashtra and Kachchh results in heavy line losses. These problems will continue to plague the development scene in Gujarat till Gujarat's case for atomic and gas based power plants in Saurashtra area materialises.

1.5.25. In the sphere of rural electrification the State has achieved about 60 percent coverage by the end of 1979-80. However, there is considerable variation in the pace of electrification of villages in the different regions of the State. In the 32 talukas covered under the tribal sub-plan, the overall percentage of rural electrification is only 37%. Likewise, only about 39% of the villages are electrified in 41 talukas covered under the drought-prone area programme. It is proposed to achieve 100% village electrification in the State by the end of 1984-85.

Roads

1.5.26. Gujarat lags far behind several other States of the country in road development. According to the latest available statistics of 1978-79 Gujarat State ranks eighteenth among the States in the Country with 23 kms. of road length per hundred sq. kms. as against the All India average of 39 sq. kms. In terms of road length per one lakh of population, Gujarat occupies 20th place in India. In spite of persistent efforts the State has not been able to come on par with other States due to initial backlog. In 1947 the road length per hundred sq. kms. was only 4 kms. against the All India average of 12 kms. At the end of the Nagpur Plan period in 1961, Gujarat had a deficit of 42 percent in terms of road length while the Country as a whole had exceeded the plan target by 36 percent. Similarly as against the target set for 20 Year Road Plan (1961-81), the State has a shortfall of 22 per cent in 1979-80 while several other States have already fulfilled the targets or are about to do so.

1.5.27. In regard to rural roads the position is not at all satisfactory. Fifty per cent of the rural roads are merely earthen roads. Out of the total of 18,275 villages, only 7412 villages (41 percent) are linked by pucca roads upto the end of 1979-80. The development of road net work in the command areas of irrigation projects, the tribal and in the hinterlands of ports will also demand immediate attention.

Education

1.5.28. While according to the census of 1971, Gujarat occupies the fourth place among the States of the Country in terms of the literacy percentage, it is a matter of concern to the State that the absolute rate of growth of literacy has been only 17%

as compared to 31% in Maharashtra, 25.51% in Tamil Nadu and 24.87% in Punjab. Of the 19 districts in the State, 10 districts had a literacy rate lower than the State average of 35.8%. There were seven talukas where the percentage of literacy was less than 10.

Water Supply

1.5.29. Out of 18275 inhabited villages in the State as many as 9600 villages have been identified as 'No Source' villages on the basis of investigations made so far. Even at the end of 1979-80, over 5086 villages remained to be provided with drinking water facilities. The problem has now become more and more acute in view of growing salinity and pollution in certain areas.

Urban Development

1.5.30. Gujarat has a higher degree of urbanisation with 28% of the total population living in the urban areas. The State has 216 towns with a population of nearly 75 lakhs. Seven more towns account for 45.1% of the urban population while 18 medium sized towns in the population range of 50,000 to 1 lakh account for another 15.7%. 42 towns with a

population of above 20,000 and below 50,000 have a share of 27.7% of the urban population. The serious pressures on urban land resources and strains on civil amenities such as water supply and drainage and social and recreational services have been causing great concern to the State. The situation of the smaller urban units with a very limited resource base is really precarious. Large investments are inescapable to upgrade civil amenities in the towns and to regulate peripheral development outside the cities and towns of the State and to provide a viable urban infrastructure.

1.6. New Horizons of Development

1.6.1. In the backdrop provided by the magnitude of the unfinished task of providing basic minimum needs to millions of families subsisting below poverty line and the complexity of the problem arising from gross inequalities of income and wealth, there is a need to spell out a clear strategy for making a frontal attack on the problems of poverty and unemployment. The strategy and objectives underlying the Sixth Plan are outlined in the next chapter.

“Development goals should not aim at proliferation of consumer goods or services which benefit only a certain section, but must be defined in terms of progressive reduction and eventual elimination of squalor and inequality, of malnutrition, disease, of illiteracy and unemployment. We must think in terms of minimum goods and services which are to be provided to the common man in order to eliminate the worst manifestations of poverty.”

—SMT. INDIRA GANDHI

* Extract from the inaugural address delivered by Prime Minister Smt. Indira Gandhi on 25th March, 1972 in New Delhi at the 45th annual session of the Federation of Indian Chamber of Commerce and Industry.

CHAPTER—II

THE APPROACH AND STRATEGY.

2.1. Objectives :

2.1.1. The following objectives for the Sixth Five Year Plan have been laid down by the National Development Council :

(i) a significant step up in the rate of growth of the economy, the promotion of efficiency in the use of resources and improved productivity ;

(ii) strengthening the impulses of modernisation for the achievement of economic and technological self-reliance ;

(iii) a progressive reduction in the incidence of poverty and unemployment ;

(iv) a speedy development of indigenous sources of energy with proper emphasis on conservation and efficiency in energy use ;

(v) improving the quality of life of the people in general with special reference to the economically and socially handicapped population, through a minimum needs programme whose coverage is so designed as to ensure that all parts of the country attain within a prescribed period nationally accepted standards ;

(vi) strengthening the redistributive bias of public policies and services in favour of the poor contributing to a reduction in inequalities of income and wealth ;

(vii) a progressive reduction in regional inequalities in the pace of development and in the diffusion of technological benefits ;

(viii) promoting policies for controlling the growth of population through voluntary acceptance of the small family norm ;

(ix) bringing about harmony between the short and the long term goals of development by promoting the protection and improvement of ecological and environmental assets, and

(x) promoting the active involvement of all sections of people in the process of development through appropriate education, communication and institutional strategies.

2.1.2. During the last twenty years of its existence, Gujarat has made tremendous advances in several sectors of development, specially industry and the development of infrastructure. However, a large percentage, 46 % of the State's population still lives below the poverty line. The poorest sections of the population in the State belong to the landless labourers, small and marginal farmers, rural artisans, Scheduled Castes

and Scheduled Tribes and socially and economically backward classes. The Sixth Five Year Plan aims to treat the household as the basic unit and launch a household-oriented programme for eradication of poverty. It is the objective of the programme to assist each household below the poverty line, through an appropriate package of technologies, services and asset transfer programmes.

2.1.3. The following will be the main target groups for the programme for the removal of poverty :

	in lakhs.
(1) Scheduled tribes	37.00
(2) Scheduled castes	18.32
(3) Socially and economically backward classes (Baxi Commission)	50.00
(4) Minorities	28.00
(5) Families of artisans engaged in household industries	5.00
(6) Agricultural labour of which 50 % are from scheduled castes/scheduled tribes.	18.88

2.1.4. Removal of poverty through accelerated rural development calls for operationally intergrated strategy which will aim on one hand at increasing production and productivity in agriculture and allied sectors based on better use of irrigation and improved technology and on the other at resource and income development of vulnerable sections of the population in all the blocks of the country. Experience has shown that un-coordinated efforts by a multiplicity of agencies do not lead to the desired results. The time has come to reduce the number of independently managed projects at the district and block levels and forge a multi-disciplinary apparatus at the local level as will function effectively and efficiently. In Gujarat State the District Planning Boards have been assigned a crucial role in ensuring effective coordination and integration of the ongoing programmes at the district level.

[2.2. Promoting Opportunities for gainful Employment.

2.2.1. The most challenging task facing the State today is the generation of adequate opportunities for gainful employment for all sections of the population. Inadequate purchasing power rather than non-availability of food in the market has become a major cause of under-nutrition and malnutrition. Therefore, the ability to provide opportunities for the optimum development of the physical and mental potential of children will depend upon the extent to which poverty is reduced. The major aim of both of our developmental and social security strategies should hence be the enhancement of the purchasing power of the rural and urban poor.

2.2.2. A large segment of the unorganised rural poor still need special attention. For this purpose, the rural population could be classified into the following three major functional groups:—

- (a) those engaged in agricultural occupations, including crop and animal husbandry, fisheries and forestry;
- (b) rural artisans of various kinds; and
- (c) landless labourers.

The special needs and potential of each of these major occupational groups will be met through appropriate programmes.

(a) Small and Marginal Farmers.

A majority of farmers cultivate holdings less than one hectare in size. Such marginal farmers need more area-specific and vocation-specific services rather than subsidies. The intensive development of blocks under the integrated rural development programme is one such special programme. Another scheme is the assistance to small and marginal farmers through production oriented schemes leading to self-employment/self-support in certain time frame. Since this programme is also family oriented, it envisages to bring the targetted families above the poverty line within a specific span of time. The Planning Commission has extended the coverage and contents of this on-going programme to the remaining blocks of the country from 2nd October, 1980. The farmers cultivating holdings less than one hectare in perennially irrigated areas and less than two hectares in unirrigated areas would be covered under this programme whereas in the drought prone and desert areas, the farmers having three hectares of dry land and one and half hectares of irrigated land would be covered. Among the other projects which are proposed to be introduced for assisting farmers and fishermen are:—

(i) Dry-land farming programme in all drought prone and arid and semi-arid areas. This will include provisions for community water harvesting and water shed management, scientific land use planning and contingency production plans to suit different weather conditions;

(ii) Projects for promoting dairy, poultry, sheep, goat;

(iii) Intensive Forestry Development Programme and;

(iv) Inland and coastal aquaculture programme for promoting inland fish culture and integrated sea farming based on a blend of culture and capture fisheries.

(b) Rural Artisans : Promotion of village and small industries has been and will continue to be an important element in employment generation strategy. The Village and small

industries sector with its low capital-output ratio and high employment potential will, therefore, play a dominant role in improving the income of rural poor. Programme designed to subserve the following objectives will be introduced through an effective functional intergration of numerous, small ongoing projects and programmes.

(i) Creation of employment opportunities particularly through projects in the handloom, handicraft and allied sectors.

(ii) Organisation of raw material supply of the needed quantity and quality.

(iii) Provision of design based on consumer preference and market research.

(iv) Establishment of wider entrepreneurial base and upgrading the skills of the artisans through a system of recurrent training.

The programme for improving the economic condition of the handloom weavers and other artisans will be revitalised. Measures would be taken to augment the flow of institutional finance to the village and small industries sector as a whole and in particular in favour of the cottage industries units. The Entrepreneurs Development Programme (EDP) meant for the technically qualified and educated unemployed persons would be strengthened further. Steps will also be taken to impart training in improved methods and technologies to upgrade the skills productivity and earnings of the artisans through the national programme for Training of Rural Youth for Self-Employment (TRYSEM).

(c) Landless Labourers : The landless labourers are the most underprivileged and malnourished sections of the population and for them, it is a compounded problem of unemployment, low and uncertain income and nutritional deficiencies. The State Government will take full advantage of the proposed National Rural Employment Programme (NREP) where development projects and target group-oriented employment generation projects will be closely intertwined. This programme will initially cover on an average one thousand unemployed in every block. Thus, the National Rural Employment Programme will aim at achieving concurrently (a) employment opportunities which will help to provide to all citizens their daily bread (b) planned utilisation of man power for economic development, and (c) an efficient public distribution system for the essential commodities needed by rural poor.

(d) Unorganised Labour : There are already varying numbers of unorganised labour looking for daily employment in many towns and cities. Therefore, wherever appropriate, suitable urban works programme with the highest priority for environmental sanitation, slum improvement, tree planting and community housing would be undertaken.

(e) **Physically and Mentally Handicapped :** Programmes of training, rehabilitation and employment for those unfortunately afflicted by physical and mental deformities as well as diseases like leprosy will be considerably expanded.

(f) **Educated Unemployed :** The issues of unemployment among the educated need to be viewed in the medium term context of the Five Year Plan as also in the long term perspective so that a mutually beneficial relationship can be promoted among education, employment and development. The nature of the problem is such that no single pattern would provide the needed solution. A decentralised approach is called for and a District Development Centre could become the focal point for employment planning. It is proposed to set up at the district level an Employment Generation Council consisting of peoples' representatives, concerned Government functionaries and representatives of credit institutions and of professional and academic bodies in the district. This Council will prepare an integrated district employment plan which will help to provide jobs in the industrial, agricultural and services sectors and which will also ensure that the district employment plan and the district credit plan are mutually supportive of each other. In the district employment plan there will be special component plans for scheduled castes, scheduled tribes, backward classes and women.

(g) **Integrated Rural Urban Development Strategy ;**

Through a multi-pronged strategy outlined above it will be possible ultimately to ensure gainful employment to at least one adult member in each family.

2.3. Development Strategy :

2.3.1. An essential feature of the strategy is the effective decentralisation of the planning process and the formulation of micro-level plans and the adoption of a target group oriented approach. The identification of households and target groups in all areas of the State, particularly those who have been more or less by-passed in the planning process acquires special significance in this context. Wherever necessary, detailed field surveys will be undertaken to assist in such identification and in the case of plan programmes directly or substantially benefitting local habitations and households, targets will be broken up in terms of the number of habitats, households and individuals in as many instances as feasible. Programmes aiming at the upliftment of the less privileged sections like the scheduled castes, scheduled tribes, other socially and economically backward classes, small and marginal farmers, agricultural labourers and rural artisans, will constitute a vital part of the development effort under the Plan.

2.3.2. Synthesising the basic tenets of area development with the over riding concern of the poor can be

achieved in two ways. Firstly, the main thrust of development activity would be on providing gainful employment to the needy through investments in infrastructure and social overheads. Secondly the creation of the infrastructure being essentially a one-time activity, economic activities which can be strengthened by the creation of the necessary infrastructure are to be identified and fostered in order to sustain productive employment.

2.3.3. Area planning for integrated rural development by itself is not inconsistent with target group oriented planning, because except in instances where the benefit is indivisible, all area plans are to be designed to carry most of the public sector resources and services to the vulnerable groups of the society. In the final analysis every delivery system must reach and be oriented to the needs of every poor family.

2.3.4. The Minimum Needs Programme is crucial to the level of social consumption of the poorest sections of the society in as much as it provides for supplementing investments of general economic development by programmes of direct transfer of basic services to the target groups. While Gujarat's performance under the MNP has been satisfactory during the Fifth Plan in some spheres, the State has yet to cover substantial ground in the case of rural roads, rural water supply and rural health services. The Minimum Needs programme has been assigned high priority in the State Plan. Even in fields like elementary education and rural electrification where the State is ahead of the national average, there can be no slackening of efforts both in order to consolidate the gains achieved already and to effect improvements in the standards of services. Besides specific time-bound targets, it is also proposed to ensure that programmes are formulated in precise detail as regards location, area coverage and beneficiary groups.

2.3.5. It is necessary to ensure the sustained growth of the State's economy as a whole by making adequate investments in the productive sectors as well as in building a sound economic infrastructure, the principal elements of which would be—

(i) Roads and transport and communication net work ;

(ii) Systems for the distribution of irrigation, water and power,

(iii) Input delivery systems including credit supply arrangements,

(iv) Channels for marketing and distribution of production,

(v) Storage and warehousing, and

(vi) Research, development, extension, training and service facilities ;

This is essential also to promote the long term employment generation.

2.3.6. Agriculture, Irrigation and Power will continue to be assigned a key role in the growth process. The decks being cleared for the implementation of the Narmada Project augurs well for the State and systematic efforts are mounted to tap the full potential of the project under an optimal time schedule. Development based on the resources of mineral oil and gas also need to be explored and exploited as fully as possible. The implementation of all projects in-progress in the various sectors would have to be accelerated in order to ensure the timely flow of benefits from them. Advance action in respect of prospective projects in the core-sectors and programming for effectuating inter-sectoral linkages and functional complementarities in investment also merit immediate attention. Coordinated efforts will have to be made towards tackling the special problems facing the State and making good the lags in crucial spheres of development.

2.4. Decentralised Planning :

2.4.1. Effective decentralisation of the planning process is one of the basic prerequisites for harnessing local resources and manpower more fully and for carrying the benefits of development to smallest area units and the poorest sections of the people and promoting beneficiary participation in the dynamics of growth. The most viable unit of planning at the sub-State level is the district. The need for a careful delineation of the sectors of development that can be effectively planned at the district level and devising a scheme of transfer of resources from the State to the districts in order to enable them to formulate their development plans within a given resources matrix have been fully recognised.

2.4.2. The demarcation of the action spheres of the district planning authorities entails a two tier structure of decision making with varying degrees of freedom of choice for the district. The top tier covers programmes in respect of which the State is the decision level subject to information, data and suggestions from the districts. The second tier is the district as the programme formulation level subject to the constraints of State policies, financial allocations and interaction between districts. In a major effort to provide a window for rural poor, it is proposed to strengthen the block/taluka level machinery both qualitatively and quantitatively.

2.4.3. A specific proportion of the State Plan outlay is earmarked for the District Plans annually. A formula incorporating objective criteria for apportioning the total district plan outlay among the different districts is also worked out.

2.4.4. Simultaneously, efforts have been on to establish a sound organisational base for district planning. The steps already taken include the setting up of a District Planning Unit in each district and the restructuring of the District Planning Boards with the induction of experienced, knowledgeable and expert non-officials representing key disciplines. These are expected to go a long way in ensuring the formulation of viable District Plans and their efficient implementation, monitoring and evaluation.

2.4.5. At the micro level, the investment strategy for promoting integrated rural development has to focus on projects which (i) reach large segments of the low income groups of the rural population ; (ii) are low in terms of cost per person covered vis-a-vis the benefits, (iii) provide rate of economic return at least equal to the opportunity cost of capital, (iv) strike a balance between productive and welfare components consistent with minimum cost standards, (v) include programme of rural-works for the landless poor as an integral part of the development efforts, and (vi) involve local participation in decision making.

2.5. Popular Involvement :

2.5.1. The State's involvement will, by itself, not produce the desired impact if the beneficiaries themselves are not organised and associated in the dynamics of development. This indicates yet another dimension to the new growth strategy viz. people's participation in the tasks of the creation of supportive services and their integration with the economic activities. It is the people who, as the users of facilities, should take decision on the location, nature and qualities of infrastructure facilities and social amenities, since they are in the best position to know their requirements as well as local logistics. Institutionalised public participation, especially in the context of panchayati-raj, has already created a stable base for the decentralised exercise of power both on a territorial and functional basis. Efforts have, however, to be made to ensure the purposeful involvement in the planning process of the weaker sections and the less articulate groups of the rural society and especially in the framing and execution of special programmes catering to their welfare. Programmes of rural reconstruction as fall within the Panchayat's sphere of duties or those which fulfil the long felt needs of the total population should necessarily find a place in the micro-plan for each village so as to generate a genuine feeling of participation among the people.

2.6. Institutional Frame Work :

2.6.1. The State has evolved a number of far reaching policy prescriptions for the development of industry, agriculture, commerce and trade. The measures for encouragement of industries particularly in backward areas combined with a pragmatic approach towards encouraging units in

the private sector and joint sector are among the recent examples. In the sphere of agriculture also, programmes for double cropping and multiple cropping, cultivation of cash crops, pulses, etc. are among the principal foci for action. The accent on co-operatives for undertaking a wide range of activities spanning agricultural credit, marketing, milk collection and distribution, etc. is designed to ensure that necessary institutional support is available in the rural areas for various economic activities.

2.6.2. The need for expanding the coverage of the existing public distribution system so as to include the day to day essential needs of the vulnerable sections of the people and also to increase the number of outlets to serve them more adequately has been fully reorganised. Setting up of the Civil Supplies Corporation in the State will go a long way in achieving the desired goal. Apart from foodgrains, items like soaps, matches, tea, exercise note books etc. also fall within the activities of the Corporation. Additional fair price shops will be opened in a phased manner.

2.6.3. New organisational structures have been evolved in recent years to supplement the efforts of the Government in achieving the plan objectives speedily. The array of Corporations for industrial development to take care of the needs of financial assistance, working premises, raw materials and the like and to institutionalise arrangements for close collaboration among these Corporations have contributed in no less significant measure to the industrial development of the State. Corporate activities have also been encouraged in such fields as forest development including collection of minor forest produce, dairy development, development of the scheduled castes and scheduled tribes, seed distribution, land development, tourism, construction activities and the like. It is now widely recognised that Corporations are more easily able to acquire the needed flexibility in carrying out the functions in relation to the economic environment around them and thus supplement the efforts of traditional Government Departments in respect of various plan programmes.

CHAPTER—III

THE PLAN FRAME

3.1.1. The levels of development reached in various sectors of economy, the special problems facing the State and the lags in the crucial spheres which still persist are outlined in Chapter I. The approach and strategy adopted in formulating the Sixth Plan 1980-85 are spelt out in Chapter-II. This chapter presents the profile of investment envisaged during the Sixth Plan 1980-85 and indicates the levels of development likely to be reached in important spheres at the end of 1984-85. In determining the size of investment for the Sixth Plan and the priorities in development, due consideration has been given to the following:—

(i) The imperatives of anti-poverty strategy and massive effort for employment generation.

(ii) To attain a growth rate of 5%

(iii) To provide adequate resources for the Narmada Integrated Area Development programme to which the State accords the highest priority.

(iv) The levels of development reached at the end of 1979-80 and the need to maintain the pace of progress and exploit optimal growth potential built up in the different sectors.

(v) To ensure that the projects at advanced stage are completed at the earliest so that the returns on the investments accrue to the economy immediately on the completion of the projects.

(vi) The special problems confronting the State in different spheres.

(vii) The sectoral and spatial lags and imbalance in development that have persisted despite three decades of planning.

3.2. Rate of Growth of the State's Economy.

3.2.1. The economy of the State during the decade 1960-61 to 1969-70 progressed with a growth rate of 2.7%. In the subsequent decade 1970-71 to 1979-80, the performance has improved and the economy has witnessed a somewhat higher growth rate of 3.7%. Over the period of 1970-71 to 1979-80 the growth rate in the primary sector was 1.5% and in the secondary and tertiary sector, it was of the order of 5.4% and the overall growth rate was 3.7%. During the same period, the growth of the per capita income was 1.4%.

3.2.2. The past performance gives rise to the hope that it will not be difficult to achieve a growth rate of 5% during the Sixth Plan 1980-85, with the impressive increase in the level of production and producti-

vity in agriculture recorded in the last few years and concerted measures to sustain the tempo of development, the growth prospects in agriculture appeared to be bright. Progress in the field of animal husbandry, dairying, fisheries and forestry has been reassuring. The investments made in the field of industry are likely to come to fruition in the near future and with a comfortable power position, the industrial growth could be substantial. Taking into account these considerations a growth rate of 5% is proposed to be achieved during the Sixth Plan.

3.2.3. The targetted rate of growth of 5% implies an increase in the State Domestic Product of the order of Rs. 1441 crores during the plan period 1980-85 over the estimated level of Rs. 5210 crores in 1979-80 (current prices). The private sector as well as the institutional sectors would have to supplement the investment decided in the State Plan to achieve the required investment for a growth rate of 5% during the Plan period.

3.3. Profile of Investments.

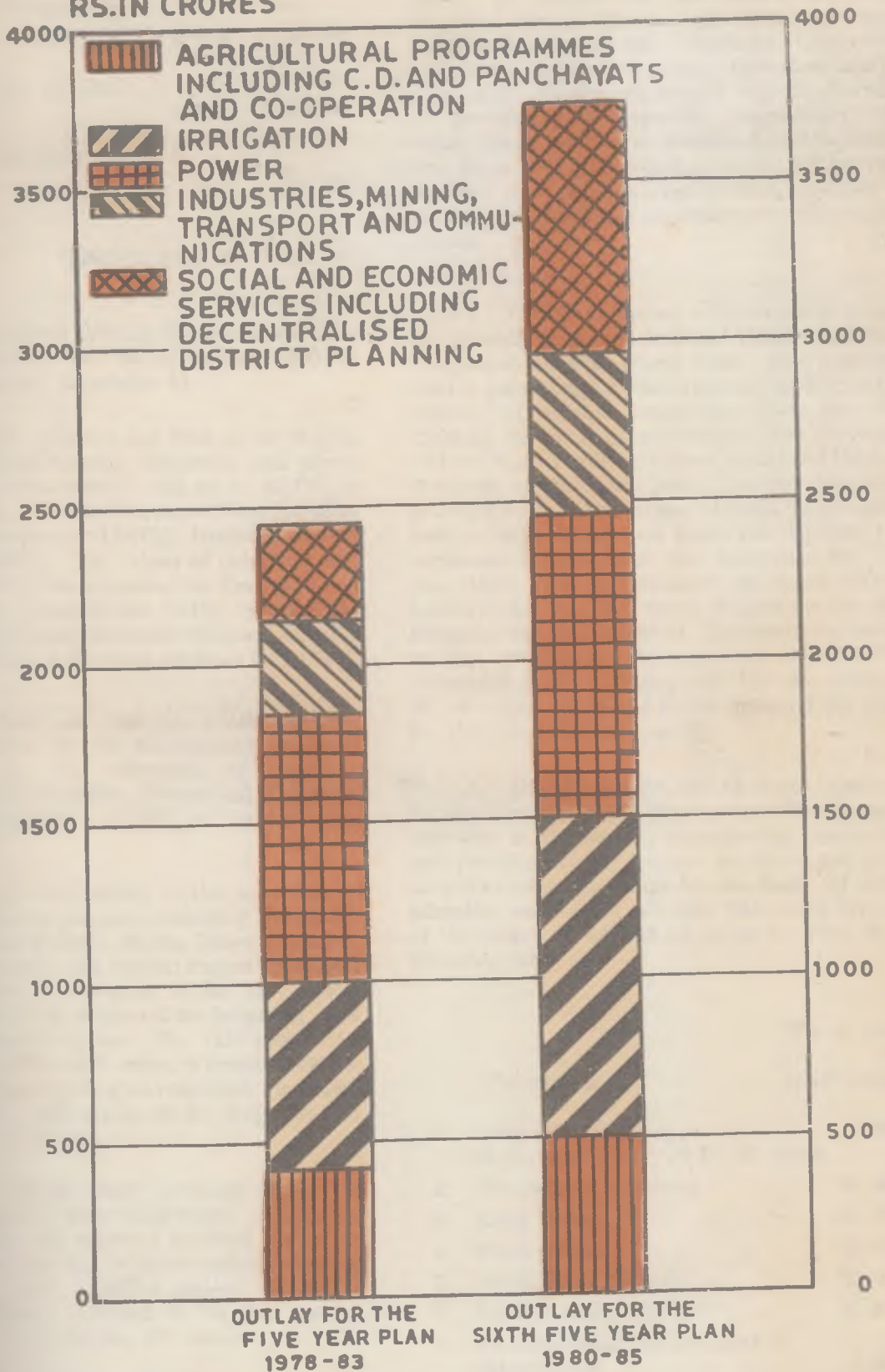
3.3.1. The investment priorities envisaged under the Sixth Plan 1980-85 are to be in conformity with the new strategy of development. An outlay of Rs. 3760 crores for the Sixth Five Year Plan 1980-85 has been proposed. As against the outlay of Rs. 2440 crores for 1978-83 Plan, this outlay is higher by about 55 percent over the previous outlay and will exceed the total expenditure of Rs. 2833 crores during the entire 20 year period 1961-80. The broad break up of the outlay is as under :—

(Rs. in crores).

Sector of Development	1978-83 Plan outlay	Sixth Plan 1980-85 Outlay
	2	3
Agriculture and Allied Programmes including C. D. Panchayats and Cooperation	413.10	506.50
Water Development (Irrigation).	612.00	1000.00
Power Development.	740.00	964.84
Industries and Minerals.	108.14	171.10

COMPARATIVE OUTLAYS FOR FIVE YEAR PLAN 1978-83 AND 1980-85

RS. IN CRORES



1	2	3
Transport and Communications.	232.00	338.60
Social, Community and Economic Services.	334.76	578.96
Decentralised District Planning.	—	200.00
Total .	2140.00	3760.00

A detailed statement showing the sectoral and Sub-sectoral distribution of the Sixth Plan 1980-85. outlays is appended (Appendix-A).

3.3.2. Highest priority has been given to the programmes of Agriculture, Irrigation and power. The outlays for these sectors add up to 65.73% of the total outlay. Within this, Agriculture including Cooperation accounts for 13.47%, Irrigation 26.60% and Power 25.66%. The share of industries and minerals is 4.55%, the allocation for Transport and Communications accounts for 9.01% whereas the Social, Community and Economic Services including Decentralised District Planning accounts for 20.71%.

3.3.3. Infrastructural facilities which are necessary pre-condition for the development are accorded priority in the allocation of resources. The outlays for Irrigation, Power and Transport programmes aggregate to 61.27% of the total plan outlay.

3.3.4. The spill over liability in the selected sectors viz. Irrigation projects (excluding Narmada), power generation projects, Roads, Minor Irrigation, Rural Water Supply, and Capital Project at the end of March, 1980 is estimated at Rs. 1417 crores, the bulk of which is attributed to Irrigation and power generation projects— Rs. 1210 crores. An outlay of around Rs. 1263 crores is proposed for the projects/programmes spilling into the Sixth Plan 1980-85 of which Rs. 1059 crores are for Irrigation and Power generation projects.

3.3.5. The largest single provision of Rs. 330 crores is proposed for Narmada project. Out of this, an outlay of Rs. 300 crores is provided under the Irrigation sector and Rs. 30 crores under the power sector. Other new irrigation projects and Power generation projects included in the plan account for an outlay of around Rs. 127 crores.

3.3.6. The rural component is around 70% of the total outlay. A number of existing and new programmes would directly benefit the backward and

problem areas and the weaker sections and the poor, both in rural and urban areas. Large outlays are provided for such programmes. An outlay of around Rs. 460 crores is provided for the Tribal Areas Sub-Plan. A special Component plan for the Scheduled Castes which has been initiated for the first time has been given high priority and around 7% of the outlay is provided for specific programmes which extend direct benefits to Scheduled Castes. Besides, the State is introducing a scheme for providing pension to landless agricultural labourers and another for financial assistance to self employed persons.

3.3.7. The Government of India has introduced the centrally sponsored National Rural Employment Programme on a matching basis. The programme aims at generating additional gainful employment and creation of durable community assets for strengthening the rural infrastructure. The programme will also improve the nutritional status and the living standards of the rural poor. Another programme launched by the Government of India on a matching basis is that of Integrated Rural Development being implemented throughout the State since 2nd October, 1980. The programmes of Small Farmers Development and the works programme for Small Farmers and Agricultural Labourers are merged into this programme. The target is to cover 5.50 lakh identified families during 1980-85. An outlay of Rs. 144 crores is proposed for the Special Programmes for the Rural Development.

3.3.8. An outlay of Rs. 343.42 crores is proposed for the Minimum Needs Programme which has special relevance in the context of improving productivity and providing higher income for the target groups as well as minimum acceptable standards of shelter, education and health services. The broad break-up of the outlay of Rs. 343.42 crores is given in the following table :—

Programme	(Rs. in crores)
1. Rural Electrification (of the total outlay of Rs. 80 crores)	3.64
2. Elementary Education	35.60
3. Rural Roads	166.59
4. Rural Health	20.09
5. Rural Water Supply	65.00
6. Rural Housing	30.85
7. Environmental Improvement in Urban Slums	5.00
8. Nutrition	16.65
	<hr/>
	343.42

3.3.9. A provision of Rs. 200 crores for decentralised district planning in the form of discretionary and incentive grants to the District Planning Boards is an important innovation in the current Five Year Plan. A large number of small works, which prove productive and crucial in the context of the needs of villages/talukas which often are lost sight of even at the district level can be taken up under this programme. The programmes of Social, Community and Economic Services with an outlay of Rs. 578.96 crores would lead to improvement in the quality of life in the rural areas. A special mention may be made of the outlay of Rs. 5 crores for UNICEF assisted social input projects being undertaken in the nine districts of the State.

3.4. Key Targets of Production and Infrastructural Programmes :

3.4.1. An additional foodgrain production potential of 12 lakh tonnes is expected to be created during 1980-85 raising the base level production of 41.22 lakh tonnes to 53.50 lakh tonnes at the end of 1984-85. In the case of oilseeds the target is to raise the potential from 19.82 lakh tonnes to 26 lakh tonnes and that of cotton from the level of 19.43 lakh bales to 24.30 lakh bales by the end of 1984-85. The elements of the action strategy for increasing crop production are :—

(1) To increase the areas under high yielding varieties of food crops from the level of 18.76 lakh hectares in 1979-80 to 24.50 lakh hectares by the end of 1984-85.

(2) To raise the consumption level of chemical fertilisers (NPK) from 3.78 lakh tonnes at the end of 1979-80 to 6.70 lakh tonnes at the end of 1984-85.

(3) To bring an additional area of 3.51 lakh hectares under the soil conservation measures on watershed basis.

(4) To bring an additional area of around 4 lakh hectares under irrigation.

(5) To adopt the new strategy to increase production of pulses by bringing more areas as a mixed crop with Bajra, Jowar, Sugarcane, Cotton and Rice.

3.4.2. The Government of India have sanctioned a project of groundnut production on an extensive scale from 1980-81 in groundnut growing pockets in the State covering six districts viz. Rajkot, Junagadh, Jamnagar, Bhavnagar, Amreli and Kachchh to encourage the cultivators to adopt modern methods of groundnut cultivation through technical guidance and financial assistance.

3.4.3. Irrigation potential created through major and medium irrigation projects is 10.12 lakh hectares at the end of 1979-80. It is proposed to create an additional irrigation potential of 2.60 lakh hectares by 1984-85. In case of Minor Irrigation the creation of irrigation potential of around 3 lakh hectares during the period 1984-85 has been targetted.

3.4.4. The installed capacity for power generation at the end of 1979-80 was 2384 M.W. The demand for power by the end of 1984-85 is projected to be 3186 M.W. needing an installed capacity of 4822 M.W. The net availability at the end of 1984-85 will be 3730 M.W. Plans for covering the gap as soon as possible after 1984-85 as also for the advanced actions for further growth in the demands have been included in the plan.

3.4.5. The addition of 7900 Kms. to the road network has been targetted raising the total length to 51573 Kms. by the end of 1984-85. It is proposed to provide pucca road links to 3654 additional villages during the Sixth Plan period 1980-85. Thus, around 11066 villages are proposed to be connected with the pucca roads by 1984-85.

3.4.6. Under the Minimum Needs Programmes the targets proposed for the Sixth Plan 1980-85 are :—

(i) Appointment of 15000 primary school teachers to take care of additional enrolment and improving the functioning of 7000 single teacher schools.

(ii) Construction of 3000 school class rooms.

(iii) Providing electricity to all the remaining 7408 villages, and thereby covering all the 18275 villages in the State under the programme of rural electrification.

(iv) Providing safe drinking water facilities to all the remaining 5086 'No Source' villages.

(v) To connect 3654 villages with pucca roads raising the total number of such villages to around 11066.

(vi) Establishment of additional 25 primary health centres and 900 sub-centres, raising the number of primary health centres to 276 and that of sub-centres to 3400 by the end of 1984-85.

(vii) Assistance to be given to 3.12 lakh allottees of the plots in construction of durable pucca houses.

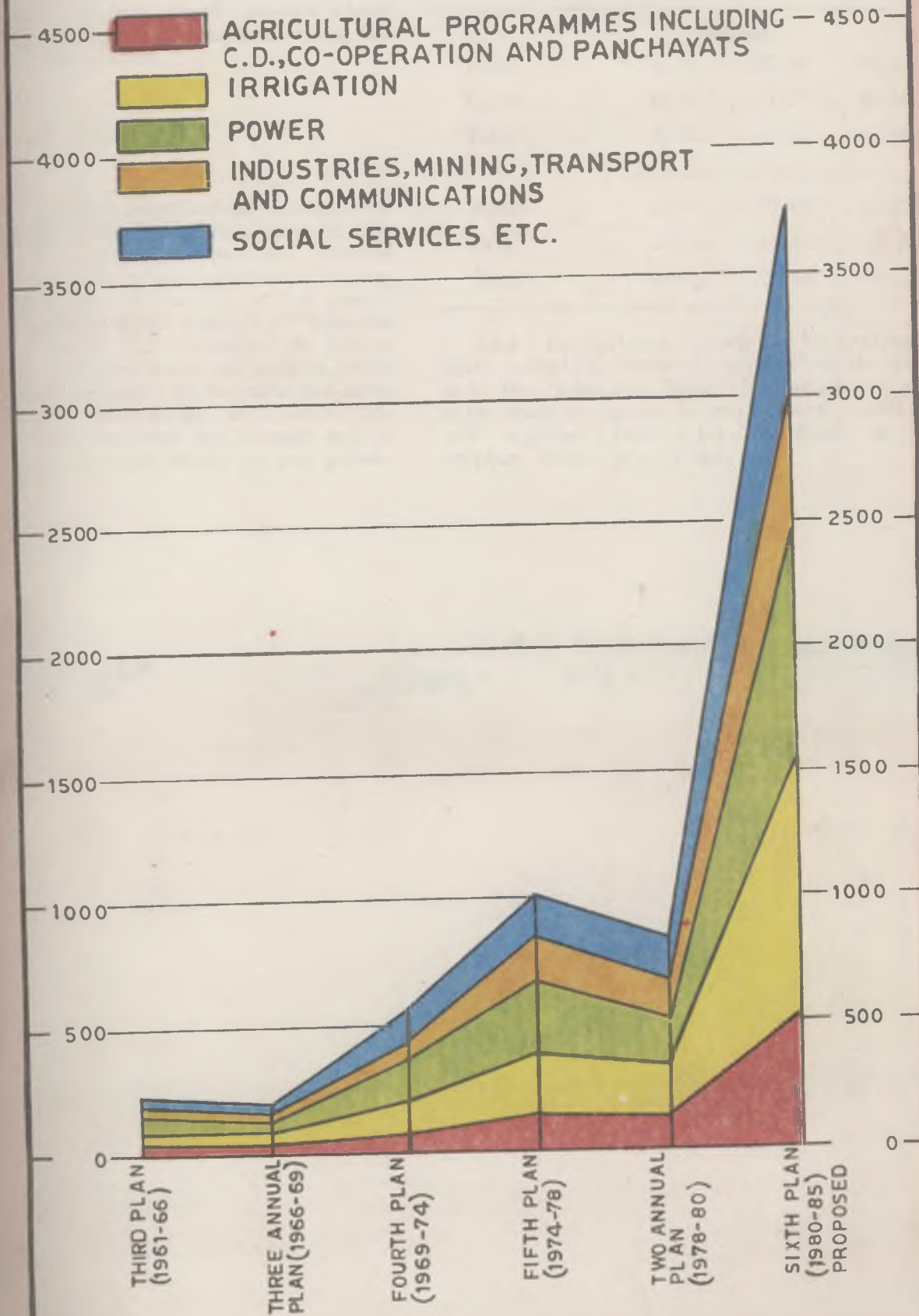
(viii) Acceleration of the programme of environmental improvement in slum areas, and

(ix) To extend the nutrition programme to the vulnerable group-additional beneficiaries being 4.25 lakhs under mid-day-meal and 4 lakhs under special nutrition programme.

3.4.7. A statement showing the selected physical targets proposed to be achieved by the end of 1984-85 is appended (Appendix 'B'). A broad outline of programmes is given in Chapter IX-Sectoral Programmes.

SIZE OF THE PLAN

RS. IN CRORES



3.5. Employment :

3.5.1. The employment oriented programmes in the State Plan accounts for an outlay of around Rs. 1795 crores which would generate about 3.1 million person years of employment during the Sixth Plan period 1980-85.

3.6. Impact on poverty

3.6.1. The targetted growth rate of State economy during 1980-85 is 5 percent. It is assumed that beyond 1984-85 same rate of growth will continue and per capita income and per capita monthly expenditure will both grow at the rate of 3.4 percent annually. The Sardar Patel Institute of Economic and Social Growth, has worked out the proportion of the population below the poverty line in 1984-85 and 1989-90 in the rural and urban areas of the State as per table below. The estimation does not take into account any redistribution of income during the plan period.

Areas	Below poverty line		
	1979-80	1984-85	1989-90
1	2	3	4
	Percent		
Rural	44.64	35.56	25.36
Urban	50.09	40.78	31.43
Total	46.27	37.19	27.34
	Absolute number in lakhs		
Rural	98.07	83.01	61.33
Urban	47.33	43.42	36.78
Total	145.40	126.43	98.11

3.6.4. It, however, needs to be mentioned that household oriented approach in the Plan and the Minimum Needs Programme and the entire range of schemes for employment generation will together have a beneficial impact on the numbers below poverty line.

APPENDIX A

Sixth Five Year Plan 1980-85

Sector/Sub-Sectoral Outlays

(Rs. in lakhs)

Sr. No.	Major/Sub-Major Head of Development						Sixth Plan (Outlay	Percentage to total
1	2						3	4
1.	Agricultural Research and Education	..	..	..	..	..	1000	0.27
2.	Crop Husbandry	..	..	..	..	..	3100	0.82
3.	Land Reforms	..	..	..	..	..	1000	0.27
4.	Minor Irrigation	..	..	..	..	..	8800	2.34
5.	Soil and Water Conservation	..	..	..	..	..	2894	0.77
6.	Irrigation Command Area Development	..	..	..	..	..	1877	0.50
7.	Animal Husbandry	..	..	..	..	..	1770	0.47
8.	Dairy Development	..	..	..	..	..	205	0.05
9.	Fisheries	..	..	..	..	..	2000	0.53
10.	Forests	..	..	..	..	..	9000	2.39
11.	Investment in Agricultural Financial Institutions	..	..	..	..	..	350	0.09
12.	Marketing, Storage and Warehousing	..	..	..	..	..	170	0.05
13.	Community Development and Panchayats	..	..	..	..	..	627	0.17
14.	Development of Backward Areas	..	..	..	..	..	250	0.07
15.	Special Programmes for Rural Development	..	..	..	..	..	14407	3.83
Total—I-Agriculture and Allied Services							47450	12.62
II.	Co-operation	..	..	..	..	..	3200	0.85
III.	Water Development (Irrigation)	..	..	..	..	..	100000	26.60
IV.	Power Development	..	..	..	..	..	96484	25.66
1.	Village and Small Industries	..	..	..	..	..	9596	2.55
2.	Large and Medium Industries	..	..	..	..	..	6364	1.69
3.	Mining and Metallurgical Industries	..	..	..	..	..	1150	0.31
Total—V-Industries and Minerals							17110	4.55
1.	Ports, Lighthouses and Shipping	..	..	..	..	..	2600	0.68
2.	Roads and Bridges	..	..	..	..	..	22000	5.82
3.	Road Transport	..	..	..	..	..	9000	2.37
4.	Tourism	..	..	..	..	..	250	0.0
Total—VI: Transport and Communications							33860	9.0

1	2					3	4
1.	General Education	..	..	..	..	5560	1.48
2.	Technical Education	..	..	..	..	600	0.16
3.	Medical and Public Health	..	..	..	..	7000	1.86
4.	Social Input (UNICEF assisted Projects )	..	..	..	..	500	0.13
5.	Sewerage and Water Supply	..	..	..	..	15070	4.01
6.	Housing	..	..	..	..	8530	2.27
7.	Urban Development	..	..	..	..	2850	0.76
8.	Capital Project	..	..	..	..	3000	0.80
9.	Information and Publicity	..	..	..	..	85	0.02
10.	Labour and Labour Welfare	..	..	..	..	4000	1.06
11.	Welfare of Backward Classes	..	..	..	..	8000	2.13
12.	Social Welfare	..	..	..	..	450	0.12
13.	Nutrition	..	..	..	..	1665	0.44
Total—VII: Social and Community Services						57316	15.24
1.	Secretariat Economic Services (Planning Machinery )	..	..	..	..	5	..
2.	Statistics	..	..	..	..	250	0.07
3.	Training of Development Personnel	..	..	..	..	75	0.02
4.	Administrative Machinery for TASP	..	..	..	..	100	0.02
5.	Civil Supplies Corporation and Consumers Movement	..	..	..	..	150	0.04
Total—VIII: Economic Services						580	0.15
IX—Decentralised District Planning		..	..	..	..	20000	5.32
GRAND TOTAL						376000	100.00

APPENDIX—B

Sixth Five Year Plan 1980-85 — Selected Targets and Achievements

Sr. No.	Item	Unit	Level of achievement at the end of		1980-85 (Target)
			1977-78	1979-80 (Base year level)	
1	2	3	4	5	6
I. Agricultural Programmes.					
1. Agricultural Production (Progressive Potential)					
(a)	Food grains	Lakh tonnes	38.74	41.22 (40.08)	53.50
(b)	Oil Seeds	Lakh tonnes	19.15	19.82 (19.93)	26.00
(c)	Cotton	Lakh bales (170 Kgs. each)	19.42	19.43 (17.85)	24.30
(d)	Sugarcane (in terms of Gur)	Lakh tonnes	2.45	2.52 (3.19)	4.50
2.	Soil Conservation on Agricultural Lands	Lakh hecets.	17.61	18.79	22.30
3. Live stock Products					
(a)	Milk	Lakh tonnes	20.25	22.00	26.40
(b)	Eggs	Lakh nos.	1980	2400	3600
(c)	Wool	Lakh Kgs.	18.19	18.34	21.00
4. Fish Production					
(a)	Marine	Lakh tonnes	1.77	2.07	3.45
(b)	Inland	Lakh tonnes	0.13	0.16	0.65
		Total :—	1.90	2.23	4.00
5. Co-operation—Agricultural Credit					
(a)	Short and Medium Term Advances	Rs. in crores	188.76	100.00	310.00
(b)	Long Term Advances	Rs. in crores	209.56	2.82 (1.41)	52.00 (1.41)
II. Area under Major and Medium Irrigation.					
(a)	Potential	Lakh hectares	9.24	10.12	12.72
(b)	Utilisation	Lakh hectares	5.01	5.29	7.53
III. Power.					
(a)	Installed Capacity	MW	1907	2384	3780
(b) Rural Electrification					
(a)	Villages Electrified	No.	8121	10867	18276
(b)	Pumpsets energised	No. in lakhs	1.56	2.03	3.28
IV. Roads (Excluding National Highways)					
(a)	Surfaced	Kms.	24872	28460	41360
(b)	Unsurfaced	Kms.	16104	16213	10213
		Total :—	40976	44673	51573
V. General Education—Enrolment					
(a) Classes I to V percentage of population in age group 6-11.					
(i)	Boys	Percent	115.00	118.77	114.33
(ii)	Girls	Percent	82.00	84.86	106.33
(iii)	Total	Percent	99.00	102.14	110.00

1	2	3	4	5	6
(b) Classes VI to VIII percentage of population in age group 11-14.					
(i) Boys	Percent	56.00	58.01	83.33
(ii) Girls	Percent	34.00	35.44	56.32
(iii) Total	Percent	45.00	47.05	70.29
VI. Health.					
1. Primary Health Centres					
(a) Main centres	No.	251	251	276
(b) Sub-centres	No.	2400	2500	3400
2. Rural Water Supply.					
No. source Villages covered out of 9600 villages	No.	2916	4514	9600
VII. Housing					
Rural Housing					
Rural house sites-cum-huts Constructed	No. in lakhs	0.56	1.12	4.24
VIII. Training of Craftsmen					
(a) No. of Institutions	No.	20	22	27
(b) Intake (i) Craftsmen	No.	6460	8040	11876
(ii) Vocationalisation	No.	..	..	15000

Note:—Figures in brackets in Col. 5 indicate actual Production.

CHAPTER—IV.

THE MINIMUM NEEDS PROGRAMME

4.1. Introduction.

(Rs. in crores).

4.1.1. The Minimum Needs Programme launched in the Fifth Plan had envisaged the allocation of adequate resources for programmes aiming at the upgradation of levels of social consumption of the poor covering Elementary Education, Rural Health Nutrition, Drinking Water Supply, Rural Roads, Rural Electrification, House Site plots for Rural Landless Labourers and construction of houses thereon and Environmental Improvement of slums in the urban areas. The programme had aimed at establishing throughout the country a network of certain essential services based on the criteria of uniformity and equality. The State Fifth Plan originally provided an outlay of Rs. 89.56 crores for Minimum Needs programme. However, this was revised to Rs. 52.04 crores. An expenditure of the order of Rs. 43.80 crores was incurred during the Fifth Plan 1974-78.

4.1.2. In the Fifth Plan some of the targets under the programme could not be fully achieved. The programmes of Elementary Education, setting up Primary Health Centres and Sub-centres, allotment of House Site Plots to the Landless Labourers had progressed satisfactorily; while the State had lagged behind in the case of Rural Water Supply, Rural Roads, and Environmental Improvement in urban slums.

4.2. Objectives of the Sixth Five Year Plan 1980-85

4.2.1. The Minimum Needs programme has been given due priority in the allocations of provisions during the Sixth Plan 1980-85. The activities covered under these programmes are proposed to be supplemented by the wider programmes in the various social services sector. It is also proposed to adopt a system approach in dealing with these social service programmes. The Minimum Needs Programme is expected to provide essential infrastructure and welfare services to the weaker sections and backward and remote areas of the State. The programmes formulated are also labour intensive and create substantial additional employment. It is proposed to pay considerable attention both to locational aspects of these basic services and their integration so as to confer optimal benefits on the target groups. Both these dimensions are proposed to be tackled within the framework of local planning in the State. An outlay of Rs. 343.42 crores has been proposed for the Sixth Five Year Plan 1980-85 for the Minimum Needs Programme. The broad break-up of the outlay as under:—

Sr. No.	Name of the Programme	Proposed Outlay 1980-85
1	2	3
1.	Rural Electrification. (of the total outlay of Rs. 80.24 crores.)	3.64
2.	Rural Roads.	166.59
3.	Elementary Education including Adult Education.	35.60
4.	Rural Health.	20.09
5.	Rural Water Supply.	65.00
6.	Housing Assistance to Rural Landless Labourers.	30.85
7.	Environmental Improvement of slums.	5.00
8.	Nutrition.	16.65
Total..		343.42

4.2.2. The progress in the implementation of the Minimum Needs Programme upto the end of 1979-1980, the implication of the norms set up by the Planning Commission and the proposed programmes for the Sixth five Year Plan 1980-85, are broadly indicated in the subsequent paragraphs.

Elementary Education.

4.2.3. The objective continues to be the universalisation of elementary education. The norm for the Country, for the Minimum Needs Programmes for elementary education is to achieve 95 per cent enrolment in the age group 6-11 years and 50 per cent in the age group 11-14 years by 1985. The State having attained a higher level of enrolment aims to achieve the enrolment of 110 per cent in the age group 6-11 (classes I to V) and 70.29 per cent in the age group 11-14 (classes VI to VIII) by the end of the Sixth Plan, 1984-85.

4.2.4. The progress of the enrolment and the target is as under:—

(Fig. in percentage)

Item	Age group	Achievements			target
		1978-79	1979-80	1984-85	
1	2	3	4	5	
Enrolment of children	6-11	99.80	102.14	110.00	
	11-14	46.63	47.05	70.29	

4.2.5. It is proposed to expand the coverage of elementary education during the Sixth Plan 1980-85. For achieving these objectives, an outlay of Rs. 85.69 crore has been proposed for "Elementary Education" during the period 1980-85. The important targets set under this programme during the Sixth Five Year Plan period are:—

(1) Appointment of 15000 primary school teachers to take care of additional enrolment of 11.23 lakh children and improving the functioning of 7000 single teacher schools.

(2) Construction of 3000 school class rooms.

(3) All the remaining 711 villages having population of less than 200 but more than 100 will be provided schooling facilities.

(4) To supply 5.70 lakh pairs of uniforms and 25.00 lakh sets of Text Books free of cost to the tribal children enrolled in schools.

(5) To cover under non-formal education 2.24 lakh children in the age group 9-14 to minimise drop outs and wastage.

4.2.6. Special Education for Adults, particularly in the productive age group 15-35 would also be a part of the elementary education component of MNP. The National norm is to achieve 100% coverage of the illiterates in the age group 15-35 by 1990. In Gujarat against the projected population of around 62 lakhs at the end of 1984-85, in the age group 15-35 it is targetted to cover 35.30 lakh illiterate Adults during the Sixth Plan 1980-85.

Rural Health.

4.2.7. The Fifth Plan norms of establishing one Primary Health Centre (PHC) per Community Development block, one sub-Centre for every 10,000 population and the provision of drugs at Rs. 12,000 per annum for each PHC and Rs. 2000 per annum to each sub-Centre have been fully achieved in the State. There are 251 Primary Health Centres and as a result of the various programmes under the health, family welfare, minimum needs programme and the multipurpose workers, schemes, in all 2500 sub-Centres are functioning in the State, at the end of 1979-80. At present 11 Primary Health Centres of the existing 251 PHC have already been upgraded into 30 bedded hospitals (now known as Community Health Centres).

4.2.8. The ultimate objective of Minimum Needs Programme so far Rural Health programme is concerned is that of (i) the setting up of one PHC for a population of 30,000 in plains and 20,000 in tribal and hilly areas, (ii) one sub-centre for a population of 5000 in plains and 3000 in tribal and hilly areas by 2000 A.D. In addition, it is also envisaged to have one community health volunteer for a population of 1000 or a village by 1990 and establishment of one Community Health Centre (CHC) for a population of one lakh or one C.D. Block by 2000 A.D. The CHC is a modified form of upgraded 30 bedded hospital which would provide for necessary specialisation of gynaecology, paediatrics, surgery and medicine alongwith the provision of beds.

4.2.9. It is proposed to establish additional 25 PHCs and 900 sub-Centres raising the number of PHCs to 276 and that of sub-Centres to 3400. It is also proposed to upgrade 5 PHC into CHC. An outlay of Rs. 20.09 crores has been proposed for the Sixth Five Year Plan 1980-85.

Rural Water Supply.

4.2.10. Large areas in the State fall under the arid and semi-arid zones. Recent draughts have severely depleted the ground water resources. Villages along the coastline also face serious problem of potable water.

4.2.11. Of the 18,275 villages in the State, 9600 villages have been categorised as having "No Source" villages of drinking water supply by June 1977. At the end of March, 1980, 4514 villages (inclusive of 1000 villages covered by the end of the Fourth Plan) have been covered leaving a balance of 5086 villages to be covered under the rural water supply

programme. The National norm is to cover all the "No source" villages during the Sixth Plan 1980-85. The State Government attaches a high priority to this programme. The implementation machinery at the functional and apex levels has been strengthened to handle successfully the massive programme. The Government aims at covering all the remaining villages by the end of 1984-85. In addition to the State Plan outlay of Rs. 65 crores provided for the Sixth Five Year Plan 1980-85, an amount of Rs. 21 crores would be made available by the Government of India under accelerated Rural Water Supply Programme for enabling the State Government to achieve the proposed target.

Rural Roads.

4.2.12. The National norm under the Minimum needs programme is to provide road linkages to all villages with a population of 1500 and above and 50 percent coverage of villages with a population of 1000 to 1500, by 1990 and to cover 50% of the total number of villages by the end of the Sixth Plan 1980-85. Out of 3664 villages in the population range of 1500 and above 2441 villages have been connected by all weather roads and out of the 2964 villages having population of 1000 to 1500 1402 villages have been connected by roads by the end of 1979-80.

4.2.13. The State Government aims at achieving the norms of the programme fully by the end of the Sixth Plan 1980-85. It is envisaged to cover all the remaining 1223 villages in the population range of 1500 and above and 781 villages in the population range of 1000 to 1500 during the Sixth Plan 1980-85.

4.2.14. The following table depicts the achievements and the targets.

population range.	Total No. of Villages.	1979-80 (Villages connected)	1980-85 Target (additional)
1	2	3	4
1500 and above.	3664	2441	1223
1000 to 1500.	2964	1402	781

An outlay of Rs. 166.59 crores is proposed for the Sixth Plan 1980-85 to achieve the above target.

Rural Electrification.

4.2.15. Rural electrification is a socio-economic activity aiming at changing the pattern of living in rural areas and to accelerate the growth of the rural economy. There are 18275 villages in the State out of which 10867 villages have been electrified till 1979-80. The National norm for the Minimum Needs Programme is to cover 60% of the villages in each State by 1990. However the State Government aims to electrify all the remaining 7408 villages by 1984-85 and thereby achieve the stage of 100 per cent electrified villages in the State. Special emphasis is also proposed to be given to the rural electrification programme in the tribal areas of the State. While electrifying all the villages of the State, harijan basties will also invariably be covered under the programme.

Housing Assistance to the Landless Labourers.

4.2.16. The scheme for the allotment of plots to the landless labourers in the rural areas has been under implementation in the State since July, 1972 as a Central Sector Scheme. This was continued as a State Plan Scheme under the Minimum Needs Programme during the Fifth Plan. Under the scheme house sites measuring 100 sq. yards are provided free of cost to the families of landless labourers in the rural areas. 4.25 lakh plots have been allotted till the end of December, 1980. With a view to cover left out families, it has been decided to accept the applications from such families upto 31st December 1981. Assistance to 1.12 lakh allottees have been given for construction of houses under the scheme till the end of 1979-80.

4.2.17. In respect of housing assistance, the Government has launched a massive programme of assisting the allottees of the free plots since 2nd October 1976. The scheme has been recently revised and it envisages the construction of a small but durable pucca house costing about Rs. 3000/- with Government assistance by way of subsidy of Rs. 1000/-, contribution from the District Panchayats Rs. 250, loan from banks HUDCO Rs. 1500 and Rs. 250 as beneficiary contribution in terms of labour.

4.2.18. The National norm under the Minimum Needs Programme for the Sixth Plan 1980-85 is to cover all the remaining landless rural labour households for allotment of house sites and 25% of the eligible house holds for provision of assistance for construction of house. The State Government has prepared a programme of assisting 3.12 lakh allottees of Plots for construction of durable pucca houses

during the Sixth Plan 1980-85. It is further proposed to provide essential amenities like drinking water, street light, Roads, etc., on priority basis to the colonies of such beneficiaries. An outlay of Rs. 30.85 crores has been proposed for the Sixth Five Year Plan 1980-85.

Environmental Improvement of Slums

4.2.19. During the Fourth Plan, the Government of India had introduced a Central Sector Scheme for environmental improvement in the slum areas of cities with population of 8 lakhs and above. Only Ahmedabad city was thus covered under this programme. The State Government had introduced a similar scheme under the State Plan for cities having population of 1 lakh and above covering Vadodara, Surat, Rajkot, Bhavnagar, Jamnagar and Nadiad. The Central Sector Scheme was extended subsequently to cities with a population of 3 lakhs and above. Accordingly, the scheme covered Ahmedabad, Vadodara, Surat and Rajkot. In the Fifth Plan this programme was continued in the State Plan. From February 1980, the scope of this programme has however been extended to all urban areas with Municipal Corporations Municipalities. The scheme envisages the provision of financial assistance to local bodies for providing certain essential facilities and services like water supply, sewerage, storm water drains, community latrines, paving of streets and improvement of slum areas inhabited by Scheduled Castes particularly scavengers.

4.2.20. The M.N.P. norm is to cover 100 percent urban slum population by 1990 under the Programme for environmental improvement of slum areas. By the end of 1979-80, 1,49,338 slum population have been covered. It is targetted to cover 3,33,333 slum population for which an outlay of Rs. 5 crores is proposed for the Sixth Plan.

Nutrition

4.2.21. The Minimum Needs Programme comprises of Special Nutrition Programme and Mid-day Meals Programme. The Special Nutrition Programme was introduced during 1970-71 and was subsequently included in the Fifth Plan as a part of the M.N.P. The programme envisages to provide 300 calories and 10-12 grams of protein to

the children in the age group 0-6 years for 300 days in a year and 500 calories and 20-25 grams of protein to the pregnant and nursing mothers for 300 days. The programme also envisages the integration for medical care, immunisation, health and referral services and nutrition education with the provision of nutritional supplement. These services are delivered through the organiser at the feeding centres under the supervision of the officials of primary health centres. At the end of 1979-80, 550 feeding centres under the programme have been upgraded to Integrated Health cum Nutrition Centres. The Nutrition component of Integrated Child Development projects is also served under the special nutrition programme. During the Sixth Five Year Plan 1980-85 an outlay of Rs. 10.15 crores has been proposed for the Special Nutrition Programme, and it is proposed to cover additional 4 lakh beneficiaries.

4.2.22. The Mid-day meals programme for the age group 6-11 years was introduced in 1962-63. It provides Mid-day Meals to these Children for 200 days in a year and 300 calories and 10-12 grams of protein per child per day. It aims at increasing the enrolment in the Primary schools and raising nutritional status of children. It also seeks to provide supplementary feeding to the school going children in the age group of 6-11. The scheme is being implemented through primary schools with the assistance of food materials from CARE. An outlay of Rs. 6.50 crores has been proposed for the Sixth Five Year Plan 1980-85. The additional beneficiaries under this programme targetted to be covered is 4.25 lakhs during the Sixth Plan 1980-85.

Monitoring of Minimum Needs Programme.

4.2.23. The Minimum Needs Programme has a vital bearing on the quality of life of vulnerable sections of population. The Government attaches great importance to vigorous implementation and tight monitoring of the benefits conferred by this programme on the adivasis, harijans, and other socially, educationally and economically backward classes. It is, therefore, proposed to strengthen the monitoring arrangement at all the levels for this important programme. It is proposed to have appropriate monitoring machinery at each of the heads of departments level and at the District level.

4.3 The Total Spectrum

4.3.1. A total outlay of Rs. 343.42 crores is proposed for the period 1980-85 on various Components of the Minimum Needs Programme as under:—

Programme	National Objective	National Target by 1985	Coverage targetted by 1984-85 in Gujarat	Proposed outlay in the State Plan (Rs. in crores)
1	2	3	4	5
Elementary Education	1. 100% enrolment in the age group 6-14 by 1990. It would be supplemented with non-formal education.	95% enrolment in the age group 6-11 and 50% in the age group 11-14. It would be supplemented with non-formal education.	(i) 110% enrolment in the age-group 6-11 (Classes I to V) (ii) 70% enrolment at the age group 11-14 (Classes VI to VIII)	35.60
	2. 100% coverage of adults in the age group 15-35 by 1990 through non-formal education	Target not fixed.	(iii) To cover 35.30 lakh adult illiterates.	
Rural Health	1. One Community Health Volunteer for a population of 1000 or a village by 1990.	To increase the number of Community Health Volunteers from 1.40 lakh as on 1st April, 1980 to 3.60 lakhs.	(i) 19000 Community Health workers	30.09
	2. Establishment of one sub-centre for a population of 5000 in plains and 3000 in tribal and hilly areas by 2000 A.D.	To increase the number of sub-centres from 50,000 to 90,000 for 75% achievement of the objective.	(ii) To increase the number of sub-centres from 2500 to 3400	
	3. One PHC for 30,000 population in plains and 20,000 in tribal and hilly areas by 2000 A.D.	To establish 600 additional PHCs and 1000 SHCs over and above 5400 PHCs and 1000 SHCs existing now for achieving about 45% of the number required.	(iii) To increase the number of P. H. Cs. from 251 to 276	
	4. Establishment of One Community Health Centre for a population of one lakh or one C. D. Block by 2000 A. D.	To establish 174 Community Health Centres, in addition to converting existing 430 upgraded PHCs into Community Health Centres.	(iv) Community Health Centre-additional 5 P. H. Cs. to be upgraded raising the total number to 16.	
Rural Water Supply		Coverage of all the remaining problem villages by 1985 excepting in some difficult areas like hilly and desert regions.	All the remaining 5086 'No Source' villages to be covered.	65.00
Rural Roads	Linking up of all remaining villages with a population of 1500 and above and 50% of the total number of villages with population of 1000-1500 by 1990.	To cover about 50% of the total number of villages required to be covered to achieve the objective i.e. additional about 20,000 villages.	(i) To cover 1223 all the remaining villages with population of 1500 and above. (ii) 781 Villages in the population range of 1000-1500.	166.59
Rural Electrification	At least 30% of the villages in each State and Union Territory to be electrified by 1990.	40% of the villages required to be covered to achieve the objective i.e. additional 46,464 to be electrified.	To cover all the remaining 7408 Villages, thus achieving 100% coverage.	3.64 (of the total outlay of Rs. 80.24 crores provided in the State Plan).
Housing Assistance to rural Landless Labourers.	Provision of housing assistance to all landless labour households by 1990. Assistance to include house-site construction materials, drinking water well for a cluster of houses and approach road.	To cover all the remaining households for allotment of house-sites and 25% of the eligible households i.e. about 3.6 million for provision of assistance for construction of houses.	(i) Plots already allotted 4.25 lakhs. To cover all remaining eligible families. (ii) Housing assistance already provided to 1.12 lakh allottees. Proposed to provide assistance to additional 3.12 lakh allottees for construction of small durable pucca house	30.85

1	2	3	4	5
Environmental Improvement of urban slums	100% coverage of urban slum population by 1990. Facilities to include water supply, sewerage, paving of streets, storm water drains, community latrines. Areas inhabited by Scheduled Castes particularly scavengers would be given priority.	40% of the remaining slum population i. e. additional 10 million slum population to be covered.	To cover Slum population of about 3.3 lakhs.	5.00
Nutrition		SNP : 5 million children in 600 ICDS blocks and 5 lakh women to be covered by providing integrated services of feeding, Health, welfare, etc.	4 lakh beneficiaries under SNP.	16.65
		MDM : The existing level of beneficiaries i. e. about 17.4 million Children to be continued in the Nutrition integrated programme with other essential services	4.25 lakh beneficiaries under M. D. M.	
			TOTAL	<u>343.42</u>

4.3.2.. The outlay proposed constitutes a substantial increase over the level of expenditure of about Rs. 44 crores during the Fifth Plan 1974-78 and the outlay of Rs. 211 crores for the Five Year

Plan 1978-83. This will be a decisive step toward extending the benefits of the Plan to the poor and the less privileged sections of the society.

CHAPTER V.

PROGRAMMES FOR THE DEVELOPMENT OF BACKWARD AREAS AND THE WEAKER SECTIONS OF THE SOCIETY**5.1. Introductory ;**

5.1.1. Reduction of the disparities in the levels of development as between different areas and different sections of the society is an important objective of planning. In the case of the less developed areas, appropriate growth strategies have to be evolved based on the identification of the lead sector of development, which in turn, is related to agro-climatic conditions, natural resources endowments and techno-economic and social constraints. Equally important is the provision of welfare schemes meant to cater to the backward classes and vulnerable sections of the society such as the small and marginal farmers, land less agricultural labourers and rural artisans etc. It would be necessary to evolve specific programmes aiming at the welfare of these groups on the basis of a proper identification of their levels of development and the scope for raising their living standards by way of income supplementation through fruitful economic activities. Efforts in the past at improving the economy of the backward areas and the levels of the living of the weaker sections have no doubt yielded results but the pace of progress has not been sufficiently fast nor has the spread of benefits been even.

5.1.2. The Planning Commission has set up a National Committee on the Development of Backward Areas under the Chairmanship of Shri B. Sivaraman, ex. Member, Planning Commission, to formulate appropriate strategy/strategies for effectively tackling the problems of backward areas. The Committees' report is awaited.

5.1.3. So far as the backward areas are concerned, each such area poses a unique problem based on combination of various factor. Therefore the development of such areas becomes a complex exercise in spatial planning. The adoption of a suitable location-specific strategy based on a proper diagnosis of the causes of backwardness and the assessment of the potential for development in each area, therefore, becomes an essential prerequisite. So far, special programmes have been initiated for speeding up the pace of development of mainly the tribal area and Drought Prone tracts. The Central Scheme for industrially backward districts provided for concessional finance from the financial institutions and cash subsidy subject to prescribed ceiling for industries in selected districts. The plan for the period 1980-85 not only provides for accelerating the implementation of Tribal Area Sub-Plan and the Drought Prone Area Programme but also provides for new programmes like National Rural Employment Programme, reoriented Integrated Rural Development Programme, Minimum Needs Programme and District Plans for Social Inputs. All such programmes will not only help in speeding up the progress in backward areas but will also help considerably in the upgradation of the levels of living of the weaker sections of the society.

5.1.4. Gujarat has a large population of backward classes, the scheduled castes and the scheduled tribes constitute respectively 7% and 14% of the total population. The population of nomadic and denotified tribes is estimated around 7 lakhs. In addition, the State has a large number of the economically backward classes; apart from the small and marginal farmers, landless agricultural labourers constituting vast segments of the rural poor, who need special attention. The problems of the urban slum dwellers and the urban poor in general also demand special consideration. Specific programmes initiated for the welfare of distinct sections of the underprivileged groups have been under implementation having regard to the needs of individual sections. Mention may be made of the programmes for the scheduled castes and scheduled tribes, the special programmes for the small and marginal farmers and a variety of social welfare measures aimed generally at the weaker sections. Apart from continuing such programmes, the plan for 1980-85 provides for several new programmes for improving the socio-economic condition of the weaker sections. The principal amongst them are 20 Point Economic Programme, setting up of Rural Workers Welfare Board, Financial Assistance for the maintenance of old aged Agricultural labourers, social inputs programmes for women and children, housing for rural poor as well as the integrated rural development programme which is designed to help large segments of the poor. The programmes for the socially and educationally backward classes and the economically backward classes, as well as disabled persons have also been proposed. Another significant step is the acceleration of special component plan for the scheduled castes. The new thrust on employment generation would not only increase the tempo of economic activities in backward areas but would also bring about a rise in the income level of the backward and the weaker sections of the people. Apart from the expansion of the employment generating programmes like minor irrigation, animal husbandry and dairy, soil conservation, afforestations and roads, the Plan 1980-85 provides for other new programmes also. All such programmes aim at upgrading of the levels of social consumption of the poor and increasing their income.

House hold Approach :

5.1.5. The State Government is introducing the family based programme for removal of poverty and providing social in puts to the persons living below poverty line. Essentially, the household based programme is not a new scheme, but a combination of various schemes or activities already been performed by the integrated Rural Development Agency, the District Industries Centre, the ITI, etc. what is new about the programme is—

(i) that the programme concentrates on the household as the unit ;

(ii) has a definite orientation towards raising the household income above the poverty line ;

(iii) is a time-bound programme with annual targets for the number of beneficiaries to be covered ;

(iv) Besides income generating activities, the programme covers social inputs to the identified areas, such as family welfare, immunisation and in case of landless labourers, housing etc.,

The beneficiaries in this scheme will be mainly covered under the following programmes :—

- (1) Integrated Rural Development Programme;
- (2) National Rural Employment Programme;
- (3) Special Component Programmes for Scheduled Castes and Tribal Areas Sub-Plan;
- (4) Housesites and housing assistance for landless labourers.

5.1.6. The major thrust of the programme for 1980-85 will, in the circumstances, have to be on an optimal programme mix that will, on the one hand assimilate the gains achieved through the programmes under implementation so far and cover new ground in relation to specific needs.

5.1.7. The main programmes benefitting the the backward areas and the weaker sections have been summarised below.

5.2 Tribal Areas :

5.2.1. The centrally sponsored Tribal Development Block programme was under implementation in the State for a long time. There were 53 blocks at the end of the Fourth Plan. In pursuance of the national policy of evolving an intergrated development programme for the tribal areas, the State formulated Tribal Area Sub-Plan and initiated its implementation substantially in the year 1976-77.

5.2.2. The tribal area sub-plan of the State covers 32 talukas with a majority of the tribal population. In addition 15 pockets of tribal concentration have been also included in the Sub-Plan. The list of the 32 talukas and 15 pockets is given in Appendix 'A'. The tribal area is situated mainly on the eastern hilly belt of the State, spread over eight districts, Dangs, Valsad, Surat, Bharuch, Vadodara, PanchMahals, SabarKantha and BanasKantha. The total area covered under the sub-plan is 27189 sq.kms. constituting 13.89 per cent of the total area of the State. The Tribal population of the sub-plan area is 30 lakhs which is 68.18 per cent of the total population of the sub-plan area and 81 percent of the total tribal population of the State.

5.2.3. The long term objectives of the Tribal Area Sub-Plan are :—

- (1) To narrow the gaps between the level of development of the tribal and other areas of the State ;
- (2) To improve the quality of life of the tribal community ;
- (3) To tackle important socio-economic problems facing the tribal people.

5.2.4. These objectives have guided the formulation of the Sub-Plan for 1980-85. Elimination of exploitation in all forms and speeding up of the process of socio-economic development are the primary foci of the plan. Steps have been taken continuously to save the tribals from exploitation in the spheres of land alienations, forest labour and in securing their essential consumption needs. It is proposed to consolidate during the Sixth Plan the gains of the protective measures initiated earlier. Bridging the gaps in the levels of development of the tribals through programmes capable of generating additional incomes is another aspect of the upliftment of the tribal population.

5.2.6. The programmes at the field level under the sub-plan have been in operation only since 1976-77. It is, therefore, proposed generally to adhere to the priorities and strategies of the Sub-Plan which have been evolved only recently. Production oriented programmes and infrastructure development will continue to receive emphasis and the generation of larger employment opportunities will be accorded priority attention. The spread of social services in the tribal areas during the Fifth Plan had not been optimal and it is therefore proposed to assign considerable importance to the social services in the Sub-Plan 1980-85.

5.2.7. The Sub-Plan outlay for 1980-85 comprises of four elements (1) flow of funds from the State Plan sectors (2) special central assistance (3) programmes of central ministries and (4) institutional finance. The bulk of the programmes in the Sub-Plan are funded under the State Plan. Having regard to the high proportion of the tribal population in the State, the larger area covered by the Sub-Plan, the low levels of development of the tribal area and people and the need for mounting a massive effort for the upliftment in accordance with the development strategy, an outlay of Rs. 459.65 crores will flow to the Tribal Sub-Plan from the State Plan outlay of Rs. 3760.00 crores which is more than 14% of the State's outlay. This is expected to be supplemented by special central assistance as well as other central programmes of the Central Ministries and institutional finance. A broad sectoral breakup of the proposed

outlay of the State flow is given in the following table :—

(Rs. in crores)		
Sr. No.	Major Head of Development	Flow From State Plan
1	2	3
1.	Agriculture and Allied Programmes including Community Development, Panchayats and Special Programmes	129.74
2.	Co-operation	8.57
3.	Water Development	91.28
4.	Power	35.21
5.	Industries	25.53
6.	Transport and Communications	60.11
7.	Social and Community Services	108.21
8.	Economic Services	1.00
Total ..		459.65

5.2.7. Bulk of outlay flowing from the State Sector is proposed to be provided for agricultural and allied programmes, water development, roads and social services, more particularly education and health. Schemes have been provided also for the primitive groups. Specific attention will be paid to the needs of the scattered tribal population residing outside the sub-plan area through suitable schemes in the general plan.

5.2.8. Within the outlay for the Sub-Plan a nucleus budget is also sanctioned every year which is placed at the disposal of the Project Administrator. This is being done in order to meet the specific local requirements of the project areas. The system of providing a nucleus budget will be continued during the plan period 1980-85.

5.2.9. Special projects for the welfare of tribals have been prepared to attract substantial institutional finance from the public sector undertakings, banks etc. Substantial institutional finance is expected for implementation of programmes under Agriculture supporting services, co-operation and industries.

5.2.10. The State has already set up a Tribal Development Corporation in October, 1972 to participate actively in the process of promoting the economic well being of the tribals. According to provisions of the Act, the State Government has to provide capital contribution and grant towards administrative expenditure. Adequate provision is proposed in the State Plan 1980-85. The Corporation provides soft loans to tribal cooperatives and share loans. A few schemes, pertaining to co-operation, social welfare and cottages and small industries aiming at tribal welfare have been transferred to the Corporation. The Corporation has also initiated the scheme for differential rate of interest. Under this scheme about 32,000 families have been benefitted till 1979-80. Various banks have advanced additional loan of Rs. 4.41 crores under this scheme for helping Supple-

mentary occupations. The activities of this corporation are proposed to be accelerated.

5.2.11. A number of measures for saving the tribals from the exploitation of vested interest are being taken. The plan also provides for a scheme like protection against unauthorised alienation of land held by tribals. Mention may also be made of the scheme for grant of subsidy for payment of interest on loans obtained from land development banks for purchase of occupancy rights under B.T. and A.L. Act, 1958. In the Sixth Five Year Plan target group oriented approach will be adopted for raising income level of the tribals living below the poverty line and number of measures have been proposed for the upliftment and welfare of the tribals.

5.3. Drought Prone Area Programme.

5.3.1. Scarcity is a recurrent feature of the Agricultural economy of the State. The National Irrigation Commission has identified 58 talukas in the State as drought prone. The Drought Prone Area Programme covers 41 talukas in ten districts namely Amreli, Bhavnagar, Jamnagar, BanasKantha, Ahmedabad, Kachchh, Mahesana, Panchmahals, Rajkot and Surendranagar (Appendix B). These talukas cover a total area of 52202 sq.km. which is 28.2% of the total area of the State and a population of 47.46 lakhs which is 17.8% of the total population of the State.

5.3.2. Stress under this programme is on integrated area development to restore ecological balance to stabilise the agriculture base by the optimal utilisation of the land and water resources in the area and the development of supplementary occupations which are not entirely dependent on rainfall, soil and moisture conservation, restructuring of cropping pattern and pasture development and change in agronomic structure etc. are the other elements of the programme. The ultimate objective is to reduce through appropriate investment and technology, the severity of droughts and create a long term stable base for productive employment. A total outlay of Rs. 30.75 crores is proposed for the period 1980-85 for this programme to be shared between the Centre and the State.

5.3.3. Under this programme, it is proposed to cover 19289 hectares of land under minor and ground water irrigation, soil conservation in 18525 hectares, afforestation in 21045 hectares and soil and moisture conservation in 500 hectares. Besides, 2680 hectares will be covered under grass land development. It is also proposed to complete two drinking water supply scheme in these areas. 435 milk cooperative societies and 80 poultry units will be assisted under the programme. It is also proposed to provide financial assistance to 350 cooperative societies and about 11,000 small and marginal farmers under the programme during the plan 1980-85.

5.3.4. The State has vast areas having desert characteristics. Most of the desert areas are also border areas. A pilot project for development of desert areas has been initiated in selected talukas. In Gujarat, 11 talukas of the State viz. Sami and Harij of Mahesana District, Lakhpat, Abdasa and Nakhtrana of Kachchh District and Kankrej, Vav, Tharad, Radhanpur, Palanpur and Deodar talukas of Banas Kantha District are covered by the project. The programme is sponsored and assisted by the Government of India. An outlay of Rs. 4.12 crores is provided for 1980-85 as the State's share. The programmes like ground water development, fodder development, afforestation, rural electrification, etc. are proposed to be undertaken for the development of desert areas under this project.

5.3.5. It is also proposed to expand the infrastructural facilities in the drought prone and desert areas as a necessary pre-condition for their development. Due priority is proposed to be given in the relevant sectors of the plan for the extension of infrastructural facilities to these areas.

5.4. Coastal Areas :

5.4.1. The State has a long coastline of around 1600 kms. The areas adjoining the coastline suffer from the problems of salinity ingress, resulting in permanent damage to agricultural land and accentuating the problems of drinking water supply. Several Coastal areas also suffer from infrastructural and other deficiencies which come in the way of rapid development of these areas. There is also problem of water pollution. Thus, some of the problems of the coastal area call for specific attention. A programme of development of Khar lands is in operation. Another programme of prevention of salinity ingress in certain parts of Saurashtra where the problem has become very acute, has also been initiated and significant provision is made for attending to urgent works on the basis of a comprehensive plan formulated by a high level committee. In addition, a separate Working Group was also entrusted with the task of studying the various problems of coastal areas and deficiencies in the development and making suitable recommendations for accelerating the tempo of development in the needed direction. The report of the working group has been received and it is expected to be considered by the State Planning Board.

5.5. Industrially Backward Areas :

5.5.1. Ten districts (1) Amreli, (2) Banaskantha, (3) Bhavnagar, (4) Bharuch, (5) Junagadh,

(6) Kachchh, (7) Panchmahals, (8) Mehsana, (9) Sabarkantha and (10) Surendranagar have been declared by the Government of India as industrially backward for the purpose of concessional finance from financial institutions. Three of these districts, Surendranagar, Panchmahals, and Bharuch have been declared eligible for the central cash subsidy. Industries in these districts receive special benefits in respect of liberal finance on concessional terms for procuring developed plots/built up sheds, special rates in respect of purchase of machinery on hire purchase, preferential treatment for allotment of scarce and imported materials etc.

5.5.2. The Policy of location of industries as now adopted by the State Government not only seeks to check the indiscriminate growth of industries in large urban complexes but is designed to encourage their dispersal in the rural and less developed areas. The basic objectives of the development of industrially backward areas have been kept at the centre of attention. Efforts are being made to divert the flow of resources so as to pull the industries for the development of backward areas. In the case of G.S.F.C., of the total assistance of Rs. 230 crores envisaged for the Sixth Five Year Plan as much as Rs 127 crores is expected to flow in backward areas. A further fillip to backward area development would be achieved through the New Incentive Scheme under which, the capital subsidy and sales tax benefits on liberal scale would be offered to industries to be set up in rural and backward areas so as to compensate them for economic burden and handicaps, such units have to bear. Under new scheme Sales tax exemption or Sales tax deferment will be allowed on a liberal scale to industrial units being set up away from Metropolitan areas and large cities. The more backward a location, the larger will be the quantum of assistance available. Adequate provision is proposed to be made in the Sixth Plan so that the trend of industries to be set up in backward areas is accelerated and paucity of resources does not in any way throttle the working of this effective instrument of backward area development. The package of incentives in the form of cash subsidy, sales tax exemption and interest free loan to new industries set up and commissioned after 1st November, 1977 are proposed to be continued and expanded during the period of Sixth Five Year Plan. G.I.I.C. has adopted the policy of locating its various projects in the backward areas of the State. Out of six projects already commissioned four are located in backward areas with a total investment of about Rs. 24 crores. The new projects planned by G.I.I.C. will also have some plants in the backward regions. G.I.D.C. has adopted the policy of the decentralisation of indus-

trial growth through the setting up of industrial estates. Out of 109 different locations in the State 53 i.e., 49% are located in backward areas. During the last three years, the development expenditure of G.I.D.C. in backward areas has been raised to about 35%. It is also proposed to set up work shops in rural and backward areas during the Sixth Five Year Plan. G.I.D.C. has proposed an outlay of Rs. 60 lakhs for undertaking schemes for developing infrastructural facilities in rural and backward areas 17 District Industries Centres have started functioning in the State according to the new industrial policy of the Central Government. An outlay of Rs. 160 lakhs for the Sixth Five Year Plan 1980-85 has been proposed for undertaking intensive drive to industrialise the rural and backward areas. The State Government has introduced a scheme of cash subsidy and has adopted the concept of "growth centre". Since, the inception of the scheme, 5527 units have been registered till 31st March, 1980. Out of these units, 2647 units have been sanctioned subsidy of Rs. 10.40 crores. The total investment in fixed assets is of the order of Rs. 81.49 crores. The State public undertakings viz., G.S.F.C., G.I.D.C., G.I.I.C., etc. will continue to play a significant role in the promotion of industrial development in the backward areas.

5.5.3. The Khadi and Village industries Programme is being expanded considerably. This includes the setting up of a number of Ambar Char-khas Parishramalayas and gramodyog wadies. This programme together with other programme of cottage industries will make significant contribution to the development of rural industries in the State including the backward areas. The new thrust on development and spread of industries in the rural and backward areas of the State will also result in generation of large employment opportunities and help improving the income levels of the poor. An outlay of Rs. 14.50 crores for 1980-85 has been proposed for the purpose.

5.6. National Rural Employment Programme :-

5.6.1. The National Rural Employment Programme has been introduced in Sixth Five Year Plan by replacing the food for work scheme. The objectives of the programmes are (i) generation of additional gainful employment for the unemployed and under employed persons in the rural areas, (ii) creation of durable community assets for strengthening the rural infrastructure which will lead to rapid growth of rural economy and steady rise in the income levels of the rural poor and (iii) improvement of the nutritional status and the living standard of the rural people. Under this new programme, Central Government will make available foodgrains free of charges and cash grants in the

ratio of 2:1. The foodgrains will be distributed to the labourers as a part payment of wages while the cash component will be utilised for the purchase of materials for the works to be undertaken. The value of foodgrains and cash component will be approximately 50% of the total cost of the scheme. The State is expected to provide remaining 50% as matching provision for the Programme. During the period 1980-85, an outlay of Rs. 4500 lakhs is provided in the State Plan. An equal amount will be made available by the centre as its share. The works of local importance in accordance with the objectives of the Programme are proposed to be undertaken and employment of 975 lakh mandays is expected to be generated during 1980-85.

5.7. Integrated Rural Development :-

5.7.1. A new programme for intensive development of blocks under the programme for "Integrated Rural Development" has been launched in the State since 1978-79. From 2nd October, 1980, the entire State comprising of 218 blocks stands covered under this programme. Integrated Rural Development Programme mainly aims at creating productive assets for the rural poor to help them to increase their level of incomes and to bring them above poverty line. Originally this programme was started from the last quarter of the year 1978-79 as a fully central sector programme. Thereafter from the year 1979-80 and onwards the pattern of financial assistance for this programme has been changed to 50:50 as central and State share during the Sixth Five Year Plan. This pattern will be continued. Each block of the State will be allotted Rs. 5.00 lakhs to be shared equally by the State and the Centre. Two other programmes, namely S.F.D.A. and S.F.A.L. are merged with Integrated Rural Development Programme. During the period 1980-85 an outlay of Rs. 3815 lakhs is provided in the State Plan. An equal amount will be shared by the Centre. The Programme will benefit about 5.50 lakhs identified families.

5.8. Accelerated Development of Backward Talukas :-

5.8.1. Special Programme is being implemented at present for the relatively more backward talukas for taking up specified categories of small works of local importance. A special provision of Rs. 50 lakhs is being made every year at the rate of Rs. 2.00 lakhs per taluka for 25 talukas. (Appendix-C) The amount is being placed at the disposal of the concerned District Panchayats as grant-in-aid for undertaking essential works in these talukas having due regard to the local needs under the specified programmes namely roads, minor irrigation, primary education, primary health facilities and rural water supply. An outlay of Rs. 250.00 lakhs is provided for the period of Sixth Five Year Plan 1980-85.

5.9. Labour Welfare :—

5.9.1. Rural Labour Welfare Board for Agricultural and rural Workers: It is Proposed to establish a Rural Welfare Board as an apex body at State level and district labour welfare boards at district level. The purpose of establishment of such board is to start various welfare activities such as educational recreational, cultural etc. through the welfare centres for the upliftment of agricultural and rural workers. An outlay of Rs. 60.00 lakhs is provided for the purpose for the period of Sixth Five Year Plan 1980-85.

5.9.2. Financial assistance for the maintenance of old age Agricultural labourers: The landless agricultural labourers are the most under privileged and malnourished section of the population. They face problems of unemployment. Low and uncertain income and nutritional deficiencies. There is no certainty of getting work excepting during the season that too for few days only. Most of them live in debt. On attaining the age of 60, they will have no physical capacity to do gainful manual work. It is therefore proposed to provide financial assistance to support such agricultural labourers. A provision of Rs. 85.00 lakhs is made during the Sixth Five Year Plan period 1980-85.

5.9.3. The implementation of Gujarat unprotected manual workers Act 1979 has been brought into force. According to the provision of this act, it is proposed to constitute a statutory Board for the regulation of employment and welfare of unprotected workers. An outlay of Rs. 23.00 lakhs is provided for the Period 1980-85. Measures are also proposed to be taken for the welfare of migrant labour.

5.10. Rural Artisans.

5.10.1. It is essential to upgrade existing skill and develop new skills among traditional artisans. The needs of changing times necessitate entification of suitable technology and provide help to the artisans to acquire the same. The aim is to tie up effectively the training programme with the local requirements. It is proposed to suitably expand the existing programme wherever necessary. The State has facilities for the formulation of skills through different schemes and institutions *viz.*, apprentice scheme, vocational and technical education schemes. ITIs and mini ITIs, courses run by the Directorate of the Cottage Industries, etc. It is proposed to provide training facilities through private training institutions and will also play a vital role. However with the establishment of big and medium industries and around 43,000 SSI units in the State, the demand for skilled and semi-skilled workers is expected to be of the order of 50,000 persons per year. Provision has been made for undertaking different programmes of skill formation and training.

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5.10.2. Under the programme of financial assistance to artisans, it is envisaged to give loans to individuals at a lower rate of interest for purchase of raw materials and tools and equipments. for starting their business. The artisans belonging to scheduled castes and scheduled tribe will get the financial assistance at concessional rate of interest through the Scheduled Castes Economic Development Corporation and Tribal Development Corporation. Besides benefit of the differential rate of interest on loan will be made available to all eligible artisans. An outlay of Rs. 220 lakhs has been proposed in the Sixth Plan and it is expected that 70,000 artisans and self employed persons will be benefitted.

5.11. Welfare of Backward Classes (SCs, STs, NTs, and DNTs)

5.11.1. A sizeable provision is being made for the supplementary sector of welfare of backward classes i.e. scheduled castes, scheduled tribes and denotified tribes. Several new schemes are also included in the backward class welfare sub sector in the plan 1980-85. Programmes in this sub-sector fall under three main groups *viz.* education, economic uplift and health, housing and other schemes. An outlay of Rs. 80 crores is provided under the State Plan. This is expected to be supplemented by the Government of India substantially. In the implementation of the schemes, preference will be given to landless labourers and most vulnerable sections amongst the backward classes. Apart from the Scheduled Tribe Development Corporation which was set up earlier, the State Government has set up Scheduled Castes Economic Development Corporation in 1975 under the Societies Registration Act, 1960. The main objectives of this Corporation are to achieve economic amelioration to identify the problems of economic backwardness and to implement schemes for the benefit of scheduled Castes either directly or through agencies. The Corporation has initiated the implementation of schemes aiming at the welfare of the scheduled castes workers.

5.11.2. Special Component Plan for Scheduled Castes.

The Tribal Area Sub-Plan is being regularly formulated and implemented since 1976-77. A significant step is towards the formulation of a Special Component plan for the Scheduled Castes within the State Plan Frame. This envisages identification of schemes under various sectors of development which would be of benefit to the scheduled castes, quantification of funds from the suitable divisible schemes under relevant sectors and determination of specific targets in terms of the number of families or individuals who would benefit from these schemes. An outlay of about Rs. 259.46 crores is accordingly provided for 1980-85 for specific schemes under various sectors constituting the special component plan for the scheduled castes. In addition scheduled castes will get the benefits of schemes, which are not clearly divisible.

5.12. Programme for Socially, Educationally and Economically Backward Classes.

5.12.1. The Government has accepted all the recommendations of the Socially and Educationally Backward Classes Commission (Baxi Commission) which has classified 82 castes, classes and groups as socially and educationally backward. A programme for their upliftment has been initiated since 1978-79. Government has also extended the benefits of various recommendations of the Commission except those relating to reservation in services and reservation in educational institutions to economically backward classes such as agricultural labourers, rural artisans, marginal farmers, unprotected and unorganised labourers and other persons who are self employed such as hand-cart pullers, small shopkeepers etc. subject to an income limit of Rs. 4800 per annum. An outlay of Rs. 17.50 crores is proposed in the plan 1980-85 for the socially and educationally backward classes and economically backward classes. An outlay of Rs. 2.50 crores has also been proposed for the welfare of minority communities.

5.13. Minimum Needs Programme.

5.13.1. Minimum Needs Programme launched in the Fifth Plan was envisaged for the allocation of adequate resources for programmes aiming at the upgradation of levels of social consumption of the poor covering elementary education, rural health, drinking water supply, rural roads, rural electrification, house sites for rural landless labourers and environmental improvement of slums in the urban areas. The programme had aimed at establishing a net work of certain essential services based on the criteria of uniformity and equality throughout the country. These programmes have been continued during the period of Sixth Five Year Plan 1980-85. The State Government has decided to implement very effectively the Minimum Needs Programme. Apart from providing essential infrastructural and welfare services to the weaker sections of the population, the Minimum Needs Programme is also labour intensive and can create substantial additional employment. Considerable attention is to be given both to locational aspects of these basic services and their integration so as to confer optimal benefits on the target group. The Sixth Plan envisages to accelerate the implementation of the programme.

5.13.2. An outlay of Rs. 343.42 crores is proposed for the Minimum Needs Programme for the period 1980-85. The norms for the country for the Minimum Needs Programmes for 'Elementary Education' is to achieve 95 percent enrolment in the age group 6-11 and 50 percent in the age group 11-14 by 1985. The State having attained higher level of enrolment aims to achieve the enrolment of 110 percent in the age group 6-11 (Classes

I to V) and 70.29 percent in the age group 11-14 (Classes VI to VIII) by the end of Sixth Plan 1984-85. As regards "Rural Health", the norms set up for the country is one PHC for 30,000 in plains and 20,000 in Tribal and hill areas and one sub-centre for a population of 5000 in plains and 3000 in tribal and hill areas by 2000 A.D. In addition, it is also envisaged to have community health volunteer for a population of 1000 or a village by 1990 and establishment of one community health centre for a population of one lakh or one C.D. Block by 2000 A. D. There are 251 Primary Health Centres and as result of the various programme under the health, family welfare, Minimum Needs Programme and multi purpose workers schemes, in all 2500 sub-centres are functioning in the State at the end of 1979-80. During 1980-85, it is envisaged to establish additional 900 sub-centres and 25 PHCs. It is also envisaged to upgrade five Primary health centres into 30 bedded hospitals during 1980-85. Under Rural Water Supply Programme, out of 18275 villages in the State, 9600 villages have been categorised as having "No Source" of drinking water supply by June 1977. Till 1979-80, 4514 villages have been covered. All the remaining 5086 villages are likely to be covered by 1980-85. As regards "Rural Roads" the norms set by the Government of India is to provide road links to all villages with a population of 1500 and above and 50 percent coverage of villages with a population of 1000 to 1500. Out of 3664 villages of the first category, 2441 villages have been connected by pucca all weather roads and out of 2964 villages of the second category 1402 villages have been connected by pucca roads by the end of 1979-80. The Government aims at achieving the norms of this programme fully at the end of Sixth Plan 1984-85. Under the Rural Electrification Programme, in Gujarat out of 18275 villages, 10867 villages have been electrified till March, 1980. 1500 Villages are likely to be electrified during 1980-81, raising the total number of electrified to 12367 villages by the end of 1980-81. It is proposed to achieve 100 percent village electrification by the end of 1984-85. The Minimum Needs Programme aims at the provision of house-sites and housing assistance to all rural landless labour households. 4.25 lakh plots have been allotted till 31st December 1980. The scheme in respect of housing assistance has been re-oriented and liberal provisions have been made. At the end of 1979-80 construction works of 1,11,866 houses were completed. It is proposed to provide assistance towards construction of 3.12 lakh houses during the Sixth Five Year Plan 1980-85. The Environmental Improvement programme in the Sixth Plan includes water supply, sewerage, paving of the streets and provision for the community latrines in the urban slums. By 1979-80, 149338 slum population have been covered. It is targeted to cover about

3.3 lakh beneficiaries during 1980-85. Under Minimum Needs Programme, 'Nutrition' covers two schemes namely, the Supplementary Nutrition Programme and Midday Meal Programme. At the end of March 1980, the beneficiaries covered under the SNP and MDM are 7.70 lakhs and 4.28 lakhs respectively. Additional likely beneficiaries to be covered are 4 lakh under SNP and 4.25 lakhs under MDM during 1980-85.

5.14 Housing for the Weaker Sections.

5.14.1. In addition to the scheme for assisting the beneficiaries of the programme of free house site plots and the scheme for environmental improvement of slum areas provided under the Minimum Needs Programme, other housing schemes are also proposed outside the Minimum Needs Programme for low income groups and economically weaker sections both in urban and rural areas. Provision is made to enable the Gujarat Housing Board to take up housing programme for the economically weaker sections and low income groups on a larger scale. The slum clearance board will also play a significant role in the sphere assigned to it. Under the site and services scheme, the minimum structure is proposed to be provided and the beneficiaries will themselves gradually improve the quality of the accommodation through their own efforts. A new scheme for economically weaker section in rural areas with HUDCO participation has also been proposed. Adequate outlay is proposed for the low income group housing schemes already under implementation in the rural areas. It is also proposed to provide assistance for the improvement of houses in rural areas particularly to weaker sections of the society.

5.15. District Plans for Social inputs.

5.15.1. As a part of the basic minimum needs approach and with women and children as a focal point, the State Government proposes to formulate district plans for social inputs with the assistance of UNICEF in nine districts of the state viz. Valsad, Surat, Vadodara, Bharuch, Panchmahals, Sabarkantha, Surendranagar, Junagadh and Kachhh. Meaningful programmes have been formulated for reducing child and maternal mortality among the families below poverty line in these talukas which are proposed to be covered under this programme. An outlay of Rs. 500 lakhs has been provided for the Sixth Five Year Plan 1980-85.

5.16. Education and Welfare of Physically Handicapped.

5.16.1 Various activities for the education, training and rehabilitation of the physically handicapped persons such as blind, deaf and dumb and orthopeadically handicapped are carried out in the State. Grants are also paid to voluntary agencies for carrying out such activities. The programme is proposed to be continued on an expanded scale during the period of Sixth Five Year Plan 1980-85.

5.17. Rehabilitation of Beggars.

5.17.1. Till now Receiving Centres for beggars had been established mainly in major cities viz., Ahmedabad, Vadodara and Surat. It is proposed to start Receiving-Cum-Detention Centres in a few other cities and pilgrim centres during the period of Sixth Five Year Plan 1980-85.

APPENDIX—A.

List of Talukas covered under Tribal Area Sub-Plan

Sr. No.	Name of Taluka	Name of District	Sr. No.	Name of Taluka	Name of District
1	2	3	1	2	3
1	Vijayanagar	Sabarkantha	17	Jhagadia	Bharuch
2	Khedbrahma	Sabarkantha	18	Uchchhal	Surat
3	Bhiloda	Sabarkantha	19	Vyara	Surat
4	Meghraj	Sabarkantha	20	Mahuva	Surat
5	Jhalod	Panch Mahals	21	Mandvi	Surat
6	Dahod	Panch Mahals	22	Nizar	Surat
7	Santrampur	Panch Mahals	23	Songadh	Surat
8	Limkheda	Panch Mahals	24	Valod	Surat
9	Devegadhbaria	Panch Mahals	25	Mangrol	Surat
10	Chhotaudepur	Vadodara	26	Bardoli	Surat
11	Naswadi	Vadodara	27	Dharampur	Valsad
12	Tilakwada	Vadodara	28	Bansada	Valsad
13	Dediapada	Bharuch	29	Chikhali	Valsad
14	Sagbara	Bharuch	30	Pardi	Valsad
15	Valia	Bharuch	31	Umbergaon	Valsad
16	Nandod	Bharuch	32	Dangs	Dangs

List of Tribal Pockets covered under Tribal Area Sub-Plan in addition to 32 Talukas.

Sr. No.	Name of Tribal Pocket	Name of Taluka	Name of District	Sr. No.	Name of Tribal Pocket	Name of Taluka	Name of District
1	2	3	4	1	2	3	4
1	Ankleshwar	Ankleshwar	Bharuch	9	Bhatpur	Sankheda	Vadodara
2	Kamrej	Kamrej	Surat	10	Kareli	Jambugam	Vadodara
3	Palsana	Palsana	Surat	11	Bhikhapura	Jambugam	Vadodara
4	Palej	Gandevi	Valsad	12	Kathola	Halol	Panch Mahals
5	Atgam	Valsad	Valsad	13	Mora	Godhra	Panch Mahals
6	Ronval	Valsad	Valsad	14	Amirgadh	Palanpur	Banaskantha
7	Sisodaganesh	Navsari	Valsad	15	Danta	Dangs	Banaskantha
8	Vadeli	Sankheda	Vadodara				

APPENDIX—B

41 Talukas covered under the Drought Prone Area Programme

District/Talukas	District/Talukas
1. Ahmedabad.	5. Rapar
1. Viramgam	6. Bhachau
2. Dhandhuka	7. Anjar
2. Amreli	7. Mahesana
1. Rajula	1. Sami
2. Lathi	2. Harij.
3. Dhari	8. Panch Mahals.
4. Khambha.	1. Godhra
3. Banaskantha	2. Jhalod
1. Tharad	3. Limkheda
2. Dhanera	4. Dahod
3. Radhanpur	5. Lunawada
4. Wav	6. Santrampur
5. Santalpur	7. Shehra.
6. Deodar.	9. Rajkot.
4. Bhavanagar	1. Jasdan
1. Gadhada.	2. Wankaner.
5. Jamnagar	10. Surendranagar.
1. Okha-Mandal	1. Dasada
2. Kalyanpur.	2. Lakhtar
6. Kachehh.	3. Wadhwan
1. Lakhpat	4. Muli
2. Abadasa	5. Dhrangadhra
3. Nakhatrana	6. Halvad
4. Bhuj	7. Sayla
	8. Limbdi.

APPENDIX—C.

A list of 25 Backward Talukas.

Sr. No.	Name of Taluka.	District.	Sr. No.	Name of Taluka	District
1	2	3	1	2	3
1.	Lilia	Amreli	14.	Dhanera	Banaskantha.
2.	Jambughoda	Panch Mahals	15.	Vav	Banaskantha
3.	Shehera	Panch Mahals	16.	Deodar	Banaskantha
4.	Lunawada	Panch Mahals	17.	Tharad	Banaskantha
5.	Halol	Panch Mahals	18.	Kankrej	Banaskantha
6.	Vagra	Bharuch	19.	Sami	Mahesana
7.	Hansot	Bharuch	20.	Chanasma	Mahesana
8.	Gariadhar	Bhavnagar	21.	Balasinor	Kheda
9.	Malpur	Sabarakantha	22.	Bhesan	Junagadh
10.	Bayad	Sabarkantha	23.	Jabugam	Vadodara
11.	Abdasa	Kachchh	24.	Vaghodia	Vadodara.
12.	Rapar	Kachchh	25.	Olpad	Surat.
13.	Kalawad	Jamnagar			

CHAPTER—VI

EMPLOYMENT AND MANPOWER SITUATION

6.1. Dimension of the Unemployment Problem:—

6.1.1. In the context of the accepted major plan objective of progressive removal of poverty and unemployment, it becomes imperative to look at the magnitude of the problem and the impact of the current plan on its mitigation.

6.1.2. The total labour force of Gujarat is estimated to be 134.42 lakhs in 1980 and is expected to increase to 147.16 lakhs in 1985 (Statement-I).

6.1.3. The rural-urban composition of the labour force is assessed as below for 1980 and 1985 (Statement-I).

(In '000)

Year	Rural	Urban
1980	10322	3120
1985	11165	3551

The percentage of urban workers to total workers which is 23.21 in 1980 is likely to be 24.13 in 1985.

6.1.4. The percentage of literacy in Gujarat based on the census of 1971 was 35.79 and the change in this percentage will be reflected when the census results for 1981 are compiled.

6.1.5. The industrial categorywise distribution of workers based on 1971 census was as below:—

Sr. No.	Category.	Percentage to total workers.
1.	Cultivators.	43.6
2.	Agriculture labourers.	22.7
3.	Live stock, forestry, fishing, hunting plantation, orchards and allied activities.	2.0
4.	Mining and quarrying.	34.6 0.4
5.	Manufacturing:—	
	A. Household industry.	2.8
	B. Other than house-hold industry	9.3
6.	Construction.	1.4
7.	Trade and commerce.	7.0
8.	Transport, storage and communication.	2.9
9.	Other Service	8.8

In the category of workers there is likely to be a sizable problem of under-employment especially in the rural areas as the figures in the next paragraph would reveal. Besides, there is a problem of unemployment too and the plan would have to cater to the net addition to the labour force during the plan period.

6.1.6. Till the published figures of the labour force/employment-unemployment surveys carried out under subsequent round of National Sample Survey are available, broad magnitude of unemployment can be known on the basis of the projections based on the result of such survey carried out in 27th round of N.S.S. As a result of such projections the following brings out the present levels of unemployment and under employment.

	In lakhs.
(1) Chronic unemployed	1.77
(2) Under-employed	7.90
TOTAL	9.67

6.1.7. The urban-rural break-up of the chronic unemployed was 1.15 lakhs and 0.62 lakh respectively. This means that about 65% of the chronic unemployed are in the urban areas and 35% come from the rural areas.

6.1.8. In the category of the under employed only 1.92 lakhs belong to the urban areas while 5.98 lakhs residing in the rural areas. This gives a percentage of 24.31 for the urban areas and 75.69 for the rural areas.

6.1.9. In addition, the number of those joining the labour force during the plan period has to be taken note of. According to the participation rates of the 27th round of N. S. S., the total labour force in April, 1980 works out to be about 134.42 lakhs. On the basis of labour force participation rates of the 27th round of N.S.S. the total increase for the entire sixth plan period (1980-85) would be 12.74 lakhs with the average annual increase of 2.55 lakhs during the plan period. Thus the total labour force at the end of the plan period 1984-85 would be 147.16 lakhs based on the participation rates of the 27th round of the N.S.S.

6.1.10. The following table gives the forecastes of new entrants to the labour force in the beginning and at the end of the plan period and the total labour force at the end of the plan period according to estimates based on the 27th round of NSS.

Item	(In lakhs)	
	Based on participation rates of the 27th round of N.S.S.	
(1) Estimated chronic unemployed and under employed at the beginning of the plan	9.67	
(2) New entrants		
(i) Annual	2.55	
(ii) For plan period	12.74	
(3) Total backlog plus new entrants. [1+2 (ii)]	22.41	
(4) Total labour force.		
(i) In 1980	134.42	
(ii) In 1985	147.16	

Educated Unemployed

6.1.11. The data obtained from the live register of the Employment Exchanges is given in the table below :—

	(Figures in '000) As on 1st April,			
	72	74	78	80
Matriculates and under Graduates	67	92	186	205
Diploma holders	2	1	4	3
Graduates and Post-graduates in Arts, Science, Commerce and Law.	15	20	41	36
Graduates and Post-graduates in Technical and Professional subjects.	1	3	7	10
Total	85	116	238	254

6.1.12. The data suggests that the educated unemployment has been increasing in absolute number. The percentage increased per annum comes to 25%.

6.1.13. It will be interesting to know that about 52% of the educated unemployed are concentrated in Ahmedabad, Vadodara, Nadiad, Mehsana and Junagadh districts.

6.1.14. In deriving estimates of educated unemployed based on employment exchange registrations, the application of a correction factor becomes necessary for the following reasons (i) persons on the live registers might already be employed but might not have cancelled their registration after securing employment or may keep it going in order to have better openings, (ii) some of those actually seeking jobs might not have registered their names, (iii) many candidates register even while pursuing studies in view of the long time-lag between registration and the notification of vacancies.

6.1.15. In the year 1970 the State Bureau of Economics and Statistics had conducted a comprehensive survey of the educated unemployed in Bharuch district covering both rural and urban areas of the district and educated job seekers registered with employment exchanges as well as those not registered with the employment exchanges. Applying the correction factor revealed by the Bharuch survey the number of candidates on the live registers of the employment exchanges would stand revised as follows :—

(in '000)

	As on 1-4-1980.	
	According to live register	Revised by applying correction factor.
Matriculates and under-graduates	204.8	224.6
Diploma holders	3.4	4.3
Graduates and Post-graduates in Arts, Science, Commerce and Law.	36.2	39.7
Graduates and Post-graduates in technical and professional subjects.,	10.0	11.4
	254.4	280.0

6.1.16. Thus, the total number of educated job seekers at the beginning of the Five Year Plan (1980-85) is estimated at 2.80 lakhs.

Note.—The survey revealed that 76% of the educated persons in urban areas not registered with the employment exchanges, were found to be employed or were studying and not seeking work, while 9 percent of those not registered with employment exchanges were found to be seeking work and the remaining 15 percent were registered with the employment exchanges. The survey also showed that in the urban areas, out of those registered (15% of the educated) with the employment exchanges, 50 percent were neither studying nor employed, 18 percent were employed and prosecuting studies and 32 percent were only studying. For the rural areas the survey indicated that of the educated persons, 68 percent who were not registered with the employment exchanges were employed or were studying and not seeking work, 13 percent who were not registered with the employment exchanges were seeking work and the remaining 19 percent were registered with the employment exchanges. Of the persons registered with the employment exchanges, 42 percent were neither studying nor were employed. The percentage of persons employed or employed and studying among the total number of the registered was 40, whereas the percentage of persons who were only studying among the total number registered was 18. In other words the actual number of educated job seekers, both in rural and urban areas, is about 10% more than the number on the live registers.

6.1.17. While computing the additions to the ranks of the educated job seekers during the plan period it has to be remembered that not all who complete a certain stage of education would be seeking work. In fact some employed persons take up courses leading to formal educational qualifications mainly with a view to further their career prospects. A sizable proportion of women securing degrees and diplomas do not seek jobs, especially after they are married. For example, in the case of female arts graduates who responded to the Census of Degree Holders (1971) it was noticed that out of the 25,841 female graduates enumerated 4003 (25.27%) were unemployed and were not seeking jobs; only 2,977 (18.79%) were looking for jobs. In the case of science graduates also 1050 (26.49%) were not seeking jobs as against 790 (19.93%) doing so out of a total of 3964. Some post-graduate courses notably in engineering and medicine are pursued on account of the attractive stipends and/or part time employment that go with studentship. Exactly what proportion of matriculates, graduates and post graduates do not seek jobs is difficult to determine in the absence of data on follow-up of these categories of persons. Statistics from the special census of degree holders (1971) are admittedly not comprehensive. However, they yield the following percentages of unemployed persons seeking and not seeking jobs.

Category	Percentage of unemployed seeking jobs	Percentage of unemployed not seeking jobs.
Arts Graduates	9.5	7.8
Commerce Graduates	11.2	1.9
Science Graduates	14.8	6.8
Diploma Holders	9.5	1.0
Engineering Graduates	4.0	0.7
Agriculture Graduates	4.5	1.2
Medical Graduates	2.0	1.0

6.1.18. With allowance made for this factor, the number of educated persons for whom jobs would have to be found could be estimated as follows (rates observed in respect of female arts graduates have been assumed for matriculates in the absence of any other data).

Category	Total out-turn (in-lakhs)	Percentage of persons not seeking work	Estimated job-seekers (in-lakhs)
Matriculates	7.19	25.27	5.37
Diploma holders in Engineering	0.15	1.00	0.15
Non-technical graduates and post-graduates.	2.21	6.50	2.07
Technical Graduates and post-graduates.	0.36	1.00	0.36
TOTAL;—	9.91	..	7.95

6.1.19. The total number of educated job seekers (obtained by adding the backlog of 2.80 lakhs to the 7.95 lakh new entrants) would thus be 10.75 lakhs during the plan period.

6.2 Employment Strategy in the plan :

6.2.1. It is clear from the foregoing paras that the strategy for rural areas with high incidence of under-employment will have to be different from the strategy for urban areas which have a high incidence of chronic unemployment.

6.2.2. An increase in agricultural production has been given top most priority in the rural areas of Gujarat. The percentage of irrigated areas in Gujarat is less than the national average. Therefore, the foremost requirement of the State in developing agriculture is irrigation. The development of irrigation facilities would also require consequent attention being paid to the development of command areas of the irrigation projects. The development of the irrigation in the rural areas will not only provide work to the educated technical, skilled and semi-skilled persons but it will also provide sizable employment to the unskilled and uneducated. The development of communication, housing and forestry will also have a similar impact in tackling under-employment and hence emphasis would also be placed on soil and water conservation, animal husbandry and fisheries, the last two of which have a good scope for family oriented development. Employment potential for the unemployed and under employed of the rural areas would be augmented by the implementation of National Rural Employment Programme (N.R.E.P.).

6.2.3. Wage employment will not be able to cater to the large number of unemployed and under-employed especially in the rural areas. Therefore, an emphasis will be placed on development of industries minerals and services in the small and self-employment sectors.

6.2.4. The skills possessed by a large number of the unemployed and the under-employed are not the ones which are marketable to-day. In order to divert the population from agriculture in rural areas and to make an impact on the educated unemployed the State desires to sizably increase the facilities for training in skill formation. This is intended to cater to the requirement of manpower for industrial development as well as for self-employment.

6.2.5. In order to monitor the employment situation in the districts and the progress of the employment generating schemes, Government have decided to set up the District Employment Generation Councils consisting of peoples' representatives, as well as officials. These councils will prepare an integrated district employment plan which will be consistent with the district credit plan.

6.3. Employment Generation : Plan Investment:

6.3.1. In keeping with the requirement of massive employment generation under plan programmes the State's Plan for 1980-85 envisages a large investment on employment intensive schemes. The broad dimensions of these efforts are described below:—

	VI Plan 1980-85
I. Total Outlay (Rs. in Crores).	3760.00
Outlay on schemes with a high employment component (Rs. in crores).	1794.95
II. Employment Generation:—	
(A) Uneducated : ('000 person years).	
Unskilled	2466
Semi skilled and skilled	305
Total A.	2771
(B) Educated (Nos.):—	
Technical	22955
Non-Technical	83732
Total B.	106687

(The total under item B above viz. 106687 would be 318 thousand person years).

6.3.2. The outlay on schemes with a high employment component forms 47.74% of the total of Rs. 3760.00 crores for the VI Plan 80-85. Sectorwise and sub-sector-wise estimates of employment generation are indicated in Statement.II. Sizable outlays have been provided on water development (Rs. 1000.00 crores), roads and bridges (Rs. 220.00 crores) minor irrigation (Rs. 88.00 crores), housing (Rs. 85.30 crores), Village and small industries (Rs. 95.96 crores), forest (Rs. 90.00 crores), soil and water conservation (Rs. 28.94 crores) and scheme for the educated unemployed (Rs. 10.14 crores) which are employment intensive in character.

6.3.3. The employment estimates indicated above are exclusive of employment generation attributable to:—

(i) Central Government investment within the State;

(ii) Expenditure on Central Sector/Centrally sponsored Schemes.

(iii) Corporate public sector investment on of their own resources.

(iv) Private sector investments.

(v) Investments of local bodies and panchaya and;

(vi) Expenditure on the non-Plan account the State Government.

6.3.4. Similarly indirect employment resulting from plan investments and the activities of the Government and Semi-Government agencies operating in the State, are also not included in these estimates. The lack of a firm data base in this regard precludes the quantification of the employment that would be generated in the plan period from these investments.

Job prospects for Educated Technically Qualified Persons

6.3.5. The backlog of technical graduates, post graduates and diploma holders at the beginning of the plan period is 15700, new entrants in these categories during the plan period would be 51000. The total number of jobs needed for qualified technical personnel would thus be 66700 during the plan period.

6.3.6. While direct employment opportunities arising under plan programmes would be of the order of 22955 for technical personnel, there are many categories of technical personnel for whom there is demand in the public as well as private sector. In addition to the establishment of industries based on petroleum and gas there are good prospects of expansion of chemical, fertilizers and engineering industries in the State. Several industrial projects taken-up during the previous plan will also come to fruition in the near future. Cumulatively these developments are likely to provide employment opportunities to a majority of the technically qualified personnel not covered by the plan programme.

Job prospects for the Educated Non-Technical Persons :-

6.3.7. The State Plan scheme would not by themselves normally generate sizable job opportunities for the educated non-technical persons. However keeping in view the very large number of the educated non-technical persons, the Sixth Five Year Plan includes an innovative scheme for creating increasing number of employment opportunities for this class of people. Together with job created under other plan schemes job opportunities available for the educated non-technical persons will be of the order of 0.84 lakh. If the present trends of employment growth (2.7%) are maintained in the organised private sector 9000 new jobs are expected to be created annually for non-technical graduates and matriculates. This would work out to 45000 jobs over the five year period. To this may be added the normal replacement needs placed at 3%. At the rate of 18104 (assuming 62.6% of total employment going to this class of job seekers) annually, over the five year period, this would work out to 90520.

6.3.8. Thus total of 2.20 lakh jobs (consisting of 0.81 lakh from plan programmes, 45000 from private

sector and 90520 on account of replacement needs) would be available for the educated non-technical persons as against 10.08 lakh jobs that are needed to be created. This could take care of 21.8% of the total employment requirements for the educated non-technical persons (consisting of the backlog 2.61 lakhs and fresh entrants 7.44 lakhs).

An overview

6.3.9. Looking to the facts stated in paras 6.3.3. and 6.3.4, it can be observed that the estimates indicated above cover only a small segment of economic activities arising from investments in plan programmes, and leave out substantial indirect employment. Considerable indirect job opportunities are also likely to arise from the expansion of irrigated agriculture, introduction of high yielding varieties and ancillary activities such as animal husbandry, dairy, poultry and fisheries. The employment potential in these spheres is really large.

6.3.10. Despite the limited coverage of the economic activities encompassed in the State Plan programmes, the investments in the sectors of water development and agriculture and allied activities are estimated to lead to employment generation of 2165000 person years for unskilled, semi-skilled and skilled persons as also jobs for 27250 educated persons. The investment on power development would not only ease one of the bottlenecks in agricultural and industrial development but also would lead to direct employment of about 5000 person years for unskilled/semi-skilled/skilled workers and 1923 jobs for educated persons. The increase in transport and communication facilities would add to the required infrastructure as also a creation of direct employment of 276000 person years for uneducated and 4202 jobs for educated persons. In the industries sector suitable emphasis is laid on development of small and cottage industries. Training and institutional linkages are envisaged to be provided to promote self employment which will benefit the under privileged sections of the community. Skill formation training would be augmented to increase the supply of trained industrial workers as well as to reduce the number of inexperienced educated job seekers. The investment in this sector is likely to create 210000 person years of employment opportunities for unskilled/semi-skilled/skilled persons.

6.3.11. The total requirement of person years of employment come to about 5.4 million. The Plan investment itself would create about 3.1 million person years of employment. This will take care of 57% of the total requirement.

6.3.12. The system of a decentralised district level planning already introduced would be made more effective by providing an employment focus in the formulation of the district plan. The District Employment Generation Council with expert and popular

representation has been formed in each district to more accurately prepare an integrated district employment plan commensurate with the general plan as also the credit plan of the district.

Institutional Arrangements :

6.3.13. Planning with employment as one of the key objectives is admittedly a recent, as well as, a very challenging task, but it is a must for a country which has surplus manpower at the present stage of development.

6.3.14. Due to the recent special emphasis on this objective, institutional arrangement should exist at the National and at State levels and should be extended upto district level. Arrangements exist at the National and the State levels in the form of National Development Council and State Planning Board. However, as a generation of employment and beneficiaries who take advantage of such employment generation are at the district level, some institutional arrangement for this purpose at district level was considered necessary. District Employment Generation Councils have therefore been set up to oversee employment content in the district level plan schemes as well as to monitor its implementation and use the feed-back to improve the effectiveness of schemes from employment angle in future. The staff to assist the District Planning Board and the Employment Generation Council will have to be strengthened to undertake this task. The District Employment Generation Council will ensure that district plans and the schemes lead to a higher employment generation, as well as potential for future employment generation.

6.4. Manpower :

6.4.1. In the planned economy it is necessary to balance demand and supply of technical manpower. Lack of suitably trained personnel is a major obstacle in mounting development programmes.

6.4.2. The availability and requirement of principal categories of skilled manpower during the Five Year Plan period (1980-85) are presented in Statement-III.

6.4.3. The migration in and out regarding which data is not available, though material has been over-looked in the computations referred to in the paras that follow.

Engineering Personnel :

6.4.4. Engineering personnel is one of the important categories of technical manpower. It is, therefore, desirable to have long term perspective planning in context to demand and supply of engineering personnel. Accordingly, the requirement and availability of degree and diploma holders in engineering have been estimated. The requirement has been worked out on two alternative assumptions

viz., growth rate of 4.2% based on observed trend during 1970-79 for non-agricultural sectors (excluding some minor-sub-sectors) and an alternate targetted growth rate of 6.1% for non-agricultural sectors as envisaged in the Five Year Plan 1980-85. On this basis the requirement of graduates and diploma holders together at growth rate of 4.2% and 6.1% by the end of the Five Year Plan (1980-85) would be 69775 and 75047 respectively.

6.4.5. It appears that there will be a marginal shortage of 1033 graduates calculated on the basis of lower growth rate of 4.2%. The shortage would be 2004 graduates on the basis of higher growth rate of 6.1%. For diploma holders there would be a surplus of 3151 at lower growth rate of 4.2%; however there would be a shortage of 1150 at the higher growth rate of 6.1%.

6.4.6. Though the work of building up the detailed estimates for various categories of technical manpower that would be required for the Narmada Irrigation Project has been entrusted to the Institute of Applied Manpower Research, New Delhi, the requirement of degree and diploma holders during 1980-85 for Narmada Irrigation Project as provisionally calculated by the Irrigation Department is placed at 1199 and 644 respectively. This requirement will further widen the gap between requirement and availability for engineering graduates. While in the case of diploma holders it would bring down the surplus to 2507 at 4.2% while the shortage will also register a rise to 1794 at the growth rate of 6.1%.

6.4.7. The main proposals included in the Five Year Plan (1980-85) by the respective department are as under:—

(i) To increase 435 seats for degree & 1277 seats for diploma courses during the Five Year Plan (1980-85).

(ii) In order to meet the specialised manpower needs in various fields following post diploma courses with total intake of 160 seats are proposed to be introduced.

Foundary Technology, Plastic Technology, Energy System, Machine Tools Maintenance, Interior Decoration, Dairy Engineering, Industrial Electronics, Bio Medical Instrumentation, Industrial Engineering.

(iii) To establish five new Industrial Training Institutes. It is also proposed to increase seats in the existing I. T. Is. Accordingly it is proposed to increase the intake capacity from 8040 to 18000 during Five Year Plan Period (1980-85).

Medical Personnel :—

6.4.8. As on 31st December, 1980 the number of doctors registered with the Gujarat Medical Council was 14099 indicating a doctor population ratio of 1:2341 as against the norms of 3000 to 3500 prescribed by the Mudaliar Committee. These figures

should, however be viewed with some caution as they do not fully reflect the attrition due to migration, retirement or death. Although the total number of doctors in the State seems to be sufficient, still difficulties persist in securing the services of post-graduates/specialists for teaching jobs. On 31st March, 1980 nearly 25 % of the posts were not manned. Similarly, there is shortage of doctors in rural and tribal areas. About 20 % of the posts in rural areas were lying vacant on 31st March, 1980. In short, there is no overall shortage of doctors but the shortage seems to be selective.

6.4.9. The training and deployment of community health volunteers is major innovation in the field of public health in the rural areas. The main object of the scheme is to provide training in the basic knowledge of health, hygiene and first aid and treatment of minor ailments to the literate persons in the village. This scheme is being implemented in the entire State and training is given in all Primary Health Centres. About 19018 Community Health volunteers have been trained and are working in rural areas.

6.4.10. The multipurpose workers scheme is being implemented in all the districts in the State. The scheme aims at delivering of packages of health services in an integrated manner in rural areas. About 7254 multipurpose workers are in a position in the State. It is proposed to create 2211 posts of male and 1768 posts of female multipurpose workers during Sixth Five Year Plan (1980-85).

6.4.11. As far as Ayurved graduates are concerned, problem of unemployment seems to be quite acute. Backlog of unemployed ayurved graduates is increasing every year. In the beginning of the Five Year Plan Period (1980-85) there were 991 Ayurvedic doctors on the live registers of the employment exchanges. The outturn during the plan period (1980-85) is expected to be 1455. Given the limited opportunities in the Government Health Care System and negligible prospects of private practice in urban areas or emigration overseas, it appears that self employment in rural areas seem the one of the major outlet and the surplus is likely to increase during the plan period.

6.4.12. As per the survey conducted by the Indian Pharmacists Association there were about 5000 unqualified Pharmacists in the State. As per the amendment of the Pharmacy Act, (1948) no person other than registered pharmacists shall prepare, mix or dispense any medicines on the prescription of the medical practitioner after 1-9-1984. It is planned to qualify 2100 unqualified pharmacists during the Five Year Plan Period (1980-85). Moreover, looking to the increasing

demand of pharmacists in the State it is proposed to start diploma course in pharmacy with an intake capacity of 30 students each at Adipur (Kachhha) Vallabh Vidyanagar and Bardoli (Surat).

Agricultural Personnel

6.4.13. For the implementation of the programme for agricultural production, soil conservation, command area development and Minor Irrigation, the demand of agricultural graduates is placed at 424. Against this, the supply during the plan period (1980-85) is expected to be 1352 which will leave a surplus of 928 agricultural graduates. A large number of such graduates is also likely to be absorbed in banking, fertilizers industry and research work. Some of these would also go for self-employment. It is expected that there will be a very negligible surplus, if any, at the end of the plan.

6.4.14. Similarly, the demand for agricultural diploma holders during 1980-85 is placed at 253 against which the supply is expected to be 1238 leaving a surplus of 935. A part of the surplus would be absorbed in the farming sector. As the entire outturn is from the Government Institutions, no difficulty is foreseen in matching the demand with the supply and the capacities of the institutions could be diverted towards creation of new course which may be devised after making surveys. Such courses could mainly be in the processing of agricultural produce for consumption purposes.

6.4.15. A major shift in the pattern of agricultural extension services by the introduction of training and visit system would have a significant effect on the number of extension functionaries. The major thrust would be towards an integrated approach for increasing crop production of major crops. The programme would require a VLW to maintain an intensive training and visit schedule for a group of families and would be a model for extension programme. The scheme which has been worked out and is being implemented require 3440 village level workers. 431 agricultural extension officers (one each for a group of VLWs) and 37 subdivisions having a Sub-Divisional Agricultural Officer, supported by additional Sub-Divisional Agricultural officers and two subject matter specialists. There will be three subject matter specialists in each district and four Zonal Joint Directors of Agriculture for technical guidance and supervision.

Animal Husbandry :-

6.4.16. During the Sixth Five Year Plan 1980-85, major emphasis has been placed on cattle, poultry and sheep and wool development for increased production of important items of mass consumption such as milk, eggs wool etc. The programmes envisaged will need veterinary and animal husbandry personnel in good number to implement the schemes of cross breeding programme with sophisticated—

techniques. The reliance on supply of milch cattle as a means of improving the economic conditions of small/marginal farmers, landless labourers, tribal and scheduled Castes members and enhancement of milk production are likely to augment the demand for the veterinary services on a large scale. Moreover the enlargement of Milk chilling collection and processing activities are also likely to lead to a demand of veterinary services on far large scale. The estimated demand of veterinary graduates in public sector during 1980-85 is 240, the estimated supply would be 180 indicating marginal shortage of about 60 veterinary graduates. It is therefore decided to increase intake capacity by 20.

6.4.17. The demand of Livestock Inspectors during the Sixth Five Year Plan will also be increased which is estimated to be about 535 depending upon the various envisaged programmes. The present intake capacity of the course conducted by the Gujarat Agricultural University is 50. Present capacity will have to be raised suitably to meet with the demand. The Gujarat Agricultural University will be requested to make necessary arrangements for the same.

6.4.18. The total requirement of Field Assistants is placed at 228 during Five Year Plan period - (1980-85). The training Institutions for Field Assistants are under the purview of the department of Animal Husbandry. At present the courses for cross breeding technique, sheep and poultry husbandry are kept in abeyance and the same will be conducted as per requirement as and when necessary to meet with the demand of sanctioned posts.

Dairying Personnel

6.4.19. In respect of dairying personnel, the supply of 225 graduates in Dairy Technology will be adequate to meet the demand (Government and Cooperatives) of 140 posts requiring the qualifications in Dairy Technology.

Forestry Personnel

6.4.20. The increasing emphasis on the programmes of afforestation, social forestry, Forest Development Corporation is leading to an increase in the demand for supervisory personnel.

6.4.21. At present there is shortage of Officers in the cadre of Rang Forest Officers. The demand for Range Forest Officers during five year plan is placed at 395, the anticipated supply would be 240 leaving the deficit of 155. There is a full fledged college at Rajpipla for training Range Forest Officers with the intake capacity of 40. To meet with the demand of Range Forest Officers the capacity is likely to be 60 from the next year. The demand for foresters/guards during the Five Year Plan period is about 2510. There is a training institute at Kakrapar imparting training to foresters. The present intake

capacity is 360. As this intake capacity is not sufficient to meet the future demand, the intake capacity will be increased to 480 during the Five Year Plan Period (1980-85).

Teaching Personnel.

6.4.22. Both the technical categories viz: Bachelor of Education (B.Ed) and Primary Teaching Certificate (P. T. C.) are the surplus categories. This situation is likely to continue during the plan period (1980-85).

6.4.23. As against the supply of 25,000 trained teachers for primary schools during the Five Year Plan-period, the demand is likely to be 11,000 leaving a surplus of 14,000.

6.4.24. The anticipated supply of trained secondary school teachers during Five Year Plan (1980-85) is expected to be 20985, as against the demand of 10275 leaving a surplus of 10,710.

6.4.25. This highlights the need to reduce the intake capacity and utilise the released capacity of the training institutions for in service training of the already engaged staff.

Changing the State's skill Profile

6.4.26. The State Government has already accepted the policy of 50% Vocationalisation for matriculates who are turned out each year. Accordingly the number of persons to be covered under vocational and technical training by the end of the Five Year Plan (1980-85) is about 1.10 lakhs. The training facilities available at present is for about 30,000 matriculate students; considering the target for the Five Year Plan (1980-85), this leaves the gap of about 80,000.

6.4.27. In the beginning of the Five Year Plan (1980-85) there were 22 ITIs in the State with a total intake capacity of 8040 seats. During the Five Year Plan period (1980-85) it is proposed to establish five new I.T.I.s. It is also proposed to increase seats in the the existing I.T.I.s. Accordingly it is proposed to increase the intake capacity from 8040 to 18000 during the Five Year Plan Period (1980-85).

6.4.28. It has been decided to accelerate the implementation of the National Apprenticeship Training Scheme which is one of the items of the 20 points programme. Accordingly under this programme it is proposed to increase the sanctioned seats from 12000 to 21,000 during the Five Year Plan (1980-85.)

6.4.29. In addition, there are nearly 100 out of 184 talukas in the State which do not have any worthwhile training facilities for skill-formation. It is proposed to create additional training facilities for about 10,000 matriculates.

6.4.30. This training would be supplemented by 10+2 vocational system, Tystem in rural areas, training for cottage industries, the training being imparted by other departments and institutions towards the goal of 50% vocationalisation for the matriculates. Preference in admission will be given to those who have no member having any assured earning in their families in selection for training for skill-formation.

on the promotion of self-employment. It is proposed to actively promote self-employment through entrepreneurship training, assistance in presenting bankable scheme and subsidy or margin-money assistance to the poor. Through these measures assistance or self-employment prosed to be stepped up consider ably to benefit nearly 200,000 persons during the plan which will include those who have been imparted training for skill-formation in addition to other aspiring entrepreneurs.

6.4.31. The expansion of the training facilities would require a commensurate increase in emphasis

STATEMENT—I

Year-wise Labour-force by sex for rural and urban areas in Gujarat State

(In 000)

Year	RURAL			URBAN			TOTAL		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1980	6240	4082	10322	2516	604	3120	8756	4686	13442
1981	6346	4152	10498	2585	621	3206	8931	4773	13704
1982	6450	4219	10669	2654	638	3292	9104	4867	13961
1983	6552	4285	10837	2723	655	3378	9275	4940	14215
1984	6652	4350	11002	2792	673	3465	9444	5023	14467
1985	6751	4414	11165	2862	689	3551	9613	5103	14716

Note :—For Age group 15-59.

STATEMENT-II

Broad estimates of direct employment generation during the Sixth Five Year Plan (1980-85)

Sr. No.	Sector/Subsector	Proposed outlay (Rs. in lakhs)		Estimated employment generation				
		Total	For Employment intensive schemes.	Thousand Person years;			Educated (NO.)	
1	2	3	4	Unskilled/Uneducated	Semi-skilled	skilled	Technical	Non-Technical
				5	6	7	8	9
I. Agriculture and allied programmes:-								
1.1.	Crop production	3100.00	..	..	..	..	4500	421
1.2.	National rural employment programme	4500.00	4500.00	178	..	..	..	..
1.3.	Drought Prone area programme	1950.00	1185.65	58	..	..	..	..
1.4.	Minor Irrigation	8800.00	8720.00	150	12	7	354	837
1.5.	Soil and Water conservation	2894.00	2282.00	289	1	..	244	114
1.6.	Command Area Development	1877.00	1475.50	71	1	..	..	..
1.7.	Animal Husbandry.	1770.00	..	1	..	..	822	418
1.8.	Fisheries	2000.00	1859.86	54	18	13	5903	247
1.9.	Forest	9000.00	8777.90	214	..	1	2342	1199
1.10.	Community Development and Panchyat.	627.00	387.94	..	..	..	..	2091
Total :-I-Agriculture and Allied Programmes.		36518.00	29188.85	1015	32	21	14165	5287
II.	Water Development	100000.00	100000.00	977	66	54	2173	5645
III.	Power Development	96484.00	..	3	1	1	1093	830
IV.	Industries and Minerals.	17110.000	2835.00	210	..	..	..	..
V. Transport and Communications								
5.1.	Ports, Light houses and shipping-	2600.00	..	4	6	5	73	156
5.2.	Roads and Bridges.	22000.00	22000.00	190	46	13	352	741
5.3.	Road Transport	9000.00	9000.00	6	6	..	103	2777
Total V Transport and Communications.		33600.00	31000.00	200	58	18	528	3674
VI. Social and Community Services								
6.1.	General Education	5560.00	2910.37	..	..	..	..	80355
0.2.	Technical Education	600.00	455.00	..	..	..	113	135
6.3.	Housing	8530.00	7730.00	56	8	39	3249	11380
6.4.	Capital Project	3000.00	3000.00	5	6	6	28	55
6.5.	Labour and Labour Welfare	4000.00	2376.00	..	..	..	1606	26391
Total VI. Social and Community Services.		21690.00	16471.37	61	9	45	4996	68916
Grand Total:-		305402.00(x)	179495.22	2466	166	139	22955	83782

(x) Exclusive of outlays to which direct employment is not attributable.

STATEMENT—III

Demand and supply of certain selected categories of Technical Manpower during Five Year Plan
(1980-81 to 1984-85.)

Disciplines	Category of personnel		Demand during F.Y.P.	Supply during F.Y.P.	Surplus(+) or Deficit(-)
1	2		3	4	5
Engineering	Degree in Engineering*	a	27952		-1033
		b	28923	26919	-2004
	Diploma in Engineering*	a	41823		+3151
		b	46124	44974	-1150
Agriculture	B.So. (Agri.)		424	1352	+928
	Diploma (Agri.)		253	1238	+985
Forestry	Range Forest Officer Foresters/guards		395	240	-155
			2509	2040	-469
Veterinary	Veterinary Graduates		239	180	-59
	Livestock Inspectors		535	251	-284
	Field Assistant in Veterinary.		228	**	**
	B.So. (Dairy Tech.)		140	225	+85
Teaching	Secondary School Teachers		10275	20985	+10710
	Primary School Teachers		11000	25000	+14000

* For degree and diploma the demand and supply figures indicate total number required and total availability as on 31st March, 1985.

** There are 4 training centres with the intake capacity of 65 seats. Training is conducted as per the need of the department.

(a) Estimates at 4.2% trend growth rate in State domestic product for non-agricultural sectors (excluding some minor sub-sectors)

(b) Estimates at 6.1% targetted growth rate for non-agricultural sectors of State domestic product for Five Year Plan (1980-81 1984-85).

NOTE—The demand likely to arise on account of taking up the execution of Narmada River Projects is not taken into account in the Statement. However, estimates of engineering graduates and diploma holders, have been worked out by the Irrigation Department for Narmada Project and are placed at 1199 and 644 respectively.

STATEMENT—IV

Requirement and availability of Engineering Personnel in 1980--81 and 1984--85

Category	Trend growth rate 4.2%						Targetted growth rate 6.1%					
	Position in 1980-81			Position in 1984-85			Position in 1980-81			Position in 1984-85		
	Require- ment	Availa- bility	Surplus (+) or Deficit (-)	Require- ment	Availa- bility	Surplus (+) or Deficit (-)	Require- ment	Availa- bility	Surplus (+) or Deficit (-)	Require- ment	Avail- ability	Surplus (+) or Deficit (-)
1	2	3	4	5	6	7	8	9	10	11	12	13
Graduate	22233	22073	+630	27952	28919	-1033	22698	22978	+370	28923	26919	-2004
Diploma	33366	35691	+2625	41823	44974	+3151	34473	35691	+1218	46124	44974	-1150
Total ..	55364	58669	+3305	69775	71893	+2118	57171	58669	+1588	75047	71893	-3154

STATEMENT--V.

Statement showing sanctioned Strength, actual admissions, Predictable cut-turn during 1980-81 to 1984-85, numbers on live registers and total availability during 1980-85.

Category/Course	Sanctioned strength (1979)	Actual Admission (1979)	Estimated out-turn during the 5 year period					Total (4 to 8)	Total on L. R. as on 31-12-79	Total Availability 1980-85 (9+10)
			1980-81	1981-82	1982-83	1983-84	1984-85			
1	2	3	4	5	6	7	8	9	10	11
Engineering Post-Graduate.										
Civil	76	45	38	40	40	40	40	198	2	200
Mechanical	46	26	14	16	15	15	15	75	2	77
Electrical	39	26	8	8	8	8	8	40	..	40
Textile Engineering	10	3	2	2	2	2	2	10	..	10
Metallurgy	10	5	2	2	2	2	2	10	..	10
Graduates										
Civil	530	575	551	555	555	555	580	2800	241	3041
Mechanical	440	425	394	394	395	395	395	1973	293	2276
Electrical	370	346	175	175	175	180	180	885	146	1031
Chemical	120	124	115	115	115	185	185	715	62	777
Instrumentation Control	15	18	15	15	15	15	15	75	1	76
Metallurgy	40	31	25	25	25	25	25	125	10	135
Electronics Communication.	15	19	15	15	15	15	15	75	..	75
Textile Engineering	20	44	20	20	20	20	20	100	..	100
Textile Technology	40	52	35	35	35	35	35	175	18	191
Production Engineering	20	19	20	20	20	20	20	100	82	182
Electronics	20	42	30	30	30	30	30	150	19	169
Architecture	70	65	89	90	90	90	90	449	31	480
Textile Chemistry	10	..	..	5	5	5	5	20	..	20
Architect Diploma (Degree level)	10	..	15	15	15	15	15	75	..	75
Post Graduate Diploma.										
Air Conditioning and Refrigeration.	5	..	1	1	1	1	1	5	..	5
Planning	20	16	14	14	14	14	14	70	..	70
Low Cost Housing	5	3	..	..	..	..	2	2	..	2
Post Diploma.										
Production	40	40	35	35	35	35	35	175	1	176
Power Plant	..	3	1	1	1	1	1	5	..	5
Television	20	18	..	14	14	14	14	56	..	56
Tele-Communication	10	11	..	7	7	7	7	28	..	28
Instrumentation control	120	22	13	20	20	20	20	93	..	93
Technical Sales Representative	15	28	6	6	6	6	6	30	..	30

1	2	3	4	5	6	7	8	9	10	11
Air Conditioning Refrigerations.	25	26	10	10	10	10	10	50	..	50
Automobile Engineering	10	..	..	3	3	3	3	12	..	12
Construction Engineering	10	..	..	7	7	7	7	28	66	94
Diploma.										
Civil	945	1016	953	950	950	950	950	4753	1567	6320
Mechanical	675	758	730	730	730	730	730	3650	678	4628
Electrical	555	609	430	440	440	415	445	2160	596	2756
Chemical	40	23	65	65	65	60	65	320	40	360
Textile Technology	45	20	25	25	25	25	25	125	5	130
Textile Chemisty	45	52	110	110	110	110	110	550	..	550
Radio Engineering	45	45	25	30	30	30	30	145	25	170
Electronics/Sound	20	23	18	18	18	18	18	90	..	90
Automobile Engineering	90	83	99	95	95	90	98	477	269	748
Printing Technology	30	42	24	24	24	25	26	113	10	123
Textile Manufacturing	45	78	77	75	75	77	78	382	11	393
Technology of Production/Oil Gas	15	59	15	15	15	15	15	75	..	75
Metallurgy	15	17	12	12	12	12	12	60	..	60
Architectural Assistantship	60	67	34	40	40	40	40	194	32	226
Ceramic Technology	15	18	13	12	12	12	12	61	..	61
Plastic Engineering	30	25	30	30	30	30	30	150	..	150
Manmade Fibres Fabric	25	33	20	20	20	20	20	100		
Manmade Fibres wet Processing	30	33	25	25	25	25	25	125	13	238
Production of Synthetic resins	15	..	15	15	15	15	15	75	..	75
Tech. of Producing Fertilizer	15	..	15	15	15	15	15	75	2	77
Industrial Electronics	30	105	35	35	35	35	35	175	..	175
Production Engineering	60	84	52	52	52	52	52	260	..	260
Electronics and Radio Engineering	35	38	32	30	30	30	30	152	..	152
Agricultural Courses										
M. Sc (Agri.)	[(a)*	146*	46*	50	50	50	50	248	11	257
M. V. Se.	(a)*	17*	3*	3	1	2	2	11	1	13
M. Sc. (Diary)	(a)*	2*	2*	2	2	2	2	10	6	16
B. Sc. (agri)	300*	356*	252*	275	275	275	275	1352	630	1982
B. V. Sc.	40*	40*	35*	35	35	35	35	185	..	185
B. Sc. (Diary)	60*	60*	47*	45	45	45	45	227	..	227
Diploma in Agriculture	270*	294*	238*	250	250	250	250	1238	1608	2844
Livestock Inspectors' course	50*	51*	51*	50	50	50	50	251	4	255
Pharmacy Courses.										
M. Pharm.	20	31	15	17	17	17	17	83	2	85

1	2	3	4	5	6	7	8	9	10	11
B. Pharm	107	140	140	130	145	144	144	703	107	810
Diploma in Pharmacy	260	260	265	255	255	255	255	1285	239	1524
B.S. A.M.	243	232	295	290	290	290	290	1455	991	2446
B. Pham (Ayu)	25	25	18	13	15	6	10	62	..	62
Teachers Course										
B. Ed.	3500	4420	3984	4271	4243	4243	4243	20984	6068	27552
P. T. C.	4040	5435	5000	5000	5000	5000	5000	25000	10455	35455
Medical and Para-Medical Courses.										
Post-Graduate Courses										
M.D.	N.A.	N.A.	110	110	110	110	110	550	1	551
M.S.	N.A.	N.A.	55	55	55	55	55	275	..	275
M.D.S.	N.A.*	13*	10*	10	10	10	10	50	..	50
Graduate Courses										
M.B.B.S.	675	675	720	720	712	625	625	3402	57	3459
B.D.S.	50*	49*	43*	45	45	45	52	223	..	223
B. Sc. (Nursing)	60	26	25	30	30	30	30	145	..	145
Para Medical Course										
General Nursing (Dip'om)	745	462	445	440	440	440	440	2205	70	2275
Diploma in Homopathy	130	130	75	74	73	75	75	372	..	372
Sanitary Inspectors Course	150*	165*	186*	175	175	175	175	886	155	1041
Health Visitor	125	28	45	30	40	30	30	165	2	167
Auxiliary Nurse Midwifery	355	278	225	225	225	225	225	1125	92	1217
I. T. I. Certificate Course:										
Wireman	528*	606*	251	284	355	355	355	1600	747	2347
Fitter	800*	898*	427	540	675	675	675	3042	513	3555
Turner	636*	679*	400	452	442	442	442	2178	494	2672
Machinist	264*	322*	158	178	232	232	231	1029	244	1273
Mechanic Grinder	48*	43*	36	41	41	41	41	200	1	201
Building Construction	16	18	15	16	16	16	16	79	8	87
Watch Clock Repairer	32*	03*	13	14	14	14	14	69	11	80
Electrician	576*	583*	396	448	460	560	560	2524	511	3035
Instrument Mechanic	240*	258*	148	167	209	207	209	942	165	1107
Refrigerator Mechanic	208*	224*	70	79	100	100	100	449	70	519
Civil Draftsman	288*	299*	69	78	105	106	105	462	193	655
Mechanical Draftsman	176*	185*	109	123	160	160	160	712	121	833
Surveyor	144*	164*	68	77	97	97	97	436	92	528
Radio T. V. Mechanic	144*	89*	36	41	45	45	45	212	1	213
Pattern Maker	48*	42*	21	24	30	30	30	135	37	172
General Mechanic	192*	185*	76	85	105	105	105	476	64	540

1	2	3	4	5	6	7	8	9	10	11
Engineering-Cum-Electric Mechanic	64*	66*	37	42	49	49	49	226	..	226
Rural Workshop Mechanic	48*	32*	14	20	20	20	20	94	5	99
Maintenance Mechanic	16	2	..	2	2	2	2	8	11	19
Electroplater	16*	16*	8	9	9	9	9	44	13	57
Motor Mechanic	448*	616*	205	231	235	265	265	1131	768	1809
Tool Die Maker	32	28	20	28	32	32	32	144	16	160
Welder	612*	614*	441	500	500	500	500	2441	516	2957
Sheet Metal Worker	16*	18*	14	14	14	14	14	70	9	79
Painter	16*	19*	15	15	15	13	13	71	14	85
Moulder	96*	55*	55	65	65	65	65	315	37	352
Carpentry	64*	32*	20	24	25	25	25	119	18	137
Mechanic (Tractor)	176*	169*	55	56	65	65	65	315	11	326
Mechanic (Diesel)	368*	435*	106	125	125	125	125	606	318	924
Plumber	48*	35*	45	47	50	50	50	242	48	290
Hand Compositor	32*	35*	20	22	25	25	25	117	11	128
Stenography	160*	165*	30	35	35	35	35	170	..	170
Foot-Wear	32*	10*	6	6	6	6	6	30	..	30
Book Binder	16*	11*	..	2	2	2	2	8	2	10
Letter Press Mechanic	32*	29*	30	32	35	35	35	167	..	167
Hand-Craft	32*	18*	14	14	14	14	14	70	..	70
Armature Winding	32*	25*	12	12	12	12	12	60	26	86
Suit case Manufacture	16*	..*	12	13	15	15	15	70	..	70

(a) Stats are adjusted according to facilities.

*Information is for the year 1980

N.A.=Not Available.

STATEMENT—VI

Statement showing probable out-turn during 1980-85, number on live registers of employment exchanges and total availability during 1980-85

Category/Course	Estimated out-turn during the plan period					Total (2 to 6)	Total on L.R. as on 31.3.80	Total Availa- bility
	1980-81	1981-82	1982-83	1983-84	1984-85			
1	2	3	4	5	6	7	8	9
1. Non Technical Post Graduates	3840	4055	4270	4485	4700	21350	2565	23915
Arts	2015	2105	2195	2285	2375	10975	1313	12288
Science	825	875	925	975	1025	4625	682	5307
Commerce	1000	1075	1150	1225	1300	5750	570	6320
2. Non-Technical Graduates	38705	41455	44205	46955	49605	220925	35553	256478
Arts	15625	16525	17425	18325	19225	87125	16192	108317
Science	4200	4350	4500	4650	4800	22500	4929	27429
Commerce	15480	16780	18080	19380	20680	90400	14295	104695
Law	3400	3800	4200	4600	4900	20900	127	21027
3. S.S.C.	1,51,072 (Actual)	180000	200000	220000	240000	9,91,072	1,93,069	11,84,141

“affluence does not always improve the quality of life and industry which provides us with our necessities and our luxuries is also largely responsible for the pollution of air and water. I hope our own industrialists will take active interest in ecology in ensuring clean living and in preserving the beauty of our environments whether it is natural beauty or man made monuments.”

— SMT. INDIRA GANDHI

• Extract from the inaugural address delivered by Prime Minister Smt. Indira Gandhi on 25th March, 1972 in New Delhi at the 45th annual session of the Federation of Indian Chamber of Commerce and Industry.

CHAPTER-VII

IMPLEMENTATION OF TWENTY POINT PROGRAMME

7.1. The Twenty Point Programme aims at eradication of poverty. The programme is a pivot on which success of the programmes for the welfare of weaker sections depends. In order to boost up the pace of implementation and to ensure timely accrual of the benefits to the weaker sections of society, it is proposed to set up a High Power Committee at the State level with the Chief Minister as Chairman and a full time executive chairman with the rank of a Cabinet Minister.

7.2. The Sixth Five Year Plan 1980-85 provides for an outlay of Rs. 2077 crores for various programmes included in Twenty Point Programme, which constitutes nearly 55% of the total outlay for the Sixth Plan period.

Production Procurement and Distribution of Essential Commodities.

7.3. Government is vigilant on curbing the rising trend in the prices of Essential Commodities. Various administrative measures have been taken in this direction. Constitution of Secret Fund, formulation of Vigilance Committees, introduction of Reward schemes and strengthening of intelligence wing in the Civil Supplies Department are such measures which would ensure effective implementation of policy. In order to ease the availability of the essential commodities the State Government has established Civil Supplies Corporation which would help holding the price line in time of stress. It would also undertake procurements, storage and distribution of essential commodities which would gradually take up a sale mix of items like Tea, Soap, Match Boxes and Soda-ash through Fair Price Shops. This would serve the weaker sections more particularly the tribals, small and marginal farmers and agricultural labourers in the rural areas. The Corporation would also open Fair Price Shops in difficult, and inaccessible backward areas so that, the weaker sections residing in these areas would get essential supplies at a time at reasonable prices. In order to promote consumer awareness and educate them for dissemination of the relevant information, efforts are being made through display of cinema-slides, advertisement in newspapers as well as booklets and pamphlets explaining rights under various orders relating to Essential Commodities Act, Prevention of Food Adulteration Act, Weights and Measures Act, etc. A provision of Rs. 1.5 crore is made in the Sixth Five Year Plan towards share capital as well as the consumer movement.

7.4. Efforts are made to increase agricultural production through the improved agricultural practices by encouraging increased use of fertilisers, better extension services and use of high yielding varieties. It is targetted to increase foodgrain--

production to 53.50 lakh tonnes by the end of the Sixth Five Year Plan period. In order to bring the desired results, training and visits system has also been introduced in the agricultural sector. This would provide effective and timely guidance to the farmers at the village level, understand their problems as well difficulties and offer them technical guidance for solving their problems. In order to solve the problems of shortage of edible oil, Government has launched programme for summer groundnut cultivation which would promote more production and result in enhanced availability of edible oil. 5.43 lakh hectares of additional land would be covered by the end of 1984-85 under the programme. Similarly in order to provide reasonable price for the cotton, Government has provided Revolving Fund of Rs. 10 crores to the Cotton Marketing Federation which would enable them to obtain better prices of their produce.

Implementation of Agricultural Land's Ceiling Act.

7.5. In order to ensure speedier distribution of agricultural land among agricultural labourers, State Government has accelerated the implementing of Agricultural Land Ceiling Act. Additional 40 agricultural land tribunals have been set up raising the total number to 55. 17768 hectares of land, out of 18012 hectares of land declared surplus under the pre-revised Ceiling Act, has been distributed to 14730 beneficiaries. Out of them 1486 belong to schedule caste and 9937 to scheduled tribes with allotted area of 2443 hectares and 7778 hectares respectively. By January, 1981 another 27450 hectares of land has been declared surplus under the revised Ceiling Act. Possession of 8008 hectares is taken and 1593 hectares is disposed off on permanent basis.

Updating Record of Rights.

7.6. In order to update village record of Rights, eight Record of Rights teams are functioning in the State. The teams have completed their first round in 14 districts and have started second round in 12 districts of the State. The work has been completed in 16258 villages in first round and 9226 villages in second round. 67392 cases of concealed tenants have been discovered by these teams of which 58411 have been brought on record. 14619 cases of concealed tenants known as "Bhalamania" have also been discovered in Kachchh area. It is proposed to carry out work of updating the record in 5857 villages-2118 in the first round and 3739 in the second round-at an estimated cost of Rs. 110 lakhs.

Housesites to the landless labourers and Construction of Houses

7.7. For the benefit of eligible rural families last date for submission of application has been extended to 31st December, 1981, for housesites to the landless labourers. 4.23 lakh plots have been allotted to eligible families free of cost by the end of January, 1981 and 1,53,665 houses constructed on these plots. In order to ensure the intensification of this programme the scheme has been liberalised to provide pucca houses costing Rs. 3,000 per house and steps have also been taken for easy availability of institutional finance. Gujarat Rural Housing Board would get finance directly from HUDCO/Banks and disbursed to the beneficiaries through Taluka and District Panchayats. 3.12 lakhs houses are proposed to be constructed during Sixth Five Year Plan period and an amount of Rs. 3227 lakhs is provided for the purpose which includes Rs. 142 lakhs to meet with the cost of land acquisition.

Implementation of Minimum Wages Act

7.8. It is extremely necessary to ensure payment of legitimate wages to the workers more particularly in rural areas. The machinery of enforcement of Minimum Wages Act has been strengthened in the State in 73 talukas having population of agricultural labourers more than 10,000. A separate post of Rural Labour Commissioner is also created alongwith staff, which would look after the implementation of the Minimum Wages Act for agricultural labourers. Government has also appointed a Committee in September, 1980 to recommend revision of rates of minimum wages to agricultural labourers. The report from the Committee is awaited.

Irrigation Development

7.9. Water is considered a critical inputs for agricultural production. Increase in irrigation facilities is one of the important point under 20-Point Programme. Government also provides high priority for increasing irrigation potential and its optimal use during 1980-85 under the 20-Point Programme. As a result of major and medium irrigation projects the additional potential of 2.60 lakh hectares is proposed to be created during the Sixth Five Year Plan period raising the total potential to 12.72 lakh hectares at the end of 1984-85. Simultaneously utilisation is also proposed to be increased from 5.29 lakh hectares at the end of 1979-80 to 7.53 lakh hectares at the end of 1984-85. Stress has also been laid down to the development of minor irrigation. The outlay of Rs. 1068 crores has been provided in the Sixth Five Year Plan for Development of Irrigation, which includes Rs. 88 crores for minor irrigation.

Power Development

7.10. Power is important in the present energy crisis. Increase in consumption of power for industrial agricultural and domestic purposes requires to be properly planned so that the economic activities may not suffer on account of power shortage. Existing installed capacity 2384 MW would be raised to 3730 MW by the end of 1984-85. In order to electrify the rural area of the State it is proposed to cover as many villages as possible under the rural electrification programme. 11879 villages have been electrified by the end of December, 1980. All the villages (18275) would be electrified by the end of Sixth Plan, which would cover all Harijan localities in rural areas.

Handloom

7.11. There are 20471 handlooms in the State. Of these 50 per cent are in the Co-operative field. The Gujarat Handloom Development Corporation provides assistance to handlooms outside the co-operative sector. An outlay of Rs. 470 lakhs is provided for the development of Handloom sector in the plan period 1980-85.

Implementation of Gujarat Rural Debtors Relief Act

7.12. Out of 41452 applications received under the Gujarat Rural Debtors Relief Act, 1976, 33194 applications were required to be published by the local bodies. Out of these 27800 applications have already been published and 19908 applications have been disposed off by the Debt Settlement Officer by the end of December, 1980 granting relief to 10763 debtors to the tune of Rs. 2.21 crores. The remaining applications would be expedited.

7.13. As a follow up action to meet the credit requirements of beneficiaries on account of implementation of the Act, alternative sources of finance are also being tapped. Since most of the borrowing by them are for the household expenditure arrangements have been made to provide them consumption loans through Farmers Service Societies/Large Agricultural Multi-purpose societies. Provision has been made of Rs. 30 lakhs for the risk fund subsidy to be given to the societies who are not able to recover the loans given for pure consumption purpose. Since the granting of pure consumption loans will not achieve the objective of rehabilitation of such groups, it has been decided to secure production credit for these beneficiaries from the commercial banks. Bankable schemes are therefore being prepared by the State Corporations to improve the economic condition of these people and make them self reliant.

Implementation of Apprenticeship Act

7.14. Under the Apprenticeship Scheme 12000 seats have been sanctioned by the end of 1979-80.

The utilisation of seats has increased from 8425 at the end of 1979-80 to 10392 by the end of January, 1981. Of the total number of seats utilised, 1001 seats have gone to scheduled castes, scheduled tribes and disabled, while 334 seats have gone to the minorities. Looking to the phenomenal growth of the industries it is proposed to sanction additional 5000 seats during the period of Sixth Five Year Plan 1980-85.

Workers' Participation in Industries

7.15. Under the scheme for Workers' Participation in the Industries, Joint Management Councils have been formed in 182 units under both the voluntary and statutory schemes of Joint Management Councils. An outlay of Rs. 5 lakhs has been provided for the implementation of schemes for the Sixth Five Year Plan period 1980-85.

Supply of Text Books

7.16. Students coming from the weaker section of the society are not able to purchase text books

for their studies at secondary and high secondary stage of education. The scheme envisages provision for free supply of text books to such students. It is proposed to supply 1.40 lakh sets of text books at an estimated cost of Rs. 35 lakhs during 1980-85.

Report of the Working Group of Reserve Bank of India

7.17. The State Government has begun the implementation of the recommendations of Working Group of the Reserve Bank of India set up under the chairmanship of Shri K. S. Krishnaswami. The work of identification of beneficiaries under Twenty Point Programme is in progress. Viable economic schemes for such beneficiaries are formulated in consultation with State development agencies. On the part of banks also the definition of "Priority Sector Lendings" is liberalised and most of the beneficiaries under Twenty Point Programme are now covered under the "Priority Sector Lendings" by banks. The current ratio of priority sector advances to the total advances by banks would be raised from 33-1/3 % to 40 % by 1985.

CHAPTER-VIII

DISTRICT PLANNING

8.1 Decentralisation of Planning Process.

8.1.1. Effective decentralisation of the planning process is one of the basic prerequisites for harnessing local resources and man-power more fully and for carrying the benefits of development to smallest area units and the poorest sections of the people and promoting beneficiary participation in the dynamics of growth. The most viable unit of planning at the Sub-State Level is the district at present. The need for a careful delineation of the sectors of development that can be effectively planned at the district level and devising a scheme of transfer of resources from the State to the districts in order to enable them to formulate their development plans within a given resource matrix have been fully recognised. In the Draft Sixth Five Year Plan prepared by the Planning Commission for the Period 1980-85 emphasis has been laid on grass-root planning by augmenting the capabilities of development administration both at the district level as well as the block level. Need for planning for rapid economic and social development in a democratic frame with people's willing participation has also been recognised. For effective implementation of the plan objectives, arrangements for the people's involvement in the planning process will require to be reviewed and strengthened.

8.1.2. The idea of District Planning was being entertained right from the Second Five Year Plan. With the introduction of the Panchayati Raj in 1963, certain powers as also number of district level schemes were transferred to panchayats along with funds and personnel. This could be considered as the first concrete phase in this direction. At the time of the formulation of the State's Fourth Five Year Plan and Fifth Five Year Plan, attempts were made to involve the District Panchayats in the formulation of the proposals. For this purpose, tentative ceilings were also indicated and the District Panchayats were requested to formulate proposals in respect of district level schemes within those prescribed ceilings and send them to the concerned working groups set up at State Level for formulation of the sectoral proposals. It was expected that while formulating their proposals, the Working Groups would take in to account the proposals received from the District Panchayats. However, many District Panchayats had sent their proposals very late and even in case where proposals were received, some of them were not found in order and were in far excess of the ceilings prescribed. Besides, the very process of finalising the State Five Year plan was also delayed for various reasons.

8.1.3 In the context of formulating the proposals for the earlier Five Year Plan for the period 1978-83,

efforts were made to get the proposals from the districts and integrate them at the State level. For this purpose, the District Planning Boards were requested to formulate proposals for district level schemes and send them to concerned Steering Groups which were set up at the State level for preparing the sectoral proposals for the State Plan. However, many of the District Planning Boards could not adhere to the time schedule. The period of the Sixth Five Year Plan was subsequently decided to be reckoned as 1980-81 to 1984-85. Besides, as the draft plans of the States were required to be discussed with the Planning Commission according to the time schedule prescribed by them, it did not become possible to delay the finalisation of the State's draft plan. Thus, for a variety of reasons, it did not become possible to ensure full integration of the proposals received from the districts in the State's Plan.

8.2. District Planning Boards

8.2.1. Thus efforts made in the past to associate the District Panchayats/District Planning Boards in the formulation of the plan have not yielded satisfactory results for a variety of reasons. But, now having regard to the importance attached to the decentralisation of the planning process and with a view to making planning at District Level more effective and ensuring its integration with the State Plan, the District Planning Boards which were set up at the district level have been reorganised recently i.e. on 11th September 1980. The constitution of the re-organised District Planning Board is as under:-

- | | |
|--|-------------|
| (1) District Collector | Chairman |
| (2) President of the District Panchayat. | Co-Chairman |
| (3) Taluka Panchayat Presidents of two or three talukas of the District (Two for small district and three for large district). | Member |
| (4) All M. P.s elected from the District. | Member |
| (5) All M. L. As elected from the District. | Member |
| (6) President of one of the Municipalities in the District. | Member |
| (7) Mayor of the Municipal Corporation (in the District having Municipal Corporation) | Member |

*(8) The President of one of the Nagar Panchayats in the district.	Member.
(9) An expert from a Research Institution.	Member.
(10) A Representative of the District Lead Bank.	Member.
(11) Chairman-District Central Co-operative Bank.	Member
(12) District Development Officer	Member
(13) Project Administrator, Tribal Area Development Project	Member
*(14) A Member of the State Planning Board	Member
(15) District Planning Officer	Member-Secretary
(16) District Statistical Officer	Additional Member-Secretary
(17) Officer of the G.A.D. (Planning Division)	Observer

Minister(s) from the district as also a representative of the Reserve Bank of India are expected to be invited to attend the meetings of the Board.

*as may be nominated by Government.

Moreover, a small Executive Planning Committee for ensuring effective working of the District Planning Board has also been constituted as under :—

(1) District Collector	Chairman
(2) President of the District Panchayat	Co-chairman
(3) District Development Officer	Member
(4) Project Administrator, Tribal Area Sub-Plan	Member
(5) District Planning Officer	Member-Secretary
(6) District Statistical Officer	Additional Member-Secretary

8.2.2. With a view to assisting the District Planning Board in the work of formulation and monitoring the implementation of District Plans continuously, it has been decided to constitute the following Task

Forces on which members will be appointed by the concerned District Planning Board.

(1) Agriculture and allied services including cooperation and irrigation.

(2) Small and cottage industries.

(3) Social Services including primary education, adult education, rural health services, rural water supply, rural housing, environmental improvement of slum areas and nutrition.

(4) Development of primary infrastructure facilities, such as rural electrification, storage and warehousing and roads.

The District Planning Boards of Surat, Bharuch and Valsad have been advised to set up a separate Task Force for Housing and other problems of Halpatis and Agricultural Labourers whose population is substantial in those districts.

8.2.3. A Steering Group has been set up at the State Level to provide proper guidance to the District Planning Boards in their task of plan formulation.

8.2.4. The functions of the District Planning Board are as under:-

(1) To prepare Perspective Plan, Five Year Plan and Annual Plan of the District, ensuring balanced development of the district by continuous study of the socio-economic and cultural environments of the district and keeping in view and assessing the local resources of the district and formulate the programme as an integral part of the frame-work of the broad policy of the State and satisfying the requirements of the local areas reasonably and realistically.

(2) To frame specific schemes in various fields keeping clearly in view their size and form with reference to the priorities fixed by the State Government and to pay special attention to the upliftment of the economically backward and weaker sections of the society in the district planning.

(3) To ensure that planning becomes realistic, willing and maximum participation and help of local bodies, industrial houses, and people from different strata of society becomes available in the formulation and implementation of the plan programmes.

(4) To undertake regular and effective review and evaluation of all the district level schemes and programmes being implemented in the district and on the basis thereof to strive continuously to remove bottlenecks and take remedial measures for the successful implementation of each scheme.

(5) To undertake special monitoring and evaluation of the implementation of Minimum Needs Programme from amongst the programmes mentioned above, as it is proposed with reference to the rural areas and its benefits accrue mainly to the rural areas.

8.2.5. The District Planning Boards are thus to provide a main window to the rural poor. They are expected to ensure effective co-ordination through periodical review of all special programmes in the field of agriculture, the Minimum Needs Programme, the Tribal Sub-Plan, the Component Plan, and other sectoral programmes. The District Planning Boards have also been assigned an important role in formulating a large number of small but meaningful programmes out of the discretionary outlay which constitutes a sizeable part of the outlay on district level schemes.

8.3. Criteria for Districtwise Distribution of Outlay.

8.3.1. It has been aimed that 35 percent of the State Plan outlay should on an average be allotted for district level schemes during the period of the Five Year Plan and 20 percent of the district plan outlay so allotted be earmarked as discretionary and incentive outlay. However, to begin with an outlay of Rs 1125 crores has been envisaged in the State's Sixth Five Year Plan for being allotted toward District Five Year Plans and an amount of Rs 200 crores therefrom is earmarked for being allocated to District as discretionary and incentive outlays taken together during the Sixth Five Year Plan period.

8.3.2. For determining the districtwise distribution of the outlay for district plan which may be set apart from the State Plan, it has been decided to adopt the following criteria:

Item	Percent
1. Population (excluding Towns having population of 50,000 and above)	40
2. Population of scheduled castes, scheduled tribes and small and marginal farmers and population of agricultural labourers other than scheduled castes and scheduled tribes.	15
3. Agricultural Backwardness	10
4. Irrigational Backwardness	10
5. Industrial Backwardness	5
6. Backwardness in the spheres of Roads and Drinking Water.	10
7. Backwardness in respect of the targets of other selected minimum needs.	5
8. Incentive provision	5
	100

8.3.3. With a view to providing greater latitude to the District Planning Boards in suggesting such schemes as they may consider useful in the context of the local development needs, it has been decided to initiate a distinct feature of earmarking a specific outlay therefor. Accordingly, the part of the State Plan outlay allocable for district level schemes would be divided into the following three categories:--

(a) Provision for the normal district level schemes in the State plan to be proposed in the light of priorities and guidelines given by the State.

(b) Provision for providing complete latitude to the District Planning Boards in suggesting such schemes as they may consider useful having regard to the local needs and local potential.

(c) Provision as an incentive provision to raise additional financial resources at district level. In order that backward districts may also be able to derive adequate advantage of this incentive provision, proportion of additional financial resources to be raised by them has been kept low in the case of districts where half or more than half of the talukas are covered under Tribal Area Sub-Plan or Drought-Prone Area Programme. Thus the proportion of incentive provision and the financial resources to be raised by the District concerned are as follows:—

Name of the District.	Proportion of incentive provision.	Proportion of financial resources to be raised by the concerned District.
1.	2	3
1. Dangs	75 per cent	25 Percent
2. Panchmahals.		
3. Bharuch		
4. Valsad		
5. Surat		
6. Kachchh		
7. Banaskantha		
8. Surendranagar.		
9. Remaining Districts	50 percent	50 per cent

8.3.4. Proposals made by the District Planning Boards for the district plan outlay in regard to the district level schemes from the normal plan, keeping in view the priorities and guidelines given by the State Government are expected to be incorporated by the concerned Heads of Departments and Administrative Departments in their Plan and Budgetary proposals, without effecting any change unless there are any special reasons therefor. In case

where there are special reasons to effect any change, the changes made are expected to be intimated to the concerned District Planning Board.

8.3.5. Provision for schemes to be formulated by the District Planning Boards against the discretionary and incentive outlays allocated to them is being made under one budget head "314-Community Development-B-Community Development Programme" for operational convenience.

8.3.6. The District Planning Boards have been fully empowered to reappropriate between two sub-heads within the same minor head from the above provision for district level scheme in the normal plan during the year. Besides, the District Planning Boards are allowed to propose reappropriations upto 10 per cent of the provision made for the sector concerned and the Heads of Departments concerned have to incorporate the same in their proposals for reappropriations.

For schemes taken up against the discretionary outlay, the District Planning Boards can make reappropriations remaining within the ceiling for the discretionary outlay for the district. From the provision, for district level schemes in the normal Plan, no reappropriation shall be made towards schemes suggested under discretionary outlay.

8.4. Outlays in the district plan 1980-85.

8.4.1. The process of involving the District Planning Boards in the formulation of the District Annual Plans was initiated from the year 1980-81. To begin with, an outlay of Rs. 140 crores was initially allocated for the District Plans within the State Plan outlay for 1980-81. It was divided into three parts namely for district level schemes in the normal plan, and for schemes to be suggested by District Planning Board against the discretionary and incentive outlays respectively.

8.4.2. The final size of the State Annual Plan 1980-81 now stands at Rs. 537.50 crores. Besides a provision of Rs. 28 crores towards discretionary and incentive outlays placed at the disposal of the District Planning Boards, the above State Plan outlay also includes an outlay of about Rs. 178 crores for District level schemes in the normal plan provided for by the respective departments in their development sectors and which are amenable for district-wise break-up.

8.4.3. Within the discretionary and incentive outlays, the District Planning Boards have been given the discretion to plan, having due regard to urgent and local needs of the District, mainly in selected fields such as Agriculture, Minor Irrigation, Cottage Industries and the programmes covered under the Minimum Needs Programme such as Primary Education, Adult Education, Public Health, Drinking Water Supply and Rural Roads.

The District Planning Boards have to formulate the schemes to be financed from this outlay. These schemes are sanctioned by them and got implemented through respective departments and agencies. It is this discretionary outlay that has aroused good deal of optimism among the District Planning Boards and by and large, efforts have been made by them to formulate meaningful programmes, providing missing links in the existing infrastructure at the village, taluka District level.

8.5. Formulation of District Five Year Plan for 1980-85.

8.5.1. The process of preparation of the Five Year Plan for 1980-85 and Annual Plan 1981-82 for the Districts has also been initiated. Tentative outlays for different districts have been suggested to the districts for formulating their proposals for the Five Year Plan 1980-85 and Annual Plan 1981-82. General guidelines to be kept in view while preparing proposals have also been given. The administrative departments and the Heads of departments are also expected to provide necessary guidance to the District Planning Boards in the task of formulation of their proposals. The tentative outlays for District Five Year Plan for 1980-85 are indicated in the statement given in Appendix-I

8.6. District Planning Organisation.

8.6.1. Till the end of the Fifth Plan there was no separate planning unit at the district level. There had been a lack of unified direction and effective synchronisation of district planning activities transferred to the Panchayats and those retained by the Government. Monitoring of the implementation of district level programmes had also suffered in consequence. The State Government has now appointed District Planning Officer in all the districts with a small technical staff under the Collector of the District. The District Planning Officer also functions as the Member-Secretary of the District Planning Board. Steps have also been taken to bring about close co ordination between the work of the District Statistical Office under the District Panchayat and the District Planning Cell under the Collector. The District Statistical Officer has been appointed as Additional Member-Secretary of the District Planning Board. In the context of the responsibilities now cast on the District Planning Board the organisation and the structure of the District Planning Cell will be reviewed from time to time and suitable strengthening and improvement will be effected as and when necessary. Strengthening planning machinery at the district level and at the block level, improving the data base, strengthening the capacity at the district level for rapid quantitative and qualitative analysis through electronic data processing are some of the measures which deserve consideration at the National level by devising a suitable scheme under centrally sponsored programme.

APPENDIX—I

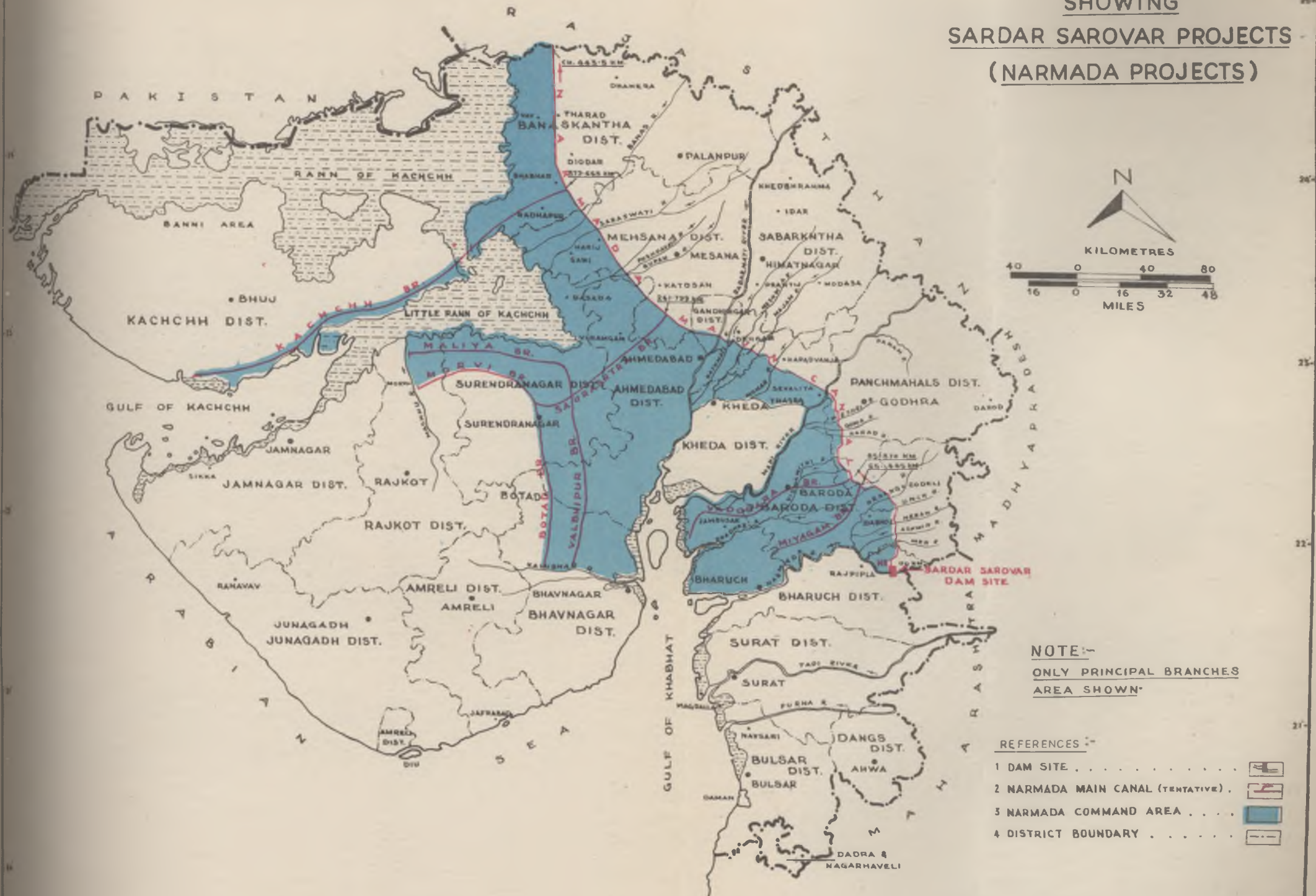
Statement showing Districtwise allocations of tentative outlay for District Five Year Plans for 1980-85.

(Rs. in lakhs)





Sr. No.	Name of the District	Districtwise distribution of total outlay for District Five Year Plans for 1980-85				
		Outlay for district level schemes in the normal plan	Discretionary outlay	Incentive outlay	Total (Col. 3 to 5)	Funds to be raised by the district to become eligible for getting the incentive outlay shown in Col. 5
1	2	3	4	5	6	7
1.	Ahmedabad	5134	832	278	6244	278.00
2.	Amreli	3487	566	188	4241	188.00
3.	Kachchh	3987	646	216	4849	72.00
4.	Kheda	6937	1125	375	8437	375.00
5.	Gandhinagar	1822	296	98	2216	98.00
6.	Jamnagar	3709	601	201	4511	201.00
7.	Junagadh	5125	831	277	6233	277.00
8.	Dangs	2488	404	134	3026	44.67
9.	Panchmahals	7650	1240	414	9304	138.00
10.	Banaskantha	5162	837	279	6278	93.00
11.	Bharuch	5087	825	275	6187	91.67
12.	Bhavnagar	4551	738	246	5535	246.00
13.	Mahesana	6567	1065	355	7987	355.00
14.	Rajkot	4051	657	219	4927	219.00
15.	Vadodara	6124	993	331	7448	331.00
16.	Valsad	6151	998	332	7481	110.67
17.	Sabarkantha	5134	832	278	6244	278.00
18.	Surat	6124	993	331	7448	110.33
19.	Surendranagar	3210	521	173	3904	57.67
Total..		92500	15000	5000	112500	3564.01

MAP OF GUJARAT STATE

SHOWING
SARDAR SAROVAR PROJECTS
(NARMADA PROJECTS)



NOTE:-
ONLY PRINCIPAL BRANCHES
AREA SHOWN

- REFERENCES :-**
- 1 DAM SITE 
 - 2 NARMADA MAIN CANAL (TENTATIVE) 
 - 3 NARMADA COMMAND AREA 
 - 4 DISTRICT BOUNDARY 

CHAPTER IX

SECTORAL PROGRAMMES

1. Agriculture & Allied Programmes

1. The Agriculture Sector is the main contributor to the State income. More than 40 percent of the State income is contributed by the Primary Sector of agriculture, 65 percent of the working population depend on agriculture and allied pursuits for their livelihood. Agriculture and allied programmes play the most vital role in rural development. Agriculture, besides being a productive sector, possesses the greatest scope for absorbing the labour force.

2. Stress has, therefore, been laid on integrated rural development. Special efforts would be made to increase the share of more vulnerable sections in the total agricultural production. Intensive programmes for Scheduled Castes and Scheduled Tribes have been launched with the objective of improving their productivity by supplying inputs at subsidised cost and to provide them better extension facilities. A dual scheme of better utilisation of water by the rotational system of irrigation in irrigated areas and special dry farming programmes in water-shed would also be implemented. Efforts would be made to raise out-put levels and employment intensity not merely in crop production but also in animal husbandry, dairying, horticulture, forestry and fisheries.

3. Special Programmes for rural development designed towards improving the social and economic status of rural poor especially vulnerable and weaker sections of the society would be implemented vigorously with a view to eradicate poverty and improving the quality of life.

4. Out of the total plan outlay of Rs. 376000-lakhs proposed for the Sixth Plan 1980-85, an outlay of Rs. 50650 lakhs has been proposed for agriculture and allied programmes including Co-operation; the broad break-up of which is as under :—

(Rs. in lakhs)		
Sr. No.	Major/Sub-Major Head of Development	Outlays 1980—85
1	2	3
1.	Research & Education	1000
2.	Crop Husbandry	3100
3.	Land Reforms	1000
4.	Minor Irrigation	8800
5.	Soil & Water Conservation	2894
6.	Command Area Development	1877
7.	Animal Husbandry	1770
8.	Dairy Development	205
9.	Fisheries	2000
10.	Forests	9000
11.	Investment in Agricultural Financial Institutions.	3350
12.	Marketing, Storage and Warehousing	170
13.	C. D. and Panchayats	627
14.	Development of Backward Areas	250
15.	Special Programmes for Rural Development.	14407
I. Total: Agriculture & Allied Services		47450
II. Co-operation		3200

5. The programmes for each of these sector/sub-sectors are outlined in the subsequent pages.

1.1. AGRICULTURAL EDUCATION AND RESEARCH

1.1.1. Introduction :

1.1.1.1. The Gujarat Agricultural University was established on 1st February, 1972 under the Gujarat Agricultural University Act, 1969. University aims at promotion of agricultural productivity in general and improving the economic conditions of the rural community in particular through integration of teaching, research and extension education. Keeping in view these broad objectives and State/regional needs of development in agriculture and allied sectors, the University started functioning from 1st June, 1972 with the transfer of teaching, research and extension education activities of the State Departments of Agriculture and Animal Husbandry and the Institute of Agriculture, Anand. During the Fifth Five Year Plan, the University was engaged in its initial planning, organisation and institution building programmes for its growth and development in teaching, research and extension education.

1.1.1.2. In order to achieve the objectives of imparting education to the students, the University has three constituent colleges of agriculture at Anand, Junagadh and Navsari, one college of veterinary science and animal husbandry at Anand and one college of dairy science at Anand. All these colleges undertake under-graduate and post-graduate teaching. In order to regulate teaching in different areas and disciplines, the University has at present four faculties in operation namely the Faculty of (i) Agriculture (ii) Veterinary Science and Animal Husbandry; (iii) Dairy Science and (iv) Post-graduate studies. The Faculties of (i) Basic Sciences and Humanities; (ii) Home Economics; (iii) Agricultural Engineering and Technology provided in the Act and the First Statutes are yet to be established. The University is a multi-campus University and has four Campuses namely Junagadh, Anand, Navsari and Dantiwada, with its principal Campus at Sardar Krishinagar (Dantiwada) in the District of Banaskantha.

1.1.1.3. The University had inherited traditional system of education which was substituted by semester system. With the introduction of semester system, all the under-graduate and post-graduate courses were thoroughly revised and made more practical oriented as per the recommendations of Kothari Commission on Education, I. C. A. R. - Review Committee and National Commission on Agriculture for making agricultural, veterinary and dairy education more relevant to the needs of the society and linking of education with production having more emphasis on practical training. This has been supplemented by faculty competence-improvement, improvement in teaching and evaluation, implementation of U.G.C. scales of pay, library improvement and students welfare programme.

1.1.1.4. Considering the academic and research needs of the State, the University has established eight new departments namely Department of Farm Engineering at Junagadh, Department of Soil and Water Engineering at Navsari, Department of Agricultural Process Engineering at Anand and the Department of Rural Engineering at Dantiwada as well as Department of Plant Breeding and Genetics, Department of Nematology, Department of Bio-chemistry and the Department of Horticulture with the financial assistance from I. C. A. R.

1.1.1.5. The Gujarat Agricultural University had inherited under-developed Campus at Junagadh, Navsari and Anand. New main Campus at Dantiwada has been created after its establishment. All the four Campuses, 54 research stations and 25 extension educational institutions had inadequate infrastructural facilities such as staff quarters, approach roads, supply of electricity, drainage and water, farm buildings and structures, laboratories etc. The work of administrative building at Dantiwada with 387 residential quarters, shopping centre, bank building, guest-house, health centre, schools are completed. Development of other Campuses such as Anand, Junagadh and Navsari by proper designing and land scaping as well as minimum infrastructural developments have also been done during Fifth Five Year Plan.

1.1.1.6. The University is responsible alongwith teaching and research, for the agricultural extension education and training programmes through which research findings in the form of agricultural technology and package of practices are made available to farmers for their adoption and to solve their problems. The developments in the fields of extension education are the Extension Education Institute at Anand, the Sardar Smruti Kendra at Junagadh, Anand and Navsari, the Krishi Vigyan Kendra at Deesa and the Tribal Research-cum-Training Centre at Devgadbaria. All these centres serve as information and communication centres and training centres for farmers, extension and field workers and the students. The net-work of other extension training institutions are ten agricultural schools, one home science school, one school of baking, two farm mechanic-cum-artisan training centres, one livestock inspectors training centre, one bidi tobacco cultivation training centre, one poultry training centre, one applied nutrition centre. Additionally farm advisory services are also extended to farmers through 'Farmers Days', radio talks, demonstrations, operational research projects and publications of monthly "Krishi-Go-Vidya", GAU Research Journal and leaflets, booklets and pamphlets etc. All these activities serve for developing skills and productivity on the part of farmers, artisans, labourers and tribals engaged in the agriculture, animal husbandry and allied fields. The University has also participated actively in 'Lab-to-Land' programme of I. C. A. R.

With the introduction of the T and V (Bejor) system in the State, the University has taken the responsibility for training subject matter specialists of the Department of Agriculture. Strong linkages between the University and development Departments of Government namely agriculture, animal husbandry, Panchayats etc. are developed for effective co-ordination and co-operation to strengthen the activities of agricultural development in the State through dual representations in various bodies, committees, councils, training and extension programmes, visits and exchange of staff.

Research High-lights

1.1.1.7. Research activities of the University encompass the whole State of Gujarat and are carried out through 54 research farms located in varied agro-climatic conditions. Agricultural research at present includes mainly applied research problems with emphasis on inter-disciplinary, location specific and problem oriented research. This includes research on cereals, pulses, millets, cotton, tobacco, oilseeds, sugarcane, fruit and vegetable crops, forage crops species and medicinal crops. Besides, special emphasis has also been given to the research in the subjects of dry-farming, water management, agronomy, plant protection, agricultural engineering, agricultural economics, extension and statistics, animal husbandry, animal nutrition and reproductive biology.

1.1.1.8. As a result of research efforts by the University from its inception, 49 improved varieties of different crops having better yield potential and quality characters have been evolved and released or adopted by the farmers. They are as under :

Crop varieties evolved, released and recommended by Gujarat Agricultural University

Sr. No.	Crop	Varieties
1.	Paddy	GAUR-1, GAUR-10, GAUR-100, GAUR-2, GR-3 and GR-11.
2.	Wheat	GAUW-10, A-28, GW-40, GW-18, LOK-1,
3.	Bajra	GHB-J-1399.
4.	Jowar	CSH-5, CSV-3, GJ-103. CSH-6, CSH-8R, GJ-9.
5.	Hill Millets	G-Nagli-1, G. Kodra-1, G. Vari-1.
6.	Pulses	Urid-G-75, GAU-Muth-1, Urid-T-9.

Sr.No.	Crop	Varieties.
7	Spices and Condiments	Fennel YF-35, Coriander-GAU-C-1, Fenugreek-GAU-F-1, GAU-F-2, GAU-F-3, Garlic-GAU-G-1 and G-G-10.
8.	Cotton	GAU-Cot-10, GAU-Cot-100, GAU-Cot-101, and G-Cot-11. G-Cot-hy-6.
9.	Tobacco	G-T-4.
10.	Oilseeds	Groundnut-GAU-G-1, GAU-G-10 M - 13, Castor-GAUCH-1, GAU-C-1, Sesamum-G- Til-1, Mustard-Varuna.
11	Vegetables	Brinjal-G-6, Musk Melon-GMM-1 and GMM-2.
12	Forage Crops	Lucerna-GAU-L-2, Grass Dharaf-GD-1.
13	Medicinal Plants	Gujarat Isabgul-1.

1.1.1.9. Gujarat State is pioneer in evolving hybrid in bajra, similarly Gujarat was the first State to develop and release castor hybrid. First budded cotton combining characteristics of annual and perennial cotton was released and recommended for cultivation in tribal areas and for marginal farmers in Gujarat. Tobacco is one of the important cash crops of the State. The excellent research work on tobacco has helped to triple the yield of the crop after inception of the Research Station in 1954 largely due to evaluation and adoption by the farmers of high yielding varieties and improved crop production and protection techniques. The most effective, economical and easy method for establishment of grafted mango by grafting "in Situ" grown mango seedling in dry regions of State has been evolved considering the several aspects of work and progress on horticultural crops. I.C.A.R. has now established a Horticultural Research Centre in Gujarat at Vajalpur. In case of date crop research station has been located at Mundra in Kachehh and date suckers from abroad have been brought and planted there.

1.1.1.10. Cost of the seed in case of potato cultivation becomes the limiting factor as it has to be purchased from outside the State. With a view to supply cheaper seeds to farmers, University has taken-up research on seed production aspects.

1.1.1.11. Agronomic practices are also worked out for newly developed varieties. Fertiliser doses are modified and new recommendations based on cost

benefit ratio are made for economical use of fertilizers. More emphasis is given to non-monetary low cost inputs. For the purpose of economy work on Azolla and Bio-fertilizers is actively in progress. Schedules are also worked out for control of pests and diseases of the old and new crop varieties and recommendations are made with a view to provide plant protection umbrella.

1.1.1.12. Even-to-day the irrigation facilities are meagre in the State and only 16 % of the total cultivated area is under irrigation. 82% of the total area in the State comes under arid and semi-arid conditions of farming. Emphasis is, therefore, being given to evolve suitable technology, cropping patterns, crop mixtures and package of practices of soil-moisture, crops management to minimise risk in crop production which may in turn bring higher-production and income to the farming community of this region. Suitable crop varieties and other practices such as mixed cropping, contour bunding, land shaping and agronomical practices including fertilizer practices have been recommended.

1.1.1.13. Agricultural engineering plays a key role in increasing the farm efficiency and bringing down the production cost. Research in these disciplines is also undertaken as a result of which designing of low cost irrigation channels has been possible. Considerable progress in development of processing equipments like groundnut digger, groundnut sheller, castor decorticator and sprayig equipments has been made. Scheme for testing lift irrigation equipments and developing submersible motor pump suitable for the pumping water from open well with fluctuating water level have been successfully implemented.

1.1.1.14. In the field of Animal Husbandry considerable progress has been made for increasing the milk yield per lactation and the decrease of mortality rate by developing suitable techniques for prevention and curative measures. Similarly, the genetic improvement of indigenous breeds of cattle and under taking cross-breeding programmes for the development of desired herds are also in progress. Major achievements are that buffaloes can be successfully bred during summer also and their pregnancy and milk-yield remain normal like buffaloes bred in winter. The experiment of bringing jersey cows has been successful. A bull mother farm for Jersey has been established and bulls are being supplied to different State Governments in India. In sheep breeding project, cross breeding of Patanwadi ewes and exotic rams of Marino and Rambouillet breeds for improvement of wool yield and quality in local breeds is in progress.

1.1.1.15. A method for in-can-pasteurization of neera at 70°C for 30 minutes in a hot water bath followed by cooling to atmospheric temperature has

been developed which has made it possible to save large quantity of neera from spoilage and transport of neera, from interior producing places to selling centres.

1.1.1.16. Farm forestry and energy plantation are the new areas where the University has undertaken research work which will not only help the farmer to increase their fuel resources but it will also help the State by only way of providing large number of products and energy materials to help tide over energy crisis.

Financial assistance from the I.C.A.R.

1.1.1.17. For University development, the University got financial assistance of about Rs. 400 lakh for various educational and research programmes. University collaborated in 42 I. C. A. R. Co-ordinate Research Projects, *Ad-hoc* Projects and project of other agencies.

1.1.2. The strategy for development

1.1.2.1. Important considerations kept in view while formulating the Sixth Plan agriculture research and educational proposal would be to achieve fundamental objectives of providing potential employment, equitable distribution of benefits, development and enhancing rate of growth in agricultural sector at desired level, promoting self-reliance in agricultural and industrial production and balance development of all regions of Gujarat's economy. While analysing yield level of principal crops in the State it has to be recognised in case of a number of them the yields are well below then national level. The targets for the Sixth Plan for agricultural production indicate the magnitude of the task of increasing production and consequently carrying out research and education programmes is of an enormous magnitude. The identification of the gaps and needs in agricultural research and education would form the basis for investment proposals for supporting education and research at G.A.U.

1.1.3. Programmes for 1980-85

1.1.3.1. An out-lay of Rs. 1000/-lakhs is proposed for the Sixth Five Year Plan 1980-85 for the programmes of Agricultural Education and Research. A broad break-up of this outlay is given below.

Programme	(Rs. in lakhs)
1. Agricultural Education	554.00
2. Agricultural Research	346.00
3. State Share in I. C. A. R. Schemes.	100.00
TOTAL:-	1000.00

1.1.3.2. The Gujarat Agricultural University aims at promotion of agricultural productivity in general and improving the economic conditions of the rural community in particular through integration of teaching, research and extension. Keeping in view these broad objectives and State/ regional needs of development in agriculture and allied sectors, the University has chalked out the programmes for the Five Year Plan as under:-

Agricultural Education

College Education

1.1.3.3. Education in Agriculture, Dairy and Veterinary has been thoroughly revised through semester system and made more practical oriented as per recommendations of I. C. A. R. Review Committee and National Commission on agriculture. The revision of courses and curricular structure in view of the introduction of 10+2+4 system of education makes agricultural education more relevant to the practical needs of the society and linking of education with production. This necessitates increasing the practical content in the courses, introduction of electives and job-oriented courses, crop and animal production courses, and "Earn while you Learn"-programmes. This requires strengthening under graduate teaching by establishing and developing instructional farms, laboratories, equipments etc. Post-graduate teaching and research in agriculture, veterinary and dairy disciplines have to be strengthened to accommodate latest scientific developments and greater element of basic sciences in the curricula. This will necessitate the strengthening of the existing departments and establishment of the new departments of agricultural meteorology, post-harvest technology, farm forestry, basic sciences and other departments to support and associate inter-disciplinary research programmes.

1.1.3.4. Establishment of Faculty of Home-Economics and College of Home Science would help to carry out teaching and research in different aspects of family science with a view to improve health of rural masses through improved technology in food and nutrition, child development, home and farm management and gainful employment of rural women.

Students' welfare programmes

1.1.3.5. Students' welfare programmes are designed for all-round development of students personality and character through sports, games and students amenities like health centres, cafeteria, gymnasium, play-ground, students housing and dining facilities and schemes for physical education, cultural and recreational facilities and the schemes for students counselling, magazines, aid funds and placement services and establishment of book banks and production of new books. Special scholarships and fellowships are to be awarded to best students.

1.1.3.6. With a view to up-grade the quality of teaching and academic standards in the fields of teaching, in research and extension education, the University has to develop the programmes of human resources development for improvement of faculty competences through programmes of advance training of teachers, workshops, seminars, conferences, instructional and study tour, developing teaching aids and guest lectures.

1.1.3.7. Library as being an integral component of learning, campus libraries have to be strengthened by liberalising the grants for books, journals, buildings and other facilities.

Extension Education.

1.1.3.8. The University is responsible along with teaching and research for the extension education and training programmes. It is necessary to make useful research findings available to farmers quickly and to help them to solve their problems. Research results and findings in the form of agricultural technology and packages of practices should reach the farming community for their adoption fully. This is possible through education and training of the farmers and personal engaged in the extension and development departments. It is also necessary to strengthen the demonstration, operational research projects and publications. Important programmes proposed in extension education and trainings are (1) Up-grading of existing agricultural schools (2) Up-grading of school of baking at Anand and establishment of schools of baking at other campuses (3) Up-grading of farm mechanic-cum-artisan training, (4) establishment of farm advisory services at main research stations and campuses, (5) Schemes for mobile ambulatory clinic for veterinary and animal husbandry at Sardar-Krishinagar. (6) Strengthening of livestock inspectors, training, (7) establishment of home science schools (8) up-grading of Sardar Smruti Kendras and establishing extension wing at veterinary college (9) establishment of tribal development centres and operational research project in extension education (10) correspondence course etc.

Campus Development

1.1.3.9. The University is a multi-campus University and has four Campuses namely Anand, Junagadh, Navsari and Dantiwada with its principal Campus at Sardar Krishinagar. The main Campus is baptised as Sardar Krishinagar and is being erected *de-novo*. New Campus at Dantiwada has been created after its establishment. All the four Campuses, 54 research stations and 25 extension education institutions need substantial amounts for their development for supporting research teaching and extension activities. Infra-structural facilities such as staff quarters, approach roads, supply of water, electricity and drainage, farm buildings and structures, laboratories schools and community facilities auditorium, guest

houses, land shaping, service complex centres, canteen and gymkhana etc. are required to be developed.

Agricultural Research :

1.1.3.10. In light of the basic aims of national planning and the responsibility of research related to agricultural production and rural development in the State, it is planned to conduct research on important problems in agriculture and allied sciences with a view to (a) increase agricultural productivity, reduce losses from diseases and pests, salinity and drought conditions and (b) effect overall improvement in animal productivity through the evolution of better breeds of cattle and formulate appropriate nutritional, management and health cover practices for animal husbandry.

1.1.3.11. It is proposed to continue, expand and strengthen the University's research activities which include:

- (i) Crop improvements in food crops, oilseeds crops, cotton, tobacco, sugarcane, spices, condiments and medicinal crops, forage crops, horticultural and vegetable crops.
- (ii) Research in agronomy and soil sciences.
- (iii) Plant protection research.
- (iv) Farm forestry research and energy plantations.
- (v) Researches in social sciences and economics
- (vi) Research in agricultural engineering.
- (vii) Research in animal husbandry and veterinary sciences.
- (viii) Research in dairy sciences.

Research Gaps and Priorities :

1.1.3.12. The four campuses of the University, Dantiwada (North Gujarat), Anand (Middle Gujarat), Navsari (South Gujarat) and Junagadh (Saurashtra) serve the four broad agro-climatic regions of the State. Besides these Campuses, the University has 8 main stations viz, Waghai for hill millets, Surat for cotton, Godhra for maize, Nawagam for rice, Vijapur for wheat, Mundra for date-palm, Targhadia for dry farming and Jamnagar for millets and 41 sub-stations serving as testing centres. The agro-climatic zone-wise information on location of these research farms and major crops grown is given in Annexure-I. From the past performance, the crop improvement particularly cotton, wheat, rice, bajra, tobacco, groundnut and sorghum has shown that good work has been done in these crops helping to increase per hectare production. However, what has been done is only touching the fringes of vast multitudes of the problems facing

agricultural production. It is, therefore, essential to take steps required to tackle the important problems on immediate basis. The research gaps and research priorities are therefore identified as under:-

- (1) Dry farming.
- (2) Mixed Farming.
- (3) Salinity and drainage problems.
- (4) Improving efficiency of water use.
- (5) Research on food crops viz rainfed wheat, transplanted rice, groundnut, bajra, maize and pulses.
- (6) Plant protection problems, white grub etc.
- (7) Inter-cropping and pest/disease control.
- (8) Micronutrient and secondary nutrient deficiencies.
- (9) Use of saline ground waters.
- (10) Seed technology.
- (11) Social Sciences research.
- (12) Agricultural Engineering.
- (13) Agricultural Meteorology.
- (14) Improvement of tribal area economy

National Agricultural Research Projects :

1.1.3.13 The National Agricultural Research Project (N.A.R.P.) has been formulated by the Indian Council of Agricultural Research for strengthening the regional research capability of the State Agricultural Universities with the assistance from the International Bank for Reconstruction and Development (I.B.R.D.). The main objective of N. A. R.P. is to strengthen the regional research capability as an important means of finding solutions to the location. Specific problems in different agro-climatic zones by intensification of research in (1) food grains, pulses and oilseeds grown under rainfed conditions, (2) farming systems involving crop-livestock and crop-fish production systems, (3) soil and water conservation techniques (4) land use patterns for more efficient use of natural resources and ecological potential. The Gujrat Agricultural University has participated in the N.A.R.P. programmes. The approximate allocation earmarked for each of the State Agricultural University under N.A.R.P. is Rs. 5 crores from which I.C.A.R. has already sanctioned sub-projects at Arnej, Targhadi and expansion of Directorate of Research. The I.C.A.R. Research Review committee for G.A.U. has recommended

the strengthening of research stations in G.A.U. as under.

1. Under N.A.R.P. support and ICAR support

- (a) Four Regional Research Stations (Dantiwada, Anand, Junagadh and Navsari)
- (b) Seven special stations (Surat, Arnej, Godhra, Targhadia, Jamnagar, Vijapur and Nawagam.)
- (c) Four sub-stations (Bharuch, Deroi, Bhachau and Dhari).

2. Under State Plan support

- (a) one special station (Waghai) under tribal Plan
- (b) Four sub-stations (Paria, Vadodara, Mahuva and Dohad.).

1.1.3.14 Necessary outlays have also been proposed for State Plan programmes and State liability for infrastructural facilities

Veterinary Sciences, Animal Husbandry and Dairy

1.1.3.15. Gujrat is well known for its milk co-operatives, milch breeds like Surti and Mahesani buffaloes and dual breeds of Gir and Kankrej cows. Pure breeding and cross breeding work for the improvement of cow initiated in the Fifth Plan through

livestock research stations at Dantiwada, Navsari, Anand and Junagadh will be strengthened in respect of herd of 300 heads for progeny testing, breeding nutrition and animal health and new research for improvement of buffaloes and their management will be undertaken. Research work on poultry, goat, sheep and camel is also envisaged in the Sixth Plan.

1.1.3.16 Development of dairy industry through dairy research in technology of indigenous dairy products, recycling and utilization of dairy wastes and system improvement in the use of low level processing technology for rural needs will be initiated during the period 1980-85.

1.1.3.17 Academic programmes in the veterinary and Dairy sciences for under-graduate and postgraduate teaching and research will be continued and strengthened at Gujarat College of Veterinary Science and Animal Husbandry at Anand and Sheth M. C. College of Dairy Science at Anand during 1980-85. Considering the demands of veterinary graduates in teaching, research and extension, it has been decided to strengthen the veterinary science college at Anand by increasing the intake capacity from 40 to 60 seats by providing additional facilities of class rooms, laboratories, hostel, staff and equipments. The Dairy Science College is also to be strengthened by expansion of Departments of Dairy Chemistry, Dairy Technology, Dairy Engineering and Dairy Microbiology to strengthen post-graduate teaching and research to meet the needs of dairy industry in the State and country.

STATEMENT
AGRICULTURAL EDUCATION & RESEARCH
List of Schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85	
		Total	Capital Content
1	2	3	4
A. Agricultural Education			
1.	AER—1 Post graduate degree training in India & Abroad	20.00	..
2.	AER—2 Grant--in-aid to G.A.U. for Education.	418.00	..
3.	AER—3 Development of Veterinary College	71.00	..
4.	AER—4 Development of Dairy Science College	45.00	..
TOTAL : (A) Education		554.00	..
B. Agricultural Research			
5.	AER—5 Grant-in-aid to G.A.U. for Research	196.00	..
6.	AER—6 Establishment of Livestock Research Station	150.00	..
TOTAL (B) AGRIL. RESEARCH		346.00	..
C. Assistance from I.C.A.R.			
AER—7 State Share to I.C.A.R. Scheme			
	(i) Agricultural Research Scheme	82.00	..
	(i) Veterinary Research Scheme	18.00	..
TOTAL (C)		100.00	..
GRAND TOTAL (A+B+C)		1000.00	..

1.2 CROP HUSBANDRY

1.2.1.1. The total geographical area of the Gujarat State is 1,95, 984 sq. Kms. accounting for about 6% of the total geographical area of the Indian Union. Extreme variability in the distribution of total annual rainfall is the peculiarity of the State. Geographically the basic complex of the State varies from region to region. Soils in the southern regions are deep black (soils of basaltic origin), central and northern parts of the State have old aluviul and the Saurashtra region have medium black soils of basaltic origin. All along the coast the saline alluviul is found. The variations in rainfall and soil types can be largely attributed to geographical situation of the State. The State is located in the fringe of the area of South-West monsoon. The rainfall, therefore, is confined to 3 to 4 months only, starting from June to September with practically no precipitation in winter months. The annual normal-rainfall varies from 349.4 mm. in Lakhpat taluka of Kachchh district to 2409.8 mm. in Dharampur taluka of Valsad district. Co-efficient of variability of rainfall even in Surat district which is situated in the so-called assured rainfall zone is 34.22 % while that in Dwarka taluka situated in Jamnagar district is as high as 88.38 %. Nearly 41 talukas in 10 districts of Gujarat are prone to scarcity or semi-scarcity conditions. Some of the areas which are not prone to scarcity are often hit by floods. The scarcity and floods are two natural calamities which have retarded the economic growth of the State.

1.2.1.2. The land utilisation statistics show that in Gujarat, 54 % of the reported area is put under cultivated crops. The State accounts for 28.6% of the total cotton area and 22.2 % of the total groundnut area in the country.

1.2.1.3. According to 1976-census, 30.60 percent of the holdings were irrigated either partly or wholly. Wholly irrigated holdings were only 9.50% covering 35.36% of the total irrigated area. 21.10% of the holdings were partly irrigated which accounts for 64.64 % of the total irrigated area. Out of the total area irrigated, foodgrains account for 56% while the remaining 44 % area is under commercial crops. Out of the total irrigated area as much as 67% is irrigated by surface wells, 18.16 % by canals, 12.46% by tubewells, 1.58 % by tanks and 0.88 % by other sources.

1.2.1.4. The principal food crops of Gujarat are bajra, jowar, maize and wheat, while cotton, ground nut and tobacco are the main commercial crops. In South Gujarat, the deep black retentive soils are suitable for paddy, while in central northern parts, with less retentive soils and less rainfall, bajra, jowar and groundnut are the main crops. Since the soils and rainfall are generally poor in Saurashtra, natural tendency is to grow crops like groundnut, which mature with the available moisture from the rainfall. Cotton is the other important cash crop which is grown throughout the State. There has also been an expansion in the cultivation of tobacco in the middle Gujarat and spices like cumin and mustard in North Gujarat. Over the years there has also been a general shift towards cultivation of commercial crops like cotton and ground nut.

1.2.2. Review of Progress:

2.2.1. The production of foodgrains and commercial crops have increased rapidly over plan periods as shown in the following table:

Area in lakh hectares ;
Production in lakh tonnes
Yield in kgs/Hect.

Sr. No.	Plan Period	Food grains	Oil Seeds	Cotton	Tobacco	Sugarcane
1	2	3	4	5	6	7
1. First Five Year Plan 1951-52 to 1955-56	Area	55.86	11.93	13.72	0.60	0.10
	Prod.	18.75	4.40	8.83	0.41	0.57
	Y/H.	336	362	109	683	5182
2. Second Five Year Plan 1956-57 to 1960-61	Area	49.80	18.99	17.60	0.81	0.18
	Prod.	20.28	11.07	11.17	0.56	0.54
	Y/H.	407	586	108	691	5522
3. Third Five Year Plan 1961-62 to 1965-66	Area	47.96	23.44	17.57	0.86	0.29
	Prod.	25.79	13.58	15.23	0.83	1.66
	Y/H.	538	581	147	965	5594
4. Average of Three Annual Plans 1966-67 to 1968-69	Area	51.90	21.57	16.89	0.91	0.33
	Prod.	28.11	11.31	15.48	0.93	1.81
	Y/H.	542	524	156	1026	5476
5. Fourth Five Year Plan 1969-70 to 1973-74	Area	51.82	20.56	19.65	0.88	0.46
	Prod.	37.19	13.87	20.18	1.13	2.53
	Y/H.	714	675	174	1284	5500

1	2	3	4	5	6	7
6. Fifth Five Year Plan 1974-76 to 1977-78	Area	46.92	21.71	18.22	0.89	0.57
	Prod.	35.82	18.03	17.89	1.40	3.40
	Y/H.	763	831	165	1582	5937
7. 1978-79	Area	45.80	23.53	17.59	0.75	0.58
	Prod.	44.85	20.39	21.01	1.54	3.29
	Y/H.	979	866	203	2060	5677
8. 1979-80	Area	43.84	23.46	17.17	1.15	0.57
	Prod.	40.08	19.93	17.85	1.75	3.19
	Y/H.	914	850	177	1524	5610

Note.—1. Production of sugarcane is in terms of 'Gul'.

2. Production of cotton is in lakh bales each of 170 kgs. lint.

3. Total oilseeds include groundnut, sesamum, castor, rape and mustard.

1.2.2.2. Upto the end of Fourth Five Year Plan period, the increase in production of foodgrain (which was achieved alongwith a considerable shift in area towards other crops) is mainly due to considerable improvement in productivity levels, and not due to any extension of areas under these crops. As a matter of fact in the last 30 years there has been reduction in the food crops acreage to the extent of around 12 lakh hectares. The production of foodgrains had reached a record figure of 48.44 lakh tonnes in the year 1970-71.

1.2.2.3. The linear rate of growth of production of foodgrains for the period from 1949-50 to 1972-73 had been 7.1% though in the subsequent years; this rate of growth has declined due to recurrence of droughts, floods and heavy unseasonal rains. The linear and compound rates of growth have been 3.09 and 2.50 per cent respectively since formation of Gujarat State for all crops. Particularly, rapid growth has been achieved in case of sugarcane, tobacco and foodgrains. Lower rate of growth in general for all crops during Fifth Plan period can be attributed to recurrent droughts floods and unseasonal heavy rains during that period. The fluctuations were more pronounced in case of foodgrains productions. The targeted level of production of foodgrains and cotton could not be reached. In case of sugarcane also production was below the targeted level during the first three years but had exceeded in the year 1977-78. Oilseeds production during 1974-75 was lowest. It, however, hit an all time record during 1975-76 and also exceeded the target in 1976-77. But again during 1977-78, 1978-79 and 1979-80 it has remained stagnant.

1.2.2.4. This was the direct result of the adverse climatic conditions in 1974-75 which was a year of unprecedented scarcity. During 1975-76 Bajra was badly affected by downey mildew resulting in a considerable fall in the yields of Bajra which normally accounts for 50% of the food crops grown in the kharif season and 30% of the crops in the whole year. During 1976-77, monsoon was early and hence area under groundnut increased reducing the area under Bajri. Area under maize was increased but because

of untimely heavy rains, the crop was affected resulting in poor yield. Cotton suffered because of heavy rain in cotton growing area. In the case of oilseeds, the target was surpassed. However, the production remained lower compared to that in the year 1975-76, despite increase in area because of lower yields due to the delayed sowing of groundnut in the Western Saurashtra region, excessive rains affected the pod formation and rat meances in the groundnut growing area of Saurashtra. During 1977-78, the food crops were badly affected due to untimely and incessant heavy rains. Oilseeds production also remained low for similar reasons. As regards cotton the climatic conditions in 1977-78 remained very unfavourable due to continuance of heavy rains. In 1978-79 the food growing crops were affected due to untimely and incessant heavy rains in some parts of the State. The cotton crop was affected due to low rainfall in cotton growing areas. In case of oilseeds, the major groundnut growing area of Saurashtra region suffered for want of last spell of rains in 1979-80, the food grains crops were affected on account of heavy rains and floods in the districts of Saurashtra and Kheda districts in Middle Gujarat. The standing crops, soils, and minor irrigation equipments were worst affected. The districts of Panchmahals, Surat, Valsad and Dangs were affected due to inadequate rains.

High Yielding Varieties Programmes

1.2.2.5. In increasing the foodgrains production in the State high yielding varieties programme has been continued. The progress made under this programme is given below :—

(lakh hectare-)

Crop	Level of achievement at the end of		
	1973-74	1977-78	1979-80
1	2	3	4
Paddy	0.88	2.16	2.56
Bajra	11.03	10.46	10.46
Jowar	0.11	0.32	0.38
Maize	0.16	0.58	0.76
Wheat	3.15	5.82	4.60

Fertilizers and Manures :

1.2.2.6. Fertilizers hold great potentialities for stepping up agricultural production. Nitrogenous fertilizers have particular importance as Nitrogen is considered to be the important limiting factor of the fertility of our soil. The cultivators are making increased use of fertilizers to increase the productivity. In view of large high yielding varieties programme, intensive agricultural programme, development of commercial crops and the increase in irrigation potential etc, the level of consumption of different fertilizers had been as under :—

(Consumption in lakh tonnes)

Fertilizers (in terms of nutrients)	Level of achievement at the end of		
	1973-74	1977-78	1979-80
1	2	3	4
N	1.39	1.70	2.24
P	0.60	0.79	1.15
K	0.19	0.28	0.39
Total ..	2.18	2.77	3.78

1.2.2.7. In addition to chemical fertilizers, organic manures like compost and green manures are necessary for improving soil structure. The area under green manuring which was 1.29 lakh hectares in 1973-74 has reached the level of 1.98 lakh hectares in 1979-80.

Plant Protection Measures

1.2.2.8. The State had 9 soil testing laboratories and 2 mobile soil testing vans having total capacity of analysing 1.60 lakh soil samples at the end of the Fourth Plan. This had increased to 14 static and 8 mobile soil testing laboratories by the end of 1979-80. The area covered under plant protection measures was as under :—

(Area covered in lakh hect.)

Crop	Level of achievement at the end of		
	1973-74	1977-78	1979-80
1	2	3	4
Food crops	1.86	15.21	10.97
Commercial Crops	6.37	21.55	49.89
Total ..	8.23	36.76	60.86

1.2.2.9. The aerial spraying was also carried out and farmers were subsidised in operational charges and cost of insecticides. Around 1.23 lakh hectares were covered during 1979-80, and the consumption of pesticides was 6500 tonnes of technical grade materials.

Farmers' Training Programme :

1.2.2.10. This programme mainly include need based institutional training for farmers, farm women and youths in modernised agricultural technique and also one day training camps on cultivators' field i.e. outside the training institutions. At the end of the year 1979-80, 13 farmers' training centres were functioning in the State of which five were in tribal areas.

Dry Farming :

1.2.2.11. A scheme for dry farming in banded area is being implemented since 1965-66 in five districts viz. Kachhh, Jamnagar, Banaskantha, Sabarkantha and Panchmahals as non-Plan scheme and merged in Training and visit system. Considering the importance of dry farming technology in major parts of the State, the scheme of dry farming technology is now functioning as integral part of watershed in all districts. The main features of this scheme are demonstration of package of practices under dry farming technology and subsidised distribution of improved implements and plant protection equipments.

Horticulture Development

1.2.2.12 Under the horticultural programme development of major crops like Banana, Mango and Ber is emphasised, besides imparting training and rendering services to farmers and urban people by way of fruit and vegetable nurseries, canning and kitchen gardening and certification of grafts. A scheme to develop cultivation of date palm in Kachhh and coconut development scheme in the coastal area districts have responded well in the State. Ber cultivation and Nilgiri Plantation in Watershed area will be specially attended to in the Sixth Plan.

1.2.3. Objective and Strategy :

1.2.3.1. During the Sixth Plan the major thrust will be on increasing production by (1) improving the productivity of the crops by way of adoption of modern technology and thereby to increase agricultural production;

(2) raising the economic status of the farmers specially those of scheduled castes/tribes and the weaker sections of the farming community;

(3) educating the farmers by way of training through the Training and Visit system, and farmers training centres.

The programmes to raise level of production for foodgrains as well as commercial crops including horticultural development will mainly be based on the following strategy :—

(1) To increase the area under hybrid/HYV programme.

(2) Systematic availability of main inputs viz. seeds, fertilisers and insecticides largely through the village cooperatives.

(3) Increase production of groundnut using pre-seasonal irrigation for sowing, inter-furrow method of sowing for moisture conservation, closer spacing, supplemental irrigation, summer groundnut programme and additional area to be brought by way of introduction of groundnut crop in non traditional areas. Increase production of sesamum by introduction of early maturing Guj-1 variety and by taking this crop as an intercrop with main crop like cotton.

(4) Increase production of pluse crops by taking them as mixed crops with other crops like castor and cotton, introduction of short duration variety of mung in summer after harvest of irrigated wheat.

(5) Training of farmers will be organised through Training and Visit system and farmers training centres.

(6) Integrated pest management programmes for cotton, groundnut, pulses and sugarcane will be implemented to protect the crops from pest damages and thereby enhance the production of respective crops.

Supporting programmes to increase agricultural production will be:—

(1) Adoption of soil and water conservation measures on watershed approach.

(2) Area under irrigation will be increased with implementation of latest management technology in water use management.

(3) By effective implementation of special programmes like DPAP, and IRD, the productivity will be increased in the holdings of farmers belonging to weaker sections.

(4) Providing credit support by way of input loan and assuring the farmers remunerative prices of their produce by providing organisational and financial support when prices of agricultural commodities fall below the support price.

1.2.4. Programme for Sixth Five Year Plan 1980-85

1.2.4.1. An outlay of Rs. 3100 lakhs has been proposed for the Sixth Five Year Plan, the details

of which are briefly given below:—

(Rs. in lakhs).

Sr. No.	Minor Head of Development	Sixth Plan 1980-85 Outlay.
1	2	3
Crop Husbandry.		
1.	Direction and Administration	999.49
2.	Multiplication and Distribution of Seeds.	171.95
3.	Manures and Fertilizers.	450.94
4.	Plant Protection.	237.45
5.	Commercial Crops	354.55
6.	Extension and Farmers Training	304.00
7.	Agricultural Engineering.	191.28
8.	Agriculture Economics and Statistics.	95.43
9.	Horticulture.	208.91
10.	Other Expenditure.	20.00
11.	Contingency Plan.	45.00
12.	Nucleus Budget for TASP.	21.00
	Total	3100.00

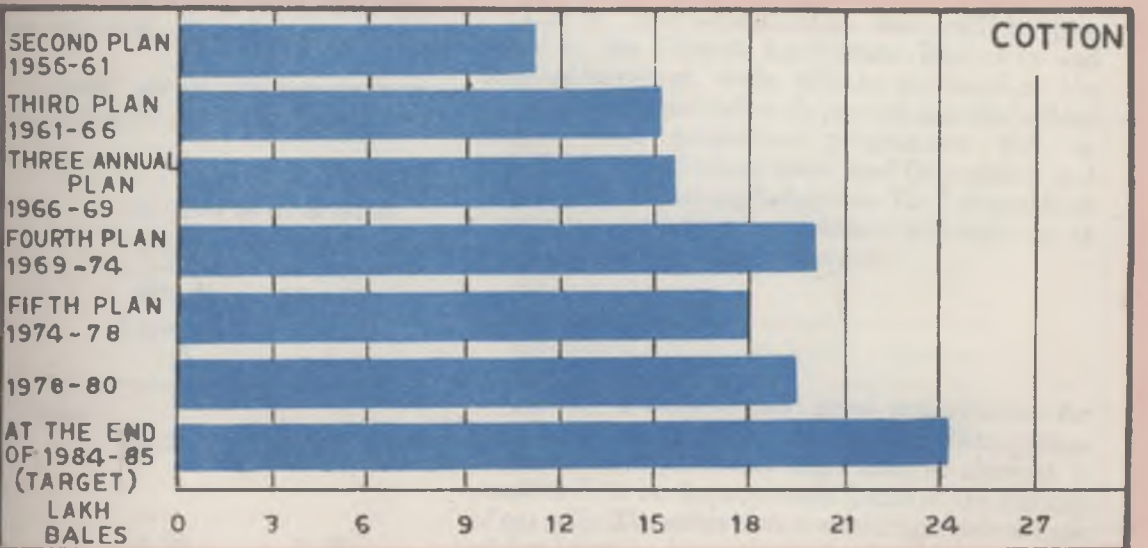
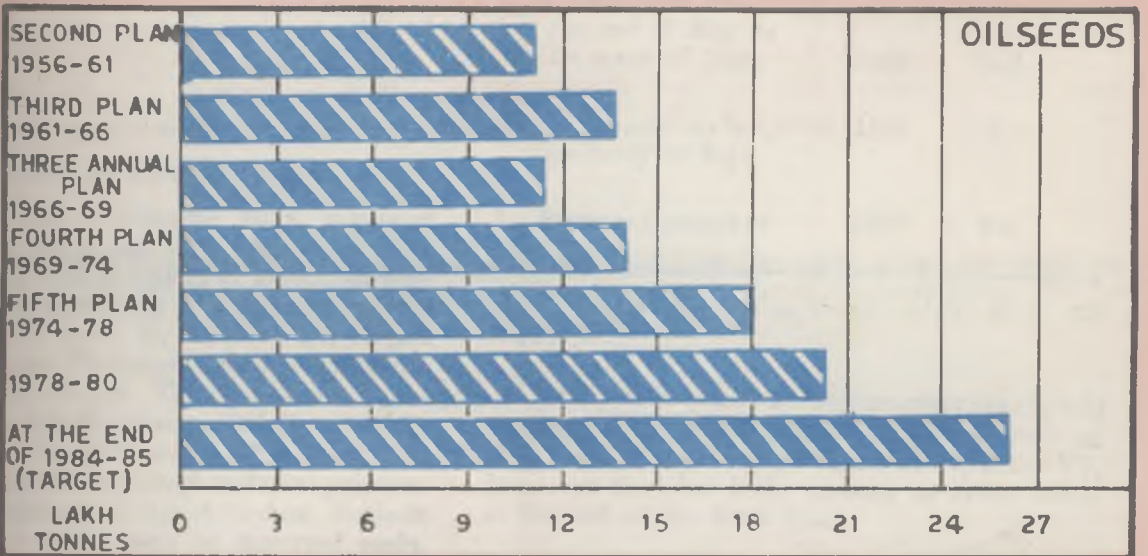
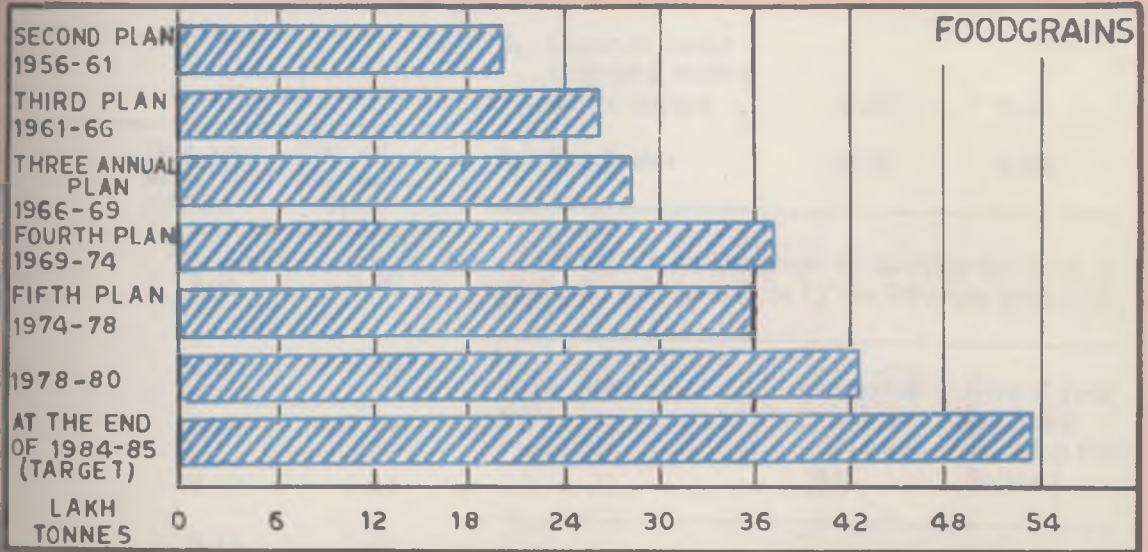
Production Targets.

1.2.4.2. The targetted production for foodgrains and commercial crops for the Sixth Five Year Plan are as under:—

Sr. No.	Crop	Unit	Base year Level	Target for 1984-85
1	2	3	4	5
			Avg. of triennium ending 79-80	
1	Foodgrains	Lakh tonnes	41.22	53.50
2	Oilseed	"	19.82	26.00
3	Cotton	Lakh bales (170kgs/each)	19.43	24.30
4	Sugarcane (in term of gul)	Lakh tonnes	3.32	4.50
5	Tobacco	-do-	1.51	2.00

AGRICULTURAL PRODUCTION

ANNUAL AVERAGE



High Yielding Varieties Programme.

1.2.4.3. This programme will be expanded by providing sufficient quantity of certified improved seeds through the State Seed Corporation and Marketing Federation in time and at reasonable rates. The plan of coverage is as under:—

(in lakh hectares)

Sr. No.	Crop	Base year level 1979-80	Planned coverage 1984-85
1	HYV Wheat (Irrigated)	4.60	5.60
2	HYV paddy	2.56	3.80
3	Hy. Bajra	10.46	13.00
4	Hy. Jowar	0.38	1.10
5	Hy. Maize	0.76	1.00
6	Hy. Cotton	3.26	4.00
7	Hy. Castor	0.60	0.80

Intensive programme for Groundnut Production :-

1.2.4.4. In order to overcome short supply of edible oils and to save foreign exchange, Government of India have approved a project of groundnut production on an extensive scale in groundnut growing pockets in Gujarat State. Six districts, viz; Rajkot, Junagadh, Jamnagar, Bhavnagar, Amreli and Kachchh are included in the project. The programme is proposed to run from 1980-81 summer, 1981-82 to 1983-84 at a total cost of Rs. 35.00 crores. It is planned to encourage the cultivators through technical guidance and financial assistance to adopt modern methods of groundnut cultivation such as improved seeds, optimum spacing, pest control management, sprinkler and supplementary irrigation.

1.2.4.5. The proposed programme for coverage for different items during the plan period is as under:-

Sr. No.	Item	Area to be covered in lakh hectares.	
		1979-80 (base year)	1984-85
1	2	3	4
	Pre-monsoon sowing of groundnut.	0.30	2.00
	Supplemental irrigation to groundnut.	0.20	3.00

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1	2	3	4
3.	Summar groundnut	0.68	2.00
4.	Coverage under improved variety of Seesamum	0.10	1.25
5.	Hy. Castor	0.55	0.80

1.2.4.6. It is proposed to increase the level of production of groundnut by the following methods:-

Sr. No.	Item	Expected yield per hectare in Kgs.	Normal yield in rainfed area (Kgs. per hectare)
1.	Pre-monsoon sowing by the end of May or 1st week of June.	1300	900
2.	Supplementary Irrigation probably in Sept.	1300	900
3.	Summer Groundnut	1800	900

Supply of Seeds :

1.2.4.7. It is planned to replace every year hybrid seeds in 100% area and self-pollinated crops on 20% area. Total requirement of Hybrid/HYV/Improved Seed has been assessed at 44765 tonnes at the end of the Sixth Plan.

1.2.4.8. Breeder/foundation seeds will be produced by the Gujarat Agricultural University and certified/improved seeds will be produced on the farms of the registered seeds growers and State Seed Farms. Seed production programmes will be organised by the Gujarat State Seed Corporation and Gujarat State Marketing Federation. The National Seed Corporation and private producers will continue to function to supplement seed supply.

Fertilizers :

1.2.4.9. Fertilizers hold great potentialities for stepping up of agricultural production. Nitrogenous fertilizers have particular importance as nitrogen is considered to be the important factor of the fertility of our soils. The cultivators are making increased use of fertilizers to increase the productivity. In view

of large high yielding programme, training and visit system, farmers training centres, development of commercial crops, and likely increase in irrigation potential the consumption of fertilizer is planned as under:-

Nutrient	Unit	Achivement 1979-80	Target 1984-85
Nitrogen(N)	Lakh tonnes	2.24	4.00
Phosphorous (P)	„	1.15	2.00
Potash (K)	„	0.39	0.70
Total:-		3.78	6.70

Plant Protection:-

1.2.4.10. Plant protection activity in the State is now implemented on need base. Scouting system has been introduced since last two years where scouts actually take counts of the pest population and guide the cultivators in spraying on threshold value under T & V system. Subject Matter Specialists (Plant protection) have been provided in each district. It is planned to expand this programme during the Sixth Plan period as below:-

Year	Area to be covered under plant protection measures in (lakh hectares)	Remarks
1979-80 (base-year)	60.86	These targets are purely provisional—(subject to the incidence of pests from year to year)
1984-85	87.04	

1.2.4.11. Technical grade material for manufacture of insecticides which will be required by the State has been estimated as under:-

Year	Technical material in M. T.
1979-80 (base year)	7000
1984-85	12000

Increase in Pulse production.

1.2.4.12. In case of moong and tur improved varieties like Guj-Moong-1, Moong-2 and Tur 15-15 yield 25% more in comparison to local varieties. To increase pulse production efforts will be for replacement of local varieties by improved ones and growing of pulse crops as mixed crops with the cotton or castor. Plan of action will be as under:-

(Area in lakh hectares)			
Sr. No.	Item	1979-80 (base year)	1984-85 (Target)
1.	Coverage by improved Seed of Moong.	0.10	1.00
2.	Coverage of improved Seed of Tur.	0.08	2.00
3.	Mix cropping.	0.80	4.00
4.	Summer Moong.	0.20	0.75

Training of Farmers:-

1.2.4.13. The farmers are trained through reorganisation and strengthening of extension service (Training & Visit System) and farmers training centres established in the districts.

Training & Visit System:-

The programme aims at improving the efficiency of the Services by (i) Intensifying contacts between extension workers and farmers (ii) Upgrading the standards of extension workers and (iii) improving the quality of technical package through better adoptive research.

1.2.4.14. The major thrust would be on implementation of intergrated approach to increase crop production of major crops like cotton, groundnut, bajra, jowar, paddy and wheat for which extension services would regularly and systematically be provided to farmers with up-to-date advice and demonstration of farming practices best suited to their specific conditions which would have immediate impact on production and income.

1.2.4.15. The Village Extension worker attends the training held once a fortnight by subject matter specialists where he is provided with latest technology to be fed to the farmers during the next fortnight.

1.2.4.16. The extension technique is based on a systematic programme of training of full time agricultural workers combined with frequent visits by VEWs to farmers fields. The system enables a VEW to visit each group of farmers once a fortnight after he has received an intensive training in agricultural practices and recommendations which relate directly to farm operations during that fortnight. The fixed schedule of visit enable close supervision and follow up to achieve a visible impact on production, VEW concentrates on selected contact farmers. He also concentrates on important crops, focusing mainly on those practices which bring the best economic results and on making optimum use of available resource. Two pre-seasonal training services are organised every year for 2-3 days each wherein subject matter specialists and specialists of Gujarat Agricultural University participate. The subject matter specialists are trained for 2-3 days in a month at university campuses to keep them up-to-date in their know how of the subject. They also receive two weeks' training every year to refresh their knowledge at university.

Farmers' Training Centres

1.2.4.17. At present except Dangs and Gandhinagar all districts in the State are equipped with farmers' training centres. The farmers and farm-women are trained in respect of latest developed technique in agriculture through institutional classes and one day camp organised at village level. Out of 17 Farmers' Training Centres, 5 are in tribal areas. Every year 3500 farmers are to be trained in each such centre.

Integrated pest management programmes for Cotton, Groundnut, pulses and Sugarcane to enhance production of respective crops.

1.2.4.18. Since 1978-79 this programme is organised in the State more systematically and need based spraying is carried out as an integrated part of the Integrated Cotton Development scheme. Targets for aerial and ground spraying are fixed in advance for cotton, groundnut, pulse and sugarcane. To provide insecticide at a reasonable price and of quality, arrangements have been made through the District Sales and Purchase Unions. The operational charges and cost of insecticides are subsidised for aerial as well as ground sprays. Tractor mounted spraying is a newly introduced technique in the State and sprayers purchased under the scheme are subsidised at the rate of 50% for the public sector institutions and 33% for individual beneficiaries. The coverage is proposed to be as under :—

Sr. No.	Crop	Year	Net area to be covered in lakh ha.		
			Aerial	Ground	Total
1.	Cotton	1979-80 (Base year)	0.11	1.50	1.61
		1984-85	0.50	2.75	3.25
2.	Groundnut	1979-80 (base year)	0.33	1.48	1.81
		1984-85	2.00	9.00	11.00
3.	Pulses	1979-80 (base year)	0.07	..	0.07
		1984-85	0.15	0.40	0.55
4.	Sugarcane	1979-80 (base year)	0.22	..	0.22
		1984-85	0.35	..	0.35

Supporting Programmes :

Soil and Water conservation measures on watershed approach.

1.2.4.19. Agricultural production mainly depends on the development of soil and water resources. Prior to 1976-77, soil and water conservation measures were carried out in scattered way with the main objective of providing labour intensive works in scarcity affected areas. Now under the watershed approach, besides measures for soil and water conservation like contour bunding, nalla plugging, terracing, land reclamation, land levelling, other development activities such as improvement of pastures including farm forestry, Construction of farm ponds are also taken up in watershed unit. Dry farming is also now implemented in a watershed with the integration of extension wing of the department by adoption of 10% of the farmers from this area. Total 446 watersheds have been identified with an area of 13.87 lakh hectares and work has been started in 350 watersheds. It is proposed to cover an area of 22.30 lakh hectares by the end of 1984-85.

Increase in area under irrigation

1.2.4.20. Water is a vital input in agricultural production. During the past plan periods large investments are made to provide more irrigation

facilities by constructing major and medium irrigation projects. The present need is, therefore to maximise utilisation of the irrigation potentialities. Command Area Development organisation functions to improve the present status of irrigation by way of constructing water channels, land levelling and providing guidance by extension machinery within the command area. Irrigation Agronomists of Agricultural University and of the department are stationed at Navsari. These officers guide the farmers regarding judicious use of irrigation water. It is expected that around 4 lakh hec areas of additional area will be brought under irrigation during the Sixth plan of which about 60% will be utilised for foodgrain crops.

1.2.5. Investigation and Survey work for Contingency Plan

1.2.5.1. The State is frequently visited by natural calamities like drought, floods. It is necessary to dovetail relief works with the plan projects in order to create community assets through such works. A scheme for investigation and survey work for preparing a self of paojeets has been introduced since 1976-77. In that year the scheme was initiated in the districts of Kachchh, Banaskantha and Jamnagar. In the year 1978-79 the scheme was extended to the ditriacts of Panchmahals, Surendranagar, Amreli and Bhavnagar. The scheme has been continued in Sixth Plan for which an outlay of Rs. 45 lakhs is provided.

STATEMENT

CROP HUSBANDRY

List of schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs).

Sr. No.	No. & Name of the Scheme.	Sixth Five Year Plan 1980-85—Outlay	
		Total	Capital
1	2	3	4
Direction & Administration :			
1.	AGR—1 Reorganisation and strengthening of extension services.	.. 714.99	150.00
2.	AGR—2 Establishment of World Bank Cell.	.. 25.00	..
3.	AGR—3 Reorganisation & strengthening for TASP.	.. 185.00	52.00
4.	AGR—4 Creation of staff for tribal area sub-plan work.	.. 52.00	..
5.	AGR—5 Planning machinery for agriculture development.	.. 22.50	..
Total:—		.. 999.49	202.00
Multiplication & Distribution of Seeds.			
6.	AGR—6 Strengthening of seed testing laboratories.	.. 18.52	0.25
7.	AGR—7 Strengthening of seed certification agency.	.. 1.00	..
8.	AGR—8 Production of hybrid cotton seed.	.. 20.86	..
9.	AGR—9 Free distribution of seeds in Dangs district (GIA to Panchayats.)	.. 2.31	..
10.	AGR—10 Extension of seed multiplication farm providing irrigation facilities.	.. 4.00	..
11.	AGR—11 Distribution of seed, fertilizers and pesticides at subsidised rate in tribal area...	.. 54.49	..
12.	AGR—12 Subsidised supply of hybrid/high yielding varieties seed to tribal cultivators.	.. 25.37	..
13.	AGR—13 Establishment of seed cell.	.. 5.00	..
14.	AGR—14 Distribution of seeds to Harijan cultivators.	.. 15.40	..
15.	AGR—15 Distribution of seeds, fertilizers, pesticides at subsidised rate to SC cultivators	.. 15.00	..
16.	AGR—16 Foundation seed corporation.	.. 10.00	..
Total:—		.. 171.95	0.25
Manure & Fertilizers :			
17.	AGR—17 Multicrop demonstration scheme.	.. 20.00	..
18.	AGR—18 Subsidised supply of fertilizers to tribal cultivators for TASP.	.. 174.86	..
19.	AGR—19 Subsidised supply of chemical fertilizers to SC/ ST cultivators	.. 39.00	..
20.	AGR—20 Development of quality control of inputs fertilizer quality control laboratory.	.. 26.42	..
21.	AGR—21 Gobar gas plants.	.. 7.50	..
22.	AGR—22 -do- for TASP.	.. 40.00	..
23.	AGR—23 Strengthening of soil testing laboratories and soil testing van in TASP.	.. 66.13	..
24.	AGR—25 Strengthening of soil testing laboratories (normal)	.. 12.40	..
25.	AGR—25 Strengthening of soil testing laboratories, building works in TASP, office building and staff quarters.	.. 59.31	59.31
26.	AGR—26 Construction of fourth floor of Krijahi Bhavan.	.. 5.32	5.32
Total:—		.. 450.94	64.63

1	2	3	4
Plant Protection:			
27.	AGR-27 Training of extension staff in plant protection.	7.05	..
28.	AGR-23 Establishment of Central Agriculture Input Testing Laboratory at Gandhinagar. . .	22.75	..
29.	AGR-29 Assistance to farmers using pesticides for aerial spraying.	48.82	..
30.	AGR-30 To help farmers in eradication of pest & disease on crop in endemic areas by aero-chemical operation.	40.00	..
31.	AGR-31 Control of prodenia pest.	5.00	..
32.	AGR-32 Subsidy on purchase of tractor mounted sprayers.	15.04	..
33.	AGR-33 Subsidy on ground spraying of insecticides.	22.00	..
34.	AGR-34 Distribution of pesticides and plant protection appliances under subsidy scheme in tribal area.	22.90	..
35.	AGR-35 Control of white grubs.	18.00	..
36.	AGR-36 Additional staff for plant protection.	6.85	..
37.	AGR-37 Establishment of plant quarantine station.	8.83	3.27
38.	AGR-38 Demonstration of plant protection measures on cultivators fields.	3.01	..
39.	AGR-39 Encouraging co-operative societies for custom spraying.	5.20	..
40.	AGR-40 Subsidy on insecticides and plant protection appliances to S C cultivators.	12.00	..
Total:—		237.45	3.27

Commercial Crops:

41.	AGR-41 Intensive cotton production programme irrigated cotton.	15.50	..
42.	AGR-42 Intensive cotton production programme in tribal area	26.09	..
43.	AGR-43 Scouting scheme for intensive plant protection measures on cotton in selected areas.	38.11	..
44.	AGR-44 Intensive oilseed development including summer programme in tribal areas.	71.75	..
45.	AGR-45 Intensive oilseed development programme (Groundnut)	73.00	..
46.	AGR-46 Intensive production of groundnut summer programme.	15.00	..
47.	AGR-47 Planning & monitoring for oilseeds processing	5.00	..
48.	AGR-48 Development of oastor in Kachchh district.	5.90	..
49.	AGR-49 Sugarcane development.	12.53	..
50.	AGR-50 Intensive cotton district programme in Bharuch, Vadodara, Surendranagar and Sabarkantha districts.	91.76	..
Total:—		354.55	..

Extension & Farmer's Training :

51.	AGR-51 Publicity through state transport.	3.00	..
52.	AGR-52 Provision of audio-visual vans to districts.	4.70	..
53.	AGR-53 Provision of audio visual vans to districts. for TASP.	32.30	12.00
54.	AGR-54 Farmer's training & education in tribal area equipping with aid-cum-exhibition units for TASP.	5.70	5.70

1	2	3	4
55.	AGR-55 Agriculture education tour by tribal cultivators.	.. 2.31	..
56.	AGR-56 Establishment of farmers training centres, construction of institute building & staff quarters.	.. 90.76	20.00
57.	AGR-57 Establishment of farmer's training centres under TASP.	.. 102.25	55.51
58.	AGR-58 Organisation of crop competition.	.. 0.72	..
59.	AGR-59 Organisation of crop competition under TASP	.. 1.35	..
60.	AGR-60 Increased production of pulses.	.. 24.31	..
61.	AGR-61 Development of pulses.	.. 26.30	..
62.	AGR-62 Strengthening of adoptive research programme.	.. 10.30	..
Total:—		.. 304.00	93.21
Agricultural Engineering.			
63.	AGR-63 Improved agricultural implements at subsidised rate to Harijan and backward class farmers.	.. 2.10	..
64.	AGR-64 Improved agricultural implements at subsidised rates to Harijan & backward class farmers for TASP.	.. 6.15	..
65.	AGR-65 Supply of bullocks/male buffaloes to SC cultivators at subsidised rate	.. 0.25	..
66.	AGR-66 Supply of bullock carts to SC cultivators at subsidised rate	.. 0.25	..
67.	AGR-67 Supply of bullocks at subsidised rate to tribal cultivators.	.. 132.98	..
68.	AGR-68 Supply of bullock carts at subsidised rate to tribal cultivators.	.. 44.50	..
69.	AGR-69 Standardisation of agriculture machinery and implements.	.. 5.05	..
Total:—		.. 191.28	..
Agriculture Economics & Statistics :			
70.	AGR-70 Investigation in artificial rain making (Tribal area).	.. 39.28	..
71.	AGR-71 Strengthening of mechanical tabulation unit. (EDC cell)	.. 6.00	..
72.	AGR-72 Installation of rain gauges and collection of rainfall data.	.. 2.27	..
73.	AGR-73 Study and investigation in agriculture activities	.. 7.60	..
74.	AGR-74 Pilot sample survey for determining the cost of production of important fruits and spice and studying their marketed practices.	.. 4.87	..
75.	AGR-75 Co-ordination programme at pre-harvest forecasting yield of crop of groundnut.	.. 4.57	..
76.	AGR-76 Timely reporting of estimates of area and production of principal crops.	.. 15.71	..
77.	AGR-77 Improvement of irrigation statistics.	.. 5.00	..
78.	AGR-78 Improvement of crop statistics.	.. 10.13	..
Total:—		.. 95.43	..
Horticulture:			
79.	AGR-79 Supervision of development activities pertaining to vegetables, fruits grafts, other Plants & floriculture.	.. 8.97	..
80.	AGR-80 Subsidised supply of fruit grafts & plants.	.. 15.00	..
81.	AGR-81 Subsidised supply of fruit grafts and plants for TASP.	.. 24.86	..

1	2		3	4
82.	AGR-82	Development of fruit nurseries and supply of grafts and plants etc.	.. 23.14	..
83.	AGR-83	Development of fruit production for export of banana.	.. 9.82	..
94.	AGR-84	Package programme on mango	.. 19.67	..
85.	AGR-85	Development of fruit nurseries.	.. 4.00	..
86.	AGR-86	Date palm production in kachchh district.	.. 11.51	..
87.	AGR-87	Ber cultivation	.. 13.25	..
88.	AGR-88	Establishment of community canning centres and kitchen gardening.	.. 24.49	..
89.	AGR-89	Promotion of vegetable cultivation in tribal areas.	.. 29.64	..
90.	AGR-90	Crop development scheme for potato (Dangs)	.. 24.56	..
		Total :—	.. 208.91	..
Other Expenditure:				
91.	AGR-91	Agro-Industries Corporation.	.. 20.00	..
		Grand Total:— (AFCD)	.. 3055.00	363.36
Contingency Plan:				
92.	AGR-92	Investigation and survey for preparation of a shelf of project.	45.00	..
		Nucleus Budget (AFCD)	.. 21.00	..
		Grand Total (Crop Husbandry)	.. 3100.00	363.36

1.3 LAND REFORMS

1.3.1. Gujarat has been consistently following the policy of elimination of exploitation and achieving social justice in agrarian society. The State has been in the forefront in taking a number of progressive measures such as Tenancy Act, Tenure Abolition Laws which have been effectively implemented. The first Land Ceiling Act was enacted as early as 1960 and its implementation has been completed.

1.3.2 Review of Progress.

1.3.2.1 In the first phase of land reforms in the Gujarat State, legislation were enacted for abolition of intermediaries. In addition to Tenancy Act, thirty different tenure abolition laws were enacted for the purpose. The peasants were placed in direct relationship with the State and enabled to become owners of the land either on payment of occupancy price or without payment of occupancy price. The last tenure of Devasthan Inam was abolished from 15th November, 1969. This tenure was already abolished in Saurashtra and Kachchh areas of the State under the Barkhali Abolition Act, 1951 and the Bombay Inam (Kachchh) Area Abolition Act, 1958. All the areas of the State are thus covered by the Raiyatwari Tenure by now. The implementation of the said Acts resulted in the removal of over 5 lakh intermediaries and conferment of occupancy rights on about 9.79 lakh persons over an area of more than 46.56 lakh hectares of land.

1.3.2.2 The Tenancy Act regulating the relationship between the tenant and landlord giving security of tenure and other related protections to the tenant was amended from time to time to make it more and more in favour of tenants. The principles of Land to the Tiller 'and' purchase or quit' were made applicable as back as in 1957. To plug the loopholes and to do away with concealed tenancies, the Tenancy Act, 1973, has been amended. The provision regarding resumption for personal cultivation in favour of landlords has been removed.

1.3.2.3 Occupancy rights are conferred in respect of an area of 46.56 lakh hectares of land. As pointed out by the National Commission on Agriculture, Gujarat is one of the six States which has enacted such a legislation. In Saurashtra area prohibition of Leases Act is in force by which lease of agricultural land have been totally prohibited.

1.3.2.4 In the second phase, the Gujarat Agricultural Land Ceiling Act, was enacted in 1960 with a view to imposing ceiling on land holdings for distribution of the available surplus land among the eligible weaker sections. This Act was brought in force from 1st September, 1961. The family was adopted as unit for ceiling right from 1961. Having regard

to the types of land, the mode of irrigation, productivity of land, the minimum income required to accrue to a family etc. the villages in the State were classified into different categories and ceiling limits were fixed for those categories. This ceiling legislation has been fully implemented. About 18012 hectares of surplus land has been taken over under this pre-revised Act. Out of this, 17768 hectares of surplus land has been distributed to 14729 beneficiaries of which 10,000 hectares of land have been distributed to the scheduled caste and scheduled tribe beneficiaries.

1.3.2.5 Over and above this surplus land, 5.39 lakh hectares of Government waste land out of 5.86 lakh hectares of Government waste land have been distributed to 2.39 lakh persons, majority of whom belonging to the scheduled castes, scheduled tribes and other backward classes etc.

1.3.2.6 A bill to amend the Ceiling Act which was presented in the State legislative assembly in 1972 was passed in 1974 but could not be brought into force on account of litigation. The Revised Ceiling Act was brought into force from 1st April, 1976.

1.3.2.7 In view of the recommendation of the State Level Committee, the Government had also issued the instructions that in the case of land already declared surplus, possession should not be taken over and in the case of lands where possession has been taken over, they should not be disposed off on permanent basis. This ban on disposal of land already declared surplus has now been lifted with effect from 5th March 1980. As a consequence possession of 7478 hectares of land has been taken upto 30th November, 1980, and in remaining cases is being taken over. Out of the land taken, possession of 1447 hectares is disposed off on a permanent basis while 1686 hectares is given on Easali basis, as the land declared surplus in Surat, Eharuch, Vadodara, Panchmahals and Surendranagar districts is to be kept reserved for affectees of the Narmada Reservoir Project. The ban on cases for declaration of surplus land having been lifted other 8000 hectares of land is likely to be declared surplus and distributed to eligible allottees primarily belonging to scheduled castes and scheduled tribes.

1.3.2.8 Most of the land in these areas will be poor in quality and will require development. As the allottees will be mainly from the weaker sections of the community, assistance will have to be provided for inputs, like seeds, fertilisers, insecticides etc. A scheme envisaging an assistance of Rs. 1000/- per hectare consisting of Rs. 500/- for land development and Rs. 500/- for inputs is already sanctioned.

1.3.2.9 The Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947 is in force in the State. Antifragmentation restrictions of the Act are applicable all over the State. While provisions regarding consolidation of holdings are applied to such villages in which Government decided to implement the consolidation scheme, the scheme has been made voluntary. The main restriction contained in Section 31 of the Act was a ban on transfer of holdings of land after the scheme is implemented. The said provision has now been amended so as to remove restriction on transfer of entire consolidation block. It would now be easier to achieve progress in consolidation of holdings.

1.3.2.10 Provisions are also made for the ongoing programmes of upto dating the record of rights and loans to tenant cultivators for purchase of occupancy rights. Specific schemes for the tribal area viz. (1) Protection against unauthorised alienation of land held by tribals and (2) Grant of subsidy interest payable by tribal tenure are also included in the plan.

1.3.2.11 The deemed purchasers under the B.T. and L.A. Act, 1948 have to pay the purchase price determined by the ALT under the Act on annual instalments. It is proposed to introduce a new scheme to grant subsidy towards financial assistances to the Scheduled Caste tenant purchasers to acquire their occupancy rights.

1.3.3 Programmes for the Sixth Plan 1980-85.

1.3.3.1. An outlay of Rs. 1000 lakhs for the period 1980-85 is proposed for the Land Reforms programmes a broad break-up of which is as under:—

	(Rs. in lakhs)
(i) Consolidation of holdings	180.00
(ii) Resurvey and Revision survey.	179.00
(iii) Rewriting and Reconstruction of torn Land Records.	86.25
(iv) Introduction of Village site survey.	124.24
(v) Updating Records of Rights.	110.00
(vi) Implementation of Agricultural Land Ceiling Act.	124.88
(vii) Others.	195.63
Total :	1000.00

Consolidation of Holdings :

1.3.3.2 The scheme has been implemented in 3320 villages covering 14.25 lakh hectares by the end of the year 1979-80. During the Sixth Five Year

Plan period 1980-85 it is proposed to continue the programme in 900 villages covering 450 thousand hectares with an outlay of Rs. 180 lakhs.

Resurvey and Revision Survey of Villages.

1.3.3.3 Revision Survey is generally required to be undertaken every 30 years. Original Survey in certain areas of the State was undertaken some 80 to 90 years ago. The work in 959 villages has been completed by the end of the year 1979-80. During the Sixth Five Year Plan period it is proposed to continue the programme in 860 villages with an outlay of Rs. 179.00 lakhs.

Rewriting and Reconstruction of Torn Land Records.

1.3.3.4 The work of 111.73 lakh units and 22.14 lakh pages was completed at the end of the year 1979-80. In the Sixth Five Year Plan 1980-85 an outlay of Rs. 86.25 lakhs is proposed to complete the work of 60 lakh units and 15.00 lakh pages.

Introduction of Village Site Survey.

1.3.3.5 Village site survey activities is taken up under section 95 read with section 131/135/G of Land Revenue Code in the following categories of villages (1) Villages having population below 2000 inhabitants, and having more than 5000/ inhabitants (2) villages situated within the periphery of 5/1 Kms. from the urban agglomeration, (3) villages situated within extended area of Surat Municipal Corporation and (4) villages situated in Tribal Areas.

1.3.3.6 The survey of village site is prerequisite for orderly development of the villages for various development activities both by local Bodies and Government. It also provides the Records of Rights (property cards) showing clear right title and interest and liabilities on each property. Such survey is also useful for administrative purposes and determining N.A. Revenue, detection of encroachment and unauthorised N.A. use etc. It provides accurate maps for various purposes.

1.3.3.7 The work of introduction of village site survey was completed in 102 villages by the end of the year 1979-80. During the Sixth Five Year Plan period 1980-85, it is proposed to provide Rs. 124.24 lakhs for introduction village site survey work in 382 villages.

Gujarat Survey Training Institute.

1.3.3.8 Land Record Department carried out survey and classification operations, measurement of lands, recommending assessment measurement for introduction of village site/city survey and survey for acquisition purposes and update maintenance of the Land Records.

1.3.3.9 Looking to the magnitude of activities undertaken it has become necessary to have trained staff. This has necessitated creation of a separate organisation for imparting training. A separate Gu-

rat survey Training institute is proposed to be established with an outlay of Rs. 9 lakhs. The institute will train 400 persons during the period of Sixth Plan.

Record of Rights

Specific measures for Land Reforms-Record of Rights Scheme.

1.3.3.10 In order to discover concealed tenancies and to update the record of rights to ensure that position as on field tallies with the position as on record, a scheme to update the record of rights has been introduced from the Fourth Five Year Plan period.

Upto the end of the year 1979-80 the work was completed in 16258 villages in the first round and 9226 villages in the second round. In the Sixth Five Year Plan period, it is proposed to continue the programme at an estimated expenditure of Rs.110 lakhs to complete the Record of Rights work in 5857 (2118 in first round and 3739 in second round) villages.

Protection against unauthorised alienation of lands held by tribals.

1.3.3.11 The scheme for protection against unauthorised alienation of land held by tribals is introduced under the Tribal Area Sub-Plan since the year 1976-77 to detect alienation of land held by tribals. This is a detection scheme. The assent to the bill for proposed amendments in Land Revenue Code and insertion of New Section 73-A is received from Government of India and the bill will take the shape of enactment shortly. Upto the end of March, 1980 the detection work is completed in 3691 villages and 17005 cases have been detected and 8050 hectares of land in 6518 cases is restored to tribals. The scheme will be continued in the Sixth Plan period with an outlay of Rs. 13.04 lakhs.

Grant of subsidy in interest payable to Tribal Tenants.

1.3.3.12 Under the Bombay Tenancy and Agriculture land Act, 1948 the occupancy rights are given to tenants on payment of purchase price of the land in order to finance the purchase price to economically backward class tenants. The Gujarat State Co-operative Land Development Bank used to advance loans to such tenant purchasers. As the rate of interest in such loans charged by the said Bank is to the tune of 11 1/2% which is higher than the rate of interest charged by the Government, a scheme to subsidise the difference of rate in interest is introduced in plan since 1976-77 and proposed to be continued in the Sixth Five Year Plan at an estimated expenditure of 1.37 lakhs. The beneficiaries of this schemes are only tribals.

Implementation of Agricultural Lands Ceiling Act.

1.3.3.13. In the year 1960 Gujarat Agricultural Lands Ceiling Act was enacted with a view to imposing ceiling on land holding and for acquisition of surplus land for distribution preferably amongst Co-operative Societies, Scheduled Tribes and Scheduled Caste persons, landless labourers and other individual agricultural labourers. This Act was materially amended with a view to bring the same in line with guidelines issued by Central Government and the amendment Act was brought into force with effect from 1-4-76 and the scheme was included as a plan scheme from the year 1976-77.

1.3.3.14. The ban on disposal of land declared surplus is lifted with effect from 5-3-80. Ban on disposal of cases resulting in declaration of surplus land is also being lifted. As a result the scheme is required to be continued during the Sixth Five Year Plan with an outlay of Rs. 42 lakhs.

About 18012 hectares of surplus land has been taken over under this pre-revised Act. Out of this, 17768 hectares of surplus land has been distributed to 14729 beneficiaries, of which 10,000 hectares of land have been distributed to the scheduled caste and scheduled Tribe beneficiaries.

Financial Assistance to the assignees of surplus lands.

1.3.3.15. The new allottees of the surplus lands get financial assistance for land development and agricultural inputs. The entire amount of Rs. 1000/- is now to be treated as subsidy and the share of Central Government will be 50% in the scheme. Generally the allottees of surplus land belong to weaker section of the society and they need financial assistance for the above purpose. The benefit of the above scheme is not extended to the allottees of land holders in programme areas. However, provision of the State share is required to be made in the Plan.

1.3.3.16. The scheme introduced in 1980-81 will be continued during the Sixth Plan period with an outlay of Rs. 82.88 lakhs as State share. It is envisaged that about 8000 hectares of land will be provided financial assistance under the scheme.

Loans to tenant cultivators for acquiring occupancy rights under B.T. and A.L. Act.

1.3.3.17. In order to protect the rights of tenants on lands who are in arrears of payment of purchase price, a scheme has been introduced during the Fifth Five Year Plan for advancing loan to such tenant cultivators. In the Sixth Five Year Plan period it is proposed to continue the scheme with an outlay of Rs. 25.50 lakhs.

Financial assistance to grantees of Government Waste lands for development of lands etc.

1.3.3.18. With introduction of 20 point economic programme from the year 1975, Government waste land is being granted on a priority basis to the Scheduled Caste and Scheduled Tribe communities. These persons come from most economically weaker section and the lands granted being of the inferior quality they are not in a position to put the lands into effective cultivation and some of the lands have remained fallow. Government waste lands granted grantees during the last 4 years is as under:—

Year	Scheduled Tribes	Hectares	Scheduled Castes	Hactares
1976	3240	3774	3239	4893
1977	1650	2202	2550	4051
1978	720	1151	1501	2181
1979	184	317	720	8102
	5794	7444	8010	19227

1.3.3.19. Thus 26,671 hectares of land in distributed of which approximately 2/3 is situated in programme areas and will get required assistance under the various schemes applicable in the programme areas. In the remaining 66 Talukas the grantees holding about 6400 hectares of land who are not entitled to any such assistance will need assistance for development of land and for efficient cultivation. It is proposed to grant such assistance at the rate of Rs. 1000 per hectare out of which Rs. 500/- will be for land development and Rs. 500/- for inputs. An outlay of Rs. 34.36 lakhs is provided for 1980-85 Sixth Plan.

Financial assistance to Tribal Tanant purchasers to acquire occupancy rights under the B. T. & A. L. Act 1948.

1.3.3.20. The deemed purchasers under the B. T. and A. L. Act, 1948 have to pay the purchase price determined by the A.L.T. under the Act by annual instalments. The interest @4% is added to the purchase price and the annual instalment is fixed accordingly. There is a general scheme for advancing tagavi loan bearing 7% interest in operation in the State to pay up the arrears of instalments.

It is proposed to sanction a scheme of financial assistance to the Tribal tenant purchasers under the Tribal Area-sub-plan scheme to enable them to acquire occupancy rights; in respect of lands for which purchase rights are conferred under the B. T. & A. L. Act. This will help in raising economic status of this weaker section of the tribal society. Under this scheme it is proposed to cover only those tribal tenants who are having less than 2 hectares of land and have no other source of family income. It is proposed to put into effect the above scheme with the proposed outlay of Rs. 51.44 lakhs for the Sixth Five Year Plan, benefiting about 35000 tribal tenant purchasers who are marginal or small farmers.

Subsidy of financial assistance to Scheduled Caste Tenants, to acquire the occupancy rights under the B. T. & A. L. Act.

1.3.3.21. It is proposed to introduce a scheme of financial assistance to the scheduled caste tenant purchasers under the Special Component plan for Scheduled Castes to enable them to acquire occupancy right, in respect of lands for which purchase rights are conferred under the B. T. & A. L. Act, which will help in raising the economic status of the weaker section of the Society. It is proposed to grant this assistance to Scheduled Caste tenant purchasers having land less than 2 hectares and who have no other source of family income. It is proposed to put into effect the scheme with total outlay of Rs. 24 lakhs during Sixth Five Year Plan. This is likely to help 6000 Scheduled Caste tenant-purchasers who are also marginal or small farmers.

STATEMENT
LAND REFORMS

List of schemes included in the Sixth Five Year Plan 1980-85.

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85 Outlays	
		Total	Capital
1	2	3	4
1	LND.1 Consolidation of Holdings	180.00	..
2	LND.2 Resurvey and Revision Survey	179.00	..
3	LND.3 Rewriting and Reconstruction of form Land Records	86.25	..
4	LND.4 Introduction of village site survey	124.24	..
5	LND.5 Updating the maintenance work of Land Records of the District Survey Offices of the State.	13.00	..
6	LND.6 Reclassification of the lands of the villages of Jamnagar District	12.00	..
7	LND.7 Purchase of Xerox machines for supply of the copies.	8.17	..
8	LND.8 Scheme for Erection of BND marks in the Remaining surveyed villages of the Dangs District.	3.75	..
9	LND.9 Gujarat Survey Training Institute	9.00	..
10	LND.10 Updating Records of Rights	110.00	..
11	LND.11 Protection against unauthorised alienation of Land held by tribals.	13.04	..
12	LND.12 Grant of subsidy on interest payable by tribal tenants for acquiring occupancy rights.	1.37	..
13	LND.13 Implementation of agricultural land ceiling Act.		
	(a) Administrative set-up	42.00	..
	(b) Financial Assistance to allottees of surplus lands.	82.88	..
14	LND.14 Loans to tenant cultivators for acquiring occupancy rights under the B.T.&A.L. Act	25.50	..
15	LND.15 (a) Subsidy to Tribal tenants for payment of purchase price for occupancy rights under the B.T. & A.L. Act.	51.44	..
	(b) Subsidy to Scheduled Caste Tenants for payment of purchase price for acquiring occupancy rights under B.T. & A.L. Act.	24.00	..
16	LND.16 Granting financial assistance to Grantees of Government Waste Lands.	34.36	..
Total.		1000.00	..

1.4. MINOR IRRIGATION.

1.4.1. Introduction.

1.4.1.1. Water is inevitably the prime constituent for agriculture. Nearly 70 percent of the population of Gujarat depend on agriculture and agriculture is, therefore, the backbone of Gujarat's economy. The crops over most part of the State depend upon the vagaries of monsoon with hardly 16 percent of the cultivable lands provided with irrigation facilities. Irrigation water is the fundamental and indispensable input to increase agricultural productivity in as much as it has a potential to increase the productivity more than three times. Besides, it becomes worthwhile to incur expenditure on other inputs like seeds, fertilizers, land development etc., only if there is an assured water supply for agriculture.

1.4.1.2. Despite its needs, Gujarat is, one of the States in the Country with relatively limited water resources for irrigation. Large areas of the State are attacked with scarcity often. The inadequacy and uneven distribution of rainfall over large parts of the State are responsible for recurrent droughts in one or other part of the State. About 23 percent of the area of the State receives average annual rainfall even less than 431 m.m. (17") and about 33 percent of the additional area receives less than 635 m.m. (25"). Banaskantha, Kachchh and also part of Mahesana, Surendranagar and Rajkot districts are characterised by arid and semi arid climate, the average rainfall in these areas varying from 250 m.m. to 450 m.m. Similarly, Panchmahals, Sabarkantha and parts of Bhavnagar and Ahmedabad districts are also facing scarcity conditions in 7 out of

10 years. The sources for water in all areas are by way of surface water & ground waters. In fact, some of the ground water resources have been badly depleted specially in Mahesana district, where control on the sources for tapping of ground water is called for. Same is the situation in the coastal parts of Saurashtra (Junagadh district) where the ingress of salinity from the sea coast into ground water has converted potentially fertile soils into marginally productive of unproductive soils.

1.4.1.3. Minor Irrigation programme includes ground water development through construction of dugwells, private shallow tubewells, deepening of public tubewells, boring and blasting for deepening of old and new dugwells, installation of oil engines, electric motors and surface water development through diversion schemes, storage schemes and lift irrigation projects having culturable command area not more than 2000 hectares. Bulk of the finance for minor irrigation programme for private wells and tubewells, pumps and also for public tubewells and lift irrigation schemes is obtained from financial institutions like ARDC etc., Public sector outlay is mostly utilised for surface water schemes, giving subsidy to Harijan and Addivasi cultivators for construction of new wells, installation of pumps and pipelines, providing custom hire services to cultivators for boring and blasting works.

2.4.2. Review of Progress.

1.4.2.1. The total irrigation potential created and utilisation achieved by the various minor irrigation works such as tanks and bandharas, tubewells, lift irrigation and wells are depicted in the table below:-

(In lakh hectares)

Programme	Achievement at the end of					
	1977-78		1978-79		1979-80	
	Potential 2	Utilisation 3	Potential 4	Utilisation 5	Potential 6	Utilisation 7
1. Tanks and Bandharas	1.17	0.72	1.19	0.76	1.28	0.80
2. Tubewells	1.00	0.65	1.11	0.65	1.24	0.65
3. Lift Irrigation	0.37	0.26	0.42	0.28	0.45	0.29
4. Wells	14.05	12.64	14.21	12.79	14.37	12.93
Total	16.59	14.27	16.93	14.48	17.34	14.67

1.4.3. Strategy and Priority adopted for the Sixth Plan.

1.4.3.1. The strategy and priority for the minor irrigation schemes under the Sixth Five Year Plan are as under:-

(1) Tribal and backward areas of the State have been accorded high priority in providing irrigation facilities during the Sixth Plan 1980-85. Efforts are also being made to provide irrigation facilities as far as practicable even to such areas where small pockets of such population exist.

(2) Minor irrigation works can be completed within a period of 2 to 3 years and irrigation can start immediately thereafter. With a view to get early results from investments already made, the schemes which are in an advanced stage are given high priority and outlay required to complete such schemes is provided fully.

(3) New programme of modernisation of distribution system of the old and existing irrigation tanks is also proposed to be implemented. This will help in increasing the irrigation facilities in the backward areas.

(4) For balanced development of different areas priority will be given to new works in such areas which are backward in irrigation facilities or areas which have no other source of irrigation.

(5) Priority is proposed to be given in to areas classified as drought prone areas and inhabited by scheduled caste population.

(6) Areas which are not covered under the command of Narmada Project are also given preference.

(7) Among different types of works under this programme of minor irrigation, priority is given for irrigation tanks and bandharas which give direct and immediate benefits of irrigation. This is followed by percolation tanks and check dams which give indirect benefits by raising water levels in the wells in the nearby areas.

(8) Investigation of hydrology in hard rocky areas.

(9) Survey, research and development of ground water resources including recharge.

(10) Stepping up mobilisation of institutional investment for ground water development to maximum extent possible through progressive simplification and streamlining the procedures for entertaining and processing of loan applications.

(11) Strengthening the agricultural engineering section of the Agriculture Department for speeding up the work of micro level surveys, promoting research and developmental efforts to evolve cheap technology and extending to the farmers technical guidance and custom services in boring/drilling, selection of pumpsets and construction of wells and tubewells.

1.4.4. Programmes for the Sixth Plan 1980--85

1.4.4.1. An outlay of Rs. 8800 lakhs is proposed for the various programmes of this Sub-sector for the Sixth Plan 1980-85, the broad break up of which is as under:—

(Rs. in lakhs.)

Programme	Outlay 1980-85
I. D. Programmes.	
1. Tanks and Bandharas	6000.00
2. Tubewells	2350.00
A. F. & C. D. Programmes	
3. Co-operative Lift Irrigation	80.00
4. Boring-Blasting activities and assistance to backward classes	370.00
Total : 8800.00	

Minor Irrigation Works :

1.4.4.2. The spillover liabilities for the minor irrigation works at the end of March, 1980 accounts for Rs. 2974 lakhs. For continuing the present tempo of minor irrigation works and also to conform with the high priority of providing irrigation facilities, an outlay of Rs. 6000 lakhs is provided for the tanks and bandharas programme for the Sixth Plan 1980-85. This accounts for Rs. 2974 lakhs for spillover works and the balance of Rs. 3026 lakhs for the new works.

1.4.4.3. Priority will be given to the programmes for the tribal, backward, and drought prone areas and for such areas which are not covered under the command of Narmada Project. The State Government has strengthened its organisation by creating 8 divisions and 40 sub-divisions in addition to the existing minor irrigation project circle (Central Design Organisation) with two design units attached to it and two divisions for the field works, to investigate and design the schemes properly. It is proposed that about 0.35 lakh hectares of additional irrigation potential will be created during the Sixth Plan through tanks and bandharas programme taking the total potential to 1.63 lakh hectares at the end of 1984-85, whereas the utilisation will be increased by 0.20 lakh hectares during the Sixth Plan, bringing the total utilisation to 1.00 lakh hectares by the end of 1984-85.

Tubewells

1.4.4.4. Tubewells are the most assured source of supply of water for irrigation. Tubewells tap the deep aquifers of ground water through slotted pipes lowered in drilled holes by lifting out water by pumps and distribution through pipe lines of open

channels. The State Government has reactivated the Gujarat Water Resources Development Corporation Limited (GWRDC), during the year 1975-76 for the speedy and effective development of ground water through tubewells. The Corporation has undertaken various surveys for irrigation purpose and has prepared a feasibility report of availability/suitability of underground water for drilling of about 3200 tubewells in the State during the Sixth Plan period. The GWRDC is given the institutional finance through the Agriculture Refinance and Development Corporation (ARDC). State Government provides 20 percent as share capital contribution to the GWRDC and the ARDC gives loans to the GWRDC for the remaining 80 percent of the estimated cost of the project which is refundable in a period of ten years.

1.4.4.5. By March 1980, the GWRDC had successfully drilled 785 tubewells under different programmes. Out of this, 376 tubewells were already commissioned by April, 1980, creating an irrigation potential of 0.24 lakh hectares taking the total potential to 1.24 lakh hectares at the end of 1979-80. It is proposed to carry out the works of 1920 tubewells during the Sixth Plan in addition to spill over of 409 tubewells. Thus during the Sixth Plan period, it is proposed to complete 2100 tubewells. It is estimated that an additional irrigation potential of 1.26 lakh hectares will be created during the Sixth Plan raising the irrigation potential to 2.50 lakh hectares by the end of 1984-85.

Dantiwada Project :

1.4.4.6. Due to shortage of surface water in the command area of the Dantiwada command and surplus available ground water in that area, it is proposed to undertake a new pilot project of construction of 200 tubewells in 67 clusters for the conjunctive use of water along the main canal and distributories in the upper reaches of Dantiwada Command Area at a total cost (including maintenance) of about Rs. 410 lakhs.

1.4.4.7. Renovation and modernisation of the existing tubewells, extension of pipelines of 300 tubewells and redrilling of 100 tubewells in Mahesana and other districts are also proposed to be carried out during the Sixth Plan period.

1.4.4.8. An outlay of Rs. 2350 lakhs is proposed for the tubewells programme for the Sixth Plan 1980-85 which comprises of Rs. 376 lakhs for the spill over liabilities (as on 31st March, 1980) and Rs. 1974 lakhs for the other new programmes/works.

Underground Hydrology :

1.4.4.9. The Gujarat Water Resources Development Corporation is now closely collaborating with the Physical Research Laboratory for quantitative assessment of ground water with radio-isotope tracer technique and with Indian Space Research Organisa-

tion in connection with satellite imaginerics. This sphere involves fairly good amount of field work for ground truth checks. Recharge studies are also being planned in collaboration with UNDP and CCWB. This is very essential for the recently developed subjects of under ground hydrology.

Co-operative Lift Irrigation :

1.4.4.10 Lift irrigation schemes are taken up either on the banks of river or nalas where sufficient flow of water is available in monsoon and on private wells. Minor irrigation activities are organised in the form of co-operative lift irrigation societies. The Government gives 45 percent of the cost of the scheme as subsidy which is raised to 75 percent in tribal areas. In order to encourage more and more members of scheduled castes to join and to take benefit of the co-operative lift irrigation scheme, the State Government gives 50 percent subsidy towards the share capital contribution. Further, it is proposed to give 50 percent subsidy towards repayment of capital cost in the form of water charge recovered from the scheduled caste members for five years since the commission of the scheme. It is proposed to organise 133 lift irrigation societies during the Sixth Plan taking the total number of societies to 653 at the end of 1984-85 as compared to 520 at the end of 1979-80.

Grant of subsidy to SC/ST cultivators :

1.4.4.11 The State Government has been encouraging the construction of new wells and installation of pump sets to scheduled caste (Harijans etc.) and scheduled tribe (ST) cultivators for utilising irrigation potentiality and resulting in increasing the agricultural production. During the Sixth Plan 1980-85, it is proposed to provide assistance to 4500 cultivators for the construction of 2550 wells and installation of 4900 pumpsets. An outlay of Rs. 260 lakhs is proposed for this scheme for the Sixth Plan 1980-85.

Extension Activity Services :

1.4.4.12 It is proposed to provide necessary guidance, advisory service and training to cultivators for proper selection/utilisation of agricultural machinery. During the Sixth Plan 1980-85, it is proposed to train about 4920 cultivators under this programme. An amount of Rs. 40 lakhs is proposed for this scheme for the Sixth Plan 1980-85.

Boring and Blasting Operations:

1.4.4.13 The boring and blasting operation make it possible to dig and deepen wells expeditiously and thereby to increase water storage capacity in the wells. It is, therefore, necessary to carry out boring and blasting operations within the paying capacity of the cultivators, so that irrigation facilities are improved and thereby increasing the agricultural production. An outlay of Rs. 70 lakhs is proposed for this scheme for the Sixth Plan 1980-85.

STATEMENT

MINOR IRRIGATION

List of Schemes included in the Sixth Five Year Plan 1931-35

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan	
		Total	Capital
1	2	3	4
I. D. Programmes			
1. MNR—1	Tanks and bandharas, check dams, percolation tanks etc., (Surface irrigation)	.. 6000.00	46.00
2. MNR—2	Tubewells including ground water survey and investigations.	.. 2250.00	150.00
Total : (I. D.)		.. 8250.00	196.00
II. A. F. and C. D. Programmes :			
3. NNR—3	Co-operative Lift Irrigation	.. 80.00	..
4. MNR—4	(1) Grant of subsidy to Harijans, (E. C.) & S. T. cultivators for irrigation facilities (non-tribal).	.. 60.00	..
	(2) —do— for TASP.	.. 200.00	..
5. MNR—5	(1) Extension Activity Services (non-tribal)	.. 11.00	..
	(2) Extension Activity Services for TASP.	.. 29.00	..
6. MNR—6	Improvement of wells by boring and blasting.	.. 70.00	..
Total (A. F. & C. D.)		.. 450.00	..
Grand Total : (Minor Irrigation). (I+II)		.. 8700.00	196.00

1.5. SOIL AND WATER CONSERVATION

1.5.1. Introduction :

1.5.1.1. Substantial areas of Gujarat State periodically experience droughts and floods leading to considerable loss in agricultural production. Ecological deterioration because of denudation of forests and excessive grazing has led to soil erosion. A large part of the State suffers from poor soil, undulating terrain and undependable rainfall. Irrigation facilities are extremely limited in the State. Soil erosion by wind and surface runoff takes place continuously in different parts of the State on an extensive scale. Geographical area of the State according to area classification admeasures 195.98 lakh hectares, of which the area reported for land utilisation purposes comes to 188.09 lakh hectares. Out of this, an area of nearly 126.51 lakh hectares still needs various soil and water conservation measures

1.5.1.2. In the past, the soil and water conservation works *viz.* contour bunding, terracing, nalla plugging, land reclamation, conveyance of water etc. were undertaken on a large scale, but the approach was limited on small catchment basis and scattered. In order to reap the benefits of erosion control and water conservation for complete harvesting of rainfall water and making it fit for maximum use to increase agricultural production and to solve the various problems like flood prevention, gully control, land reclamation, improvement of pastures including village forests and farm forests, this programme is now planned to be undertaken on a watershed basis on large areas. This provides opportunities for stimulating economic growth and acts as catalyst to the whole rural development endeavour by benefitting the weaker sections of the society with adequate employment opportunities and thereby raising their level of income.

1.5.1.3. In all, 446 sub-watersheds in catchment areas of various river systems have been so far demarcated in the State covering an area of about 13.87 lakh hectares against the total area of 126.51 lakh hectares which needs watershed treatment. Though the entire work of demarcation and delineation of various sub-watersheds is not completed, the total number of such sub-watersheds will approximately come to about 6325 in the State.

1.5.2. Review of Progress :

1.5.2.1. The physical progress achieved so far under soil and water conservation works and ravine land reclamation development programme is summarised below :—

(in lakh hectares)

Sr. No.	Item	Achievement at the end of		
		1977-78	1978-79	1979-80
1	2	3	4	5
1	Area covered under soil and water conservation works—contour bunding equivalent	17.61	18.14 (0.53)	18.79 (0.65)
2	Ravine land reclamation—area covered	0.42	0.44 (0.02)	0.48 (0.04)

(Figures in brackets indicate the net achievement)

1.5.3. Objectives for the Sixth Plan :

1.5.3.1. The proposals for the Sixth Plan have been formulated keeping in view the following major objectives :

1. To provide optimum utilisation of available rainfall and thereby to reduce the severity of the impact of drought.

2. To improve the capabilities for integrated planning and implementation.

3. To reclaim ravines for economic land use like agriculture and forests and thereby to restore the ecological balance.

4. To protect the coastal saline land against ingress of tidal waters and improve the land for maximum agricultural production.

5. To create awareness among the farmers about the adoption of scientific farming through utilisation of packages of practices and thereby increase the income of the weaker sections of the society.

1.5.4 Outlay for the Sixth Plan—1980-85.

1.5.4.1. An outlay of Rs. 2894 lakhs is proposed for the soil and water conservation programmes. Broad break-up of the outlay is given in the following table :—

(Rs. in lakhs)

Programme	1980-85 Outlay
I. AFCD Programmes	
1. Direction and Administration	50.00
2. Research	5.00
3. Education and Training	10.00
4. Soil Conservation	1482.55
5. Other Programmes (including ravine and kharland reclamation)	946.45
Total (AFCD Programmes)	2494.00
II. I.D. Programme	
6. Ghed Area Development	400.00
Grand Total (I+II) (Soil and Water Conservation)	2894.00

Education and Training :

1.5.5.3. Various soil conservation measures are proposed to be undertaken in the State such as watershed development, ravine land reclamation, kharland development, river valley projects etc. It is therefore, proposed to impart training to about 1000 persons in soil and water conservation techniques during the Sixth Plan to meet with the requirements of the trained/technical manpower. An outlay of Rs. 10.00 lakhs is proposed for the Sixth Plan 1980-85.

Programme for Wind Erosion affected areas :

1.5.5.4. The northern districts of the State and the area of Kachchh suffers from wind erosion problem where the annual rainfall is about 375 mm. to 500 mm. The soils of these areas are generally sandy in nature which leads to a severe problem of wind erosion bringing about the denudation of crop fields. To protect this land, the pilot projects for controlling wind erosion in such problematic areas have been established with nurseries, shelter belts, plantations etc. Under this programme, an area of about 860 hectares has been covered by the end of 1979-80. It is proposed to cover an area of about 1250 hectares by the end of Sixth Plan 1980-85. An amount of Rs. 14.76 lakhs is proposed for the pilot project for controlling wind erosion problem for the Sixth Plan 1980-85.

Soil Conservation Works :

1.5.5.5. soil and water conservation works are proposed to be carried out in all the 446 sub-watersheds already demarcated in the State. It is proposed to cover an area of about 3.51 lakh hectares (contour bunding equivalent) taking the total coverage to 22.30 lakh hectares by the end of 1984-85. The existing staff of the six divisions and 23 sub-divisions functioning in the State will be utilised for the soil and water conservation works. It is also proposed to undertake follow-up programme of dry farming practices in an area of about 5.00 lakh hectares in the Sixth Plan 1980-85.

Ravine Land Reclamation :

1.5.5.6. Ravine formation is the result of constant erosion over many centuries in the deep alluvial soils of the main rivers and their tributaries. These ravines are known as 'Kotars'. Faulty agricultural practices, illicit cutting of vegetation for fuel and exposing the areas to the vagaries of nature like wind storms heavy rainfall and floods etc. accelerates the process of erosion hazards. The ravine area extending from 1 to 8 kms. on both the banks of the rivers and their tributaries is endangering the good fertile table land, village sites, roads etc. It is estimated that, in Gujarat, about 4 lakh hectares of area have been affected by the ravines on the various

1.5.5. Programmes for the Sixth Plan 1980-85**Direction and Administration (Soil Survey) :**

1.5.5.1. Soil survey provides some basic information about the nature and characteristics of soil and their extent, locations, their use, capabilities etc. The most important and widely recognised practical utility of the soil survey is to provide a scientific and systematic study for the soil and water crop relationship to increase the agricultural production. There are 3 soil survey units with headquarters at Nadiad, Navsari and Bhavnagar functioning in the State. Under this programme, it is proposed to carry out survey in an area of about 6.00 lakh hectares during the Sixth Plan period. An outlay of Rs. 50.00 lakhs is proposed for the Sixth Plan 1980-85.

Research :

1.5.5.2. With a view to have investigation and studies of various types of problems like drainage, water logging, wind erosion etc. and to evolve new and modified techniques to deal with the various soil and water conservation treatment in the different types of soils, the programme of investigation and research has been proposed to be continued in the problematic areas viz. at Limbhoi (Sabarkantha), Akru (Ahmedabad) and at Radhanpur (Banaskantha) for which an outlay of Rs. 5.00 lakhs is proposed for the Sixth Plan 1980-85.

rivers viz. Banas, Saraswati, Meshwo, Watrak, Mahi, Narmada, Tapi, Shetrunji, etc. and their tributories flowing in the district of Banaskantha, Sabarkantha, Mahesana, Kheda, Vadodara, Panchmahals, Bharuch, Surat, Amreli etc.

1.5.5.7. The State Government has established the "Gujarat State Land Development Corporation" for undertaking the activity of ravine land reclamation expeditiously. To give impetus to this activity, the programme of advance survey and planning for preparation of projects in ravine areas has also been undertaken by the Corporation. It is proposed to give share capital contribution to the tune of Rs. 50 lakhs for the Sixth Plan 1980-85 to the Corporation to undertake its activities more effectively. Under this programme, it is proposed to cover an area of about 0.15 lakh hectares during the Sixth Plan period taking the total area covered to 0.63 lakh hectares at the end of 1984-85.

Khar Land Reclamation :

1.5.5.8. Gujarat is having a long coastline of about 1600 Kms. of length. A large part of this area adjoining the coastal line in the twelve districts of the State is affected by salinity. An area of about 3.00 lakh hectares is under the effect of salinity due to ingress of tidal waters. This has rendered the upper area of these kharlands infertile resulting in low agricultural production.

1.5.5.9. The Kharland Development Board, established under the Khar Land Act, 1963, undertakes protective works by constructing earthen embankments alongwith the cross drainage works to stop the ingress of tidal water. As per the provisions of the Khar Land Act, 1963, the expenditure on land reclamation is to be shared by the State Government and the beneficiary in the ratio of 40 : 60, the Government share being the subsidy. It is also proposed to continue the mobile soil testing laboratory (in Ahmedabad district) to ascertain progressive reduction in salinity and to recommend correction measures to the farmers. The demonstrations will also be organised to educate the farmers on the benefits of Khar land reclamation and methods of improvement of the areas under Ukai-Kakrapar and Shetrunji Irrigation Projects.

Preparation of Kyari for Paddy Cultivation :

1.5.5.10. Nearly 1.37 lakh adivasi cultivators are residing in the Surat and Valsad districts. In general, the agricultural lands of Surat and Valsad districts are suitable for paddy cultivation. With view to encourage adivasi cultivators to undertake paddy cultivation, Government has formulated a scheme from the year 1978-79, under which, one acre of the holding of a tribal cultivator is to be converted into kyari for paddy cultivation in these

2 districts. Necessary technical guidance will also be provided by the Government for this purpose. 50 Percent of the total expenditure or Rs. 500 (per acre) with ever is less, will be paid to the cultivators as a subsidy. During the last two years i.e. 1978-79 and 1979-80, the benefit has been given to about 8142 tribal families covering an area of about 3257 hectares. It is proposed to extend this benefit of about 30000 tribal families covering an area of about 12000 hectares during the Sixth Plan period 1980-85. An amount of Rs. 150 lakhs is proposed for this scheme for the Sixth Plan 1980-85.

1.5.6. Soil conservation works in catchment areas of river valley Projects :

1.5.6.1. The centrally sponsored scheme (50 : 50) for carrying out soil conservation works in catchment areas of the river valley projects for the Ukai, Mahi and Damanganga Irrigation Projects is proposed to be continued during the Sixth Plan period. It is proposed to cover an area of about 10900 hectares under the various soil and water conservation measures during the Sixth Plan period. An outlay of Rs. 80 lakhs (State share) is proposed to be provided for this purpose. The remaining 50 % outlay will be received from the Government of India (25% loan and 25 % subsidy).

1.5.7. Development of Ghed Areas :

1.5.7.1. Ghed area is situated in about 1425 sq. kms. divided in two parts-Barda Ghed and Sorthi Ghed in the north-west of Junagadh district. The Barda ghed comprises of 30455 hectares of the cultivable land while the Sorthi ghed comprises of 79950 hectares. The ghed area is a vast deltaic region of the major west flowing rivers viz. Minser, Bhadar, Ozat, Madhuvanti, Sabli etc. and is bounded by the Arabian sea-coasts on the south-west. All along the coasts, there is a lime stone ridge, the width of which varies from one furlong to one mile. The above rivers have made their way through this lime stone ridge and have formed outlets into the sea. As the riverbed gradients in this deltaic area are very slight most of the rivers over flow their banks and inundate the countryside. The flood water causes inundation and erosion in the surrounding cultivable lands besides salty efflorescence in the soil. During the floods of 1980 monsoon, this area was very badly affected.

1.5.7.2. In order to find out solutions to the aforesaid problems, the proposals are framed for widening and regrading of the existing cross and longitudinal drains, providing additional drainage facility and new outlets to the sea, strengthening the communication system and to provide electricity operated steel gates on the regulators to effectively prevent ingress of sea water. By taking these measures,

is expected to bring about 51230 hectares-38900 hectares of Sorthi ghed and 12400 hectares of Barda ghed area-under cultivation. For the development of these areas, two comprehensive master plans are prepared, costing about Rs. 417 lakhs for Sorthi ghed and Rs. 904.31 lakhs (including Rs. 810 lakhs for Sedha Creek reclamation scheme which is partly sanctioned and is posed to the World Bank for assistance) for the Barda ghed area. The master plans provide for quick drainage facilities, closing

of off-shoots, construction of C. D. Works-cum-regulators on cart tracts, construction of percolation tanks and reclamation works etc. The preliminary works on the rivers viz. Minsar, Ozat and Madhuvanti are nearing completion.

1.5.7.3. An outlay of Rs. 400 lakhs is proposed for the ghed area development programme in the Sixth Plan.

STATEMENT

SOIL AND WATER CONSERVATION

List of schemes included in the Sixth Five Year Plan 1980-85.

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85 Outlays	
		Total 3	Capital 4
(I) A. F. C. D. Programmes			
I Direction and Administration			
1.	SLC-1 Strengthening of Soil Survey Organisation	50.00	..
II Research			
2.	SLC-2 Soil Conservation Investigations	5.00	..
III Education and Training			
3.	SLC-3 Soil Conservation Training	10.00	10.00
IV Soil Conservation			
4.	SLC-4 (1) Soil conservation including contour bunding, nala plugging, terracing etc. in non tribal areas	942.55	..
	(2) Soil conservation including contour bunding, nala plugging, terracing etc. in TASP.	540.00	..
	Sub-Total (Soil Conservation)	.. 1482.55	..
V Other Programmes			
5.	SLC-5 Afforestation and reclamation of ravine lands	200.00	..
6.	SLC-6 Advance survey and planning for watershed management	30.00	..
7.	SLC-7 Pilot projects for soil conservation in watershed areas	20.00	..
8.	SLC-8 Pilot project for wind erosion problem	14.76	..
9.	SLC-9 Reclamation of kharland under Kharland Act;		
	(a) Protection of reclamation measures	169.93	..
	(b) Kharland Board (H. Q. staff)	24.45	..
	(c) Mobile soil testing laboratory	27.81	..
	(d) Drainage work in water logged alkaline and saline area.	8.50	..
	Sub-Total-9 (Khar Land Reclamation)..	230.69	..

1	2	3	4
10.	SLC-10 Share capital for Gujarat State Land Development Corporation	50.00	..
11.	(1) Kyari making for paddy cultivation in Surat and Valsad districts	150.00	..
	(2) Kyari making for paddy cultivation in Dangs district	50.00	..
12.	SLC-12 Carrying out soil conservation work in River Valley Projects (centrally sponsored Scheme)	80.00	..
13.	SLC-13 Pilot projects for protection of table lands	100.00	..
	Nucleus Budget for TASP (AFCD)	21.00	..
	Sub-Total-V—(Other Programmes)	946.45	..
	Total-(I)—(AFCD Programmes)	2494.00	10.00
(II) I. D. Programme			
14.	SLC-14 Ghed Area Development	400.00	400.00
	Grand Total—(I + II) (Soil and Water Conservation)	2894.00	410.00

1.6 COMMAND AREA DEVELOPMENT.

Area Development Authority Mahi-Kadana

1.6.1. Introduction:

1.6.1.1. The basic need for Agriculture is water for irrigation. Agriculture is a crucial factor in the economic development of the country. Assured irrigation facilities are of vital importance to agriculture. A large investment made in the major and medium irrigation projects highlighted the need for the optimum utilisation of the irrigation potential. It is very important that integrated area development approach should be adopted to increase utilisation of irrigation water resulting in optimum agricultural production.

1.6.1.2. A special area development programme was initiated during the Fifth Plan for an integrated development of the command area of major irrigation projects. Initially the programme was to be shared by two specially constituted Area Development Authorities and the Director of Agriculture. Third Area Development Authority is also constituted since January, 1980. The main activities are soil and water conservation, construction of field channels and drains, land levelling and shaping, kyari making, strengthening of cooperative net work to ease the availability of agricultural inputs, strengthening of extension machinery, training programme and development of communication and marketing and processing facilities. The various activities in the sub-sector are funded from plan as well as non-plan provisions of the State budget and institutional finance.

1.6.1.3. Mahi-Kadana, Panam, Hiran, Kharicut and Fatewadi Projects are entrusted to Area Development Authority, Ahmedabad; Ukai, Kakrapar, Karjan and Damanganga projects are entrusted to Area Development Authority, Surat. While Shetrunji project and certain projects situated in North Gujarat and Saurashtra have been entrusted to the Area Development Authority, Gandhinagar.

1.6.2 Review of progress and programme for 1980-85

Pilot projects for soil and water management.

1.6.2.1. The objectives under the programme are:-

(i) To study the water losses by seepage and side and deep percolation in earthen and lined field channels.

(ii) To demonstrate water use and management practices and also the proper use of irrigation water, fertilizer and improved seeds for multiple cropping for maximisation of agricultural production.

(iii) To impart training to the farmers in water use management practices and improved method of cultivation, farm technology for getting maximum agricultural production.

(iv) To study the soil test crop response in block area of Command Area Development Authority, Mahi-Kadana.

A scheme for adoptive trials and Demonstration-Mahi-Kadana.

1.6.2.2 The Government of India had sanctioned the Pilot Project for a period of 3 years ending 31st March 1977. From 1977-78 it has been continued as follow up Pilot Project for Soil and Water Management in Mahi-Kadana Command Area fully financed by State Government. From the year 1981-82 this follow up Pilot Project will be discontinued and a New scheme viz "Adoptive trials and Demonstrations" in Kadana Project will be introduced. For this scheme 50% Central Assistance would be available provided the scheme is approved by Government of India. For approval of this scheme the matter has been taken up with the Government of India. This New Scheme will be implemented in the left bank of the Kadana Project. 2 Blocks will be selected wherein water management activities will be undertaken. During the Sixth Plan a provision of Rs. 5.50 lakhs has been made for the scheme.

Area Development Authority, Shetrunji, Gandhinagar.

Shetrunji :

1.6.2.3. The project for Shetrunji has been completed during first three years i.e. from 1976-77 to 1978-79. Introduction of new crops, gypsum treatment and the crop demonstration plots are arranged and extension activities are done under this project. 56 demonstrations were undertaken upto 1979-80. 431 demonstrations are targetted for the Sixth Plan.

Area Development Authority Ukai-Kakrapar :

Ukai-Kakrapar :

1.6.2.4. A project for Ukai-Kakrapar is also sanctioned by Government of India. Due to perennial water, table has come up and it has adversely affected the fertile land reducing its productivity. The areas of Bardoli, Kamarej & Palsana Taluka in command area are adversely affected. The programme of field demonstration, composite demonstration and construction of rains is undertaken and is in progress. As the neighbouring villages of these talukas are also affected with water logging problems, it has been decided to cover more villages of affected area. For effective drainage programme, the scheme is to be continued. The provision of Rs. 18.80 lakhs is made for small staff for carrying out demonstration work for showing extension method to the farmers of CAD project. The details of the provisions are as under;

	(Rs. in lakhs)
Mahi-Kadana	5.50
Shetrunji	3.00
Ukai-Kakrapar	10.30
	<hr/>
	18.80

1.6.2.5. 37 bulldozers and 25 tractors are in operation for land levelling and kyari making work in Ukai-Kakrapar Command area. To modernise the agricultural engineering section by providing proper workshop facility, upto date tools, modern machinery, equipments for prompt repairs and sheds for machinery, the amount of 31.80 lakhs is provided for the Sixth Plan.

On Farm Development works :

1.6.2.6. The on farm development works consist of land levelling, field channels, kyari making, field drainage etc.

Area Development Authority Mahi-Kadana :

(1) Mahi-Kadana Project:

1.6.2.7. The culturable command area of the project was originally fixed at 2,73,000 Hectares on right bank canal and 13,000 hectares on left bank canal. The Command area has now been revised as 2,24,235 hectares (2,12,694 hectares on R.B.C. and 11,541 hectares on L.B.C.) land target for land levelling was fixed at 24,972 hectares and levelling work has been undertaken upto March, 1980 for 24,662 hec. The target for the Sixth Plan is 1800 hectares.

1.6.2.8. As regards field channel, 1,34,234 hectares have been covered upto March 1980. The target fixed for the Sixth Plan is 40000 hectares.

1.6.2.9. Field drains in the Kadana Project command area are to be constructed in 20,000 hectares. The works depend upon prior construction for main drains and lateral and sub-lateral drains. A master plan has already been sanctioned by Government. The target for the Sixth Plan is 20,000 hectares.

1.6.2.10. The details of work done and the programme proposed for the Sixth Plan are given below:—

Sr. No.	Item	Unit	Achiv. upto March 1980	Target for the Sixth Plan
1.	Land levelling	Hect.	24662	1800
2.	Field channel.	„	134234	40,000
3.	Field Drain	„	..	20,000

1.6.2.11. An outlay of Rs. 16.00 lakhs is provided for the Sixth Plan for OFD works under command area development.

2) Panam Projects.

1.6.2.12. The details of works done and the programme proposed for 1980-85 are given below:—

2683—26

Sr. No.	Item	Unit	Achievement upto March 1980	Target for the Sixth Plan
1	2	3	4	5
	Field channel	Hect.	658	35,000

1.6.2.13 The work has been started and it will gain momentum. This would be centrally sponsored scheme on the line of Kadana Project after 1981-82. An outlay of Rs. 100.00 lakhs has been provided as State share for the Sixth Plan 1980-85.

(3) Other Projects.

1.6.2.14. Three new projects viz. Hevan, Khariot and Fatewadi have been entrusted to Area Development Authority. A provision for each project is kept to the tune of Rs. 14.00 lakhs during the Sixth Plan period. Field channel works in 2500 Hectares in each project will be taken up during the plan period.

Area Development Authority Shetrunji.

(1) Shetrunji Project :

1.6.2.15. On farm Development works in this project consist of construction and remodelling of field channel works in 34800 hectares, land levelling works in 9606 hectares and field drain works in 4046 hectares..

1.6.2.16. The details of works done and the programme proposed for the Sixth Plan are given below:—

Sr. No.	Item	Unit	Project Target	Achievement upto March 1980	Target for the Sixth Plan
1	2	3	4	5	6
1.	Land levelling	Hect.	9606	4270	4,000
2.	Field channel	„	34800	21539	13,261
3.	Field drains	„	4046	300	3,200
4.	Soil Survey	„	34800	19235	15,565

1.6.2.17. This is a centrally sponsored scheme and as per the revised pattern, the State share amounting to Rs. 53.00 lakhs is provided in the Sixth Plan.

(2) Other Projects.

1.6.2.18 It is also proposed to take OFD works in Dharoi, Dantivada and other Major and Medium projects during the Sixth plan. The total outlay of Rs. 395.00 lakhs is provided for 1980-85.

Area Development Authority Ukai-Kakrapar:**(1) Ukai-Kakrapar Project.**

1.6.2.19. Land Levelling by field channel circle Surat is being done in Ukai Left Bank canal, block number 12 to 14 and this being voluntary, work is done to the extent of consent as available. The farmers are expected to carry out the land levelling once they see the water running into canals. The progress of achievements and the targets envisaged for the Sixth Plan are given below:—

Sr. No.	Item	Unit	Project target	Achievement upto March 1980	Target for the Sixth Plan
1.	Land levelling and Kyari making	Hect.	116900	21700	77400
2.	Ravine channel	-do-	468200	206400	285200
3.	Field Drain	-do-	251300	57647	240700
4.	Drainage	Kms.	6321	1554	4700

(2) Damanganga Projects :

1.6.2.20 The Damanganga Project envisages supply of water to southern part of the Ukai Kakrapar command. It is expected that the project will start giving water from 80-81 and will supply to 5000 hectares of land in the first year, field channel and O.F.D. works are to be completed before the water is released in the fields. Investigations are required to be made for doing the O.F.D. works and field channel work. For carrying out OFD works in this project Rs. 337.75 lakhs are provided in the Sixth Plan with the following targets.

Sr.No.	Item	Unit	Target for the Sixth Plan
1.	Field channel.	Hect.	29000
2.	Field Drains	„	11600
3.	Land Levelling	„	16650

Karjan Project.

1.6.2.21. Similar planning is done for Karjan Project so as to synchronise all the activities and get the proper benefits. This scheme will start bearing fruits from 1983-84 only i. e., from the 4th year of Sixth Five Year Plan. The programme proposed for the Sixth Plan is as under:—

Sr. No.	Item	Unit.	Targets for the Sixth Plan.
1.	Field channel	Hect.	8800
2.	Field Drain	„	2640
3.	Land Levelling	„	3960

Pilot Project for Reclamation of khar Land in Surat and Valsad Districts.

1.6.2.22. The Pilot Project for the reclamation of saline coastal land of 1760 hectares to increase agricultural production at the cost of Rs. 82 lakhs was taken up in 1972. The scheme envisages construction of protective earthen dams, reclamation of land by construction of internal drains, field channels, land levelling etc.

1.6.2.23. With the introduction of Modernisation Programme in Kakrapar Command the reclamation of Coastal land is to be carried out by the Superintending Engineer, Modernisation circle. The modernisation programme of Kakrapar command has been posed to the World Bank for I. D. A. credit assistance, and accordingly with the assistance of World Bank, the reclamation of coastal land will be carried out by Modernisation Circle, Surat. An outlay of Rs. 40.45 lakhs is provided for the Sixth Plan.

Ayacut Development Programme.

1.6.2.24. The Ayacut Development Programme was taken up in 27 villages near Kim in Ukai-Kakrapar command area development. The results have been encouraging. It has, therefore, been extended in 43 villages covering 8 villages from Ankleshwar Taluka, 20 from Hansot Taluka and 15 from Mangrol Taluka. It is proposed to continue the scheme on existing basis during Sixth Five Year Plan with a view to demonstrate proper method of irrigated agriculture. 45 to 50 demonstrations of various agriculture practices are carried out yearly. This programme is implemented by Command Area Development Authority, Ukai Kakrapar. An outlay of Rs. 3.00 lakhs is provided for the Sixth Plan.

1.6.2.25. On the basis of ayacut development programme in Surat District, Government have sanctioned ayacut development scheme for the two districts in Rajkot and Sabarkantha to educate the farmers in irrigation farming for maximum utilisation of irrigation water. 90 demonstrations are proposed to be carried out yearly. This programme is implemented by the Director of Agriculture. An outlay of Rs. 11.30 lakhs is provided for the Sixth Plan.

Implements: Workshop at Navsari.

1.6.2.26. To train village farmers for the use and repairing of improved agricultural appliances and machineries, the cultivators are paid Rs. 150 per month as stipend under this scheme. In addition to this the repairing works of departmental trucks, jeeps, bulldozers and replacement of spare parts etc. are carried out in the workshop. Use of improved implements is necessary for effective water management. An outlay of Rs. 20.00 lakhs is provided for the Sixth Plan.

World Bank aided Scheme :

Command Area Development Authority Mahi Kadana :

Water management activities in Panam Project :

1.6.2.27. As per the proposal contained in the Aid-memoire of Dr. Shanan, World Bank consultant, of May 14, 1980 it has been decided to implement the programme of undertaking water management activities pilot programme with an outlay of Rs. 34.00 lakhs during the Sixth Plan for the following activities:—

- (1) To evaluate present design standards;
- (2) To introduce a methodology for preparing seasonal and water allocations and for operating the net work according to determined schedules;
- (3) To adopt scheduled deliveries to changing cropping patterns;
- (4) To roster combined planning by agricultural engineering staff;
- (5) To establish demonstration farms where farmers can observe efficient field irrigation;
- (6) To train staff in adopting advanced methodology and operational procedure for other irrigation projects.

Training in Water Management

1.6.2.28. In order to build up a professional cadre of water management, a training programme in water management and land development for irrigated agriculture has been agreed to be financed by the World Bank. The expenditure involved for a period of five years is Rs. 3. crores. The centre is to be located in the Mahi Kadana Command area which offer a good training ground for personnel involved in irrigation management. The centre will be established at Anand. The Programme of training varies from 6 to 9 months for new recruits, refresher course for those who are already serving the command areas such as Deputy engineers, sub-divisional Soil Conservation Officers and for the officers of the level of Executive Engineers and Deputy Director of Agriculture serving as Divisional Soil Conservation Officers. It is proposed to conduct one week workshop as well as three weeks refresher course. An outlay of Rs. 11.00 lakhs has been provided for the Sixth Plan, 1980-85.

Rotational System of Irrigation (Warabandhi) in Mahi Kadana Command Area.

1.6.2.29. The World Bank has agreed to finance the introduction of rotational water supply (Warabandhi) in the irrigation projects of Gujarat. The total area to be covered is 60,000 hec. out of which 30,000 hectares will be in Mahi-Kadana Command area.

1.6.2.30. Before the agreement was signed in April, 1980, 2000 hectares were already covered in Mahi-Kadana command area in the right bank as an experimental measure during 1978-79 Rabi season as well as 1979-80 Rabi season.

1.6.2.31. It is proposed to introduce warabandhi in an additional area of 9000 hec. in Kadana Project and the provision has been kept to the tune of Rs. 55.00 lakhs in the Sixth Plan.

1.6.2.32. As estimated expenditure for 60,000 hectares is Rs. two crores the approximate expenditure per hectare would be Rs. 333. The expenditure would be with regard to upgrading the distribution system by construction of cross regulators, installation of measuring devices and improvement of field channels and related control structures.

Introduction of Warabandhi system in Ukai-Kakrapar Command area:—

1.6.2.33. It is proposed to introduce warabandhi in selected areas of Ukai Kakrapar project. The area proposed to be covered in Kakrapar is 8222 hectares and in Ukai 1200 hectares totalling to 9422 hectares in 1980-81. The work of upgrading the canals to the required

extent is also necessary so as to give water at F. S. I. in the entire system in one week/two weeks rotation period. It is proposed to incur the expenditure on establishment under plan. 50% central assistance is admissible under the scheme. The area under warabandhi is likely to be increased in the ensuing years. It is proposed to cover 50,000 hectares of area under warabandhi during the Sixth Plan period for which a provision of Rs. 46.50 lakhs is provided during the Sixth Five Year Plan.

Establishment of trial-cum-demonstration farms in Ukai-Damanganga Projects.

1.6.2.34. It is proposed to start four trial-cum-demonstration farms in command area of Ukai, Damanganga and Karjan project during the Sixth Plan. These T. C. D. farms are proposed on the lines of existing pattern of T. C. D. farm under Kakrapar project. It is proposed to procure 120 hectares of land for four T. C. D. farms. For construction of office building, laboratory building, staff quarters, purchase of agricultural equipments and for purchase of land etc., the provision of Rs. 53.60 lakh is made in the Sixth Five Year Plan. 50% central assistance is available and as such only state share is provided in the State Plan.

Strengthening of T. C. D. Farms.

1.6.2.35. There are sixteen T. C. D. Farms in the State. Most of them are situated in the command area of irrigation projects to carry out the trials and demonstrations of the research findings undertaken by the Gujarat Agricultural University. It is essential to conduct the trials of the findings by a well experienced and responsible manager and to demonstrate the same to the farmers of the area. A provision of Rs. 6.70 lakhs has been made during the Sixth Plan.

Establishment of New T. C. D. Farms in irrigation project.

1.6.2.36. The new medium irrigation projects are sanctioned. The construction of dams, canal system are initiated and in some of the projects irrigation potential is also created. The Narmada project is also initiated. It is necessary to establish trial-cum-demonstration farms in the command area of the projects well in advance according to

the climatic and soil conditions so as to find out the suitable crop pattern, water requirement methods of irrigation etc. for maximum utilisation of available water for sustained production. While proposing the T. C. D. Farms in different irrigation projects, the existing T. C. D. Farm and climatic soil conditions etc., of all the irrigation projects were considered. An amount of Rs. 89.40 lakhs has been proposed during the Sixth Plan period, of which Rs. 69.40 lakh has been provided for capital works.

Subsidy to Small and Marginal farmers:

1.6.2.37. This is a new scheme to be introduced during the Sixth Plan period. The State Government has decided to give subsidy to the small farmers upto 25 % of the expenditure incurred. The subsidy is 33% of the expenditure for marginal farmers. The Central Government has now suggested subsidy of 15 % of the expenditure to medium farmers. The expenditure on subsidy is shared with the Central Government in equal proportion. Presently, the entire expenditure is borne initially by the State Government. The benefit of subsidy is given at the time of recovery. An outlay of Rs. 80 lakhs is provided for subsidy for Sixth Five Year Plan. Under this scheme 1,20,000 farmers are likely to be benefitted during the plan period.

Special Loan Account for ineligible farmers:--

1.6.2.38. The O. F. D. works at present are being financed by the State Government. Attempts are being made to avail of institutional finance. This is likely to materialise within a couple of years. There would be certain category of farmers who would, however, not be willing to obtain loan from bank for O. F. D. works or would not be eligible for bank loans for a number of reasons such as title to land may not be clear, past default etc. A special loan fund account is, therefore, proposed to be opened and operated for giving loan for O. F. D. to such farmers. The Special Loan Fund Account would be, subscribed to by both the Central Government and the A. R. D. C. The outlay proposed for this purpose is Rs. 100.00 lakhs and it is expected that about 1170 farmers will be benefitted during the Sixth Plan Period.

STATEMENT

COMMAND AREA DEVELOPMENT

List of schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	No. and Name of the scheme	Sixth Five Year Plan 1980-85 outlays	
		Total	Capital
1	2	3	4
1. CAD-1	Establishment of Area Development Authority for Mahi-Kadana, Ahmedabad	20.00	..
2. CAD-2	Agricultural Support Programme for Kadana Project (J.D.A.'s Office).	12.50	..
3. CAD-3	Pilot Project for Soil and Water Management in Kadana Project.	5.50	—
4. CAD-4	On Farm Development Works in Area Development Authority of Mahi Kadana, Ahmedabad.		
	(1) Kadana Project.	16.00	..
	(2) Panam Project.	100.00	..
	(3) Kharicut Project.	14.00	..
	(4) Fatewadi Project.	14.00	..
	(5) Heran Project.	14.00	..
5. CAD-5	Training centre for Land Development and Water Management in Mahi Kadana Authority.	11.00	..
6. CAD-6	Water Management Area in Panam Project.	34.00	..
7. CAD-7	Warabandhi in Mahi Kadana Project.	55.00	..
8. CAD-8	Establishment of Area Development Authority for Saurashtra and North Gujarat Region, Gandhinagar.	17.00	..
9. CAD-9	Agricultural Support Programme for Shetrunji Project.	11.00	..
10. CAD-10	Pilot Project for Soil and Water Management in Shetrunji Project.	3.00	..
11. CAD-11	Establishment of Joint Director's Office at Gandhinagar.	9.00	..
12. CAD-12	On Farm Development Works in Saurashtra and North Gujarat region Area Development Authority, Gandhinagar.		
	(1) Shetrunji Project.	53.00	..
	(2) Dharoi Project.	140.00	..
	(3) Dantiwada Project.	64.50	..
	(4) Hathmati Project.	21.00	..
	(5) Meshwo Project.	20.50	..
	(6) Bhadar Project.	3.00	..
	(7) Machhundri Project.	18.00	..
	(8) Sukhbhadar Project.	18.50	..
	(9) Kalubhar Project.	17.50	..
	(10) Khodiar Project	25.50	..
	(11) Venu--II Project.	18.00	..
	(12) Machhu--I Project.	7.50	..
	(13) Sipu Project.	11.00	..
	(14) Watrak Project.	30.00	..

1	2	3	4
13.	CAD-13 Establishment of Area Development Authority Ukai Kakrapar Surat.	23.50	..
14.	CAD-14 Opening of regional Soil and Water Management Pilot Project at Bardoli.	10.30	..
15.	CAD-15 Pilot Project for reclamation of Khar Land in Surat and Valsad Districts.	40.45	19.00
16.	CAD-16 Ayacut Development Programme in Surat District.	3.00	..
17.	CAD-17 Bunglow for Area Development Commissioner, Surat.	0.70	0.70
18.	CAD-18 Staff quarters for Area Development Commissioner, Surat.	7.00	7.00
19.	CAD-19 Office Building for the Office of Area Development Commissioner and Joint Director of Agriculture, Surat.	14.30	14.30
20.	CAD-20 Establishment of workshop at Navsari.	20.00	2.70
21.	CAD-21 Operational Staff for Bulldoser for carrying out Soil conservation works in Ukai Kakrapar Command Area.	31.80	17.30
22.	CAD-22 Establishment of T.C.D. Farm in Ukai-Daman Ganga Project.	53.60	15.00
23.	CAD-23 Introduction of Warabandhi in Ukai-Kakrapar command area.	46.50	..
24.	CAD-24 On Farm Development works in Area Development Authority of Ukai Kakrapar, Surat.		
	(i) Ukai-Kakrapar Project.	130.00	..
	(ii) Karjan Project.	54.10	5.20
	(iii) Daman Ganga Project.	337.75	180.75
25.	CAD-25 Strengthening of TCD Farms.	6.70	..
26.	CAD-26 Construction of Residential Buildings and Shed and Works in progress.	20.05	20.05
27.	CAD-27 Popularisation of improved Agril. implements.	4.30	..
28.	CAD-28 Ayacut Development Programme in Irrigation Projects of seven districts of the State.	11.30	..
29.	CAD-29 Irrigation Demonstration in the medium irrigation projects.	8.25	..
30.	CAD-30 Establishment of new T. C. D. Farms in Irrigation Projects.	89.40	69.40
31.	CAD-31 Subsidy to small and marginal farmers.	80.00	..
32.	CAD-32 Special loan account for ineligible farmers.	100.00	100.00
		1877.00	451.40

1.7 ANIMAL HUSBANDRY

1.7.1. Introduction :

1.7.1.1. Animal Husbandry plays a very important role in the agricultural economy of the State. Cattle and buffaloes are the main source of draught power in the agricultural operations and rural transportation. They provide essential foods of animal origin like milk and meat. Large quantities of animal by products are also provided by these animals. For many years to come, bullock and buffalo will continue to be the main stay of agricultural operations, particularly for small and marginal farmers. Even in future, despite the impact of modernisation, a large portion of motive power of rural transportation will be bullock-based. As cattle and buffalo raising involves intensive use of labour usually on the part of the members of a family more than any other enterprise, it offers very significant employment and income opportunities to the small and marginal farmers and agricultural labourers. A very large portion of female labour force finds scope for fuller employment in several operations connected with cattle and buffalo rearing.

1.7.1.2. Gujarat is endowed with very good livestock wealth. The livestock population as per 1972 and 1977 census is as under :-

(Figures in '000)

Sr. No.	Category	1972 Census	1977 Census (Provisional)
1	Cows above 3 years	1811	1695
2	Buffaloes above 3 years.	2047	2121
3	Sheep and Goats	4931	4658
4	Total Livestock	15088	14374
5	Poultry	2736	3377

The important breeds of cattle are Gir and Kankrej which are dual purpose breeds. Amongst buffaloes, Surti, Mehsani and Jafrabadi are important milch breeds. The average milk yield per day per cow was 2.12 litres and for buffalo, it was 3.36 litres as estimated from survey data during 1977-78. The total milk production during 1977-78 was estimated to be 20.25 lakh tonnes. The important breeds of sheep in the State are Patanwadi and Marwadi. Patanwadi sheep produces medium to fine variety of wool, whereas Marwadi sheep produces coarse grade wool suitable for carpet manufacture. The annual production of wool was estimated to be 18.19 lakh kgs. during 1977-78. The annual egg production was of the order of 198 millions by the end of 1977-78.

1.7.1.3 Having regard to the need for increasing the contribution of Animal Husbandry coupled with Dairying to the national income and also keeping in view the increasing shift in demand from cereal to livestock products, particularly from nutrition point of view and above all, in light of unquestionable utility of this sector in improving the economy of the small farmers and agricultural labourers, considerable stress is required to be laid on fulfilling developmental needs.

1.7.2. Review of Progress :

1.7.2.1 At the commencement of the Fifth Plan, there were 211 veterinary hospitals/dispensaries, 6 intensive cattle development blocks, 5 cattle breeding farms, 70 sheep extension centres, 2 sheep breeding and marketing centres, 9 poultry breeding farms (expansion) and 3 intensive poultry development projects.

1.7.2.2 During the Fifth Plan and thereafter the main thrust under the cattle development programme was on cross-breeding of local non-descript cows with high yielding exotic bull semen of Holstein, Friesian and Jersey breeds for enhancement of milk production. To give impetus to this programme, one LN2 plant has been installed at Rajkot. Action for installation of one more LN2 plant in South Gujarat was initiated during 1979-80. Till the end of the year 1979-80, 83906 artificial inseminations were performed under this programme. Six units for cross-breeding programme in non-ICDP areas in the districts of Valsad, Bharuch, Vadodara, Sabarkantha, Ahmedabad and Kachchh have been established.

1.7.2.3 The incomplete intensive cattle development blocks of the districts of Ahmedabad, Sabarkantha and Surat were expanded to make them full-fledged blocks. In addition, two new blocks were also established in the districts of Junagadh and Banaskantha with 40 livestock sub-centres each. There are 605 sub-centres functioning in the State under I.C.D. Blocks. Four cattle breeding farms were taken up under expansion programme for providing additional facilities, such as land development, purchase of cows, construction of farm buildings, equipments, machineries etc.

1.7.2.4 Under the integrated gaushala development programme, 63 gaushalas have been assisted to take up scientific cattle breeding activities. Action for establishment of a buffalo bull mother farm near Gandhinagar has been initiated. Under special development programme, rearing of 558 cross-breed heifers has been subsidised till 1979-80. Under the Tribal Area Sub-Plan, 11176 milch animals were supplied at 50 percent subsidised rate to the Adivasis for supplementing their source of income till the end of 1979-80.

1.7.2.5. Under the poultry development programme, during the Fifth Plan 1974-78, 6 new intensive poultry development projects were established at Valsad Vyara (Surat), Dohad (Panchmahals), Vadodara, Valia (Bharuch) and Himatnagar (Sabarkantha). In addition, 4 district poultry extension centres in the districts of Dangs, Banaskantha, Kachchh and Bhavnagar were also established to promote poultry production till 1979-80. National coordinated poultry breeding programme has been undertaken at Makarba (Ahmedabad) as per the technical programme advocated by the Central Government for evolving high laying strains of chicks and the same is being continued. Under the special development programme, 9185 poultry units, each of 50 birds have been established to assist the small and marginal farmers and agricultural labourers till the end of 1979-80.

1.7.2.6. For providing residential facilities to poultry trainees, construction of hostel buildings at Makarba (Ahmedabad), Junagadh, Surat, Chanvai (Valsad), Dohad (Panchmahals) and Himatnagar (Sabarkantha) have been undertaken. Another significant development in poultry production programme is the establishment of Gujarat State Cooperative Poultry Farmer's Federation Ltd. during the year 1978-79 for providing better marketing of eggs and poultry.

1.7.2.7 Under the sheep and wool development programme, two intensive sheep development blocks were established at Bhuj (Kachchh) and Bhavnagar for the augmentation of wool production both qualitatively and quantitatively. Similarly, 2 district sheep and wool extension units have been established in the districts of Banaskantha and Jamnagar with 8 extension centres each. The existing district extension unit at Rajkot has been expanded by adding 2 more extension centres. Thus, there are 88 sheep extension centres functioning in the State. Under the special development programme, assistance was given for the establishment of 984 sheep units till the end of 1979-80. Gujarat Sheep and Wool Development Corporation has been provided the share capital contribution to undertake its activities.

1.7.2.8. Under the veterinary services and animal health programme, during the Fifth Plan, 15 veterinary dispensaries were modernised. 5 first aid veterinary centres and 10 veterinary mobile units were established. By the end of 1979-80, 5 more dispensaries were modernised, 3 first aid veterinary centres and 3 mobile units were also established. The expansion of Biological Product Station (Animal Vaccine Institute) at Gandhinagar has also been undertaken. The institute has started manufacturing H. S. (A.P.) vaccine. By now, the institute has produced 5 lakh doses of vaccine (till 1979-80). Experimental productions of B.Q. and E.T. vaccines have also been undertaken. Under disease control programme, 2 epidemiology units—one for foot and mouth disease and another for other diseases are

functioning in the State. Under the foot and mouth disease control programme about 1.52 lakh doses of vaccine were utilised till 1979-80. Under the scheme for training of departmental personnel, the department has already deputed 8 officers for M.V.Sc. and 2 officers for post-graduate diploma training.

1.7.2.9. The programme of expansion of horse breeding farm at Junagadh and camel breeding farm at Dhori (Kachchh) has also been undertaken. Under rabari bharwad rehabilitation scheme, 35 multi-purpose societies and 22 vasahat societies have been assisted by the end of 1979-80. Integrated fodder development programme has been undertaken from 1977 under which assistance is provided for 1911 demonstration plots, 46 chaff cutters, 39 silos etc., till the end of 1979-80. Under the fodder development programme, 494 gauchar plots under panchayats have been taken for gauchar development. Similarly, in 1100 acres, grassland improvement work has been undertaken in Banni area of Kachchh district. The grass production farm alongwith the buffalo bull mother farm near Gandhinagar is also proposed to be continued.

1.7.3. Strategy of Development

1.7.3.1. The essential elements of the strategy are: (1) To improve the productive potential of livestock and poultry, weed out inferior and uneconomic and surplus animals and arrange for provision of feeds and fodder for the productive stock. Improved animal husbandry practices and better health cover form important component of the strategy. The policy is to adopt scientific methods of cross breeding of cattle to provide adequate feeds and fodder and animal health cover and to improve management practices. (2) Large scale cross-breeding programme by using exotic breeds of sheep is also undertaken for rapid increase in quality wool production. (3) The policy in poultry development is to attain self sufficiency in production of quality chicks and to augment production of eggs and poultry meat. (4) In the field of animal health, the strategy is to develop an effective service and to keep live stock free from hazards of animal diseases for ensuring optimum production.

1.7.4 Programme for the Sixth Plan 1980-85.

1.7.4.1. Consistent with the strategy referred to above the broad programme contents of the Sixth, Five Year Plan, 1980-85 would be:—

(1) An overall scientific development of cattle and buffalo for increased production of milk from 22.00 lakh tonnes at the end of 1979-80 to 26.40 lakh tonnes by the end of 1984-85.

(2) Increasing wool production from 18.34 lakh kgs. in 1979-80 to 21.00 lakh kgs. till the end of 1984-85.

(3) Increasing egg production from 240 millions in 1979-80 to 360 millions till the end of 1984-85.

(4) Development of horses and camels by providing necessary service centres and;

(5) Strengthening of veterinary services and disease control programme.

1.7.4.2. An outlay of Rs. 1770 lakhs is proposed for the Sixth Five Year Plan 1980-85. The bulk of the outlay is provided for the programmes of cattle development, poultry development, sheep and wool development and veterinary services and animal health programmes. The programmewise details are as under.

(Rs. in lakhs.)		
Sr. No.	Programme	1980-85 Proposed Outlay
1	2	3
1	Direction and Administration.	70.00
2	Veterinary Education and Research	12.00
3	Veterinary Services and Animal Health.	271.00
4	Investigations and Statistics.	18.00
5	Cattle Development.	663.00
6	Poultry Development.	431.00
7	Sheep & Wool Development.	214.00
8	Other Livestock Development	41.00
9	Feeds and Fodder Development.	50.00
Grand total		1770.00

Direction and Administration

1.7.4.3. The objective of this programme is to strengthen the organisation of the Department to cope up with the increased work-load for better administration and monitoring of the departmental activities at various levels. It is proposed to strengthen the planning cell, marketing cell and poultry branch of this Department by providing additional staff. It is also envisaged to strengthen the Offices of the District Animal Husbandry Officers by providing additional staff and other facilities.

The Government have also accorded sanction for the construction of office building 'Pashupalan Bhavan' at Ahmedabad. An outlay of Rs. 70 lakhs is proposed for the Sixth Plan 1980-85.

Veterinary Education and Research

1.7.4.4. Looking to the development and advancement in the field of veterinary and dairy sciences, it is necessary to train veterinary/dairy science graduates in various specialised fields in order to equip them with the advance knowledge. It is proposed to provide post-graduate diploma-training, M.V.Sc. degree and Ph.D. degree to 15, 25 and 2 Officers respectively and training abroad to 2 Officers during the the plan period 1980-85. An outlay of Rs. 12 lakhs is proposed for the Sixth Plan 1980-85.

Veterinary Services and Animal Health

1.7.4.5 Adequate health cover measures are to be ensured to improve the production capacity of livestock. During the Sixth Plan, it is envisaged to strengthen the veterinary services by opening 9 veterinary dispensaries and 80 first aid veterinary centres (including 40 under T.A.S.P.), 9 mobile veterinary units, 2 poly-clinics and 1 State Level Disease Investigation Laboratory at Gandhinagar. In addition, it is also envisaged to establish 8 health control units in tribal areas for providing useful diagnosis, treatment and guidance to the cattle owners. During the Sixth Plan, the Animal Vaccine Institute envisages manufacturing of important vaccine like H.S., B.Q., enterotoxaemia, Ranikhet disease, antirabic, fowl pox vaccines etc., in a phased manner. It is proposed to construct the building of Tissue Culture Laboratory. Under the disease control programme of foot and mouth diseases, it is proposed to purchase about 2.00 lakh doses of vaccine for protection of valuable animals during 1980-85. An outlay of Rs. 271 lakhs is proposed for the Sixth Plan 1980-85.

Investigation and Statistics

1.7.4.6 The State Government has undertaken the work of intergrated survey of livestock and livestock products on yearly basis. Further, as per recommendations of the All India Workshop on Animal Husbandry and Dairying Statistics, it is necessary to undertake the schemes for the estimation of structure and indices of cost of production of livestock products, feeds and fodder and monitoring and assessment of livestock development programme. An outlay of Rs. 18 lakhs is proposed for the Sixth Plan 1980-85.

Cattle Development

1.7.4.7 During the Sixth Plan 1980-85, it is envisaged to perform about 4.00 lakh artificial inseminations under cross breeding programme. A frozen semen bank is also proposed to be established at Rajkot.

The State has established 8 intensive cattle development projects (ICDP) for enhancement of milk production by coordinating all the related aspects of breeding, feeding, management, dairy extension, marketing etc., in the milk shed areas. Out of these 8 projects, 4 projects at Kheda, Ahmedabad, Sabarkantha and Mahesana are full-fledged projects. The remaining 4 projects at Vadodara-Bharuch, Rajkot, Banaskantha, and Junagadh are still incomplete. During the Sixth Plan, it is envisaged to complete these 4 projects. It is envisaged to establish a new I.C.D. project covering Amreli-Bhavanagar districts. It is also envisaged to establish 15 livestock production centres for providing necessary extension services under the Tribal Area Sub-Plan during Sixth Plan 1980-85. The State had four cattle breeding farms at Morvi, (now being shifted to Bhutwad in Dhoraji taluka of Rajkot district,) Bhuj, Thara and Mandvi. The farm at Morvi is for Gir cattle whereas the farm at Mandvi (Surat) is for cross-breed animals. On an average, each farm maintains about 75 adult animal units. In order to take up progeny testing work, it is envisaged to increase the number of adult animals to 200 each so as to have tangible results.

1.7.4.8. In Gujarat, there are quite a good number of cattle breeding institutions/gaushalas which are engaged in cattle development work. The Government have introduced a new scheme of providing assistance to the institutions known as "Integrated Gaushala Development Programme". During the Sixth Plan, it is proposed to extend the benefit of this scheme to about 36 institutions. The scheme for supply of milch animals is being implemented through the Gujarat Tribal Development Corporation under the Differential Rate of Interest scheme. The beneficiaries are provided 50% subsidy for purchase of milch animals. During the Sixth Plan 1980-85, it is envisaged to assist the tribals for purchase of 19,500 milch animals. Similar scheme has also been introduced for the benefit of the scheduled caste members of the society and it is envisaged to assist the beneficiaries for purchase of 3333 milch animals during 1980-85. The scheme is proposed to be implemented through the Gujarat Scheduled Castes Economic Development Corporation. Necessary credit facilities will be made available by the Corporation to the beneficiaries. Under the scheme, it is also envisaged to assist the scheduled castes for construction of cattle sheds and purchase of fodder for their animals. Similarly other backward class members of the society as declared under 'Baxi Panch Award' are also proposed to be assisted for purchase of 560 milch animals during 1980-85.

1.7.4.9. A centrally sponsored scheme to assist SF/MF/ALS for rearing of crossbred heifers is proposed to be continued during the Sixth Plan. It is envisaged to assist rearing of 3700 cross-breed heifers during 1980-85.

1.7.4.10. There are good number of ashramshalas in the adivasi areas who are maintaining small dairy units. It is envisaged to assist such 6 ashramshalas for establishing/providing cattle breeding cum dairy farming units (demonstration units) in the adivasi areas. About 575 tribal beneficiaries are proposed to be provided short term training with animal husbandry practices during the Sixth Plan period.

1.7.4.11. An outlay of Rs. 633 lakhs is proposed under this programme for the Sixth Plan 1980-85.

Poultry Development

1.7.4.12. Main thrust under this development programme is on strengthening the infrastructural facilities and providing assistance to the weaker sections of the society for augmentation of eggs and poultry production in the State. There are 9 Intensive poultry development blocks (I.P.D.B.) in the State. During the Sixth Five Year Plan, it is proposed to establish 3 more blocks in the districts of Kheda, Mahesana and Rajkot. As the poultry production programme is to be launched on a very big scale in the coming years, it is proposed to strengthen the existing I.P.D.Bs. and district poultry extension centres by establishing 135 poultry service centres during 1980-85.

1.7.4.13. During the plan period 1980-85, it is envisaged to assist 4,000 beneficiaries for establishment of 8000 poultry units under special development programme. It will be ensured that at least 7% of the benefit will flow to the Scheduled Caste people. Similarly under the Tribal Area Sub-Plan, it is envisaged to assist 4025 beneficiaries for establishment of 8050 poultry units during 1980-85. Under this production programme other weaker sections are also proposed to be assisted for establishment of 600 poultry units. Thus, under this poultry production programme, in all, 8625 beneficiaries are proposed to be assisted for the establishment of 16650 poultry units. Under the poultry production programme necessary credit facilities will be made available to the beneficiaries of the weaker sections. It is proposed to train about 10,000 poultry farmers during the Sixth Plan and necessary stipend to the trainees will be provided during the period of training. The State has also established a State Poultry Farmers' Co-operative Federation Ltd. for better marketing of eggs and poultry. The activities of the Federation will be expanded during the Sixth Plan period by linking the poultry farmers' cooperative societies organised during the Plan period.

1.7.4.14 An outlay of Rs. 431 lakhs is proposed under this programme for the Sixth Plan 1980-85.

Sheep and Wool Development

1.7.4.15 There is sizeable sheep population in Gujarat. 88 Sheep extension centres and two intensive sheep development blocks have been established in the State for providing necessary extension services to the shepherds. It is envisaged to establish two more I. S. D. Blocks in the districts of Rajkot and Banaskantha and two more sheep extension units having 14 sub-centres in the districts of Rajkot and Mahesana-Sabarkantha (composite). Four service centres for migratory sheep flocks are also proposed to be established during the plan period 1980-85 at Aliabet (Bharuch), Modasa (Sabarkantha), Viramgam (Ahmedabad) and Chotila (Surendranagar)

1.7.4.16 The scheme of cross-breeding of local Patanwadi sheep breeds with Russian Merino rams is to be continued. For this purpose, establishment of one more large scale sheep breeding farm in Bhavnagar district and establishment of 12 centres for cross-breeding are proposed in the districts of Kachhh, Bhavanagar and Jamnagar during the Sixth Plan period. It is proposed to establish one wool grading centre at Mahuva (Bhavnagar) or Deesa (Banaskantha) for marketing of wool during the plan period. Under special development programme (centrally sponsored scheme), it is proposed to assist the beneficiaries of the weaker sections for establishment of 3800 sheep units during 1980-85 Plan. Necessary credit facilities will be provided to the beneficiaries from the financial institutions through the respective implementing agencies. It is also proposed to expand wool analysis laboratory established at Morvi to enable to analyse 8000 wool samples during the Sixth Plan 1980-85. Necessary share capital contribution is also proposed to be provided to Gujarat Sheep and Wool Development Corporation for undertaking its activities. It is also proposed to establish one goat breeding farm with a view to increase the production level of milk in the indigenous breeds by infusing exotic blood from dairy breeds of goats.

1.7.4.17 An outlay of Rs. 214 lakhs is proposed under this programme for the Sixth Plan 1980-85.

Other Livestock Development

1.7.4.18 It is proposed to locate 4 horse breeding centres and 4 camel breeding centres for providing natural services. It is also proposed to establish one more horse breeding farm during the Sixth Plan. The programme of modernisation of slaughter houses at Ahmedabad, Vadodara and Surat is also proposed with a view to provide wholesome and hygienic meat for public consumption. It is also proposed to assist the Maldharies (Gopalaks) for the organisation of 13 multipurpose societies, 12 vasahats and 2 taluka gopalak sanghs during the Sixth Plan. An outlay of Rs. 41 lakhs is Proposed for the other

livestock development programmes for 1980-85 Sixth Plan.

Fodder and Feed Development

1.7.4.19. It is proposed to take up the integrated fodder development programme comprising of 18200 demonstration plots, 123 silo pits, 696 chaff cutters and seed multiplication work in 500 hectares during 1980-85 Plan. It is also envisaged to take up grass land development in 1150 hectares of land; possession of gaushalas and such other institutions during the plan period. Establishment of three village fodder development farms is also envisaged during the plan period 1980-85. An outlay of Rs. 50 lakhs is proposed under this programme for the Sixth Plan 1980-85.

1.7.5 Centrally Sponsored Schemes

1.7.5.1. The following four centrally sponsored schemes and one I.C.A.R. scheme are proposed to be continued during the Sixth Plan period 1980-85.

1. Assistance to SF/MF/ALS for poultry/sheep and pig production programme.
2. Assistance to small farmers for cross-breed heifers.
3. Rinderpest Eradication.
 - (a) Establishment of vigilance unit.
 - (b) Rinderpest surveillance and containment vaccination programme.
4. Disease control programme for foot and mouth disease and;
5. I.C.A.R. Scheme :- All India Coordinated Research Project for Study of Foot and Mouth Disease.

1.7.6.1 There is a good scope for increased employment generation under the Animal Husbandry programme. It has been estimated that the animal husbandry programmes will generate direct employment for about 1996 persons during the Plan period. In addition, it is also estimated that there will be indirect employment as a result of the following beneficiary oriented programmes.

<u>Sr. No.</u>	<u>Item</u>	<u>1980-85 No. of (beneficiaries)</u>
1	Assistance for rearing of cross-breed heifers.	3530
2	Supply of milch animals.	23390
3	Establishment of poultry units.	8650
4	Establishment of sheep units.	3700
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1.7.6.2 Thus, animal husbandry programme will benefit substantially a large number of weaker people in the economic activities during the plan period 1980-85.

STATEMENT
ANIMAL HUSBANDRY

List of schemes included in the Sixth Five Year Plan 1980-85.

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme	Sixth Plan 1980-85 Outlays.	
		Total	Capital
1	2	3	4
I. Direction and Administration			
	1. ANH-1. Expansion of Directorate of Animal Husbandry.	70.00	45.00
	Total:—I.	70.00	45.00
II. Veterinary Education and Training			
	2. ANH-2. Development of Departmental Personnel.	12.00	..
	Total:—II.	12.00	..
III. Veterinary Services and Animal Health			
	3. ANH-3. Improvement of Veterinary Aid.	176.00	65.00
	4. ANH-4. Disease Control Programme.	50.00	4.21
	5. ANH-5. Strengthening of Biological Products Station.	45.00	10.60
	Total:—III	271.00	79.21
IV. Investigation and statistics			
	6. ANH-6. Strengthening of Statistical Wing.	15.00	..
	7. ANH-7. Estimation of Structure and Indices of Cost of Production of Livestock Products.	3.00	..
	8. ANH-8. Estimation of Area and Production of Feed and Fodder.		
	9. ANH-9. Establishment of Livestock Census cell in the Animal Husbandry Department.		
	10. ANH-10. Monitoring and Assessment of Livestock Development Programme in the field of Animal Husbandry and Dairying.		
	Total:—IV.	18.00	..
V. Cattle Development			
	11. ANH-11. Artificial Insemination Scheme with Semen bank and Stud Farm.	85.30	20.00
	12. ANH-12. Intensive Cattle Development Programme.	120.00	6.00
	13. ANH-13. State Farm for Gir and Kankrej Cattle.	45.00	12.00
	14. ANH-14. Buffalo Bull Mother Farm.	20.00	10.00
	15. ANH-15. Subsidy to cattle breeding Institutions and Gaushalas.	80.00	..
	16. ANH-16. Supply of milch animals in Tribal Area.	240.70	..
	17. ANH-17. Locations of Cross-bred bulls in Tribal Areas.	12.00	1.00
	18. ANH-18. Progeny testing Scheme in co-operation with Cattle Breeding Institutions and Gaushalas.	2.00	..
	19. ANH-19. Training of Adivasis in Animal Husbandry Practices.	10.00	7.00
	20. ANH-20. Establishment of cattle Breeding-cum-Dairy Farming Centres at Ashramshalas.	3.00	..
	21. ANH-21. Assistance to Small Farmers for Cross-bred Heifers.	25.00	..
	22. ANH-22. Establishment of Livestock Production Centres in Tribal Areas.	20.00	10.00
	Total : V.	663.00	66.00

1	2	3	4
I. Poultry Development			
23.	ANH-23. Farmer's Training.	24.00	12.00
24.	ANH-24. Coordinated Poultry Breeding Programme.	43.00	16.00
25.	ANH-25. Expansion of Poultry Feed-Testing Laboratory.	4.00	2.00
26.	ANH-26. Intensive Poultry Development Projects.	120.00	50.00
27.	ANH-27. State Egg Marketing Federation.	20.00	12.90
28.	ANH-28. Development of Economically Weaker Sections of the society by taking to Poultry Farming.	140.00	..
29.	ANH-29. Integrated Poultry Development Programme.	80.00	..
Total VI:—		431.00	92.90
II. Sheep and Wool Development			
30.	ANH-30. Intensive Sheep Development Blocks.	80.00	2.94
31.	ANH-31. Pig Breeding Farm.	0.20	0.20
32.	ANH-32. Strengthening of Sheep Breeding Farms at Patan and Morvi.	4.00	..
33.	ANH-33. Supervisory Unit for sheep Extension Centres.	18.00	0.80
34.	ANH-34. Service centres for Migratory flocks.	25.00	8.00
35.	ANH-35. Wool Grading Centres.	8.00	3.00
36.	ANH-36. Share Capital Contribution to the Gujarat Sheep and Wool Development Corporation.	11.00	11.00
37.	ANH-37. Wool Utilisation Unit.	..	..
38.	ANH-38. Audio-visual Aid.	4.00	..
39.	ANH-39. Modernisation of Wool Analysis Laboratory.	4.00	..
40.	ANH-40. Sheep Breeders Co-operative Societies.	20.00	20.00
41.	ANH-41. Large Scale sheep breeding Farms.	21.00	5.00
42.	ANH-42. Formation of Wool Board.	..	..
43.	ANH-43. Establishment of Goat Breeding Farm.	8.00	2.00
44.	ANH-44. Location of Exotic Cross-breed rams.	10.80	2.90
Total VII:—		214.00	55.84
Other Livestock Development			
45.	ANH-45. Expansion of existing Exhibition Unit.	3.00	..
46.	ANH-46. Expansion of Horse Breeding Farm.	11.00	5.00
47.	ANH-47. Expansion of Camel Breeding Farm.	4.00	1.00
48.	ANH-48. Rabari Bharwad Rehabilitation Scheme.	15.00	12.00
49.	ANH-49. Modernisation of Slaughter Houses	5.00	5.00
50.	ANH-50. Financial Assistance to Cattle Market.	2.00	1.30
51.	ANH-51. preservation of Milch animals (Expansion Programme)	1.00	..
Total : VIII.		41.00	24.30
Fodder and Feed Development.			
52.	ANH-52. Feed and Fodder Development Programme.	50.00	..
Grand Total-(I to IX)		1770.00	363.25

1.8 DAIRY DEVELOPMENT

1.8.1. Introduction :

1.8.1.1. Gujarat is one of the foremost States in the country in the field of dairy development. The State has covered a lot of mileage since 1948 when the first dairy was established at Anand. Today, it has 18 dairies-one in each district of the State except Dangs. Even Dangs will get a dairy by the end of 1981-82.

1.8.1.2. Dairying is one of the enterprises that has tremendous potential for gainful and productive employment of the rural population. It can provide a source of ancillary income to the rural poor.

1.8.1.3. There are 14 dairies under organised sector and 5 dairies under construction as shown in the appended Statement. These dairies have covered 6200 milk/Cooperative Societies having 804815 members. Out of these, 35 to 40 % are small and marginal farmers, landless agricultural labourers including members of Scheduled Castes and Scheduled Tribes.

1.8.1.4. Four dairy plants are being established in the districts of Valsad, Gandhinagar, Surendranagar and Bhuj (Kachchh). During the Sixth Five Year Plan, 1500 more societies are being organised and 9.00 lakh milk producers will be covered. In the remaining district of Dangs, Cooperative village milk societies have been formed and milk is being supplied to Sumul Dairy, Surat.

1.8.1.5. The Milk Producers are being financed to purchase milch animals under different special programmes like D.P.A.P., S.F.A.L., I.R.D. and different institutions like Tribal Development Board, Social Welfare Board and Scheduled Caste Economic Development Corporation etc. Milch animals are also being supplied under tribal area sub-plan through Animal Husbandry department as detailed below :—

Year	No. of milch animals supplied.	Subsidy disbursed Rs.
1977-78	866	8,66,000
1978-79	924	9,24,000
1979-80	13,822	1,38,22,000

1.8.2. Review of Progress

1.8.2.1. At the end of the year 1979-80, 5 milk product factories and 9 liquid milk plants with an installed capacity of 20.28 lakh litres/day and the milk handling capacity of 17.32 lakh litres/day were in operation (*vide* Annexure-I). About 6200 primary co-operative societies covering more than 7.50 lakh milk producers have supplied the milk to the unions. Seven cattle feed factories with an installed capacity of 900 tonnes per day have also been established.

Operation Flood Programme-I

1.8.2.2. The Government of India with the assistance of World Food Programme of United Nations launched 'Milk Marketing and Dairy Development Scheme' known as "Operation Flood Programme". The project report was prepared by the National Dairy Development Board, Anand and approved by the Government of India. This project was started in July-1970 and six districts namely Kheda, Mahesana, Banaskantha, Sabarkantha, Vadodara and Ahmedabad were covered for the installation/expansion of feeder dairies and chilling centres. Dairy projects of Mahesana and Kheda were expanded from 3.5 to 5 lakh litres/day and from 5 to 7 lakh litres/day respectively and two new dairies at Palanpur and Himatnagar were established to handle 1.5 lakh litres/day each. In addition to this cattle feed plants at Palanpur and Himatnagar were installed and cattle feed plants at Kheda and Mahesana were expanded. Technical inputs, artificial insemination and grass land development facilities were also provided to the members of societies in these districts. An amount of Rs. 18.14 crores has been paid to the above district cooperative milk producers' union by the end of 1979-80. The programme is expected to be continued upto March, 1981.

Operation Flood Programme-II

1.8.2.3. This programme has been commenced from 22nd October, 1979 in India. In Gujarat State, out of 1 districts, 19 districts (except Amreli, Bhavnagar and Dangs) are covered and the two proposed clusters. Cluster-I comprises districts of Banaskantha, Sabarkantha, Kheda, Mahesana, Panchmahals, Vadodara, Surat, Bharuch and Valsad. This project will be implemented by Gujarat Co-operative Milk Marketing Federation. The Cluster-II comprises districts of Kachchh, Jammagar, Surendranagar, Junagadh, Rajkot, Ahmedabad and Gandhinagar. This Cluster-II project will be implemented by Gujarat Dairy Development Corporation.

1.8.3. Objective and Strategy for the Sixth Plan

1.8.3.1. The main considerations kept in view while formulating the Dairy Development Programmes for the 1980-85 Plan are:—

1. To ensure economic uplift of the weaker sections by encouraging them to take up dairying as a means of increasing their income;
2. To increase the milk production by providing technical inputs to make all dairy plants economically viable.
3. To increase the actual milk handling capacity from around 17 lakh litres a day to 20 lakh litres a day; and
4. To establish 4 liquid milk plants, 6 instant milk cooling centres and 10 chilling centres to cover more milkshed areas.

1.8.4. Programmes for the Sixth Plan, 1980-85.

1.8.4.1. An outlay of Rs. 205.00 lakhs is proposed for the Sixth Plan; the broad break-up of which is as under:—

	(Rs. in lakhs)
1. Dairy Development.	195.00
2. Education, Research and Training.	6.00
3. Direction and Administration.	4.00
	205.00

Financial assistance to District Cooperative Milk Producers' Unions and Feeder Societies.

1.8.4.2. Under the scheme, financial assistance will be given to district cooperative milk producers unions to establish/expand the dairies, chilling centres and cooling units. A subsidy at 30% will be given by the State Government and 70% loan will have to be obtained from the nationalised banks. In case of tribal area, 50% subsidy will be given by State Government to the unions and 50% loan will be obtained from the nationalised banks. In addition financial assistance will also be given to primary cooperative milk societies for purchase of cans, utensils etc. @Rs. 2000/- each and for managerial subsidy @Rs. 100/- per month per society for two years in tribal area.

1.8.4.3. An outlay of Rs. 60 lakhs has been proposed for the financial assistance to district cooperative milk producers' unions for the expansion/establishment of dairies/chilling centres. District cooperative milk unions which are not covered under Operation Flood Programme-II will be

assisted. It is estimated that about 800 primary cooperative societies will be formed in the milkshed areas of the district unions and the dairies under Gujarat Dairy Development Corporation would supply milk to the organised dairy plants. The scheme will benefit small and marginal farmers, agricultural labourers and the tribal areas.

1.8.4.4. There are some towns in the State where it is not possible to establish dairies. It will ultimately be possible to meet the demand of such towns by bringing surplus milk from the established dairies. Consumers cooperative societies will be established to take up this activity. The societies will make their own arrangements for storage and distribution. Three such societies are proposed to be established during the plan period. Rs. 5 lakhs have been proposed to be given as financial assistance to consumers cooperative societies. The consumers of such towns will get the pasturised milk & milk products of the dairies at a reasonable rate.

Banni Development Scheme.

1.8.4.5. The area of Banni lies on Northern side of main land of Kachchh. It has reclaimed alluvial flat area of 328 sq. miles with a population of about 11,000. It is mostly inhabited by nomadic cattle breeders having good number of milch cattle of superior quality. The cattle owners depend only on livestock and their products. Banni area of Kachchh is well known for its pasture land. In every five years, three years are of famine resulting in scarcity of water and fodder. It is, therefore, desirable to take grassland development, water storage, afforestation, poultry development, construction of reclamation dam in this area. During the Sixth Five Year Plan, Rs. 20.00 lakhs have been proposed to collect 5000 kgs. of grass seeds and land development in 2500 hectares.

1.8.4.6. Besides, it is proposed to set up milk producers' co-operative societies in villages of Banni as part of Operation Flood-II through which milk would be collected and sent to the dairy being established at Bhuj by the Gujarat Dairy Development Corporation.

Share Capital Contribution to Gujarat Dairy Development Corporation Limited, Gandhinagar.

1.8.4.7. Government has formed Gujarat Dairy Development Corporation with an authorised share capital of Rs. 200 lakhs in the year 1973. The main objectives of the Corporation are:—

- (1) To set up dairies/chilling centres/cattle feed factories in milkshed areas.
- (2) To develop existing weak dairies and to administer the dairies that are not economically viable.

(3) To encourage organisation of primary milk societies on cooperative basis.

(4) To hand over dairies set up or developed by the Corporation to district cooperative milk unions, when they are economically viable.

(5) To look after collection and marketing of milk economically.

(6) To evolve working arrangement with the existing milk unions within Gujarat Milk Grid and;

(7) To take all such measures as may be necessary for fulfilment of the aforesaid objectives including sale and purchase of equipments, materials and construction of buildings/plants etc.

1.8.4.8. By the end of 1979-80, share capital of Rs. 339.38 lakhs has been paid and an amount of Rs. 50.00 lakhs is proposed to be paid during the Sixth Plan period.

Operation Flood Programme—II.

1.8.4.9. Operation Flood-II programme, in Gujarat State, has already commenced in October 1980. This programme is estimated at a cost of Rs. 57.19 crores comprising of Rs. 41.56 crores in Cluster-I and Rs. 15.63 crores in Cluster-II. To supplement this programme, it is likely that there will be State commitments to Operation Flood-II programme for which a provision of Rs. 10.00 lakhs is proposed in the Sixth Five Year Plan.

Financial assistance to District Cooperative Milk Producers Unions/G.D.D.C. for Milk Rooms, Spear Head Team, Transport Subsidy etc.

1.8.4.10. It is proposed to finance district co-operative milk producers' unions/G.D.D.C. for construction of milk rooms at society level where the milk from the members will be collected and samples tested and the milk despatched to the dairy. Cattle feed, cans etc. will be stored at milk rooms. Similarly the unions/G.D.D.C. will be financed for the

spear head team for milk enhancement programme. It is also proposed to finance the unions/G.D.D.C. in transport subsidy so that more societies can be formed and more milk is collected.

1.8.4.11. It is proposed to finance Rs. 50.00 lakhs to district co-operative milk producers' unions/G.D.D.C. during the Sixth Five Year Plan.

Strengthening of Organisation

1.8.4.12. The major portion of the funds allocated for dairy development in the State is placed at the disposal of Registrar of Cooperative Societies and Gujarat Dairy Development Corporation. It is necessary that the dairy section of the Directorate is strengthened to plan, scrutinise, guide, coordinate, monitor and maintain the liaison with other concerned agencies viz., Gujarat Dairy Development Corporation, Gandhinagar, National Dairy Development Board, Anand, Gujarat Agricultural University and Government of India. It is therefore, proposed to strengthen suitably the organisational out put during the Sixth Plan period. An outlay of Rs. 4 lakhs is proposed for the Sixth Plan 1980-85 for this programme.

Technician's Training Centre, Mahesana (Grant-in-aid to National Dairy Development Board, Anand)

1.8.4.13. This important project which was started during the Fifth Plan period is to be continued during the Sixth Plan period. It will cater to the needs of providing technical and practical education needed for technicians of different dairy plants. The scheme will also ensure continued supply of technicians for cattle development and other animal husbandry programmes. The State Government will give grant-in-aid to National Dairy Development Board, Anand for funding this scheme. An amount of Rs. 6 lakhs is proposed for this purpose during the plan period. 300 Technicians of the Government will not have to pay the tuition fees. The required technical personnel will be made available by this institute.

STATEMENT

Statement showing the Dairy Development activities in Gujarat State

Sr. No.	Name of the Dairy	Starting year of Dairy	Installed capacity of Dairy (litres in lakhs/day)	Quantity of milk handled during 79-80 (litres in lakhs/day)	No. of Co-op. societies	Members of co-op. societies	Chilling Centres	Handling capacity Lts/day	Cattle feed plant	Remarks			
1	2	3	4	5	6	7	8	9		11			
MILK PRODUCTS FACTORIES UNDER DISTRICT COOPERATIVE MILK PRODUCERS' UNION													
1	Amul Dairy, Anand	1948	7.00	4.88	893	3,08,000	Kapadwanj Dev	20,000		1 As per Column No. 4.			
2	Rajkot Dairy, Rajkot	1963	0.40	0.20	143	6,000	Wankaner Vinchhiya	5,000	5,000	..			
3	Sabar Dairy, Himatnagar	1964	1.50	2.19	1030	86,700	Khedbrahma Dhansura Shamlaji	20,000	20,000	25,000	1		
4	Dadhsagar Dairy, Mehsana	2-4-65	4.50	4.05	915	1,26,000	Vihar Harij Kadi Kheralu Hansapur	80,000	25,000	25,000	45,000	25,000	1
5	Bans Dairy, Palanpur	1969	1.50	1.30	804	75,850	Khimana Dhanera	20,000	20,000		1		
DAIRIES UNDER DISTRICT COOPERATIVE MILK PRODUCERS' UNION													
6	Baroda Dairy, Baroda	1965	1.00	0.84	578	69,928	Bodeli	20,000			1		
7	Sumul Dairy, Surat	1967	1.50	1.54	581	81,400	Bajipura	20,000			1		
8	Dhdudhara Dairy, Bharuch	1973	0.40	0.25	252	19,000	Rajpipla Sagbara Dodiypada	4,000	4,000	4,000	..		
UNDER GUJARAT DAIRY DEVELOPMENT CORPORATION													
9	Bhavnagar Dairy, Bhavnagar.	1957	0.08	0.08	120	2,300	..	..	..	..	..
10	Jamnagar Dairy, Jamnagar	1964	0.25	0.04	50	600	Jam-kham-bhaliya	4,000			..		
11	Junagadh Dairy, Junagadh	1965	0.25	0.09	35	1,215	..	..	..	..	..
12	Chalala Dairy, Chalala	1979	0.20	0.06	80	2,132	Rajula	5,000			..		
13	Panchmahal Dist. Co-op. Milk Produ. Union, Godhra	1980	0.30	0.21	176	6,995	..	..	..	..	..
14	Abad Dairy, Ahmedabad	1979	1.40	1.61	..	..	..	..	..	..	..
DAIRIES UNDER CONSTRUCTION													
5	Ahmedabad Dist. Co-op. Milk Pro. Union Ltd. Ahmedabad	..	..	..	170	6,745	..	..	..	..	..
6	Valsad D.C.M.P.U. Ltd., Valsad	Dairy is under construction			149	3,500							
7	Gandhinagar -do-		..		54	3,700							
8	Surendranagar -do-		..		142	3,500							
9	Bhuj -do-		..		28	200							
Total			20.28	17.32	6,200	8,04,815	..	4,68,000	..	..	

STATEMENT

DAIRY DEVELOPMENT

List of the schemes included in the Sixth Five Year Plan, 1980-85.

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme.	Sixth Five Year Plan 1980-85 outlay,	
		Total	Capital
1	2	3	4
I. Direction and Administration :			
1	DMS—1 State Level Organisation	4.00	..
II. Dairy Development.			
2	DMS—2 Financial assistance to District Cooperative Milk Producers' Unions and Feeder Societies	60.00	..
3	DMS—3 Financial assistance to Consumer's Coop. Societies.	5.00	..
4	DMS—4 Banni Development Scheme.	20.00	..
5	DMS—5 Share Capital contribution to Gujarat Dairy Development Corporation.	50.00	50.00
6	DMS—6 State Commitments to Operation Flood-II.	10.00	..
7	DMS—7 Financial assistance to District Cooperative Milk Producers' Unions for milk rooms, spear head team, transport subsidy etc.	50.00	..
		Total-II	50.00
III. Education, Research and Training :			
8	DMS—8 Technician's Training Centre, Mahesana (Grant in-aid to National Dairy Development Board, Anand.)	6.00	..
Grand Total (I+II+III)		205.00	50.00

1.9 FISHERIES

1.9.1. Introduction

1.9.1.1. The State has an excellent marine and inland estuarine, brackish water, mariculture and coastal aquaculture potential resources for fisheries. The State enjoys an enviable position amongst all the maritime States of the Country in view of its longest coast line of about 1633 kms. from Lakhpat in Kachchh district to Umargam in Valsad district (roughly one third of the Indian coastline). The State is also gifted with vast sea board forming about 1.65 lakh sq.kms. of fishable potential (inshore, off shore and deep sea fishing areas.) Besides, the coastal belt of Gujarat provides large number of creeks and low lying potential resources of about 3.67 lakh hectares for tapping and launching mariculture, brackish water and coastal aquaculture programmes all along the coastline. There are also two prominent gulfs namely the Gulf of Kachchh and the Gulf of Khambhat engulfing the Saurashtra peninsula.

1.9.1.2. Five major river systems namely Narmada, Mahi, Tapi, Sabarmati and Banas and other sweet water swamps also form rich potential sources for development of inland fisheries in the State. Perennial village tanks covering of about 10,000 hectares are available for inland fish culture practices, besides about hundred irrigation reservoirs also offer considerable scope to support lacustrine fisheries in the State.

1.9.1.3. Our marine waters surrounding Saurashtra peninsula comprise the richest fishing grounds consisting of the most important commercial varieties of fish such as Pomfrets, Hilsa, Goldara, Perches, Sharks, Cat fish, Bombay ducks, Tuna besides availability of crustaceans namely Prawns, Shrimps, Crabs, Lobsters among our marine life. It has been now an established fact that the waters of Saurashtra offer rich fishing grounds on the west coast of India. Besides, optimum conditions do prevail in the Gulf of Kachchh for the growth and sustenance of real Pearl Oysters, Edible Oysters, Window Pane Oysters, Chunks and other small fish and turtles and sea weeds of commercial importance.

1.9.1.4. The full extent of our marine, fresh water and brackish water resources so richly available in Gujarat have not been fully assessed so far. These are far from being fully exploited or developed. The fishing in the sea is generally confined to the coastal belt upto 25 fathoms and in certain areas upto 40 fathoms.

1.9.2. Review of Progress.

1.9.2.1. Fish production was 0.80 lakh tonnes in 1960-61. The same rose to the potential level of 2.46 lakh tonnes by the end of 1978-79. During 1979-80, 2.75 lakh tonnes of fish production was targetted but due to cyclonic monsoon, unfavourable

weather conditions, inadequate landing and berthing facilities in the State and especially due to acute shortage of diesel and price hike too in the fuel, fishermen were compelled to restrict their fishing voyages. As a result, fish landed in Gujarat during the year 1979-80 was 2.23 lakh tonnes (2.07 lakh tonnes marine fish and 0.16 lakh tonnes inland fish).

1.9.2.2. To assess and evaluate the pace of development so far, it is to discover the fact that under the main production oriented scheme namely mechanisation of fishing crafts which generate significant permanent self-employment of the fisherman, assistance was provided for mechanisation of 1946 fishing vessels (powered with 1050 inboard marine diesel engines and 896 outboard motors) and for construction of 947 wooden boats (hulls) in long spell of 23 years (1951-1974). Assistance for mechanisation of 1006 fishing vessels (powered with 853 inboard engines and 153 outboard motors) and for construction of 484 wooden boats (hulls) was provided in a span of only four years (1974-78) of the Fifth Plan. Against this, assistance for 784 mechanised fishing vessels, 342 fully mechanised trawlers of 11.5 mt. size and above, interest free loan from the State and subsidised purchase of 440 inboard marine diesel engines, for the purpose besides two maxican trawlers imported for deep sea fishing only, was provided during a short spell of past two Annual Plans (1978-80), 12 fish seed farms for supporting inland fisheries including last 3 being completed during 1980-81 have been established. About 900 hectares of village tanks have been improved for inland pisciculture. Reservoir fisheries have been taken up in 29 reservoirs. So far 1261 Fisher youths/girls have been trained in various aspects of marine fisheries and 1229 tribals have been imparted training in culture and capture fisheries in inland water sheets, which includes short term training of 15/30 days duration to 1023 tribals and weaker sections in the hinter land to take up village ponds/tank fisheries. Besides as against 64 fisheries co-operatives existing in 1974, 167 fisheries co-operatives have come into existence by now which include 60 co-operatives on marine fisheries side and 107 co-operatives in inland fisheries side including 46 societies in tribal areas.

1.9.2.3. In addition, the following supporting facilities have also been created during the last 29 years of the development programme- (1) Service stations at Veraval, Mangrol, Porbandar, Umargam, Valsad, Madhwal, Okha, Jamnagar and Salaya for installation and repairs of engines of the mechanised fishing vessels of the State.

(2) Boat building yards through Government aid at Veraval, Porbandar, Mangrol, Umargam, Valsad and Jafrabad.

(3) Ice factory and cold storages through Government aid at Kandla, Jamnagar, Porbandar, Veraval and Umargam.

(4) Freezing plant, ice factory and cold storage at Bombay and a complex comprising of freezing plant, frozen storage, ice factory and cold storage at Veraval, processing unit for dry fish processing at Navabunder in Una taluka (Junagadh district) established by the Gujarat Fisheries Central Co-operative Association Ltd.

(5) 3 Training centres for imparting training to fisher youths and girls in marine fisheries at Veraval, Porbandar and Valsad.

(6) 3 Training centres—two at Ukai and one at Vansda to impart training on inland fisheries to adivasis and the people of weaker sections.

(7) Research stations on marine fisheries at Okha with sub-stations at Sikka, Bhavnagar and Bharuch.

(8) Research station in inland fisheries at Ukai.

(9) Fish Farmer's Development Agencies at Surat and Godhra.

(10) Achieving the level of exporting of fish and its by-products 3954 tonnes (worth Rs. 12.69 crores) in 1978-79.

1.9.2.4. It is estimated that 59,000 fishermen including 3000 adivasis are involved in fishing industry permanently.

1.9.3. Approach and Strategy for the Sixth Plan

1.9.3.1. Keeping in view the vast potentiality and resources richly available in the State for furtherance of many production oriented schemes with Significant employment generation and to utilise this natural gift through balanced development of fisheries in the State, the Sixth Five Year Plan proposals have been formulated with the following objectives :

- (1) to increase fish production;
- (2) to strengthen the infrastructural facilities;

(3) significantly improve the fish distribution channels, for ensuring fair returns to the fishermen, the adivasis and the weaker sections of the societies involved in fisheries;

(4) to enhance the income of the backward and weaker sections of the society involving them in fisheries and fishing industry through a co-operative fold linked up with marketing activities all along the coastline and in the interior hinterland and to improve their socio-economic conditions;

(5) to intensify survey of brackish water-mariculture and coastal aquaculture resources aiming at intensifying the scientific approach in fish farming, fish culture of selected varieties of commercial importance and increase fish production systematically;

(6) to intensify efforts in inland reservoirs and tank fisheries;

(7) to establish more fish seed production/rearing farms in the direction of self-sufficiency in production of quality fish seed so vital for inland pisciculture;

(8) to improve village tanks and ponds suitably for augmenting fish production through composite fish culture of inland and exotic species; and

(9) to further strengthen the integrated rural development programme involving tribals and weaker sections in fish farming along with cropping, animal husbandry, poultry, flowery, duckery, apiary and piggery development.

1.9.3.2. It is well known fact that those engaged in the fisheries sector as their permanent vocation for self-employment are mainly from the economically backward classes. The efforts have, therefore, been made in the direction to improve the economic conditions of these poorer sections engaged in fishing activities by increasing the productivity as envisaged and expanding the opportunities for their self-employment in this sector giving them gainful income. Towards this end, the activities of the department continue to be concerned with financing the availability of inputs as much as by way of knowledge and skills as by finance, tools and equipments. Thus, opening of employment opportunities by way of imparting skills through training on modern methods and opening spheres of activities has been a part of this sectoral programme.

1.9.4. Outlays for the Sixth Plan

1.9.4.1. A broad distribution of the outlays

over the various programmes for the Sixth Five Year Plan 1980-85 is shown in the following table.

(Rs. in lakhs)

Sr. No.	Programme	1980-85 proposed outlay
1	2	3
1.	Direction and Administration.	25.00
2.	Extension	50.00
3.	Research.	200.00
4.	Education and Training.	89.91
5.	Inland Fisheries.	636.00
6.	Deep Sea Fisheries.	76.40
7.	Processing, Preservation and Marketing.	350.00
8.	Mechanisation and Improvement of Fishing Crafts.	411.60
9.	Other Programmes.	161.09
	Total	2000.00

1.9.5. Programmes for the Sixth Plan :**Direction and Administration :**

1.9.5.1 This envisages the organisation and strengthening the ministerial staff such as Audit and Reconciliation Cell, Budget and Budget Performanc, Statistical Cell, Planning and Monitoring Cell, and Other Administraive Personnel Management.

Extension.

1.9.5.2 The staff is required for appropriate publicity and extension work to transmit the results concluded from various resources/projects and experiments to the fish farmers in the interior remote places and all along the coastal villages through various media viz. pamphlets, films, audio visual aid, projectors and personal contacts by the field staff. At the same time field staff is required to study the problems, success and failures of the performance actually done by the fish farmers in their own fields and solve them on the spot itself and in required cases to take such problems to the laboratory.

Research :

1.9.5.3. Survey, investigation and exploitation programmes are taken up to support the production oriented programme of the fisheries sub-sector through various research and investigations. Three 49 footer survey vessels powered with 87 HP engines, with its base at Okha are to continue their operations for exploratory survey in various depths ranging from 25 to 40 fathoms off Saurashtra waters off Dwarka to Jakhau and in the Gulf of Kachchh to know habits and habitats of various marine lives in the sea, to establish good fishing grounds and to expose them to the fishermen for commercial fishery to fully exploit such resources. Gujarat Aquatic Science Station at Okha with sub-stations at Sikka, Bhavnagar, Bharuch, Mundra and Jodia are to continue various research studies on plankton off Gujarat waters, survey and availability of various flora and fauna in the Gulf of Kachchh, hydrographical survey and analysis of sea water, biological studies of different oysters and marine life, problem on water pollution and its effect on marine life, survey rearing and culture of sea weeds, edible oysters, pearl

1. Dredging equipments and spares. 100%
2. Civil works under harbour and other civil works under traditional fishermen sub-project. 50%
3. Consultancy services 100%
4. Testing of fishing surveys and market study. 90%

5. ARDC loan for the procurement of mechanised fishing boats, out-board motors, canoes, net making machines and trucks etc.

1.9.5.17. The work on the project for Jakhau and Madhward will be completed by the end of 1980-81 and maintenance expenditure is to be provided for facilities such as ice factories, water supply, auction hall, working sheds and service stations which are being completed at these centres where insulated trailer vans for quick transport of fish are also provided.

1.9.5.18. Project at a cost of Rs. 129 lakhs for development of Porbandar as fishing harbour as approved by GOI on 50:50 share basis between GOI and the State has been taken up and the work is in progress.

1.9.5.19. The works on initial landing and berthing facilities at Kolak, Umargam, Umarsadi is also in progress. It is envisaged that the work at Shivrajpur (Okha) will be initiated during 1980-81 on receipt of clearance from the GOI.

1.9.5.20 During the Sixth Plan 1980-85, it is proposed to further step up the second phase of the development of Veraval and to develop Umargam in South Gujarat as fishing port.

Marine Fisheries.

1.9.5.21- The Programmes envisaged under the marine fisheries programme are:-

(1) Mechanisation of fishing crafts (2) Incentive for improvement of traditional fishing, (3) Financial assistance for improved designed boats, (4) Supply of modern requisites and (5) Establishment of service stations.

1.9.5.22. Under this programme financial assistance is given in the form of interest free loan @ Rs. 25,000 for a mechanised vessel of 11.5 metre and above from 1979-80 onwards. Prior to this it was granted for mechanised fishing vessels of 14.5 metres and above.

1.9.5.23. Also interest free loan for out board motorised canoe of 9 metre length @ Rs. 5,000 is given as per existing pattern. Subsidy is also granted only for inboard marine diesel engines and outboard motors to those who have their own fishing vessel or canoe respectively at 30% of the cost (Upto Rs. 20,000) and at 15% of the cost (upto Rs. 400). Subsidy for preparation of gill net, bag net and dol net is given @ 33% on bank loan upto Rs. 5,000 only as incentive for improvement of traditional fishing in the area where DPAP and central agency is not granting subsidy for the purpose whereas subsidy @ 5% is granted on the cost of cotton/monofilament twines and @ 10% on nylon twines under the scheme of supply of fishing requisites for non-mechanised vessels in the State.

1.9.5.24 The progress of the main components viz., financial and physical for mechanised fishing vessels, canoes fitted with outboard motors and inboard marine diesel engines increasing significant sustained self-employment of the fishermen on marine fisheries is given below :-

Year	Expenditure (Rs. in lakhs)	Physical				
		Interest free loan		Subsidy on		
		Mechanised vessels (Nos.)	Canoes fitted with out-board motors (Nos.)	Inboard engines (Nos.)	Out-board motors (Nos.)	Wooden boats (Nos.)
1	2	3	4	5	6	7
1978-79	94.91	125	..	309	..	..
1979-80	82.48	217	..	131	..	13
1980-85 (proposed)	411.60	700	360	750	1400	500

1.9.5.25. Service stations newly established during 1979-80 at Salaya, Jamnagar and Jafrabad will have to be maintained and establishment of additional service stations at Mota-Salaya and Shivrajpur (Jamnagar district) is envisaged in the Sixth plan. The service stations at Jamnagar, Jafrabad, Salaya, Veraval, Jakhau, Madhwad, Valsad, Umargam, Mangrol, Porbundar, Okha are required to render services to the mechanised fishing vessels for installation of engines and their repairs at scheduled rates.

Other Programmes :

1.9.5.26 This programme covers-

1. Scheme for strengthening of co-operatives and
2. Construction of office building and quarters.

Under item (1) Co-operative societies are organised and strengthened by grant of managerial subsidy and share capital contribution and matching contribution towards N.C.D.C. loans and

subsidy, whereas under item (2) staff quarters, office buildings and similar facilities are required to be provided as with the expansion of developmental activities, such facilities become essential on coastal area and in the hinterland where fisheries activities are expanded or initiated.

1.9.5.27 Managerial subsidy is granted at 100%, 75% and 50% respectively in the first, second and third year to the co operative society. It is envisaged to grant managerial subsidy to 10, 8 and 10 co-operatives and share capital contribution to 126, 15 and 25 co-operatives during 1980-85 Sixth Plan., at the respective rates.

1.9.5.28 Works for construction of 129 quarters at various places are in progress and new works for 2 office buildings and 19 quarters are proposed during 1980-85 (Sixth Plan period). It is expected to complete work for 129 quarters which is in progress and to take up works of 145 quarters and two office buildings each at Jakhau and Umargam. To continue the activities it is proposed to provide an outlay of Rs. 161.09 lakhs for 1980-85.

STATEMENT
FISHERIES

List of Schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	No. and name of scheme	Sixth Five Year Plan 1980-85-outlay	
		Total	Capital
1	2	3	4
I. DIRECTION AND ADMINISTRATION.			
	1. FSH-1 Strengthening of supervision, planning and statistics.	25.00	..
	TOTAL—I.	25.00	..
II. EXTENSION			
	2. FSH-2 Strengthening of publicity and extension.	50.00	..
	TOTAL—II.	50.00	..
III. RESEARCH			
	3. FSH-3 Survey, investigation & exploitation.	200.00	104.22
	TOTAL—III.	200.00	104.22
IV. EDUCATION AND TRAINING.			
	4. FSH-4 Training of departmental personnel.	18.00	..
	5. FSH-5 Training of fisher-youths.	71.91	45.31
	TOTAL—IV.	89.91	45.31
V. INLAND FISHERIES			
	6. FSH-6 Fish seed production and augmentation of inland fisheries resources.	525.00	172.44
	7. FSH-7 Exploitation of inland fisheries resources.	111.00	48.45
	TOTAL—V.	636.00	220.89
VI. DEEP SEA FISHERIES			
	8. FSH-8 Deep sea fisheries.	76.40	..
	TOTAL—VI	76.40	..
VII. PROCESSING, PRESERVATION & MARKETING.			
	9. FSH-9 Infrastructural facilities and fish based ancilliary industries.	350.00	275.00
	TOTAL—VII	350.00	275.00

1	2	3	4
VIII. MECHANISATION AND IMPROVEMENT OF FISHING CRAFTS			
10.	FSH-19 Mechanisation of fishing crafts.	358.00	193.00(Loan)
11.	FSH-11 Incentive for improvement of traditional fishing.	4.00	..
12.	FSH-12 Financial assistance for improved designed boats.	25.00	..
13.	FSH-13 Supply of modern requisites.	5.00	..
14.	FSH-14 Establishment of service stations.	19.60	..
TOTAL—VIII.		411.60	193.00
IX. OTHER PROGRAMMES			
15.	FSH-15 Programmes for strengthening of cooperatives.	47.25	42.50 (Share capital)
16.	FSH-16 Construction of building and quarters.	113.84	113.84
TOTAL—IX		161.09	156.34
GRAND TOTAL		2000.00	994.76

1.10 FORESTS

1.10.1 Introduction

1.10.1.1. Gujarat happens to be one of the deficit States from the point of view of forest resources with only about 10 percent of its total land area under forests. Out of the total forest area of about 15.59 lakh hectares, less than half or about 8 to 9 lakh hectares only can support productive forests in the State. Till the end of 1979-80, hardly, an area of about 0.96 lakh hectares have been brought under man made forests of economically important species like teak, khair and bamboos. To get higher return in terms of yield value per hectare, it is necessary to convert the remaining area into man made forests. The need of such a conversion is all the more urgent as the present production of timber and fuel wood is only 33 percent and 5 percent respectively of the State's demand.

1.10.2. Strategy of the Plan :

1.10.2.1. The major thrust of the Forestry Programmes for the Five Year Plan 1980-85 will be towards ecological balance, employment generation, energy conservation and economic stability of the tribal population. This is proposed to be achieved by adopting the following strategy :-

1. Undertaking a massive programme of community forestry to meet the growing rural energy needs.

2. Improving environment by protecting forests and undertaking massive afforestation in the degraded areas.

3. Preserving nature, flora and fauna through the establishment and development of national parks and sanctuaries.

4. Providing employment to the rural population with special attention to the weaker sections of the society i.e. tribals, so as to give a permanent support to their economy, through forestry programmes and;

5. Consistent with the above, increasing the productivity of forest products so as to march towards the goal of self sufficiency in meeting the economic, industrial and rural needs of the State.

1.10.2.2. The overall broad strategy for development of forestry sector in the State would be to increase tree growth wherever possible both inside and outside the forest areas. The core activity of the programme will, therefore, be the plantations including conservation measures and protective plantation. In consonance with the objectives and strategy enumerated above, the priorities are given to the production, conservation, community forestry, environment forestry

including nature conservation and tribal welfare programmes accordingly.

1.10.3 Programmes for the Sixth Plan 1980-85

1.10.3.1 An outlay of Rs. 9000 lakhs for the Sixth Plan 1980-85 is proposed for this sub-sector. Bulk of the outlay is proposed for extension, forest conservation and development, plantation schemes and conservation of wild life programmes. The broad break up of the proposed outlay is as under :—

(Rs. in lakhs)

Programme	Outlay 1980-85
1. Direction and Administration	110.30
2. Research	41.00
3. Education and Training	153.00
4. Forest Conservation and Development	630.90
5. Plantation Schemes	657.40
6. Farm Forestry	188.70
7. Communication and Buildings	179.30
8. Preservation of Wild life	310.00
9. Extension (World Bank assisted Project)	6186.40
10. Management of Zamindari (Acquisition of Private forests)	40.00
11. Other Expenditure	503.00
Total..	9000.00

1.10.3.2. The broad programmewise details of the Sixth Plan 1980-85 are given in the following paragraphs.

Direction and Administration

1.10.3.3. The forests being exposed to adverse biotic factors, the protection measures assume great significance. It is proposed to help the local staff in apprehending offenders by appointing more jodi-guards, establishment of mobile square and mobile court to detect offences and deal the enquiry cases, to strengthen the planning and

statistical cell of the forest department for monitoring and evaluation of the various programmes during the Sixth Plan 1980-85.

Research, Education and Training :

1.10.3.4. With the increase in activities, the need for strong research support has become an essential requirement. A State Forest Research Institute has therefore been established at Rajpipla during 1979-80 to carry out research work. It is necessary to train the staff at various levels. A Ranger's Training College at Rajpipla, Training school for forests and field assistants at Kakrapar and School for training the adivasi youths in carpentry at Waghai has also been started for this purpose. It is proposed to strengthen these institutes to meet the requirements of trained personnel.

Forest Conservation and Development

1.10.3.5. Upto the end of 1979-80, soil and moisture conservation and afforestation works were carried out in about 0.78 lakh hectares. The target for the Sixth Plan 1980-85 is to cover an additional area of about 0.27 lakh hectares under this programme.

Plantation Schemes :

Afforestation on Desert Border :

1.10.3.6. Till the end of 1979-80, plantations have been raised in about 0.22 lakh hectares. The target proposed for the Sixth Plan 1980-85 is to cover an additional area of about 0.07 lakh hectares.

Arresting advancing salinity in the coastal area of Saurashtra (World Bank assisted scheme) :

1.10.3.7. This is a World Bank assisted scheme. Under this scheme, till the end of 1979-80, the plantations have been raised in about 390 hectares and about 90 kms. of shelter belts. It is proposed to carry out plantations over an area of 8000 hectares during the Sixth Plan 1980-85.

Plantations by Fast Growing Species :

1.10.3.8. Plantations by fast growing species have been raised in about 0.37 lakh hectares till the end of 1979-80 and it is proposed to cover an additional area of about 0.10 lakh hectares during the Sixth Plan 1980-85.

Economic Plantations

1.10.3.9. Plantations have been raised in about 0.59 lakh hectares till the end of 1979-80. The target for the Sixth Plan 1980-85 is to cover an additional area of about 0.21 lakh hectares.

Plantations on Coastal Areas

1.10.3.10. The object of this scheme is to stop the violent wind coming from the sea and also to stabilise the shifting of sand converting agricultural land into sandy waste. Till the end of 1979-80, plantations have been raised in about 7500 hectares and the target for the Sixth Plan 1980-85 is to raise tree plantations in about 3000 hectares.

Irrigation Plantations :

1.10.3.11. This scheme is started on pilot scale during 1979-80 and only 10 hectares of plantations were raised. It is proposed to raise irrigated plantations over an area of about 1400 hectares during the Sixth Plan 1980-85.

Energy Plantations :

1.10.3.12. The energy plantations programme aims at harvesting of plantations in the form of high density and short rotation forestry practices. The experimental energy plantations raised at Indroda in Gandhinagar has given very encouraging results indicating that it is feasible to raise high density plantations to yield higher returns to be harvested on a short rotation. During the Sixth Plan, it is proposed to raise energy plantations over an area of 700 hectares at a cost of Rs. 23.60 lakhs. Planning is continuing to bring forward a more substantial programme in irrigation project command areas.

Farm Forestry

1.10.3.13. Under this scheme, nearly 500 lakh seedlings were distributed by 1979 to public, free of cost, during the Vanmahotsava celebrations. It is proposed to distribute about 1000 lakh seedlings during the Sixth Plan 1980-85. It is proposed to rehabilitate degraded and marginal farm lands by farm forestry programme in an area of about 100 hectares during the Sixth Plan.

Communication and Buildings :

1.10.3.14. A good net work of roads not only adds to the value of the forest produce but also makes it possible to harvest in accessible areas in the interiors of the forests. This scheme aims at converting some of the existing cart tracks into motorable roads and also the construction of new roads. Under this scheme, upto, the end of 1979-80, improvement/metalling of 481 kms. of roads has already been carried out. It is proposed to improve roads over a length of additional 56 kms. during the Sixth Plan. It is also proposed to provide for the construction of 5 godowns to increase the storage capacity of grass. Forest subordinates are entitled to rent free residential quarters in remote places. Upto the end of 1979-80, about 2000 quarters were constructed and it is proposed to construct about 300 quarters for the forest subordinates during the Sixth Plan 1980-85.

Wild Life Preservation

1.10.3.15. A number of wild life sanctuaries and national parks have been established/expanded all over the State for the proper protection, preservation and development of the rare and valuable wild life species such as asiatic lion, wild ass, black buck, chinkara, wild fowl etc. This includes the Gir sanctuary-cum-national park, wild ass sanctuary of Kachchh, Velavadar national park, Nalsarovar bird sanctuary etc. It is proposed to accelerate the wild life preservation activities during the Sixth Plan 1980-85.

Community Forestry Project (World Bank assisted Project)

1.10.3.16. The objects of this scheme are to :

(1) meet the most urgent requirements in forest produce of the rural plantations in the shortest time possible,

(2) induce the village communities to actively participate in the plantation programme through appropriate extension and sharing of plantation benefits, and

(3) provide additional labour opportunities particularly to the landless workers.

This project has started since November, 1979 and become operative from 1980-81 at an estimated cost of about Rs. 62 crores with the assistance of the world Bank over a period of five years i. e., 1980 to 1985. The project will cover the following activities (targets) during the Sixth Plan period:-

Activity	Target 1980-85
Strip Plantations	
Road side	31,600 ha.
Canal banks	2,000 ha.
Railway side	3,400 ha.
Village Woodlands	
Irrigated	2,880 ha.
Rainfed	34,560 ha.
Forest Areas	
Reforestation of degraded forests.	30,000 ha.
Tree Farms	
Plantations in Malki lands	1,000 ha.
Seedlings for farm forestry	1,500 lakhs

Schemes benefitting the Tribals :

1.10.3.17. Various schemes are proposed to be continued for the welfare of tribals who depend on the forest for employment, housing, fodder, natural food etc. during the Sixth Plan 1980-85. These are providing amenities to forest labourers' co-operative societies, giving tagavi loans to the cultivators, welfare of kotwalias, opening/expansion of foodgrain banks, mobile shops, fire-wood depots, seed banks etc. Necessary share capital contribution will also be paid to the Gujarat State Forest Development Corporation for expanding its activities to ensure fair wages to tribals and augmenting the production of forest products.

STATEMENT

FORESTS

List of schemes included in the Sixth Five Year Plan, 1980-85.

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan, 1980-85- Outlays.	
		Total	Capital
1	2	3	4
I. Direction & Administration.			
1.	FST-1 Appointment of Jodi Guards.	22.20	..
2.	FST-2 Establishment. of Mobile Squads	32.60	..
3.	FST-3 Establishment. of Mobile Court	13.40	..
4.	FST-4 Vigilance Squad.	17.00	..
5.	FST-5 Planning & Statistical Cell.	25.10	..
Total:—I		110.30	..
II. Research.			
6.	FST-6 Forest Research.	41.00	..
Total: II		41.00	..
III. Education & Training.			
7.	FST-7 Training of Staff.	149.00	..
8.	FST-8 Estt. of Wood Workshop-cum-Production-cum-Carpenter's Training Centre at Waghaj.	4.00	..
Total:—III		153.00	..
IV. Forest Conservation & Development.			
9.	FST-9 Soil & moisture conservation & Afforestation in Denuded areas.	426.20	426.20
10.	FST-10 Afforestation of Desert Borders.	82.10	82.10
11.	FST-11 Arresting Advancing Salinity in Coastal tract of Saurashtra.	122.60	122.60
Total: IV		630.90	630.90
V. Plantation Schemes.			
12.	FST-12 Plantation of Fast Growing Species.	172.10	130.00
13.	FST-13 Economic Plantation.	287.70	..
14.	FST-14 Plantation on Coastal Border.	91.70	60.00
15.	FST-15 Irrigation Plantation.	82.30	82.30
16.	FST-16 Energy Plantation.	23.60	23.60
Total:—V		657.40	295.90
VI. Farm Forestry			
17.	FST-17 Farm Forestry.	128.60	128.60
18.	FST-18 Rehabilitation of Degraded Farm Lands.	57.90	57.90
19.	FST-19 Malki Teak Plantation.	2.20	..
Total:—VI		188.70	186.50

1	2	3	4
VII. Communication and Buildings			
20.	FST-20 Development of Communication.	23.30	23.30
21.	FST-21 Construction of Grass Godowns.	16.00	16.00
22.	FST-22 Construction of Buildings.	140.00	140.00
Total: VII		179.30	179.30
VIII. Preservation of Wild Life.			
23.	FST-23 Wildlife Management and Conservation.	104.70	..
24.	FST-24 Establishment of Safari Park.	18.70	..
25.	FST-25 Zoological and Public Garden.	5.50	..
26.	FST-26 Establishment of Sanctuary at Jessor.	17.50	..
27.	FST-27 Establishment of National Park at Bansda.	15.30	..
28.	FST-28 Asiatic Lions in Barda Forests.	40.00	..
29.	FST-29 Establishment of Natural History Museum at Gandhinagar.	40.00	..
30.	FST-30 Introduction of Black Buck in eastern part of Gir Forests.	1.00	..
31.	FST-31 Holding Nature Education Camp at Hingolghadh.	8.40	..
32.	FST-32 Establishment of Marine National Park.	40.00	..
33.	FST-33 Establishment of Flamingo Sanctuary in little runn of Kachchh.	2.80	..
34.	FST-34 Crocodile Breeding.	2.60	..
35.	FST-35 Establishment of Chinkara Sanctuary at Narayan Sarovar in Kachchh.	12.00	..
36.	FST-36 Introduction of Wild Fowls in Dangs Forests.	1.50	..
Total:—VIII		310.00	..
IX. Extension.			
37.	FST-37 Community Forestry Project (World Bank assisted project)	6186.00	6186.00
38.	FST-38 Plantation at Nalia/Bhuj, Kandala, Vadodara and Jamnagar.	0.40	0.40
Total:—IX		6186.40	6186.40
X. Management of Zamindari.			
39.	FST-39 Acquisition of Private Forests.	40.00	12.00
Total:—X			
XI. Other Expenditure:			
40.	FST-40 Demarcation and Survey.	39.80	..
41.	FST-41 Improved Logging.	2.20	..
42.	FST-42 Fire Protection.	24.70	..
43.	FST-43 Establishment of Checking Nakas.	22.50	..
44.	FST-44 Forest Publicity.	19.60	..
45.	FST-45 Development of Victoria Park.	9.00	..
46.	FST-46 Development of Botanical Garden.	11.00	..
47.	FST-47 Amenities to F.L.C.S.	0.50	..

1	2	3	4
48.	FST-48 Tagavi Loans.	4.10	..
49.	FST-49 Kotwalia's Welfare.	22.10	..
50.	FST-50 Establishment of Grain Bank & Mobile Grain Stores	4.50	4.50
51.	FST-51 Opening of Firewood Depots.	40.00	..
52.	FST-52 Establishment of Seed Bank.	12.70	..
53.	FST-53 Expansion of Saw Mill at Waghai.	5.00	..
54.	FST-54 Share Capital contribution to G.S.F.D.C.	31.00	31.00
55.	FST-55 Van Rakshak Dal.	3.90	..
56.	FST-56 Development of Forest Settlement.	1.00	..
57.	FST-57 Polythene bags manufacturing unit.	28.70	..
58.	FST-58 Kabirvad.	0.90	..
59.	FST-59 Development of Adivasi Children.	0.60	..
60.	FST-60 Fodder Bank in Tribal Area.	5.10	..
61.	State Share for Centrally Sponsored Schemes	189.00	..
62.	Nucleus Budget.	25.00	..
Total:—XI		503.00	35.50
GRAND TOTAL:—		9000.00	7526 50

1.11. INVESTMENT IN AGRICULTURAL FINANCIAL INSTITUTIONS

1.11.1.1. Progressive institutionalisation of the agricultural credit is the strategy adopted in the field of agricultural credit. The long term finance is provided to the agriculturists by Gujarat State Coop., Land Development Bank for construction of wells, repairs or deepening of old wells, pump sets (engines and motors), tractors, purchase of occupancy rights under the Land Refroms Act and other miscellaneous purpose.

1.11.1.2. The State Govt. is anticipating in lending programme of the bank by making investments in its ordinary and special debentures. There was a progressive increase in the advances upto the end of the Fourth plan. But thereafter decline set in. This was due to heavy overdues at the branch level and consequent ineligibility of branches of the bank for fresh loaning. The discussions with Reserve Bank have helped in indentifying the problems as obtaining in the short-term sector as well as long-term credit sectors. A scheme has been evolved with specific measures for relief viz., staggering of instalments upto 10 to 12 years in the short-term sector as also rephasing of instalments on the basis of identifying overdues according to their age and character for the long-term credit sectors, relief with regard to interest in general as well as in

principal for beneficiaries falling within the category of small farmers, Advasi cultivators, grant fresh credit on punctual performance etc., are included as a part of the scheme.

1.11.1.3. Steps are being taken for boosting up the loaning programme of the Gujarat State Coop. Land Development Bank. Up to 1979-80 State Govt. has contributed Rs. 101 lakhs for strengthening the capital base of the land development bank.

1.11.2. Programme for the Sixth Plan:

1.11.2.1. The total long term advances upto 1978-80 is of the order of Rs. 211.80 crores. It is proposed to make additional long term advance of Rs. 50 crores during the Sixth Five Year Plan bringing the cumulative advances to Rs. 266.80 crores. The State Govt. would provide support by purchasing debentures floated by the bank so as to enable it to carry out its loaning programme.

1.11.2.2. An outlay of Rs. 350.00 lakhs is provided for the Sixth Plan period 1980-85. Out of the total amount provided for the Sixth Plan, an amount of Rs. 40.00 lakhs will flow to the Tribal Area Sub Plan 1980-85.

STATEMENT

Investments in Agricultural Financial Institutions.

List of Schemes included in the Sixth Five Year Plan 1980-85.

(Rs. in lakhs)

Sr. No.	Number and Name of the scheme.	Sixth Five Year Plan outlay 1980-85.	
		Total	Capital
1	2	3	4
1.	AGC.I: Investment in Debentures of Gujarat State Coop. Land Dev. Bank.		
	Share Capital :	350.00	350.00

1.12. MARKETING, STORAGE, AND WAREHOUSING

1.12.1. Development of adequate and efficient warehousing and marketing facilities is essential for the sustained growth of agricultural production. The programme of warehousing is meant to minimise the waste of agricultural produce by providing facilities for storage on scientific lines to the Agriculturists, Traders, and Co-operatives and thereby indirectly to help stabilization of prices of agricultural products. The programme of regulated markets is undertaken to help agriculturists to secure fair prices for their products and prevent malpractices on the part of the traders.

1.12.2. Review of Progress

1.12.2.1. State Warehousing Corporation is incharge of development of warehousing facilities. The storage capacity with the State Warehousing Corporation was 73000 M. Tonnes, at the end of 1979-80. The State Government gives share capital contribution to the Warehousing Corporation. A total amount so far given is of the order of Rs. 95.50 lakhs. The Central Warehousing Corporation is also expected to contribute an equal amount by way of share capital to the Corporation.

1.12.2.2. The Agriculture Produce Market Committees consisting of elected members are in charge of the regulated markets. There were 287

regulated markets including sub-yards by the end of 1979-80, out of which 70 were in tribal area. The State Government gives loan to the Agriculture Produce Market Committee for the purchase of land.

1.12.3. Programme for the Sixth Plan 1980-85

1.12.3.1. The storage capacity for Warehousing Corporation which was 0.73 lakh tonnes at the end of 1979-80 has been proposed to be increased to 1.83 lakh tonnes by the end of Plan. The storage capacity of the Co-operatives will be raised from 3.19 lakh tonnes at the end of 1979-80, to about 3.23 lakh tonnes by the end of Sixth Plan. It is proposed to regulate 20 more markets during the Sixth Plan bringing the total number of regulated markets to 307.11 market yards will be in the tribal areas. The commodities likely to be regulated will be cotton, groundnut, wheat and bajara. A Directorate of Agricultural Marketing is proposed to be set up. The main functions of the Directorate would be to superwisc the regulated markets, to anticipate problems of marketing agri-cultural produce, to collect market information, analyse data, give information, undertake marketing survey and research and to give timely advice to the Government on measures necessary to protect the interest of the producers. An outlay of Rs. 170.00 lakhs is proposed for this programme in the Sixth Plan.

STATEMENT

MARKETING, STORAGE AND WAREHOUSING

List of Schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85 outlays	
		Total	Capital
1	2	3	4
1.	WRH-1. Development of Regulated Markets		
	Loan	35.00	35.00
	Subsidy	35.00	..
	Total	.. 70.00	35.00
2.	WRH-2. State Warehousing Corporation		
	Share capital	55.00	55.00
3.	WRH-3. Establishment of Directorate of Agricultural Marketing		
	Staff subsidy	25.00	..
4.	WRH-4. Development of Rural Markets (Old centrally sponsored scheme)		
	Subsidy	20.00	..
	Grand Total	.. 170.00	90.00

1.13. COMMUNITY DEVELOPMENT AND PANCHAYATS

1.13.1. Introduction :

1.13.1.1. Community Development Programme was first introduced in 1952 as a process designed to create conditions of economic and social progress for the whole community with its active participation and involvement and the fullest possible reliance on the community's initiative. It has basically the object of securing better life, both in respect of standard of living and also mode of living. Significant achievements of the Community Development Programme can be seen in the field of agriculture, public health, co-operation, education, communication, animal husbandry, cultural activities etc.

1.13.2. Review of Progress :

1.13.2.1. The entire rural area of the State was covered by 250.00 C.P.A. Units of Community Development Blocks by the end of 1963. At the commencement of the Fifth Plan 62.50 C.P.A. Units of Community Development Blocks were in Stage II and the remaining 187.50 C.P.A. were in Post Stage II. All the 250.00 C.P.A. Units of Community Development Blocks were in the Post Stage II by the end of 1976-77.

1.13.2.2. With the inception of the Panchayati Raj in Gujarat from 1st April, 1963, the second phase of Community Development viz. creation of development and democratic institutions at district, taluka and village levels to take over the responsibility of development has been ushered in. The Panchayats have been assigned vast field of development along-with adequate powers, resources and manpower.

1.13.2.3. The programme during the Sixth Plan will comprise of the maintenance of Post Stage II Community Development Blocks, imparting training to officials and non-officials associated with Panchayati Raj Institutions. For strengthening the administration at the village level a Programme of creating additional posts of Panchayat Secretaries is also taken up.

1.13.3. Programme for the Sixth Five Year Plan 1980-85 :

1.13.3.1. An outlay of Rs. 627 lakhs is proposed for Community Development Programme, the distribution of which is as under :—

(Rs. in lakhs)		
Sr. No.	Programme/Scheme	Outlay for Sixth Plan 1980-85
1	2	3
1.	Corebudget for Post Stage II Community Development Blocks.	125.00

1	2	3
2.	Additional Posts of Panchayat Secretaries.	355.00
3.	Training, Education and Research in Panchayati Raj.	42.05
4.	Planning Cell for District Plans.	4.20
5.	Gram Safai Shibir.	45.12
6.	Block Level Agency.	8.63
7.	Padadhikari Sammelan.	1.25
8.	Sarvodaya.	25.75
9.	Rural Development through Voluntary Agencies.	20.00
Total : 1 to 9...		627.00

1.13.4. Core-budget for Post Stage-II. Community Development Blocks :

1.13.4.1. The entire rural area of the State has been covered by 250.00 CPA Units of Post Stage II Community Development Blocks. There is no schematic budget for Post-Stage II Community Development Blocks. A scheme of Core Budget was introduced in the Fifth Plan to provide funds for Post Stage-II Community Development Blocks to maintain the existing level of activities and to enable them to undertake community programme and local works which are not covered under the Sectoral Programmes of the Departments. It is proposed to continue this Scheme for Post Stage-II Community Development Blocks during 1980-85 also. An outlay of Rs. 125.00 lakhs has been provided for 1980-85 at the rate of Rs. 10,000/- per CPA Unit of C. D. Blocks

1.13.5. Additional Posts of Panchayat Secretaries :

1.13.5.1. As against 12857 Village Panchayats in the State as on 31st March, 1978 10766 posts of Panchayat Secretaries are existing at the end of 1980. It would be necessary to strengthen basic minimum administrative structure of the village level by providing one Panchayat Secretary for each village Panchayat. To achieve the goal of one independent Panchayat Secretary for each Village Panchayat by the end of 1984-85, about 2091 posts of Panchayat Secretaries shall have to be created. It is, therefore proposed to create 2091 additional posts of Panchayat Secretaries during 1980-85, for which an outlay of Rs. 355.00 lakhs is provided.

1.13.8. Training, Education and Research in Panchayati Raj :

1.13.6.1. For improving the administration of the Panchayati Raj institutions the Institute of Rural Development and Panchayati Raj, Junagadh is imparting training to Officials as well as non-officials associated with Panchayati Raj Institutions. It is necessary to provide funds for hostel buildings, staff quarters and water supply facilities at this Institute. The old institute building also requires some additions and alterations. It is also proposed to continue a training course for Office bearers of District Panchayats, Taluka Panchayats and Village Panchayats under the auspices of Gujarat Pradesh Panchayat Parishad, Gandhinagar. An outlay of Rs. 42.05 lakhs has been provided for this scheme.

1.13.7. Gram Safai-Shibirs :

1.13.7.1. In order to encourage people in rural areas for maintaining cleanliness and public health through better sanitation and to provide the facilities like soakage pits, smokeless chulas, bath rooms, ventilations, latrines etc. Gram Safai Shibirs are organised by Taluka Panchayats with the Participation of village people and village youths, official functionaries and University students. Panchayats provide financial help in organising such shibirs from their own funds. It is targetted to organise 940 such shibirs (One shibir per year per taluka for five years during 1980-85. This Scheme is to be continued during the Sixth Five Year Plan with an outlay of Rs. 45.12 lakhs.

1.13.8. Planning Cell for District Plans :

1.13.8.1. Having regard to the need for ensuring better co-ordination and supervision as also for guiding, and helping the Panchayati Raj Institutions in formulating Plan programmes and watching, reviewing and monitoring programmes implemented at the district level a special planning cell has been created in the office of the Development Commissioner. It is proposed to continue and strengthen the Cell during the Sixth Plan for which an outlay of Rs. 4.20 lakhs has been provided.

1.13.9. Padadhikari Sammelan :

1.13.9.1. The objective of the Scheme is to create active interest among the non-officials associated with Panchayati Raj and to increase their knowledge and familiarise them in the sphere of administration, general rules and regulations, planning etc. For the efficient working of the Panchayati Raj Institutions such Sammelans are held at the district level. For District level Sammelan Rs. 30/- per delegate is paid for the duration of 2 to 3 days session. The total number of participants is to be 100. Contingency grant of Rs. 200/- per Sammelan is also allowed. For State level Sammelan the number of delegates is 200 for 2 to 3 days and Rs. 50/- per delegate is

provided with contingency grant of Rs. 500/- per Sammelan. The participants are selected from among the Sarpanchas and Panchayat members as well as representatives of Social Organisations. An outlay of Rs. 1.25 lakhs has been provided for this scheme during the Sixth Five Year Pla.

1.13.10. Block Level Agencies :

1.13.10.1. The High Level Committee (Shri Rikhavdas Shah Committee) on Pachayats has also recommended creation of a Post of Assistant Taluka Development Officer in talukas having a population of more than two lakhs keeping in view the need for administrative strengthening of the taluka level in order to supervise and co-ordinate all the programmes implemented in the taluks. The State Government has in the first instance created 13 posts of Assistant Taluka Development Officers in the talukas having population exceeding two lakhs viz. (1) Kheralu (2) Vijapur (3) Gandhinagar (4) City Taluka-Ahmedabad (5) Nadiad (6) Anand (7) Petlad (8) Borsad (9) Kapadwanj (10) Godhra (11) Santrampur (12) Devgadhi-Baria (13) Navsari.

An outlay of Rs. 8.63 lakhs is provided for 1980-85 Plan to maintain the posts which are created.

1.13.11. Rural Development Participation of Voluntary Agencies :

1.13.11.1. Looking to the importance of Rural Development, the Central Govt. has given a top-priority to the programme of rural development. In addition to the official agencies the Voluntary Agencies have been invited to assist according to their capacity as well as their resources. In order to encourage them in a bigger way in this venture of rural development, the Govt. of India have incorporated two new Sections i. e. 35 CC and 35 CCA in the Income Tax Act, 1961 according to which the expenditure incurred on the programme of rural development would be deductible in the process of computing the income of the applicant voluntary agency. The programme of rural development is to be executed subject to the prior approval of the prescribed authority State Level Committee, which consists of the Commissioner of Income tax as Chairman and a Special Secretary to the Govt. of Gujarat as a member.

1.13.11.2. The State Govt. has also paid special attention to the programme of Integrated Rural Development undertaken by voluntary agencies. A high-powered Committee under the Chairmanship of Hon. Governor to formulate general policy guidelines, has been set-up.

1.13.11.3. A Special Cell at Ahmedabad namely Integrated Rural Development Programme created under the Agriculture, Forests and Cooperation Department is functioning for monitoring and liaisoning the rural development activities being

undertaken by Voluntary Agencies. The Cell also guides the Voluntary Agencies in the preparation of projects, in selection of villages and also in scrutinising the applications sent to the State Level Committee.

1.13.11.4. The programme is entirely implemented by Companies, Trusts, Co-operatives etc. Upto March

1980 about 81 institutions have got approval of their rural development program and adopted 1475 villages of the State.

1.13.11.5. In order to carry out the activities of the Cell, an outlay of Rs. 20 lakhs is proposed for the Sixth Five Year Plan 1980-85.

STATEMENT

Community Development and Panchayats

List of schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakh.)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85 outlays	
		Total	Capital
1	2	3	4
1	CDP-1 Planning Cell for District Plan.	4.20	..
2	CDP-2 Training, Education and Research	42.05	14.46
3	CDP-3 Additional Posts of Panchayat secretaries	355.00	..
4	CDP-4 Community Development	125.00	..
5	CDP-5 Sarvodaya	25.75	..
6	CDP-6 Rural Development Undertaken by Voluntary Agencies	20.00	..
7	CDP-7 Gram Safai Shibirs	45.12	..
8	CDP-8 Strengthening of Block Level Agencies	8.63	..
9	CDP-9 Padadhikari Sammalan	1.25	..
Total : ..		627.00	14.46

1.14. SPECIAL PROGRAMMES FOR RURAL DEVELOPMENT

The main thrust of the development activities is on rural development, providing employment through investments in infrastructure and social overheads for eradication of poverty and improving the quality of life. In addition to the outlays proposed in the sectoral programmes benefitting the rural areas, specific provision is also made for Special Programmes which would largely aim at assisting the rural poor. An outlay of Rs. 14407 lakhs is proposed for the Sixth Five Year Plan 1980-85. Major elements of this programme are (1) Works programme for creating supplementary employment opportunities through National Rural Employment Programme, (2) Resource and income development for the rural poor through Integrated Rural Development, (3) Special area development programme through Drought Prone Area and Desert Development Programme, (4) Abhinav Gram Nirman Karyakram etc. The programmewise details of the outlays are as under:—

(Rs. in lakhs)

Sr. No.	Programme	Sixth Plan 1980—85 Outlay.
1	2	3
1.	Integrated Rural Development	3815
2.	National Rural Employment Programme.	4500
3.	Drought Prone Area Programme (including Desert Development Programme).	1950
4.	Antyodaya.	492
5.	Block Level Planning for Employment.	700
6.	Strengthening and Supporting Special Programme Organisation.	500
7.	Local Development Works Programme.	1250
8.	Abhinav Gram Nirman Karyakram	1050
9.	Off-season Unemployment Relief Works.	150
	Total..	14407

An outline of each of the above programmes is given in subsequent paragraphs.

1.14.1. Integrated Rural Development programme.

1.14.1.1. A new programme for integrated development aiming primarily at assisting the rural poor under the programmes for Integrated Rural Development has been launched as a Central scheme in this State from the year 1978-79. The Government of India allotted 100 blocks at the beginning of the programme i.e. from the year 1978-79. During the second year of the programme, 3 more blocks were added and, thus, 103 blocks were functioning in the State under the programme. From the October, 1980, i.e. the first year of the Sixth Five Year Plan, the entire State, comprising of 218 Blocks, is covered under this programme and earlier similar programmes of SFDA, SFAL merged into it.

1.14.1.2. The main objectives of the programme are to raise families in the identified target groups above the "poverty line" and to create substantial additional opportunities of employment and income in the rural sector. In fact, the programme is to be seen as an instrument for achieving some of the major objectives of the Sixth Plan. The target groups consist of the poorest among the poor in our rural areas, small and marginal farmers, agricultural and non-agricultural labourers, rural artisans and craftsmen, many of whom would be belonging to scheduled castes and scheduled tribes. The anti poverty objective of the IRD programme is proposed to be achieved by enabling the poorest families to acquire productive assets, technology and skills as would make their economic activities viable.

1.14.1.3. Originally, this programme was started from the last quarter of the year 1978-79 as a fully central sector programme. There after, from the year 1979-80 and onward, the pattern of financial assistance for this programme has been changed to 50:50 as Central and State shares. During the Sixth Plan, this pattern of financial assistance will be continued. During the year 1978-79 and 1979-80 the programme has benefitted 24734 and 75,000 rural poor families respectively.

1.14.1.4. The programme in the blocks would be implemented by the staff of the DPAP/SFDA/SFAL Agencies already established in every district of the State. With the special integration of the programmes, the Agencies implementing them are uniformly designated as "Rural Development Agencies" in all the Districts of the State. The Rural Development Agencies in each District will be expected to draw up a development plan for each Block which by drawing up resources available from various schemes and institutions, which would consist of exploita

tion of the opportunities available in the block area and also development of the rural households depending upon the background and need of individual households. The Block Plan would also include the setting up of activities such as Dairies which would support the individual poor households and the arrangement for meeting their credit requirements through Banks.

Programme for the Sixth Five Year Plan-1980-85.

1.14.1.5. From the 2nd October, 1980 this programme is being implemented in all the Blocks of the State and as suggested by the Government of India each Block of the State will be allotted Rs. 5/- lakhs to be shared equally by the State and Central for the year 1980-81, Rs. 6/- lakhs for the year 1981-82 and Rs. 8/- lakhs for the remaining three years of the Sixth Plan.

1.14.1.6. An outlay of Rs. 7630 lakhs is envisaged for the Sixth Plan to be shared equally by the Centre and the State. Therefore, State Plan provides for an amount of Rs. 3815 lakhs as State's share, About 5.50 lakh identified families of the rural poor at the rate of 600 families per Block per year are likely to be benefitted under different schemes as will augment their income.

1.14.2. National Rural Employment Programme.

1.14.2.1. National Rural Employment Programme, introduced in November, 1980 has replaced the Food for Work scheme and has become the part of Sixth Five Year Plan. The Programme will have the following objectives:—

- (i) generation of additional gainful employment for the unemployed and under employed persons both men and women in the rural areas;
- (ii) creation of durable community assets for strengthening the rural infrastructure, which will lead to rapid growth of rural economy and steady rise in the income levels of the rural poor;
- (iii) improvement of the nutritional status and the living standards of the rural people.

1.14.2.2. Under the new programme, the Central Government will make available, depending upon available stocks, foodgrains free of charge and cash grants in the ratio of 2:1. The foodgrains will be distributed to the labourers as a part payment of wages not exceeding 2 Kgs per head per day. The central and the State will share the programme cost on 50 : 50 basis.

1.14.2.3. All on going Plan/Non Plan schemes as well as new item of the schemes which result in the creation of durable community assets in rural areas, will fall within the purview of this programme. The community works like rural roads, medium and

minor irrigation works, flood and drainage works, soil and water conservation, plantation, school buildings, drinking water wells, village ponds etc. can be taken up under the programme.

1.14.2.4. The programme is basically aimed at providing employment to the rural poor, raising their economic status, generating community assets thereby strengthening the rural infrastructure. Though the Rural Development Agency of the District will be in charge of the programme, Panchati Raj Institutions will be intimately involved in the implementation of the programme. A State Level Steering Committee headed by the Chief Minister will look after the overall progress in the implementation of the programme, while a District Level Steering Committee will be in charge of planning and execution of the programme, determine the allocation of the resources to the blocks/panchayats and official agencies executing the work in the districts.

1.14.2.5. During the year 1980-81, 22,500 Mts of foodgrains and Rs. 287.90 lakhs of cash grants are allotted to the State Government under the programme. The new programme has been introduced by Government of India since November, 1980. Before that the State Government had already utilised about 22,500 Mts of foodgrains. Hence new programme will be implemented from 1981-82 in the State.

1.14.2.6. This programme will be implemented in accordance with guidelines of Government of India during the Sixth Five Year Plan. An outlay of Rs. 90 crores is envisaged for this programme, to be shared equally by the Centre and the State. Accordingly, State Plan provides an amount of Rs. 45 crores as State Share. As a result of implementation of the programme, employment potential of about 975 lakh mandays is likely to be generated during Sixth Five Year Plan.

1.14.3. Drought Prone Areas Programme.

1.14.3.1. The programme aims at mitigation of the effects of drought through integrated area development in agricultural and allied sectors of the rural economy. The strategy is to improve the economy of these areas through a package of infrastructural and on-farm development activities with the objective of optimum utilisation of land, water, human and livestock resources of the selected areas. The main thrust of the efforts is in the direction of restoration of a proper ecological and occupational balance in the areas. The main programme components are:—

- (i) Development and management of water resources;
- (ii) Soil and moisture conservation measures;
- (iii) Afforestation, with special emphasis on social forestry and farm forestry;
- (iv) Development of pasture lands and management of sheep development.;

(v) Livestock development and dairy development;

(vi) Restructuring of cropping pattern and changes in agronomic practices; and

(vii) Development of subsidiary occupations.

1.14.3.2. The programme is in operation in 41 selected talukas of the ten district of Ahmedabad, Amreli, Banaskantha, Bhavnagar, Jamnagar, Kachchh, Mahesana, Panchmahals, Rajkot and Surendranagar.

Programme for Sixth Five Year Plan 1980-85

1.14.3.3. The pattern of central assistance during Sixth Plan continues to be on 50:50 matching basis. Annual financial allocation is Rs. 15 lakhs per taluka. As 41 talukas of the State are covered under the programme, a total annual allocation comes to Rs. 615 lakhs. A total programme of Rs. 3075 lakhs is thus to be provided of which the State share is of Rs. 1537.50 lakhs. Main highlights of financial and physical programme are as under:—

Sr. No.	Sector	Outlay State share (Rs. in lakhs)	Physical targets		
			Item	Unit	Target
1	2	3	4	5	6
1.	Minor Irrigation	983.30	(1) Direct irrigation potential	Hect.	10289
2.	Afforestation	406.16	(2) Indirect irrigation potential	Hect.	10461
			(i) Current Plantation	Hect.	21045
			(ii) Soil and Moisture conservation.	Hect.	500
3.	Soil Conservation	362.10	(1) Area Covered under S. C. measuries	Hect.	18525
			(2) Farm Ponds	No.	1280
4.	Drinking Water Supply	1.00	1 Water supply Scheme to be contd.	No.	2
5.	Animal Husbandry and Dairy	715.93	(1) Estt. of Milk Co-operative Societies.	No.	435
			(2) Supply of Milch animals	No.	4785
			(3) Sheep Societies	No.	26
			(4) Chilling/cooling Plants	No.	9/2
6.	Agriculture	28.00	(1) Demonstration	No.	107
			(2) Supply of Improved Agricultural Implements	No.	780
7.	Co-operative and Credit Management	4.52	(1) Subsidy for enrolment of new members from SF/MF	No.	350
			(2) Share Capital loan to SF/MF	No.	1641
8.	Organisation and Management Uncommitted	395.36			
		178.66			
		3075.00			

Desert Development Programme :

1.14.3.4. The main objective of this programme is integrated development of the desert areas by increasing the productivity, income level and employment opportunities for the inhabitants through optimum utilisation of physical, human, livestock and other biological resources. While striving to achieve this ultimate objective, the programme would emphasise prevention of further deterioration of the desert areas and arrest the spread of desertic conditions. The pattern of central assistance is 50%.

1.14.3.5. The programme was introduced in the State in 1977-78 and is in operation in the following eleven talukas of the State.

Sr. No.	District	Taluka
1.	Banaskantha	1. Deodar
		2. Tharad
		3. Kankrej
		4. Radhanpur
		5. Santalpur
		6. Wav
2.	Mahesana	1. Sami
		2. Harij
3.	Kachehh	1. Abdasa
		2. Nakhtrana
		3. Lakhpat.

Programme for the Sixth Plan-1980-85

1.14.3.6. According to the present indications, an outlay of Rs. 825 lakhs is envisaged for eleven talukas under this programme for Sixth Plan period. The State share is of Rs. 412.50 lakhs. The preparation of draft plan for Sixth Plan period is entrusted to the DPAP Agencies.

1.14.4. Antyodaya

1.14.4.1. The State Government had launched the Antyodaya Programmes from 1st May, 1979 for the upliftment of the poor families in rural areas. In view of the introduction through out the State of the Integrated Rural Development Programme with similar objectives, an outlay of Rs. 492 lakhs for the economic programmes benefitting 20,000 families is provided in the State's Sixth Plan.

1.14.5. Block level Planning for Employment

1.14.5.1. Keeping in view the magnitude of the problem of unemployment and underemployment and the need for a suitable action programme, 20 talukas were selected for comprehensive block level planning for employment generation during the year 1978-79. 20 more talukas were added during the year 1979-80.

1.14.5.2. The work of preparation of Block level Plan was entrusted to the Voluntary Agencies and other institutions for undertaking the socio-economic survey in the selected talukas, compile an inventory of skills and resources available in the talukas and prepare a comprehensive block level plan indicating viable projects for employment intensive programme.

1.14.5.3. On account of introduction of IRD Programme in all the Blocks of the State no new talukas are to be added under this programme during the plan period. During the Sixth Five Year Plan 1980-85 efforts would be made for undertaking suitable schemes which would create favourable conditions generating forces for increased income and employment in the selected 40 talukas. An amount of Rs. 700 lakhs is proposed for the Sixth Plan.

1.14.6. Strengthening and Supporting Special Programme Organisation:

1.14.6.1. The development projects for small farmers and agricultural labourers on pattern of central sector SFDA/MFAL projects had been started by State Government since 1974-75. Now, since IRD Programme is being implemented in the whole State with effect from 2nd October 1980 no need is felt for continuance of the State Programme during the Sixth Plan. However, the provision for additional field level staff at taluka and village level is required to be made so as to enable the Agencies to effectively implement the special programmes particularly IRD programme which is now extended to all the parts of the State. Besides this, it is also contemplated to undertake study and research for IRD and other special programmes for rural development and to organise seminar and workshops as and when necessary for implementation of rural development programmes smoothly and effectively. Moreover, for the wider publicity of this programme, it is considered necessary to employ various media which would create awareness about the programme.

1.14.7. Local Development Works Programme

1.14.7.1. The Local Development Works Programme was being implemented during the earlier Five Year Plans. It was designed to enthuse interest in the Plan Programme among wide sections of community and to draw forth local initiative. It had received encouraging response from the local bodies and the people but had suffered dilution with the revision of the Community Development Programme in 1959. With the establishment of Panchayati Raj in April 1963, a number of district level schemes have been transferred to the Panchayats which also resulted in relegating the programme to the background.

1.14.7.2. In view of the emphasis on rural development particularly rural infrastructure and generation of large employment opportunities in rural areas, it was considered necessary to review the Local Development Works Programme in reoriented form on a large scale in rural areas. The programme was designed to achieve the important objective of encour-

aging initiative and participation and involvement of Panchayati Raj bodies in the process of planning and implementation. The programme provides employment opportunities to the needy in the rural works through investments in infrastructure and social overheads. Accordingly, a suitable programme was formulated and introduced in the State during 1978-79.

1.14.7.3. With the introduction of National Rural Employment Programme and the Integrated Rural Development Programme, the programme content of the Local Development Works will be suitably integrated during the course of the Sixth Plan.

1.14.8. Abhinav Gram Nirman Karyakram

1.14.8.1. The programme of Abhinav Gram Nirman envisages to provide basic civil amenities in the villages viz., (1) construction/conversion of latrines with biogas linkages, (2) improvement of houses with roof tops, smokeless chulas, ventilation, bathrooms etc., (3) stone/brick paving of the streets with water drain, and (4) cultural community centre cum-work place etc. The programme has generated unprecedented enthusiasm among the people and has raised good deal of hope and aspirations among the people of the rural areas of the State. The programme is extended to all the 16221 villages in the State having population of 200 and above. Under this programme, varying amount of assistance is provided to villages in different population ranges. The villages are categorised as having population of 200 to 1000, 1000 to 2000 and 3000 and above which

are given grant of Rs. 30,000/- (Rs. 10,000 per year), Rs. 50,000 (Rs. 15,000 for first and second year each and Rs. 20,000 for the third and last year) and Rs. 1,00,000/- (Rs. 30,000 for the first and second years each and Rs. 40,000 for the third and last year). Up to the end of 1979-80, 1700 villages were covered under this programme. An outlay of Rs. 1,050.00 lakhs is proposed for the Sixth Five Year Plan.

1.4.9. Off Season Unemployment Relief Works

1.14.9.1. The scheme was introduced in the year 1978-79. The aim of the scheme is to provide employment to the agricultural labourers, small and marginal farmers affected by lean agricultural situation. The scheme was introduced in the districts of Banaskantha, Panchmahals, Vadodara, Bharuch, Ahmedabad, Rajkot, Surendranagar, Mahesana and Kheda in the first spell of the financial year 1978-79 covering the period from 1st April, 1978 to 15th June 1978 and 2.19 lakh mandays of employment were generated. During the second spell of the scheme commencing from 15th January 1979, Districts of Amreli, Rajkot, Panchmahals, Bhavnagar and Surendranagar were covered. Employment provided was 4.50 lakh mandays. The scheme has been introduced during the lean agricultural situation in the districts of Sabarkantha, Banaskantha, Panchmahals and Valsad with effect from 16th October, 1979.

1.14.9.2. An outlay of Rs. 150 lakhs is proposed for the Sixth Five Year Plan 1980-85, which is likely to generate employment for 15 lakh mandays.

ANNEXURE-I

List of taluka included under Drought Prone Areas Programme

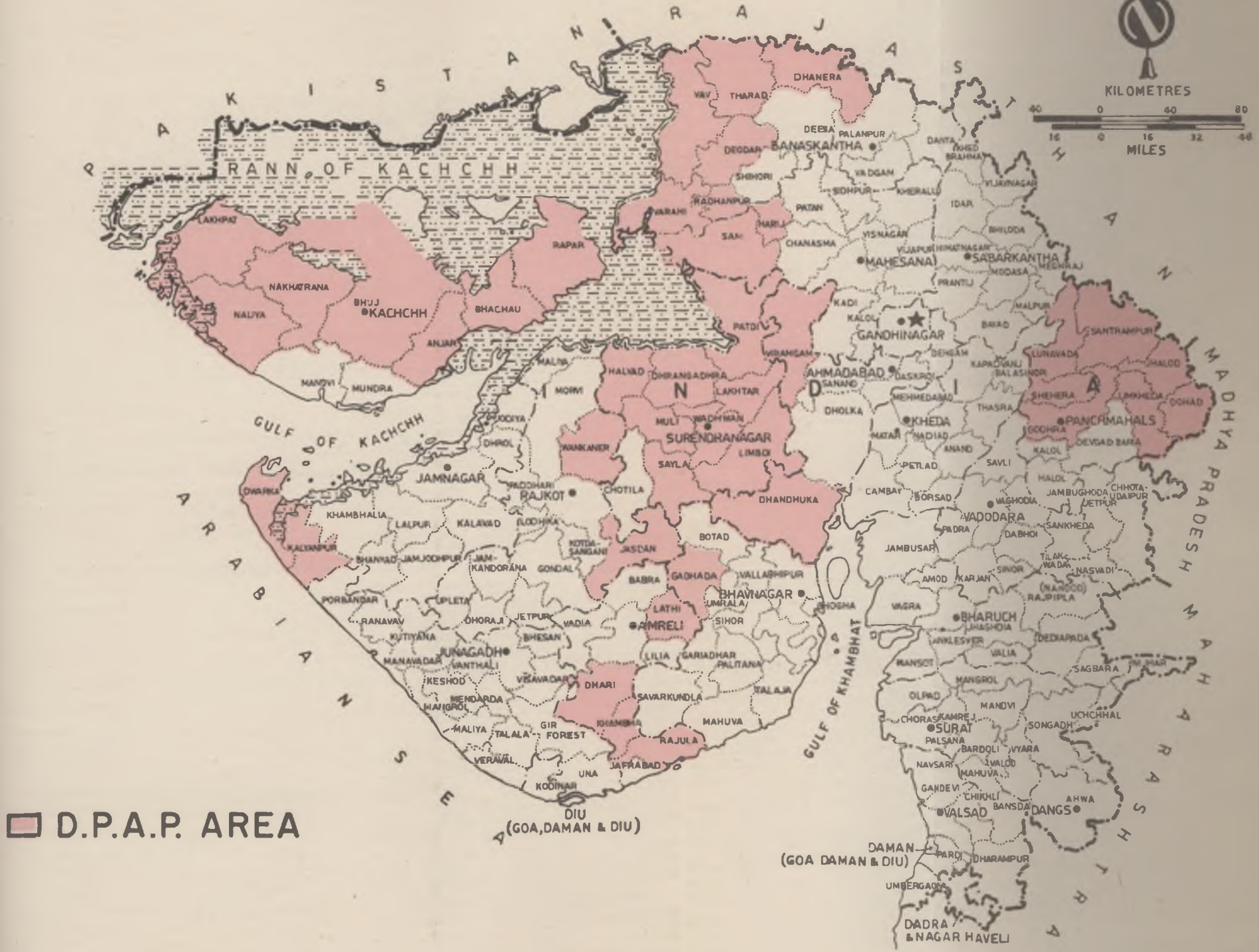
Sr. No.	District	Talukas	1	2	3
1.	Ahmedabad	(i) Viramgam (ii) Dhandhuka			(vi) Bhachau (vii) Anjar.
2.	Amreli	(i) Rajula (ii) Lathi (iii) Dhari (iv) Khambha	7.	Mahesana	(i) Sami (ii) Harij
3.	Banaskantha	(i) Tharad (ii) Dhanera (iii) Radhanpur (iv) Wav (v) Santalpur (vi) Deodar.	8.	Panchmahals	(i) Godhra (ii) Zalod (iii) Limkheda (iv) Dohad (v) Lunawada (vi) Santrampur (vii) Shehra
4.	Bhavnagar	(i) Gadhadra	9.	Rajkot	(i) Jasdan (ii) Wankaner
5.	Jamnagar	(i) Kalyanpur (ii) Okhamandal	10.	Surendranagar	(i) Dasada (ii) Lakhtar (iii) Wadhwan (iv) Muli (vii) Dhrangadhra (vi) Halwad (viii) Sayala (viii) Limbdi.
6.	Kachchh	(i) Abdasa (ii) Lakhpat (iii) Nakhtrana (iv) Rapar (v) Bhuj			

GUJARAT

- · — · — INTERNATIONAL BOUNDARY
- · — · — STATE BOUNDARY
- · — · — DISTRICT BOUNDARY
- TALUKA BOUNDARY



KILOMETRES



 D.P.A.P. AREA

STATEMENT

SPECIAL PROGRAMMES FOR RURAL DEVELOPMENT

List of Schemes included in the Sixth Plan-1980-85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Outlay-1980-85	
		Total	Capital
1	2	3	4
1.	IRD-1 Integrated Rural Development Programme	3815.00	...
	Total ..	3815.00	...
2.	NEP-1 National Rural Employment Programmes	4500.00	...
	Total ..	4500.00	...
	(a) Drought Prone Areas Programme		
3.	IRD-2 Minor Irrigation	491.65	...
4.	IDR-3 Afforestation and Pasture Development	203.08	...
5.	IRD-4 Soil Conservation	181.05	...
6.	IRD-5 Drinking Water Supply Schemes	0.50	...
7.	IRD-6 Animal Husbandry and Dairy Development	359.95	...
8.	IRD-7 Agriculture	14.00	...
9.	IRD-8 Co-operation and Credit Management	2.26	...
10.	IRD-9 Organisation and Management	197.68	...
11.	Uncommitted	89.33	...
	Total : DPAP	1537.50	..
	(b) IRD-10 Desert Development Programme	412.50	..
	Total : (a) + (b)	1950.00	..
12.	ANT-1 Antyodaya	492.00	492.00
	Total ..	492.00	492.00
13.	BLP-1 Block Level Planning for Employment	700.00	..
	Total ..	700.00	..
14.	SFP-1 Strengthening and Supporting Special Programme Organisation	500.00	..
	Total ..	500.00	..
15.	LDW-1 Local Development Works Programme	1250.00	..
	Total ..	1250.00	..
16.	AGK-1 Abhinav Gram Nirman Karyakram	1050.00	..
	Total ..	1050.00	..
17.	URW-1 Off Season Unemployment Relief Works	150.00	..
	Total ..	150.00	..
	GRAND TOTAL ..	14407.00	492.00

2. CO-OPERATION

2.1. Introduction.

2.1.1. Co-operation is conceived to be an instrument for encouraging decentralisation and local initiative in our development process with the overall purpose of having a society based on democracy and socialism. Co-operative development has, therefore, continuously been accorded a significant place in the successive plans

2.1.2. Gujarat has a long tradition in co-operative movement. It got considerable impetus after the commencement of planning and passed through various levels of development in a way developed its own autonomous character. The movement has become diversified and is no longer confined to the sphere of agricultural credit, consumers' credit, marketing processing and storage. It has extended itself to numerous other fields of socio-economic activities. A number of co-operative federal organisations have also come up and developed

2.1.3. Even after covering almost all the villages by primary agricultural co-operative credit societies, the progress in certain parts is lagging behind. The number of such societies as on 30th June, 1971 was 8438. Continuous efforts are being made to make the PACs viable. This number has decreased to 7896 as on 30th June, 1978 and further to 7647 as on 30th June, 1979. During the Sixth Plan 1980-85 it is proposed to reduce the number of agricultural credit societies by 1000.

Credit Co-operatives.

2.1.4. Credit co-operatives perform the task of providing credit to the agriculturists to improve their economic conditions and lift them out of the vicious circle of indebtedness and exploitation for which co-operation was introduced in India in the early years of 20th century. For supporting the massive agricultural programme, the State tried to create strong credit structure. It consists of primary agricultural co-operatives, district central co-operatives, co-operative banks and State level co-operative Bank. The State's assistance to these co-operatives is in the form of loans and grants for undertaking special tasks and share capital contributions. The main programmes under the credit co-operatives are briefly detailed below :

(a) **Outright grant** is given by the State to primary agricultural credit societies at the rate

of 4% of the additional short and medium term loans given to weaker sections (small and marginal farmers). The Co-operative Bank is given outright grant for the said purpose at the rate of 2% of the additional agricultural short term and medium term loans given to weaker sections. This amount is utilised to create a special bad debt reserve.

(b) **Share capital loan** is given to PACs by Government to be passed on to the small and marginal farmers to encourage them to become members. An amount of Rs. 30 per prospective member is granted to be repaid within 2 years.

(c) **Branch subsidy to Central Co-operative Bank** is given in case the Bank suffers losses in opening branches in 26 economically backward and under-developed talukas for the first 3 years based on the loans advanced by the Bank.

(d) The **State Agricultural credit relief and guarantee fund** is created to serve as a strong reserve at the Government level for writing off arrears of debt due to the co-operative credit institutions when such arrears assume a magnitude which threatens stability of co-operative credit structure and when such arrears have arisen from causes such as wide-spread or chronic famine beyond the control of co-operative credit institutions concerned.

(e) Government contributes to share capital of agricultural credit institutions viz Apex Co-operative Banks, Central Co-operative Banks, PACs so as to supplement their owned funds. It also adds strength to their capital base, to enable them to borrow adequately from higher financing institutions for carrying out the lending programme.

(f) **Agricultural Credit Stabilisation Fund** is created at the Government level to give loans to the State Co-operative Bank at the rate of 15% of the conversion of the short term loans into medium term and medium term loan into rephasing and a similar fund is created at the level of Land Development Bank also.

According to the accepted co-operative discipline laid down by the Reserve Bank of India, agricultural primary co-operatives are not given fresh finance. Ho

ever, with a view to giving relief to the agriculturist-members affected by natural calamities like drought, floods, pests etc. stabilisation arrangements have been introduced for the last several years. The short term loan of the affected agriculturist members are converted into medium term conversion loans, and fresh finance is also given to them. If the natural calamities occur during consecutive year or years, Repayment and Re-scheduling facilities are also being given. Thus regular members of agricultural primaries who have been incapable of repayment of their loans on account of natural calamities like famine drought etc. are not necessarily treated as wilful defaulters and the flow of co-operative credit is kept open to them.

(g) Consumption finance to weaker sections

Risk fund to PACs and Co-op. Bank

Consequent on the steps taken by the State Government to eradicate the indebtedness of the weaker sections of the community from non-institutional sources, the State Government has decided to give consumption finance upto Rs. 500 to a member through the agricultural co-operative primaries so that their dependence on non-institutional sources for this kind of finance may be eradicated. Looking to the risk involved in advancing consumption finance to weaker sections, contribution to risk fund by the State Government to the Co-operative Agricultural Societies at 7.5% and Central finance-agencies at 2.5% of the total consumption finance provided by them to weaker section of society is granted.

(h) Redemption of frozen debts.—Under this scheme Government grants loans to scheduled caste and small and marginal farmers upto Rs. 500 plus interest repayable in 10 annual instalments to PACs so that the debt on account of natural calamities do not prevent the flow of credit to them.

2.1.5. Out of Rs 240 crores outstanding at the level of primary societies, some 50 % thereof namely, Rs. 120 crores would be classified as overdues. In the long-term sector (Land Development Bank) out of outstanding of Rs 65 crores, some Rs 42 crores are overdues. The discussions with Reserve Bank have helped in identifying the problems as obtaining in the short-term sector as well as long-term credit sectors. A scheme has been evolved with specific measures for relief viz staggering of instalments upto 10 to 12 years in the short-term sector as also rephasing of instalments on the basis of indentifying overdues according to their age and character for the long-term credit sector, relief with regard to interest in general as well as in principal for beneficiaries falling within the category of small farmers, adivasi cultivators, grant of fresh credit on punctual performance etc, are included as a part of the scheme

2.2. Review of Progress

2.2.1. Total number of Primary Agricultural Co-operatives (PACs) stood at 7647 at the end of 1979 out of which 2535 were viable and 2735 were potentially viable and 2377 were non viable. The membership of PACs stood at 18.57 lakhs at the end of 1979-80. Of these 13.24 lakhs were estimated to belong to weaker sections. 41 Farmers Service societies and 51 LAMPs have been registered.

2.2.2. Short and medium term advances of PACs are estimated to be of the order of 165 crores by the end of 1979-80, out of which Rs. 13.50 crores is estimated for weaker sections.

2.2.3. The total loans advanced by the Land Development Bank during 1979-80 was of the order of Rs. 3.82 crores. Percentage of overdues outstanding against short term and medium term credit is 37.59 and the long term advance is 61% in the year 1978-79. An amount of Rs. 4.66 lakhs has been spent for risk fund. 39 branches were opened by the Central Co-operative Banks in economically backward and undeveloped talukas and Rs. 7,500 is given as subsidy in the year 1979-80. Agricultural Credit Relief Guarantee Fund reached the level of Rs. 70 lakhs by the end of the year 1979-80. An amount of Rs. 68 lakhs has been spent on stabilisation arrangements for the co-operatives (short term and medium term). An amount of Rs. 66.94 lakhs was contributed by Government as share-capital to the CFAs, FSS, LAMPs, PACs in the year 1979-80.

Farmers Service Societies (FSS) and Large Sizes Multi-purpose Societies (LAMPs)

2.2.4. By the end of the year 1979, there were 40 Farmers Service Societies registered of which 23 were in tribal areas. The total membership of these societies was 60589 of which 58849 were from Scheduled Castes and Scheduled Tribes. Total share capital of these FSS was Rs. 60.57 lakhs of which the Government share capital is Rs. 13.81 lakhs. During 1979 the loan advanced to members was Rs. 217.54 lakhs of which Rs. 7.03 lakhs were to scheduled castes and Rs. 89.99 lakhs to scheduled tribes.

2.2.5. By the end of 1979, there were 58 LAMPs registered in tribal areas for providing integrated credit including consumption credit, agriculture and consumer requisites and arranging for marketing of minor produce (forest), agriculture produce and other products of other ancillary occupations. The existing primary credit Societies in the areas of

FSS and LAMPS were to be amalgamated with them or liquidated to ensure the objectives of meeting the requirements of the weaker sections. The membership of those LAMPS was 42257 of which 29936 were members belonging to scheduled castes and scheduled tribes. The share capital of these 53 LAMPS was Rs. 41.32 lakhs of which the share capital contribution of Government was Rs. 5.54 lakhs. During 1979 the loan advanced was Rs. 113.27 lakhs of which Rs. 6.04 lakhs were to scheduled castes and Rs. 45.66 lakhs to scheduled tribes. At the end of 1979 the loan outstanding was to the extent of Rs. 136.39 lakhs of which loan overdues was Rs. 56.07 lakhs.

2.3. Programme for Sixth Five Year Plan

2.3.1. An outlay of Rs. 3,200 lakhs is provided for the Sixth Five Year Plan 1980-85. This will be supplemented by the special central assistance for Tribal Area Sub-Plan. The broad break-up of the outlays provided for 1980-85 plan is as under.

(Rs. in lakhs)

Sr. No.	Programme	Sixth Five Year Plan 1980-85 outlays
1.	Direction and Administration	50.00
2.	Credit Co-operatives	1,952.80
3.	Labour Co-operatives	6.00
4.	Farming Co-operatives	5.20
5.	Warehousing and Marketing Co-operatives	83.50
6.	Processing Co-operatives	100.00
7.	Co-operative Sugar Mills	500.00
8.	Consumers' Co-operatives	40.00
9.	Co-operative Training	100.00
10.	Other Co-operatives	362.50
	Total	3,200.00

2.3.2. The number of Primary Agricultural Societies is to be brought down to 6647 by the end of the Sixth Plan by means of liquidation, amalgamation, reorganisation etc.

Membership for the PACs is proposed to be increased by about 50,000 every year reaching the level of 21 lakhs by the end of 1984-85. Six more LAMPS are to be organised by the end of 1984-85. Short term and medium term advances are to be increased to Rs. 315 crores by the end of 1984-85; of which Rs. 23 crores is estimated to be for weaker sections. The long term advances are proposed to be increased to Rs. 55 crores by the end of 1984-85. The consumption finance to the weaker sections of the society is projected to reach the level of Rs. 300 lakhs for the Sixth Plan for which an amount of Rs. 44.90 lakhs as risk fund is provided. An outlay of Rs. 250 lakhs for the sixth plan is envisaged for the scheme for Redemption of frozen debts. An amount of Rs. 50.00 lakhs towards subsidy is provided for Agricultural Relief and Guarantee Fund and Rs. 250 lakhs loan for stabilisation fund arrangement for flow of co-operative credit (short and medium term).

2.3.3. An amount of Rs. 1,139.90 lakhs for share capital contribution to agricultural credit institutions as Government share capital contribution is earmarked for the Sixth Plan. (Rs. 899 lakhs for Apex and District Co-operative Banks and Rs. 240.90 lakhs for Service Societies).

Labour Co-operative Societies

2.3.4. Labour Co-operatives are organised by the labourers in order to prevent exploitation by contractors and also to enable them through self help and by the P. W. D. authorities to earn better wages. Government gives subsidy and share capital contribution to the societies. Government gives work contracts without inviting tenders to the labour contract societies keeping in view the classification given to the societies for this purpose. Share capital subsidy of Rs. 40 per member limited to Rs. 4,000 per society is being made available to scheduled caste members to enable them to become members of labour contract co-operatives. At the end of 1978 there were 743 societies with a total membership of 48,681. This figure rose to 830 labour contract societies with a total membership of 58,000 at the end of 1979. These societies have executed contract work to the extent of Rs. 726 lakhs and have paid wages of Rs. 293 lakhs, of which the wages to members was to the extent of Rs. 193 lakhs. The value of consumer goods distributed by the labour societies was to the tune of Rs. 4 lakhs by these societies in the year 1979.

Farming Societies

2.3.5. Farming co-operative societies are established to help agriculturists with the small holdings to adopt better techniques of agricultural production

led to raise their income. There were 371 co-operative farming societies by the end of June 1980. Out of 371 farming co-operatives 23 are joint farming co-operatives, in which the land is owned individually and the remaining 348 are Collective Farming Societies in which the ownership of the land rests with the societies. Most of the Collective Farming Societies are formed on the Government waste lands and the members by and large belong to backward areas. The command area is estimated to be 1570 hectares of which net area under cultivation is estimated at 18,860 hectares. The value of agricultural produce is estimated at Rs. 108 lakhs for the year 1979. It is proposed to organise 50 new co-operative farming societies during the Sixth Five Year Plan. This sector can be said to have achieved limited measure of success.

Warehousing, Marketing and Processing.

2.3.6. The Co-operative marketing structure in the State consists of the Gujarat State Co-operative Marketing Society at the apex level, District purchase and sales union at the District level and Taluka purchase and sales union at primary level. These co-operatives are engaged in the distribution of agricultural inputs and marketing of crops. Some marketing co-operatives are engaged in processing too. To enable the marketing societies to undertake the purchase and sale of agricultural produce, the sale of fertilizers and other inputs, State Government gives share capital contribution on matching basis and also subsidy for price fluctuation fund of the value of the agricultural produce purchased directly from the small and marginal farmers. During 1979-80 an amount of Rs. 3.28 lakhs as price fluctuation fund has been given to the marketing co-operatives for carrying out these activities based on its purchases. Target value of agricultural produce is estimated to be Rs. 110 crores by the end of 1984-85. The total capacity of godowns of marketing societies and rural godowns put together is 3.19 lakh tonnes at the end of the year 1979-80. It is proposed to increase the same to 3.35 lakh tonnes by the end of the Sixth Five Year Plan.

2.3.7. Processing co-operative Societies are established to encourage the agriculturists to process their produce through their own co-operative societies so that their produce may fetch better price. Government gives share capital on a matching basis to agricultural processing units.

Sugar Factories

2.3.8. Sugar Co-operatives are given share capital per cent to the extent of Rs. 160 lakhs. There are 15 co-

operative sugar factories having 90,000 members in the State, out of which 13 are in production, while two are under the stage of erection viz at (i) Talaja, Dist. Bhavnagar and (ii) at Zoravara, Dist. Surat which are likely to start functioning during 1981-82 or so. Government has so far contributed Rs. 1420 lakhs as share capital till the end of June, 1980. It is proposed to establish one or two more co-operative sugar factories during 1980-85. In order to rehabilitate the sugar industry and strengthen the base as per the recommendations of the study group under the chairmanship of Shri Baveja, it is proposed to provide financial assistance to such units. Further, it is also proposed to encourage existing sugar cooperatives to establish sugar by-product industries such as bagass and molasses in suitable area for which financial assistance is also proposed to be provided. An outlay of Rs. 500 lakhs is proposed for the Sixth Plan.

Ginning & Pressing Co-operatives.

2.3.9. At the end of 1979 there were 111 ginning and pressing co-operatives covering most of the cotton ginning areas in the State with a total membership of 1.12 lakhs. Its share capital is estimated to be Rs. 232 lakhs of which Government share capital contribution is Rs. 21 lakhs. During 1979 the cotton ginned is estimated at 15.45 quintals and 3.58 lakh bales pressed valued at Rs. 37.50 crores.

Cooperative Rice Mills.

2.3.10. There were 43 rice mills in the State at the end of 1979-80. Five more are proposed to be organised during the Sixth Plan.

Marketing Societies.

2.3.11. There are 18 District Purchase and Sale Unions and 171 Taluka Purchase and Sale Unions in the State. Further, there are 141 other co-operative marketing societies like cotton sale, vegetables and fruits sale societies etc. and the Apex Marketing Federation at the State level. Thus, there are in all 331 marketing societies. Cotton is the main cash crop of Gujarat and co-operative cotton marketing societies work on pooling system. During the last 4 years or so, the marketing and processing of groundnut on co-operative basis has developed in the Saurashtra region. Taluka Purchase and Sales Union of Gondal, Jetpur and Rajkot Lodhika have under taken this activity. Further, the Apex Marketing Society has also recently entered this field having its oil mill at Rajkot.

2.3.12. The Gujarat State Co-operative Marketing Federation is the sole distributor of fertiliser of Gujarat State Fertiliser Company and of pool Fertilisers & IFFCO for distribution of fertilisers in the State. During 1979-80, it has distributed fertilisers worth Rs. 104 crores through the Co-operatives. Thus, the Co-operatives are increasingly involved in the distribution of agricultural inputs.

Consumers Co-operatives.

2.3.13. Consumers Co-operatives are meant to supply essential articles to the consumers at the fair price. These consumers co-operatives which have 50 and more members of Schedule Castes are given special benefits. The Government gives share capital contribution to the rural consumers co-operatives and other co-operatives i.e. PACs/FSS/IAMPS etc. who

undertake consumer activities in addition to the other activities. In the State, in all district head quarters and urban areas consumer stores have been organised. In rural areas, the village primaries and their federations, as a matter of policy, are encouraged to undertake consumer activities in these areas.

2.3.14. By the end of 1979-80, 1015 primary consumers co-operatives, 24 wholesale co-operative stores and one State Federation of Consumers were organised with an estimated membership of 2.85 lakhs. The retail sales of consumer goods in urban and rural area is estimated to reach 195 crores of which Rs. 140 crores in rural areas during the Sixth Five Year Plan period. The wholesale sale by the State Level and Central wholesale stores is estimated to reach Rs. 65 crores at the end of 1980-85.

STATEMENT

Co-OPERATION.

List of Schemes included in the Sixth Five Year Plan 1980-85.

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme.	Sixth Five Year Plan outlay	
		Total	Capital
1	2	3	4
I-A Direction and Administration.			
(1)	COP—1 Expansion of Administrative and supervisory staff.		
	(a) Staff Subsidy.	35.00	..
(2)	COP—2 Expansion of Statistical Staff		
	(a) Subsidy.	10.00	..
(3)	COP—3 Training of Staff.		
	(a) Subsidy.	5.00	..
	Total:—I.	50.00	..
II-B Credit Cooperatives:			
(4)	COP—4 Village cooperatives.		
	(a) Out Right grant (Subsidy)	15.00	..
	(b) Revitalisation.	2.00	..
	(c) Share Capital (Loan).	1.00	1.00
	Total-II(B)-4.	18.00	1.00
(5)	COP—5 New Redemption of frozen debt.		
	(a) Loan.	250.00	250.00
	Sub-Total—5	250.00	250.00
(6)	COP—6 Risk fund for consumption finance.		
	(a) Subsidy	30.00	..
	Sub-Total—6	30.00	..
(7)	COP—7 Central Cooperative Bank/Land Development Bank.		
	(a) Branches (Subsidy)	11.40	..
	(b) Outright grant to cooperatives. Subsidy.	3.50	..
	Sub-Total—7	14.90	..
(8)	COP—8 Agricultural Relief and Guarantee Fund. Subsidy.	50.00	..
	Sub-Total—8 ..	50.00	..
(9)	COP—9 Stabilisation fund arrangement for flow of Co-op. credit (Short and medium term.)		
	a. Loan.	250.00	250.00
	Sub-Total—9 ..	250.00	250.00

1	2	Total 3	Capital 4
(10)	COP—10 Credit stabilisation fund to State Co-op. Land Development Bank for long term advances.		
	(a) Loan	50.00	50.00
	(b) Subsidy.	150.00	..
	Sub-Total-(10).	200.00	50.00
(11)	COP—11 Share Capital contribution to Agricultural credit institutions.		
	(a) Share capital.		
	(1) Apex and District. Co-op. Bank.	899.00	899.00
	(2) Service Co-operatives.	240.90	240.90
	Sub-Total:(11)	1139.90	1139.90
	Total :II-B.	1952.80	1690.90
III. Labour Co-operatives:—			
(12)	COP—12 Labour co-operative societies		
	(a) Share capital	2.53	2.53
	(b) Loan.	..	..
	(c) Subsidy.	3.47	..
	Total—(III)	6.00	2.53
IV Farming Co-operatives.			
(13)	COP—13 Co-operative Farming Socys.		
	(a) Share capital.	1.50	1.50
	(b) Loan	..	..
	(c) Subsidy.	3.70	..
	Total. (IV)	5.20	1.50
V. Warehousing and Marketing Co-operatives.			
(14)	COP—14 Apex marketing societies		
	(a) Share capital.	6.00	6.00
	Sub-Total-14	6.00	6.00
(15)	COP—15 District marketing socys.		
	(a) Share capital.	5.00	5.00
	Sub-Total-15	5.00	5.00
(16)	COP.—16 Primary marketing societies		
	(a) Share capital	10.00	10.00
	Sub-Total—16	10.00	10.00
(17)	COP.—17 District marketing society. Godowns.		
	(a) Subsidy.	6.25	..
	Sub-Total-17	6.25	..

1	2	Total 3	Capital 4
(18)	COP-18— Price fluctuation fund.		
	(a) Subsidy.	40.00	..
	Sub-Total—18	40.00	..
(19)	COP.19 Primary marketing socys. Godowns.		
	(a) Subsidy.	6.25	..
	Sub-Total-19	6.25	..
(20)	COP.20— Rural socys. Godowns.		
	(a) Loan.	10.00	..
	(b) Subsidy.	10 00	..
	Sub-Total-(20).	10 00	..
	Total -V.	83 50	21.00
VI. Processing co-operatives:—			
(21)	COP-21— Other processing societies.		
	(a) Share capital.	100.00	100.00
	(b) Subsidy.	..	..
	Total VI.	100.00	100.00
VII. Co-operative sugar Factories:—			
(22)	COP.22—Co-operative [sugar factories		
	(a) Share Capital.	480.00	480.00
	(b) Loan.	5.00	5.00
	(c) Subsidy.	15.00	..
	Total VII	500.00	485.00
VIII. Consumers Co-operatives:—			
(23)	COP-23—Distribution of consumer articles in rural areas through village and marketing socys.		
	(a) Share capital.	2.55	2.55
	(b) Loan.	1.80	1.80
	(c) Subsidy.	0.65	..
	Sub-Total-23	5.00	4.35
(24)	COP-24-Urban cooperative.		
	(a) Share capital	14.65	14.65
	(b) Loan.	13.63	13.88
	(c) Subsidy	6.52	..
	Sub-Total (24)	35.00	28.48
	Total VIII	40.00	32.83
(IX) Education.			
(25)	COP-25—Co-operative Training and education.		
	(a) Subsidy.	100.00	..
	Total (IX)	100.00	..

1	2	Total 3	Capital 4
(X) Other Co-operatives.			
(26)	COP-26-Auto Rickshaw and Redda pullers.		
	(a) Share Capital	2.00	2.00
	Sub-Total-26	<u>2.00</u>	<u>2.00</u>
(27)	COP-27-Transport society.		
	(a) Share Capital	0.50	0.50
	Sub-Total-27.	<u>0.50</u>	<u>0.50</u>
(28)	COP-28-Rural Electricity Socys.		
	(a) Share Capital	10.00	10.00
	Sub-Total-28.	<u>10.00</u>	<u>10.00</u>
(29)	COP-29-Share capital contribution to co-operatives for contribution towards participation in share capital of Kriboo (Hajira) by co-operatives.		
	(a) Loan.	350.00	350.00
	Sub-Total-29	<u>350.00</u>	<u>350.00</u>
	Total. X	<u><u>362.50</u></u>	<u><u>362.50</u></u>
	Total:-Cooperation.	<u>3200.00</u>	<u>2696.26</u>

3. WATER DEVELOPMENT (IRRIGATION)

3.1.1. Water is a crucial factor in the economy of the State. Hardly 16 % of the land under cultivation is irrigated. Agriculture in the State is a consequence highly dependent on the vagaries of the monsoon. Parts of ten districts in the State are drought prone out of a total of Nineteen districts. The State's agricultural output and the Gross Domestic Product are subject to severe fluctuations between a good year and a drought year. Harvesting the State's water Potential and utilizing it to the

maximum are, therefore, of great importance for the development of the State.

3.1.2. Gujarat is one of the States with limited water resources. As against a national figure of 55 % for the ultimate potential for irrigation, the State has an ultimate potential of only 43 %. The overall estimates of the irrigation potential of the State are given in the table below :—

Item	Ultimate Potential estimated (in Maft.)	Ultimate irrigation potential (Lakh hect.)
1	2	3
Surface Waters		
1. Major and medium schemes based on surface waters (without Narmada).	10.56	14.64
2. Minor schemes based on surface waters	1.90	2.49
	12.46	17.13
3. Narmada Project	9.00	15.26
Total : Surface Waters :	21.46	32.39
4. Based on ground waters	..	18.00 (Tentative.)
	21.46	50.39

3.1.3. As against the ultimate potential possible the status of development as on 30-6-1980 is was as under :—

Item	Harnesses potential estimated (lakh Ha.)	Utilisation (lakh Ha.)
1	2	3
1. Major and Medium schemes	10.12	5.29
2. Minor Schemes :		
(a) Based on surface waters	1.28	0.80
(b) Based on ground waters	15.53	13.60
Total	26.93	19.69

3.1.4. Whereas the harnessing of Ground Water resources is nearly 83 % of ultimate potential, the harnessing of surface water resources is only of the order of 35.2 % of the ultimate potential. Irrigation in the State is heavily dependent on ground water resources probably overdrawing in some areas, while with regard to surface water only about one third of the ultimate potential is harnessed. Therefore, in the Sixth and subsequent Plans, the emphasis will be on the development of surface water resources.

3.1.5. Even in the matter of utilisation of potential created by medium and major irrigation projects, there is a tremendous leeway to make. As against 10.21 lakh hectares of potential created hardly 5.29 lakh hectares are utilized which works out to just 51 %.

3.2. Review of Progress.

3.2.1. The Fourth Plan started with 13 spill-over schemes. During the course of the Fourth Plan, the State Government had taken up as many as 49 new irrigation schemes, 5 of them major and 44 medium schemes. Two medium schemes could be completed fully and the Ukai project was put on road to completion, the dam works having been fully completed by June, 1972 and a good headway made with canal works. Altogether, 11 major and 47 medium schemes had spilled into the Fifth Plan. In the interest of consolidating the position in respect of creation of irrigation potential the State Government accorded the highest priority to expedite the completion of all schemes at an advanced stage which spilled over to the Fifth Plan. During the course of the Fifth Plan (1974-75 to 1977-78) in all 13 medium schemes were fully completed. Besides, 4 major schemes and 10 medium schemes were also substantially completed. Construction of several schemes both major and medium has been brought to such an advanced stage that with some investment in the Sixth Plan period 1980-85, the same can start yielding physical benefits early in the plan.

3.2.2. The overall position of irrigation development in the State is such that most of the major projects and medium projects on important rivers will be completed soon with the result that during the course of Sixth Plan, the State will have to undertake all the remaining schemes in a phased manner with the stress on optimisation of additional potential generation from the existing projects also.

3.2.3. The following table depicts the level of irrigation potential and utilisation in the various plan periods commencing from the First Plan.

(lakh hectares)			
Sr. No.	Plan	Irrigation potential created (after re-appraisal)	Utilisation achieved
1	2	3	4
1.	At the end of the First Plan (1951-56)	0.23	..
2.	At the end of the Second Plan (1956-61)	2.48	0.66
3.	At the end of the Third Plan (1961-66)	3.41	1.90
4.	At the end of the Three Annual Plans (1966-69)	4.40	3.11
5.	At the end of the Fourth Plan (1969-74)	6.22	4.01
6.	At the end of the Fifth Plan (1974-78)	9.24	5.01
7.	At the end of 1978-79	9.53	5.03
8.	At the end of 1979-80	10.12	5.29

3.2.4. It will be seen from the above table that the tempo of irrigation development picked up in the Fourth Plan increased during the Fifth and subsequent two annual plans. It is proposed to maintain and increase the tempo of irrigation development during the Sixth Five Year Plan 1980-85.

3.3. Approach and Strategy.

3.3.1. Water development is one of the key sectors in Gujarat's economy. A substantial outlay of Rs. 1000 crores which represents 26.6% of the total outlay in the State Five Year Plan has been proposed in this sector.

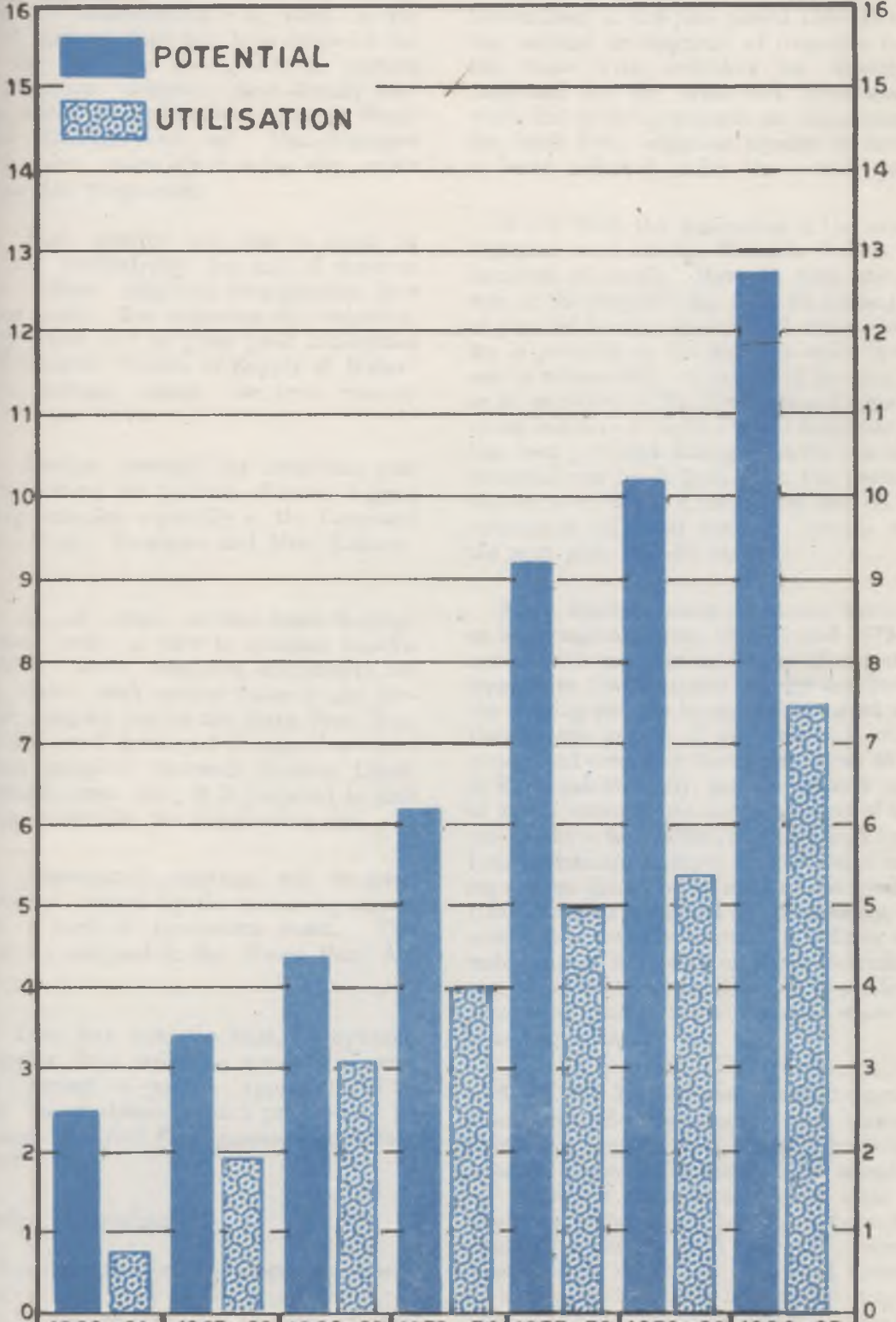
3.3.2. The outlay for the various projects has been so planned that the rate of irrigation development through major and medium projects is sustained and at the same time considerable headway is made with the Narmada Project so that benefits from this project are derived progressively from the initial years of the Seventh Five Year Plan. Thus, the Sixth Five Year Plan 1980-85 in effect has to serve as a transition from effective development of irrigation through major and medium irrigation projects other than Narmada to the realisation of benefits from Narmada Project in the Seventh Plan period. The main potential creating projects other than Narmada are expected to be essentially completed or put on way to completion during the period.

IRRIGATION

MAJOR AND MEDIUM IRRIGATION PROJECTS

LAKH HECTARES

LAKH HECTARES



1960-61

1965-66

1968-69

1973-74

1977-78

1979-80

1984-85

PROJECTED

3.3.3. Very high priority will be given to the full utilization of the irrigation potential created by various projects already completed. This will be achieved not only by drawing up an effective multidisciplinary strategy for full utilization of irrigation water but also through comprehensive modernization. A start in the direction of modernization has been made by the State in the last few years. Eleven existing medium irrigation schemes have already been taken up under this programme through World Bank Aid. Modernization of Ukai-Kakrapar project is also taken up in a big way under World Bank Aid programme.

3.3.4. High priority will also be given to increasing the productivity per unit of water in the areas where irrigation arrangements have already been made. For achieving this objective, the strategy which will be given great importance is the "Rotational System of Supply of Water" (Warabandh System) which has been recently introduced in the State.

3.3.5. Another strategy for increasing productivity is tackling the problem of water logging by providing drainage especially in the Command Areas of Ukai Kakrapar and Mahi Kadana Projects.

3.3.6. As a part of anti-water logging strategy and with a view to optimize benefits from available water resources, conjunctive use of ground water with surface water is also proposed to be adopted during the Sixth Five Year period. In the well developed command areas of Mahi Kadana complex, Fatewadi System, Dantiwada command area etc., it is proposed to drill augmentation tubewells for conjunctive use.

3.3.7. Concentrated attention will be given to the problems created by the increasing ingress of salinity in parts of Saurashtra coast. This project is partly included in the World Bank Aid Programme.

3.3.8. Last but not the least, for optimizing the benefits from irrigation resources already created, a project-to-project approach will be adopted, the problems in each project will be identified and analysed and methods of solving them evolved.

3.4. Perspective of Development

3.4.1. While emphasis on the ongoing projects has to continue as a part of the overall strategy, it has also to be realised that since adequate number of new projects could not be taken up in the Fifth Plan, the development remained confined mostly to the major ongoing projects on the principal rivers *viz.* Tapi and Mahi and a few scattered medium

irrigation projects which were taken up in the Third and the Fourth Plan periods. As a result, irrigation facilities could not be developed adequately and effectively in some of the dry parts of the State like Kachehh, Saurashtra and North Gujarat and certain tribal areas. It is the endeavour of the State Government in the plan period 1980-85 to balance the regional development of irrigation facilities in the State with emphasis on drought prone, backward and dry areas and tribal areas. Thus, while the on-going projects are being completed in the Sixth Plan, adequate pipeline of new schemes is being inducted under the overall programme.

3.4.2. With the declaration of the award of the Tribunal, work on the Narmada Project has been launched effectively. However with the enormous size of the project (Rs. 2755.00 crores) the flow of physical benefits cannot start unless sizeable outlay is provided in the plan. In order that project can be substantially completed in the next 12 years or so, an outlay of Rs. 300 crores-net (gross Rs. 531 crores inclusive of share of other beneficiary States) has been provided during 1980-85. No benefits of potential can be derived from the project during the course of the five year period 1980-85. The large investment will start yielding returns only from the next plan 1985-90 onwards.

3.4.3. Though certain investment has been made on new projects during 1978-79 and 1979-80, it is necessary to maintain the tempo of irrigation development so that optimum benefits are derived from the existing projects by way of improved utilisation through the process of modernisation, warabandhi system and extending the channel from 40 ha. chak to 8 ha-chak. Similarly, problem created on account of use of waters in the command areas of the major projects have to be effectively countered by comprehensive drainage schemes. The problems are assuming a large dimension in some of the areas like the Ukai Kakrapar command. Simultaneously, problems arising on account of intrusion of salinity in ground waters along the coast of south Saurashtra have also to be effectively tackled by way of check dams, percolation tanks, larger storages where feasible, spreading channels etc.

3.4.4. The 1980-85 span is also the most opportune period for accelerating flood control works considering the fact that reservoir projects on the principal rivers have already been completed and the vulnerable down stream flood areas can be effectively protected by integrated measures (with regulated discharges from reservoirs) consisting of embankments, sluices etc. The flood distress areas are as large as 9.01 lakh hectares affecting a population of 40 lakhs. The State Government has therefore, taken-up framing of a revised master plan for flood control covering the entire State keeping in view the recommendation made by the National Commission on Floods.

3.5. Key considerations ;

3.5.1. The key considerations in formulating the proposals are as under :

(i) Early completion of all on-going major and medium schemes spilling into the Sixth Plan, for deriving full benefits therefrom.

(ii) Launching Narmada project in a big way so that partial benefits start flowing before the end of the Seventh Plan.

(iii) Taking maximum advantage of available external foreign assistance by vigorous implementation of such aided schemes.

(iv) According high priority to the new medium irrigation schemes benefitting the drought-prone, backward and tribal areas.

(v) Accelerating the pace of modernisation of existing earlier plan schemes and effecting conjunctive use of surface and ground waters, and thereby utilising fully the water resources harnessed.

(vi) Taking up in a big way drainage works in the command areas of Ukai-Kakrapar and Mahi-Kadana Projects.

(vii) Implementing vigorously the works for preventing salinity ingress in coastal areas.

(viii) Boosting the tempo of studies, investigation and research relating to irrigation, drainage, and flood control works.

(ix) Construction of irrigation channels upto 8 ha. chak instead of 40 ha. chak for better efficiency of water management.

(x) Implementation of Warabandhi system for equitable distribution of water for better use of available water.

(xi) Accelerating the tempo of Flood Control Works.

(xii) Anti-Sea erosion works.

(xiii) Modification and improvements to the existing schemes due to revision in hydrology.

3.6. Programme for the Sixth Five Year Plan 1980-85.

3.6.1. Keeping in view the strategy narrated above and for achieving the physical targets based on the key considerations enumerated above, an outlay of Rs. 1000 crores is provided for the Sixth Five Year Plan (1980-85) as detailed below :—

(Rs. in crores)					
Sr. No.	Programme	Spillover liability as on 1-1-80	Estimated cost of new programme	Total	Outlay proposed for Sixth Plan 1980-85
1	2	3	4	5	6
1.	Major Projects in progress as on 1-4-76	14.99	..	14.99	14.99
2.	World Bank Projects—				
	(a) Medium Line of Credit	281.06	..	281.06	276.05
	(b) Major Composite Group of Projects	283.80	..	283.80	230.29 + 12.00*
					242.29
3.	On-going Projects				
	(a) Major	6.71	..	6.71	6.71
	(b) Medium	23.53	..	23.53	23.53
		30.24	..	30.24	30.24
	Total : 1 to 3	610.09	..	610.09	551.57 + 12.00
4.	Narmada Project	2703.52	..	2703.52	300.00
	Total 1 to 4	3313.61	..	3313.61	851.57 +12.00

1	2	3	4	5	6
5.	Warabandhi System	..	41.00	41.00	17.00
6.	Extension of Irrigation canals from 40 Ha. chak to 8 Ha. chak	..	41.00	41.00	15.50
7.	Modernisation of canals (other than World Bank)	23.00	..	23.00	8.00
8.	Water Development Services	20.00	..	20.00	17.00
9.	Flood Control and Anti-erosion works	9.50	20.50	30.00	20.00
10.	New schemes of 1978-80.	173.89	..	173.89	34.87
11.	New Schemes of VI Plan	..	199.63	199.63	3.06
12.	Modification and improvements to the existing schemes due to revision in hydrology	..	40.00 (Tentative)	40.00	10.00
13.	Drainage	21.00	..	21.00	17.00
14.	Prevention of Salinity Ingress (other than World Bank)	..	37.00	37.00	6.00
Total of 5 to 14		247.39	379.13	626.52	148.43
Total of 1 to 14		3561.00	379.13	3940.13	1000.00 +12.00

3.6.2. During the Sixth Five Year Plan 1980-85, it is estimated that an irrigation potential of 2.60 lakh hectares would be created bringing the level of available irrigation potential to 12.72 lakh hectares at the end of 1984-85. Similarly, the target for irrigation utilisation is 2.24 lakh hectares bringing the level of utilisation of irrigation potential to 10.53 lakh hectares at the end of 1984-85.

3.7 Details of the programme.

3.7.1. The overall programme for the Sixth Five Year Plan is divided into different groups as shown in the preceding paras. They are discussed in detail as under :—

Major Schemes which were in progress as on 1st April 1976.

3.7.2. Out of the 3 schemes considered under this group 2 schemes viz. Kadana and Ukai would be completed by 1981-82 in all respects and the third scheme viz. Sabarmati would be completed during 1982-83. An amount of Rs. 14.99 crores is provided for these schemes during the first three years of the Plan.

Other on-going major and medium projects.

a) Major Projects :

3.7.3. Only 2 projects viz. Mahi (Stage-I) and Akrapar which are practically completed and for which a nominal amount of Rs. 1.08 crore would be needed, are considered. A provision of Rs. 5.63 crores is also provided towards our share in Mahi Sajjagar Project.

b) Medium Projects :

3.7.4. Out of 31 schemes covered under this group, 13 schemes estimated at Rs. 28.02 crores are at a very advanced stage of construction and a nominal provision of Rs. 2.90 crores is required for completing them. Out of these 13 schemes 3 are in tribal areas and one in drought prone area. These projects are Kalindri, Baldeva, Pigut, Vaidy, Phophal, Bagad, Shinghoda, Chhaparvadi, Ambajal, Raval, Godhathad, Hiren (S) and Rajawala.

3.7.5. Out of the remaining 18 schemes, 14 schemes are in progress through contracts. For completing these 14 schemes, a provision of Rs. 14.17 crores is provided. Of the 14 schemes in progress, 10 schemes benefit tribal or drought prone areas. These 14 projects are Rami, Nara, Amipur, Godadhari, Bhukhi, Jangadia, Mitti, Lakhigam, Kabu tari Sankara, Umara etc.

3.7.6. The remaining 4 schemes which are at various stages are either in tribal or drought-prone area. A provision of Rs. 5.46 crores is provided for these schemes. These projects are Harnav-II Wankleshwar Bhay, Dam on Nani-Vahial and Dholi.

3.7.7. All these on-going medium projects are proposed to be completed during the Sixth Plan period. Total outlay provided for these schemes is Rs. 23.53 crores for Five Year Plan, 1980-85.

Narmada Project.

3.7.8. This project is the life-line of Gujarat. Speedy implementation of this project is assured in the State Manifesto. A minimum provision of Rs. 300 crores is provided for this project during the Sixth Plan period towards the share of Gujarat for irrigation sector. The gross outlay for this project including the share of other beneficiary States is Rs. 531 crores.

World Bank Projects.

3.7.9. Assistance from World Bank/US aid, under two different groups (i) Medium Irrigation Projects and (ii) Major Composite Projects is available at present. Further as the Narmada Project, is an inter-State project calls for investment of exceptionally large magnitude, the State Government has requested the Government of India to take early steps to pose it for World Bank Assistance. Government of India has appointed a Planning Group to prepare a Memorandum for posing the project before the World Bank. Recently, an Identification Report has been prepared and submitted to the World Bank.

Project for a Group of Medium Irrigation Schemes.

3.7.10. This group includes in all 34 schemes, 11 of which have been completed but are proposed for modernisation. Of the remaining 23, 18 are continuing schemes while 5 are new ones. The total estimated cost of these 34 projects works out to Rs. 364.12 crores. These medium projects will benefit 8 drought prone talukas in the districts of Kachchh, Panchmahals, Banaskantha, Bhavnagar and Surendranagar. An agreement for credit assistance of 85 million dollars has been signed with the World Bank in July, 1978, and for 30 million dollars with USAID in August, 1978 for the medium irrigation projects. An outlay of Rs. 276.05 crores is provided for these projects under Sixth Five Year Plan.

Major Composite Projects

3.7.11. Projects of Damanganga (with JAD works), Ukai-Kakrapar (CAD components including modernisation), Heran and Karjan and Saurashtra coastal project have been accepted for assistance. The total estimated cost of these projects is around Rs. 334 crores. The agreement has been signed in May, 1978 for 175 million dollars for these projects. An outlay of Rs. 239.29 crores is provided for the Sixth Five Year Plan.

Drainage

3.7.12. With the rapid progress of irrigated agriculture in the State, especially in the tracts with deeper and relatively impermeable soils, the problem of drainage has assumed special importance. Drainage has a special role to play in important projects like Ukai-Kakrapar and Mahi-Kadana. Master Plans for drainage for Ukai Kakrapar and Mahi-Kadana are envisaged costing Rs. 1059 lakhs and Rs. 1400 lakhs respectively. An outlay of Rs. 1700 lakhs is provided looking to the resources available.

Modernisation of Existing Irrigation Channels

3.7.13. In tune with the national policy and in terms of requirement of this State, modernisation of

the earlier plan projects specially canal system has been given higher priority in view of the need to utilise the available water resources optimally and at a relatively smaller capital investment. This programme is, therefore, included under the World Bank Programme under Medium Line of Credit and also under Major Composite Project. The details are as under :-

Sr. No.	Name of the Programme	Outlay provided for Sixth Plan (Rs. in crores)
<i>World Bank Programme</i>		
1	Ukai-Kakrapar Modernisation under Major Composite Project	31.40
2	11 Projects under Medium line of Credit	55.26
	Total..	86.66

3.7.14. Over and above the schemes mentioned above, the modernisation of the remaining schemes is also taken up. These works are estimated to cost Rs. 23 crores. An outlay of Rs. 8.00 crores is provided for the programme during the Sixth Five Year Plan.

Water Development Services

3.7.15. The tempo of the irrigation activities can be maintained only if a shelf of schemes, properly investigated and processed upto construction stage are kept ready well in advance. Unfortunately this aspect had not been given due importance in the earlier plans, perhaps, because of the availability of good storage sites affording construction of economical schemes, smaller size of the outlay earmarked for the water development sector etc. For further development of irrigation, suitable sites for locating the schemes will have to be searched out, suitable design solution for overcoming the complicated site problems if any, will have to be evolved. This is a time consuming process and will be possible by a proper set up of investigation personnel.

3.7.16. There are at present three investigation circles entrusted with this work. The Government of India has directed that adequate provisions should be made for investigation of schemes in the Five Year Plan. The Research Institute, at Vadodara is doing a pioneering work in the field of engineering. A number of research projects are also undertaken by this Institute for which the State Government has to participate with the Government of India. The various hydrolic model studies pertaining to Narmada Project are being carried out by this Institute.

3.7.17. Looking to the type and size of the problems involved, an outlay of Rs. 17 crores for the Sixth Five Year Plan is provided for this programme. The break-up of outlays for this programme is as under :—

	(Rs. in crores)
(1) Survey and Investigation	12.00
(2) Research.	5.00
Total	17.00

Flood Control and Anti-Erosion Schemes

3.7.18 The National Commission on Floods under the Chairmanship of Shri Jaisukhlal Hathi has made in all 207 recommendations for preparing and maintaining flood control schemes. These recommendations are kept in view in framing the revised Master Plan which is under finalisation for submission to the Government of India for approval. The works which are already in progress and which are proposed to be taken-up during the Sixth Plan period are as per the Master Plan. The Technical Advisory Committee at the State level has to approve each work before it could be taken up for execution.

3.7.19. At the end of 1979-80 in all 184 works with a spillover amount of Rs. 9.5 crores were in progress. For this programme, an amount of Rs. 20 crores is provided for Sixth Plan.

Prevention of Salinity Ingress

3.7.20. Continuous heavy withdrawals of ground waters for the purpose of irrigation and water supply (ground water being the only source for the purpose) of Saurashtra combined with decreased recharges have created problems of ingress of salinity in the ground waters in the areas and the problem has assumed serious dimension. Currently, an area of as much as one lakh hectares is affected with a population of about 2.8 lakhs. The number of wells affected comes to 12562. This programme is included in the World Bank Programme under Major Composite Group of Projects. The cost of the remaining works is estimated at Rs. 37 crores. Against this, an outlay of Rs. 6 crores is proposed for the remaining works to be carried out (other than World Bank) during the Sixth Plan period.

New Programmes

3.7.21. Besides, the framework of the plan also includes the following inevitable programmes :—

(a) Warabandhi System.

3.7.21.1. Equitable distribution of water to the cultivators is the primary need of the time more so when the water resources are scarce and the benefits have to be distributed equally to all. To ensure this, the State has recently introduced the system of "Warebandhi" or "Rotational water supply System." For efficient implementation of this system on all the existing schemes, minor structural improvements will be required to be made in the existing canal system. An outlay of Rs. 17 crores is provided for the Sixth Five Year Plan for this purpose.

(b) Extension of irrigation channels from 40 Ha. Chak to 8 Ha. Chak

3.7.21.2. One of the reasons for low utilisation of the water potential created is the difficulty experienced by the small farmers in providing field channels upto their fields. This difficulty could be overcome by extending the existing point of supply to the fields so as to reduce the present area of 40 hectares chak to manageable area of 8 hectares chak. The Planning Commission has also directed in October, 1979, that irrigation channels upto 8 hectares chak instead of 40 hectares chak will have to be constructed at project cost. Accordingly an outlay of Rs. 15.50 crores has been provided for this programme.

(c) Modifications and improvements to the existing schemes due to revision in hydrology.

3.7.21.3. It has been observed that since last few years there is a significant change in the rainfall pattern especially in Saurashtra and Kachh regions. Sudden heavy intensity of rainfall of short duration has also been observed. This has necessitated the revision of the hydrological studies of all the existing medium schemes which in turn may result in the modification of the spillways/dam-sections. The cost on the modification is still to be worked out. However, looking to the resources position of the State, it is proposed to phase out the works in such a way that schemes which need immediate attention will be taken up during this plan and the remaining schemes during the Seventh Plan. A provision of Rs. 10 crores is provided for this programme during the Sixth Plan period.

(d) New Schemes of Sixth Plan.

3.7.21.4. In all 51 schemes estimated to cost Rs. 199.63 crores are under various stages of formulation. Of these, 18 schemes estimated to cost Rs. 116.13 crores are either in tribal or drought prone areas. In order to maintain the tempo of development in these areas during the Seventh Plan also, it will be advisable to make a beginning on these works during the last year of the Sixth Plan. A lump-sum provision of Rs. 3.06 crores is therefore provided for the works under this programme during the Sixth Plan.

3.8 Irrigation Development in the Tribal Areas

3.8.1. In view of the Physiographical and topographical characteristics, the tribal areas of the State offer potentially good exploitable sites for irrigation development. The area is so located that some of the major principal dam sites of the State like Ukai, Kadana, Damanganga, Sukhi, Heran, Karjan and O.sang fall in these areas. In addition a good number of medium irrigation projects and minor irrigation projects (tanks and bandharas) can be favourably located in these areas. Irrigation development in these areas would provide effective means for the amelioration of the economic conditions of the tribals.

3.8.2. In 5 years period, 1980-85, there will be in all 25 projects spilling over under the tribal area sub-plan from March, 1980. Of these 8 being the pre-Fifth Plan projects, and the other 8 will be the projects taken up in Fifth Plan period, and 9 projects taken up during 1978-80. All the 16 projects of pre 1978 period are planned to be completed before March, 1985. Out of the remaining 9 schemes under Tribal Area Sub-Plan, one scheme namely Sidhumber will be a major project. It will benefit exclusively the tribal area. The total benefits that will be derived in the Sixth Five Year Plan would come to 2.60 lakh hectares of which projects under the tribal area sub-plan would yield 0.21 lakh hectares. An outlay of Rs. 78.80 crores is provided for Five Year Plan 1980-85.

3.9. 20-Point Programme of Creation of Irrigation Potential

3.9.1. Creation of irrigation potential through planned programme and increasing utilisation thereof is one of the important programmes of 20 point economic programme. Over and above the creation of irrigation facilities through irrigation projects, the Sixth Five Year Plan also provides modernisation of the existing irrigation projects for increasing the irrigation facilities. The target of creating additional irrigation potential during the Sixth Five Year Plan 1980-85 is fixed at 2.60 lakh ha. Thus the total irrigation potential of 10.12 lakh hectares created at the end of June, 1980 shall increase to 12.72 lakh hectares at the end of the Sixth Five Year Plan.

3.9.2. Over and above the creation of irrigation potential, the State has also taken steps for increasing the utilisation of the created irrigation potential. Two new programmes have been proposed for this purpose (1) Varabandhi system for equitable distribution of water which will also help in saving of water thereby increasing utilisation (2) Extending the irrigation channels from 40 ha. chak to 8 ha. chak. Total outlay of Rs. 32.50 crores is provided for these two programmes.

3.10. Strategy for increasing the utilisation of irrigation potential during the Sixth Five Year Plan period.

3.10.1. By the end of June, 1980 the irrigation potential as shown below has been created in the State through various categories of schemes. The level of maximum utilisation achieved against each is also indicated.

(in lakh hectares)			
Sr. No.	Type of Schemes	Irrigation potential created	Maximum utilisation
1	2	3	4
1	Major and Medium Irrigation Schemes	10.12	5.29
2	Minor Irrigation Schemes	1.28	0.80
3	Tubewells	1.25	0.65
Total		12.65	6.74

Lag in Utilisation :

3.10.2. The State Government is fully seized of all the serious implications of the problem of under-utilisation. The major areas have been already identified and remedial steps are being taken from time to time by holding frequent periodical review meetings at high levels in Government. It is found that particularly Ukai-Kakrapar and Mahi-Kadana projects are the major defaulters in this behalf as the area covered by these projects forms more than half the area covered by all the projects of the State, taken together. The State Government has also appointed a High Power Committee for taking-effective and timely steps for increasing the level of utilisation. It is observed that on an average, compared to the created or planned irrigation potential, the annual irrigation achieved comprised of 20 percent in Kharif, 25 to 50 percent in Rabi and 5 to 10 percent in hot weather seasons. As against this pattern of actual performance, the sanctioned projects by an large provide for a cropping pattern with 40 to 60 percent irrigation in Kharif. Therefore more emphasis is required to be laid on increasing the actual irrigation during kharif season.

Moreover, it is proposed to tak-up the following steps in a phased manner :

(i) Introduction of warabandhi system *i. e.* (Rotational water delivery system).

(ii) Introduction of water co-operatives and selling water on volumetric basis.

(iii) Sanctioning water applications inspite of areas of water dues by relaxing canal rules from time to time.

(iv) The activities such as on-farm development works undertaken by Command Area Development Authorities.

(v) Conversion of large tracts of Grass lands under Kakrapar and Damanganga projects into irrigation lands.

(vi) Giving seasonwise optimum targets of annual irrigation and reviewing the performance at the end of every irrigation season at the level of Chief Engineer etc.

(vii) Modernisation Programme.

(viii) Extension of irrigation channels from 40 Ha. chak to 8 Ha. chak.

(ix) A water management institute is being set-up for training of personnel in this field.

3.11. Outline of important projects

An out line of some of the important irrigation projects is given below :—

Ukai

3.11.1. All principal components are essentially completed by March, 1980. An expenditure of only Rs. 178 lakhs spills into the plan 1980-85. This is mainly on account of pending liabilities, remaining works of distribution system and the works relating to problematic reach of the right bank canal and the under-ground distribution system for the flood plain areas of the Narmada. Full potential of 153 thousand hectares is developed by the end of June, 1980. An outlay of Rs. 178 lakhs is provided for the Sixth Plan.

Sardar Sarovar (Narmada) Project

3.11.2.1. Narmada is one of the major west flowing rivers in the country. It is an inter-State river passing through the States of Madhya Pradesh, Maharashtra and Gujarat. It has a total catchment area of 27,610 sq. miles upto the sea. The Narmada is the single largest source of flow irrigation in the State. For, even if all the water resources including ground water in the State are harnessed and utilised, it has been estimated that without the waters of

Narmada, Gujarat will be able to ultimately irrigate only 30.00 percent of the cultivable area, with Narmada waters this percentage can be raised to 43.

3.11.2.2. The Narmada Water Disputes Tribunal has assessed the total availability of utilisable quantum of water upto the Navagam Dam site in the state has 28 Maft. After allowing 0.5 Maft for Rajasthan and 0.25 Maft. for Maharashtra and 18.25 Maft. for Madhya Pradesh the Tribunal has decided the following pattern of allocation to Gujarat.

Water allocation	CCA proposed for Irrigation	Intensity proposed
9.00 Maft.	52.36 lakh acres	70 percent

3.11.2.3. The main feature of the Sardar Sarovar Project is that the Navagam Dam is to be constructed to FRL 455 ft./MWL 460 ft. across the river Narmada near village Navagam of Nandod taluka in Bharuch district and a canal system to provide irrigation benefits to an area of about 15.26 lakh hectares, annually on full development. The Tribunal has also permitted construction of a canal off take with F. S. L. 300 ft. from Navagam Dam which would serve the command areas in Gujarat and in Rajasthan.

3.11.2.4. Hydro-power would also be generated at the Navagam dam site. It is proposed to have installation of 4 units each of 200 MW in the river-bed power house and 4 units each of 50 MW in the canal bed power house to generate in the initial stage 571 MW at 100 percent L.F. and 104 MW at 100 per cent L. F. in the ultimate stage. The power generated and costs thereof shall have to be shared between Madhya Pradesh, Maharashtra and Gujarat. Gujarat is entitled to 16 per cent of the power benefits from this project.

3.11.2.5. The project report is prepared and submitted to C. W. C. for clearance in February, 1980. Approximate estimates place the cost of the dam and power house at Rs. 371 crores and the canal system at Rs. 2639 crores with fully lined canals upto 3 hectare blocks. Approximate sharing of the cost amongst the beneficiary States will be broadly as under :—

(Rs. in crores)

Unit	Cost	Allocation of cost			
		Gujarat	Maharashtra	Madhya Pradesh	Rajasthan
1	2	3	4	5	6
I Dam.					
(a) Chargeable to Irrigation	162.87	154.31 (18/19)	..	..	8.56 (1/19)
(b) Chargeable to power	208.13	33.31 (16%)	56.20 (27%)	118.62 (57%)	..
Total	.. 371.00				

(Rs. in crores)

1	2	3	4	5	6
II. Power House	360.00	57.60 (16%)	97.20 (27%)	205.20 (57%)	
III. Canals	1600.00	1478.39 (92.4%)	..	..	121.61 (7.6)
		Considering cost of Unit II canals as Rs. 1600 Crores			
Total	2331.00	1723.61	153.40	323.82	130.17

3.11.2.6. It is further estimated that an outlay of Rs. 424 crores would be needed for the command area development. Thus, the overall outlay on Sardar Sarovar Project would be Rs. 2755 crores.

3.11.2.7. A twelve year programme of construction of the dam, power house and canal system has been contemplated. Through partial storage in the reservoir, it is proposed to develop irrigation in gross command areas of about 2 million acres in the Seventh year. The dam and hydro power works are proposed to be completed by the 8th year. The works on the canal system are proposed to be completed by the twelfth year. Command area development works are proposed to be taken-up from the fourth year and completed by the fifteenth year.

3.11.2.8. Setting up of an autonomous corporation with full powers for the speedy execution of Narmada Project is under consideration. Inter-State aspects of the project would be looked after by a Narmada Control Authority, for which Tribunal has suggested three high ranking engineer members from the Central Government and one from each State to constitute this authority.

3.11.2.9. The benefits likely to flow from this project to Gujarat are briefly as under:—

(i) 38 per cent of the total drought affected area in the State would get assured irrigation from the Narmada Waters.

(ii) Annual agricultural production would be augmented by 82 lakh tonnes valued at about Rs. 400 crores;

(iii) Water available from this project will also help to meet the domestic industrial requirements of water for villages, towns and cities of Gujarat located within the command area. Water requirements of some cities outside the command could also be expected to be met with from this project;

(iv) The completion of this project and upstream projects including Narmada sagar, would also partly help flood control and benefit villages and towns down stream of Navagam Dam.

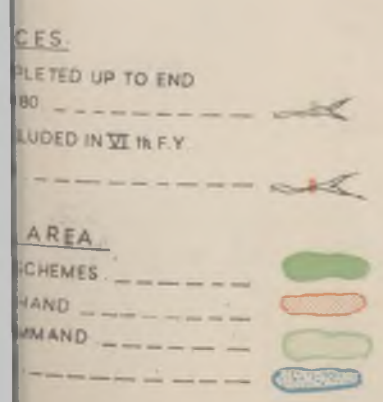
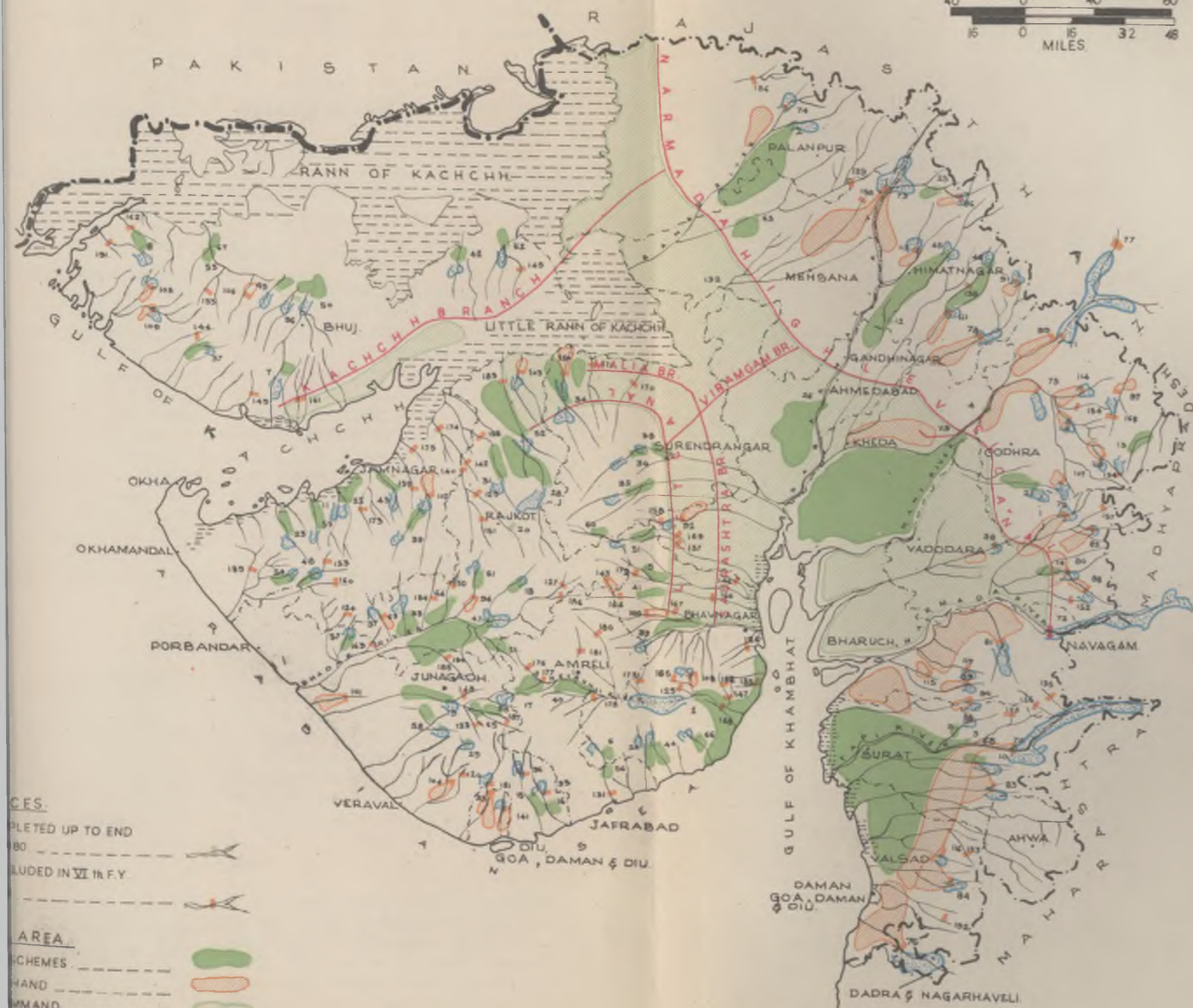
3.11.2.10. As per the decision of the Tribunal further detailing in respect of dam, power house canals and construction schedules thereof etc. has been under-taken. In the meanwhile, the requirements of fund for the Sixth Five Year Plan 1980-85 have been worked out. According to the project schedule that is in view an outlay of atleast Rs. 551 crores will be needed for this project. Deducting the share of other beneficiary States, the net development outlay needed for the period 1980-85 is Rs. 306 crores which is provided in the State Plan. Up to March 1980 an expenditure of Rs. 51.48 crores is incurred on this Project. Government of India has appointed a Planning Group for preparing a memorandum for posing this Project before the World Bank. The identification report has been prepared and forwarded to World Bank Authorities.

Kadana Project :

3.11.3. This has been a World Bank aided Inter-State project involving submergence in Rajasthan. The revised estimated cost of the project stands at Rs. 91.20 crores. The project has also been essentially completed. The expenditure spilling in the Plan period 1980-85 is only Rs. 353 lakhs. The spill-over in the plan 1980-85 is mainly on account of expenditure required to be incurred for the balance works of radial gates, additional spillway, payments to Rajasthan for properties affected by back water (including rehabilitation) and also a certain spillover on account of project liabilities. A provision of Rs. 353 lakhs is provided for the project in the plan 1980-85. The corresponding physical benefits will be, however, larger proportionately because of the development of potential due to Kadana in the Mahi command. The potential benefits in the Mahi State-II command due to Kadana Project will be 13905 hectares and 74595 hectares in command of Mahi Stage-I.

MAP OF GUJARAT STATE SHOWING

MULTIPURPOSE, MAJOR & MEDIUM IRRIGATION SCHEMES



SCHEMES COMPLETED UP TO END OF MARCH 1980.		SCHEMES IN PROGRESS INCLUDED IN VI Th F Y PLAN 1980-85	
MAJOR		MAJOR	
1 SHETRUNJI (PALITANA).	70 UKAI	78 WATRAK	
2 DANTIWADA.	71 KADANA	79 SUKHI.	
3 KAKRAPAR.	72 NARMADA	80 HEREN II	
4 MAHI STAGE	73 SABARMATI	81 KARJAN	
	74 SIDU	82 ORSANG	
	75 PANAM	83 ZANKHARI	
	76 DAMANGANQA	84 SIONHUMBER	
	77 BAJAJ SAGAR (RAJ)		
MEDIUM		MEDIUM	
5 BHIMADAD	85 VER II	151 NYARI II	
6 SURAJWADI	86 HARNAV II	152 MEN	
7 GAJOD	87 MACHHAN-NALA.	153 JHUJ	
8 SANANDRO	88 RAMI	154 PHULPARI	
9 VER I	89 BALDEVA.	155 KAZIPUR.	
10 DOSWADA	90 PIGUT	156 REL	
11 PUNA	91 VAIDY	157 ANI.	
12 KAROL	92 SUKHBHADAR.	158 KANIYAD	
13 DATADUNGRI	93 BHINGODA.	159 FALLA (MAHKAWATI).	
14 HERAN I.	94 CHAPARWADI (JEPUR).	160 VERADI.	
15 MACHHUNDRI I	95 RAVAL-II	161 KALAGHOQA	
16 RAVAL I	96 MACHHUNDRI II	162 BAIYAWA	
17 MUNJIABAR	97 VENU II	163 SARAN	
18 GONDLI.	98 DEO	164 LIMBALI	
19 OZAT	99 BHADAR (PANCH)	165 HANOL	
20 AJI I.	100 KALUBHAR	166 DARED MALANA.	
21 SAKROLI.	101 AMIPUR	167 LOLIYANA	
22 SASOI	102 JIVAPUR	168 HATHIWAN	
23 QHEE	103 GHODADHAROI	169 GUNDA	
24 MALAN	104 HIRAN -II	170 FULKA	
25 HARNAV I.	105 JANGADIA	171 KHARI -II	
26 MOTI-FATEWADI	106 SHUKHI	172 SARANGPURGALLA (NINGALA).	
27 KARAD	107 WANKLESHVARBHEY.	173 RANGMATI.	
28 MACHHU I	108 RAJAWAL	174 AJI IV	
29 HIRAN -I	109 BHOGAVO I	175 UNO II	
30 BHOGAVO I	110 HADAF	176 KHARI-KHIJADIA	
31 DEMI	111 MAZAM	177 SATALI.	
32 LIMBDI-BHOGAVO	112 GUHAI	178 KAREN	
33 MOJ	113 LAKHIGAM.	179 SEL DODUMAL (HATHASANI).	
34 BRAHMANI I	114 KABUTARI	180 KHAKHARIA.	
35 RANGHOLA	115 BARKARA	181 WADI-THEBI	
36 KAILA	116 KELIA	182 HAMIRPUR	
37 KANKAWATI	117 DHOLI	183 MACHHU III	
38 BHOGAVO-II	118 UMARIA	184 SODAVADAR	
39 FULZAR.	119 SHEDHI BRANCH	185 JASPUR MANDVA.	
40 SHETRUNJI (KHODIAR).	120 VRAJANI	186 ISWARIA.	
41 QHELO	121 DATARDI	187 OZAT II.	
42 SUIVI	122 OZAT	188 USEN II	
43 SAPDA	123 SONMATI.	189 SANI.	
44 ROJKA	124 DAI (MINSAR).	190 USEN	
45 HATHMATI	125 KHARO	191 GODA THAD	
46 MESHWA	126 LAKHANKA	192 NANIVAHAL.	
47 BHADAR	127 KARMAL		
48 VARTU	128 DEMI II		
49 VARTU	129 AJI II		
50 NIRUNA	130 PHOPHAL		
51 RUDRAMATA	131 RAIDY		
52 GOMA	132 RUPEN		
53 MACHHU II	133 MATHAL		
54 GAJANBAR	134 EDALWADA		
55 SORTHI	135 CHOPADVAV.		
56 ZANJHESARI	136 KAKADIAMBA.		
57 DHATARWADI	137 KHAMBHADA		
58 KALINDRI	138 BAKROL		
59 MADHUVANTI	139 MUKTESHVAR		
60 FULZAR II	140 AJI III		
61 CHHAPARWADI (L).	141 BANGAVADI		
62 KASVATI	142 BANGAVADI		
63 SARASWATI	143 MALGADH		
64 PHOPHAL	144 BERACHIA		
65 AMBAJAL	145 FATEHGADH		
66 BAGAD	146 MITHAPUR		
67 NARA	147 SAMADHIALA		
68 RAISING OF KAKRAPAR WEIR	148 RAMANTH		
69 RAISING OF MOJ DAM.	149 DON		
	150 BAHMANI-II		
			* SCHEMES NEARING COMPLETION.

Sabarmati (Dharoi) Project

3.11.4. Wasna Barrage is already completed and the feeder canal would be completed soon. The project would be completed by June, 1982 in all respects. The outlay provided in the plan period (1980-85) is Rs. 968 lakhs which would cater mostly to direct canal systems on either bank. The benefits that would be derived from this project during the course of the plan period would be 35570 hectares, out of the total potential of 56680 hectares, the balance being already achieved by June, 1980. The larger benefits accruing during the plan period 1980-85 are due to the investment made in the Fifth Plan and the two subsequent Annual Plans which have brought the projects to an advanced Stage. Total expenditure till the end of March, 1980 is Rs. 5432 lakhs.

Panam Project :

3.11.5. This is a World Bank aided project. The revised cost of it as per World Bank has been estimated at Rs. 4136 lakhs. The expenditure incurred upto March, 1980 is Rs. 2508 lakhs. The spill over in the plan 1980-85 would be Rs. 1628 lakhs, which is mainly in respect of the canal distribution works. The scope of the works has changed because of financing of the project by the World Bank and extending Government canals upto 8 hectare blocks on an average. The target of potential has increased from 26,440 hectares to 53420 hectares. The remaining works of the canal are planned to be completed by June, 1982. Irrigation potential of 20920 hectares is created by June, 1980. This project would be the largest single potential creator in the plan 1980-85 and is expected to be completed by June, 1982.

Chhi Stage-I

3.11.6. The spillover in the plan 1980-85 is of the order of Rs. 79 lakhs which is fully provided. The project would be completed in all respects by March, 1981. Full irrigation potential of 1,86,000 hectares is created by June, 1980. The outlay proposed for 1980-81 is for completion of miscellaneous works. Further potential of Rs. 74,595 hectares has been achieved due to the Kadana Project in the Chhi-Stage-I command areas.

Chhi Bajajsagar

3.11.7. This project is being executed by the Government of Rajasthan. An outlay of Rs. 563 lakhs would be needed in the Plan 1980-85. The project would be completed during 1982-83. The schedule for the completion of this project was June, 1982 which will not be materially affected.

Chitrak Project

3.11.8. This is also a spillover project. The spillover will be to the extent of Rs. 1528 lakhs out

of the total estimated cost of Rs. 24.09 lakhs. Some physical benefits were to be derived during the Fifth Plan but as a result of change in the scope of the project, this could not materialise even by June, 1980. The entire benefits have thus, spilled into the plan period 1980-85. Thus the physical benefits during the period 1980-85 will be 18350 hectares. An expenditure of Rs. 881 lakhs is incurred upto March, 1980. This is also a World Bank aided project. An outlay of Rs. 1528 lakhs is provided for 1980-85 Plan.

Projects of Narmada Basin

3.11.9. The three major Projects of the Narmada basin in Gujarat which were initiated only in the last year of the Fifth Plan i.e. 1977-78 are Karjan, Sukhi and Heran.

Karjan

3.11.9.1. The Project was originally estimated to cost Rs. 3,640 lakhs with an irrigation potential of 61,970 hectares. The scope of the project has been revised because of assistance from the World Bank so as to extend Government canals upto eight hectares outlet blocks on an average. The cost is therefore increased from Rs. 3,640 lakhs to Rs. 8,960 lakhs and the planned potential has also been increased from 61,970 hectares to 77,530 hectares. Out of the total revised cost of Rs. 8,960 lakhs, cost allocable to irrigation component is Rs. 7,368.84 lakhs and the remaining cost is meant for command area development activities and construction of roads in the command area. It may be stated that the project envisages construction of the highest dam (93.70 metric) built so far in the State. The dam would be composite one, flanks would be of masonry and central portion would be of concrete. An outlay of Rs. 7,120 lakhs is provided in the plan 1980-85 as against the spillover amount of Rs. 7,838 lakhs. An important strategy would be to push-through canal works simultaneously with dam works. Out of the potential of 77,530 hectares 23,330 hectares is proposed to be achieved during the plan 1980-85. This is a World Bank project covered under major composite group. An expenditure of Rs. 11.23 lakhs is incurred till the end of March, 1980.

Heran

3.11.9.2. This project was originally estimated to cost Rs. 2,526 lakhs. The scope of the project has been revised because of assistance from the World Bank so as to extend Government canals upto eight hectares outlet blocks on an average. The cost of the project is therefore increased from Rs. 2,526 lakhs to Rs. 5,064 lakhs and the planned potential has also been increased from 36,420 hectares to 39,507 hectares. Out of the total cost of Rs. 5,064 lakhs cost allocable to irrigation component is Rs. 3,954 lakhs, while remaining cost provides for C. A. D.

activities and construction of roads. Out of the potential of 39507 hectares about 15,000 hectares is proposed to be achieved during the plan, 1980-85. An outlay of Rs. 4,450 lakhs has been provided for the plan 1980-85. This is a World Bank aided project covered under major composite Group. Total expenditure of Rs. 472 lakhs is incurred till the end of March, 1980.

Sukhi

3.11.9.3. The project was originally estimated to cost of Rs. 2,311 lakhs. The scope of the project has been revised because of assistance from the World Bank so as to extend Government canals upto 8 hectares outlet blocks on an average. The cost has therefore increased from Rs. 2,311 lakhs to Rs. 3,578 lakhs and the planned potential has also been increased from 21,250 hectares to 25,200 hectares. Out of the total of Rs. 3,578 lakhs the cost allocable to irrigation component is Rs. 3,249 lakhs, while the remaining amount provides for construction of roads in the command area. The expenditure spilling into the plan period 1980-85 is Rs. 2,207 lakhs. Full outlay is provided in the Plan. The project is proposed to be completed by the end of June, 1983 as per the programme given to the World Bank.

Damanganga

3.11.10. An expenditure of Rs. 5647 lakhs spills into the plan period 1980-85. Out of the estimated cost of Rs. 9,684 lakhs, an amount of Rs. 5,500 lakhs is for the Dam and Canal works. This is an Inter-State project benefitting areas of Gujarat and Union Territories of Dadra, Nagar Haveli and Daman. The dam will be completed by June, 1982. The Canal Works have been taken up right from the beginning of execution of the project so that the benefits can accrue soon after completion of the dam works. The physical benefits will begin to accrue from the third year, of the plan and will be fully realised during the plan period with only a small spillover in the plan 1980-85. Thus, an irrigation potential of 50,000 hectares would be created in the plan 1980-85. This project would be the second largest potential creator in the plan period 1980-85. This is also included under the composite project accepted by the World Bank for assistance.

Sipu

3.11.11. This is a World Bank aided project located in the dry tract of Banaskantha District. Essentially, the project would attain maturity in the plan 1980-85. The National Agricultural Commission has made a special mention of this project as having potentialities of an anti desertification project. It is therefore proposed to give it a high priority. An outlay of Rs. 1,700 lakhs is provided during the plan period 1980-85.

Total irrigation potential of the Project is about 32,100 hectares. An expenditure of Rs. 104 lakhs has been incurred upto March, 1980.

Zankhari

3.11.12. This project is estimated to cost Rs. 3,443 lakhs. Although included in the Fifth Plan, no work could be commenced. It is proposed, to take up and complete this project substantially during the plan period 1980-85. The project had been submitted to the Planning Commission after compliance of the various technical remarks relating to hydrology and other basic aspects. The possibility of reducing the extent of forest area going under submergence is being examined. An outlay of Rs. 3,318 lakhs is provided in the Sixth Plan. The project will be solely benefitting the tribal area of Sengadh taluka in Surat District.

Sidhumber

3.11.13. This is a new project of 1978-80. It is estimated to cost Rs. 1,824 lakhs with an irrigation potential of 11,340 hectares. The project report with estimates will be submitted to the Government of India shortly for clearance. The project is located in South Gujarat and will benefit solely the tribal area of Dharampur Taluka in Valsad District.

Medium Schemes

3.11.14. During the Fifth Plan, out of 56 on-going medium schemes 13 were completed while the remaining 43 schemes were in progress at the end of the plan. During the subsequent two annual plans 1978-79 and 1979-80, 66 new medium schemes (excluding 5 schemes of World Bank Programme estimated to cost Rs. 187 crores and with an ultimate irrigation potential of 1.12 lakh hect. were taken up. Out of these new schemes 7 schemes viz. (i) Samadhiala, (ii) Brahmani II, (iii) Fulpar (iv) Baiyawa, (v) Khari-II, (vi) Khari Klujadi and (vii) Khakharia are proposed to be dropped as they are not feasible. At the beginning of the Sixth Plan, i.e. 1980-85, 113 medium schemes (including 18 under World Bank aid) were in progress with a spillover amount of Rs. 304.46 crores. A total outlay of Rs. 170.68 crores is provided for these schemes with the target of completing only a few schemes during the plan period. In order to continue the tempo of irrigation development during subsequent plans beyond 1985, 100 medium schemes with an estimated cost of Rs. 199.6 crores are proposed to be launched during the Sixth Plan and an outlay of Rs. 306 lakhs is provided for the same during the Sixth Plan so that the works can get momentum right from the beginning of the Seventh Plan and can maintain the tempo of irrigation development beyond the Sixth Plan.

STATEMENT
Water Development (Irrigation)
List of schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme						Sixth Five Year Plan 1980-85 outlays	
							Total	Capital Contant
1	2						3	4
I Multipurpose Projects								
1.	IRG—1	Ukai	..	..	..	..	178.00	175.00
2.	IRG—2	Narmada	.	..	..	..	30000.00	30000.00
3.	IRG—3	Kadana	..	..	..	..	353.00	353.00
4.	IRG—4	Sabarmati.	..	..	..	..	968.00	968.00
5.	IRG—5	Damanganga	..	..	..	..	4870.00 +1200.00(UT)	4870.00 +1200.00(UT)
6.	IRG—6	Panam	..	..	..	..	1628.00	1628.00
7.	IRG—7	Bajajsagar	..	..	..	..	563.00	563.00
						(Total I)	38560.00	38557.00
(II) Irrigation Projects								
<i>(a) Major Projects</i>								
8.	IRG—8	Mahi Stage — I	..	..	..	..	79.00	33.00
9.	IRG—9	Kakrapar	..	..	..	..	29.00	29.00
10.	IRG—10	Watrak	..	..	..	..	1528.00	1528.00
11.	IRG—11	Sipu	..	..	..	..	1700.00	1700.00
12.	IRG—12	Karjan	..	..	..	..	7120.00	7120.00
						TOTAL (a)..	10456.0	10410.00
<i>(b) Medium Projects</i>								
13.	IRG—13	Kalindri	..	..	..	..	4.00	4.00
14.	IRG—14	Ver—II	..	..	..	..	352.00	352.00
15.	IRG—15	Harnav—II	..	..	..	..	121.00	121.00
16.	IRG—16	Machhaunala	..	..	..	..	289.00	289.00
17.	IRG—17	Rami	..	..	..	..	85.00	85.00
18.	IRG—18	Baldeva	..	..	..	..	25.00	25.00
19.	IRG—19	Pigut	..	..	..	..	29.00	29.00
20.	IRG—20	Vaidy	..	..	..	..	4.00	4.00
21.	IRG—21	Phophal	..	..	..	..	8.00	8.00

1	2	3	4
22.	IRG-22 Sukhbhadar	404.00	404.00
23.	IRG-23 Bagad	4.00	4.00
24.	IRG-24 Shinghoda	45.00	45.00
25.	IRG-25 Chaparwadi (J)	53.00	53.00
26.	IRG-26 Ambajal	3.00	3.00
27.	IRG-27 Raval	56.00	56.00
28.	IRG-23 Machhundri	364.00	364.00
29.	IRG-29 Venu-II	722.00	722.00
30.	IRG-30 Nara	62.00	62.00
31.	IRG-31 Deo	1326.00	1326.00
32.	IRG-32 Sani	129.00	129.00
33.	IRG-33 Ghodathad	6.00	6.00
34.	IRG-34 Bhadar (P)	1101.00	1101.00
35.	IRG-35 Kalubhar	377.00	377.00
36.	IRG-36 Amipur	247.00	247.00
37.	IRG-37 Jivapur (Und)	1171.00	1171.00
38.	IRG-38 Ghodhadharoi	76.00	76.00
39.	IRG-39 Hiran(8) (New)	23.00	23.00
40.	IRG-40 Jangadia	40.00	40.00
41.	IRG-41 Bhukhi	98.00	98.00
42.	IRG-42 Wankleshwar Bhey	45.00	45.00
43.	IRG-43 Rajwal	25.00	25.00
TOTAL (B)..		7309.00	7309.00
TOTAL (II) (A+B)..		17765.00	17719.00

(B.I.) New Scheme of Fifth Plan

(1) Multipurpose Projects

(2) Irrigation Projects

(A) Major Projects

44.	IRG-44 Heran (Vadodara)	4450.00	4450.00
45.	IRG-45 Sukhi	2207.00	2207.00
46.	IRG-46 Zankharf	3318.00	3318.00
TOTAL (A)..		9975.00	9975.00

1	2	3	4
<i>(B) Medium Projects</i>			
47.	IRG-47 Mitti (Kachchh)	.. .. .	50.00 50.00
48.	IRG-48 Dam on Nani Vahial	.. .. .	189.00 189.00
49.	IRG-49 Hadaf (PWS)	.. .. .	707.00 707.00
50.	IRG-50 Guhai	.. .. .	1408.00 1408.00
51.	IRG-51 Mazam (S.K.)	.. .. .	350.00 350.00
52.	IRG-52 Lakhigam	.. .. .	27.00 27.00
53.	IRG-53 Kabutri	.. .. .	65.00 65.00
54.	IRG-54 Sankara	.. .. .	147.00 147.00
55.	IRG-55 Kalia	.. .. .	575.00 575.00
66.	IRG-66 Dholi	.. .. .	191.00 191.00
57.	IRG-57 Umaria	.. .. .	81.00 81.00
53.	IRG-53 Constructing Shedhi Branch from M.R.B.C. 1	.. .. .	309.00 309.00
59.	IRG-59 Constructing Lift Irrigation Schemes for River or canals	.. .. .	91.00 91.00
		TOTAL(B) ..	4190.00 4190.00
		TOTAL (B.1) (A+B)..	14165.00 14165.00
(G) New Scheme of 1978-80			
Irrigation Projects			
<i>(a) Major Projects</i>			
60.	IRG-60 Sidhumber	.. .. .	776.00 776.00
		TOTAL (a)	776.00 776.00
<i>(b) Medium Schemes</i>			
61.	IRG-61 Vrajani	.. .. .	191.00 191.00
62.	IRG-62 Uben	.. .. .	282.00 282.00
63.	IRG-63 Datardi	.. .. .	187.00 187.00
64.	IRG-64 Orat	.. .. .	15.00 15.00
65.	IRG-65 Sonmati	.. .. .	15.00 15.00
66.	IRG-66 Dai (Minfar)	.. .. .	250.00 250.00
67.	IRG-67 Kharo	.. .. .	120.00 120.00
68.	IRG-68 Lakhanka	.. .. .	113.00 113.00
69.	IRG-69 Karmal	.. .. .	82.00 82.00
70.	IRG-70 Demi-II	.. .. .	483.00 483.00
71.	IRG-71 Aji-II	.. .. .	289.00 289.00
72.	IRG-72 Phophal-II	.. .. .	1.00 1.00

1	2	3	4
73.	IRG—73 Raidi	18.00	18.00
74.	IRG—74 Rupen	16.00	16.00
75.	IRG—75 Mathal	109.00	109.00
76.	IRG—76 Edalwada	102.00	102.00
77.	IRG—77 Chopadvav	178.00	178.00
78.	IRG—78 Kakadiamba	129.00	129.00
79.	IRG—89 Khambhala	40.00	40.00
80.	IRG—80 Bakrol	40.00	40.00
81.	IRG—81 Mukteshwar	212.00	212.00
82.	IRG—82 Aji—III	516.00	516.00
83.	IRG—83 Sagawadi	4.00	4.00
84.	IRG—84 Bangawadi	20.00	20.00
85.	IRG—85 Malgadh	10.00	10.00
86.	IRG—86 Barachia	85.00	85.00
87.	IRG—87 Fategadh	105.00	105.00
88.	IRG—88 Mithapur	8.00	8.00
89.	IRG—89 Ramnath	4.00	4.00
90.	IRG—90 Dor	10.00	10.00
91.	IRG—91 Brahmani—II	0.50	0.50
92.	IRG—92 Myari—II	40.00	40.00
93.	IRG—93 Men	100.00	100.00
94.	IRG—94 Jhuj	982.00	982.00
95.	IRG—95 Kajipur	0.50	0.50
96.	IRG—96 Rel	0.50	0.50
97.	IRG—97 Ani	60.00	60.00
98.	IRG—98 Kaniyad	10.00	10.00
99.	IRG—99 Falla (Kankavati)	60.00	60.00
100.	IRG—100 Varadi	8.00	8.00
101.	IRG—101 Kalaghoga	10.00	10.00
102.	IRG—102 Baiyava	0.50	0.50
103.	IRG—103 Sarana	8.00	8.00
104.	IRG—104 Limbadi	10.00	10.00
105.	IRG—105 Hancli	3.00	3.00
106.	IRG—106 Dvred (Malana) (Navagam)	10.00	10.00
107.	IRG—107 Lohiyana	40.00	40.00

1	2	3	4
108	IRG-108 Hathivan	10.00	10.00
109	IRG-109 Gunda	3.00	3.00
110	IRG-110 Fulka	3.00	3.00
111	IRG-111 Khari-II	0.25	0.25
112	IRG-112 Sarangpur Gala (Ninngla)	3.00	3.00
113	IRG-113 Rangamati	3.00	3.00
114	IRG-114 Aji-IV	2.00	2.00
115	IRG-115 Und-II	71.00	71.00
116	IRG-116 Khari Khijadia	0.25	0.25
117	IRG-117 Satalia	0.50	0.50
118	IRG-118 Karan	0.50	0.50
119	IRG-119 Sholl (Dedumal) (Hathisani)	3.00	3.00
120	IRG-120 Khakhadia	0.50	0.50
121	IRG-121 Vadi Thebi	3.00	3.00
122	IRG-122 Machhu-III	8.00	8.00
123	IRG-123 Hamirpur	20.00	20.00
124	IRG-124 Sodavadar	55.00	55.00
125	IRG-125 Jaspur Maudva	3.00	3.00
126	IRG-126 Ishvaria	88.00	88.00
127	IRG-127 Ozat-II	8.00	8.00
128	IRG-128 Uben-II	1.00	1.00
	Total	5263.00	5263.00
	TOTAL (C) (a+b)	6039.00	6039.00
	(D) New Scheme of VI Plan	306.00	306.00
	TOTAL (D)	306.00	306.00
	(E) Water Development Services		
	(a) Survey and Investigation		
	(b) Research		
	(c) Workshop and Training	1700.00	1700.00
	TOTAL (E)	1700.00	1700.00
	(F) Drainage	1700.00	1700.00
	(G) Modernisation of canals	9466.00	8620.00
	(H) Flood Control and anti-erosion works	2000.00	940.00
	(I) Prevention of Salinity Ingress in Saurashtra Coastal Projects	3260.00	3260.00
	(J) Narmada Planning Unit	189.00	189.00
	(K) Warabandhi System	1700.00	1700.00
	(L) Extension of Irrigation channel from 40 Ha. chak to 8 ha. chak.	1550.00	1550.00
	(M) Modification and improvements to the existing schemes due to revision in Hydrology	1000.00	1000.00
	(N) Prevention of Salinity Ingress (other than World Bank)	600.00	600.00
	TOTAL (F) TO (N)	21465.00	19559.00
	GRAND TOTAL:	100000.00	98045.00

4. POWER DEVELOPMENT

4.1.1. Electrical power is a basic infrastructure for all round economic growth. It is an effective instrument for influencing spreading out of industrial development and accelerating agricultural growth. Since the inception of Gujarat State in May, 1960, particular attention has been paid for power development. Resources allocated to this sector have been generally between 27 to 29% of the total plan provision of each successive Five Year Plan commencing with the Third Five Year Plan. This has enabled doubling of the installed generating capacity in the State at the end of each successive Five Year Plan period from the Third Plan onwards. At the same time, rate of increase in electricity consumption in the State has been higher than the national average rate. Thus, as against the national average annual growth rate of electricity consumption of 12% for the period 1951 to 1966, sale of power in Gujarat Electricity Board system increased by more than 100% during the period 1960-61 to 1965-66. Similarly, while the annual national growth rate of electricity consumption slumped to about 6.4% in the early seventies, sale of power by Gujarat Electricity Board increased three-fold to 3144 million units during the period 1965-66 to 1973-74, which again nearly doubled to 5883 million units by 1978-79. In the matter of per capita consumption of electricity also Gujarat stands next only to Punjab.

Energy Policy.

4.1.2. Traditionally energy planning confined itself to the establishment of conventional Thermal and Hydro power Stations and, in a very limited manner, to utilisation of nuclear energy. However the need for evolving a total Integrated Energy Policy in the context of rapidly increasing demand for power with limited fuel resources has been increasingly recognised. In fact, creation of additional generation capacity would be meaningful only if it is coupled with measures to ensure optimal availability as well as utilisation of the power generated. This would entail inter-alia taking appropriate measures for conservation of energy, specially in the industrial and agricultural sectors which alone consume bulk of the energy generated. Effort would also have to be made to harass all possible alternatives as well as renewable sources of energy. An essential part of the energy policy would be to promote rural electrification so as to ensure acceleration of agricultural development in particular and rural development in general. The State Government has set up the Gujarat Energy Development Agency to diffuse useful knowledge in the various fields of energy and to deal with the situation posed by the rapid depletion of non-renewable energy sources. This Agency is also giving attention to the need for formulating appropriate measures for conservation of energy.

4.2. Review of Progress.

4.2.1. In 1951 electricity was available only in a few urban and semi-urban areas. At the time of formation of the State, the total generating capacity was only 315 MW and power distribution was restricted to areas around the power stations. The total installed capacity at the end of the 1979-80 was 2384 MW as shown below:—

Available generation	MW
(1) Dhuvaran Thermal power Station	588
(2) Utran Thermal Power Station.	67.5
(3) Shapur Thermal Power Station.	16
(4) Kandla Thermal Power Station.	15
(5) Ukai Hydro Power Station.	300
(6) Ukai Thermal Power Station.	240
(7) Ukai Thermal Extension.	400
(8) Gandhinagar Thermal Power Station.	240
(9) Ahmedabad Electricity Company	327.5
(10) Share in Tarapore Atomic Power Station.	190
Total..	2384

4.3. Perspective Planning :

4.3.1. For the purpose of power planning it is essential that load forecasts are made on a realistic basis and the generation required is planned in advance. During the year 1979-80, Gujarat System registered a maximum demand of 1850 MW against 1705 MW assessed by the 10th Annual Power Survey Committee. The demand projections made by A. P. S. Committee are very conservative and can not be relied upon for power planning. The power demand in Gujarat is developing fast and it is our experience that no sooner a new generation unit is added the same is booked in short time. The load projections carried out by Gujarat Electricity Board and the Study carried out by Operation and Research Group of Sarabhai Chemicals indicates that the load growth in Gujarat will be higher than the estimates of the 11th A. P. S. The comparative estimates of load projection of 11th A. P. S., O. R. G. and G. E. B. and capacity required to meet these demands are tabulated below:—

	1984-85		1989-90	
	Demand in MW	Installed capacity required in MW	Demand in MW	Installed capacity required in MW
11th A.P.S.	2645	4127	4134	6962
O. R. G.	3186	4822	5607	8546
G. E. B.	3575	5386	5650	8613

4.3.2. It will be seen that load estimates of O. R. G. are higher than 11th A. P. S. but lower than G. E. B.'s estimates and also provides for a growth rate of 11.97%. The need for overcoming the power shortages as well as the need to ensure that power planning is 16% ahead of the demand has been recognised. Keeping this in view power planning should be atleast made on the basis of the load estimates of O. R. G.

4.3.3. At present the installed capacity in Gujarat is 2384 MW. Allowing for retirement of old and un-economical sets the net available generating capacity is 2300 MW. Based on load estimates of O. R. G. the installed capacity required will be 4822 MW by 1984-85 and 8546 MW by 1989-90. This indicates that new generating capacity of 2522 MW will have to be added in Sixth Plan period 1980-85 and 3724 MW during the Seventh Plan 1985-90.

4.3.4. To meet the demand during the Sixth Five Year Plan the following schemes have been so far cleared by CEA/Planning Commission.

	MW
1. Wanakbori Thermal Project (3 × 210 MW)	630
2. Wanakbori Thermal Extension (3 × 210 MW)	630
3. Ukai Thermal Extension Unit-V (1 × 210 MW)	210
Ukai Left Bank Canal Power House (2 × 2.5 MW)	5
5. Kadana Hydro (2 × 60 MW)	120
6. Lignite Thermal Power Station in Kachehh (2 × 60 MW)	120
Total ..	1715

4.3.5. These projects have already been taken up for execution on a priority basis so that benefits will become available as far as possible during the present plan itself. With the commissioning of these projects new generating capacity of 1715 MW will be added raising the total generating capacity to 4015 MW but leaving a deficit of 807 MW.

New Schemes

4.3.6. To meet this deficit the following schemes have been submitted to CEA/Planning Commission for their consideration :—

1. Installation of 210 MW Thermal unit as an extension to Gandhinagar Thermal Power Station.	MW 210
2. Replacement of Small Units at Shapur and Sikka by installing one 120 MW. Thermal Unit at Sikka.	120
3. Replacement of small units at Utran by installing one unit of 120 MW	120
4. Replacement of small units at Kandla.	60
5. Gas Based Thermal Power Station at Mahuva (2 × 210 MW)	420
Total	930

4.3.7. The scheme for replacement of 120 MW unit at Sikka has now been cleared by the Planning Commission. This scheme will be taken up for execution during 1981-82.

Meeting Demand During Seventh Plan

4.3.8. As discussed earlier, demand by the end of 7th Plan i. e., 1989-90 will be 5607 MW as per O. R. G. estimates and installed capacity required to meet this demand will be 8546 MW. On completion of the schemes referred to above the total installed capacity in Gujarat will be 4945 MW. This would mean that further new generating capacity of 3601 MW will have to be added during the Seventh Plan period.

Narmada Hydro

4.3.9. Gujarat is having limited hydro resources. Hydro Potential of Ukai has already been exploited. The Tribunal has declared award on Narmada waters and it will be possible to undertake work on Narmada Hydro Project during the Sixth Plan. However, Gujarat's share in Narmada Hydro Power is only 16 % which works out to about 170 MW.

Atomic Power Station

4.3.10. The oil and natural gas available in Gujarat is fully utilised. There are no other sources of fossil fuel in Gujarat. The power development during the Fifth and Sixth Five Year Plans is from thermal stations based on coal to be imported from Central India. This calls for long distance

haulage. Gujarat is, therefore, ideally, suited for Nuclear Power station. The Site Selection Committee appointed by the Government of India have made detailed investigations for locating a Nuclear power station in Gujarat.

Super Thermal Station:--

4.3.11. The Government of India have accepted, in principle, to set up super thermal stations at pit heads to meet the regional power needs. At present the super thermal station at Korba is under construction. The Government of India have allocated 187 MW of power to Gujarat from first stage at Korba Super Thermal Station. The expansion of this super thermal station is also under consideration. It is expected that whatever power is needed by Gujarat would be allocated from this central generation.

Thermal Station on Narmada Canal.

4.3.12. To meet the power demand during the Seventh Plan, one of the schemes under investigation is the establishment of a thermal power station on Narmada Canal. It is proposed to instal four sets each of 500 MW.

4.4 Programme for 1980-85.

4.4.1. An outlay of Rs. 96184 lakhs is proposed for the power development sector for the Sixth Plan. The broad break up of the proposed outlays is as under :--

	(Rs. in lakhs)
Programme.	Sixth Five Year Plan Outlay.
1. Power Development (Survey and Investigations)	100
2. Power Projects (Generation)	
(a) Continuing Generation Schemes	50695
(b) New Generation Schemes.	12400
3. Transmission and Distribution	25000
4. Rural Electrification	8024
5. General	265
Total	96484

4.4.2. A broad outline of the projects, physical targets etc., is given in the following paragraphs:--

(1) Kadana Hydro (2 x 60 MW)

4.4.2.1. The Scheme consists of installation of two hydro units each of 60 MW at Kadana on the bank of river Mahi. This is designed as a peaking station. The estimated cost of this project is Rs. 3,280 lakhs. The work on this project has already been taken on hand. Major equipments have been imported by BHEL and most of the supplies have been received at site. Civil works are in progress. The scheme is scheduled for completion in 1983-84. An outlay of Rs. 1,852 lakhs is proposed for the Sixth Plan 1980-85.

(2) Ukai Left Bank Canal Power House (2x2.5 MW)

4.4.2.2. At the emergence of Left Bank Canal at Ukai Dam, it is envisaged to install 2 units each of 2.5 MW. The estimated cost of the Scheme is Rs. 305 lakhs. The Scheme has already been cleared by the Planning Commission. The orders for turbo-generator sets have already been placed with M/s. Jyoti Limited. The scheme is targeted for completion in the year 1983-84. An outlay of Rs. 252 lakhs is proposed for the Sixth Plan 1980-85.

(3) Wanakbori Thermal Project (3 x 210 MW)

4.4.2.3. The execution of the project is in full swing. Orders for major equipments and works are already placed. The hydro test of first boiler has been completed. The first unit of 210 MW is programmed for completion in June 1981 followed by the second and third units in December 1981 and June 1982. An outlay of Rs. 13,000 lakhs has been proposed in the plan for 1980-85.

(4) Ukai Thermal Extension Unit-V (210 MW).

4.4.2.4. This scheme envisages installation of another one unit of 210 MW as an extension to the Ukai Thermal Project. The approved estimated cost of this scheme is Rs. 6683 lakhs. The scheme has already been cleared by the Planning Commission. The order for turbo-generator set with matching boiler has been placed with BHEL. This scheme is targeted for completion in the year 1982-83. An outlay of Rs. 5,366 lakhs is proposed for the Sixth Plan 1980-85.

(5) Wanakbori Thermal Extension (3 x 210 MW)

4.4.2.5. This scheme envisages installation of three more units, each of 210 MW, as an extension to the Wanakbori Thermal Project which is under construction. The approved estimated cost of this Project is Rs. 20,679 lakhs. The scheme is cleared by Central Electricity Author-

city and Planning Commission. The orders for the main equipments will be finalised shortly. One of the units will be completed by 1984-85 and the remaining two in the Seventh Plan. This project is targetted for completion by 1985-86. An outlay of Rs. 21,600 lakhs has been proposed in the Sixth Five Year Plan 1980-85.

(6) Lignite based Thermal Power Station (2×60 MW).

4.4.2.6. This scheme envisages installation of two units each of 60 MW at Panandhro using Lignite as fuel. The estimated cost of this scheme is Rs. 7,127 lakhs. The scheme is cleared by C. E. A. and Planning Commission. The work on this scheme is taken on hand and is targetted for completion in 1984-85. An outlay of Rs. 6,000 lakhs is proposed for the Sixth Plan 1980-85.

(7) Ahmedabad Electricity Company's Projects :

4.4.2.7. The Company has already completed installation of one 110 MW unit as a replacement for some of its old sets and commissioned it. The State Government has been the major partner in financing this project. The Company has also initiated the installation of another 110 MW as a replacement unit and the Company has already submitted its proposal to Central Electricity Authority. The total cost of the project is estimated at Rs. 6,000 lakhs. As against this, the assistance required by the Company during the Sixth Plan period is estimated at Rs. 2,000 lakhs. It is proposed to assist the A. E. Co., by Rs. 2,000 lakhs during the Sixth Five Year Plan period in the form of loan. The expansion programme has been targetted to be completed by 1984-85.

(8) Replacement of small Units at Shapur and Sikka:

4.4.2.8. At present small sets of 3 MW, 4 MW and 5 MW are installed at Shapur and Sikka. These units are very old, inefficient and uneconomical to operate. These small units have outlived their useful life and shall have to be retired. It is proposed to install one 120 MW thermal unit at Sikka where the developed site is available with all infrastructures like railway siding, colony, trained personnel, etc., The estimated cost of this project is Rs. 4,414 lakhs. The scheme has already been approved. Initial steps are being taken for execution of this scheme.

(9) Replacement of small units at Kandla :

4.4.2.9. This scheme envisages replacement of small and un-economical units at Kandla by installing one large thermal unit of 60 MW. The estimated cost of this project is Rs. 2,815 lakhs. The scheme has been posed for approval of C.E.A. and Planning Commission.

(10) Replacement of Small Units at Utran Thermal Station.

4.4.2.10. This scheme envisages replacement of small and un-economical units at Utran by installing large modern 120 MW thermal unit. The estimated cost of this project is Rs. 4,587 lakhs. The scheme has been posed for approval of C. E. A. and Planning Commission.

(11) Gandhinagar Thermal Project Extension (1×210 MW).

4.4.2.11. This scheme envisages installation of one 210 MW Thermal Unit as an extension to the existing Gandhinagar Thermal Station. The estimated cost of this project is Rs. 6,930 lakhs. The scheme has been posed for approval of the C. E. A. and Planning Commission.

(12) Gas based Thermal Station at Mahuva :

4.4.2.12. The State Government is pressing the Government of India to allocate adequate quantum of gas available from Tapti High to Gujarat for power generation. This is essential since Gujarat has no resources of fossil fuel. This scheme envisages installation of two units, each of 210 MW, at Mahuva on Saurashtra coast. There is no major source of generation in Saurashtra and this scheme will help to meet the growing demand in Saurashtra and also help to improve the quality of supply in Saurashtra. This project, at an estimated cost of Rs. 13,207 lakhs has already been posed for the approval of C. E. A./Planning Commission.

(13) Narmada Hydro Project :

4.4.2.13. As per the Narmada Tribunal Award following hydro stations have been proposed :—

(1) Installation of 5 units each of 150 MW at the river head at Navagam.

(2) Installation of 5 units each of 75 MW at the canal power house.

This is being further examined by the Sub-Group constituted by the C. E. A. regarding the final size and number of units to be installed. The construction of this project will be started during the Sixth Plan so that the benefits become available atleast by the end of Seventh Plan. An outlay of Rs. 3,000 lakhs is provided for the Sixth Plan 1980-85.

(14) Kadana Hydro Project :- (Unit 3 and 4)

4.4.2.14. At present 2 units each of 60 MW are being installed at Kadana. It is proposed to add further two units each of 60 MW. The estimated cost of this extension is Rs. 1800 lakhs.

(15) Other New Schemes, Slurry Pipeline :-

4.4.2.15. At present the annual requirement of coal for the power stations in the State is around 4 million tonnes which would be more than double by the end of the Sixth Five Year Plan. In view of the logistical difficulty in transportation of coal to Gujarat, apart from suggesting coal movement by the sea route, a study has been commissioned through M/s. Engineers India Limited for establishing techno-economic feasibility for slurry pipeline transportation and the report has also been received. It appears that the Planning Commission has suggested to the Ministry of Railways to examine the feasibility of slurry pipeline transportation. It is possible that this project would be taken up jointly with interested central agencies.

(16) Pit Head Power Station.

4.4.2.16. Another possibility of meeting the difficulties in transportation of coal is that of establishing a joint coal pit head power station with the Government of Madhya Pradesh. The State Government have already taken up the matter with the Government of Madhya Pradesh.

(17) Tidal Power

4.4.2.17. The study undertaken by the UNDP Expert, prof. Wilson, indicates tremendous power generation potentiality in the Gulfs of Cambay and Kachchh. Proposals have been submitted to Government of India for undertaking investigations in this regard. The Government of India have set up a multi-disciplinary co-ordination committee to study the matter. The Committee has proposed that the preliminary investigations should be initiated and the Government of India also have recently sanctioned the project for undertaking detailed studies and investigations, with an outlay of Rs. 2.18 crores which would help in formulating the feasibility study for tidal power project in the Gulf of Kachchh.

4.4.2.18. An outlay of Rs. 12400 lakhs inclusive of Rs. 3000 lakhs for Narmada Hydro project has been proposed for new projects.

Transmission and Distribution

4.4.2.19. The transmission and distribution capacity should always be adequate not only to evacuate the power generated in the generating stations, but also to distribute it to the various load centres and right upto the consumers premises. Inadequate transmission line capacity will lead to heavy line losses and poor voltage regulations. Therefore, along with the execution of power generation projects, suitable transmission and distribution schemes are always planned and executed simultaneously. So far the grid system consists of transmission lines and sub-stations with maximum voltage of 220

K.V. For distributing the additional power generated during Sixth Plan period 1980-85 high voltage lines and sub-stations of 400 KV is necessary. Therefore, it is proposed to have 400 KV lines from Wanakbori Thermal Station to Asoj in Central Gujarat, Jetpur, in Saurashtra and Nardipur in North Gujarat and also a 400 KV. line from Ukai to Asoj. In addition several 220 KV, 132 KV and 66 KV lines and sub-stations are proposed for construction and the capacities augmented to evacuate the additional power generated as follows :

Sr. No.	Transmission lines	Additions proposed in Sixth Plan in Circuit kms
1.	400 KV	1085
2.	220 KV	1606
3.	132 KV	558
4.	66 KV	2086

Sr. No.	Sub-stations	Additions proposed in Sixth Plan (Nos)	
		New	Augmentation
1.	400 KV	4	..
2.	220 KV	5	12
3.	132 KV	4	11
4.	66 KV	78	65

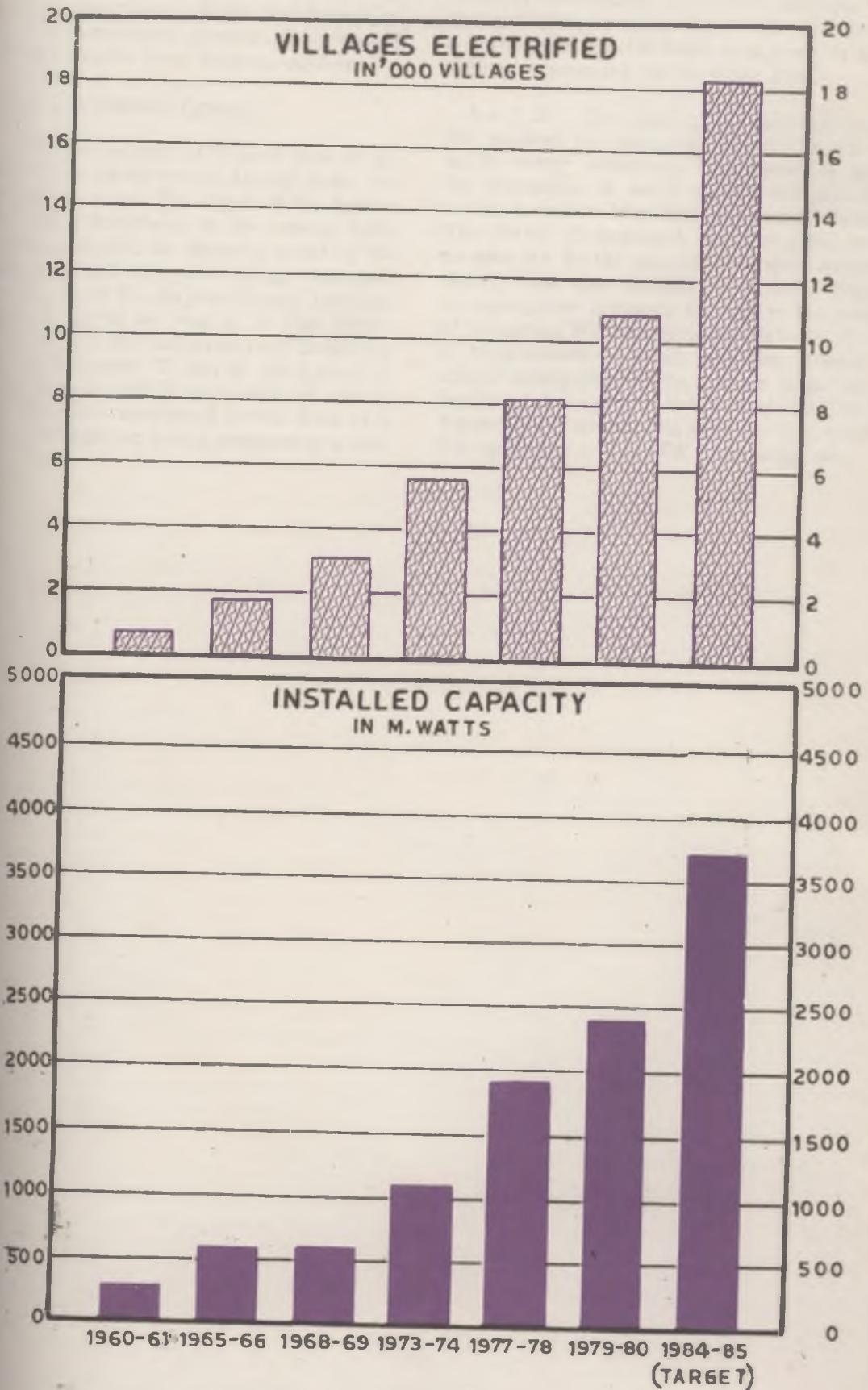
4.4.2.20. Provision of Rs. 25000 lakhs is proposed for Sixth Plan period 1980-85.

Rural Electrification

4.4.2.21. There are 18,275 villages in the State out of which 10,867 villages have been electrified by the end of the year 1979-80. The number of wells and Government Tubewells electrified has reached a figure of 2,02,853 by the end of 1979-80. Under the rural electrification programme for the Sixth Five Year Plan 1980-85, it is proposed to electrify the remaining villages. It is also proposed to electrify 25,000 Pump-sets every year. Thus, during Sixth Plan period, 1,25,000 pump-sets will be electrified raising the total number of pumpsets electrified to 3,27,853 by end of 1984-85.

4.4.2.22. Whenever, a village is electrified for domestic connection, street lights, etc. the Harij Basti of the village is also being electrified at the time of initial electrification. Thus, in the villages which are electrified for all purpose the Harij bastis have also been covered. This policy will be continued during the Sixth Five Year Plan while electrifying new villages for all purposes. To undertake the Rural Electrification Programme during the Sixth Plan as proposed, an outlay of Rs. 80

ELECTRICITY



lakhs has been provided in the Sixth Plan. Of this it is proposed to allocate Rs. 20 crores for electrification for all purposes those villages that have been electrified only for agricultural purposes. It is proposed to raise Rs. 4100 lakhs from financial agencies.

Gujarat Energy Development Agency.

4.4.2.23. The Government of Gujarat have set up the Gujarat Energy Development Agency under the Societies Registration Act. The object of the Agency is to diffuse useful knowledge in the various fields of energy and to deal with the situation posed by the rapid depletion of non renewable energy resources. With the setting up of the Gujarat Energy Development Agency, it would be possible to take appropriate steps to explore the various ways of harnessing alternative energy sources. To enable the Agency to commence its work as quickly as possible an amount of Rs. 5.00 lakhs was sanctioned in the form of a grant in aid in 1979-80 for taking preparatory action

Now that the agency has started functioning it would be necessary to provide adequate funds so that the agency can function effectively. Accordingly a provision of Rs. 100 lakhs as a grant in aid to the Agency is proposed for the Sixth Plan.

4.4.2.24 This Agency has already taken up a few projects for promoting the utilization of renewable energy resources. The agency is promoting the utilization of solar cookers and suitable institutions have been identified for manufacturing them. The State Government has also given concession in sales tax for the sale of such solar cookers. The Agency has also decided to instal 2 Wind Mills at appropriate locations to explore the possibilities of utilizing Wind energy, especially in the context of requirements of small irrigation pumps. In the area of energy plantations, a fairly large size project has been taken up in collaboration with the Gujarat Agriculture University to meet the fuel requirement for operating a 1.5 MW generating set

STATEMENT

POWER DEVELOPMENT

List of schemes included in the Sixth Five Year Plan--1980-85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85 outlays	
		Total	Capital
1	2	3	4
I. Generation :			
<i>(A) Approved and on-going schemes.</i>			
1.	PWR--1 Ukai Hydro Project (4×75 MW).	100.00	100.00
2.	PWR--2 Kadana Hydro Electric Project (2×60 MW).	1852.00	1852.00
3.	PWR--3 Ukai L. B. Canal Power House (2.×2.5MW).	252.00	252.00
4.	PWR--4 Gandhinagar Thermal Project (2×120 MW).	125.00	125.00
5.	PWR--5 Ukai Thermal Power Extension (2×200 MW).	400.00	400.00
6.	PWR--6 Wanakbori Thermal Project (3×210 MW).	13000.00	13000.00
7.	PWR--7 Uaki Thermal Project Extension Unit-5 (1×210 MW).	5366.00	5366.00
8.	PWR--8 Wanakbori Thermal Project Extension (3×210 MW).	21600.00	21600.00
9.	PWR--9 Lignite based Thermal Power Station in Kachchh. (2×60 MW).	6000.00	6000.00
10.	PWR--10 Assistance to the Ahmedabad Electricity Co. Ltd.	2000.00	2000.00
Sub-total (A).		50,695.00	50,695.00
<i>(B) New Schemes/Projects proposed to be started.</i>			
11.	PWR--11. Modification of Ukai (H) and Dhuvaran TPS.		
	(i) Dia. pharm wall		
	(ii) Uprating of 62.5 MW units.		
12.	PWR--12. Replacement of 120 MW unit at Sikka.		
13.	PWR--13 Replacement of 60 MW unit at Kandla.	12400.00	12400.00,
14.	PWR--14 Replacement of 120 MW unit at Utran.		
15.	PWR--15 Gandhinagar Thermal Project Extension (1x210 MW)		
16.	PWR--16 Gas based Thermal Project at Mahuwa. (2×210MW).		
17.	PWR--17 Narmada Hydro Project (3000.00)		
18.	PWR--18 Kadana Hydro Electric Project Units-III and IV (2×60 MW).		
19.	PWR--19 Slurry Pipe-line.		
20.	PWR--20 Joint Pit head station.		
21.	PWR--21 Tidal Power Station.		
22.	PWR--22 Atomic Power Station.		
Sub Total B.		12400.00	12400.00
Sub-Total—Generation(A+B).		63095.00	63095.00

Sr. No.	No. of schemes	Sixth Five Year Plan 1980-85 outlays	
		Total	Capital
1	2	3	4
II. Transmission and Distribution			
23.	PWR--23 Transmission and Distribution.	25000.00	25000.00
	Sub-Total-II.	25000.00	25000.00
III. Rural Electrification :			
24.	PWR--24 Rural Electrification	8024.00	8024.00
	Sub Total-III.	8024.00	8024.00
IV. Survey And Investigations.			
25.	PWR--25 Survey and Investigations.	100.00	100.00
	Sub Total-IV.	100.00	100.00
V. General :			
26.	PWR--26 Acquisition of Licences.	165.00	165.00
27.	PWR--27 Financial Assistance to Gujarat Energy Development Agency.	100.00	..
	Sub : Total-V.	265.00	165.00
	Grand Total (I to V)	96484.00	96384.00

5. INDUSTRIES AND MINERALS

5.1 Introduction.

5.1.1 The economy of Gujarat State like the country's economy is predominantly rural and depends heavily on primary sector for employment and income. However, there is very limited scope for extension of area under agriculture and forest and paucity of potential irrigation sources would also act as a constraint on rapid development in this sector. Therefore, the industries sector would be called upon to bear an increasing responsibility for generating employment and production so as to raise the living standard of the people.

5.1.2 The approach to the Plan for Industries Sector would therefore, have to be an ambitious forward-looking programme exploiting the maximum potential for industrial development and thereby playing a leading role in meeting the challenges from the problems of poverty and unemployment with special emphasis on the development of backward regions of the State.

5.1.3 The performance of the Industries Sector of the State so far has been quite encouraging and would inspire confidence in having an ambitious programme to fulfil the task ahead. According to Annual Survey of Industries (1978), with Rs. 4300 crores worth output from 9800 factories, the State accounted for 10% share in the all India total and ranked second among all States. The State's share of factories employment was 8.91% against its share of approximately 5% of the country's population. The organised and unorganised sectors combined together generated a per capita income of Rs. 322 in manufacturing activity as compared to the national average of Rs. 194.

5.1.4 Several factors have contributed to this remarkable achievement of the State in industrial front leading it to position No. 2 in the whole country. Important amongst them are business tradition and the excellent base of entrepreneurs, hard working and disciplined labour force and farsighted as well as the pragmatic policies followed by the State Government. Combination of all these has created a very congenial environment for industrial forces and has enabled exploitation of State's potential resources which provide a good industrial base. Moreover, the latter half of 1960s and 1970s have seen opening up of new horizons of factor endowments of the State with discovery of oil and gas, opening of mineral wealth by geological surveys and rapid strides made by the agricultural sector. The strategy of industrial development in the Sixth Plan would be suitably oriented to ensure harnessing of all these resources in the most optimum manner.

5.1.5 The resource base on which the State would build its further industrial growth is expected to be considerably widened further with the setting up of another petrochemical complex based on offshore gas which has already been accepted by the Government of India in principle. With the landfall point as well as the location of petrochemical complex having taken final shape programmes of developing petrochemical based industries and utilisation of downstream products for generating maximum income and employment for the people would have to be given due priority in the Sixth and subsequent Plans.

5.1.6 The State Industries Sector has recorded effective diversification leading to a much broader base. The sector which was predominantly textile based in the beginning of 1960 has achieved a noteworthy progress in chemical and petro-chemical and engineering sectors. This is reflected in a significant reduction in the share of textile group in the factory-labour force which has dropped sharply from 76% to 48% while the new group of industries like Chemicals and Engineering have raised their share by two and half times to 20% and 18% respectively. The same trend is revealed in generation of national income in different groups of industries. This is notwithstanding the fact that the textile group itself has increased its production and employment in absolute terms. Our approach for 1980, particularly for the Sixth Five Year Plan would be to strengthen these forces of diversification. Growth of Engineering and Chemicals would be accelerated, new grounds will have to be covered in other sectors such as Electronics, diamonds, salt, cement and other mineral based industries and at the same time growth in textile sector will have to be consolidated and further improved.

5.1.7 Besides the overall growth and diversification of industrial sectors, noteworthy feature of the recent developments has been a process of dispersal of industries on wider geographical area. Fiscal and financial measures introduced by the Government of India in the 1970s which have been supplemented by the Incentive Policies of the State Government for taking industrial development to backward regions started showing results. Pioneering efforts made by the Gujarat Industrial Development Corporation (GIDC) in providing infrastructure and other facilities and setting up of large industrial townships in the backward regions have enabled these incentive policies to make concrete impact and several new centres of industrial growth have emerged. The State can take pride in having piloted growth of some of the largest industrial complexes like Vapi, Ankleswar

alol in the Adivasi and backward areas. These steps initiated towards industrialisation of backward regions and dispersal of industries will have to be reinforced by appropriate infrastructural, financial and fiscal measures. The District Industries Centres set up in all the Districts would have to be made more active to serve the objective of helping the rural, cottage and small scale sectors on widest possible spectrum.

5.1.8 Construction of the Eastern State Highway passing through the entire backward eastern belt of the State is expected to become a landmark and open up these otherwise remote regions for industrial growth. With construction of this Highway, these backward areas of eastern belt are likely to experience strong pull of industrial growth similar to the one experienced by Umbergaon-Ahmedabad National Highway belt in the 1970s. The 1980s can be expected to herald a completely new era of unprecedented economic development for these areas. Advance planning of infrastructure and other facilities would be undertaken to facilitate orderly growth of industries in context of these new opportunities.

2 Review of Progress.

5.2.1 Till 1960 industrial economy of Gujarat rested primarily on the textile industry and textile ancillaries came into existence. But these had only a marginal impact on the economy of the State. But, with the discovery of oil and gas, the setting up of a refinery, fertilizer factories and a petrochemical complex the economic horizon has widened considerably and scope for wide spectrum of industries in the State. Alongwith this, salt production and mineral exploration have added impetus.

5.2.2 On 31st December, 1960, there were 3647 working factories providing employment to 3.30 lakh persons. The number of these factories and the number persons employed therein rose to 9836 and 5.01 lakh respectively at the end of 1978. The productive capital in the registered factories sector in 1961 was Rs. 245.79 crores and goods worth Rs. 420.23 crores were produced. The corresponding figures for 1976-77 were Rs. 1969.99 crores and Rs. 3531.43 crores. The value added was Rs. 121.33 crores at the end of 1961. This rose to Rs. 687.49 crores at the end of 1976-77. This represents nearly six fold increase in net value added in a span of sixteen years.

5.2.3 Correspondingly, there was also momentum in the registration of Small Scale Industries units in

the unorganised sector. The total number of small scale units registered with Industries Department in 1961 was 2169. This increased to 18093 in 1971 and over 41,000 by the end of June, 1980.

5.2.4 Promotion of village and cottage industries has received equal importance. In the year 1978-79, 3,435 beneficiaries were assisted with subsidised loans to the extent of Rs. 71.25 lakhs. In the year 1979-80, the number of beneficiaries rose steeply to 10,140. The financial assistance also rose significantly to Rs. 2.91 crores.

5.2.5 Similarly, the production of Khadi increased from 56.31 lakh meters in the year 1978-79 to 65.35 lakh meters in 1979-80 and will go upto 80 lakh meters during 1980-81. The earnings received by the workers in the Khadi numbering over 55,000 will be Rs. 4.5 crores. Other activities in the fields of village and artisans, support employment for about 28,000 people giving them an annual earning of Rs. 3 crores. Bulk of these workers are engaged in manufacture of leather, neera, pottery and jaggery.

5.2.6 On the infrastructure and finance front, the Gujarat Industrial Development Corporation (GIDC), Gujarat Industrial Investment Corporation (GIIC) and the Gujarat State Financial Corporation (GSFC) are trying to keep pace and Government is augmenting their resources to the maximum with the demand for infrastructure and finance. The GIDC has so far developed 110 estates on 8,000 hectares of land with a total number of sheds allotted 5,400 and land plots allotted 27 million sq. mts. About 5,400 units are functioning with annual production of over Rs. 700 crores and total employment of 81,500. In the major estates set up in backward areas where housing accommodation is scarce, the Corporation tries to provide industrial housing also and has so far constructed 3,300 quarters.

5.2.7 The Corporation has stepped up its investments, infrastructure, lands, sheds etc. doubling it every year since 1978-79. It was about Rs. 9 crores in 1978-79, went up to Rs. 18.5 crores in 1979-80.

5.2.8 On the investment side, the GIIC has assisted units under three schemes; Technicians Scheme. Now entrepreneurs scheme and the General Scheme. Under the Technicians' Scheme the number of units assisted as on 31-3-1980 would come to 1,111 with an assistance of Rs. 863.45 lakhs.

5.2.9 So far as the large and medium industrial units are concerned, the Corporation has sanctioned Rs. 7380.86 lakhs as on 31-3-1980 to 568 units.

5.2.10 The Gujarat State Financial Corporation provides term loan assistance to small and medium scale industries in the State to a limit of Rs. 30 lakhs for loanees who are companies or co-operative societies and for partnership and proprietary concerns, the limit of loan is fixed at Rs. 15 lakhs. Corporation sanctioned term loan assistance of Rs. 190.13 crores to 12,918 units till 31-3-1980. The disbursement has been made of Rs. 131.60 crores. Of the total term loan extended, as much as Rs. 127.07 crores was extended to 10,808 small scale units. The Corporation also extended flood loan assistance of Rs. 2.35 crores to 1,640 units. 470 medium and small scale units were also extended assistance of Rs. 60.71 crores.

5.2.11 To provide self employment opportunities, the Corporation has already evolved a scheme known as New Entrepreneurs Scheme. Under the Scheme till 31-3-1980, the Corporation has extended a loan of Rs. 8.62 crores to 665 units. The assistance under the scheme is proposed to be increased by Rs. 15.42 crores having regard to Government emphasis on eliminating unemployment amongst the technically qualified persons.

5.2.12 Under the Mini Loan Scheme, the Corporation provides assistance upto Rs. 25,000 to artisans, craftsmen and small borrowers. The Corporation has extended term loan assistance of Rs. 1.89 Crores to 2,458 units till 31-3-1980.

5.2.13 Fertiliser is becoming an important sub-sector of industry in Gujarat with Gujarat Narmada Valley Fertilizer Company nearing completion and two other big plants under IFFCO being already firm up and efforts under way for a third gas-based fertilizer plant.

5.2.14 On the Electronics side, the Gujarat Communication and Electronics Limited, Vadodara is making rapid strides on the high technology sophisticated electronics area. Simultaneously growth of electronics as a wide spread cottage-cum-small industry would also be encouraged.

5.3 Policy framework and programme linkages :

5.3.1 The policies and programmes for the Sixth Five Year Plan would revolve around the principal objectives of removing poverty through generation of employment and raising production in the State. This would be effectively translated in the following directions :

(1) Generating massive employment opportunities through special emphasis on small scale, cottage and village industries and employment oriented scheme.

(2) Achieve further diversification and broad-basing of industrial sector with emphasis on promoting industries based on local raw materials and also by supporting special programmes for electronics etc.

(3) Provide adequate infrastructure, finance and other inputs so as to give full scope to the local talents and enterprises for development of industries.

5.3.2 The strategy of opening of backward areas with a view to ensuring balanced development as well as direct attack on areas of concentrated poverty would, of course, be interwoven in all the above directions while formulating the detailed programme.

5.3.3 A major thrust in the policy and programmes of the Plan would be on the cottage and village industries front for which a massive outlay of Rs. 3031 crores is proposed. Besides, accelerating the traditional programmes of Khadi, leather, handicrafts etc. new avenues for employment are sought to be created in a few other important trades like handloom, woolen carpet weaving which have good potential but have so far remained relatively undeveloped in our State. A package support right from provision of finance and raw materials at the ground level to marketing and quality control at the apex level would be provided and the State level Corporation could be actively associated in rendering all these services. The leather project set up by the GIIC in joint sector would be called upon to provide technical guidance, raw material and an integrated marketing network so as to get better returns for village flayers on the one side and to provide a widening market base for the leather workers. Similar would be the case with the handloom programme. The predominant position enjoyed by the State in diamond cutting and polishing activity would be further consolidated and efforts would be made to raise the profit and earning of the artisans by providing training facilities on wide scale and creating research facilities for improvement of technique and tools in a diamond complex proposed to be set up. Training facilities on wide scale would also lead to much desired dispersal of these industries and also open up opportunities of high-wage employment in backward and rural areas.

5.3.4 The State is well poised for further diversification of industrial sector on chemical and petrochemical side. The prospect of the second petrochemical project based on off shore gas will open up vast opportunities for such industries. Detailed

advance planning for petro-chemical down-stream industries with emphasis on such of these which supply important raw material for feeding cottage and village industries is envisaged so as to minimise time lag between setting up of petro-chemical complex and application of raw materials on the widest possible spectrum.

5.3.4.1 Preliminary steps for development of skills and facilities in the field of petrochemicals in Gujarat are also to be initiated. A branch of C.I.P.E.T. is being opened and a polymer wing is proposed to be added to the Industrial Research Laboratory at Vadodara.

A co-ordinated programme of developing industries based on petrochemical down stream products is also proposed. Some of the items such as acrylic fibre which lend themselves as a most viable base for promoting industries in tiny sector and producing goods of mass consumption would be given due priority.

5.3.5 The second thrust of diversification strategy would be in the direction of local raw material based industries. This would be achieved firstly by promoting raw material based enterprises in private sector on the one hand and simultaneously, spearheading development of such industries through public Sector/joint sector project promotion programmes of GIIC, GMDC and GSIC etc.. Soda ash, cement, marine chemicals, spinning mills, phenol are the Projects proposed to be taken on hand in this context. An ambitious programme on the resource-based industries side and the major programme on the mineral front with 12 Projects involving a capital investment of Rs. 321 crores is envisaged by the GMDC for the Sixth Plan.

5.3.6 It is proposed to make concentrated efforts on the Electronics side with a view to have due share of this rapidly growing industry for the State. The GC and EL would be called upon to play a leading role by taking up Projects of high-technology professional electronics involving a total capital outlay of the order of Rs. 40 crores on the one hand and also as a catalytic agent for promoting joint sector electronic projects in consumer and other professional grade electronic equipments. A suitable marketing network is also expected to be developed under the aid of a suitable agency like GC and EL or Trade Centre of GSIC to support development of electronic industry in the cottage and small scale sector on widest possible basis.

5.3.6.1 This programme of Electronic Industries Development would include setting up of an Electronic

Estate at Gandhinagar. It has been decided to give the full benefit of the incentive package to electronic units being set up at Gandhinagar Estate with a view to boost this Industry's Development. It has also been decided to give Sales Tax concession to make local Electronics manufacture more competitive.

5.3.7 Talents and enterprise displayed by the people of the State is our most important asset. With a view to harness this important resource, a net work of State Industrial Development Corporations such as GIDC, GIIC, GSFC, GSIC, GSEC; etc., would implement a coordinated programme in providing adequate infrastructure, financial and marketing assistance for the industries. An investment of the order of Rs. 450 crores is envisaged in development of infrastructure, lands, sheds, labour, housing etc. by the GIDC so as to keep pace with the growing demand for industrial plots and sheds.

5.3.8 On the finance side, the GIIC has planned to sanction Rs. 188 crores during the Plan period. It would catalyse investment of the order of Rs. 564 crores and provide employment opportunities both direct and indirect to 1.20 lakh persons.

5.3.9 A further fillip to backward area development would be achieved through the New Industries Scheme, under which the capital subsidy and sales tax benefits on liberal scale would be offered to industries going to rural and backward areas so as to compensate them for extra economic burden and handicaps such units have to bear. Adequate provision is proposed to be made in the Sixth Plan so that the trend of industries going to backward areas is strengthened and paucity of resources does not in any way throttle the working of this effective instrument of backward area development.

5.3.10 The enthusiasm generated by declaration of Income Tax Holiday and several other concessions for industries being set up in the Kandla Free Trade Zone (KFTZ) would be fully harnessed with the twin objectives of giving further fillip to development of backward areas of Kachchh and also help meeting the pressing need of earning foreign exchange for the country. The State Government has already taken several necessary steps in this direction, the most important of them being making Kandla eligible for full package of incentives declared by the State Government. Setting up of a Thermal Power Station in Kachchh and augmentation of other industrial and civic facilities through the programmes of GIDC and the Gujarat Housing Board would be a part of this strategy.

5.4 Programme for Sixth Five Year Plan.

5.4.1.1 The outlay provided for 'Industries and Minerals' Sector for the Sixth Plan 1980-85 is Rs. 17110 lakhs. The broad break up of the outlay is as under:—

(Rs. in lakhs)		
Sr. No.	Sub-Head of Development	Provision for Sixth Plan
1	2	3
1.	General Industries	614.00
2.	Large and Medium Industries	5749.60
3.	Village and Small Industries	
	(a) Small Industries	6565.40
	(b) Village and Cottage Industries	3031.00
4.	Mining and Metallurgical Industries	1150.00
	Total ..	17110.00

5.4.1.2 The details of some of the major programmes proposed are given in the subsequent paragraphs.

5.4.2 General Industries :

5.4.2.1 The programmes covered under this group are shown below alongwith the outlays provided for the Sixth Five Year Plan 1980-85.

(Rs. in lakhs)	
Programme	Outlays for Sixth Plan 1980-85
1. Direction and Administration	25.00
2. Weights and Measures	60.00
3. Industrial Education, Research and Training	455.00
4. Other Expenditure	
(a) Export Award	2.00
(b) Pollution Control	30.00
(c) Financial Incentives to Film Studies set up in the State	25.00
(d) Quarters for employees of Government Press	22.00
Total ..	614.00

Weights and Measures :

5.4.2.2 Bombay Weights and Measures Enforcement Act, 1958 is the consumer's oriented Act and protects consumer's interest. The Government of India have passed the New Act *i. e.* Standards of Weights and Measures Act, 1976 in April, 1976. The State Government have been provided with model therefor for implementing in their respective territories. The introduction of the New Act in the State is under active consideration of State Government.

5.4.2.3 The State Government is much anxious to protect the consumer's interests. As a preliminary action in this direction, the State Government has separated the weights and measures activities from the Industries Department and weights and measure department has been made independent department with effect from 1st February 1979.

5.4.2.4 With a view to carry out the various activities such as annual verification, implementation of packaged commodities rules, verification and stamping of electricity, water, autorickshaw and tax meters, inter-State verification of weights and measures, verification and stamping of clinical thermometers, implementation of Numeration Act etc. an outlay of Rs. 60 lakhs is provided for the Sixth Plan 1980-85.

Industrial Education, Research and Training :

5.4.2.5 Industrial development in Gujarat taking place in various fields. New fields have been opened after establishment of petrochemicals complex in the State. The diversified and fast changing industrial structure demands creation of research and development facilities. These facilities are very much necessary to meet various requirements of the industries. There is scope for creating such facilities in glass and ceramics, chemicals and petrochemical engineering, machine tools, textiles etc. With the cooperation of Council of Scientific and Industrial Research and the Industries in the State, it is proposed to create such facilities by setting up branches of Central Institute of Plastic Engineering Technology (CIPET), Mechanical Engineering Research and Development Organisation (MERADO), Central Machine Tool Institute (CMTI), etc. It is also proposed to create Polymer Research wing in Industrial Research Laboratory. Additional testing facilities will also be provided in IRL for testing new products. To carry out these various research and developmental activities, an outlay of Rs. 455 lakhs is provided for Sixth Plan 1980-85.

Industrial Research and Development Institute, Vadodara.

5.4.2.6 The Industrial Research Laboratory at Vadodara is equipped for testing paint, varnish, ink, soaps, oil, boot polish, water, chemical effluents, minerals etc. With a view to add plastic and polymers wing to this Industrial Research Laboratory a Committee was appointed under the Chairmanship of Shri V. B. Eswaran M. D. GSPCL. The Committee had recommended establishment of plastic and polymers wing to strengthen industrial research laboratory. Government have accepted the recommendation of the Committee looking to the future requirement of plastic, processing and conversion industries in the State and in the context of much larger availability of polymers in future on account of IPCL. This has already gone into production. This institute would facilitate growth of plastic and conversion industries in the State. The scope of industrial research and development institute will be as under:—

1. Finished products testing facilities for processing and conversion industries.
2. Polymers (Resin) characterisation facilities.
3. Development of the new uses of polymers and plastics and requirement of suitable polymer grades as the programme of products application and development division in liaison with the processing and conversion industries etc. An outlay of Rs. 250 lakhs is provided for the Sixth Plan 1980-85.

Pollution Control Schemes :

5.4.2.7 To help the Gujarat Water Pollution Control Board to augment its monitoring facilities, it is proposed to create the testing facilities for characterisation of industrial effluent including the facilities for analysis of industrial effluent cases and commissions in various polytechnics, Engineering Colleges, University Departments and Science Colleges located in various districts of the State. Financial assistance is given for the purchase of testing equipments etc.

5.4.2.8 The Small and Medium scale sector units in the field of Chemical, dyestuffs and its intermediates, pharmaceuticals and other polluting engineering units find it difficult from their existing sources of finance to have pollution testing equipments. To serve an encouragement to the industry, it is proposed to subsidise the cost of equipments for testing to the tune of 25%.

5.4.2.9 The task of Pollution Control and the protection of environment is very vast because the problem of Pollution Control requires attention both in urban and rural areas, particularly with increase in S.S.I. units in the rural areas. For running the effluent control plants, the services of qualified and

experienced environment engineers will be required. The scheme, therefore, envisages providing 25% subsidy amounting to Rs. 1800/- per person to the industries that employ such engineers. In implementing the scheme the industry may have to approach a consultant seeking the guidance for setting up a suitable effluent treatment plant. On an average, fees for such consultancy amount to Rs. 10,000/- per unit for deciding the character of effluent, method to be adopted for its treatment and equipment required for the same. It is envisaged to provide cash subsidy at a rate of 25% of cost to the industrial units. An outlay of Rs. 30,00 lakhs is provided for this purpose in the Sixth Plan.

Development of Film Industry

5.4.2.10 The State Government's policy of extending liberal tax exemption has given tremendous fillip to production of Gujarati films and has also heralded birth of film industry in the State. Development of this industry so far has, however, been lopsided, and out of the three important segments, e.g. Film Shooting Studio, Film Processing Laboratory and Sound Recording Studio, only the first segment has been developed to an extent, while the other two are conspicuous by their absence. The new film policy being introduced with effect from 1st April, 1981 has been made comprehensive so as to induce development of the other two segments also.

5.4.3 Large and Medium Industries :

5.4.3.1 The programmes covered under this group are shown below along with their outlays provided for the Sixth Five Year Plan 1980-85. (Rs. in lakhs).

Sr. No.	Programme	Outlays provided for Sixth Plan 1980-85
1	2	3
1.	Petroleum, Chemicals, and Fertilisers Industries	
	(a) Gujarat Petrochemical Corporation	500.00
	(b) Gujarat Narmada Fertilizer Company—Water Supply Plant	495.00
	(c) New Fertilizer Project based on Bombay High Gas	300.00
2.	Ship Building and Aeronautical Industries	
	M/s. Alcock Ashdown Co.	22.00
3.	Gujarat Communication and Electronics Ltd.	200.00
4.	Consumer Industries	
	(a) Gujarat State Textile Corporation	5.00
	(b) Government contribution to Narmada Comout Company	53.00
	(c) Ginnar Scooter Project	150.00
5.	Industrial Financial Institutions	
	(a) G. I. I. C. (Market Borrowing)	550.00
	(b) G. I. I. C. (Projects)	2700.00
	(c) Captive power Generation GIIC	499.60
6.	Other Programmes	
	(a) Index Grant for Promotional activities	25.00
	(b) Grant of Loan to Industries for amount of Sales Tax paid on the sale of finished products	250.00
	Total	5749.60

Gujarat Petrochemical Complex :

5.4.3.2 The State Government has constituted Gujarat State Petrochemicals Corporation Limited for setting up a petrochemical complex in Gujarat based on off shore gas with an authorised capital of Rs. 10 crores. The proposed petrochemical complex will consist of a gas separation unit, a gas cracker, common utilities and offsite facilities and downstream units for the manufacture of LDPE, HDPE, PVE etc. It is proposed that the gas separation, gas cracking and the common utility facilities will be owned by the Gujarat State Petrochemicals Corporation and the investment of the Corporation in equity will be 40% and 11% of the equity will be by Government agencies. Assuming a debt equity ratio as 3 : 1, Corporation's equity will be Rs. 44 crores based on the erected plant cost Rs. 440 crores for gas separation, gas cracking and utilities and offsite facilities. The downstream units would be in the joint sector in which GSPCL will be holding and equity of 26%. The estimated total outlay in downstream units being Rs. 340 crores on the basis of debt equity ratio of 3 : 1, GSPCL contribution towards equity in the downstream units would be Rs. 22 crores. The paid up capital of the Company as on 31st March, 1980 stood at Rs. 49,00,700 wholly subscribed by the Government.

5.4.3.3 On the basis of the technology evaluation and short listing of process licencers, the Corporation has issued tender enquiries for various process plants and the reports from leading process licencers have been received. The committee constituted by the Government of India for recommendations regarding the landfall point for the gas pipe line and site for the petrochemical complex have finalised their reports. A provision of Rs. 500 lakhs as share capital contribution of State Government to GSPCL is made in the Sixth Five Year Plan period 1980-85.

Third GNVFC. Plant (Water Supply) :

5.4.3.4. Gujarat Narmada Valley Fertilizers Company Limited is implementing a fertilizer project for production of 1350 tonnes of Ammonia and 1800 tonnes of Urea. The project cost of company's project has been placed at Rs. 445 crores. Government of Gujarat and Gujarat State Fertilizers Company Limited will hold 26% and 25% respectively of the share capital of the company. The finance for the project has been arranged through the share capital (Rs. 89 crores) and loans (Rs. 356 crores).

5.4.3.5. The company is having its own Water Supply scheme for its captive use, for drawing 68 million litres of water per day from Ukai Right Bank Canal by a pipeline.

5.4.3.6. Considering the requirement of reliable water supply to Bharuch Municipality/City and the requirement of a new fertilizer project (Expansion Project) at Bharuch which is under consideration of Government of India, it was resolved by Government to have a new scheme of water supply from upstream Narmada taking into account the requirement of :—

- (a) Expansion of fertilizer project;
- (b) Bharuch Municipality/City and
- (c) GIDC Estate, if required on long term basis.

5.4.3.7. The total requirement of water under this new/additional scheme is estimated at 60 million litres a day. The funds required for the scheme are at present estimated between Rs. 5 to 6 crores. As decided by Government the amount is to be fully made available initially in full by Government as an interest bearing loan to GNFC Ltd. as the scheme is to be got investigated and the work awarded and completed by GNFC as its own scheme. Also the scheme when completed will be operated and maintained by GNFC. Ltd.

5.4.3.8. When the fertilizer expansion project is approved and the means of financing are finalised the loan would be continued as loan or will be converted into equity or partly both in so far as the cost of the scheme is attributable to expansion project. So far an amount of Rs. 1.05 crore has already been released to Gujarat Narmada Valley Fertilizers Company Limited.

For remaining requirement of this project a provision of Rs. 495 lakhs is made in the Sixth Plan 1980-85

New Fertilizer project Based on Bombay High Gas :

5.4.3.9. The State Government have submitted a detailed memorandum on utilisation of off-shore gas in Gujarat. In this memorandum, mention has been made about the application for expansion of capacity by Gujarat State Fertilizers Company and Gujarat Narmada Fertiliser Co. In this connection indications were given to the State Government that the Centre would be agreeable to the setting up of one more Fertilizer unit in Gujarat in addition to the two that are being set up in Hajira based on Bombay High Gas. It has already been conveyed to the Central Government that the location of this unit would be at the existing site of GNFC at Bharuch. Since this project would be by way of an expansion project, it is estimated that it would cost around Rs. 400 crores. Assuming a debt equity ratio of 4:1 which had been allowed for GNFC and also considering the normal joint sector pattern

of 25% investment by the State Government, the equity requirement will be about 5% of the total cost viz., Rs. 20 crores. For Sixth Five Year Plan 1980-85, a provision of Rs. 300 lakhs is provided.

Gujarat Communications and Electronics Ltd. :

5.4.3.10. M/s. Gujarat Communications and Electronics Limited, has been set up by the State Government with the object of promoting and developing the Electronics industry in the State. The Company was incorporated on 30th May, 1975 with an authorised share capital of Rs. 5 crores. The company is engaged in manufacturing of highly sophisticated professional electronic equipments which are presently imported or are in short supply. For Sixth Plan 1980-85 a provision of Rs. 200 lakhs is made to assist the company in the form of loan.

Gujarat State Textile Corporation :

5.4.3.11. The Gujarat State Textile Corporation Limited was formed by the Government of Gujarat in the year 1968-69, as an instrument to take over and run the sick textile mills which were closed. The corporation had accordingly taken over nine sick textile mills for management till April, 1974, when Government of India issued the Ordinance for Nationalisation of the sick textile mills. Subsequently these mills were handed over to the National Textile Corporation, Gujarat. When more mills fell sick, the Gujarat State Textile Corporation was asked to take over such mills. Currently, the Gujarat State Textile Corporation is running two sick textile mills, the Priyalaxmi Mills, Vadodara and Shree Subhalaxmi Mills, Cambay as authorised controller. The mills were restarted in the end of 1977 and after incurring a loss of Rs. 28 lakhs in 1977-78, mainly due to inadequate utilisation of capacity and teething troubles during the start up period, they turned the corner in 1978-79 and have been making profits ever since. The corporation has obtained soft loans from the Industrial Development Bank of India to the extent of nearly Rs. 304 lakhs for both the mills for modernisation. The Corporation proposes to take up production of knitted fabrics from the current year which will increase the financial viability and the profitability of the mills. In addition, for diversifying the activities of the Corporation and also to develop the productive capacity and employment in the backward areas, as well as to enable greater utilisation of the surplus cotton production in the State, the Corporation has proposed to go in for five new spinning units of a nominal capacity of 25000 spindles each to be located in the backward areas in the State at a total estimated cost of Rs. 25 crores in the joint sector. The requirement of funds for these projects for the Corporation is to be generally met with from internal resources. However, to provide for escalation as well as additional requirements of capital, a nominal provision of Rs. 5 lakhs is provided for the Sixth Five Year Plan.

Narmada Cement Co. Ltd. :

5.4.3.12. Gujarat Government is one of the promoters of the Narmada Cement Co. Ltd. As a part of Government equity capital contribution of Rs. 173 lakhs Government have paid Rs. 120 lakhs as share capital so far. The remaining amount of Government share capital contribution of Rs. 53 lakhs, will be paid to the Company during 1980-81. Further expansion programme is under consideration of the Company. In the Sixth Five Year Plan, a provision of Rs. 53 lakhs is provided in the form of share capital contribution.

Gujarat Industrial Investment Corporation :

5.4.3.13. Gujarat Industrial Investment Corporation has basically to perform the functions of (a) developing banking activity and (b) investment catalyst by way of project provision. As regards development of banking activity, the Corporation has assisted units under three schemes, Technician's Scheme, New Entrepreneurs' scheme and General Scheme. For the Sixth Plan 1980-85 for development of banking activity the Corporation has planned to sanction Rs. 188 crores which would give catalysed total investment of the order of Rs. 564 crores. So far GIIC have promoted 6 projects for caustic soda and chlorine (GACL), Carbon Black (GCL), Methyl Methacrylate (POGL), Machine Tools (GMTC), Leather Project (GLIL) and Cresols (GAL). The Corporation has planned additional 55 projects in the next 5 years.

5.4.3.14. The Corporation alongwith its Co-promoters has already received 34 letters of Intent out of 61 projects and for the remaining sanctions are under way. All these projects when completed would mean a total investment of the order of about Rs. 1000 crores, out of which GIIC's contribution would be around Rs. 80 crores. Thus, the Corporation would have galvanised investment efforts of Rs. 1000 crores with its own investment at only Rs. 80 crores. During Sixth Plan State Government would assist GIIC in the form of loan to the extent of Rs. 2700 lakhs as a Project loan.

GIIC would also tap better policy investment resources to facilitate quick implementation of capital incentive projects such as soda ash, cement, sponge iron, seamless tubes etc. Efforts in this direction have been initiated and visit of a High level State Government delegation has already generated on enthusiastic interest amongst investors in Middle East countries for putting their surplus funds in the industrial projects in the State. This will also help import requirements of some of these projects without utilising foreign exchange resources of this country.

Girnar Scooter Project :

5.4.3.15. An idea was mooted in 1967 for setting up Girnar Project mainly to encourage development of ancillary industries and thereby to provide additional opportunities for employment and to utilise technical services available in Automobile line in Gujarat. The Corporation obtained a

letter of Intent in 1971 and an industrial licence to manufacture 24000 scooters per annum was obtained in October, 1972. It started modest production of 100 scooters in 1972. The project at present has the production capacity of 9000 scooters per annum. Revised project report is being prepared for approaching IDBI for grant of requisite project loan. The project is now expected to cost about Rs. 15.3 crores. Investment of the order of Rs. 270/- lakhs has already been made till 31-12-1979 of which Government of Gujarat has sanctioned loan of Rs. 186 lakhs till the end of 31-12-1979. Procurement of bodypanels had been the main bottleneck. With the alternative arrangement having been already made, the project will shortly be self sufficient in this respect also. The production of the new model scooters has already commenced. The project is at present manufacturing 500 scooters per month. The rate of production will go up to 750 scooters per month. It is proposed to expand the production capacity from 9000 to 30,000 scooters per annum by 1985 in a phased manner.

For this project a provision of Rs. 150 lakhs is made in the Sixth Plan.

Captive power plant GIIC/GSFC

5.4.3.16 Gujarat State is experiencing considerable power shortage due to inadequate supply of fuel for stations in the State. As a result several engineering units are in the process of installing captive diesel generating sets to meet with their power needs. Depending upon their work-load, these units are installing one or more generating sets to fill the gap between the power required and available which entails a considerable amount of initial investment. Besides, the unit cost of power by diesel generation is much higher than the electricity tariff. There are two ways in which captive power generating sets could be installed in an industry. In an Industry using steam back pressure turbine generators could be installed to generate power and if an industry is not using steam, diesel generators may have to be installed.

5.4.3.17 In order to help industries combat power shortage in the State, GIIC has evolved a scheme to finance installation of power generating sets. Under the scheme, assistance is available to install either diesel generating sets or back pressure turbines depending upon the other existing facilities available with that particular industry. Installation of these equipments would help the industrial units to increase their production and thereby resulting in better energy management and productivity. For this scheme an amount of Rs. 499.60 lakhs is provided for the Sixth Plan 1980-85 in the form of loan to be advanced to GIIC.

Grant of Loan to Industries for the amount of Sales Tax paid on sale of finished products.

5.4.3.18 For accelerating the industrial growth

ensuring balance and systematic development of industries and also with a view to decongest already developed areas and cities like Ahmedabad, Vadodara and Surat, Government have introduced a scheme of interest free sales tax loan with effect from 1st November, 1977. The scheme envisages grant of interest free sales tax loans to all new medium and large scale industrial units as well as expansion and diversification of existing units commissioned during the period of the scheme. The loan amounts will be equal to the amount of Sales Tax paid by the industrialists on the sales of their finished product during the first five years of production limited to a ceiling of 15% to 25% of the fixed assets of new undertaking or expansion or diversification as the case may be or Rs. 15 to 25 lakhs whichever is less. For being eligible for the loans the industrial units should be established in area beyond 24 Kms. from the municipal limits of Ahmedabad and Vadodara, 10 K.M. from municipal limits of Surat, Rajkot, Bhavnagar and Jamnagar and also not located in towns/cities having a population of more than one lakh on the basis of 1971 Census. Within these areas loans at half sale would be given at selected growth centres. The scheme will be in force for a period of five years. The amount of Rs. 113.43 lakhs has been disbursed to 10 units by GIIC. For the Sixth Plan 1980-85 a provision of Rs. 250 lakhs in form of loan is made.

5.4.4. Village and Small Industries :

Small Scale Industries :

5.4.4.1 The programmes covered in this group are shown below along with their outlays provided for the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	Programme	Provision for the Sixth Plan 1980-85
1	2	3

Small Industries::

1.	Share Capital contribution loan to GSFC.	100.00
2.	Gujarat Industrial Development Corporation	3200.00
3.	G. I. D. C. Margin Money	
4.	Subsidy to G. I. D. C. for Industrial areas and townships.		1.40
5.	Pilot Plant for testing facilities (GIDC)	20.00
6.	Critical infrastructure facilities for backward areas (GIDC)	60.00

1	2	3
7.	Workshop in Rural and Backward Areas (GIDC)	20.00
8.	Common Industrial Facility Centres (GIDC)	20.00
9.	Grant-in-aid for providing integrated training skills to Industries in GIDC areas (Captive Training Centres)	25.00
10.	Grant in aid to CED self employment in rural and backward areas.	60.00
11.	Loan to Gujarat Small Scale Industries Corporation for Hire Purchase Scheme:	37.00
12.	Contribution for marketing funds for G. S. I. C. to provide marketing assistance to SSI units.	40.00
13.	Trade Centres.	25.00
14.	Diamond Industries Complex	25.00
15.	Capital subsidy and Growth Centres.	2500.00
16.	District Industry Centres	160.00
17.	Rural Industries Project.	150.00
18.	Apprentice Training in Govt. Printing Presses.	22.00
19.	Package Assistance to Small Scale Industries.	100.00
	Total :	6565.40

Gujarat State Financial Corporation

5.4.4.2. G.S.F.C. provides term loan assistance to Small and medium scale industries in the State to a limit of Rs. 30 lakhs for loanees who are companies or Co-operative Societies and for partnership and proprietary concerns the limit of loan is fixed at Rs. 15 lakhs. During the Sixth Five Year Plan (1980-81 to 1984-85) the Corporation proposes to sanction additional loans of Rs. 230 crores to about 6,000 units most of which will be in the small scale sector. The Corporation also proposes to make disbursement of Rs. 167 crores. Of the total sanction of Rs. 230 crores, small scale sector is likely to receive assistance of Rs. 161.62 crores. The main thrust

of the Corporation would be to extend larger assistance in the backward areas. Of the total assistance of Rs. 230 crores as much as Rs. 127 crores will go to backward districts.

5.4.4.3. The Corporation also proposes to provide assistance to SC/ST entrepreneurs by granting term loan at concessional rates. As against the assistance of Rs. 0.5 crore granted during the last 3 years, the Corporation proposes to set up the lending operation to these categories of borrowers to the extent of Rs. 1.40 crore during the Sixth Five Year Plan period. Under the Mini Loan Scheme, the Corporation provides assistance upto Rs. 25,000 to artisans, craftsmen and small borrowers. The Corporation has extended term loan assistance of Rs. 1.89 crore to 2458 units till 31st March, 1980 and additional term loan of Rs. 1.78 crores is proposed to be made available during the Sixth Five Year Plan period to this category of borrowers who mostly hail from the weaker sections of the society and from rural areas.

5.4.4.4. The Corporation will have to mobilise resource either by borrowing from the open market or by availing of refinance facilities available from IDBI. We have projected that the Corporation will get by way of bonds a sum of Rs. 57 crores. Besides, the Corporation will take refinance of Rs. 128 crores from IDBI. This sum of Rs. 128 crores is the net amount after taking into consideration the payment of Rs. 79 crores to IDBI and refinance limit of Rs. 57.50 crores which IDBI has fixed for the Corporation upto 31st March, 1981. IDBI normally grants refinance to the extent of 3 times of the paid up share capital and reserves. In exceptional cases, refinance is granted to the extent of 4 times of paid up capital and reserves. The Corporation is already having paid up capital and reserves of Rs. 20.57 crores including a sum of Rs. 4 crores provided by way of loans to be converted into paid up capital after the SFC Act is amended. To draw refinance to the extent indicated above it would be necessary for the Corporation to step up its capital and reserves to Rs. 32 crores. It would be possible to generate internal resources to the extent of about Rs. 6 crores during the plan. It would thus be necessary to raise the Corporation's capital by a further sum Rs. 6 crores. This sum of Rs. 6 crores will be contributed on matching basis by IDBI and the State Government. A provision of Rs. 1.00 crore is made in the form of loan during the Sixth Five Year Plan which may be provided by the State Government in the form of loan temporarily, pending amendment in the SFC Act.

Gujarat Industrial Development Corporation

5.4.4.5. The industrial estates of GIDC are an instrument for rapid and orderly development of industrial growth in Gujarat. Industrial estates have achieved following socio-economic objectives :-

Decentralisation of Industrial Growth

5.4.4.6. Industrial estates have provided the thrust to the decentralisation of industrial growth. Such Industrial growth is taking place at present at 109 different locations in the State. Of these, 53 *i. e.* 49 per cent are in backward areas.

Preventing migration of workers from rural hinterland to metropolitan cities

5.4.4.7. Industrial estates help develop small and intermediate and rural locations *i. e.* Vapi, Ankleshwar Surendranagar, Kalol (Mahesana), Kalol (P. M.) etc. These industrial estates provide means of employment through units being set up there. It, therefore, prevents migration of workers from rural hinter-land to metropolitan towns. Industrial estates also help develop small and intermediate towns.

Multiplier economic impact of investment, production, employment in secondary sectors and trade, transport and commerce in Tertiary sectors.

5.4.4.8. Units being set up help generate massive economic impact in the State of Gujarat. Following table would reveal this impact :—

Indicator	Impact
1. Units in production as per 1978-79 economic survey	4281
2. Investment	Rs. 192.27 crores
3. Production	Rs. 630.57 crores
4. Employment	76082

5.4.4.9. Of the above, 605 units with investment of Rs. 29.40 crores, production of Rs. 55.10 crores and employment of 13,878 are working in 10 backward districts.

Development of SSI Units

5.4.4.10. Ready built factory sheds and developed infrastructure coupled with entrepreneurial base in Gujarat help develop SSI Units. Thus 96% of the GIDC units fall in SSI sector (Old definition). Thus according to 1978-79 survey, there are 4133 SSI Units with Rs. 131.86 crores of investment, employment of 63,186 and producing goods worth Rs. 444.46 crores.

Demand for GIDC's factory sheds and plots and resources required to meet with this demand during the Sixth Plan.

5.4.4.11. The demand for GIDC's goods and services is constantly expanding. Following picture reveals position as in June, 1980 of the pending demand.

Indicator	No. of applications	Area/No.
Plots	3452	156.86 lakh sq. mts.
Sheds	2857	2857
Housing tenements (Approx.)	900	3000

5.4.4.12. This demand represents 70% of the total cumulative GIDC allotment upto 1978-79 in case of plots and 65% in case of sheds.

Demand expected by March, 1981.

Indicator	No. of applications	Area/No.
Developed plots	4802	221.60 lakh sq. mts.
Sheds	4285	4285
Housing tenements	1500	5000

5.4.4.13. Over a period of 1981-82 to 1984-85 the demand would increase particularly in view of favourable industrial climate, Government of India's recently liberalised policy decision, expected improvement of about 10% in industrial growth in the Country in 1980-81; halting of negative growth rate by DGTU units in the first 3 months of 1980-81 and expected improvement in the core sectors of coal and transport. A conservative 10% increase would show the following picture for demand of GIDC goods and services.

Indicator	1981-82	1982-83	1983-84	1984-85
Plots (Area in Hects)	3100	3410	3800	4200
Sheds	4200	4620	5080	5500
Housing tenements	5000	5500	6050	6600

5.4.4.14. The GIDC's total Sixth Five Year Plan outlay for development programmes is expected to be of the order of Rs. 480 crores. For the entire Sixth Five Year Plan period 1980-85 an amount of Rs. 3200 lakhs is provided as State budgetary support. The budgetary support from the Government of the order of Rs. 1 crore ultimately generates about Rs.12 crores by way of total private investment, and therefore over the entire Sixth Plan period about 30,000 units with an investment of about Rs. 1100 crores and production worth about Rs. 3500 crores will be set up. Out of these expected 30,000 units, approximately 50% of the units will be in backward areas.

Infrastructure in rural and backward areas.

5.4.4.15. Certain infrastructure particularly of power and water are very critical for developing some backward and rural locations. For the lack of this basic infrastructure, such industries are not set up or not become economically viable. Such critical infrastructure at Veraval in the backward district of Junagadh and Bamanbar in the backward district of Surendranagar are conceived and the execution of these schemes would start soon. In the year 1980-81 a provision of Rs. 15 lakhs is made. Out of this Rs. 10 lakhs will be utilised for such critical infrastructure at Halol in backward district of Panchmahal and at Veraval. A provision of Rs. 60 lakhs is provided for undertaking similar other schemes in different backward areas over the entire Sixth Plan period.

Pilot plant and testing facility.

5.4.4.16. Chemical industries have reached a proportion of 16% of the total functioning units. Share of chemical industry has gone up from 6% to 16% and is constantly increasing. Chemical industries cause water pollution which has social cost. Water Pollution Control Act has also been enacted and Pollution Board has also been set up. The small scale units before they can treat their effluents require facilities of testing characteristics of their effluents to identify before parameters. Therefore, pilot plants & testing facilities are required. Thus such facility is being set up in Ankleshwar which is very large chemical complex. Over the Sixth Plan period, a provision of Rs. 20 lakhs is provided which is inclusive of recurring expenditure.

Common Industrial Facilities.

5.4.4.17. Often entrepreneurs particularly belonging to SSI sector cannot afford certain equipments and facilities which are costly but critical for their operation. Such facilities can improve quality of production and certain diversification. It is proposed to provide tools and equipments as well as testing laboratories under the scheme. Such facilities are provided at Surendranagar and are being provided at Vapi. A provision of Rs. 20 lakhs is provided for the Sixth Plan.

Captive Training Centre.

5.4.4.18. On account of the growing industrial needs, constant shortage of particular type of skills relevant to particular groups of industries are experienced in GIDC estates. While the skilled workers available through the ITI's are suitable for the medium and large scale industries both from the level of skills required as well as from viability criteria SSI units cannot afford such skills. It is estimated that skilled workers required for the GIDC estates alone will be of the order of 5000 to 8000 for next five years. It is therefore proposed that captive training centre to provide specific need based training be set up in the GIDC estates, for which a provision of Rs. 25 lakhs is made for the entire Sixth Plan period to enable the GIDC to set up 12 such centres.

Scheme for Hire purchase of Machinery.

5.4.4.19. The hire purchase scheme for supply of machinery to SSI Units being operated by the GSIC is one of the most important support activities extended by the Corporation to the SSI sector. In order to extend this important facility to the backward districts and tribal areas, the Corporation has evolved a hire purchase scheme with substantial reduction in the interest rates and earnest money deposit. The scheme is also applicable to persons belonging to SC/ST and other backward classes.

Marketing Scheme.

5.4.4.20. Assisting SSI units to market their products is an important activity undertaken by the Gujarat Small Industries Corporation. This activity is integral to the overall development of the SSI sector in the State. In fact, marketing is a facility which complete the package of incentives extended by the State Government to SSI units. Without this assistance, there is every likelihood of many units 'falling sick' and failing to exploit the healthy industrial climate of the State. The State Government have entrusted this important task to the GSIC and has in the past subsidised the expenditure incurred by the Corporation on this vital promotional activity. It may be appreciated here that without strong technical assistance in the field of market much of our efforts to promote industrial activity in the SSI sector would come to naught. For the Sixth Plan 1980-85 a provision of Rs. 37 lakhs is made to carry out these activities.

Diamond Industries Complex.

5.4.4.21. The Diamond Cutting and Polishing Industry which has developed in Gujarat is highly labour intensive. It is estimated as of today that this industry provides employment to about 1.5 lakh people. The Industry is at present mainly concentrated in Surat, Navsari, Bhavnagar and Palanpur. The growth of this industry has however not been consciously planned and as a result it has de-

veloped certain unhealthy features such as the unhygienic surroundings in which the workers have to operate, lack of adequate facilities for the welfare of their labour etc. The Diamond industry is also basically an export oriented industry. The formation of the Hind Diamond Training Corporation by the Government of India is a significant measure in the context of boosting the export of diamonds. In this context, therefore it is necessary to provide for a systematic growth of the diamond industry in Gujarat to serve the twin purposes of optimising the employment potential of the industries and maximising the export. For the Sixth Plan 1980-85 a provision of Rs. 25 lakhs is made under this programme.

District Industries Centre.

5.4.4.22. This is a centrally sponsored scheme on sharing basis according to the new industrial policy of the Central Government. 17 District Industries centres have started working in Gujarat. They are busy in intensive drive to industrialise the rural and backward areas of the State. In the State the DICs were started first in 10 backward districts of the State on 1st May, 1978 and the rest of the districts were covered on 2nd October, 1978. In each of the district target programmes have been chalked out and given to them for 18 months period from October, 1978 to March, 1980. As per the instruction of the Central Government, targets for 4 years have been fixed. A committee under the Chairmanship of the Collector has been appointed to advise and supervise the working of the District Industries Centre. The Central Government has given Rs. 5.00 lakhs per DIC as non recurring expenditure for the buildings, vehicles etc. As per the revised pattern, the Central Government contributes 50 percent of the recurring expenditure. The Schemes implemented through the DIC are cash subsidy on Capital Investment, Power subsidy, interest subsidy, testing subsidy, sales tax loans and tax holiday, State Cash subsidy, Bankable Scheme for Cottage Industries, the tribal sub-plan scheme and Central Plan Scheme. A Monitoring Cell has been established at State level to centralise and supervise the progress of the district industries centres and to help in smooth implementation of the programme for the Sixth Plan 1980-85 Rs. 169 lakhs are provided as state share.

Capital Subsidy and Growth Centres.

5.4.4.23. As mentioned in the beginning, the fiscal and financial concessions introduced by the Government of India in the centrally declared backward Districts (Bharuch, Panchmahals, Surendranagar, Sabarkantha, Mehsana, Banaskantha Kachohh, Bhavnagar, Amroli and Junagadh) have started showing the impact on geographical distribution of industries in the second half of 1970. This process of industrial dispersal has gathered

momentum particularly after introduction of the State Government's package of incentives for location of industries in backward areas with effect from 1st November, 1977. The State Government's package of incentives contain several innovations and refinements. The most important innovation is the concept of growth centre around which the development of medium and large industries is encouraged. These growth centres are selected after careful assessment of industrial potential of different locations as well as infrastructure availability and feasibility of meeting different service needs of larger units. More than 120 such growth centres scattered throughout the State have been identified so far. The State incentive policy also contains a refinement in the sense that instead of taking a district as a unit, it has gone down to taluka level, so that backward talukas of advance districts are not neglected and left out from the purview of industrial growth. Since inception of the Scheme, 5,527 units were registered upto 31st March, 1980. Out of these 2,647 units were sanctioned subsidy of Rs. 1040 lakhs. The total investment in fixed assets of these units would be of the order of Rs. 81.49 crores.

5.4.4.24. The response received from the entrepreneurs to set up industrial units at growth centres can be seen from the fact that out of 5527 industrial units registered under the scheme, as many as 4056 i.e. nearly 73% are at various growth centres.

5.4.4.25. Having regard to the efficacy of this incentive package as an instrument to induce industries to undeveloped areas away from metropolitan industrialised centres, it is proposed to harness this weapon to fullest extent in our strategy of widening industrial base and reaching the fruits of industrial development to the backward and under-developed areas. The State Government has introduced one more innovation, a very important innovation for industrial dispersal in terms of incentives for pioneering units. The concept of pioneering units is based on the recognition that the entrepreneur has to face many hurdles and suffer several economic disadvantages for taking industry to an undeveloped location. It is also based on the recognition that development of backward regions is a social goal and therefore, the pioneering units should be compensated to some extent for economic disadvantages it undergoes because of choosing location so as to further the social objective. The new scheme of pioneering units introduced in the State in the later half of 1980 is expected to provide effective motivation and thereby the industrial investment in the State is expected to be spread over the length and breadth of the State.

INTENSIVE DEVELOPMENT OF SMALL INDUSTRIES IN RURAL AREAS

5.4.4.26. The Government of India have directed to implement the Rural Area Scheme with effect from 1st May 1978 in 10 Districts and from 2nd

October 1978 in several other districts through the District Industries Centres in the entire State except the towns and villages having population more than 25000 according to the 1971 census, with ratio of expenditure 50:50 by Central and State Government. Under this scheme, financial as well as other assistance are given as under :—

(a) All types of entrepreneurial training scheme ;

(b) Expenditure on common facility service centre including land, building, machinery equipment, etc.

(c) Expenditure on Technical and Managerial staff of experimentally run production centre on economical schemes such as raw materials, deposits, emporia, sales depots etc.

(d) Expenditure on other departmental schemes including publicity, exhibition, research and departmentally run pilot technological, experimental scheme and subsidy on power.

5.4.4.26. These schemes were implemented through the five District Panchayats viz Kachchh, Panchmahals, Junagadh, Sabarkantha and Banaskantha upto 30th April 1978 and the same are implemented through District Industries Centres from 1st May 1978. For the Sixth Five Year Plan 1980-85 the total outlay of Rs. 300 lakhs is provided of which State share will consist of Rs. 150 lakhs for the programme and 21000 entrepreneurs will be assisted.

5.4.5. Village and Cottage Industries

5.4.5.1. The programmes covered under this group are shown below along with the details of the outlays provided for the Sixth Five Year Plan 1980-85

(Rs. in lakhs).

Sr. No.	Programme	Outlays for the Sixth Plan 1980-85
1	2	3
1.	Direction and Supervision	25.00
2.	Handloom Industry	
	(a) Handloom Industry	310.00
	(b) Intensive Development of Handloom Industry.	140.00

1	2	3
	(c) Gujarat Handloom Development Corporation.	20.00
3.	Handicraft Industry.	
	(a) Handicraft Industry	35.00
	(b) Gujarat Handicraft Development Corporation	10.00
	(c) Carpet Weaving Centre	50.00
	(d) Woolen Carpet Cell in GEC	20.00
4.	Cooperative Industry.	
	(a) Cooperative Spinning Mills.	30.00
	(b) Financial assistance to Industrial Cooperatives.	100.00
	(c) Powerloom Cooperative Industry.	10.00
5.	Gujarat State Khadi and Village Industries Board.	1450.00
6.	Other Programmes.	
	(a) Training of Industrial artisans.	330.00
	(b) Financial assistance to individual artisans	220.00
	(c) Gujarat Marketing Corporation for village and Cottage Industries (GRIMCO)	30.00
	(d) Establishment of village playing centres and village tanning	120.00
	(e) Rural Production Centres.	45.00
	(f) Rural Technology Institute.	30.00
	(g) Tribal Development Corporation.	6.00
	(h) Mini Industrial Estates in Rural Areas.	50.00
	Total	3031.00

Handloom Sector.

5.4.5.2. Handloom industry in its employment potential is only next to agriculture in our Country. Majority of the weavers in Gujarat, almost 85% belong to Scheduled Castes and the remaining belong to various backward and minority communities. Development of Handloom industry in Gujarat especially in the context of 20 point programme, assumes significant importance. The State Government would like to intensify the efforts with a view to ensure that there is no future decline in the number of handlooms in the State and all handlooms work at optimum level of production. Government also envisages to see that employment potential in this sector is fully exploited and opportunities for better earning are made available. An outlay of Rs. 470 lakhs has been provided for the Sixth Plan period 1980-85 to implement the Handloom Schemes.

Handicraft Industry.

5.4.5.3. Gujarat has a rich heritage in arts and crafts, in addition to artistic value of the products. Gujarat Handicrafts have a large market at home and abroad. The Gujarat Handicrafts mainly are based on textile, wood and ceramics. The State Design Centre provides valuable service in preservation of traditional skills and innovate them to suit the modern requirements. The State Design Centre is to be strengthened during the Sixth Plan period by opening new sections concerning various handicrafts in the State. Industrial Cooperative Association and 155 Handicrafts Primary Cooperative Societies are also to be encouraged. A special rebate is granted every year for a week to promote marketing of handicrafts. An outlay of Rs. 35 lakhs for the Sixth Plan is provided to benefit the artisans engaged in various crafts.

Gujarat Handicrafts Development Corporation.

5.4.5.4. Gujarat State Handicraft Development Corporation provides marketing support to the artisans of Gujarat. It has a small net-work of emporia in big cities, viz. New Delhi, Bombay and Ahmedabad. There is a need to improve the marketing net-work by opening new Emporia at other important centres in the country. The Corporation has also to perform developmental role by setting up 3 Museums at Gandhinagar, Shamalaji and Saputara to exhibit rare collections of handicrafts. It has also to popularise improved specimen of various handicrafts. It also sets up production Centres, introduce new designs and patterns and helps the artisans to project their products and exhibitions. It also exports articles of handicrafts. On account of initial difficulties, which it faced in marketing, there is an accumulated loss of about Rs. 12 lakhs at the end of the last plan. It will be necessary to provide additional share Capital to Gujarat State Handicrafts Development Corporation to enable it to undertake its activities. An outlay of Rs. 10 lakhs is provided for Sixth Plan period for the purpose.

Powerloom Industry.

5.4.5.5. There are 28 power loom societies in the State having 853 licenced power-looms. Of the above 28 powerloom societies, 20 are working and 600 power-looms are active. Eight Powerloom societies are defunct having 253 idle powerlooms. It is proposed to activate the powerlooms by revitalising the existing societies or by transfer of looms to new societies. An outlay of Rs. 10 lakhs is proposed for the Sixth Plan with a target to activate 250 power-looms.

Financial Assistance to Industrial Artisans.

5.4.5.6. A new scheme is introduced from 1st April 1979 under which artisans are given financial assistance at concessional rate of interest by public sector banks. Artisans and entrepreneurs falling within the definition of Cottage Industries are eligible to obtain such loan from public sector banks, Urban Cooperative Banks and recognised financial institutions to the extent of Rs. 25,000/- at a rate of interest not exceeding 12 percent. In respect of the artisans belonging to scheduled castes and scheduled tribes the loans will be routed to them through the Scheduled Caste Economic Development Cooperation and the Tribal Development Corporation respectively. Those artisans who are not entitled to get the benefit of D.R.I. Scheme will be given interest subsidy at the following rate:—

	Rate of Interest-subsidy
1 Loans to Artisans from Tribal Areas	6%
2 Loans to Artisanas from Scheduled Castes and other backward classes	5%
3 Loans to other Artisans.	4%

5.4.5.7. The benefit of the differential rate of interest (*i. e.* rate of W.P.C.) on loan will be made available to all eligible artisans. Besides, as against loans sanctioned by the banks for purposes of tools and equipments subsidy at the following rate is given.—

Limit of the loan	Loan to Tribals	Loans to Persons from S.C. and other B. Cs.	Loans to others
1	2	3	4
1 Upto Rs. 5000	50 P.C.	40 P.C.	30 P.C.
2 5000 to 10000	50 P.C.	35 P.C.	25 P.C.
3 10000 to 25000	40 P.C.	30 P.C.	20 P.C.

5.4.5.8. During the year 1979-80 an expenditure of Rs. 53 lakhs was incurred benefitting 9453 artisan loanees. An outlay of Rs. 220 lakhs has been provided for the Sixth Plan 1980-85 to benefit 70,000 artisans and self employed persons. Government is also visualising a scheme to aid small ventures of self employed persons during the Sixth Plan. The total credit which would be made available to this sector during the plan would be Rs. 3000 lakhs from the banks. The number of S.T./S.C. beneficiaries would be 20000 each and efforts will be made to cover as many persons of weaker section as possible under the scheme.

5.4.5.9. A large group of self employed people particularly in the urban areas has so far remained uncovered in our net work of financial support and assistance for such productive activities. These are hand cart pullers, farsan makers, way side tea stall vendors etc. who are earning their small livelihood, but have been left out in all schemes of financial assistance for raising their productivity. It is proposed to formulate definite programmes for this informal entrepreneur sector having due regard to the large number of families earning livelihood from such activities and the scope for enhancing their earnings with small financial support for purchase of better equipments and working capital requirements.

Khadi and Village Industries :

5.4.5.9. Khadi and Village Industries are employment oriented programmes. With the adoption of improved technology in Khadi and village industries there has been a rise in production of Khadi and village industries and simultaneously it has ensured quality of products and lessening of manual labour. The Khadi and Village industries programme is still capable of providing employment in remote and tribal areas of the State. The programme has provided employment to 72,000 workers at the end of 1979-80. Its production has been of the order of Rs. 2792 lakhs and sale has been of the order of Rs. 2681 lakhs. It has paid wages of Rs. 637 lakhs. An outlay of Rs. 1450 lakhs has been provided to carry out the schemes of the Board during the Sixth Plan pe-

Development of Khadi.

5.4.5.10. New Model Ambar Charkhas with 6 spindles can provide full employment. Till 1979-80, 33000 Ambar Charkhas are made available. Providing of Ambar Charkhas need be coupled with supply of quality slyvers (pooni). At present there are 8 puni plants and 10 more units are likely to be commissioned shortly. If Khadi industry has to stand and consolidate its position expert weavers are necessary. Alongwith this, strengthening of sale outlets is also necessary. Thus for 3 objectives viz. supply of quality slyvers, facilities to weavers and strengthening of marketing outlets the State Khadi and Village Industries Board has

drawn out a phased programme. Since Khadi and Village Commission give Charkhas only on loan and the beneficiaries being too poor are not able to afford it. State Board's scheme of 'Right to Work' is modified to provide 75% subsidy to tribals and 50% subsidy to others and also to provide all other supporting facilities like training, management, grant, rent and processing facilities from State budget. It is expected that the Commission will supply 40,000 Charkhas i.e. 1600 units of 25 Charkhas. This will ensure employment to 45,300 people in spinning, weaving and processing activities. It will imply that the number of persons to be given employment during the next 5 years will be almost the same which has been provided so far from the inception of Khadi programme. In terms of value of production it will go from Rs. 597 lakhs to Rs. 1200 lakhs at the end of the Sixth Plan period.

Village Industries :

5.4.5.11. Village pottery, tanning, oil ghani, rice milling etc. are village industries, KVIC generally provides loan and subsidy. KVIC scheme has to be supported in various ways and publicity workshops, rebate and interest subsidy are required to motivate village artisans and render assistance. Cumulative efforts of this have been that there has been a rise both in number and quality of products from small rice millers, paper units, toilet soap and laundry soap and leather items. It is also realised that institutions engaged in promotion of Khadi and Village industries have to be subsidised atleast for loan from financing institutions.

Establishment of Village flyings Centre.

5.4.5.12. Gujarat Leather Co. promoted by GIIC had carried out survey and indicated 200 potential locations for intensive development of decentralised leather industry. It has estimated that in addition it will have to provide all infrastructure facilities like construction of tannaries, flyings centres, hygienic environment, carting of carcass and better tools and chemicals. The investment in the sector would have to be viewed as social and economic infrastructure for the benefit of the weaker sections which have not derived direct or indirect benefit of the development. Provision of Rs. 120 lakhs has been made for the purpose for the Sixth Plan, 1980-85.

Rural Technology Institute, Gandhinagar.

5.4.5.13. One of the major handicaps of rural industries is its out dated and perhaps, obsolete technology and tools and equipments. If it has to survive it should imbibe advances made in science and technology. Advancement in rural technology is therefore, necessary. Government of Gujarat has therefore, set-up a rural Technology Institute. Intermediate Technology Development Group London has been engaged as consultant. The

Institute has been set up on the lines of ITDG recommendations. It is a society registered under Societies Registration Act and a Trust under Public Trust Act. Its role is to identify technological problems to develop tools and equipments which will reduce fatigue of an artisans's labour and ensure greater productivity. The institute has a plan to undertake various projects. Most of the artisans in Gujarat belong to category of village potters, carpenters, blacksmiths, leather workers and bamboo workers. The Institute therefore, proposes to motivate and induce artisans to adopt scientific technology and provide improved tools and equipments of their operations. Categories of artisans proposed to be covered during the Sixth Plan period are as under :—

Class of artisans	
1. Potters or Brick layers.	2400
2. Carpenters.	2250
3. Blacksmiths.	1500
4. Leather workers	1750
5. Bamboo workers and others.	1500
Total	9400

Mini Industrial Estates :

5.4.5.14. The units of Cottage Industries generally exist side by side with the residential accommodation of artisans. There is concentration of them at many places for a particular craft or industry. There is a scheme to offer Godown-cum-Workshed under Industrial Co-operatives. But artisans who are generally individualists prefer to have direct support and to have independent space for this work. Gujarat Industrial Development Corporation sets-up modern Industrial Estates for organised small scale industries and it is over burdened in view of the rapid industrialisation in the State. It is therefore, necessary to entrust to D. I. C. some provisions which could be utilised to provide common infrastructural facilities to Cottage Industries. Gujarat Rural Industrial Marketing Corporation which intends to set up 50 Rural Marketing Centres would also need infrastructural facilities. Many handloom weavers, leather workers and other handicraft artisans have already indicated their preference for worksheds at a common side. They may also be organised in service co-operatives or as Rural Marketing Centres. Voluntary agencies and industrial houses have also shown their willingness to undertake the work-shed construction programme provided the same is supported by Government subsidy. The loan portion is to be obtained from banks and the Margin required will be covered by subsidy and self help. A provision of Rs. 50 lakhs has been made for the scheme for the Sixth Plan.

Salt manufacturing :

5.4.5.15. Salt manufacturing has a great potential for development in rural and self-employment sector. The State Government has already introduced a scheme of granting small plots upto 10 acres in the little Rann of Kachchh and other saline areas of

Surendranagar, Banaskantha and Kachchh districts to help salt labourers become self-employed small manufactureres and improve their economic lot. Realising the need for giving marketing support to this growing rural and small scale sector of salt industry, the Gujarat Rural Industries Marketing Corporation (GRIMCO) has decided with financial support from Government to enter into marketing of salt. This will fill one long felt missing link of marketing for small scale, and cooperative sector and improve its viability. This would incidentally also help the other salt consuming States to meet consumers' demand for this essential commodity on steady basis thereby introduce an element of price stability against vulnerability of market forces.

5.4.6. Mining and Metallurgical Industries

5.4.6.1. An outlay of Rs. 1150 lakhs has been proposed for the Sixth Five Year Plan 1980-85.

The programmes covered under the sub-sector are shown below alongwith details of outlays provided for the Sixth Plan 1980-85.

(Rs. in lakhs)		
Sr. No.	Programme	Outlays provided for Sixth Five Year Plan 1980-85
1	2	3
1	Expansion and Reorganisation of Directorate of Geology and Mining	350.00
2	Loans to Gujarat Mineral Development Corporation	800.00
Total		1150.00

Gujarat Mineral Development Corporation Limited

5.4.6.2. The Corporation has set up 5 project viz. Fluorspar Project, Kadipani (District Vadodara) Bauxite Mining Project, Mandvi, (District Kachchh) Bauxite Mining Project, Mevasa (District Jamnagar) Glass-sand Project, Surajdeval (District Surendranagar) and Lignite Mining Project, Panandhr (District Kachchh) with an investment of about Rs. 700 lakhs. Implementation of these five project has helped to create and provide direct employment to about 2500 employees out of whom 80% comprises of adivasis and tribal people.

Fluorspar project, Kadipani (District Vadodara).

5.4.6.3. The plant is the first and only one of its kind in the country and has been put up with Indian know-how, indigenous machineries and India Engineers. The project has successfully helped in saving crores of rupees of foreign exchange and providing employment to large number of adiva workers besides earning appreciable return of capital investment.

Glass-sand project, Surajdeval (District Surendranagar)

5.4.6.4. The Corporation is considering to put up 500 MT per day capacity, crushing, grinding and washing Plant in joint sector to meet with the demand of washed silica-sand which is estimated to be over 3 lakh MT per year by the end of 1984-85. The mining of sand-stone will have to be developed so as to mine and feed such a plant to the extent of 700-800 MT per day. Mining will be partially mechanised and more labourers will be employed.

Lignite project, Panandhro (District Kachhh).

5.4.6.5. Lignite mines in Kachhh District are being developed and exploited rapidly with a view to mitigate acute shortage of coal being experienced for last two to three years in the State. On an average 800 MT of lignite per day is being supplied to various industries and thermal power stations of the State.

Bauxite Mining and Alumina project (District Kachhh).

5.4.6.6. The Corporation has been mining-bauxite in Saurashtra and Kachhh regions with a view to supply to consuming industries. The Corporation has been endeavouring for putting up an Export Oriented Alumina Plant on rich bauxite deposit of about 30 million tonnes available in the Kachhh district. In the year 1978, the Corporation entrusted the work of study and preparation of techno-economic feasibility of Alumina Plant Project of 3 lakh MT capacity per year to a Hungarian firm M/s. Chenokamplex at the cost of U. S. 400,000.

The feasibility study report was received and the same was sent to the Ministry of Mines and Metals and Bharat Alumina Company for their study and comments. As per the recommendations, the Corporation will have to find out a foreign shelter which can undertake to purchase alumina atleast for first 10 to 15 years besides raising finance to meet with the estimated capital outlay of Rs. 20,170 lakhs. The Corporation is in touch with the Central Ministry as well as Hungarian Consultants to find out the ways and means for implementation of the project.

Bauxite Calcination Project-KFTZ (District Kachhh)

5.4.6.7. Based on the available high quality bauxite in Kachhh District the Corporation is considering to put up a joint sector project to manufacture refractory grade calcined bauxite which is prime raw material for high alumina refractories which is being used in glass, steel, cement, chemical and aluminium industries. The estimated capacity of the calcination plant will be 100,000 MT per year. The entire production will be exported from Kandla Free Trade Zone which will earn precious foreign exchange for the country. The estimated capital outlay on this project will be Rs. 1000 lakhs.

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5.4.6.8. The projectwise details of the total estimated capital outlay for the Sixth Plan period as estimated by the Corporation is Rs. 160.00 crores. Against this, the State budgetary support of Rs. 800 lakhs is provided for the Sixth Plan.

STATEMENT
INDUSTRIES AND MINERALS

List of Schemes included in the Sixth Five Year Plan-1980-85.

(Rs. in lakhs)

Sr. No.	No. and Name of the scheme	Sixth Five Year Plan-1980-85-Outlay	
		Total	Capital
1	2	3	4
(A) General.			
(a) Direction and Administration.			
1.	IND-1 Monitoring and planning cell in I M & PD	.. 5.00	..
2.	IND-2 Strengthening of technical and statistical wing in the office of Industries Commissioner.	.. 15.00	..
Total (a)		.. 20.00	..
(b) Standardisation of quality Control.			
3.	IND-3 Weights & Measures	.. 60.00	15.00
Total (b)		.. 60.00	15.00
(c) Industrial Education, Research and Training.			
4.	IND-4 Research and Development scheme	200.00	..
5.	IND-5 Hosiery training and research centre (CED)	5.00	..
6.	IND-6 Industrial Research Laboratory, Vadodara	250.00	..
Total (c)		455.00	..
(d) Other Expenditure.			
7.	IND-7 Export Award	2.00	..
8.	IND-8 Pollution control scheme	30.00	..
9.	IND-9 Financial incentives to Film studios set up in the State.	25.00	..
10.	IND-10 Construction of residential quarters for employees of Govt. press.	22.00	22.00
Total (d)		79.00	22.00
Total-(A)-General (a+b+c+d)		614.00	37.00
(B) Large & Medium Industries			
(a) Petroleum chemicals and fertilizer industries.			
11.	IND-11 Gujrat Petrochemical Corporation	500.00	500.00
12.	IND-12 GNFC Water supply plant.	495.00	495.00
13.	IND-13 New Fertilizers project based on Bombay High Gas.	300.00	300.00
Total (a)		1295.00	1295.00

1	2	3	4
(b) Ship Building and Aeronautical Industries			
14.	IND-14 M/s. Alcock Ashdown Co.	22.00	22.00
Total (b)		22.00	22.00
(c) Tele communication and Electronics Industry			
15.	IND-15 Gujarat Communication and Electronics Ltd.	200.00	200.00
Total (c)		200.00	200.00
(d) Consumer Industries.			
16.	IND-16 Gujarat State Textile Corporation	5.00	5.00
17.	IND-17 Govt. Contribution to Narmada Cement Co.	53.00	53.00
18.	IND-18 Girnar Scooter Project.	150.00	150.00
Total (d)		208.00	208.00
(e) Industrial financial institutions			
19.	IND-19 Gujarat Industrial Investment Corporation (MB)	550.00	550.00
20.	IND-20 GIIC (Projects)	2700.00	2700.00
21.	IND-21. Captive power generation	499.60	499.60
Total (e)		3749.60	3749.60
(f) Other Exeenditure.			
22.	IND-22 Index grant for promotional activities	25.00	..
23.	IND-23 Grant of loan to Industries for the amount of sales tax paid on sale of finished products.	250.00	250.00
Total (f)		275.00	250.00
Total-(B)-Large & Medium Industries (a+b+c+d+e+f)		5749.00	5724.60
(C) VILLAGE AND SMALL INDUSTRIES.			
(a) Small Industries.			
24	IND-24 Share Capital Contribution/Loan to GSFC.	100.00	100.00
25	IND-25 Gujarat Industrial Development Corporation (MB).	3200.00	3200.00
26	IND-26 GIDC Margine Money.		
27	IND-27 Subsidy to GIDC for industrial areas and township (GIDC).	1.40	..
28	IND-28 Pilot Plant for testing facilities (GIDC).	20.00	
29	IND-29 Critical infrastructure facilities for backward areas (GIDC).	60.00	..
30	IND-30 Workshop in Rural and Backward Areas (GIDC).	20.00	..
31	IND-31 Common Industrial facilities Centres (GIDC)	20.00	..

1	2	3	4
32	IND-32 Grant in aid for providing integrated training skill to industrial area (GIDC).	25.00	..
33	IND-33 Grant in aid to CED. Industrial self employment in rural and backward areas.	60.00	..
34	IND-34 Loan to Gujarat Small Industries Corporation for Higher purchase Scheme.	37.00	37.00
35	IND-35 Trade Contribution for Marketing fund for GSIC to provide marketing assistance to SSI units.	40.00	..
36	IND-36 Trade Centres.	25.00	10.00
37	IND-37 Diamond Industries complex.	25.00	..
38	IND-38 Capital subsidy and growth centres.	2500.00	..
39	IND-39 District Industries Centres.	160.00	..
40	IND-40 Rural Industries Project.	150.00	..
41	IND-41 Apprentice Training in Government Printing Press.	22.00	..
42	IND-42 Package assistance to SSI.	100.00	..
Total:—(a) Small Industries.		6565.40	3347.00
(b) Village and Cottage Industries.			
43	IND-43 Administrative and Supervisory staff.	25.00	..
(2) HANDLOOM INDUSTRIES.			
44	IND-44 Handloom Industry.	310.00	39.00
45	IND-45 Intensive Development of Handloom Industry.	140.00	62.00
46	IND-46 Gujarat Handloom Development Corporation.	20.00	20.00
Total (2)		470.00	121.00
(3) HANDICRAFT INDUSTRY.			
47	IND-47 Handicraft Industry.	35.00	..
48	IND-48 Gujarat Handicraft Development Corporation.	10.00	10.00
49	IND-49 Carpet weaving Centre.	50.00	..
50	IND-50 Woolen Carpet Centre in Gujarat Export Corporation.	20.00	..
Total (3)		115.00	10.00
(4) CO-OPERATIVE INDUSTRIES.			
51	IND-51 Cooperative Spinning Mill.	30.00	30.00
52	IND-52 Financial assistance to industrial Co-operatives.	100.00	32.50
53	IND-53 Handloom Co-operative Industry.	10.00	7.50
Total (4)		140.00	70.00
(5) KHADI INDUSTRY.			
54	IND-54 Gujarat State Khadi & Village Industries Board.	1450.00	171.52
(6) OTHER EXPENDITURE.			
55	IND-55 Training of Industrial artisans.	330.00	48.40
56	IND-56 Financial assistance to industrial artisans	220.00	..
57	IND-57 Gujarat Marketing Corporation for Village and Cottage Industries ((GRIMCO)	30.00	22.50
58	IND-58 Establishment of Village playing centres and Village training.	120.00	..
59	IND-59 Rural Production Centres.	45.00	..

1	2	3	4
60	IND-60 Rural Technology Institute.	30.00	..
61	IND-31 Gujarat Tribal Development Corporation.	6.00	..
62	IND-62 Mini Industrial Estates in Rural areas.	50.00	..
Total (6)		831.00	70.90
Total (b) Village & Cottage Industries.		3031.00	443.42
Total (C)-Village and Small Industries.		9596.40	3790.42
(D) MINING AND METALLURGICAL INDUSTRIES.			
(a) Mineral Exploration Development.			
63	IND-63 Expansion and Reorganisation of Directorate of Geology and Mining.	350.00	..
64	IND-64 Link Road in Mining areas.		
(b) Loan for Mining & Metallurgical Industries.			
65	IND-35 Loans for Gujarat Mineral Development Corporation.	800.00	800.00
Total (D)-Mining.		1150.00	800.00
GRAND TOTAL : Industries & Minerals.		17110.00	10352.02

6. TRANSPORT AND COMMUNICATIONS

Development of infrastructural facilities has been given a high priority in the current phase of development. Transport constitutes one of the most important infrastructural facilities for supporting productive activities and the distribution system. Development activities in this sector also generate large employment opportunities. Each mode of transport has a distinct role to play in the economy and its inherent advantages should be exploited optimally within a coordinated system.

2. The State is lagging behind in the sphere of road development including rural roads. The passenger transport service also needs to be extended to more interior areas. The development of ports and harbours has also special significance for Gujarat which is a principal maritime State in the country with 39 minor and intermediate ports dotted all along its 1600 kms. of coastline. There is vast scope for development of tourism with a number of places of tourists interest both ancient and modern which can attract even foreign tourists in large numbers.

3. An outlay of Rs. 33860 lakhs is provided in the Sixth Plan 1980-85 for Transport and Communications. Its distribution over the various sub-sectors is as follows :—

	(Rs. in lakhs)
Sub-Sector of Development	Proposed Outlay 1980-85
1. Road Development	22,000
2. Road Transport	9,000
3. Tourism	260
4. Ports, shipping and Light houses	2,600
Total ..	33,860

An outline of the programme is given in subsequent paragraphs.

6.1. ROAD DEVELOPMENT

6.1.1. Introduction

6.1.1.1. An acknowledged transport economist of U. S. A. stated :—

“We were not wealthy nation when we began improving our highways, but the roads themselves helped us to create a new wealth in business, industry and land values. So it was not our wealth that made our Highways possible. Rather, it was our highways that made our wealth.”

“You pay for the roads whether you have them or not, you pay more if you do not have them” Roads are potent instrument for the economic growth of country.

6.1.1.2. The roads play an important role in the development of industries and agriculture, distribution of chain of business and have become part of the fabric of our daily life. The diversification of industries and general economic development depends upon adequate road system. Rural roads play a vital role in dispersing industries in backward areas, providing productive employment creating a link between industries and agriculture and forging closer ties between producers and consumers, in rural and urban areas. The rural roads help to modernise outlook of rural population by exposing them to modern way of life.

6.1.2. Basic Infrastructure of economy :

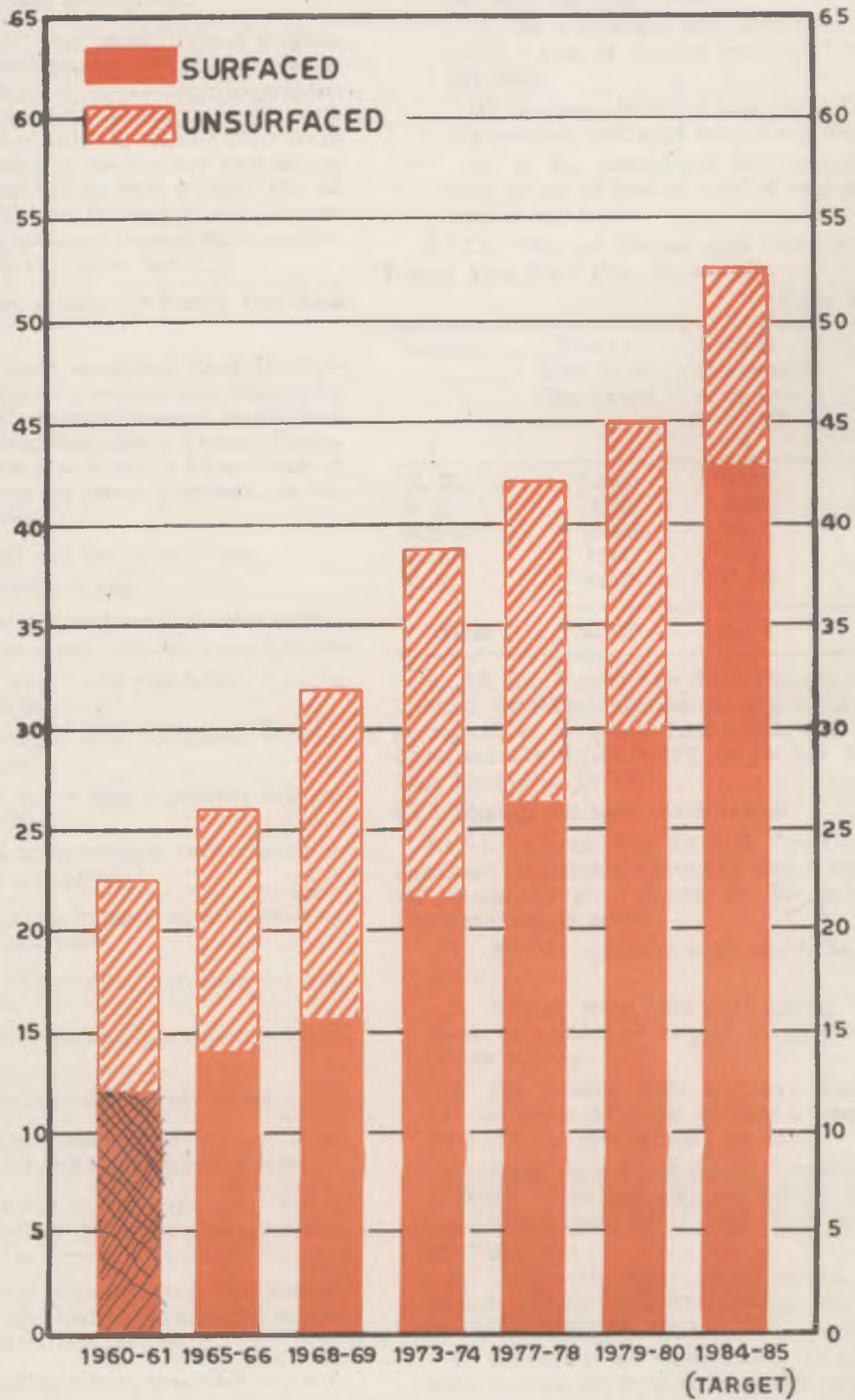
6.1.2.1. In the context of restructuring the plan with a focus on agriculture, rural development and rural industries coupled with the need for substantial generation of employment, the road development programmes have significant role in the Sixth Five Year Plan. Besides, being an important component of basic infrastructure for the economic development of the country, roads, during the construction phase also generate considerable employment. Roads provide an effective means of transport for haulage of goods and passengers over short and medium distances. Within an integrated road development programme, rural roads are proposed to be assigned higher priority so as to bring more of our villages into the national mainstream.

6.1.3. In Retrospect :

6.1.3.1. The road length including the National Highways constructed during various plans is indicated below :—

(Length in Kms.)				
Sr. No.	Year	Surfaced	Unsurfaced	Total
1	2	3	4	5
1	1950-51	6,621	6,533	13,154
2	1955-56	7,786	10,001	17,787
3	1960-61	11,930	10,699	22,629
4	1965-66	14,104	11,925	26,029
5	1968-69	15,685	16,526	32,211
6	1973-74	21,632	17,349	38,981
7	1977-78	26,252	16,107	42,359
8	1978-79	27,519	15,737	43,256
9	1979-80	29,895	15,213	45,108

LENGTH OF ROADS IN THOUSAND KILOMETRE



6.1.3.2. After formation of Gujarat State in 1960-61 the road length which was 22,629 Kms. has increased to 45,108 Km. in 1979-80. Category-wise details are shown in Appendix-I.

6.1.4. Backlog in road development.

6.1.4.1. Despite the good rate of progress achieved in road development in Gujarat in relation to other several States in the Country, Gujarat has been lagging far behind. According to the latest available statistics of 1978-79, Gujarat State ranks 18th among the States in the Country with 23 kms of road length per 100 sq. kms. against the all India average of 39 kms. In terms of road length per one lakh of population Gujarat State occupies 20th place among the other States.

6.1.5. Achievement against the Twenty Year Road Plan.

6.1.5.1. The second integrated Road Development Plan lays down a comprehensive formula for arriving at the Kilometerage required for National Highways, State Highways, Major District Roads, Other District Roads, and classified Village Roads or any given unit area by giving weightage to the following basic factors :

- (i) Developed and agricultural areas.
- (ii) Semi developed area.
- (iii) Undeveloped and non-cultivable areas.
- (iv) No. of towns with population over 1,00,000
- (v) No. of towns with population between 1,00,000 and 50,000.
- (vi) No. of towns with population between 50,000 and 20,000.
- (vii) No. of towns with population between 20,000 and 10,000.
- (viii) No. of towns/villages with population between 10,000 and 5,000.
- (ix) No. of towns/villages with population between 5,000 and 2,000.
- (x) No. of villages with population between 2,000 and 1,000.
- (xi) No. of vil'ages with population between 1,000 and 500.
- (xii) No. of villages with population below 500.
- (xiii) Allowance assumed at 5% for future development and other unforeseen factors.

6.1.5.2. In addition to the above, the following other important factors have also been considered in formulation of the Twenty Year Road Plan :—

- (1) Location of administrative headquarters, places of pilgrimage, health resorts, tourist centres, Universities and cultural centres.
- (2) Location of industries, important commercial centres, big railway junctions and ports.
- (3) Strategic needs of the Country.

The objective of 1961-81 road plan is to provide a network of highways as under :—

(1) to provide 32 kms. of road per 100 sq.kms. of area on an average.

(2) to bring every village :—

(a) In a developed and agricultural area within 6 kms. of metalled road and 2 kms. of any road;

(b) in a semi-developed area within 12 kms. of a metalled road and 4 kms. of any road and;

(c) in an undeveloped and noncultivable areas within 18 kms. of metalled road and 7.5 kms. of any road.

6.1.5.3. The achievement with reference to the Twenty Year Road Plan are as under :—

(Fig in Kms.)

Category	Twenty Year Road Plan Target	Roads Achievement of as on 31-3-1980	%age.
1	2	3	4
N. H.	3602	1435	39%
S. H.	6168	9097	146%
M.D.R.	14382	10542	73%
O.D.R.	16441	10571	64%
V..R.	17035	13463	78%
Total	57628	45108	78%

6.1.5.4. The Twenty Year Road Plan will be over in 1981. At the present rate of growth the target is proposed to be attained not earlier than 1988. At present the deficit is 22% as per the Twenty Year Road Plan 1961-81.

6.1.6. Strategy and basic considerations

6.1.6.1. In formulating the Sixth Five Year Plan some basic considerations have been kept in view and the priorities are given accordingly. The main considerations are as under :—

1. All the spill-over works should be given priority.

2. Missing road links and missing bridges should be included in the plan and be given the highest priority.

3. The existing State highways should be widened where the traffic intensity is more than 3000 P. C. U. (per car unit) per day.

4. Rural roads connecting the population of 1500 and above and also the villages having population between 1000 to 1500 should be given priority.

5. To provide roads having special needs such as Mining, Industry, Dairy, etc., and Irrigation command areas.

6. Improving and strengthening the existing weak stretches and weak bridges and C. D. works.

7. To press the Government of India to declare more State Highways as National Highways.

6.1.7. Spill-over liabilities

6.1.7.1. The Sixth Plan opens with very heavy spill-over liabilities amounting to Rs. 10765 lakhs, the details of which are as under :—

Spillover liabilities as on 1st April, 1980

(Rs. in lakhs)

Sr. No.	Item	No. of works	Estimated Cost	Expenditure upto March, 1980	Spillover liabilities as on 1st April, 1980	
1	2	3	4	5	6	
I. Normal						
(a) Panchayat						
	(1) Roads	.. ..	1659	7743	2392	5351
	(2) Bridges	.. ..	90	1058	221	837
	Total—(a)	.. ..	1749	8801	2613	6188
(b) Government						
	(1) Roads	.. ..	139	2733	1158	1575
	(2) Bridges	.. ..	89	2187	845	1342
	Total—(b)	.. ..	228	4920	2003	2917
	I Total—(a + b)	.. ..	1977	13721	4616	9105
II. Tribal						
(a) Panchayat						
	(1) Roads	.. ..	314	1701	814	887
	(2) Bridges	.. ..	52	629	195	434
	Total—(a)	.. ..	366	2330	1009	1321
(b) Government						
	(1) Roads	.. ..	14	413	231	182
	(2) Bridges	.. ..	19	282	125	157
	Total—(b)	.. ..	33	695	356	339
	II Total—(a + b)	.. ..	399	3025	1365	1660
	Grand Total—(I + II)	.. ..	2376	16746	5981	10765

6.1.8. Programme for the Sixth Plan 1980-85.

6.1.8.1. An outlay of Rs. 22000.00 lakhs has

been proposed for Road Development Sector in the Sixth Plan. The broad details of the proposed outlay are as under :—

(Rs. in lakhas)

Sr. No.	Programme	Proposed Outlay 1980—85.		Total
		State Programme.	Rural Roads (M. N. P.)	
1	2	3	4	5
1.	Spillover liabilities	3256	7509	10765
2.	Missing C.D. Bridges on existing surfaced roads	500	100	600
3.	Improvement of existing roads for raising to required standard	..	200	200
4.	Construction of new links for bye-passes	150	..	150
5.	Widening the State Highways for having traffic intensity more than 3000 P.C.U. (1000 Kms).	1000	..	1000
6.	<i>Provision proposed for the works of road improvement.</i>			
	(a) For missing C.D. Bridge works	..	583	583
	(b) Raising to standard surface.	100	1034	1134
	(c) Metalling of earthen roads	..	2687	2687
7.	<i>New roads to connect the remaining villages.</i>			
	(a) Having population of 1500 and above.	..	2177	2177
	(b) Having population of 1000 to 1500. (including roads of Command Area)	..	2369	2369
8.	<i>Miscellaneous items.</i>			
	(a) Industrial roads	50	..	50
	(b) Road safety works.	25	..	25
	(c) Research and Planning	25	..	25
	(d) State share for Centrally Sponsored Scheme	200	..	200
	(e) Sugarcane roads	35	..	35
	Total..	5341	16659	22000

6.1.9. Physical Target in Sixth Plan

6.1.9.1. It is proposed to construct the additional new road length of 7900 Kms as under:—

(In" Kms.)

State Highways	300
Major District Roads	1500
Other District Roads	1500
Village roads	4600
Total	7900

6.1.9.2. In addition to the above length, it is proposed to improve about 12500 kms. of roads during the Sixth Plan, which includes conversion of about 5000 Kms. of unsurfaced roads into

surfaced roads. At the end of Sixth Plan Gujarat State will have 51573 Kms. of different categories of roads excluding National Highways.

Minimum Needs Programme Rural Roads.**6.1.10. Rural Roads**

6.1.10.1. Rural roads need greater attention specially to sustain green revolution. Roads are required to feed villages with fertilizers, hybrid seeds, finished goods, etc. and to take-out marketable surplus quickly to the urban areas.

6.1.10.2. With the impact of speed and technology on the present day life the aspirations of the people even in villages are growing day by day. The green revolution has brought good measures of prosperity to our country side and the

stage is now set for the rural sector to play an increasingly important role as a consumer force. Not only every village now desires to be connected by road with rest of the world but, also desires to have a smooth, modernised all weather road to suit the modern means of transport such as motor-cars, trucks, passenger buses, etc.

High proportion of Kachchha Roads

6.1.10.3. The State suffers from serious lag in the matter of road development as stated earlier. The position in regard to rural roads is also not satisfactory. Out of the road length of 43673 Kms. (excluding National Highways) 55 % are rural roads. Further nearly 50% of the rural roads are earthen roads.

Villages joined by Pucca Roads

6.1.10.4. The position in respect of number of villages joined by pucca all weather roads at the end of 1979-80 is detailed below:—

Population of Villages	Total No. of Villages	Villages joined by pucca roads at the end of 1979-80	Percentage
1	2	3	4
1500 and above	3664	2441	65%
1000 to 1500	2964	1402	47%
500 to 1000	5217	1830	36%
below 500	6430	1739	26%
Total	18275	7412	41%

6.1.10.5. Only 41% of Villages have been joined by pucca roads by the end of 1979-80 and there are still 10863 villages to be provided with pucca roads as under:—

Villages having population of	No. of villages to be joined after 31-3-1980.
1500 and above	1223
1000 to 1500	1562
500 to 1000	3387
below 500	4691
	10863

According to the norms of Minimum Needs Programme it is targetted to cover all the remaining 1223 Villages having population of 1500 and above, and 50 % of the villages having population between 1000-1500 during the Sixth Plan 1980-85.

6.1.11. Spillover liabilities of rural roads in Sixth Plan

6.1.11.1. The spillover liabilities of rural roads at the end of the 1979-80 are of the order of Rs. 7509 lakhs as indicated below:—

Item	No. of works	Estimated cost	Expenditure upto 31-3-80	Spill-Over liabilities as on 1-4-80
Panchayats				
a. Normal				
Roads	1659	7743	2392	5351
Bridges	90	1058	221	837
Total a ..	1749	8801	2613	6188
b. Tribal				
Roads	314	1701	814	887
Bridges	52	629	195	434
Total b ..	366	2330	1009	1321
GRAND TOTAL (a + b)	2115	11131	3622	7509

6.1.11.2. In addition to these heavy spillover liabilities, there are certain existing roads on which C. D. works/bridges are required to be constructed in order to make them useable in all seasons. There are certain below standard roads having insufficient crust thickness which have to be brought to the standard surface. Large number of earthen roads are also to be provided with metal or asphalt surface. It is programmed to complete all the on going works during the Sixth Plan.

6.1.11.3. Out of the total allocation of Rs. 22,000 lakhs a provision of Rs. 16,659 lakhs has been proposed for the Minimum Needs Programme including Rs. 7509 lakhs for the entrie spill over works.

6.1.12. Physical Targets in the Sixth Plan under M.N.P.

6.1.12.1. Under the Minimum Needs Programme it is targetted to cover additional 3654 villages as under :—

Villages having Population of	Target in the Sixth Plan
1500 and above	1223
1000-1500	781
500-1000	850
Below 500	800
	3654

6.1.12.2. The new road length that will be added during the sixth plan is as under:

MDR	1500
ODR	1500
VR	4600
	7600

In addition to above new road length it is proposed to improve 9800 Kms. of roads under this programme.

Special Programme :—

6.1.13. Tribal Areas Sub-Plan.

6.1.13.1. During the Fifth Five Year Plan period 1974-78 in tribal area sub-plan an expenditure of Rs. 823 lakhs have been incurred and 841 Kms. of roads have been constructed. During 1978-79 an expenditure of Rs. 438.15 lakhs have been incurred and 300 Kms. of roads have been constructed. During 1979-80 an expenditure of Rs. 473.18 lakhs have been incurred.

6.1.13.2 A total outlay of Rs. 5111 lakhs is proposed for the Tribal Area Sub-Plan within the total outlay of Rs. 22,000 lakhs for road development in the State plan 1980-85. It is proposed to construct additional road length of 2500 Kms in T. A. S. P. 1980-85.

6.1.14 Roads in command areas :

6.1.14.1 The large investments made in Irrigation Projects highlights the need for the optimum utilisation of the irrigation potential resulting in optimum production. Better means of communications will be needed to move the agricultural production and to meet the other requirements of

the irrigated areas. The World Bank has laid down certain specifications for construction of roads in Sukhi and Panam Projects. Roads in four other projects, viz, Karjan, Daman Ganga, Heran, and Ukai-Kakrapar, are also planned to be undertaken. Villages under the command areas will be joined as per the M. N. P.

6.1.15. Roads in Dairy Development :

6.1.15.1. Dairy is an effective instrument for bringing about Socio-Economic change in the rural-areas. It ensures the weaker sections of people by providing them easily accessible means for increasing their income. In Gujarat 16 Districts have been covered under the milk shed areas of the district unions and the dairies under the dairy Development Corporation. Better means of communications to district dairies/Town dairies or chilling centre will attract more milk even from the interior. The minimum needs programme will take care of connecting the milk centres

6.1.16. National Highways Central Sector.

6.1.16.1. At the end of 1979-80 the length of National Highways in Gujarat State was 1435 Kms. In the 20 year road plan 1961-81 the target for national highways in Gujarat is 3602 kms. In view of the high deficit the State Government has proposed to the Government of India to declare 10 important state highways covering a road lengths of 2283 kms. as national highways. Among the roads proposed for upgradation the following three roads need to be given priority

Name of the Road	Length in Gujarat in Kms.
1 Ahmedabad-Bhopal Road Via Indore	180
2 Kandla Bamanbore Bombay coastal highway via Malia Jamnagar-Porbandar Bhavnagar, Khambhat, Vadodara:	861
3 Surat Calcutta Road Via Dhulia Nagpur:	86
Total ..	1127

6.1.17. Centrally sponsored programme for 1980-85

6.1.17.1. The State has a common boundary with Rajasthan, Madhya Pradesh, Maharashtra, Daman, Dadranagar Haveli and therefore it is essential to have inter state roads. Similarly within the state there are some roads which are of considerable importance.

6.1.17.2. During the Fifth Plan 1974-78 seven road works were taken up under the programme of inter state and economic importance. According to the decision taken by the N. D. C. roads of inter state importance will continue as centrally sponsored on 100% basis and whereas the roads of economic importance will be continued on sharing basis i. e. 50% shared by Central Government and 50% shared by State Government. It is proposed to provide the following outlays for Sixth Plan.

(Rs in lakhs)

		Sixth Plan 1980-85
(i)	Roads of Inter-State 100% Central share	598.00
(ii)	Roads of Economic Importance	
	(a) 50% State share	389.00
	(b) 50% Central share	389.00
		778.00

6.1.18 Coastal Highways

6.1.18.1. Gujarat State has a coastal line, length of about 1600 Kms. There are 11 intermediate and 28 minor ports situated on the coast line of this State in addition to 1 major port at Kandla. This coastline is very poor in road communications. This acts as a major handicap in developing the hinterland and boosting up of export trade. In this region, Railway communication is existing in some stretches, but the Railways are not in a position to handle the ever growing traffic since the Railway alignments have not been planned with this viewpoint. Therefore only a continuous road can form a convenient means of communication for thorough traffic from port to port. In order to cater to traffic to and from the hinterland of these ports, it is very necessary not only in the interest of State but of the Country as whole, that the coastal highway connecting all the ports on the coastal line is properly established. With a view, therefore, to remove this handicap for increasing the port trade a coastal highway connecting the ports of Jakhau, Mundra, Mandvi, Kandla, Navlakhi; Okha, Dwarka, Porbandar, Veraval, Pipavav, Mahuva, Bhavnagar, Khambat, Dahej, Magadalla, Valsad, Daman, Umbargaon, etc., is planned. The total length of this coastal highway is about 1628 Kms. (excluding the length of N. H.)

6.1.18.2. The coastal region between Lakhpat and Kandla is not served by the railway and a good road is necessary for economic development. The proposed coastal highway from Lakhpat to Kandla will be very useful to this area.

6.1.18.3. Kandla is one of the major ports of India. Between Kandla and Okha, Navlakhi, Bedi, Sika and Okha are other ports. Jamnagar is an important industrial centre with well established engineering industries. The coastal highway between Kandla and Jamnagar will boost up development of above ports.

6.1.18.4. Okha and Porbandar are flourishing ports and also they are industrial centres with cement and soda ash industries at Porbandar and Tata Chemical Works at Mithapur, Dwarka, Ranavav and Sikka with cement industries contributing to rapid construction activities in the country. This belt has also been found to be rich in bauxite minerals. Dwarka and Porbandar are also ancient places of pilgrimage and hence coastal highway between Jamnagar and Porbandar is very useful to this area.

6.1.18.5. Between Porbandar and Bhavnagar there are important ports such as Veraval, Jafrabad, Bherai, Victor, Mahuva, etc. There are works at Ports Bedi, Victor and Sugar factories at Kodinagar and Una. Fishing is also developing along this coastline. The work of development of Veraval as fishery harbour is also taken up.

6.1.18.6. Bhavnagar, Vadodara, Section connects important ports such as Bhavnagar, Dholera, Gogha, Kambhat, and flourishing industrial centres such as Bhavnagar, Vadodara, and important places like thermal station at Dhuvaran. This section serves the wheat producing belt of Bhal tract.

6.1.18.7. Vadodara, Umbargaon, to Border section, Ports like Kavi, Dahej, Magdalla, Daman, Umbargaon, Nanjol, etc., are situated. These ports are having a good potential of forest and agricultural products apart from their importance as fishery ports. The oil fields at Ankleshwar is now established and port Dahej is also to be developed. Between Surat and Daman various industries are rapidly coming up and traffic at the ports in this region is increasing fast.

6.1.18.8. The present position of coastal highway is as below—

	Length in Kms.
Road Length completed with two lanes.	200
Road Length completed with one lane.	1125
Road Length completed with below standard with one lane	154
Road length missing	123
Total	1602

	Rs. in lakhs.
Estimated cost for providing one standard lane.	93.00
Estimated cost for missing lanes.	192.00
Estimated cost for two lanes.	1700.00
Total	1985.00
No. of bridges completed	63
No. of bridges of sub-standard which needs improvement	19
No. of bridges in progress	43
No. of missing bridges	26
Total No. of bridges	151

having one lane carriageway. This road is passing through the tribal area and also serving an area mainly of Damanganga, Ukai, Karjan, Narmada and Kadana irrigation projects. It is also under consideration of the Government to have an industrial development in this tribal area due to water facilities available from the irrigation projects. This will also reduce some traffic from N. H. The estimated cost of widening and providing of missing bridges and improvement to the curves etc., is estimated at Rs. 13.60 crores. This does not include the requirement of strengthening of the existing road which will be taken up subsequently. The work is proposed to be taken up in the Sixth Plan.

6.1.20. Component Plan.

6.1.20.1. In a component plan, it is proposed to connect villages which have remained unconnected by all weather roads on the following basis. These are 484 villages on the basis of population of Scheduled Castes. The details are as under.

	Rs. in lakhs.
Estimated cost of improvement or strengthening or repairing	181.00
Estimated cost of missing bridges.	337.00
Total	518.00

Sr. No.	Population Group	No. of villages
1	25 to 40	396
2	40 to 50	46
3	50% and above.	42

6.1.18. Details of Works in progress.

(Rs. in lakhs).

Sr. No.	Item	Estimated cost.	Expenditure incurred up to 31-3-80	Spillover liabilities
	Roads	440.00	214.00	226.00
	Bridges	850.00	169.00	681.00

6.1.19. Eastern State Highway.

6.1.19.1. In the sixth Five Year Plan it is proposed to widen the existing Eastern S. H. joining N. H. No. 8 at Vapi in Valsad District and passing through Surat, Bharuch, Panchmahals and again joining to N. H. No. 8 in Sabarkantha at Shamlaji. The length of this road is 494 Kms. and is mostly

Total.. 484

6.1.20.2. There are 42 villages only having population of 50% and above Scheduled Castes. According to the available information villages joined by Pucca roads are indicated below:—

1	Villages already joined by Pucca roads.	187
2	Villages being connected by budgetted works.	72
3	Villages remained to be joined	225

484

6.1.20.3. The Minimum Needs Programme takes care of all such villages to be joined by Pucca roads. During the Sixth Plan 1980-85 Rs. 35 lakhs will flow to S.C. Plan out of total outlay of Rs. 22,000 lakhs.

APPENDIX-1

Categorywise road kilometrage in Gujarat State.

(Length in Kms.)

Sr. No.	Year	N.H.	S.H.	M.J.R.	O.D.R.	V.R.	Total
1.	1950-51	597	1507	210	4680	3660	13,154
2.	1955-56	716	1956	312	6951	5052	17,787
3.	1960-61	1005	4025	686	7008	4505	22,629
4.	1965-66	1033	5125	732	7065	5674	26,029
5.	1968-69	1056	6983	727	8417	8628	32,211
6.	1973-74	1352	8605	480	10183	10361	38,981
7.	1977-78	1383	9027	9830	9639	12480	42,359
8.	1978-79	1425	9058	1043	9834	12896	43,256
9.	1979-80	1435	9097	1042	10571	13463	45,108

STATEMENT

List of scheme included in the Sixth Five Year Plan, 1980-85-

Roads Development

(Rs. in lakhs).

No.	No. and Name of the Scheme	Proposed outlay	
		Total	1980-85 Capital cost
1	2	3	4
I. R D P-1 Roads and Bridges			
1.	Minimum Needs Programme (Rural Roads)	16,659.00	16,659.00
2.	Other than M.N.P.	5,341.00	5,341.00
Total		22,000.00	22,000.00

68° 69° 70° 71° 72° 73° 74°

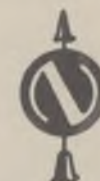
- · — · — INTERNATIONAL BOUNDARY
- · — · — STATE BOUNDARY
- · — · — DISTRICT BOUNDARY

GUJARAT

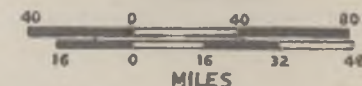
SHOWING ROADS AS
ON 31ST MARCH 1980

25°

25°



KILOMETRES



24°

24°

23°

23°

22°

22°

21°

21°

20°

20°

REFERENCES:-

- DISTRICT HEAD QUARTERS ●
- TALUKA HEAD QUARTERS ●
- IMPORTANT TOWNS ●
- RAILWAYS ———
- RIVERS ———
- ROADS:-
- NATIONAL HIGHWAYS ———
- STATE HIGHWAYS ———
- EASTERN STATE HIGHWAY ———
- EXISTING ———

68°

69°

70°

71°

72°

73°

74°

BASED UPON SURVEY OF INDIA MAP WITH THE PERMISSION OF THE SURVEYOR GENERAL OF INDIA.
THE TERRITORIAL WATERS OF INDIA EXTEND INTO THE SEA TO A DISTANCE OF TWELVE NAUTICAL
MILES MEASURED FROM THE APPROPRIATE BASE LINE.

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6.2 ROAD TRANSPORT

6.2.1 Nationalisation :

6.2.1.1 The nationalisation of passenger road transport services has been completed 100% in Gujarat State since 1969-70. It is, therefore, necessary for the Corporation as a sole operator, to cater to the natural increase in traffic on the existing routes from year to year. It is also necessary to take steps to extend passenger road transport services in the uncovered areas for the economical

services in the uncovered areas for the economical, social and cultural development of the rural areas.

6.2.2 Review of Progress

6.2.2.1 The G.S.R.T. Corporation after its formation on 1st May, 1960 has made rapid progress in extending the facilities of road transport in the rural areas of the State. The details of progress made by the G.S.R.T. Corporation during last 19 years are given in brief in the following table :

Sr. No. No.	Particulars	Progress achieved during		
		1960-61	1970-71	1979-80
1.	No. of buses held	1797	3876	6404
2.	No. of employees	11512	27897	47326
3.	No. of routes operated	1774	5404	10437
4.	No. of villages directly connected by S. T.	8682 (31-3-66)	11499	14913
5.	Effective kms. operated (lakhs) per year	728.42	2453.17	5253.42
6.	No. of passengers carried (lakhs) per year	1463.90	5064.66	11432.39
7.	Passenger kms. travelled (lakhs) per year	16733	87750	212365
8.	Per capita number of journeys performed for rural services in the year	6.07	14.87	27.96
Efficiency of operations				
9.	Vehicle utilisation (kms.)	171.4	233.9	294.2
10.	Fleet utilisation (% age)	68.9	78.5	82.4
11.	Load factor (% age)	72.9	73.1	74.2
12.	Traffic earnings per km. (paise)	91.5	140.2	229.6
13.	Rate of accident per lakh kms.	0.98	0.50	0.36
14.	Kms. per litre of diesel	4.19	4.28	4.64

6.2.2.2. The Petroleum Conservation and Research Association, Government of India, has instituted two trophies at national level, one permanent and one rolling, for best diesel conservation in the public sector road transport undertakings in the Country. In recognition of its outstanding performance in diesel conservation, the above two trophies for the years 1978-79 as well as 1979-80 have been awarded to the G.S.R.T. Corporation.

6.2.2.3. The passenger traffic on roads in Gujarat State has been increasing at a compound rate of 13% per year as against 9% in the Country

as a whole, and the growth of railways traffic at about 5% per year. To cope up with this rise in traffic, it is necessary to increase the number of schedules operated at least at the rate of 8% per year, the balance of the rise in traffic being catered to by increase in the seating capacity and increase in vehicle utilisation. Out of the total increase in schedules, 6% is utilised to cater to the natural increase in traffic on existing routes and the balance 2% to extend bus services in uncovered areas.

6.2.2.4. It is the policy of the Corporation to extend direct services to all the villages in the

State in stages subject to the availability of infrastructural facilities like a motorable road connecting the village etc. On account of rapid expansion of services made by the Corporation, as on 31st March, 1980 the Corporation provides direct services to 14913 towns/villages out of 18491 i.e. to 80.7% of the towns and villages, covering 94.8% of the State population. All villages with population of above 1000, excluding those not connected by a motorable road, have been provided with direct services. Steps are now being taken to extend direct services to the villages with population between 500 and 1000 in the State. As on 31st March, 1980 there are 3578 villages in the State which have not been directly served. For expansion of direct services to these villages, it is estimated that it will be necessary to provide about 800 additional schedules. To fulfil this objective during the Sixth Plan period it will be necessary to increase the schedules for extension of services to uncovered areas at the rate of 3% per year. Besides, it will also be necessary to plan for an increase of 5 to 6% in schedules to cope up with the natural rise in traffic on existing routes.

6.2.3. Development Plan 1980-85

6.2.3.1. The size of the State Plan for Sixth Five Year Plan 1980-85 has been fixed at Rs. 90.00

crores comprising of capital contribution of the State Government, internal resources of the Corporation and loans from L.I.C. It is proposed to purchase 4387 vehicles of which 3940 will be for replacement of vehicles against 4188 vehicles completing their life and 447 for expansion in schedule by 1.4% per year during the period of Sixth Five Year Plan. The number of schedules operated are likely to increase from 5237 in S.T.T. 1980 to 5623 in S.T.T. 1985. The above expansion will enable to provide direct services to about 220 more villages during the Sixth Five Year Plan 1980-85.

6.2.4. Employment potential :

6.2.4.1. The scheme of passenger road transport has a high employment potential and generates additional employment of 9.49 persons per schedule. Further, it generates indirect employment for manufacturing of chassis, supply of fuel, lubricants, tyres and tubes, spare parts, etc. at the rate of 2.5 persons per schedule. Expansion programme for a given year generates additional employment in the following year. Thus the rise in schedules from 5237 in S.T.T. 1980 to 5623 in S.T.T. 1985 is expected to result into generating additional employment of 3663 persons during the Five Year Plan period 1980-85.

STATEMENT

Road Transport

List of Schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth	Five Year Plan 1980-85 Outlays	
			Total 3	Capital 4
1	2			
1	RTS-1 Road Transport		9000.00	9000.00

6.3. TOURISM

6.3.1.1. Gujarat is uniquely placed to attract a variety of tourists ranging from the holiday-seekers who would like to escape from the din and bustle of daily routine to the serious students of History and Archeology and the religiously minded tourists visiting pilgrim centres. There are four sanctuaries for the wild-life enthusiasts and bird-watchers, the pride of place being taken, by Gir Sanctuary, the only surviving habitat of the Asiatic lion. There are innumerable temples at Dwarka, Palitana, Somnath, Ambaji and mosques which attract the devout as also the History-Bug and for the archeologically minded there is Lothal connected with the Indus-valley civilisation. There are beaches, holiday homes, picnic spots and health resorts for the tourists in search of rest and recreation. The potential for development is thus very vast and the scope for attracting foreign tourists is not inconsiderable. In order to increase the share of the State in the overall tourist traffic, efforts to improve the infrastructure were initiated from the Fourth Plan period by providing more accommodation, better transport and launching a concerted publicity drive. However, there is scope for further improvement by way of providing additional accommodation, air linkages between the important cities and towns like Ahmedabad, Bhavnagar, Keshod, Porbandar, Rajkot, Jamnagar, Bhuj, Vadodra, Surat in order to cater to the tourists with a tight time schedule but aspiring for wider coverage. For those with more time at their disposal and who like to travel by road, the State has an excellent network of all-weather roads a coastal Highway from Umbergaon in South Gujarat to Dwarka in Saurashtra and Kandla (Kaelchl) and there are plans for providing road side facilities.

6.3.1.2. Some of the recently completed projects include tourist bungalows at Veraval, Porbandar and Lothal. A modern forest lodge in Gir sanctuary, holiday home at Hajira, Dwarka and Ubhrat, tourists reception centre at Palitana and cafeteria at the site of the sun temple near Modhera.

6.3.1.3. The Tourism Corporation of Gujarat Limited was incorporated on 10th June, 1975 with an Authorised Share Capital of Rs. 100.00 lakhs for development of tourism in the State with the main objectives as under:—

(i) to take over, develop and manage places of tourist interest;

(ii) to provide tourism by all ways and means and to adopt such methods and devices to attract tourists in large numbers; and

(iii) to carry on business as tourist and travel agent and provide amenities and other recreational facilities to tourists.

Further all Holiday Homes, Tourist Bungalows, Hill Station, etc. are transferred to the Corporation from the Directorate of Tourism with effect from 1st September, 1978 in order that these may be developed and run efficiently on commercial lines.

6.3.1.4. In order that the potential for the development of tourism as an industry is fully exploited, the strategy adopted is based on an integrated approach covering (i) Product identification, (ii) Infrastructure requirements, (iii) Provision of goods and services; and (iv) Methodology of implementation.

6.3.2. Programmes for Sixth Five Year Plan 1980-85.

6.3.2.1. An outlay of Rs. 260.00 lakhs is proposed for the sub-Sector of Tourism for the Sixth Five Year Plan 1980-85. An outline of the programme is given in subsequent paragraphs.

6.3.2.2. Development of Sasan-Veraval Complex.

(a) **Sasan**:—It is proposed to provide additional dormitory accommodation and suites; open air-theatre; Cafeteria, recreational and audio-visual facilities covering folk dances, cultural songs, slides and film shows, T.V. indoor and outdoor games, etc., and opening of handicrafts and curio shop at Sasan.

(b) **Veraval-Somnath**:—It is proposed to provide camping site complex at Somnath having camping site for 25 cars, 4 coaches and 1 or 2 caravans, canteen facilities for about 100 persons and 25 living rooms and exhibition hall, beach facilities having beach umbrellas, rest chairs, bath rooms, public toilets, safety guards etc. at Veraval and Somnath.

(c) **Junagadh**:—It is proposed to provide tourist accommodation having 25 rooms and dormitory accommodations for about 50 persons including dining facilities; opening of Transport Unit having 4 luxury coaches, 2 mini buses, 2 jeeps and 2 Ambassador cars with garage and workshop facilities at Junagadh.

(d) **Rajkot**:—It is proposed to open a Tourist Information Bureau and Reception Centre at Rajkot.

PAKISTAN

GUJARAT STATE

MAP SHOWING
IMPORTANT TOURIST CENTRES

SCALE
10 0 10 30 60 MILES



- | | |
|-------------------|--------------|
| 1 KOTISHWAR | 12 SIDHAPUR |
| 2 NARAYAN SAROVAR | 13 TARANGA |
| 3 BHADRESWAR | 14 MOHHERA |
| 4 BETDWARKA | 15 BECHARAJI |
| 5 DWARKA | 16 SHAMLAJI |
| 6 GIRNAR | 17 DAKOR |
| 7 SOMNATH | 18 VADAL |
| 8 GADHADA | 19 VALTHIA |
| 9 PALITANA | 20 PAVAGADH |
| 10 AMBAJI | 21 UDAVADA |
| 11 KUMBHARIA | 22 MIRADATAR |

(e) **Dwarka.**—It is proposed to construct Staff Quarters, 25 living rooms with canteen facilities for about 100 persons at the existing dormitory site at Dwarka.

6.3.2.3. Development of Ahmedabad Complex.—It is proposed to provide tourist bungalows at Shamlaji and Ahmedabad City; Tourist Information Bureau and Reception Centre at Vadodara, Transport Unit and Guide Services at Ahmedabad and a dormitory, living rooms and public toilet facilities at Modhara. It is proposed to develop sites for picnic spots at Adalaj, Sarkhej Roza, Sola, Bhamario Kuva (Well) near Mehamadabad, orientation centre and camping site at Nalsarovar.

6.3.2.4. Motel Projects:—It is proposed to provide to campers hut at Shamlaji and construction of two motels, one on National Highway No. 8 near Ankleshwar or Fajelpur near Vadodara or near Navsari and other at Limbdi.

6.3.2.5. Development of Hot Springs and Picnic Spots: Development of Picnic Spots:—It is proposed to develop a few picnic spots near big cities like Vadodara, Bhavnagar, Mahesana, Su at. Palanpur, Janmagar, Rajkot, Bluju, etc.

6.3.2.6. Development of Hot Springs:—It is proposed to construct living accommodation, dining facilities and bath rooms at Lasundra hot springs in Kheda district and Tuva hot springs in Panch Mahals district.

6.3.2.7. Survey of Beaches.—It is proposed to carry out survey of a few beaches in Gujarat State and develop one of them as beach resort. Ahmedpur-Mandvi in Junagadh district and Mandvi beach in Kachehh district will be surveyed in detail and tourist facilities will be planned for development of beach in Gujarat. It is also proposed to survey Flamingo City, near Khavada in Kachehh district with regard to its tourist potential.

Tourist Information and Publicity:

6.3.2.8. Gujarat has a number of tourists centres and pilgrim places some of which have all India tourist importance. So far efforts have not been made to undertake special publicity drive for these centres in foreign countries as well as in other States of the Country. A few tours so far arranged for foreign travel agents in Gujarat have shown very encouraging results. Such attempts need to be followed by systematically by effective planned publicity for the promotion of tourism in Gujarat. It is, therefore, proposed to undertake activities like printing of attractive colourful folders, brochures, booklets, maps, guide books, picture post cards, posters, etc., as well as viewing colour slides for audio visual etc. Publicity through various media is proposed to be organised towards promotion of efforts for development of tourism in the State. It is expected

that these efforts would positively attract more number of foreign tourists to Gujarat. It is, therefore, proposed to provide an outlay of Rs. 11 lakhs for the purpose in the Sixth Five year Plan 1980-85.

6.3.2.9. Development of Holiday Homes/Tourist Bungalows:—At present there are 17 Holiday Homes which have become very popular. It is proposed to add a few more at Umbargaon, Ambaji, Mandli and Jasol hills. It is also proposed to modernise and add facilities in the existing Holiday Homes like Chorwad, Ubharat, Pavagadh, etc., which have become very popular.

6.3.2.10. Improvement of Dharmahalas:—In order to provide additional accommodation to low budget tourists, it is proposed to select Dharmahalas at Dakor, Ambaji and Pavagadh to start with and provide facilities at these places by improving and modernising them.

6.3.2.11. Ropeway Project at Pavagadh:—It is proposed to examine the feasibility of putting up a ropeway at Pavagadh.

6.3.2.12. Youth Tourism:—At present there is Youth Hostel at Gandhinagr which has become very popular. This Youth Hostel is put up with financial assistance from the Central Government. In view of the experience gained, it is proposed to put up two similar Youth Hostels one in Saurashtra region and the other in South Gujarat region.

6.3.2.13. Conducted Tours:—At present the Tourism Corporation of Gujarat has planned conducted tours covering the entire State as well as neighbouring States of Maharashtra and Rajasthan. It is also proposed to add a few more conducted tours in the Sixth Five Year Plan which may originate from various centres in Gujarat like Rajkot, Vadodara, Junagadh, etc. Gujarat having a longest sea coast and having so many tourist spots on the coasting. It is proposed to organise coastal conducted tours. It is also proposed to organise Inter-State conducted tours for the Youth so that the Youth of the other States can take advantage of seeing our State and vice-versa.

6.3.2.14. Opening of New Tourist Offices:—At present, the State Government have a Tourist Office at Bombay only outside the State. It is very necessary to have tourist offices at Delhi, Calcutta and Madras from where a number of pilgrims not only of other States but also Gujaratis settled in those regions come to Gujarat every year. It is therefore, proposed to open tourist information offices at the above places.

6.3.2.15. Training of Personnel:—The Government of India is planning to start regular course for training in tourism at Delhi for personnels in various categories and at various levels in tourism trade. It is proposed to send staff and officers of the Tourism department as well as Tourism Corporation for training at such an institute.

6.3.2.16. Strengthening of the Tourism Department:—It is proposed to provide a Statistical Cell in the Department and strengthen the existing Department of Tourism to look after the development of tourism, giving recognition to the hotels, luxury cars operators, excursion agents, etc. It is proposed to strengthen the department for an efficient working as well as planning and promotion of tourism

in the State. Modern equipment will be provided and trained staff will be appointed in the department.

6.3.2.17. Beautification and Recreational Facilities at all Tourist places in the Gujarat State:—It is proposed to beautify and provide recreational facilities for which assistance of cultural organisations and cultural troupes will be taken. It is also proposed to encourage folk art and folk music which can well be used for recreation of tourists.

STATEMENT

Tourism.

List of schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85	
		Total	Capital outlay
1	2	3	4
I. Tourist Accommodation :			
1.	TRS-1 Development of Sasan-Veraval, Porbandar Complex.	.. 30.00	30.00
2.	TRS-2 Development of Ahmedabad Complex.	.. 26.63	26.63
3.	TRS-3 Development of Hot Springs and Picnic Spots.	.. 15.00	15.00
4.	TRS-4 Development of Holiday Homes, Tourist bungalows, Hotel and Motel, Ropeways, etc.	.. 79.20	79.20
Total : I		.. 150.83	150.83
II. Tourist Information and Publicity :			
5.	TRS-5 Publicity abroad.	.. 11.00	..
Total : II		.. 11.00	..
III. Other Expenditure :			
6.	TRS-6 Coastal conducted tours and inter-State tours and development of tourist bungalows, transport facilities, improvement of Dharmashalas, development of Picnic Spots, etc.	.. 53.17	..
7.	TRS-7 Establishment of Tourism Corporation of Gujarat Limited.	.. 45.00	..
Total : III.		.. 98.17	..
Grand Total : I + II + III.		.. 260.00	150.83

6.4. PORTS, SHIPPING AND LIGHTHOUSES

6.4.1. Introduction.

6.4.1.1. Gujarat is a principal maritime State of the country. The total coastline of Gujarat represents over 30% of the coastline of the Country. The coast line of Gujarat has a very large hinterland, extending over central and northern India. Because of these natural advantages Gujarat has been very prominent in the development of maritime economy of the country.

6.4.1.2. Ports, play a very important part in the development of trade and commerce of a country and generally, in industrial development. By proper utilisation of port capacities, transportation of essential commodities in the country can be co-ordinated and congestion in rail and road transport systems can be eased. Ports act as a catalyst for the development of the Coastal area and the hinterland. It is well known that along the coastline of Gujarat, port's activities sustain large population employed in boat building, operation of various crafts, handling of cargo, fishing and trade and commerce.

6.4.1.3. The 11 Intermediate, 28 Minor and one Major Ports are situated over 1600 Kms. of coastline from Koteshwar in the North to Umbargoan in the South. Four of these ports-Bhavnagar, Okha, Porbandar and Sikka are direct berthing ports for ocean going ships. 11 Ports are lighterage Ports where steamer traffic is worked by lighters. The remaining 24 Ports are either sailing vessels ports or have fishing activities. About 98% of the total traffic is handled by only 15 ports viz. Bhavnagar, Okha, Bedi, Sikka, Porbandar, Veraval, Navlakhi, Mandvi, Maluva, Pipavav, Salaya, Valsad, Jakhau, Bharuch and Mundra. The main feature of these ports is exports which constitute 60% of the total traffic mainly to foreign countries earning foreign exchange of more than Rs. 100 crores per annum. The development activities of the ports have therefore been concentrated at these ports. In the case of other ports either a small jetty is provided or some dredging is done but no major development activities have been undertaken so far.

6.4.2. Review of Progress

6.4.2.1. In the first plan certain basic investigations were undertaken so as to enable planning for future development. In the Second Plan, investigations for more important engineering works such as, breakwaters at ports like Porbandar and Veraval, Hydrographic Surveys, engineering model tests etc. were initiated and such schemes were executed which removed deficiencies and bottlenecks in providing basic facilities at the ports. This enabled the ports to serve traffic needs in a better manner. In the Third Plan, additional landing facilities to serve increasing traffic were provided at various ports. Landing facilities like jetties, wharves etc.

were constructed; transit and storage facilities for cargo were provided; cargo handling equipment like cranes, etc., were installed and the light fleet was strengthened. This was continued in the three Annual Plans and also during the Fifth Plan. During the Fifth Plan additional facilities for improving the efficiency of the working of the ports and establishment of direct berthing facilities at the ports where necessary were provided. The targets in respect of important programmes were mostly achieved. This also helped in economic development of the hinterland in providing more efficient facilities at ports. Rates of cargo handling have since improved.

6.4.3. Growth of Traffic

6.4.3.1. The ports of Gujarat are traditionally net export oriented ports. The traditional commodities of imports are food-grains, fertilizers, mineral Oils, Coal, Sulphur, etc whereas items of exports are cakes, groundnut seeds, cement, lime, lime stone, etc. The pattern of growth of traffic since the turn of the seventies and the projections for the two years of the Sixth Five year Plan 1980-85 are as follows:-

(Figures in lakh tonnes)

Year	Import	Export	Total
1	2	3	4
1970-71	7.05	19.61	26.60
1973-74	10.43	17.75	28.18
1974-75	12.47	17.80	30.27
1975-76	12.19	18.83	31.02
1976-77	6.25	22.03	28.28
1977-78	5.80	11.65	20.45
1978-79	7.63	13.14	20.77
1979-80	10.40	14.20	24.60
1980-81	14.35	15.65	30.00
1981-82	14.35	25.65	40.00

6.4.3.2. There has been a steady increase in the traffic handled at the ports during the earlier plans period. The decline in the traffic in the recent past is on account of the stoppage of imports of food-grains and fertilizers. Restrictions placed by the Government of India on export of cement, salt and ground nut seeds and oil-cakes which are the traditional bulk export items of Gujarat, affected the growth of traffic.

mineral oil at Okha has also come down due to its diversion to Kandla which is very nearer to the consuming centres in India. In order to compensate for this loss ports are made to start import of fertilizers at ports and a sizeable quantity of imported goods is handled at Ports Bhavnagar, Veraval, Bhavnagar and Navlakhi.

6.4. Approach and Strategy.

6.4.1 Ports constitute one of the important infrastructural facilities necessary for economic advancement of a region. The development expansion and improvements at the ports are not only necessary for catering to the likely increase in traffic but also to improve efficiency of steamer working. It is necessary to develop modern direct berthing facilities. Present day shipping demands quicker turn round of the ships. Also large craft vessels are being employed increasingly in international trade. Even to cater to the present level of the traffic, existing facilities at the ports are required to be expanded by providing additional berths, additional lighterage fleets, increase in warehousing and transit facilities and addition of cargo handling equipments. It is also necessary to improve the navigational conditions by dredgings and provide additional navigational facilities and introduce mechanisation of cargo handling.

6.4.2. There is an urgent need to set up an autonomous Maritime Board on the lines of the major Ports Trusts for efficient Management of Ports on the Gujarat Coast on commercial lines.

Spill over works

6.4.1.3. M/s. Narmada Cement Co. are putting up one million tonnes capacity cement plants at port Jafrabad. The plants will produce clinker at Jafrabad which will be shipped in self propelled barges to Magdalla Port (about 6.67 lakhs tonnes) and to Ratnagiri of (about 3.33 lakh tonnes) the self propelled barges on their return voyage from the Magdalla, will carry coal for Jafrabad. In order to serve this traffic of clinker and coal, it has been decided to provide port facilities including break-water, dredging, etc at Jafrabad at a cost of Rs. 393.62 lakhs and at Magdalla at cost of Rs. 815.60 lakhs. Various works connected with this project, such as, construction of jetty, break-water, approach bund, dredging etc. have already been started.

6.4.1.4. It has been decided to provide modern ferry services between Dahej on South Gujarat Coast and Ghogha on the Saurashtra Coast. A joint sector company, namely M/s "Ghogha-Dahej-Trans-Sea Ferry Services Limited," has also been formed. Necessary terminal facilities at Dahej and Ghogha such as landing jetty, parking areas passenger facilities etc. will be provided by the State Government. The company will provide ferry boats and will operate the same Preliminary Work for providing the terminal facilities has been started.

6.4.5. Programme for 1980-85

6.4.5.1. An outlay of Rs 2600 lakhs is proposed for Sixth Five Year Plan 1980-85 for Ports development under the State Sector- A broad break up of the outlay is as follows-

		Rs. in lakhs
Sr. No.	Minor Heads of Development	1980-85 Proposed outlay.
1	2	3
(a) Ports and Pilotage		
1.	Development of Minor Ports.	1796.00
2.	Investigation	5.00
3.	Dredging and Surveying	250.00
4.	Ferry Services.	512.00
Total (a)		2593.00
(b) Light Houses and lightships, construction and Development of other Navigational Aids:		
		7.00
Total (b)		7.00
Grand Total(a+b)		2600.00

6.4.5.2. A major part of the proposed outlay is for (1) Development of Jafrabad and Magdalla port (2) Dahej-Ghogha Ferry Service (3) Dredging and (4) Floating Crafts.

6.4.5.3. The Government of Gujarat has decided to set up a statutory Board viz. The Gujarat State Maritime Board for administration of State ports. A draft bill had already been prepared and it is expected to be enacted very soon.

6.4.5.4. The details of the different Programmes are as under.

6.4.6. Development of Intermediate and Minor Ports.

6.4.6.1. Jafrabad Magdalla Port Project:- Infrastructural port facilities are required to be provided at Jafrabad and Magdalla Ports, as M/s. Narmada Cement Co. has decided to set up cement plant at Jafrabad and clinker grinding plant and packing at Magdalla port. Port facilities are proposed to be provided for transport of cement, clinker, coal etc. Government has accorded administrative approval to the plans and

estimates—the Works include infrastructural port facilities at Jafrabad port at an estimated cost of Rs. 3.94 crores and those at Magdalla port at an estimated cost of Rs. 8.15 crores. The activities include approach bund, break water, RCC Jetty, dredgings in Tapi river, etc. which have already started. Other Works such as roads, office buildings, water supply etc. are proposed to be taken up soon.

6.4.6.2. As per programmes finalised, the Narmada Cement Company will start its production by the middle of 1981 and therefore adequate provision for completion of port facilities by that time has been made which include Jetties at both the ports, Breack water and Bund at Jafrabad, Navigational aids and other miscellaneous items.

6.4.6.3. Other Schemes such as security arrangements at important ports, sea protection works and reclamations, water supply, construction of a shed at Khadakwasla etc. are also proposed to be carried out.

6.4.6.4. Development of Porbandar port:—An outlay of Rs. 50 lakhs is provided for the period 1980-1985 for completing the remaining works under the project of all weather port at Porbandar. The work is almost completed except for acquisition of land and completion of transist godowns etc. and these works are expected to be completed soon.

6.4.6.5. Construction of Docks Berth and Jetties:— Under this programme important works to be carried out are (i) Jetty for port crafts at Port Bhavnagar (ii) landing wharf (iii) extension of wharf at Rozi (Bedi) (iv) Slipway at Bhavnagar (v) wharf wall at Navalakhi etc. In addition other smaller works for improving the landing facilities at various ports are proposed to be carried out. An outlay of Rs. 125.00 lakhs has been proposed for the period of Sixth Five Year Plan 1980-85 for all such programmes

6.4.6.5. Port Equipments and Machinery

6.4.6.6. It is proposed to purchase equipments like wharf cranes, mobile cranes, dumpers, loaders, fire fighters, trucks etc. for various ports. In addition walkie talkie for lighterage working ports is also proposed to be provided. An outlay of Rs. 126.00 lakhs is proposed during 1980-85 for the purpose.

6.4.6.7. **Transport Facilities and Fleet** : It is proposed to provide concrete platforms for bulk cargo and other transport facilities at important ports during the period of Sixth Plan and for that purpose an outlay of Rs. 40.00 lakhs is proposed.

6.4.6.8. **Floating Crafts**:—It is proposed to purchase one No. 1000 BHP. Tug for Bhavnagar, No. 1000 BHP for Okha, one No. 350 BHP. Tug for Mandvi and one No. 350 BHP. Tug for Dredging cell at

Bhavnagar. Provision is also proposed to purchase one water barge for Navalakhi. An outlay of Rs. 200.00 lakh is proposed for 1980-85 for the purpose.

6.4.7. Gujarat Maritime Board

6.4.7.1. As per the recommendation of the Committee on the Administrative set up of Gujarat Ports, the State Government has taken a Policy decision to enact a legislation for setting up an autonomous State Maritime Board on the lines of the Major Ports Trusts for the efficient management of the Gujarat Ports on commercial lines. The Legislation for this purpose is likely to be enacted soon. It is therefore, proposed to provide for contribution to the new autonomous Board. A Provision of Rs. 50 lakhs is proposed for 1980-85 for this purpose.

6.4.8. Warehousing Facilities,

6.4.8.1. At Bhavnagar and Veraval, there is demand for additional storage facilities which has to be met. The construction of storage godown at Bhavnagar and Veraval has been commenced in 1979-80. It is proposed to complete the work by 1981-82. It is also proposed to construct storage godowns and open transist shed at Valsad, Pipavav, Okha and Bedi during the period of Sixth Plan for which an Outlay of Rs. 15.00 lakhs is proposed.

6.4.9. Construction of Staff quarters and Amenities at ports.

6.4.9.1. It is proposed to provide Class-I, Class-II and Class-III staff quarters at the ports of Bhavnagar, Bedi, Veraval, Mandvi and Mahuva. An outlay of Rs. 10.00 lakhs is proposed for the Sixth Plan 1980-85.

6.4.10. Dredger and Dredging

6.4.10.1. A provision of Rs. 250.00 lakhs is proposed for carrying out dredging at various important Ports in 1980-85.

6.4.10.2 **Dahej-Ghogha Ferry Service.**—The Project is to provide a modern ferry Service for transporting loaded trucks/buses etc. across the Gulf of Khambhat between Ghogha and Dahej. The Port and terminal service facilities at both end will be provided by the Port department at an estimated cost of Rs. 515.40 lakhs. Operation of Ferry service will be the responsibility of Joint Sector Company viz. 'Dahej-Ghogha Trans-Sea Ferry Service Limited' which is already functioning. The State's share in the Capital of that company is Rs. 26.00 lakhs. A provision of Rs. 542.00 lakhs is proposed for the Sixth Plan 1980-85.

6.4.11. Landing Facilities for Inland Water Transport at Matwad, Chandod, Mandar and Mangleshwar.

6.4.11.1. Till 1978-79, these schemes were fully financed out of assistance from the Central Government. However, according to the reclassification of

centrally sponsored schemes, these schemes are continued as centrally sponsored on sharing basis. Accordingly, a provision of Rs. 3.50 lakhs is proposed for 1980-85 as State share for completing the works of land facilities for IWT at the above ports. An equal provision is expected from the Government of India.

6.4.12. Construction and Development of other Navigational Aids at various ports.

6.4.12.1. Local Navigational aids at various ports are required to be provided particularly at salt loading ports where the lighterage fleet have to go in meandering creeks. An amount of Rs. 7.00 lakhs is proposed for this purpose for 1980-85.

6.4.13. Central Sector Schemes:-

6.4.13.1. The following port development works are very important for the State and therefore the State Govt. has taken up the matter with the Government of India to approve these projects as Centrally Sponsored projects

Sr. No.	Name of the Scheme.	Estimated Cost.	Outlay required during 1980-85.
1	2	3	4
1.	Development of Hazira Port.	1650.00	1650.00
2.	Development of Salaya as a direct berthing Port.	750.00	750.00
3.	Development scheme for Inland water Transport in Rivers Narmada and Tapi.	275.00	275.00
Total		2675.00	2675.00

Brief details of the above projects are given below-

1. Development of Hazira Port:-

6.4.13.2. The Central and South Gujarat especially the regions around Vadodara, Surat, Vapi, etc. are developing at a very fast rate. A large scale industrial development is taking place in this region. Presently all the port requirements of these industries are being met with by Bombay where frequent congestion results in bottleneck. In order to provide a suitable sea outlet for this region as well as for vast hinterland stretching into Central and Northern India intensive studies were made to ascertain a suitable location for developing an all weather port. Information about the available traffic other infrastructural facilities etc. was also studied and consultants were appointed for suggesting a suitable site for a port. On the basis of these studies and the consultants' Report, Hazira on the North Bank of River Tapi, has been found to be very suitable for developing as a port. The traffic projections have indicated that besides the general industrial traffic

there is a great scope for movement of coal from the Central India coal fields to the Saurashtra region through this Port and traffic projection of 1.5 to 2.00 million tonnes has been made.

A large gas base fertilizer complex is being set up near Hazira by M/s IFFCO. A gas cracking Unit and other petrochemical industries are coming up around Hazira. There is a possibility of finding gas crude oil in Bombay High area and Hazira may provide a suitable oil port for bringing crude oil from off-shore oil fields and transporting the same to Koyali Refinery. The Government of India is also considering to establish a large shipyard and as per the report of the consultants Hajira has been found to be a very suitable site for the purpose. A modern port at Hazira will be complimentary to the proposed shipping yard and its vicinity. Thus it will be seen that proposed port of Hazira will be mainly used by companies like IFFCO, I.P.C.L., which function on a country wide basis so that the port will be useful not merely for a traffic of Gujarat State but also to the country as a whole. From all these considerations, development of Hazira as a large modern Port is found to be very essential for the economic development of this fast growing region and this project is proposed to be taken up as a Centrally Sponsored Scheme.

Development of salaya as a direct berthing port.

6.4.13.3. The region around Salaya is very rich in respect of agricultural commodities. Presently, export of these and production of salt, ground nut and other Commodities are handled at near by ports like Navlakhi, and Bedi and to some extent from Salaya. A large phosphatic fertilizer plant is likely to be set up near salaya. Several other industries are coming up in the region. Further the Maritime Features at Salaya are excellent as it provides sheltered deep waters very close to the shore and through out the year. Accordingly it is proposed to develop Salaya as the direct berthing port for meeting the requirements of these industries. The project is proposed to be taken up as a Centrally Sponsored Scheme.

Development Scheme for Inland Water Transport in River Narmada and Tapi.

6.4.13.4. In Gujarat State, rivers Narmada and Tapi offer good potential for development of Inland Water Transport. The Government of India is considering to declare these two waterways as national water ways. With the construction of Navagam Dam and a series of other dams of the Narmada, IWT facilities will be available from mouth upto Hausan-gabad in Madhya Pradesh by suitable dredging and provision of locks, etc. Similarly in Tapi also, there is considerable scope for IWT development. A provision of Rs. 275. lakhs is, therefore, proposed for the development of IWT facilities for these two important water-ways.

STATEMENT

Ports, Lighthouses and Shipping

List of Schemes included in Sixth Five Year Plan 1980-85.

(Rs. in Lakhs).

Sr. No.	No. and Name of the Scheme.	Sixth Five Year Plan 1980-85 Outlay	
		Total 3	Capital, 4
A—Ports and Pilotage.			
I. Development of Minor Ports.			
1.	PRT-1 Development of intermediate and Minor Ports.		
	a. Construction of docks, berths and Jatties.	.. 125.00	125.00
	b. Ports equipments and Machineries.	.. 126.00	126.00
	c. Transport Facilities and Fleet.	.. 10.00	10.00
	d. Floating Crafts	.. 200.00	200.00
	e. Maritime board.	.. 50.00	50.00
	f. Warehousing Facilities.	.. 15.00	15.00
	g. Other expenditure	.. 1240.00	1240.00
	h. Creation of Mechanical Circle.	.. 20.00	—
	Total: I	.. 1786.00	1786.00
II. Construction and Repairs.			
2.	PRT-2 Construction of office building, staff quarters and other amenities at various Ports.	.. 10.00	10.00
	Total—II.	.. 10.00	10.00
III. Dredger and surveying.			
3.	PRT-3 Survey and investigation of Gujarat Coast.	.. 5.00	5.00
4.	PRT-4 Dredger and Dredging.	.. 250.00	250.00
	Total—III.	.. 255.00	255.00
IV. Ferry Service.			
5.	PRT-5 Inland water Transport and Dahej-Ghogha Ferry Services.	.. 542.00	542.00
	Total : IV	.. 542.00	542.00
	Sub-Total : I toIV.	.. 2593.00	2573.00
B. Light Houses and Light ships.			
Construction and Development of other Navigational aids.			
6.	PRT-6 Development of and construction of other navigational aids at intermediate and Minor Ports.	.. 7.00	7.00
	Total for B :	.. 7.00	7.00
	Grand Total (A+B)	.. 2600.00	2580.00

7. SOCIAL AND COMMUNITY SERVICES

Economic development makes growing demand on the quality of human resources. It is necessary to pay greater attention to improvement in the quality of education at all levels and improvement/diversification of the skills of the people. Better medical and health services, safe drinking water and housing facilities are needed not only for the social and economic well being of the people but also for improving the efficiency of the working population to ensure steady growth in the rate of production in fields and factories. The welfare programmes for the backward classes, other weaker sections and particularly for Scheduled Castes and Scheduled Tribes have to be considerably expanded and speeded up.

2. An outlay of Rs. 57316 lakhs is proposed for the Social and Community Services for the Sixth Five Year Plan 1980-85. The sectoral and sub-sectoral break up is as under:—

(Rs. in lakhs)

Sr. No.	Sector/Sub-Sector	Proposed Outlay 1980-85
1	2	3
1.	General Education	5560
2.	Technical Education	600
3.	Medical and Public Health	7000
4.	Social Inputs	500
5.	Sewerage and Water Supply	15076
6.	Housing	8530
7.	Urban Development	2850
8.	State Capital Project	3000
9.	Information and Publicity	85
10.	Labour and Labour Welfare	4000
11.	Welfare of Backward Classes	8000
12.	Social Welfare	450
13.	Nutrition	1665
	Total ..	57316

An outline of the programme is given in the subsequent paragraphs.

7.1. GENERAL EDUCATION

7.1.1.1. The role of education in the State and the national economy needs no emphasis. Provision of educational facilities at all levels of life as an essential social infrastructure is necessary to supplement the economic infrastructure created through various development plans. The educational system has recorded, over the years, a phenomenal growth. The Education Commission (1964-66) has emphasised the need for radical changes in the system of education and accordingly the major steps to be taken towards this end have been outlined in the National Policy on Education (1968). Therefore, the Fifth Plan Programmes were imbued with the main ingredients of these documents. The development programmes in the Sixth Plan 1980-85 aims at equalising education opportunities and make education relevant. The main thrust would be on the following two areas:—

(1) Universalisation of Elementary Education;

(2) Vocationalisation of Education.

7.1.1.2. An outlay of Rs. 5560 lakhs is proposed for General Education for the Sixth Five Year Plan 1980-85. The broad break up of the outlay is as under:—

(Rs. in lakhs)

Sr. No.	Minor Heads	1980-85 proposed outlay.
1	2	3
1.	Primary Education (MNP)	
	(i) Elementary Education	3256.74
	(ii) Teachers Training	53.26
	(iii) Special Education (Adult)	250.00
2.	Secondary and Higher Secondary Education.	822.29
3.	University and Higher Education	507.90
4.	Games, Sports and Youth Welfare	200.70
5.	Art and Culture	369.11
6.	Development of Languages	100.00
	Total ..	5560.00

7.1.2. Primary Education

7.1.2.1 Primary Education including Adult Education being a part of the Minimum Needs Programme, has been given highest priority. An outlay of Rs. 3560 lakhs for the Sixth Plan is proposed. The main programmes are given in the following paragraphs.

(a) Elementary Education

Appointment of Additional Primary Teachers

7.1.2.2. The position of enrolment in the age group 6-11 and 11-14 at the end of 1979-80 was 102% and 47% respectively, the details of which are as under:—

(Figures in lakhs)

Age group	Boys	Girls	Total
6-11	24.80 (119%)	16.58 (85%)	41.38 (102%)
11-14	6.99 (58%)	4.03 (35%)	11.02 (47%)
6-14	31.79 (96%)	20.61 (66%)	52.40 (82%)

7.1.2.3. The national norm for enrolment under the M.N.P. for the Sixth Five Year Plan 1980-85 is 95% in the age group 6-11 and 50% in the age group 11-14. By the end of 1980-81 the enrolment is expected to rise to 105% and 48% in the age group 6-11 and 11-14 respectively. It is targetted to achieve 107% and 54% coverage at the end of 1981-82 and 110% and 70% coverage at the end of the Sixth Plan 1980-85 in the respective age groups. Overall coverage will be 95% in the entire age group 6-14 by 1984-85. It is expected that 11.23 lakh additional children will be enrolled during the sixth plan 1980-85. Of this 2.24 lakh pupils are proposed to be covered under the scheme of non-formal education and 2.40 lakhs by adjustment by raising the teacher pupil ratio from 1 : 38 to 1 : 40. To manage the remaining 6.59 lakh pupils 16475 teachers will be required according to the norms. 4,000 teachers appointed during 1979-80 will be considered against the total demand of 16475 teachers of the Sixth Plan. However, it is proposed to appoint 15000 new teachers (including 4000 teachers appointed in 1979-80) during the Sixth Plan 1980-85. Of these, 3900 teachers will be appointed in Tribal areas and 770 teachers will be earmarked for special component plan. An amount of Rs. 2393.30 lakhs is proposed for the Sixth Plan 1980-85 for the purpose.

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Construction of Class Rooms

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7.1.2.4 Physical facilities form an important aspect of universalisation of elementary education. It is necessary to take up in a big way the programme of construction of school rooms. The present requirement of the school rooms on the basis of one teacher one room is about one lakh rooms for rural areas. At present there are 72,000 school rooms in rural areas. At the end of the Sixth Plan the total requirement of additional rooms will be 43,000 including 15,000 new teachers who are to be appointed during the Sixth Plan. Against this, 8800 rooms are targetted to be constructed in a phased manner. In the first phase it is proposed to cover the four categories viz (1) where a school exists but there is not even one room (2) Incomplete works to be completed (3) Works sanctioned but not started, to be taken up and completed (4) schools having more than one teacher in one room should be provided with one more room and (5) all schools having major repairs will be repaired. An amount of Rs. 135.70 lakhs is proposed for the Sixth Plan 1980-85 for construction of about 3000 class rooms.

Opening of New Primary Schools

7.1.2.5. There were 414 villages having population of 200 or more according to 1971 census which did not have schooling facilities within a radius of 1.5 Kms. All these villages will have been covered by the end of 1980-81. The State Government intends to extend these facilities to villages having population of less than 200 but more than 100. There are 711 villages falling under this category. All such villages are targetted to be covered during the Sixth Plan at the cost of Rs. 7.11 lakhs. Out of this an amount of Rs. 3.46 lakhs is proposed for trial areas.

Conversion of Single Teacher Schools into Two teacher schools.

7.1.2.6 Single teacher schools remain closed when the teacher is absent. This weakens the elementary education system. It is therefore desirable that there should be no single teacher schools. At present there are about 400 single teacher schools in the State including 2400 schools in Tribal areas. Out of these 250 schools are proposed to be covered during the Sixth Plan. It is proposed to appoint additional 250 teachers at an estimated cost of Rs. 71.65 lakhs during the Sixth Plan 1980-85.

Physical Facilities

7.1.2.7 Many Primary schools which are lacking in physical facilities such as water supply, sanitation compound wall, electrification etc. are proposed to be provided with facilities at a cost of Rs. 100 per school. 4000 such schools including 1200 schools in Tribal areas are proposed to be covered and for that an amount of Rs. 40.00 lakhs is proposed to be provided during the Sixth Plan.

Science Kit boxes

7.1.2.8 Schools having Stds. I to IV were supplied Science Kit boxes during Fifth Plan. It has been decided to continue this scheme during Sixth Plan to cover schools having Std. V to VII. There are 10500 such schools, and out of them, 4000 schools will be supplied a kit box costing Rs. 500 each during the Sixth Plan and an amount of Rs. 20.00 lakhs is proposed for the Sixth Plan 1980-85 including, 1000 schools in tribal areas.

Incentive to parents of Tribal Pupils

7.1.2.9. Literacy rate in the tribal area as compared to the in non-tribal areas is very low. Due to poverty, tribal people are reluctant to send their children to schools. It is therefore necessary to give them incentives so that they may send their children to schools. There are 6.19 lakh children enrolled in schools in tribal areas. It is proposed to supply 5.70 lakh pairs of uniforms and 25.00 lakh sets of Text books free of cost during the Sixth Plan 1980-85 and for that an amount of Rs. 200.00 lakhs is proposed.

7.1.2.10. Families of primitive groups viz. Kolgha, Kotwalia, Kathodias, Padhar, Siddi, etc. are more backward among the tribal communities. To enable these families to send their wards to schools it is necessary to offer them incentives. It is proposed to supply them food and clothes, for sending their children regularly to schools. The cost of these incentive will be Rs. 200 per family per annum. Under Special Central assistance scheme an amount of Rs. 50.00 lakhs is expected from the centre during the Sixth Plan 1980-85.

Financial assistance to Scheduled Castes, Scheduled Tribes and other backward classes (Baxi Panch) girl Pupils

7.1.2.11. There is a huge wastage after standard fourth particularly in girls. To avoid stagnation and wastage and also to promote girls education particularly in backward communities, it is proposed to give a cash award of Rs. 100 per student every year to the first five girls of S.C. S.T. and OBC in order of merit in the annual examination of Std. IV of each Taluka and this award will be continued till they complete their education upto Std. VII. During Sixth Plan a provision of Rs. 32.48 lakhs is proposed for 33,300 girl pupils.

Coaching classes for weaker students

7.1.2.12. One of the main objectives of the Programme of universal primary education is the reduction in the number of drop outs. To avoid considerable stagnation, it has been decided not to hold annual examination at the end of Stds. I and II. Looking to the stagnation rate at the end of Std. III it is desirable to conduct coaching classes for weaker students

during summer vacation so as to enable them to appear for re-examination. A teacher who will conduct such a class having strength not less than 30 pupils will be paid Rs. 150 as remuneration. During the entire period of the Sixth Plan a provision of Rs. 12.60 lakhs is proposed to cover 2.52 lakh pupils.

Non-Formal Education

7.1.2.13. It is found that despite all efforts, it is very difficult to bring all children of the age group 6-14 to schools under formal Education System. Economic factors are mainly responsible for this apathy to education. It is therefore, imperative that due stress is laid on non-formal education centres and to identify the learner. Teachers or the unemployed educated youths will be mobilised to take-up this programme. It is targetted that about 2.24 lakh pupils which comes to 20% of the total additional enrolment of the entire period of Sixth Plan will be given coaching to make them eligible for the multiple entry at the elementary stage. An outlay of Rs. 149.40 lakhs is proposed at the rate of Rs. 67 per pupil for the Sixth Plan 1980-85.

Medical Check-up of Primary School Children

7.1.2.14. It is estimated that there are about 59.00 lakh children in the age group 6-14. Health is one of the goals of Education. School health services have been now accepted as a part of the general health services. To promote and maintain the health of school going children it is necessary to have periodical medical check-up. The target for medical examination of 20.00 lakh children studying in primary schools will be achieved by 1981-82. For continuing the work of printing of pamphlet of "Arogya Pustika" a provision of Rs. 5.50 lakhs is proposed for the Sixth Plan 1980-85.

Pre-Primary Schools

7.1.2.15. At present the total no. of pre-primary schools working in the State in rural areas is 1172. More and more preprimary schools are expected to be started and they will have to be given grant-in-aid as per Government rules. As per the present rates pre-primary schools are paid 90% grant on the expenditure of the salary to teachers and contingency equipment grant at 20% of 90% grant on salaries of teachers. An outlay of Rs.89.00 lakhs is proposed for the Sixth Plan 1980-85 for the purpose.

7.1.2.16. For strengthening the existing machinery at the State level as well as district level provision of Rs. 11.90 lakhs is proposed for the Sixth Plan, 1980-85.

(ii) Teacher's Training

7.1.2.17. With a view to keep teachers in constant touch with the new trends, in the field of education, in-service training has been considered necessary once in a period of five years. Duration of the in-service training programme will be of one month and it will

be organised by the State Board of Teachers' Education. The teachers undergoing the in-service training will be paid a stipend of Rs. 150/— for one month. An amount of Rs. 12.41 lakhs for the Sixth Five Year Plan 1980-85 is proposed for this purpose.

7.1.2.18. It is proposed to provide science kit box to Panchayat schools for Std. V to VII. It is inevitable that the teachers should know how to make use of these kit boxes. It is therefore necessary to impart training to these teachers in the use of the kit boxes. An amount of 0.25 lakh is proposed for 1980-85.

7.1.2.19. It is proposed to pay grant to the training institutions of primary teachers for strengthening and improving existing facilities in these institutions. The expenditure to Government on account of each Government institution is estimated at Rs. 0.50 lakh and at Rs. 0.30 lakh for non-Government institutions. The non-Government Institutions will have to provide for a matching share of Rs. 0.20 lakh. An amount of Rs. 10.00 lakhs is proposed for 1980-85 for this purpose.

7.1.2.20. To develop the Science activities and to inspire teachers and Students to take up research activities in science, district level science fairs are organised every year in each District. State level Science fair is also organised every year. Teachers and students of schools take active part in these fairs in large numbers. An amount of Rs. 2.00 lakhs is proposed for 1980-85.

7.1.2.21. The State Institute of Education is located in 110 years old building of the P.R training College Ahmedabad. The building is very old and not suitable to the needs and programmes of the State Institute of Education. It is therefore proposed to construct a new building for S.I.E. at an estimated cost of Rs. 21.00 lakhs. A provision of Rs. 21.00 lakhs is proposed for this purpose for the Sixth Plan 1980-85.

(iii) Special Education (Adult):

7.1.2.22. According to the 1971 census about 41.75 lakh adults were illiterates in the age group 15-35. Taking into consideration the normal increase of adults in the said age group the projected population at the end of the Sixth Plan 1984-85 will be around 62 lakhs. By the end of the year 1979-80 about 9 lakh adults have been covered under the Adult Education Programme. It is proposed to cover 35.30 lakh illiterate adults in the age group 15-35 under the Adult Education programmes during the Sixth Five Year Plan through implementation of the following schemes:—

1 Rural Functional Literacy Programme (Sponsored by Government of India).

2. National Adult Education Programme (Sponsored by Government of India).

3. State Adult Education Programme (Similar to N.A.E.P) (Sponsored by State Government).

4. Adult Education Projects by Universities/Colleges.

5. Adult Education Projects through Nehru Yuvak Kendras.

7.1.2.23. The involvement of voluntary agencies is emphasised in almost all the adult education programmes. These programmes have to be publicised in the State to attract the voluntary agencies towards these programmes. Similarly the society as a whole and illiterate adults in the age group 15-35 in particular will also have to be made aware of the importance and their obligations towards these programmes. An outlay of Rs. 250.00 lakhs is proposed for the Adult Education Programme for the Sixth Plan 1980-85.

7.1.3. Secondary, Higher Secondary, University and Higher Education.

7.1.3.1. An outlay of Rs. 1440 lakhs for the Sixth Plan 1980-85 is proposed for the programmes under Secondary, Higher Secondary, University and Higher Education as under:—

(Rs. in lakhs)		
Sr. No.	Name of the Programme.	Outlay proposed 1980-85
1	2	3
1.	Secondary and Higher Secondary Education including programmes for Vocationalisation.	822.29
2.	University and Higher Education including scholarship.	507.90
3.	Games and Sports.	15.70
4.	Art and Culture (Library Development).	94.11
Total..		1440.00

7.1.4. Secondary Education:—

7.1.4.1. Secondary education in the State has rapidly expanded and has almost reached a saturation point except in rural areas. The main emphasis will have to be given to the rationalisation and consolidation of the growth achieved so far and for improvement of the quality of education.

Opening of New Secondary Schools.

7.1.4.2. By the end of May 1980 there were 3118 secondary schools in the State. It is envisaged that about 1.75 lakh additional pupils would be enrolled in the secondary schools during the period of the Sixth Five Year Plan. During the year 1979-80, 95 secondary schools (13 in tribal area and 82 in non-tribal areas) and 450 additional divisions in the existing schools were opened. According to the existing pattern, for a class of 40 pupils 1.5 teachers are sanctioned. It is proposed to provide an outlay of Rs. 276.07 lakhs on account of opening of 500 new secondary schools and also on account of facilities created so far in Government High Schools and provision for the opening additional 5 Government Secondary Schools in the tribal area during the Sixth Plan 1980-85.

In Service Training:

7.1.4.3. As a part of qualitative improvement programme, stress is laid on teachers training. It is proposed to provide an in-service training to about 4800 teachers during the period of Sixth Plan for which a provision of Rs. 6.15 lakhs is proposed. Provision is also made for strengthening libraries and laboratories during the Sixth Plan.

Book Banks :

7.1.4.4. Students coming from the weaker section of the society are not able to purchase text-books at secondary and higher secondary stage of education. The scheme envisages provision for free supply of text-books, to the needy students. The Text-Books are distributed through the District Education Officers. It is proposed to supply 1.40 lakh sets of text-books during the Sixth Plan period. The average cost of one set of text books is estimated at Rs. 25/- and accordingly an outlay of Rs. 35.00 lakhs is proposed for this purpose.

7.1.5: Higher Secondary Education-

7.1.5.1. The Government has accepted the pattern of Higher Education viz 10+2+3 to comply with the National Pattern. Under this scheme the existing secondary schools will be permitted to open Higher Secondary class of Standard XI during the First year of conversion and Std. XII in the Second year of conversion. It is proposed to convert additional 525 secondary schools into Higher Secondary Schools during the Sixth Plan period. This will necessitate opening of 525 New Classes of Standard XI and 634 new classes of Std. XII schools during the Sixth Plan Period. An outlay of Rs. 245.00 lakhs is proposed for the Sixth Plan.

7.1.6. Vocationalisation:

7.1.6.1. Vocationalisation of Education is vital for the purpose of suitable moulding our youth towards gainful vocations, thus reducing unnecessary pressure on our universities. The number of vocational institutions functioning under the Directorate of Education at present is about 30 and the enrolment of student is about 3000. During the Sixth Plan it is envisaged to raise the number of institutions to 100 and the enrolment of students, under vocational courses to 10,000. A provision of Rs. 50.00 lakhs is proposed for the Sixth Plan 1980-85.

Vocational Education Board.

7.1.6.2. It is also proposed to set up an effective Vocational Education Board in the Directorate of Education. The Chairman of the Board may be a full time honorary worker, who is supposed to deal with the officials of the Government, Semi-Government and voluntary bodies and plan and coordinate the vocational education at +2 stages in all fields. It is also proposed to set up a special unit to coordinate vocational courses. A provision of Rs. 20.43 lakhs is proposed for the Sixth Plan 1980-85.

7.1.7. University and Higher Education:

7.1.7.1. The main emphasis will be on qualitative improvement. It is proposed to provide matching assistance to the universities so as to enable them to avail of the matching assistance from the university Grants Commission. It is also proposed to provide assistance to the Universities towards the development schemes not assisted by the U.G.C. A provision of Rs. 245.00 lakhs is proposed for the Sixth Plan 1980-85 for the purpose.

7.1.7.2. A new residential university is established at Bhavnagar during the year 1978-79. It is proposed to provide an outlay of Rs. 100.00 lakhs for the Sixth Plan 1980-85 for its development programmes.

7.1.7.3. It is proposed to provide matching assistance to the affiliated colleges in respect of educational schemes proposed by them and approved by the University Grants Commission. A provision of Rs. 35.00 lakhs is proposed for the Sixth Plan 1980-85.

7.1.7.4. Provision is also proposed for improvement of physical facilities in Government Colleges, for awarding loan scholarships to the students of weaker sections, S. Cs., S.T.S. etc.

7.1.8. Art and Culture.

(i) Development of Libraries.

7.1.8.1. A provision of Rs. 94.11 lakhs is proposed for various improvement programme under Library Development for the Sixth Plan 1980-85 of which the main schemes are the opening of new village-libraries Rs. 14.75 lakhs and provision of construction of building of Government libraries Rs. 24.00 lakhs etc.

Other Programmes

Youth welfare, Cultural programmes etc.

7.1.8.2. State Youth Board and Sports Council programmes of youth welfare included alround youth development, grishma shibir, music camps, reading camps, know yours border, mgram gazettes, cottage industries camps etc. A provision of Rs. 45.00 lakhs is proposed for the youth welfare activities for the Sixth Plan. A provision of Rs. 140.00 lakhs is proposed for state sports council programmes for the Sixth Plan. A provision of Rs. 125.00 lakhs is proposed for propogation of nritya natya akademi programmes and a provision of Rs. 25.00 lakhs is proposed for the lalit kala akademi activities during the Sixth Plan 1980-85.

Archaeology:

7.1.8.3. It is proposed to expand exploration, excavation and conservation activities. It is proposed to undertake chemical preservation of monuments, publications, constructions of quarters and strengthening of Administrative machinery. A provision of Rs. 40.00 lakhs is proposed for the Sixth Plan 1980-85.

Archives.

7.1.8.4. The department looks after preservation and maintenance of old-non-current records of permanent nature. A scientifically designed building for housing archives is under construction at Gandhinagar. A provision of Rs. 35.00 lakhs is proposed for the Sixth Plan 1980-85.

Museums.

7.1.8.5. At present there are nine Government Museums, A museum has been started at Saputara in Dangs District and the work of construction of its building is expected to be completed during the Sixth Plan period. A provision of Rs. 50.00 lakhs is proposed for Sixth Plan 1980-85.

7.1.9. Development of Languages.

Gujarati Language.

7.1.9.1. The scheme of development of Gujarati Language and its literature was first initiated in the year 1966-67 and has since been continued during the Fourth and the Fifth Plans. This programme is proposed to be accelerated during the Sixth Plan 1980-85. A provision of Rs. 50 lakhs is proposed for the Sixth Plan 1980-85.

Other Languages.

7.1.9.2. The scheme for the development of Sindhi, Urdu and other Modern Indian Languages is implemented from the year 1978-79. It is proposed to accelerate and expand the activities under this programme. A provision of Rs. 50 lakhs has been proposed for the Sixth Plan 1980-85.

STATEMENT
General Education

List of Schemes included in the Sixth Five Year Plan 1980—85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Outlay proposed 1980-85	
		Total	Capital
1	2	3	4
I. Primary Education			
<i>(i) Elementary Education</i>			
1.	EDN-1 Additional teachers for Primary Schools for enrolling additional pupils	2393.30	..
2.	EDN-2 Construction of class rooms	135.70	135.70
3.	EDN-3 Construction of quarters for teachers in tribal area ..	3.00	3.00
4.	EDN-4 Opening of New Primary School	7.11	..
5.	EDN-5 Opening of New Primary Schools at capital town ..	1.98	..
6.	EDN-6 Conversion of single teacher schools into two teacher Schools	71.65	..
7.	EDN-7 G.I.A. to schools for improvement of physical facilities ..	40.60	..
8.	EDN-8 Science Kit Boxes	20.00	..
9.	EDN-9 Incentives to parents of tribal pupils	200.00	..
10.	EDN-10 Financial Assistance to talented SC/ST/OBC (Baxi Panch) girl pupils	33.48	..
11.	EDN-11 Strengthening of supervisory Machinery	82.12	..
12.	EDN-12 Coaching classes for weak students in summer vacation ..	12.60	..
13.	EDN-13 Introduction of non-formal education for the age group 9—14	149.40	..
14.	EDN-14 Medical check up for primary school children of the age group 6-14	5.50	..
15.	EDN-15 G.I.A. to Pre-Primary Schools	89.00	..
16.	EDN-16 A Strengthening of Planning Machinery & setting up of Monitoring cell in D.E.'s office	11.90	..
Total—(i) Elementary Education		3256.74	138.70
<i>(ii) Teachers Training</i>			
17.	EDN-17 Teachers Training Programme	12.41	..
18.	EDN-18 Training to primary teachers for Stds. V to VII (Science Kit boxes)	0.25	..
19.	EDN-19 Strengthening and improving of existing primary teachers training institutions	10.00	..

1	2	3	4
20.	EDN-20 Magazine for school boys	2.50	..
21.	EDN-21 Science fair at Dist. & State level	2.00	..
22.	EDN-22 A science hobby corner and innovation and experimentation in science education	1.60	..
23.	EDN-23 Workshop for science teacher of primary schools ..	0.50	..
24.	EDN-24 Construction of building for State Institute of Education ..	21.00	21.00
25.	EDN-25 Strengthening the administrative wing of State Institute of Education, Ahmedabad	2.00	..
26.	EDN-26 Strengthening of publication unit of State Institute of Education, Ahmedabad	1.00	..
Total—(ii) Teachers Training		53.26	21.00
<i>(iii) Special Education</i>			
27.	EDN-27 Rural functional Literacy programme	15.60	..
28.	EDN-28 State Adult Education Programme	163.34	..
29.	EDN-29 Adj. Post Literacy Project	24.88	..
30.	EDN-30 Incentive grants to voluntary agencies	21.00	..
31.	EDN-31 Publicity (Adults)	6.23	..
32.	EDN-32 Administrative set up	13.95	..
Total—(iii) Special Education		250.00	..
I—Total—Primary Education. (including Adult Education) (I) + (II) + (III)		3560.00	159.70
II. Secondary and Higher Secondary Education			
33.	EDN-33 Regulated growth of secondary Schools	270.07	83.50
34.	EDN-34 Remedial teaching for weak students	10.00	..
35.	EDN-35 Improvement of science education	15.00	..
36.	EDN-36 Programme of socially useful productive work	5.00	..
37.	EDN-37 Inservice training of teachers	6.15	..
38.	EDN-38 Improvement in supervision and guidance	7.00	..
39.	EDN-39 Opening of new higher secondary schools	245.00	..
40.	EDN-40 Introduction of artificial sources in technical resources. ..	1.00	..
41.	EDN-41 Setting up of spl. cell at + 2 stage vocational education ..	15.43	..
42.	EDN-42 Introduction of vocational centres	3.00	..
43.	EDN-43 Formulation of vocational education board	5.00	..
44.	EDN-44 Vocational education GIA to voluntary agencies ..	50.00	..

1	2	3	4
45.	EDN-45 Vocationalisation of education, supervision, control and direction and placement	15.20	..
46.	EDN-46 Setting up of Book Banks	35.00	..
47.	EDN-47 Strengthening of library facilities higher secondary schools ..	25.00	..
48.	EDN-48 Strengthening of Directorate of Education and Dist. Education Offices	10.00	..
49.	EDN-49 Construction/repairs in Government secondary schools ..	80.40	80.40
50.	EDN-50 Strengthening of Gujarat Secondary Education Board ..	3.00	..
51.	EDN-51 Strengthening of the State Board of Examination ..	12.96	8.10
52.	EDN-52 Strengthening of institution of vocational guidance ..	1.08	..
53.	EDN-53 Development of Sanskrit Language	2.00	..
54.	EDN-54 Appointment of Hindi teachers in non Hindi speaking States	5.00	..
II. Total—Secondary and Higher Secondary Education		822.29	172.00
III. University and Higher Education			
55.	EDN-55 Gujarat council of studies for special cultural and scientific advancement	11.10	..
56.	EDN-56 Grant to Uni. for Higher administrative and managerial development courses	2.00	..
57.	EDN-57 Performance award to colleges	10.00	..
58.	EDN-58 Development grant to Sardar Patel Insti. of Economic and Research Ahmedabad	1.00	..
59.	EDN-59 Development of Government Colleges	40.00	..
60.	EDN-60 Faculty Development Programme	1.25	..
61.	EDN-61 Assistance to professional association of an academic nature	0.80	..
62.	EDN-62 Assistance to colleges for inviting of experts for lecture and seminars	1.25	..
63.	EDN-63 Spl. Coaching classes for weak students	10.00	..
64.	EDN-64 Provision of matching share against U.G.C. Grant to colleges	35.00	..
65.	EDN-65 Hostel environment programme	1.25	..
66.	EDN-66 Opening of Education and vocational guidance department in Colleges	1.25	..
67.	EDN-67 Grant to the Universities	245.00	..
68.	EDN-68 Grant-in-aid to the Residential University at Bhavnagar ..	100.00	..
69.	EDN-69 Scholarships and freeships (Including for secondary education)	48.00	..
III. Total—University and Higher Education		507.90	..
IV. Games, Sports and Youth Welfare			
70.	EDN-70 Games and Sports	0.70	..
71.	EDN-71 Introduction of National Service Scheme	15.00	..
72.	EDN-72 Integrated Sche. of YW.	45.00	10.00
73.	EDN-73 Expansion of activities of State Sports Council	140.00	45.00
Totl..		200.70	55.00

1	2	3	4
V. Art and Culture			
<i>(i) Development of Libraries</i>			
74.	EDN-74 Library development	.. ..	12.60 ..
75.	EDN-75 Construction of building for new Government libraries	..	24.00 20.00
76.	EDN-76 Furniture for Government libraries	.. ..	1.38 ..
77.	EDN-77 Reading Material for Government libraries	.. ..	3.50 ..
78.	EDN-78 State Contribution towards R. R. Mohan Ray Foundation	..	3.00 ..
79.	EDN-79 Opening of village libraries	.. ..	14.75 ..
80.	EDN-80 Refresher courses for employees etc.	.. ..	2.75 ..
81.	EDN-81 Strengthening of Curator of Libraries	.. ..	0.73 ..
82.	EDN-82 Strengthening of Assistant Curator of libraries	.. ..	2.10 ..
83.	EDN-83 Strengthening of Central Library, Vadodara	.. ..	0.60 ..
84.	EDN-84 Strengthening of Government Dist. libraries	.. ..	4.65 ..
85.	EDN-85 (i) Strengthening of Other Government libraries	..	0.35 ..
	(ii) Strengthening of non-Government libraries	..	1.20 ..
86.	EDN-86 To Improve GIA pattern to villages libraries	..	22.50 ..
Total—Development of Libraries			94.11 20.00
<i>(ii) Other Schemes</i>			
87.	EDN-87 Cultural Schemes—		
	(A) Sangit Academy	.. ..	125.00 100.00
	(B) Lalit Kala Academy	.. ..	25.00 10.00
88.	EDN-88 Development of Archaeology	.. ..	40.00 5.50
89.	EDN-89 Development of Archives	.. ..	35.00 3.78
90.	EDN-90 Development of Museums	.. ..	50.00 38.50
Total—(ii) Other Schemes			275.00 157.78
Total—Art & Culture (i)+(ii)			369.11 177.78
VI. Development of Languages			
91.	EDN-91 Development of Languages	.. ..	100.00 ..
Grand Total—General Education			5560.00 564.48

7.2. TECHNICAL EDUCATION

7.2.1. Introduction

7.2.1.1. The existing facilities for Technical Education in Gujarat State have been provided with a view to satisfying the increasing needs for Technical and specialised manpower in the State and out-side the State. State had concentrated on consolidation and improvement of quality of education through curriculum development, diversification of courses, introduction of new electives through need based training programme, during the Fourth and Fifth Plans and has made continuous efforts to ensure a steady supply of Engineers/Technologists and Technicians, at appropriate level.

7.2.1.2. Gujarat State has established 7 Engineering Colleges and 19 Poly-technics with an intake of 1885 and 3375 seats for degree and diploma courses respectively at the end of 1979-80. There are 44 Technical High Schools which give technical background to secondary school students.

7.2.2. Level of Achievement

(a) Academic

7.2.2.1 During the Fifth Plan, the State has introduced two undergraduate courses in Chemical Engineering with 30 seats and Textile Technology with 20 seats, raising the seats from 1790 to 1840. A part-time degree course in Electronics with 10 intake was started from June, 1976. Seats for the part time degree courses have been raised from 100 to 145 and there by raising the total degree seats from 1840 to 1885.

7.2.2.2. Separate Girls, Wings have been established in four existing Polytechnics (at Rajkot, Bhavnagar, Patan and Adipur) and facilities of training to the girls have been created, with 195 seats for the diploma courses such as Home Science, Radio Technology, Commercial Practice-including Secretariat Practice, Garment Making, Costume Design and Dress Making etc. New diversified diploma courses in Automobile Engineering (30 seats) and Plastic Engineering (30) have been introduced by adjustment of seats since 1974 and 1975 respectively.

7.2.2.3. With the introduction of 10+2+3 pattern, it was considered important to divert major portion of the students from the Universities and channelise them through the need based vocational education courses. Accordingly, the State has started several job oriented vocational certificate courses. 834 additional seats have been introduced at the certificate level. Thus, the certificate courses have been developed but largely augmented by the trade courses run in Industrial Training Institutes.

(b) Faculty :

7.2.2.4. In order to improve the quality and standard of education, teachers were deputed for long term training. The in service short-term courses were

also organised for teachers and the engineers serving in industries were also allowed to participate in such courses. Teachers were deputed for Ph.d. Courses.

7.2.2.5. Institutions have been allowed to extend the consultancy services. Do-It-Yourself exhibition at State level reflecting the creative abilities of staff and students continued to be organised every year.

7.2.3 Perspective of development

7.2.3.1. The policies of State plan will have to be operated within the broad frame work of national policy of Central Government for development of technical education for the Sixth Plan. To-day Gujarat ranks as the third largest State in Industrial output in the Country.

7.2.3.2. Major Projects and Industrial Development:-The following major projects are expected to be developed during the coming years in Gujarat:-

- (a) Narmada valley Development.
- (b) Industrial Development in Fertilisers, Chemicals, Cement, etc.
- (c) Ship building yard and development of Magdalla Port.

7.2.2.3. The growth of Technical Education always gets linked with the growth of economy because, it is the economic growth that provides employment including employment of technologists engineers and technicians. Decisions to take up the above development programmes and the recent modifications in the industrial policy making it labour intensive with adequate supply of engineers and technicians at the appropriate level, have indirectly raised the need for the adequate technical man-power, at the traditional and the non-traditional fields. At the all India level, the technical man-power requirement study was undertaken by the I.A.M.R., New Delhi, based on the new perspectives, strategy and investment priorities. The estimates of man-power based on assumed growth rates, assessment of national income are as under :-

	Engg. degree and diploma holders (in lakhs)	
	1972	1987
(i) Estimated Supply	727.2	870.
(ii) Estimated Requirements low (4.5%)	642.6	875.
Estimated requirements Medium (5.5%)	698.1	1004.
Estimated requirements High (7.0%)	786.5	1224.

Of course, the steps have been taken to improve the efficiency of the institutions thereby minimising the wastage; the supply of technical man-power has been tried to be uplifted, at degree and diploma level.

7.2.3.4. It may, therefore, be necessary to introduce new courses where it may be absolutely essential in the interest of development of specific sectors of the State. The emerging areas attributing to the demand of man-power are therefore (1) Marine Engg., (2) Navigation (3) Port Engg. (4) Polymer and Plastic Engg. (5) Electronics, (6) Rubber Technology, (7) Industrial Design, (8) Irrigation Engg.; (9) Interior Decoration (10) Dairy Engg. (11) Industrial Electronics. (12) Public Health Engg. (13) Rural Engg. (14) Industrial Engg. (15) Bio-Medical Engg., etc. The inter-se priorities of the programmes will be depending upon the needs of the State, in particular field of technology.

Faculty Development

7.2.3.5. It is necessary to continue the existing faculty improvement programmes in respect of practical training of teachers in industry, deputation of teachers for post-graduate and doctoral programmes, short term courses and deputation of Polytechnic teachers to Technical Teachers, Training Institute.

7.2.3.6. The non-teaching technical supporting staff has a direct bearing on the technical education process. Apart from assisting in laboratory experimentation and work shop practice, they are primarily responsible for the maintenance of laboratory equipment instruments etc. This category of personnel will need refresher training to ensure optimum and effective utilisation of resources for instruction.

Continuing Education :

7.2.3.7. More opportunities for upgrading the skills and knowledge should be available to those who are already in the profession to enable them to professionally advance according to their abilities and convenience through continuing education and non-formal/Adult education by way of short-term courses, part-time courses, correspondence courses, etc.

Vocational Education :—

7.2.3.8. The State of Gujarat provides facility of post-S.S.C. diploma and trade courses in technical field extending over 3 years and 2 years respectively. A number of specialised fields have been covered. However, this programme of vocationalisation will progress according to the resources available and also if job-opportunities and training facilities are made available to such large section of X standard pass outs.

Students Amenities and other Programmes :—

7.2.3.9. These schemes will continue to be in operation. The canteen buildings, under construction will be completed and the furniture, utensils, water-

coolers etc. will have to be provided. Moreover, the students residing in the college campus, will be provided the medical attendance facility. The staff quarters and hostel facilities are to be provided where barely needed.

Re-organisation of Directorate:—

7.2.3.10. The State being the implementing agency for most of the educational programmes, the State Directorate have a variety of academic, professional and managerial roles to play the directorate should have organs dealing with man-power assessment, planning, co-ordination, controlling, monitoring and evaluation of education programmes. The directorate should therefore be strengthened with professional academic and techno-administrative staff.

7.2.3.11. The State has introduced Semester system of examination from 1969-70. The work of conducting diploma and certificate courses examination is voluminous and of complex nature. This work has been increasing due to revision of syllabii, introduction of electives and number of diversified courses. The Technical Examination Board will have to be strengthened with technical and non-technical staff.

7.2.4 Review of Progress

7.2.4.1. The position of the institutions together with the intake and other details from time to time is detailed below :—

Plan period	Engineering Colleges Degree		Polytechnics Diploma	
	No. of Institutions	Intake	No. of Institutions	Intake
1	2	3	4	5
1. Ist Plan (1951-56)	4	475	8	760
2. IInd Plan (1956-61)	4	950	11	1475
3. IIIrd Plan (1961-66)	5	1360	18	2705
4. Three Annual Plans (1966-69)	7	1790	19	3255
5. IVth Plan (1969-74)	7	1790	19	3255
6. Vth Plan (1974-78)	7	1840	19	3255
7. Annual Plans (a) 1978-79	7	1840	19	3515
(b) 1979-80	7	1885	19	3705

7.2.5. Development Programmes for 1980-85

7.2.5.1. An outlay of Rs. 600.00 lakhs is proposed for the sub-sector "Technical Education" for the Sixth Five Year Plan 1980-85. The broad break up of the proposed outlay is as under :—

(Rs. in lakhs)		
Sr. No.	Minor Head of Development	Proposed outlay 1980-85
1	2	3
1.	Direction and Administration	10.00
2.	Technical Schools	130.00
3.	Polytechnics	195.00
4.	Engineering Colleges and Institutions	160.00
5.	Scholarships	0.50
6.	Research and Training	10.00
7.	Other Expenditure	94.50
Total		600.00

The programmes are discussed in the following paragraphs.

7.2.5.2. It is proposed to increase the level of 1979-80 by 435 seats at degree level and by 1277 seats at diploma level during the Sixth Plan as per the details shown below:—

Sr. No.	Category of Course	Level of achievement 1979-80	Terminal year target 1984-85
1	2	3	4
I. Degree course			
1.	Full time Under Graduate	1740	2035 (295)
2.	Part time Under Graduate	145	285 (140)
Total		1885	2320 (435)
II. Diploma Course			
1.	Full time	3205	4112 (907)
2.	Part Time	330	540 (210)
3.	Post diploma	170	330 (160)
Total		3705	4982 (1277)

(Figures in bracket indicate net addition)

1. Introduction of 2 1/2 years pattern of technician diploma courses in conventional branches of Civil, Mechanical and Electrical Engineering making a

beginning with 210 seats in 1980-81, at the M.S. University, Polytechnic, Vadodara and gradually extending it at other Polytechnics in the State within the overall intakes sanctioned for the Polytechnics. Some specialised courses are envisaged for a 2 year pattern after XII Std. (Science Stream).

2. Introduction of 1 year specialised course for diploma holders to suit the needs of Narmada Project. This is to be linked up with improvement of ratio of employment to one degree holder to two diploma holders.

Civil Engineering :—

3. To take care of additional demand of Civil engineers for the Narmada Project and the Gujarat Water and Sewerage Board, it is envisaged to increase the level of 1979-80 by 200 seats at degree level and 400 seats at diploma level.

Mechanical Engineering :—

4. To meet the manpower needs of industrial development it is envisaged to increase 65 seats at degree level and 230 seats at diploma level during the Plan 1980-85.

Special Diploma Course :—

5. To take care of future industrial development in chemical fertilizer, engineering industries in areas particularly in South and North Gujarat the following special diploma courses, with an intake capacity of 150 seats during the Sixth Plan are envisaged to suit the demand of specialised technicians :

Name	Seats	Centres
(a) Elec ^t ronics	20	Vadodara or Bharuch
(b) Chemical	20	Bharuch
(c) Man-made fibre (fabrics)	20	Ahmedabad
(d) Man-made fibre (wet processing)	20	Ahmedabad
(e) Ship building Engineering	20	Bhavnagar or Surat
(f) Architectural Assistanceship	30	Ahmedabad
(g) Micro Engineering Technology/Micro Instrumentation Technology.	20	Morbi
Total		150

Post Diploma Course :

6. In order to meet the specialised manpower needs in various fields, the following post-diploma courses of 1 1/2 year are proposed to be introduced in the Sixth Plan :—

Subject	Seats	Centre
1. Foundary Technology	15	Vadodara or Bharuch
2. Plastic Technology	15	Valsad
3. Energy System	30	Vallabh Vidyanagar or Bhavnagar
4. Machine Tools Maintenance (Mechanical, Electrical/Electronics Control)	10	Bharuch or Rajkot
5. Industrial Safety	20	Ahmedabad
6. Interior Decoration	15	Ahmedabad
7. Dairy Engineering	15	Vallabh Vidyanagar
8. Industrial Electronics	20	Rajkot
9. Bio-Medical Instrumentation	10	Ahmedabad
10. Industrial Engineering	10	Bharuch
	160	

Learn while you earn scheme :-

7. Part-time courses are designed and conducted in such a way that the participants get benefit to learn and have opportunities to better their prospects. This scheme is, therefore, essentially "Learn while you earn Scheme". The experience shows that this produces better results than the correspondence courses at the degree and diploma level. It is therefore proposed to increase the existing seats for part-time degree and diploma courses as under :-

Part time courses		
A. Degree Course	Existing Level	Proposed Level
Ahmedabad	115	165
Vadodara	30	80
	145	245
Chemical, Textile Tech. Courses at Vadodra	..	40
		325
B. Diploma Courses		
Bharuch	30	60
Surat	45	90
Rajkot	45	60
Vadodara	70	170
	190	380

C. It is proposed to start part-time post-graduate course in textile chemistry with 20 seats for employees who have academic qualification of bachelor's degree in Science with Chemistry as principal subject.

Diversification :-

8. (a) It is proposed to introduce additional ten seats each for undergraduate courses in Plastic

Technology, Rubber Technology and Silicate Technology at L. D. College of Engineering, Ahmedabad.

(b) It is proposed to introduce new electives at the final year of the under-graduate courses :

- | | |
|--------------------------------|----------------------|
| (i) Micro processor | Ahmedabad |
| (ii) Alternative Energy System | Ahmedabad/Vidyanagar |
| (iii) Industrial Design | Ahmedabad |
| (iv) Marine Engineering | Surat |

(c) It is proposed to increase the existing intake of electronic courses at A. V. Parikh Technical Institute, Rajkot from 100 to 115.

9. It is proposed to make provision for educational research in Poly-technics and Engineering research in Engineering colleges.

Technical High School Level:-

10 (a) Technical High Schools impart secondary education and there is good response to join the technical education. It is therefore proposed to add ten more divisions at the following centres: —

- Girls division at Surat.
- One division at Kapadwanj.
- One division at Junagadh.
- Other places where the demand may come up.

(b) In order to divert the major portion of students from the universities and channelise them through the need based vocational education the following vocations are proposed to be introduced.

- | | |
|---|---|
| (i) Textile Design | 10 G.G.P., Ahmedabad. |
| (ii) Higher Certificate in Spinning (Part-time) | 20 R. C. Technical Institute, Ahmedabad. |
| (iii) Higher Certificate in Weaving (Part-time) | 20 -do- |
| (iv) Radio and T. V. Mechanic. | 16 Government Tech. High School, Ahmedabad. |
| (v) Fitter | 16 -do- |
| (vi) Hand Compositar (Part-time). | 20 R. C. Technical Institute, Ahmedabad. |
| (vii) Machinman (Part-time). | 10 R. C. Technical Institute, Ahmedabad. |
| (viii) Draughtsman Mech. | 16 Govt. Tech. High School, Palanpur. |

(ix) Draughtsman Mech	16	-do-	Patan
(x) Electrician	16	-do-	Surat.

	160		

- (xi) It is also proposed to start other Courses like Draughtsman (Civil) wireman, Electrician Turner, Fitter, etc. where the demand may come up.

11. *Hobby Centres* : It is the felt need to develop the skill and individual interest of students and faculty and also to develop the research talents and provide for opportunities for do-it-yourself activities. It is therefore, proposed to establish Hobby centres in each technical high schools and if any voluntary agency will come-up for such scheme. it is proposed to pay grants to such agencies/organisations. Moreover, it is proposed to pay grants to Rural Vocational Centres.

12. It is proposed to introduce the ad-hoc short duration courses to cater to the varied needs of the society. Such courses will be on self-supporting basis by making use of infrastructure facilities in institutions.

Consolidation and Improvement.

13. It is proposed to consolidate the existing achievements and improve the technical education training facilities, following are the emerging areas;

- (1) Strengthening of Book Service Centres.
- (2) Replacement of obsolete equipments and purchase of modern equipments.
- (3) Development of library facilities.
- (4) To start the sandwich based courses.
- (5) Revision in staff-structures as per all India Council of Technical Education norms.
- (6) Strengthening of computer centre at L. D. College of Engineering, Ahmedabad.
- (7) Strengthening of Accounts Divisions and management and hostels.
- (8) To provide adequate lecturers and head of Departments in Polytechnics, upgrading the existing posts.
- (9) Curriculum revision and provision for equipments for Engineering Experimentation course.

14. It is proposed to develop two more Polytechnic as Community Polytechnics.

Students, amenities.

15. It is proposed to provide for play grounds, canteen buildings, water coolers, fans, furniture for canteens/hostels, Medical facilities (at some selected centres).

Re-organisation of Directorate & Tech. Examination Board.

7.2.5.3. It is envisaged to strengthen the Directorate of Technical Education with the organs dealing with Co-ordination, controlling and evaluation of education programme. It is proposed to provide adequate Staff for Inspection Unit, Accounts Unit and monitoring and evaluation Unit.

7.2.5.4. The Technical Examination Board has introduced a comprehensive Scheme of assessment of answer books. It has various types of special functions. It is proposed to strengthen the activities and administrative set up of the Board.

7.2.6. Special Component plan

7.2.6.1. It is proposed to organise the special classes for Remedial teaching to Scheduled Castes Students for the subjects in which they are found weak.

7.2.6.2. It is proposed to establish Special book Service Centre for students belonging to the Scheduled Castes to give them a set of essential text books.

7.2.6.3. It is proposed to construct hostel block for girls belonging to scheduled castes at the following Centres.

- | | |
|-----------------------------------|----------|
| (a) Government Girls Polytechnic, | 50 Seats |
| Ahmedabad. | |
| (b) K. D. Polytechnic, Patan | 50 Seats |

7.2.7. TRIBAL SUB-PLAN

7.2.7.1. It is proposed to increase the existing seats of diploma courses from 120 to 180 at Government Polytechnic, Dohad.

7.2.7.2. It is proposed to Establish vocational centres and to introduce 52 seats at the Certificate, Trade Courses at Vyara and Chhota-Udepur.

7.2.7.3. It is proposed to start I.T.I. Trade course at the Technical High Schools in the tribal area.

7.2.7.4. It is proposed to construct additional floor on the hostel block at Weir Industrial Institute, Dharampur.

7.2.7.5. It is proposed to construct one hostel building at Government Technical High School Dohad.

STATEMENT

Technical Education

List of Schemes included in the Sixth Five Year Plan, 1980-85

(Rs. in lakhs)

Sr. No.	No. and name of the Scheme	Proposed Outlays 1980-85	
		Total	Capital
1	2	3	4
I. Direction and Administration			
1.	TED-1 Strengthening of Administrative set up of Technical Education Department and Technical Examination Board	10.00	..
II. Technical Schools			
2.	TED-2 Technical High Schools Vocationalisation	130.00	40.00
III. Polytechnics			
3.	TED-3 Development of Government Polytechnics and Girls Polytechnics including quality improvement programme Industrial Training for students diversified and sandwich course at Diploma level	185.00	60.00
4.	TED-4 Grant-in-aid private Polytechnics	10.00	..
		Total—III	60.00
		195.00	60.00
IV. Engineering Colleges and Institutions			
5.	TED-5 Development of Government Engineering Colleges including quality improvement programme and development of other special training programme for specific requirement in Gujarat.	140.00	50.00
6.	TED-6 Grant-in-aid to private Engineering Colleges including S. V. Regional College of Engineering, Surat	20.00	..
		Total—IV ..	50.00
		160.00	50.00
V. Scholarships			
7.	TED-7 Increase in number of scholarships in Engineering Colleges, Institutes	0.50	..
VI. Training and Research			
8.	TED-8 Training of Teachers and Instructors of Technical Institutions	10.00	..
VII. Other Expenditure			
9.	TED-9 Provision for student's amenities in Technical Institutions	16.00	10.00
10.	TED-10 Revision of staff Structure	3.00	..
11.	TED-11 Continuing Education Programme	5.50	..
12.	TED-12 Construction of staff quarter for staff of Engineering Colleges and Polytechnics	30.00	30.00
13.	TED-13 Construction of hostel for Students of Technical Institutions	40.00	40.00
		Total—VII ..	80.00
		94.50	80.00
		Grand Total..	230.00
		600.00	230.00

7.3. MEDICAL AND PUBLIC HEALTH

7.3.1 Health is a state of complete physical, mental and social well being and not merely absence of disease or infirmity. Providing basic health and well being to every man, woman and child in the State is, therefore, the ultimate objective of health services. Efforts have been made continuously to place the medical and health services as close to the people as possible. Considerable expansion of the health and medical services has taken place over a period of planned development. However, the gap between the scale of services required and that actually provided still persists. The gap between the scale of services provided in the rural and urban areas also persists.

7.3.1.1 The programme under this sub-sector of development covers, different fields such as Direction and Administration, Medical Relief, Medical Education and Research and Training (M&H), Public Health, Indigianous systems of medicines Ayurved and Homeopathy, Employees' State Insurance and Drugs Control Administration.

7.3.2 Review of Progress

7.3.2.1 57 Civil and other hospitals with 9086 beds and 15 cottage hospitals with 328 beds normally provide essential medical services. There are 4 mental hospitals and 16 referral hospitals with 601 and 755 beds respectively. All the District Head quarters in the State have been provided with one bed per 1000 population with the joint efforts of Government, local bodies and charitable institutions, 251 Primary Health Centres with 2500 sub-centres under different programmes like Health Programme, Family Welfare Programme, Minimum Needs Programme and Multi-purpose workers schemes are functioning in the State. In order to provide better and efficient medical services in rural areas 11 Primary Health Centres have been upgraded into 25/30 beded Primary Health Centres. 41 Sub-Centres have been upgraded into rural health dispensary centres. To take effective control measures and provide environmental sanitation and laboratory services in rural areas, epidemic cells have been established in 35 Primary Health Centres. There is a full fledged Vaccine Institute at Vadodara producing antirabic vaccine.

7.3.2.2 19 National Malaria Eradication Programme units and 11 National Filaria Control Programme units are functioning in the State. Small pox has been eradicated in the State since May, 1975 and a certificate to that effect has been issued by the International Commission appointed for the purpose. A survey carried out through out the State during 1958-59, revealed high incidence of Trachoma in Saurashtra North Gujarat and Kachchh areas. The Trachoma Control Programme is being implemented through the Primary

Health Centres. National Leprosy Programme has also been implemented in hypoendemic areas of Gujarat State. There are 8 Control Units and 370 S.E.T. Centres in the State. The high incident districts are Valsad, Surat, Dangs, Vadodara, Panchmahal, Junagadh and certain parts of Jamnagar, Rajkot and Sabarkantha District. There are 19 district T.B. Centres with about 3551 beds. Besides, there is one T. B. Demonstration Training and Research Centre at Ahmedabad.

7.3.2.3 Under the multi-purpose workers scheme aiming at delivering of package of health services in an integrated manner in the rural areas, about 7254 multi-purpose workers are in a position in the State. The Scheme for community Health Workers is implemented in the entire State. 19048 Community Health Volunteers have been trained and are working in rural areas.

7.3.2.4 29 Hospitals with 1,366 beds are providing medical services under the ESI Scheme. Besides, 83 dispensaries and 21 Diagnostic Centres are functioning under the scheme.

7.3.2.5 There are two full fledged Public Health Laboratories one each at Vadodara and Bhuj run by the State Government. One Public Health Laboratory at Palanpur has also started functioning on a small scale. The Municipal Corporations of Ahmedabad, Vadodara and Surat have their own fully equipped Public Health Laboratories with local jurisdiction.

7.3.2.6 There are four Government medical colleges and one medical College of Municipal Corporation, Ahmedabad, one Dental College and Hospital, one Nursing College and four nursing schools attached to the teaching medical colleges. The total number of seats in Government Medical colleges is 575. There are nine general nursing schools and 22 A.N.M. training schools attached to various district Hospitals. The capacity of the general nursing schools is 615 and the capacity of A.N.M. training schools is 419. There is one school for training of Physiotherapist at S. S. G. Hospital, Vadodara with intake capacity of 12.

7.3.2.7 There are 26 Ayurvedic Hospitals including 5 attached with Ayurvedic colleges and 381 dispensaries out of which 107 are run by Government and the rest are aided. In addition, 32 private hospitals and dispensaries are also aided by the Government. An Ayurvedic university functions in the State which controls Ayurvedic education in the State. The University runs a college for the study of Ayurved. In addition, there are 5 Government and 9 private colleges. The total number of seats in these colleges is 814 and the total bed strength is 1385.

7.3.3. Approach

7.3.3.1 A wide gap exists even today between urban and rural areas. Moreover, approach to the State Plan has to be conditioned by the demographic profile of the State, geographical and climatic conditions and existing level of Medical and Health facilities in the State. The rate of growth of population in the State (2.9 percent) was higher than the National average (2.5 percent). The mortality pattern in the age below 5 also shows significantly higher death rate in rural areas. The major thrust during the period 1980-85 will therefore be on the expansion and improvement of medical and health facilities specifically in the rural and tribal areas. The whole health structure will be geared up towards achieving this objective.

7.3.3.2 In fact greater emphasis would be placed on reducing infant and maternal mortality by providing nutritious food to the school going children and also comprehensive health services to the rural population. It is proposed to improve management information system for recording the births and deaths and there by to ensure the concentrated efforts being launched against the control of communicable diseases.

7.3.3.3 The need for integration of the Health Programme with the Family Welfare Programme and the great significance of the provision of acceptable and reliable medical facilities in rural areas the Family Welfare Programme has also been kept in view in planning for the Health Programmes.

7.3.3.4 The Revised Minimum Needs Programme in the plan is given due priority. The existing medical institutions in the developed areas are proposed to be adequately equipped and deficiencies in staff, equipments etc. are proposed to be made good so as to bring up the standard and quality of their services. To provide medical facilities to the rural population, a referral structure linking the Primary Health Centres, with the district hospital in each district is also visualised.

7.3.4 Programme 1980-85

7.3.4.1 An outlay of Rs. 7000.00 lakhs is provided in the Plan 1980-85. A broad programmewise break-up of the outlay is given in the following table:—

(Rs. in lakhs)		
Sr. No.	Programme	Outlay 1980-85
1	2	3
I.	Direction and Administration.	15.00
II.	Medical Relief (Medical and Health)	423.00

1	2	3
III	Training (Medical and Health) ..	25.00
IV	Medical Education & Research	660.00
V	Indigenous system of Medicines Ayurved and Homeopathy. ..	120.00
VI	Employees' State Insurance Scheme (State Plan) ..	15.00
VII	Minimum Needs Programme including Community Health Volunteers and Multipurpose Health Workers. ..	2009.00
IX	Drugs Control Administration.	142.00
X	Other Programme ..	
	Health Education, Health Statistics, Sera & Vaccine etc. ..	6.00
XI	Health Services to school children State scheme for payment of additional incentive under the Family Welfare Programme. ..	40.00 285.00
VII	Control of Communicable Diseases	3260.00
	Grand Total ..	7000.00

7.3.5 Medical Relief.

7.3.5.1 The norms for the provision of medical services have been laid down by the Mudaliar Committee. Thereafter various Committees have examined the feasibility of adopting these norms. In Gujarat, the Chatterjee Committee on Health Administration has also suggested certain norms. The structure of Medical services in the State is broad and intensive at the level of medical colleges and district hospitals, and then tapering below the taluka hospitals, dispensaries etc. At the lower levels the structure becomes thinner and merges into rural health structure. This position is sought to be corrected by providing specialist medical services not only at the district hospitals but by making available specialists services at taluka hospitals, primary health centres and referral and cottage hospitals etc.

7.3.5.2 The Municipal Corporation, Municipalities and the District Panchayats also provide medical and health facilities in the State. A number of charitable public institutions and institutions receiving grant-in-aid from Government provide medical facilities. These facilities have also to be taken into account while planning further development of medical facilities in the State. A conscious policy towards acceptance of donations is proposed to be evolved so that such efforts are channelised in areas where medical facilities are needed most. The duplication between the efforts of the Government and local bodies and between allopathic and Ayurvedic system are also proposed to be avoided so that larger resources can be diverted to the problem areas. Suitable provision is proposed to be made for grant-in-aid to charitable institutions. The conditions for eligibility of grant-in-aid are also proposed to be revised so that medical services become available to the rural public. Keeping the above approach in view, it is proposed to implement three major scheme under this sub-head viz (1) to provide one bed per 1000 population with advance medical facilities at all district head quarters hospitals (2) to link up the hospitals below the district level consisting of civil hospitals, referral hospitals, cottage hospitals, and upgraded P.H.Cs. so as to form referral link in the district and (3) arrange all the remaining hospitals, dispensaries, P.H.Cs. and sub-centres to form a uniform pattern of P.H.Cs. Sub-Gentres to be covered under the Revised Minimum Needs Programme.

7.3.5.3 The district headquarter town develop into a fulcrum of infrastructural development towards which the peripheral population naturally gravities. Keeping this in view, it is proposed to develop medical facilities at the district town through the efforts of the local bodies. All district hospitals are proposed to be developed as the main centre of specialised therapeutic services within the district. It is also proposed to cover such services by ophthalmology, skin and venereal diseases. A dental wing adequately supported by the staff team and equipments has also been proposed so as to fill in the gaps and extend these services to all district head quarters hospitals.

7.3.5.4 A referral structure in each district comprising of various types of hospitals below the district level consisting of Civil Hospitals, upgraded primary health centres, cottage and referral hospitals has been envisaged. For this purpose, it is proposed to redesignate uniformly all such institutions below the district level and various amenities available at such institutions are proposed to be rationalised to conform to a uniform pattern so that this structure can provide minimum essential requirements on the uniform basis.

7.3.5.5. At present, there are 16 referral hospitals and one cottage hospital under Public Health Sub-Sector while there are 15 cottage hospitals with Medical Sub-Sector. On an average, there is one referral hospital in each district but 4 districts are without referral hospitals. In order to link up the P. H. Cs. with District Hospitals through Referral Services it is necessary to establish one Referral Hospital in each Taluka with 50 beds according to the pattern of Referral Hospital. It is proposed to strengthen the existing Referral Services by the short fall of beds, equipments and staff.

7.3.5.6 The establishment of separate Taluka hospitals and strengthening of existing Referral Hospitals is proposed for taking over the referral cases from surrounding Primary Health Centres. This will not only provide referral services which is the basic philosophy behind upgradation of primary Health centre but will also allow P.H.C. to maintain its identity as preventive and promotive centre. Expansion of existing referral services between P.H.Cs. and District has been envisaged. Priority will be accorded to remove the gap of the 50 beds pattern and equipment etc. in the existing referral hospitals.

7.3.5.7 It is proposed to provide X-Ray machines as well as mobile X-Rays Services in 10 hospitals in phased manner during the plan period 1980-85. It is proposed to provide Ambulance Services also. It is proposed to construct 6 Ambulance Guarages with Driver's Quarters. It is also proposed to increase 245 beds at 6 district headquarters and hospitals in phased manner and 112 beds to be increased in 7 Taluka hospitals. At present there are 864 staff quarters in District and taluka Hospitals. It is proposed to construct 131 quarters in District Headquarter Hospitals and 49 quarters in taluka hospitals. It is proposed to create in all 50 posts of Medical Officers in hospitals. It is also proposed to have one each casualty section in two hospitals at Rajkot and Bhavnagar. It is proposed to establish one Paediatric Unit, 2 Orthopaedic units, 1 Ophthalmic unit, 3 blood transfusion service centres, 1 mobile surgical unit, 5 mental health care clinics, 1 Re-habilitation unit and dental clinics. An outlay of Rs. 423.00 lakhs has been provided during the Sixth Five Year Plan 1980-85 for undertakings all such activities under "Medical Relief".

7.3.6. Training

7.3.6.1 There is acute shortage of Anaesthetist and Radiologist etc. at Government Medical Institutions. Medical Science is far advancing and surgeons are being appointed in almost all District Headquarters

and Taluka hospitals. It is necessary to train present Medical Officer in anesthetic and radiology so as to help the surgeons in their work. Pending availability of such specialists, it is proposed to train present medical officers in this speciality for about three months for utilising their services in bigger hospitals. It is proposed to train 100 such doctors during the plan period. It is also proposed to strengthen the staff at two General Nursing School at Bhavnagar and months for utilising their services in bigger hospitals. It is also proposed to expand the existing hospitals at Rajkot and Bhavnagar.

7.3.6.2 At present there is shortage of multipurpose health male workers in the State on the basis of 1 per 8000 population. It is proposed to organise training programme for the Multipurpose Health male workers for the period of 18 months. It is also proposed to establish a public Health Institute at Vadodara which would cater to all training programme for the personnel working under the Health Directorate. An outlay of Rs. 25.00 lakhs has been provided for the period 1980-85 for such Training Programmes.

7.3.7. Medical Education and Research.

7.3.7.1 The approach towards Medical Education enunciated by the Government of India is to restrict the out turn of doctors. Emphasis is therefore placed on qualitative improvements in Medical Education. The rationalised pattern of post graduate education is to be involved in the field of medical research. Emphasis is also proposed to be placed on (1) major communicable diseases (2) fertility control research (3) research on nutrition and (4) research on delivery of health services and carrier structure for all paramedical personnel is also proposed to be built up. Health information system based on E.D.P. data and the planning machinery will also be suitably strengthened.

7.3.7.2 Keeping in view these national objectives the approach to the plan for the medical education sub-sector has been to maintain the existing admission capacity in the medical colleges of the State. The deficiency in the requirements as per the Medical Council of India, the Dental Council of India and the Nursing Council of India are also proposed to be made good progressively. It is proposed to strengthen the existing medical teaching institutions towards meeting the requirements of the Medical Council of India. The reduction in the seats at Jamnagar College is proposed to be restored. Provisions for additional 586 beds has been made to maintain the 7:1 ratio of beds to students prescribed by the Medical Council. The requirements of the Nursing Council pertaining

to teaching hospitals and teaching colleges are also proposed to be given priority. As against the additional requirements of 586 beds in three teaching hospitals, 111 beds have already been increased and efforts will be continued to increase at least 200 more beds according to the need and demand of the institutions.

7.3.7.3 It is envisaged to introduce three years' certificate course of Community Health Volunteers at two places namely (1) Navsari and (2) Rajkot in order to cover up a shortage of manpower who will assist the doctors in rural areas. At present doctors who come out from the medical colleges have tendency of settling down in urban areas only because of modern amenities available in cities. This results into unequal balance of technical manpower in rural and urban areas.

7.3.7.4 A programme for training of teachers for medical faculty is envisaged. The programme will offer them an opportunity to learn the basic concept of community need based curriculum development, instructional technology, use of audiovisual aids and continuing medical education for general practitioners of medicines.

7.3.7.5 In order to provide proper training to the under graduate students, internees *i.e.* resident doctors and junior staff members about the specific problems and challenges being faced in the rural areas, the pattern of adoption of a Primary Health Centre by each medical college is proposed. The entire faculty of that particular medical college will participate in understanding the problems in these selected primary health centres.

7.3.7.6 It is envisaged to provide essential services in all teaching hospitals such as laundry plant, generator set, intensive care unit, incinerator and cardiocathator laboratory in Civil Hospital, Ahmedabad.

7.3.7.7 There are certain problems facing Gujarat State which are not common to other States, and so research work on the following problems needs to be taken up :—

(1) Prevention of goitre in certain endemic areas like Rajpipla and Bhavnagar.

(2) Incidence, etilog and prevention of stones in urinary treatment in certain districts in Gujarat like Mehsana and Jamnagar.

(3) Certain occupational diseases reflect in the workers engaged in the salt industries, textile mills, cement factories and diamond cutting profession.

(4) Prevention of blindness, due to deficiency of Vitamin "A" in Sabarkantha, Banaskantha, Dangs and Kachchh. An outlay of Rs. 660.00 lakhs is provided in the Sixth Five Year Plan, 1980-85 for undertaking all such activities under "Medical Education and Research".

7.3.8 Indigenous system of Medicine :

7.3.8.1 Ayurved forms a vital part of the indigenous system of medicines and it has stood the test of time. It is proposed to strengthen Government hospitals in the districts head quarters by providing ayurvedic O.P.D. This will include Yoga Therapy as well. It is also envisaged to start Panchkarma Sections in the existing ayurvedic hospitals. 250 Ayurvedic doctors in Public Health Centres have already been appointed. It is also proposed to start 10 new ayurvedic dispensaries in the rural and non-tribal areas and 15 in the tribal areas. It is also proposed to strengthen the Ayurvedic Pharmacies in the State to accelerate the production and uninterrupted flow of reliable ayurvedic drugs required for the State dispensaries. As the Centrally Sponsored Scheme of Community Health Workers is likely to be extended throughout the State, it is necessary to provide necessary guidance, etc., to the doctors from the Ayurvedic system. One botanical garden at Kachchh district and three in tribal areas have been started. Three herbs collection centre have been started. It is proposed to strengthen these activities. An outlay of Rs. 120.00 lakhs has been proposed for the period of Sixth Five Year Plan, 1980-85 for "Indigenous system at Medicine".

7.3.9 Employees' State Insurance Scheme :

7.3.9.1 The Employees State Insurance Scheme mainly covers industrial workers and provides for medical sickness, maternity, disablement, dependents, benefit etc. The scheme at present is under implementation at 17 centres and provides medical care to 5,99,400 Family Units. It is proposed to establish hospitals at Vadodara, Surat, Kalol, Rajkot, Jamnagar, Bhavnagar, Nadiad and Porbandar and cover the facilities of expanded medical care at these hospitals into full medical care. An outlay of Rs. 15.00 lakhs is proposed for the period of 1980-85 for the purpose.

Public Health :—

7.3.10 Minimum Needs Programme :

7.3.10.1 The Primary Health Centre has been the focal point for radiating Health Services in rural

areas. Increase in the number of P.H. Cs. and their expansion is considered necessary so as to bridge the wide gap between availability of facilities in rural and urban areas. The Government of India has therefore set up the norms of the Minimum Needs Programme with the intention of providing essential health and Medical care to the vulnerable sections of the rural areas. During the Fifth Plan, it was intended to establish one P.H.C. per each community Development Block and one sub-centre for every 10,000 population. Provision of drugs of Rs. 12,000 per annum for each P.H.C. and Rs. 2000 per annum for each sub-centre was also envisaged under the Minimum Needs Programme. These norms have been fully achieved in the State.

7.3.10.2 The Minimum Needs Programme in the Sixth Plan in general envisages to establish one P.H.C. for every 30,000 population in plains and 20,000 in tribal and hilly areas and one sub-centre for every 5,000 population plains and 3000 in tribal and hilly areas by 2000 A.D. In addition it is also envisaged to have one Community Health Volunteer for a population of 1000 or a village by 1990 and establishment of one Community Health Centre for a population of one lakh or one C.D. Block by 2000 A.D.

7.3.10.3 There are 251 Primary Health Centres and as a result of the various Programmes under the Health, Family Welfare, Minimum Needs Programme and the Multi-purpose Workers Scheme, in all 2500 Sub-Centres are functioning in the State at the end of 1979-80.

7.3.10.4 During the period of the Sixth Five Year Plan, it is proposed to establish 25 additional P.H.Cs. raising the total number of P.H.Cs. to 276. It is also proposed to establish 900 sub-centres during the plan period 1980-85 raising the total number of sub-centres at the end of the plan to 3400.

7.3.10.5 It is also envisaged to upgrade one Primary Health Centre for every four Primary Health Centres. The State has already upgraded 11 Primary Health Centres of the existing 251 Primary Health Centres in the State. During the plan period 1980-85, it is envisaged to upgrade additional 5 Primary Health Centres into 30 bedded hospitals. More centres will be upgraded during the subsequent plan period so as to fulfil the set norms.

Backlog of construction :—

7.3.10.6 It is one of the primary requirements to institutions buildings and staff quarters to generate official health services. 9 mobile dispensaries have been

health services. 9 mobile dispensaries have been established in tribal area with a view to render Health Services at the door step of tribals. At present most of the P.H.Cs. have Government buildings. There is a total backlog of construction of 2824 staff quarters of P.H.Cs. and sub-centres. It is proposed to construct 222 sub-centres buildings and 176 staff quarters of P.H.Cs.

Provision of drugs of P.H.Cs.

7.3.10.7 The rate of provision of drugs at Rs. 12,000 per annum for each P.H.C. and Rs. 2000 per annum for each sub-centre has been fully achieved in the State.

Multipurpose Workers Scheme.

7.3.10.8 The multipurpose workers scheme is being implemented in all the districts of the State. The scheme aims at delivering of package of health services in an integrated manner in rural areas. About 7254 Multipurpose Workers are in a position in the State. During the period of Sixth Five Year Plan, it is proposed to expand and strengthen the activities under this Centrally Sponsored Scheme and therefore an outlay of Rs. 151.25 lakhs has been proposed for the period 1980-85 as State's share. It is proposed to create 2211 posts of Male and 1768 posts of Female Multipurpose Workers during Sixth Plan.

Community Health Volunteers.

7.3.10.9 The Scheme of Community Health Volunteers is also being implemented in the entire State. About 19048 Community Health Volunteers have been trained and are working in rural areas. The scheme provides honorarium of Rs. 50 per month to each Community Health Workers and provision of medicines worth Rs. 50. During the period of Sixth Five Year Plan, it is proposed to expand and strengthen the activities under this Centrally Sponsored Scheme and therefore an outlay of Rs. 750.00 lakhs has been proposed for the period 1980-85 as State's share. Both Multipurpose Workerers and Community Health Volunteers Scheme now come within the purview of Minimum Needs Programme under the Health Sector.

7.3.11 Drugs Control.

7.3.11.1 The provision of safe and effective drugs is an important component of the Health care programme. As per the recent amendment in the Education Regulation under Pharmacy Act, out of 5000 unregistered pharmacists, it is proposed to train 2100 untrained pharmacists before September 1984. It is proposed to start 3 centres for Diploma course in pharmacy with

an intake capacity of 30 students each. It is proposed to strengthen the administrative machinery for the enforcement of the prevention of Food Adulteration Act, 1954. It is proposed to expand Drugs laboratory at Vadodara and Bhuj. It is also proposed to start an additional regional laboratory at Rajkot. An outlay of Rs. 142.00 lakhs is proposed for the Food and Drugs Control Administration for the plan period 1980-85.

7.3.12 Other Programmes

(i) Health Education Seera and vaccine.

7.3.12.1 The Vaccine Institute of Vadodara is the only institute manufacturing Seras and Vaccine in the State. It is proposed to take up the programme for the production of Diptheria, Tetanus and Toxide. It is also proposed to provide a moderately sized workshop and augment the supply of laboratory equipments.

7.3.12.2 Under the Health Education Programme, it is also proposed to provide one regional health education unit in the Directorate of Health Services which is expected to cater to the needs of Health Education in the State.

7.3.12.3 It is also proposed to strengthen the staff entrusted with the work pertaining to vital statistics at the Head quarter and the district level. An outlay of Rs. 6.00 lakhs is proposed for 1980-85 for undertaking these activities.

Schools Health Services

7.3.12.4 According to estimates, around 50 lakhs children are in the age group of 6-14 years, who are required to be given medical check-up. Schools are within the jurisdiction of P.H.C. and therefore the P.H.C. it taken as 'unit' for peripheral target. There are 53 Urban Centres under the jurisdiction of Municipal Corporations and local bodies which take care of Health Services. The Corporations have opened despensaries and hospitals in corporation areas. In a long range programme, one school Health Unit per Urban Area will be required. It is proposed to cover up all children during the period of the Sixth Plan. An outlay of Rs. 40.00 lakhs is proposed for 1980-85 for providing school Health Services.

7.3.13 Family Welfare Programme.

7.3.13.1 The Family Welfare Programme will be continued as fully centrally sponsored scheme. However, provision of Rs. 285.00 lakhs is provided for payment of additional incentives from the State to the beneficiaries under the Family Welfare Programme during the period of Sixth Five Year Plan 1980-85.

7.3.14. Centrally Sponsored Scheme on Sharing basis. National Filaria Control Programme.

7.3.14.1 In Gujarat State, it has been estimated that 10 million population is at risk of the disease. The disease is mainly prevalent in coastal areas of southern districts and Saurashtra region extending to hinterland and has also affected urban areas. During the Sixth Plan, the emphasis will be on reduction interruption of transmission by anti larval measures and to reduce reservoir on infection, clinical manifestations by anti-parasitic measures and to delimit problem of filariasis in the State. An outlay of Rs. 18.00 lakhs has been proposed as State's share during the period of Sixth Five Year Plan 1980-85 for this programme.

National Leprosy Control Programme.

7.3.14.2 The objective of the programme is to control the disease through mass domiciliary treatment alongwith early care detection and health education by establishment of Leprosy Control units, S.E.T. Centres and Training centres etc. In Gujarat, the overall prevalence of the disease is estimated to be about 2 per 1000 population. But the disease is mainly prevalent in southern districts of Gujarat viz. Dang, Valsad, Bharuch, Surat, Vadodara and Panchmahal, where the prevalence of the disease varies from 5 to 12 per 1000. With the establishment of more SET centres in low endemic, it has been found that the incidence of the disease in some pockets is fairly high. It has also been found that the disease has shown a downward trend in areas where leprosy control units have done good work. Under the Fifth Plan, some additional components such as temporary hospitalisation beds, leprosy training centres, district leprosy supervisory offices and reconstructive surgery units were added so that complete treatment needs of the patients and other requirements of the programme are met with. In Gujarat, by the end of Fifth Plan, 8 Leprosy control units, 370 SET centres, 20 urban leprosy centres, 2 Reconstructive surgery units, one leprosy Training centre, 6 temporary hospitalisation wards and 4 District Zonal Leprosy Offices were established. During Fifth Plan 100% Central assistance was given by the Government of India for this programme. The units/centres established during Fourth Plan period however, remained under the State sector and are being financed by the State Government. It is envisaged that all the low-endemic and hyper-endemic areas in the State will be adequately covered and the leprosy patients detected through survey etc. will get the required facilities for treatment, hospitalisation and reconstructive surgery.

7.3.14.3 During the Sixth Plan, it is proposed to establish 4 additional leprosy control units, 40 urban leprosy centres and 2 additional reconstructive

surgery units. It is also proposed to establish one more leprosy training centre in the State to meet with the requirement of training. Besides, it is proposed to establish 12 more hospitalisation wards and the District/Zonal Leprosy units in such areas. The total expenditure as proposed under the plan is to be met from the central allocations as per the pattern of assistance for National Control Programme. An outlay of Rs. 40.00 lakhs has been proposed as State's share during the period of Sixth Five Year Plan 1980-85.

National T. B. Control Programme.

7.3.14.4 Since the fifth plan, the schemes, namely (1) supply of Anti-T.B. drugs to State T.B. Clinics, (2) supply of Anti T. B. drugs to T. B. Clinics run by voluntary organisations and supply of BCG vaccine to the State have been continued. The scheme in respect of establishment of "District T.B. centres and establishment of Isolation beds" have been included in the plan and 50 percent central assistance is available for TB programme. An outlay of Rs. 35.00 lakhs has been proposed as State's share during the period of Sixth Five Year Plan 1980-85.

Prevention of Visual Impairment and Control of Blindness

7.3.14.5 National programme of prevention of visual impairment and control of blindness, has been started from the year 1978-79 in Gujarat. The programme envisages the ophthalmic services in rural areas by establishing ophthalmic services in district hospitals and in Primary Health centres by providing trained ophthalmic assistants. Supply of medicines and equipments is being made by Government of India. 5 Hospitals and 70 PHCs have been covered under this scheme till 1979-80. An outlay of Rs. 52.00 lakhs has been proposed as State's share during the period of Sixth Five Year plan 1980-85.

7.3.14.6 Under National Programme for prevention and control of Visual impairment and blindness, District Headquarters Hospitals are required to be upgraded for providing Ophthalmic care. Till 1979-80, in all 9 hospitals have been upgraded. It is proposed to upgrade a few more hospitals during the period of Sixth Five Year Plan. An outlay of Rs. 23.00 lakhs has been proposed as State's share for the period 1980-85. Besides the upgradation of hospitals etc; with a view that eye treatment relief can be given to the community in the shortest possible time, a 20 year National Programme for prevention of Visual impairment and control of blindness is evolved. Central assistance in the form of equipments will t

available from the Government of India. Following items are proposed under this programme:

(1) To raise the bed strength of M & J Institution of Ophthalmology to 280 beds to make it the regional institute by providing highly sophisticated services.

(2) School of Ophthalmic technology.

(3) Mobile Ophthalmic Unit.

(4) Merging of mobile ophthalmic units of tribal areas into national programme for prevention of visual impairment and control of blindness.

(5) To upgrade the ophthalmic department of medical colleges at Surat and Jamnagar.

An outlay of Rs. 30.00 lakhs has been proposed as State's share during the period of Sixth Five Year Plan 1980-85 for undertaking these activities.

Re-orientation of Medical Education.

7.3.14.7 Under this scheme, each of the Medical College is expected to adopt 3 P.H.Cs. for the purpose of teaching and training the under graduates and internees and to provide comprehensive Health care to the rural population. An outlay of Rs. 30.00 lakhs has been proposed as State's share during the period of Sixth Five Year Plan 1980-85.

National Malaria Eradication Programme.

7.3.14.8 The objectives of Modified Plan of Operations of Malaria Programme implemented from 1st April, 1977 are as under:—

- (1) To prevent deaths due to malaria.
- (2) To keep the malaria morbidity under check.
- (3) To prevent adverse effects of malaria on agriculture and industry.
- (4) To consolidate the gains achieved so far.

These objectives are to be achieved through

- (i) Government efforts
- (ii) People's participation
- (iii) by reach and
- (iv) training.

(i) Government efforts :—

(a) Reorganisation of Malaria Units to conform to geographical boundaries of the District for better supervision by the District Health Officer, who is entrusted with the responsibility to implement the programme.

(b) Carrying out the effective insecticidal spray in areas with an API 2 and above (Annual Parasite in-

cidence = number of malaria cases per thousand population per year).

(c) Fortnightly surveillance of fever cases by Multipurpose Health Workers in rural areas and party in urban areas. Augmentation of the field staff has been made by increasing Multipurpose workers and supervisors.

(d) Five posts of Zonal Officer (Malaria) and 5 posts of Assistant Entomologists are created for better technical supervision and detailed entomological investigations.

(e) Priority is being accorded to areas which are predominant to *P. falciparum* infection.

(f) In order to minimise morbidity period due to malaria, Drug Distribution Centres (DDCs) and Fever Treatment Depots (FTDs) have been started with the help of village Panchayats, Voluntary organisations, school teachers, and Community Health workers.

(g) With a view to providing immediate diagnosis and treatment to malaria cases, malaria clinics have been started in Government Hospitals, Dispensaries and Primary Health Centres where facility of Laboratory Services is available.

(h) To reduce the timelag between the blood smear collection and examination and to reduce the time in giving the Radical Treatment to malaria cases laboratory services have been decentralised at the level of Primary Health Centres under the supervision and guidance of Medical officers and Primary Health centres.

(I) Urban Malaria Centres will be started in urban areas having a population more than 40,000 in phased manner.

(ii) People's participation :—

No health programme can succeed unless people concerned are actively involved. Village Panchayats, Yuvak Mandals & Mahila Mandals, School teachers, social workers etc. are actively involved in malaria programme by organising orientation trainings, shibirs for them. Better coverage in insecticidal spray and better performance in surveillance workers and better acceptance in Radical Treatment are achieved by imparting health education to health staff and by organising mass media publicity.

(iii) Research Activities :—

Three Research Projects are functioning since 1978-79 in the state under the auspices of Indian Council of medical research for finding out alternative control measures in malaria.

Diseases at Delhi. District Health Officers have been imparted orientation training in Malaria at Regional level at Vadodara. Medical Officers of Primary Health centres have been given training regarding their role in control of malaria under the new strategy at Zonal and District level.

(iv) Training :—

Zonal Officers, Entomologists, District Malaria officers are being trained in malariology, Malaria entomology etc at National Institute of Communicable

7.3.14.9. All the above activities are proposed to be continued during the Sixth Plan with suitable modifications as and when necessary. An outlay of Rs. 3115.00 lakhs has been proposed as State's shares for the Sixth Five Year Plan period 1980-85.

STATEMENT

Medical and Public Health.

List of Scheme included in the Sixth Five Year Plan, 1980-85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan, 1980-85 outlays	
		Total	Capital
1	2	3	4
I. Direction and Administration			
1.	HLT-1 Direction and Administration (Medical)	4.69	..
2.	HLT-2 Strengthening of Health Directorate (Health)	5.36	..
3.	HLT-3 Strengthening of District Health Organisation (Health)	4.95	..
	Sub-Total—I	15.00	..
II. Medical Relief			
4.	HLT-4 X-Ray Services to Hospitals.	5.00	..
5.	HLT-5 Ambulance Services.	3.00	..
6.	HLT-6 Ambulance Garage Drivers' quarters.	3.00	3.00
7.	HLT-7 Increase of beds in District Head-quarters Hospitals.	110.00	40.00
8.	HLT-8 Increase of beds in Taluka Hospital	45.00	20.00
9.	HLT-9 Staff quarters in District Headquarters Hospitals.	32.00	32.00
10.	HLT-10 Staff quarters in Taluka Hospitals.	30.27	30.27
11.	HLT-11 Padiatric Services.	13.00	..
12.	HLT-12 Orthopaedic Unit.	5.00	2.00
13.	HLT-13 Ophthalmic Units and Eye Camp.	5.00	..
14.	HLT-14 Blood Transfusion services centros.	4.00	..
15.	HLT-15 Emergency Medical Aid (Casulty Department).	3.00	..
16.	HLT-16 Mobile Surgical Units at District Hospitals.	2.00	..
17.	HLT-17 Mental Health at District Hospital.	8.00	..
18.	HLT-18 Expansion of Mental Hospital at Jamnagar.	15.00	15.00
19.	HLT-19 G. I. A. to Cancer Hospital.	2.00	..
20.	HLT-20 Interness quarters.	6.00	6.00

1	2	3	4
21.	HLT-21 Rehabilitation Unit (Physiotherapy and occupation thereapy)	4.00	1.00
22.	HLT-22 Air Conditioner Unit of Operation Theatre	5.00	1.00
23.	HLT-23 Provision of Medical Officers in Hospitals.	5.00	..
24.	HLT-24 Improvement of nursing Care in Hospitals.	25.00	..
25.	HLT-25 Additional Staff Classes-III, IV and Technical.	30.00	..
26.	HLT-26 Specialists Services at all Taluka Hospitals Anciliary/requirement	4.00	..
27.	HLT-27 Dental Clinics.	4.00	..
28.	HLT-28 Prevention of visual impariment and control of blindness	23.00	..
II. Health			
29.	HLT-29 Strengthening of existing referral Hospitals.	25.16	11.95
30.	HLT-30 Conversion of Cottage Hospital into referral Hospital.	6.57	4.10
	Sub-Total (II) ..	<u>423.00</u>	<u>166.32</u>
Training.			
Medical.			
31.	HLT-31 Training to Medical Officers in Paediatric etc.	0.80	..
32.	HLT-32 Construction of Hospital for nurses.	2.00	2.00
33.	HLT-33 Expansion of A. N. M. and Central Nursing School.	20.95	..
Health.			
34.	HLT-34 Certificate course in H. V. School.	1.25	..
	Sub-Total (III)	<u>25.00</u>	<u>2.00</u>
IV. Medical Education and Research.			
35.	HLT-35 Expansion of Medical College and Hospital at Ahmedabad.	111.98	27.50
36.	HLT-36 Expansion of Medical College and Hospital at Vadodara.	114.31	38.50
37.	HLT-37 Expansion of Medical College and Hospital at Jamnagar.	113.33	52.50
38.	HLT-38 Expansion of Medical College and Hospital, Surat.	192.88	108.50
39.	HLT-39 Expansion of Medical Education facilities.	25.00	..
40.	HLT-40 Strengthening of Medical records organisation.	5.00	..
41.	HLT-41 Strenthening of libraries in Medical Colleges.	8.00	..
42.	HLT-42 Specialists Unit.	8.41	0.41

1	2	3	4
43.	HLT-43 Expansion of Dental College and Hospital, Ahmedabad.	4.09	2.59
44.	HLT-44 Expansion of General Nursing School.	3.00	..
45.	HLT-45 Expansion of Nursing College at Ahmedabad.	14.00	10.00
46.	HLT-46 Prevention of Visual Impairment and control of blindness	30.00	..
47.	HLT-47 Re-orientation of Medical Education	30.00	..
	Sub-Total (IV) ..	660.00	240.00
V. Indigenous system of Medicine Arurved and Homeopathy.			
48.	HLT-48 Taking over of Ayurvedic College and expansion of existing Ayurved College.	5.00	5.00
49.	HLT-49 Construction of Hostel building.	1.00	1.00
50.	HLT-50 Development of Ayurvedic University, Jamnagar.	1.00	..
51.	HLT-51 G. I. A. to Homeopathic Institutions.	1.00	..
52.	HLT-52 Trainees training.	0.50	..
53.	HLT-53 Expansion of Ayurvedic Hospital attached with teaching Colleges	6.50	1.50
54.	HLT-54 Opening of New Ayurvedic dispensaries in rural areas.	20.00	..
55.	HLT-55 Construction of Dispensary building with Staff quarters.	1.00	1.00
56.	HLT-56 Strengthening the directorate of Ayurvedic and starting of district ayurvedic offices.	10.00	..
57.	HLT-57 Opening of new ayurvedic hospitals and expansion of existing ayurvedic hospitals.	13.00	2.00
58.	HLT-58 Botanical surveys and Herbs Garden	6.00	..
59.	HLT-59 Upgrading and expansion of Pharmacy.	2.00	0.50
60.	HLT-60 Establishment of Collection Centres.	6.00	..
61.	HLT-61 Opening of Ayurvedic wing in District headquarter hospital (Allopathy).	1.00	..
62.	HLT-62 Provision of Panch Karma Section in Government Ayurvedic hospital.	1.00	..
	Sub-Total (V) ..	120.00	11.00
VI. Employees State Insurances Scheme.			
63.	HLT-63 Employees State Insurance Scheme.	15.00	..
	Sub-Total (VI) ..	15.00	..
VII. Public Health			
Prevention and Control of Communicable Diseases :-			
64.	HLT-64 National T. B. Control Programme	35.00	16.64
65.	HLT-65 National Filaria Control Programme	18.00	..
66.	HLT-66 Prevention of Visual Impairment and control blindness	52.00	..
67.	HLT-50 National Leprosy Control Programme	40.00	..
68.	HLT-68 National Malaria Eradication Programme	3115.00	..
	Sub-Total (VII) ..	3260.00	16.64

1	2	3	4
VIII. Minimum needs Programmes.			
69.	HLT-69 A Upgrading of PHCS into 30 beded hospitals.	150.00	50.00
70.	HLT-70 Construction of Taluka hospital for Referral Services and strengthening of taluka Referral hospital.	77.50	25.50
71.	HLT-71 Construction work of sub centres of P. H. Cs building	55.50	55.50
72.	HLT-72 Drugs and Medicines to PHCs (Estt. of new P. H. Cs.)	178.40	..
73.	HLT-73 Upgrading sub-centres of PHC into dispensaries with maternity facilities.	462.30	50.00
74.	HLT-74 Strengthening of PHC.	184.05	92.80
75.	HLT-75 Community Health Volunteer Scheme	750.00	..
76.	HLT-76 Multipurpose Workers Scheme	151.25	..
	Sub-Total (VIII) ..	2009.00	273.80
IX. Other Programme			
77.	HLT-77 Expansion of Vaccine Institution, Vadodara.	3.50	1.00
78.	HLT-78 Creation of Regional Health Education Unit.	1.25	..
79.	HLT-79 Strengthening of Health Statistics.	1.25	..
	Sub-Total—IX ..	6.00	1.00
X. School Health Services			
80.	HLT-80 Health Services to the School going Children	40.00	..
	Sub-Total—X ..	40.00	..
XI. Drugs Control			
81.	HLT-81 Training of pharmacist	36.57	..
82.	HLT-82 Expansion of administrative section of Drugs Control Administration for enforcement of Drugs and Cosmetics Act, 1980 and Drugs and Magic remedies (Objectionable advertisement) Act, 1954.	53.57	..
83.	HLT-83 Expansion of Intelligence branch	0.73	..
84.	HLT-84 Expansion of Drugs Laboratory, Vadodara	43.04	10.00
85.	HLT-85 Esstt. of Regional Laboratory	6.74	5.00
86.	HLT-86 Estt. of Planning and Statistical Cell.	1.55	..
	Sub-Total—xi ..	142.00	15.00
87.	HLT-87 State Schemes for payment for additional incentive under Family Welfare Programme	285.00	..
	Grand Total :—	7000.00	725.76

7.4. FAMILY WELFARE PROGRAMME

Introduction :

7.4.1. As in the previous plans, the Family Welfare Programme will continue to be a Centrally Sponsored Programme during the Plan period 1980-85. The strategy will be to integrate the health, Family Welfare, Maternity and Child Health and Nutrition Services at all levels and to secure the general integration of the Family Welfare Programme with other programmes.

Demographic Profile.

7.4.2. In terms of population Gujarat ranks 10th among the States in India. During the decade 1971-81, the rate of growth of population in Gujarat has declined from 29.4 per cent to 27.2 per cent. Gujarat has thus recorded an Annual growth rate of 2.7 per cent as against the national growth rate of 2.4 per cent. The State also has a higher fertility rate in the age group 20-24 and 25-29. The general fertility rates as projected by the expert committee for the periods 1971-75 and 1976-80 are 188 and 150 respectively. The above figures clearly indicate that the population of Gujarat is growing at an alarming rate. The birth rate which was 45.7 during the decade 1951-61 has declined to 35.1 during 1979 showing decline of 10.6 points or about 23 per cent. While the death rate which was 23.5 during the decade 1951-61 has declined to 13.6 during 1979 showing decline of 9.9 points or about 42 per cent. This shows that the death rate is declining much faster than the birth rate. The impact of improved health measures have aggravated the basic demographic imbalance by reducing death rate while leaving the birth rate insufficiently adjusted to this change. If the present growth rate continues unchecked, the population of Gujarat will be around 4.5 to 5 crores by the turn of the century. Thus, undisputably, Gujarat is facing a population explosion of crisis dimensions. This points to the need for a massive effort to scale down the birth rate to 30 per thousand population by 1982-83 and 25 per thousand population by 1984-85.

Review.

7.4.3. Performance during the year 1977-78 and onwards in respect of birth control measures is indicated by the following table :-

Methods.	Achievements (Nos. in '000)					
	Terminal year 1984-85 Target.					Cumulative 80/81
	77/78	78/79	79/80	Target 80/81		
	1	2	3	4	5	6
Sterilisations		112	197	220	162	1000
IUD insertions		30	35	38	47	420
Conventional contraceptives.		155	205	187	254	1330

7.4.4. The number of couples protected in the productive age group is given in the table below :

Year	Estimated couples in productive age group. ('000)	No. of couples protected.	
		No.	% age
1977-78	5264	1309	24.9
1978-79	5383	1436	26.7
1979-80	5487	1519	28.8

(Figures in '000")

I.U.D. insertions.		Conventional contraceptives.	
No.	% age.	No.	% age
5	6	7	8
78	1.5	155	2.9
89	1.6	205	3.8
99	1.18	186	3.4

7.4.5. Since the inception of the programme, 22.6 lakhs sterilisation operations have been performed in Gujarat till December, 1980 giving a cumulative rate of 69.5 sterilisation per thousand population. A total of 3.9 lakhs of I. U. D. insertions have been carried out till December 1980 giving a cumulative rate of 12.5 IUD. insertions per thousand Population. Taking all the methods of family welfare into account, 18.4 lakhs couples are currently protected in Gujarat till March 1980. The birth rate in the State has dropped from 45.7 during the decade 1951-61 to 35.1 per thousand during the year 1979 according to sample registration surveys, thus recording almost a 10.6 point decline.

Programme for 1980--85.

7.4.6. To achieve the goal of reduction in the birth rate to a level of 25 per thousand Population by the end of 1980-85, it is proposed to achieve the targets of 10.00 lakhs sterilisation, 4.20 lakhs IUD insertions and 13.30 lakhs conventional contraceptive users during the period 1980-85. However these targets are provisional

and subject to the norms fixed by Government of India. The different programmes proposed to be undertaken during the plan period 1980-85 are given below :—

Post Partum Programme.

7.4.7. The main objective of the post Partum Programme is to maximise contraception among the target Population in the community catered to by institutions which attract large number of confinement cases. There are 36 Post Partum Units functioning in the state as on 31st December 1980. 382 sterilisation beds are sanctioned under Post Partum Programme till 31st December 1980. Besides, 802 reserve beds have been sanctioned under the sterilisation maintenance schemes upto 31st December 1980. 80 Post Partum centres are proposed to be created during 1980-85.

Medical Termination of Pregnancy.

7.4.8. The Medical Termination of Pregnancy Act, 1971, is in force in the State. There were 448 Medical Termination of Pregnancy centres recognised by the Government at the end of December 1980. A training Programme for Medical Officers working in Primary Health Centres and Rural Family Welfare Centres has been organised. The number of medical terminations of Pregnancy performed is as under:—

Year	No. of M. T. Ps.
1975-76	10995
1976-77	15863
1977-78	16780
1978-79	23033
1979-80	21316

7.4.9. To cope up with the rise in tubectomy acceptance a new dimension is proposed to be added to the Programme from 1980-81; that is the laproscopic tuballigations camp approach. In Gujarat, Laproscopic tuballigations are proposed to be conducted at recognised hospitals where trained surgeons and instaruments are available. Under the camp approach, Surgeons competent in the technique will be sent to district or sub-district hospitals together with other doctors to perform laproscopic tuballigation.

Oral Pill Programme.

7.4.10. In Gujarat State, Oral pill Programme was started on a pilot basis in 7 centres during 1973-74. The Programme has since been intensified and oral contraceptive tablets are now

distributed by all rural family welfare centres, Post Partum Units, and Urban Family Welfare Centres. Since the beginning of 1978-79 upto December 1980, 6.30 lakhs oral pill cycles have been distributed in the State. This programme is proposed to be intensified during Sixth Five Year Plan 1980-85.

Provision of Sterilisation Facilities under British aid scheme in Rural and Semi Rural Area :

7.4.11. The British Aid Programme aims the extension of sterilisation facilities in rural and semi rural areas by providing assistance to purchase the necessary surgical equipments and to renovate existing labour rooms at the Primary Health Centres and Sub-Divisional Hospitals. Such facilities have been sanctioned at 48 P.H.Cs. and sub-divisional Hospitals by Government of India.

7.4.12. The Family Welfare Programme is wholly Centrally Sponsored. An outlay of Rs. 6477.04 lakhs is proposed for the Programme for the five year plan, 1980-85. The additional facilities proposed to be created during 1980-85 are as under :—

Additional facility	Number
	1980-85
Rural Family Welfare Centres	160
Urban Family Welfare Centres	103
Mobile sterilisation and IUD Units.	64
Post Partum Units.	80
Conversion of labour rooms in PHCs. to operation theatres.	221

7.4.13. The Programme for 1980-85 also envisages the expansion of Vasectomy services in rural areas, increased distribution of conventional contraceptives, strengthening of the staff structure in post partum units at Government teaching hospital and elsewhere, the construction of building for all Rural Family Welfare Centres and the expansion of mass media activities.

7.4.14. The Government of India has recently sanctioned a special project for the speedy development of infrastructure for Health and Family Welfare in Panchmahals and Bharuch districts. The project aims at improvement in the delivery of health services in rural, backward, and tribal areas. An outlay of Rs. 1185.34 lakhs for the Five Year Plan 1980-85 has been proposed for the project by the Government of India. This outlay will be in addition to the provision made for the centrally sponsored Family Welfare Programme.

7.5. SOCIAL INPUTS

7.5.1.1. The UNICEF has expanded the scope and range of the programmes and projects being supported by it in the country over the period of last three decades. In the recent past the scope has been further expanded and the UNICEF assistance is now being provided for supporting a broad spectrum of development programme such as rural development projects, income generating activities for women, environmental sanitation, etc.

7.5.1.2. In pursuance of the suggestion made by the Government of India to prepare suitable projects for availing of the assistance from UNICEF for Area Development for Social Inputs, the State Government has selected nine districts for the purposes and have retained nine State based institutions to help for formulating the area plans for these nine districts.

7.5.1.3. The selection of the districts as also the Voluntary agencies and professional institutions has been approved by the Government of India and the UNICEF representatives have been associated at various stages in the process. A seminar was organised at Gandhinagar in February, 1980 where the official functionaries administering the social services facilities in the Districts, the Collectors and Officers from the State Level Departments closely concerned with social services development, were fully briefed regarding the formulation of plan programmes and projects for the selected areas in the field of the social services. Representatives of UNICEF also participated in the seminar.

7.5.1.4. In order to enable presentation of some projects for availing of UNICEF assistance during the 1980-81 year, it has been envisaged to prepare the interim plan for two talukas in each of the selected nine districts and the remaining areas are expected to be covered during the course of the plan period. The professional institutions have been entrusted with the work of preparation of plans in consultation with the Collectors of districts, the District Panchayats and other officials, the Voluntary Organisations and the District Planning Boards. These institutes will conduct surveys, collect baseline data and carry out situation analysis and feasibility studies while formulating the plan and projects.

7.5.1.5. A State Level Steering Committee is constituted to oversee the progress of preparation of plan and monitor entire project work.

7.5.1.6. The sectors and programmes which UNICEF is likely to assist are :—

1. Health care : Primary health care for the mothers, infants and children, health education and disease control;

2. Clean water for drinking;

3. Nutrition education and provision of nutritious food;

4. Education : Pre-primary and primary;

5. Training for health workers, school teachers, social workers;

6. Welfare services : balwadis, day care centres, youth and women's groups and self-help projects to improve family and community life.

7.5.1.7. UNICEF assistance is expected to have particular reference to the needs of children and women belonging to weaker sections of society with special emphasis on those belonging to scheduled castes and scheduled tribes. Illustrative examples of possible sector of assistance as incorporated in the guidelines issued by the Government of India are :—

(i) training of personnel of nutrition programme and support for applied nutrition activities

(ii) health and nutrition education;

(iii) primary health care for children and mothers including immunization programmes;

(iv) rural water supply and environmental sanitation;

(v) pre-school and non-formal education;

(vi) simple technological programme for women, aimed at benefitting the family and the children;

(vii) upgradation of skills as a preliminary to the addition of social inputs to the area development programmes;

(viii) projects and plans of community centres;

(ix) rural multi-purpose community participation;

(x) individual based programmes like "Antyodaya" taken up recently by some of the State Governments;

(xi) income generating programmes for women.

7.5.1.8. Preference is to be given to the integrated child development projects in the frame-work of Community projects.

7.5.1.9. It is envisaged that the projects to be undertaken in different districts need not be necessarily identical. The programmes to be included would depend upon the local needs of the projects areas. Besides, the actual extent of participation by UNICEF is still to be ascertained. However, the programmes for Area Development are expected to be comprehensive so as to take care of all the relevant sectors of development. During the year 1980-81 two talukas in each of the selected districts have been taken up and other talukas will be taken up subsequently during the plan period. An outlay of Rs. 500.00 lakhs is proposed for the Sixth Five Year Plan 1980-85 for the purpose.

STATEMENT

Social Inputs

List of scheme included in the Sixth Five Year Plan 1980--85 outlays

(Rs. in lakhs)

Sr. No.	No. and name of the scheme	Proposed outlay 1980--85	
		Total	Capital
1	2	3	4
1. SIP--1.	Social Inputs in Area Development	500.00	..

7.6 SEWERAGE AND WATER SUPPLY

7.6.1.1 The Programmes under the Sewerage and Water Supply Sub-Sector envisage the provision of safe and protected water supply and sanitation facilities in the urban and rural areas of the State. Supply of protected drinking water in adequate quantity and safe disposal of waste water are essential for preservation and promotion of public health. With the rapid urbanisation and concentration of large industries in certain areas of the State, the problem of treatment and safe disposal of waste water calls for serious attention. The problem of air pollution though localised at present to certain industrial belts has started causing concern and is required to be checked in its infant stage. The programmes under the sub-sector mainly concentrate on development of rural water supply, urban water supply, urban drainage and effective control measures for preventing water and air pollution.

7.6.1.2 There are 18275 inhabited villages in the State covering about 72% of the total population of the State and the remaining 28% of the population is covered in 216 towns. Out of the said villages 9600 villages, i. e. about 50% of the villages in the State have been identified as 'No Sources' problems villages upto June, 1977. The State Government has given the highest priority to the programmes of providing drinking water supply facilities to these villages.

7.6.2. Review of Progress :

7.6.2.1. About 4514 'No Source' villages under the rural water supply programme, 167 towns out of 216 towns including Corporation towns under urban water supply programme and 22 towns under the urban drainage programme were covered upto the end of the year 1979-80.

The following table shows the level of development reached at the end of 1979-80 in respect of selected programmes :

Programmes	Total	covered	Re-upto	main- ing to
			the end of	be covered
			1979-80	
1. Urban Water Supply (Towns)	216	167		49
2. Rural Water Supply (No Sources Villages)	9600	4514		5086
3. Urban Drainage (Towns)	216	22		194
4. Conversion of dry latrines.	106383	76383		30000

7.6.2.2. Certain handicaps were being experienced in implementing the sewerage and water supply schemes during the Fifth Plan. The following corrective measures have been taken :—

(1) Powers of field officers have been suitably raised to expedite sanction.

(2) Instead of elevated services reservoir, ground service (cisterns) are being constructed in the rural areas.

(3) Departmental purchase committee has been constituted for purchase of pipes, spare-parts and machinery.

(4) It has been decided to let out jobs on "turn-key basis".

(5) Implementation machinery has been strengthened.

(6) It is proposed to provide loans to the needy local bodies in cases where LIC loans are not available.

7.6.3. Objectives and Strategy

7.6.3.1. As regards water supply, the main thrust in the plan would be towards achieving the following objectives:—

(i) to cover the remaining "No Source" (Problem) villages with potable drinking water.

(ii) to provide piped water supply facility to more towns and to strengthen and augment urban water supply in areas which are currently having inadequate piped water supply, and

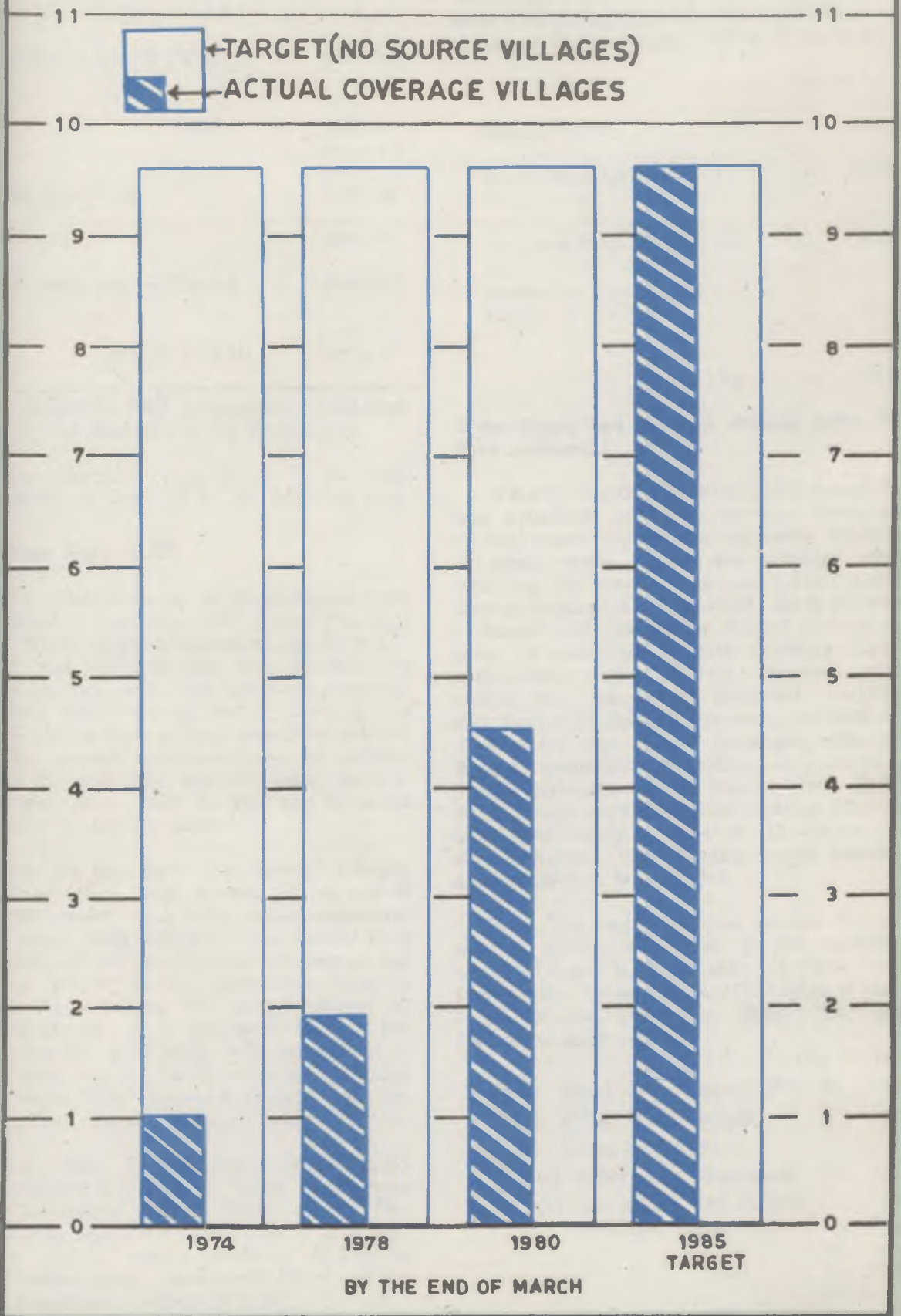
(iii) to cover predominantly industrial cities with sewerage facility.

7.6.4. Development Programme 1980-85

7.6.4.1. An outlay of Rs. 15076.00 lakhs is proposed in the Sixth Five Year Plan 1980-85. The broad programmewise break up is as under:—

(Rs. in lakhs)		
Sr. No.	Programme	Outlay Proposed 1980-85
1	2	3
1.	Survey and Investigation	100.00
2.	Research	5.00
3.	Urban sanitation	350.00
4.	Rural sanitation	26.00

RURAL WATER SUPPLY IN THOUSAND VILLAGES



BY THE END OF MARCH

1	2	3
5.	Urban Water Supply	487.00
6.	Rural Water Supply (G.I.A.) ..	8.00
7.	Rural Water Supply (MNP) ..	3500.00*
	Total : ..	4476.00
	Market Borrowing ..	1500.00
	LIC Loan ..	2500.00
	World Bank assisted Project ..	6600.00*
	GRAND TOTAL ..	15076.00

*In addition Rs. 3000 lakhs under world bank projects for Minimum Needs Programme.

7.6.4.2. The main programmes in the Sixth Plan 1980-85 are discussed in the following paragraphs.

Rural Water Supply (MNP)

7.6.4.3. Most areas of the State depend upon rainfall which is insufficient and erratic. The large areas in North Gujarat, Saurashtra and Kachchha are arid and semi-arid and they do not get adequate rainfall, only a few rivers are perennial. Apart from this, in some areas bordering the rann of Kachchha there is high salinity in sub-soil water. The coastal areas also have the problem of salinity in water. The sub soil water table is going lower from year to year and in some areas water is turning saline.

7.6.4.4. Of the 9600 "No Source" Villages, 4514 villages have been covered by the end of March 1980, under rural water supply programme leaving about 5086 villages to be tackled from the beginning of 1980-81. The State Government has given top priority to this programme so as to cover all the remaining "No source" villages by the end of 1984-85. It is estimated that as per present rates Rs. 8600 lakhs will be required to provide water supply facilities to cover remaining 5086 villages. It is targetted to cover all the remaining "No source" villages during 1980-85.

7.6.4.5. Since 1977-78, Government of India has reintroduced in a Central Sector Programme namely "Accelerated Rural Water Supply Programme" fully financed by the centre. It is proposed to obtain central assistance at least of Rs. 2100 lakhs under Accelerated Rural Water Supply Programme during 1980-85.

7.6.4.6. Of these remaining villages, some regional as well as individual Rural Water Supply Schemes proposed for World Bank assistance estimated to cost Rs. 3000 lakhs are expected to be completed during 1980-85. A provision of Rs. 6500 lakhs (3600-2100 lakhs) is proposed under the State plan during 1980-85. The broad break up of the Rural Water Supply outlay is as under:—

	(Rs. in lakhs)
Normal (MNP)	3500
World Bank (MNP)	3000
Total State Plan ..	6500
Accelerated Rural Water Supply (C.S.P.) ..	2100
Total : ..	8600

Water Supply and sewerage Projects under World Bank assistance :

7.6.4.7. The Gujarat Water and Sewerage Board has submitted a project package consisting of (i) rural water supply and sanitation scheme and (ii) urban water supply and sewerage schemes including the sewerage schemes of Ahmedabad and Rajkot Corporations. The world Bank Mission has evaluated and identified a Project package consisting of twenty sub-Projects including those of corporations. These would include sewerage scheme of Ahmedabad Municipal Corporation and Rajkot Municipal Corporation, the water supply schemes for six cities Jamnagar, Bhavnagar, Nadiad, Surendranagar, Godhra, and Anand and one Savarkundla town. Further ten Regional Rural water supply schemes covering 285 villages and water supply schemes of 111 villages (including individual village water supply scheme) are also proposed to be included.

7.6.4.8. The project package consists of a provision for training also. This project package is estimated to cost Rs. 10600 lakhs, of which expenditure to the extent of Rs. 10200 lakhs is planned to be incurred during the Sixth Plan period 1980-85 as under :-

	(Rs. in lakhs).
(1) Rural water Supply(MNP)	Rs. 3000
(2) Urban Water Supply.	Rs. 1950
(3) Urban Sewerage.	
(a) Other than Corporation	Rs. 1050
(b) Ahmedabad and Rajkot Municipal Corporation.	Rs. 4200
Total ..	Rs. 10200

Out of this, a provision of Rs. 6000 lakhs is provided in the State Plan. Of the remaining Rs. 4200 lakhs pertaining to sewerage projects of Ahmedabad and Rajkot Municipal Corporation; a provision of Rs. 500 lakhs is proposed in the plan as Market Borrowing and the rest of the amount is expected to be provided by these two Corporations from their own resources.

Low Cost Sanitation Project (UNDP) :

7.6.4.9. It is proposed to under take a programme of low cost sanitation under UNDP Global Project in 15 towns of Gujarat State. This programme is proposed to be taken up under World Bank assisted programme. An outlay of Rs. 600 lakhs is, therefore, proposed to be provided for the Sixth Plan period.

Water and Air Pollution.

7.6.4.10 Gujarat is one of the highly urbanised and industrialised States in the country. The problems of treatment and disposal of industrial waste/water and air pollution create serious health Hazards to human beings and cattle. In the last 5 years, spade work has been completed and several industries have been advised affluent treatment. Several municipalities have been also advised to take up corrective measures. The Water (Prevention and control of Pollution) Act, 1974 has come into force. The Gujarat Water Pollution Board has been constituted during 1974. The functions of the Board are to grant consent to industries for discharging waste waters, to advise the Government for the prevention of water pollution, to monitor sewerage to evolve methods for effluents and trade effluents, as well as utilisation of sewerage and trade effluents in agriculture and to advise for the location of Industries etc. It is proposed to expand and strengthen such activities of the Board during the period 1980-85. An outlay of Rs. 50.00 lakhs is proposed for the purpose so as to enable the Board to function more effectively.

Water Supply and Sewerage Board.

7.6.4.11 Gujarat Legislative Assembly has enacted an Act for establishing a separate statutory board for water supply and sewerage project in March, 1979. This board has come into existence since August, 1979. The Board is expected to undertake Sewerage and Water Supply activities in Rural and Urban areas of the State. Initially, some of the activities relating to Public Health Engineering have been transferred to this Board. Besides, the Board also executes urban water supply and drainage schemes already transferred to it. The other functions of the Board are to obtain loan from Life Insurance Corporation for local bodies and deal with projects posed for the world Bank assistance.

7.6.4.12 The Gujarat Water Supply and Sewerage Board is set up for the purpose of speedy implementation of activities of Sewerage and Water Supply in urban and rural areas of the State. The Board has been entrusted the work of implementing urban water supply projects and urban drainage projects of the towns excluding corporation cities, obtaining loan from L.I.C. for local bodies and the implementation of the projects posed for world Bank assistance.

7.6.4.13 In regard to Water Supply, out of 216 towns (including 4 Corporation cities), 167 towns have been covered by the end of March 1980 leaving 49 towns yet to be tackled. Out of these 49 towns, Water Supply schemes of 24 towns are on hand and it is proposed to take up works of the remaining 25 towns during 1980-85. Out of these it is targetted to complete Water Supply Projects of 25 towns by the end of Sixth Five Year Plan 1980-85 and rest will spill over to the Seventh Five Year Plan

7.6.4.14 Similarly, urban drainage projects of 22 towns are completed by the end of March 1980 leaving 194 towns to be tackled at the beginning of the Sixth Five Year Plan 1980-85. Drainage schemes of 38 towns are proposed to be taken up during 1980-85. Out of these, 10 projects are targetted to be completed by the end of March 1985.

7.6.4.15 The State Government has allotted Rs. 50.00 lakhs upto the end of March 1980 as Government contribution against Rs. 100 lakhs proposed in the Act for meeting with the initial expenditure. An outlay of Rs. 50.00 lakhs is therefore proposed during 1980-85 towards Government contribution to the Board to make up Rs. 100 lakhs.

Conversion of dry latrine programme (Bhangi Kashta Mukti)

7.6.4.16 Under the Programme of conversion of dry latrines known as "Bhangi Kashta Mukti" 76383 latrines out of 106383 latrines have been converted upto the end of March, 1980, with flush type. It is proposed to convert all remaining 30,000 dry latrines in the Plan 1980-85 for which a provision of Rs. 80.00 lakhs is proposed.

7.6.4.17 The urban water supply schemes are executed on "as and when" basis. Full capital cost is to be deposited by the local body for execution of the project from its own resources. Looking to the general financial condition of the local bodies, it is extremely difficult for them to spare funds for such projects from their own resources. They have to depend on outside financial assistance. The LIC gives loan to such needy local bodies. However, in Gujarat State number of towns now remaining to be covered are smaller in population and the estimated cost of individual projects work out to be less than

around Rs. 15 lakhs in many cases. LIC does not entertain applications from the local bodies if the projects are costing less than Rs. 15 lakhs. Till now provision was made only for giving grant-in-aid to such local bodies for implementing their water supply project considering that the matching loan part will be made available by the local body either getting loan from LIC or from their own resources. However, it has now become necessary to provide for loan from the State Government in the State Plan. A provision of Rs. 30.00 lakhs is proposed for Government loan.

7.6.4.18 A permanent water supply scheme costing Rs. 5 to 6 crores for Bharuch town and GNF is to be constructed through GNFC to solve its water supply problem. Funds are expected to be initially made available by the Government towards the share of Bharuch and released to GNFC in a phased manner. It is proposed to provide Rs. 100 lakhs for the purpose towards the loan to Bharuch Municipality during 1980-85.

STATEMENT

Sewerage and Water Supply

List of Scheme included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No. and Name of the Scheme No.	Sixth Five Year Plan, 1980-85 outlays.		
	Total	Capital	
1	2	3	4
1. WSS-1 Survey and investigation	100.00	..	
2. WSS-2 Research	5.00	5.00	
3. WSS-3 Sewerage scheme (Urban)	350.00	60.00	
4. WSS-4 Drainage scheme (Rural)	26.00	..	
5. WSS-5 Urban W.S.S.	487.00	436.00	
6. WSS-6 Rural W.S. (GIA)	8.00	..	
7. WSS-7 Rural W.S. (MNP)	3500.00	2750.00	
	Total	4476.00	3251.00
Market Borrowing	1500.00	1500.00	
LIC Loan	2500.00	2500.00	
World Bank Projects	6600.00*	6600.00	
	Grand Total ..	15076.00	13851.00

*includes Rs. 3000 lakhs for MNP

7.7. HOUSING

7.7.1.1. Growth of population, rapid pace of industrialisation and urbanisation have contributed to the urgency of the problems of Housing. Migration of population from village to towns and cities has created the problem of slums. In villages also acute shortage of housing is felt on account of natural growth in population and comparatively stagnant housing activities. Housing inadequacies have both quantitative and qualitative dimensions.

7.7.1.2. According to information available through 1971 census, there were 44.97 lakh occupied residential houses in the State of which 12.96 lakh houses were in urban areas and 32.01 lakhs in rural areas. The number of households was 45.37 lakhs of which 13.04 lakhs were in urban areas and 32.33 lakhs were in rural areas. The information also revealed that 52.3% of the household in urban areas live in one room accounting for 45.6% of the urban population. Another 29.4% of the households in urban areas live in two rooms accounting for 29.7% of the urban population. Thus, about 81.7% of the urban households covering about 75.3% of the urban population lives in houses with two rooms or less. Besides, it was also revealed that about 58% of the urban households were living in rented houses. In so far as six major cities (Ahmedabad, Vadodara, Surat, Rajkot, Bhavnagar, and Jamnagar) are concerned, it was found that the proportion of households living in one room was 54.9% and that living in two rooms was 28.5%. In the rural areas, according to the 1971 census data about 32.01 lakh houses were used for residences accommodating about 32.33 lakh households. The average household size for rural areas was 5.8 persons as against 5.6 persons in urban areas. The number of persons per room was 3.8 in rural areas as compared to 3.1 persons per room in urban areas. Moreover, the dwellings in rural areas do not have proper sanitary conditions and ventilation facilities and in many cases, rural houses are dwelling-cum-cattlesheds. The census data further revealed that about 2.20 lakh houses were having both walls as well as roofs made of such material as grass, leaves, rods, bamboo, mud, etc.

7.7.2. Approach and Strategy :

7.7.2.1. Housing being a basic need and as the weaker sections and the poor both in the rural and urban areas cannot easily afford to construct houses on their own, it will be necessary to assist them suitably. In view of the emphasis on rural development and the need to provide more facilities in rural areas, it is necessary to give much higher priority to rural housing than hitherto. Under urban-housing, the strategy of attempting a massive relocation of slums will be given up and instead increased investment will be made on slum improvements. In view of the large magnitude of the problems, the State alone would not be in a position to under-take a massive housing programmes.

7.7.2.2. Public housing schemes are being allotted higher outlays and will be restructured to make them consistent with the real needs and the paying capacity of the low income group for which these are meant. The development of housing has to be generally through the efforts and investment by the Private Sector. Co-operative housing society is need more encouragement as they play an important role in individual housing efforts. Emphasis is, therefore, laid on the provision of institutional support to low cost private housing.

7.7.2.3. The employes too will be expected to play a more effective role. It will be necessary to secure as much institutional finance possible. The local bodies, financial institutions, banks co-operatives and employees will be expected to make their utmost contribution by providing their own resources towards reducing the magnitude of the housing problems. It is also necessary to promote research in building technology and development of cheap and local housing materials.

7.7.3. Programmes for 1980-85 :

7.7.3.1. An outlay of Rs. 8530.00 lakhs is proposed for various Housing schemes during the Sixth Five Year Plan 1980-85. The broad break up of the proposed outlay is as under:-

(Rs. in lakhs)		
Sr. No.	Programme	1980-85 Proposed outlay
1	2	3
1.	Urban Housing	1365.00
2.	Rural Housing	3989.00
3.	Government Residential Quarters and Administrative Buildings.	1626.00
4.	Police and Jail Housing.	750.00
5.	House Building advances to Government employees.	800.00
Total:-		8530.00

7.7.4. Urban Housing :

7.7.4.1. The Urban Housing Programme is mainly comprised of Integrated Subsidised Housing Scheme, Economically Weaker Sections' Housing Scheme, Low Income Group Housing Scheme and Slum Clearance Scheme.

7.7.4.2. The Site and Services Scheme has been introduced from the year 1979-80 only to provide shelter with basic amenities to the slum dwellers and economically weaker sections of the society. An outlay of Rs. 1365.00 lakhs is proposed for the Sixth Five year Plan 1980-85. The details are as under:-

(Rs. in lakhs)

Sr. No.	Scheme.	Outlay Proposed for 1980-85.
1	2	3
1.	Integrated Subsidised Housing Scheme	5.00
2.	Economically Weakers Sections' Housing Scheme.	660.00
3.	Low Income Group Housing Scheme	400.00
4.	Slum Clearance Scheme.	100.00
5.	Site and Services Scheme.	250.00
6.	Constitution of Action Group for Settlement of Slum Dwellers.	10.00
Total:-		1365.00

7.7.4.3. The physical achievements under various urban housing schemes during 1974-78, 1978-79 and 1979-80 are as under:-

Sr. No.	Name of the Scheme	Achievements (No. of houses) *			
		1974-78	1978-79	1979-80	1980-81 likely
1	2	3	4	5	6
1.	Integrated Subsidised Housing Scheme	1288	312	24	..
2.	Economically Weaker Sections' Housing Scheme	10790	6457	3404	96
3.	Low Income Group Housing Scheme.	5352	1818	2174	348
4.	Slum Clearance Scheme.	2520	..	192	..
Total:-		19950	8587	5794	444

7.7.4.4. The Gujarat Housing Board has undertaken programme of above mentioned planned schemes except slum clearance scheme, with the funds from the State Plan as well as from HUDCO, LIC, and other financial institutions. The Gujarat Housing Board also undertakes Middle Income Group Housing Scheme and has constructed 1,146 tenements during 1977-78, 718 tenements during 1978-79 and 152 tenements till December 1980.

7.7.4.5. The Gujarat Slum clearance Board undertakes programmes with HUDCO assistance. The Board has completed 220 tenements during 1977-78, 1184 tenements during 1978-79 and 388 tenements till December 1980. In addition to this, the Board has completed 320 tenements for cyclone affected slum people in Jamnagar.

Integrated Subsidised Housing Scheme:

7.7.4.6. Industrial workers within the meaning of the Factory Act, or members of economically weaker sections' of the society, whose monthly income does not exceed Rs. 350 can be availed of the benefit under the scheme. The pattern of assistance is as below:-

Agency	Pattern of assistance (% of approved Cost)		
	Loan	Subsidy	Agency's Share.
1. Co-operative Housing Society for Industrial workers.	65	25	10
2. Employees (Rental)	50	25	25
3. Gujarat Housing Board (Rental)	50	50	..

7.7.4.7. As the prescribed ceiling cost is very low and the number of industrial workers whose income is not more than Rs. 350 per month is few it was difficult to achieve expected progress under the scheme. It has, therefore, been decided to pay emphasis on the hire purchase scheme rather than subsidised rental scheme. A scheme for Economically weaker sections' whose monthly income does not exceed Rs. 350 is implemented and houses are given on hire purchase basis. Considering all these factors, no new projects are to be considered. An outlay of Rs. 5 lakhs is provided for on-going projects of co-operative housing societies of industrial workers and employees for the Sixth Five Year Plan period 1980-85.

Economically Weaker Sections' Housing Scheme.

7.7.4.8. To provide greater and better opportunities in securing housing accommodations to the people belonging to economically weaker sections of the society, the Economically Weaker Sections' Housing Scheme was introduced during the Fifth Plan. This scheme is specifically designed to cater to the need of the people belonging to economically weaker sections having a monthly income not exceeding Rs. 350 so as to give preferential treatment amongst the Low Income Group People. This scheme is being executed through the Gujarat Housing Board and the tenements constructed under the scheme are given on hire purchase basis. The Gujarat Housing Board reserves 10% of the tenements for the Scheduled Castes and Scheduled Tribes. Moreover, 2% of the tenements are reserved for the Blind and 5% of tenements for the communities declared socially and educationally backward by Baxi Panch. The ceiling cost of the tenement is Rs. 10,000. The Government gives 100% loan assistance.

7.7.4.9. The Housing and Urban Development Corporation (HUDCO) also grants loans for execution of housing programmes for these weaker sections on the strength of the State Government Guarantee for a period of 20 years. The effective interest rate is 5%. The Gujarat Housing Board, Gujarat Slum Clearance Board, and the Municipal Corporations have taken benefit of such loan assistance. The Government has also decided to exempt these institutions/agencies from payment of Government guarantee fee in respect of the projects for economically weaker section category. In addition to HUDCO, loan assistance is also expected from LIC, Nationalised Banks, etc., for executing this scheme.

7.7.4.10. Normally HUDCO provides funds on sliding scale and the same is not sufficient to cover the entire cost of the project. The Gujarat Housing Board needs funds for matching the balance requirement, acquisition of land, etc. Government has, therefore, decided to permit the Gujarat Housing Board to utilise the amount of loans given under the State Plan Scheme as "Seed Capital" which will help in boosting the programme. An outlay of Rs. 600 lakhs is proposed for the Sixth Five Year Plan 1980-85.

Low Income Group Housing scheme:-

7.7.4.11. A person whose income does not exceed Rs. 600 per month can avail the benefit of the scheme. The maximum ceiling cost for the dwelling unit is Rs. 18,000 exclusive of land development charges for the tenements/houses constructed through the Gujarat Housing Board. The Board implements the scheme and tenement/houses constructed are given on hire

purchase basis. The State Government gives 100% loan assistance to the Board under the scheme. The Board reserves 10% of the tenements for Scheduled Castes and Scheduled Tribes. Moreover, 2% of the tenements are reserved for blind and 5% tenements for the communities declared socially and educationally backward by Baxi Panch. The HUDCO loans for low income group projects can be had on the Government guarantee for a period of 15 years with effective rate of interest at 7%. The Gujarat Housing Board undertakes the projects with the loan assistance from HUDCO, LIC, etc. over and above State Plan funds.

7.7.4.12. As in the case of EWS Housing Scheme, the Housing and Urban Development Corporation (HUDCO) grants loan for execution of this housing scheme on a sliding scale which is not sufficient to cover the entire cost of the project. Government has, therefore decided to permit the Board to utilise the amount of loan given under the State Plan Scheme as "Seed Capital" for the matching the balance-requirement, acquisition of land, etc. This will help in boosting the programme. An outlay of Rs. 400 lakhs is proposed for Sixth Five Year Plan 1980-85.

Slum Clearance Scheme :-

7.7.4.13. The Slum Clearance Scheme envisages providing pucca houses to the slum dwellers. The local bodies are given financial assistance as detailed below for construction of houses. The approved ceiling cost per tenement is Rs. 6050. The tenements so constructed are given on rental basis with subsidised rent to slum dweller whose income does not exceed Rs. 350 per month.

Agency	Percentage of approved Cost.		
	Loan	Subsidy	Agency's Share.
Municipal Corporation	50	43.75	6.25
Municipality.	50	45	5

7.7.4.14. As the tenements constructed under the scheme cannot cover all the slum dwellers within near future, it is considered necessary to give more emphasis on improvement of slum areas rather than the clearance. The improvement of slums under Environmental Improvement scheme taken-up under Minimum Needs Programme will be continued during the period 1980-85 in the "Urban Development" Sector. In view of this, no new projects are to be considered under this scheme.

7.7.4.15. However, in order to improve the living conditions of the slum dwellers, it is necessary to improve their huts. At present, there is a scheme for Environmental improvement in slum areas under "Urban Development" Sector which aims at providing basic services in the slums. But, there is no scheme for improvement of their huts and hence it has been decided to give assistance for improvement of huts through the local bodies on the pattern of the slum clearance scheme. In view of above, an outlay of Rs. 100 lakhs is proposed for the Sixth Five Year Plan 1980-85.

Site and Services Scheme :

7.7.4.16. The problems of eradication of slum pockets in big cities is becoming acute day by day. Thus, to prevent further growth of the existing slum pockets and to stop creation of new slum areas by influx of the migratory population from the rural areas to the urban areas for livelihood, a new scheme for providing cheaper houses within the reach of such population has been introduced in the State Plan from 1979-80.

7.7.4.17. The Site and Services scheme introduced by HUDCO envisages to provide housing facilities to economically weaker sections. The object of the scheme is to utilise self help capability of the weaker sections of the urban area to enable them to procure minimum shelter. A skeleton house or plinth or developed plots of land equipped with essential services like pathways, water supply, sewerage, electricity, community facilities, etc., are provided under the scheme. The ceiling cost is Rs. 2,700 for Economically Weaker sections and Rs. 4500 for Low Income Group. The effective rate of interest and repayment period is 5% and 20 years for Economically Weaker Sections and 7% and 15 years for Low Income Group respectively.

Building Materials Bank :

7.7.4.18. The State is considering the establishment of a Building Materials Bank in the State with a view to ensuring supply of building materials like steel, cement, wood, bricks, etc., at reasonable prices. The main idea behind this concept is, chiefly to augment procurement of these essential materials by the Bank and make these available to the people particularly belonging to the Economically Weaker Sections and the Low Income Group at reasonable rates. The concept is, therefore, to help such sections of population from the hardships being faced by them due to the acute shortage of building materials. The funds for setting up this Bank are to be made available from the "Seed Capital" money given as loan by the State Government to the above mentioned Agencies, who prepare and implement programmes under the Site and Services Scheme. An outlay of Rs. 250.00 lakhs is proposed for the Sixth Five Year Plan 1980-85 under the Site and Services Scheme.

Constitution of Action Group for Settlement of slum Dwellers :

7.7.4.19. A lasting solution to the problem of slum dwellers can be found only in paying more attention to slum improvement than to slum clearance. Orderly slum improvement can be fruitful only with the participation of the slum dwellers and unless they have a stake in such improvement, their participation will not be forthcoming. Making them owners of the lands they occupy will go a long way in this regard. To consider the issue regarding conferring the title of the lands to the slum dwellers and if that is not possible to locate other lands for this purpose, it has been decided to constitute an Action Group for settlement of Slum Dwellers. To meet with the expenditure of Group and to start with the activities, an allocation of Rs. 10 lakhs is proposed in the Sixth Five Year Plan 1980-85.

7.7.5. Rural Housing :

7.7.5.1. The Rural Housing Programme is comprised of Minimum Needs Programme for (a) housesites for landless labourers and, (b) assistance for construction of houses on the housesites allotted. Besides, Low Income Group Housing Scheme, Economically Weaker Sections' Housing Scheme with HUDCO participation and scheme for granting assistance for improvement of rural houses are also proposed to be continued during the period of Sixth Five Year Plan 1980-85. A new scheme for loan to farmers for construction of houses has also been proposed to be taken up during the period of Sixth Five Year Plan 1980-85. An outlay of Rs. 3989.00 lakhs is proposed for the Sixth Five Year Plan 1980-85. The details are as under :—

(Rs. in lakhs).

Sr. No.	Name of the Scheme	Outlay proposed for the Sixth Five Year Plan 1980-85
1	2	3
1.	M. N. P.	
	(i) Housesites for landless rural labourers.	100.00
	(ii) Assistance for construction of houses on the housesites allotted	2985.00
2.	Assistance for improvement of rural houses	100.00

1	2	3
3.	Low income group housing scheme	404.00
4.	Economically weaker section, housing scheme with HUDCO participation	300.00
5.	Loans to farmers for construction of houses	100.00
	Total	3989.00

Rs. 1,000	Government subsidy.
Rs. 250/-	District Panchayat contribution.
Rs. 250/-	Beneficiaries contribution in terms of labour.
Rs. 1500/-	Loan from Nationalised Bank or HUDCO.
Rs. 3000/-	Total

7.7.5.4. It is also envisaged to provide essential amenities like drinking water, street light, roads on a priority basis to the housing colonies of these beneficiaries. Through the Special Component Plan and Tribal Area Sub-Plan, it is ensured that the benefits under this scheme meant for Scheduled Castes and Scheduled Tribes are not diverted to other sections of the communities.

7.7.5.5. An outlay of Rs. 2985 lakhs has been proposed in the State Sixth Five Year Plan 1980-85 for providing assistance to 3.12 lakh allottees of plots for the construction of houses.

Minimum Needs Programme :

7.7.5.2. Under the scheme of allotment of free housesites to landless labourers, the position as on 31st December, 1980 is as under :—

(Figures in lakhs)

(a)	Plots allotted to Scheduled Castes	0.92
(b)	Plots allotted to Scheduled Tribes	1.00
(c)	Others	2.33

Total number of housesites allotted : 4.25

7.7.5.3. It is proposed to construct 3.12 lakhs houses under this scheme during the Sixth Five Year Plan 1980-85. The State Government has given top priority to the scheme of housesites to the landless labourers and construction of houses thereupon. In fact this is one of the important programmes covered under the 20-Point Economic Programme as well as under the Minimum Needs Programme. By the end of the year 1979-80, 1,11,866 houses have been constructed. In order to achieve the aforesaid objective of providing houses to all the landless rural labourers the following steps have been taken :

(1) The last date for receiving applications for housesite plots is extended upto 31st December, 1981 so as to enable the left out landless labourers to take benefit of this scheme.

(2) To enable the beneficiaries to construct a small but durable paaca house at the estimated cost of Rs. 3000, the following pattern of assistance is envisaged :—

Assistance for improvement of Rural Houses:

7.7.5.6. There are a large number of houses/husts in rural areas which need improvement in respect of ventilation, smoke nuisance, etc., keeping in view the minimum requirements of health sanitation and good habitation. There is ample scope for improvement in such matters especially in respect of the houses of weaker sections of the society. Under the scheme, the beneficiaries in rural areas belonging to Scheduled Castes, Scheduled Tribes and people belonging to a group of socially and economically backward persons whose income does not exceed Rs. 2,400 per annum, assistance for providing ventilator is being given at the rate of actual cost of the ventilator limited to Rs. 50. An Assistance is also given to the extent of Rs. 100 for erection of smokeless chulas. Assistance under this scheme to the other beneficiaries is at the rate of Rs. 25 for ventilator and Rs. 50 for smokeless chulas.

7.7.5.7. In the first two years of the inception of this scheme i. e., in the years of 1978-79 and 1979-80, 22710 smokeless chulas and 33,389 cement or Wooden Ventilators have been installed or constructed. For the Sixth Five Year Plan 1980-85, an outlay of Rs. 100.00 lakhs has been proposed for this scheme.

Low Income Group Housing Scheme :

7.7.5.8. This scheme envisages construction of houses by Gujarat Rural Housing Board for persons whose income do not exceed Rs. 600 per month. The State Government provides loan assistance to the Board for construction of houses. The loan is given at a sliding rate ranging from 100% to 7.5% of the ceiling cost of Rs. 18,000 per unit. The houses

constructed under the scheme are given" on hire purchase basis. An outlay of Rs. 404.00 lakhs is proposed for the Sixth Five Year Plan 1980-85.

Economically Weaker Sections' Housing scheme with HUDCO participation :

7.7.5.9. The Housing and Urban Development Corporation (HUDCO) has introduced a rural housing finance scheme in 1978-79 for construction of houses, cost of which does not exceed Rs. 4000/- per unit for economically weaker sections, family, whose monthly income does not exceed Rs. 350 p.m. HUDCO provides loan assistance not exceeding 50% of the cost of house at the interest rate of 5 1/4% and the period of repayment in ten (10) years in equal instalments. The State Government will finance 30% of the cost by way of loan to the Gujarat Rural Housing Board and the remaining 20% of the cost of house and land will be borne by the beneficiaries. Thus, the loan assistance from the State Government is about Rs. 1200/- per unit. An outlay of Rs. 300 lakhs is proposed for the Sixth Five Year Plan 1980-85.

Loans to farmers for construction of houses :

7.7.5.10. The scheme envisages financial assistance to rural farmers other than landless labourers for construction of modest dwellings. Under this scheme it is proposed to give loans to the beneficiaries through District Panchayats. An outlay of Rs. 100 lakhs is proposed for the Sixth Five Year Plan 1980-85.

7.7.6. Government Residential and Administrative Buildings :

7.7.6.1. According to information gathered in 1971 the requirement of residential quarters for Government employees stationed at District Head Quarters in the State was about 29,000 and that of Taluka Head Quarters was about 12684. Beginning from 1971-72, till the end of March 1980, Government has sanctioned construction of 5220 new quarters at District and 2334 Units at Taluka Head Quarters (including 576 units in 32 tribal talukas). Government has also purchased 1115 tenements (872 at District Head Quarters+243 at Taluka) from the Gujarat Housing Board at various places in the State. Thus, provision of 8669 new quarters could be made so far since 1971-72. A much head way is still to be made to meet with the demand of 33014 quarters for the Government employees needing Government accommodation. It has, therefore, been necessary to accelerate the programme of construction of quarters. Details of various categories of quarters sanctioned and new quarters required as on 1st April 1980 in the State are given below :—

District Head Quarters

Category	Requirement assessed in 1971	No. of Quarters sanctioned/ purchased upto March, 1980	Quarters required to be constructed as on 1-4-80
1	2	3	4
I	7606	1212	6394
II	19442	4205	15237
III	1451	530	921
IV & V	500	145	355
Total ..	28999	6092	22907

Taluka Head Quarters

Category	Requirement assessed in 1971	No. of quarters sanctioned/ purchased upto March, 1980	Quarters required to be constructed as on 1-4-80
1	2	3	4
I	3744	356	3388
II	8400	2185	6215
III	450	36	414
IV	90	..	90
Total ..	12684	2577	10107

(Category I is for Class-IV)

7.7.6.2. Thus, this programme requires to be pursued so that the employees residing in the private rented premises may not have to continue to face the hardships of paying abnormally high rent for inferior accommodation. An outlay of Rs. 900 lakhs is proposed for this programme during the Sixth Five Year Plan 1980-85. Works on about 2300 units are in progress of which 800 units are expected to be completed by March, 1981. Works of 681 units will be taken up shortly. It is also proposed to take up construction of 1314 units at a cost of Rs. 304 lakhs at Ahmedabad so as to provide accommodation to the Government employees occupying leased colonies of Ahmedabad Municipal Corporation which are to be handed over to the Corporation.

7.7.7. Administrative Buildings:

7.7.7.1. The problem of accommodation for Government Offices at District and Taluka Head Quarters is of great magnitude. Several Government Offices are housed in hired buildings and huge amount is spent by way of rent. Many of these premises are not quite suitable for Offices. There has been a considerable emphasis on improving the working environment in Government Offices and in that context it becomes necessary to undertake the construction of suitable buildings for housing these offices. So far, multistoried office buildings have been constructed at Ahmedabad and Surat. Works on construction of offices buildings at Vadodara, and Rajkot are in progress and Office Buildings at Palanpur and Navsari have been taken up during the year 1980-81. It is also proposed to take up the construction of Office Building for Labour, Employment and Training (Shram Bhavan) at Ahmedabad at an estimated cost of Rs. 150 lakhs. Buildings at the following places are yet to be taken up.

Sr. No.	Place	Amount of rent paid per month
1	2	3
1.	Bhavnagar	41,572
2.	Mahesana	35,500
3.	Jamnagar	25,842
4.	Nadiad	21,218
5.	Godhra	21,138
6.	Bharuch	19,062
7.	Bhuj	18,014
8.	Himatnagar	15,950
9.	Amreli	7,573

7.7.7.2. The demand for the office buildings at district head quarters has increased considerably. During the year 1979-80, the following important new works estimated to cost about Rs. 46 lakhs have been taken up :—

(Rs. in lakhs)		
Sr. No.	Name of the work	Estimated cost
1	2	3
1.	Regional Transport Office Building	16.00
2.	Regional Transport Office Building at Rajkot	20.00
3.	Regional Transport Office Building at Surat	10.00
	Total	46.00

7.7.7.3. In addition to above, the following new works have also been authorised to be taken up during 1979-80 :—

1. Central Office Building at Navsari.
2. Rest House at Navsari.
3. Rest House at Ahwa.
4. Rest House at Nadiad.
5. Rest House at Godhra.
6. Rest House at Gondal.
7. Rest House at Kandla.
8. Rest House at Bardoli.
9. Expansion of Government Offices at Palanpur.
10. Expansion of Villa Bungalow at Porbandar.
11. Rest House at Una and Circuit House Annex at Ahmedabad.

7.7.7.4. An outlay of Rs. 726 lakhs is proposed for the period of Sixth Five Year Plan 1980-85 for construction of Administrative Office Buildings.

7.7.8. House Building Advances to Government Employees :

7.7.8.1. There is a large demand from the Government employees and from the Panchayat employees for advances for purchase/construction of houses. An outlay of Rs. 800.00 lakhs has been proposed towards meeting this demand in the Sixth Five Year Plan 1980-85.

7.7.9. Police Housing Scheme :

7.7.9.1. The Housing needs for the Police personnel are to be viewed in context different from the needs of the other Government employees. This is because the Police personnel upto the rank of Inspectors are entitled to rent free quarters as per their service conditions. The Police housing scheme is being implemented as Plan scheme since the beginning of the Fifth Plan. The Police housing scheme has been transferred to State Sector from 1979-80.

7.7.9.2. During the year 1980-81, a provision of Rs. 75.00 lakhs has been made for construction of quarters for 15 P.I., 62 Sub-Inspectors and 3192 Constabulary staff. Total sanctioned strength of Police personnel, entitled to rent-free accommodation, the number of quarters available, etc, as on 1st July, 1980 is as under :—

Category	Strength	No. of quarters allotted	No. of quarters yet to be allotted	No. of quarters under construction	No. of quarters yet to be constructed
1	2	3	4	5	6
P. I.	497	265	232	15	217
P. S. I.	2175	1001	1174	62	1112
Constabulary Staff	44743	28125	16618	3192	13426
Total	47415	29391	18024	3269	14755

The outlay proposed for the Sixth Five Year Plan 1980-85 is Rs. 700 lakhs for Police housing.

7.7.10. Jail Housing Scheme :

7.7.10.1. The Jail employees are required to reside near the Jail premises and as such they are provided with rent free quarters near the Jail premises, but due to insufficient number of quarters some of the employees have to stay outside the Jail premises. The

timings of the Jail officers are morning and afternoon hours. Hence it becomes inconvenient for such employees to attend the office as they have to come and leave the office twice a day. In view of this, it is necessary to provide residential accommodation to the staff members near the Jail premises. The requirement of new staff quarters is about 142. The total financial outlay required for 142 quarters will be about Rs. 50 lakhs. Accordingly, an outlay of Rs. 50 lakhs is proposed for the Sixth Five Year Plan 1980-85.

STATEMENT

List of schemes included in the Sixth Five Year Plan 1980-85—

Sector/sub-Sector of Development :— Housing

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85 Outlay	
		Total 3	Capital 4
I. Integrated subsidised housing for industrial workers and economically weaker sections of the society :			
1.	HSG-1 Integrated subsidised housing	5.00	3.00
2.	HSG-2 Economically Weaker Sections' housing (seed capital to Gujarat Housing Board)	600.00	600.00
Sub-Total :—I		605.00	603.00
II. Urban Low Income Group Housing			
3.	HSG-3 Urban Low income group housing	400.00	400.00
III. Government Rental Housing			
4.	HSG-4 Government residential quarters for Government employees	900.00	900.00
IV. Slum Clearance and Rehousing			
5.	HSG-5 Slum clearance	100.00	60.00
V. Village Housing Projects			
6.	HSG-6 Rural Low income group housing	404.00	389.00
VI. Minimum Needs Programme			
7.	HSG-7 Housesites for landless rural labourers	100.00	..
3.	HSG-8 Assistance for construction of houses on the housesites allotted to landless labourers	2985.00	..
Sub-Total :—VI		3085.00	..
VII. Police housing and Jail buildings :			
9.	HSG-9 Police housing	700.00	700.00
10.	HSG-10 Jail buildings	50.00	50.00
Sub-Total :—VII		750.00	750.00
VIII. Others			
11.	HSG-11 Site and Services Scheme	250.00	225.00
12.	HSG-12 Construction of Action group for Settlement of Slum dwellers	10.00	..
13.	HSG-13 Assistance for improvement of rural housing	100.00	..
14.	HSG-14 Economically Weaker Sections' housing scheme with HUDCO participation	300.00	300.00
15.	HSG-15 Loans to Farmers for construction of houses	100.00	100.00
16.	HSG-16 Administrative buildings	726.00	726.00
17.	HSG-17 Loans to Government employees for house building Advance	800.00	800.00
Sub-Total :—VIII		2286.00	2151.00
GRAND TOTAL		8590.00	6253.00

7.8. URBAN DEVELOPMENT

7.8.1. Trend in Urbanisation :

7.8.1.1. Gujarat has been experiencing rapid urbanisation during the last two decades. According to 1971 census, of the total population of 2.67 crores in the State about 28% (74.96 lakhs) constituted urban population, compared to 20% in the country indicating a very high degree of urbanisation in the State. Gujarat ranks third in urbanisation among all the States of India. During the decade 1961-71 the growth of urban population was 41.1% (from 53.17 lakhs in 1961 to 74.96 lakhs in 1971) against the growth of 29.4% in total population and 25.4% in rural population, in the State.

7.8.1.2. There are 216 urban areas in the State. The distribution of these 216 towns/cities according to population size class (1971 census) is as under:-

Population size Class	1971 Census		Percentage to total urban population.
	No. of towns.	urban population (in lakhs)	
I. 100,000 and above	7	33.80	45.1
II. 50,000 to 99,999.	19	11.74	15.7
III. 20,000 to 49,999.	42	13.28	17.7
IV. 10,000 to 19,999.	73	10.53	14.00
V. 5,000 to 9,999.	71	5.40	7.2
VI. Below 5,000	5	0.21	0.3
Total	216	74.96	100.00

61% of urban population is living in 25 cities and towns having population 50,000 and above while 76 small towns (population below 10,000) accounted for 7.5% of the total urban population.

7.8. 2. Policy approach and strategy.

7.8.2.1. The growth of urban population was 20.1% during the decade 1951-61 against the All India figure of 26.4% whereas during 1961-71 it was 41.1% against 38.2% in All India.

The urban amenities are lagging behind the growth of population in urban concentrations. Fast growth of urban areas has resulted in host of problems pertaining to education, health, housing, water supply, transport, ecology and crimes. This necessitates short term strategy of checking of congestion in urban concentrations built into the long-term strategy of integrated area development resulting in optimum spatial distribution of population. Checking the growth of large cities and fostering the development of smaller towns would be the twin strategies governing the approach to Urban Development during the Sixth Five Year Plan 1980-85. Concentration of economic activities in large urban centres has been attracting the influx of job seekers to such centres from rural areas and smaller towns where amenities and services are lacking. Consequently the rate of growth in the large cities has been higher than that in the smaller towns.

7.8.2.2. The thrust of the urban policy will be to check the growth of the metropolitan cities and bringing out an integrated development of the small and medium towns. This is proposed to be achieved by laying greater emphasis on the provisions of infrastructural and other facilities for small towns and by equipping them to act as growth and service centres for the rural hinterland. At the same time adequate support is also to be given to larger cities directed specifically towards improving the conditions of the urban poor and raising civic services upto an acceptable level.

7.8.2.3. The highest priority is to be accorded to restricting the growth of population in the larger urban conglomerates. For this, the policy of granting incentives and applying disincentives to move industries, away from metropolitan centres, require to be pursued. The encouragement to household and cottage industries and small industries in the rural and semi-urban areas would help and arrest the influx of population to larger urban centres. The policy of checking the growth of metropolitan centres and big cities should go hand in hand with a policy of augmenting services in such centres economically and efficiently. In doing so, the urban poor and the slum dwellers should receive special attention. While rural development must be given the first priority in the Plan, the problems of urbanisation should not be underestimated. Integrated rural development envisages providing services on an heirarchical pattern in service centres and growth centres. This throws up the urban functions in rural development because small and medium towns act as service and growth centres. Therefore, integrated rural development would to an extent encompass the development of small and medium towns which will act as growth centres for the rural hinterland.

7.8.2.4. The pattern of urbanisation, therefore, should be on the desired lines and directions based on the strategy of regional/spatial planning. It would be necessary to adopt the strategy of growth centres in small and medium towns on the basis of regional planning and equip such centres with the required infrastructure. This will be done having regard to the regional plan that may be prepared for the area for optimum utilisation of available resources. Infrastructural development has to be integrated with suitable employment generating programme. In this context the regional aspects of the development taking place in Surat region and the Narmada project require early preparation.

7.8.2.5. The strategy of attempting a massive relocation of slums will be discouraged and instead increased investments would be made in slum improvement in the larger cities. The proposed environmental improvement (EIP) is to include water supply and sewerage, the paving of streets and the provision of community latrines. Areas inhabited by Scheduled Castes, particularly scavengers etc., are to be given due priority.

7.8.2.6. Urban development is not confined to the city limits which are accidental rather than planned. With a view to regulate, guide and provide for the development in and around larger cities, the Government has constituted four Urban Development Authorities (Ahmedabad, Vadoadara, Surat and Rajkot) and two Area Development Authorities (Bhavnagar and Jamnagar) and the smaller towns have been designed as Area Development Authorities so as to enable them to take up planning work. These Authorities will have to be provided with adequate funds to discharge the functions expected of them.

7.8.2.7. It is proposed to enlarge the scope of the Gujarat Housing Board to undertake several related urban development activities. With the enlargement of the scope, the Gujarat Housing Board can work as an agency for planning financial and execution of development projects in urban growth centres, particularly small and medium towns.

7.8.2.8. The Government with a view to improving the financial position of the Municipalities by effecting efficiency, economy, necessary discipline in their fiscal administration and to tap fully their own resources of income and fully recover the taxes levied by them, so that they can take up development programme with zeal has set up a "Municipal Finance Board". The role of the Municipal Finance Board would be to assess the resources of the various Municipal bodies and to distribute funds and grant-in-aid provided by the government to local bodies on the principles and criteria as would be finally approved. The Municipal Finance

Board will initially be assisted financially to meet with its administrative expenditure etc., to enable it to discharge its functions.

7.8.2.9. The projects, programmes and activities for integrated urban development will require large investments. The Municipal Corporation, Municipalities Urban/Area Development Authorities, Gujarat Housing Board and Gujarat Slum Clearance Board, will utilise their own resources for this purpose to the extent possible. The State Government will also supplement the resources of these institutions to assist them in undertaking some of the projects and programmes. Assistance is expected also from Government of India under the Centrally sponsored scheme of Integrated Urban Development of Small and Medium Towns. In addition, institutional finance from Banks, L.I.C., Open Market Borrowing, Assistance from HUDCO and International Agencies will also have to be availed of by all agencies.

7.8.3. Programme for Sixth Five Year Plan 1980-85:

7.8.3.1. An outlay of Rs. 2850.00 lakhs is proposed for Sixth Five Year Plan 1980-85 for various Urban Development Programmes. The break up of the proposed outlays is given as under:—

		(Rs. in lakhs)
		1980-85
Sr. No.	Name of the Scheme/ Project (Minor Heads)	Proposed outlay
1	2	3
1.	(i) Town Planning and Regional Planning.	220.00
	(ii) Introduction of City Survey around Ahmedabad Municipal Corporation Areas.	100.00
2.	Urban Development Programme.	1170.00
3.	Loans to Local Bodies.	660.00
4.	MNP Environmental improvement in slums.	500.00
5.	Integrated Urban Development Small and Medium Towns.	200.00
	Total	2850.00

7.8.4. Town Planning and Regional Planning

7.8.4.1. During the Fifth Plan 1974-78 and Annual Plans from 1978-79 to 1979-80, the programmes comprised of :—

(i) Preparation of Regional Plan for Ahmedabad-Vadodara-Surat Region;

(ii) Preparation of Metropolitan plans of Ahmedabad; and

(iii) Preparation of comprehensive Traffic and Transportation plan of Ahmedabad Metropolitan Area.

7.8.4.2. Regional planning is necessary not only to prevent sporadic and unhealthy urban expansion but also to arrest deterioration of rural environment and to secure balanced growth of industry and agriculture, to achieve better utilisation of human and physical resources and a more desirable pattern of agro-industrial and rural urban relationship. An outlay of Rs. 35.00 lakhs has been provided for regional planning for 1980-85.

7.8.4.3. Within the frame work of the Regional Plan, the Development Plan emphasises all aspects of the physical planning such as designation of land use, proposals of broad circulation and transportation systems, reservation of lands for public purposes such as schools, gardens, play-grounds and shopping centres. The Gujarat Town Planning and Urban Development Act, 1976 provides for declaration of Development areas (which may extend beyond the limits of local Authority) and constitution of Urban Area Development Authorities. Similarly the urban local bodies have been designated as development authorities which are supposed to prepare development plans for their respective development areas. Simultaneously a number of Development Plans sanctioned under the repealed Act will have to be revised under the new Act which provides for compulsory revision of the Development plans within 10 years from the date come in force. Preparation of Development Plan and Town Planning Schemes being a continuous process has to be continued during the Sixth Five Year Plan, 1980-85 also. By the end of the Fifth Plan (1977-78) 77 Development plans (including 11 revised plans) were prepared and the work of preparation of 21 Development Plans (including 12 revised plans) was in progress. During 1978-79 and 1979-80, 12 Development Plans (including 9 revised plans) were prepared and at the end of 1979-80 the work of 5 Development Plans (including revised plans) was in progress. Moreover, 5 Development Plans were also prepared by Urban/Area Development Authorities. During the next five years, Development Plans previously sanctioned will be due for revision. It is proposed to prepare 25 Development plans during 1980-85. In addition to these, some of the Area Development Authorities will prepare their

Development Plan themselves. At the end of the Fifth Plan (1977-78), 132 Draft Town Planning Schemes were prepared. During 1978-79 and 1979-80, 6 Town Planning Schemes were prepared and at the end of 1979-80, preparation of 4 Town Planning Schemes were in progress. It is proposed to prepare 25 Towns Planning Schemes during 1980-85 on behalf of various Area Development Authorities. In addition to these, it is expected, that Urban/Area Development Authorities would also prepare some schemes. For preparing these Development Plans and Town Planning Schemes an outlay of Rs. 25.00 lakhs is provided for 1980-85.

7.8.4.4. Local Authorities do not have adequate financial resources for the implementation of the Development Plan proposals either by way of preparation of Town Planning Schemes or by acquisition of lands. It was felt that the Local Authorities should be encouraged to implement the proposals of the Development Plans through preparation of Town Planning Schemes to effectively control the haphazard development taking place allaround. Therefore, scheme for giving grant-in-aid to Municipalities for implementation of the proposals of Development Plans through preparation of Town Planning Scheme was introduced in the Fifth Plan. An expenditure of about Rs. 76.07 lakhs was made during 1974-78. Grant-in-aid was given to 16 local authorities during Fifth Plan for preparation of 124 Town Planning Schemes. During 1978-79 and 1979-80, an outlay of Rs. 28.20 lakhs and Rs. 43.00 lakhs respectively was provided. During 1978-79 grant-in-aid of Rs. 28.20 lakhs was given to 4 local authorities. Rs. 35.20 lakhs was distributed among 16 local authorities during 1979-80. There are 41 Town Planning Schemes, which are either in process of finalisation with Town Planning Officer or are already finalised. In addition 29 draft Town Planning Schemes have been submitted to Government and are pending for sanction. For these purposes a total provision of Rs. 160.00 lakhs would be required for this scheme during the Sixth Five Year Plan 1980-85.

7.8.4.5. The work of Regional Plan in the State has taken into consideration the developments in connection with Narmada Project and also the rapid economic changes taking place in the Surat-Bharuch region. Narmada Project will necessitate considerable amount of regional planning to provide for project location land use, manpower, ecological balance, etc. Regional Planning is necessary to co-ordinate the inter-sectoral activities on rational basis and also for providing for rehabilitation and settlement. The Government has already initiated policy formulations in this regard and the required agency will be created soon for preparation of Regional Plan. Similarly, taking into consideration the rapid developments taking place in the Surat-Bharuch region, it is necessary to control the activities there with the help of a regional plan. A provision of Rs. 20 lakhs is provided for this purpose for the Five Year Plan 1980-85.

Introduction of City Survey of 23 Villages-Ahmedabad Municipal Agglomeration Area.

7.8.4.6. Ahmedabad Municipal Corporation area is the important Urban Area of the State. It is necessary to pay greater attention to the needs of this Urban Area. While provisions for Water Supply, Housing and Slum improvement for Urban Areas are made in the relevant sub-Sectors, further specified provision is made under the Urban Development sub-sector. The schemes under this sub-sector relate to Town Planning, City Survey, Preparation of Regional Plans, Metropolitan Plan, Implementation of development Plans and Town Planning Scheme, and assistance to Municipalities as well as Urban Community Development Projects.

7.8.4.7. City Survey is undertaken under Section 95 read with Section 131 of L.R.C. It provides the basis for preparation and execution of development plans, T. P. Schemes. It provides the records (Property Cards) showing clear rights to and liabilities on each property. Such survey is also administratively useful in determining unauthorised N. A. uses, etc. City Survey maps are also useful for providing accurate topographical details required for various development schemes. The cost is fully recoverable from property holder on completion of the work.

7.8.4.8. Till now, regular survey in Municipal Corporation limits of Ahmedabad has been undertaken only for the area included within the fort wall of the City and in village sites of certain suburbs and was not taken up in the developed N. A. areas of such villages within the Municipal Corporation Limits. These areas are fully developed and covered under the Town Planning Schemes. The Urban Land Ceiling and Registration Act, 1976 covers the Ahmedabad Municipal Corporation area, and some adjoining peripheral area. There are 23 such developing villages covered in the Urban Agglomeration area. An introduction of City Survey within this area is very useful for implementation of Urban Land Ceiling Act and for solving other administrative problems, such as for detection of unauthorised non-agricultural use, recovery of N. A. assessment, detection of encroachment of Government/Public Street Lands. Up-to-date records of Rights will be prepared after detailed measurement and enquiry in respect of each property and thereby the rights, titles and interest of the private owners, Municipality and Government will be settled.

7.8.4.9. In the Fifth Plan, the theodolite work of 11 T.P. Schemes area was completed P. T. Work of 3 T. P. Schemes was completed at a cost of Rs. 3.00 lakhs. During the year 1978-79 and 1979-80, the theodolite of 15 T. P. Schemes and P. T. Work of 18 T. P. Schemes has been completed at a cost of Rs. 16.70 lakhs.

7.8.4.10. In the Sixth Five Year Plan 1980-85 provision of Rs. 100 lakhs is proposed to complete

the remaining work of P.T. measurement of 14 T.P. Schemes. Inquiry work of 32 T. P. Schemes covering 23 Villages consisting of 2.75 lakh properties and P. R. Sanad writing work of all these properties. 15 enquiries Officers of Class I Cadre can complete the Enquiry within a period of 3 1/2 years at an estimated cost of Rs. 45 lakhs. The remaining theodolite and P. T. work of 14 T. P. Schemes can be completed at a cost of Rs. 40 lakhs and Sanad and P. R. writing work of 32 T. P. Schemes can be completed at a cost of 15 lakhs. Thus, the entire remaining work of agglomeration city survey can be completed within a period of 3 to 3 1/2 years.

7.8.5. Urban Development Programme.

7.8.5.1. As already stated the Urban Development Authorities and Area Development Authorities will require assistance at least in the initial stages of their existence. These authorities are expected to study the problems of their areas, prepare the Development Plans and Town Planning Schemes for the Development Area and to implement the proposals of the Development Plans and Town Planning Schemes. They are also expected to undertake various development programmes. They are empowered to obtain contribution from the local bodies within their jurisdiction and can levy development charge. They can also utilise the loans made available by HUDCO, LIC and Banks and also avail of assistance under integrated urban development programmes. To make them get on in the initial period, the scheme to give financial assistance in the form of seed capital to development authorities was introduced in the Fifth Plan. The seed capital in the form of loans provided to them will form the basis of revolving funds for undertakings various projects. The authorities were established towards the end of Fifth Plan and a modest loan of Rs. 10 lakhs was given as seed capital. A loan amounting to Rs. 25 lakhs was given to Urban Development Authorities (Ahmedabad, Surat, Rajkot and Vadodara) and two Area Development Authorities (Bhavnagar and Jamnagar) during last two years (1978-79 and 1979-80). An outlay of Rs. 1000.00 lakhs is provided for 1980-85 for this purpose. In due course the benefits of open market borrowing will have to be extended to these Authorities.

7.8.6. Urban Community Development Projects:

7.8.6.1. Urban Community Development Project lay special emphasis on self help on the part of the local communities and enable the relatively disadvantaged section of the community to obtain the maximum benefits from facilities provided under various government and municipal programmes. The nature of activities to be undertaken in a project will depend upon the needs and conditions of the area but it will be desirable that only a few selected activities.

are undertaken so that the project may take an impact. Broadly the activities may cover physical improvements and civic amenities, health and sanitation, recreation and cultural activities, educational activities, economic programmes such as employment referral services credit referred services, production centres, small saving etc., looking to the long experience of all these existing projects, it is seen that economic backwardness always acted as a major brake on rapid social development so that projects were advised to pay more attention to provide the communities with tools to improve their economic status in order to accelerate their social upliftment.

7.8.6.2. In Gujarat, there are 17 projects sanctioned since starting of the scheme, out of which, 3 projects (Porbanda, Godhra and Bhavnagar-II) are discontinued. Thus 14 projects are at present located at Vadodara, Surat, Rajkot, Municipal Corporations and Bhavanagar, Jamnagar, Mahesana, Dabhoi, Khambat, Kalol, Nadiad, Surendernagar and Palanpur municipalities are functioning.

7.8.6.3. In all 16 Projects are proposed to be taken up during the period 1980-85. The UNICEF has volunteered to assist in the existing of 3 UCD projects in the slum areas of Ahmedabad city and 2 projects in the slums of Vadodara city. These projects will be implemented under the joint auspicious of the State Government, Municipal Corporation and UNICEF. The agreements in this regard have been already executed and the preliminary works in this regard have began. When the UNICEF withdraws from the scene, the liability is to be shared by the State Government and the Municipal Corporation in 40:60 ratio. An outlay of Rs 40.00 lakhs is provided for U.C.D. programme for 1980-85.

7.8.7. Urban Local Development Programme:

7.8.7.1. The benefits of socio-economic development should reach effectively to the people in different areas of a town or city. The different areas of a town or city must have adequate schools nurseries, playground, gardens, auditorium, reading room, recreation centers, gymkhanas swimming pools, community halls and such similar facilities. In order to improve the standard of living in Urban areas, a number of small projects at the local level can be taken up by the Urban local bodies which can bring social and cultural benefits to the people in the local area. The urban local bodies do make efforts and take necessary measures to provide these amenities. However, they do not find adequate fund to provide for such facilities to the extent necessary. There are number of voluntary organisations such as Lions club, Rotary Club, Charitable Institutions, Religious bodies, etc., in the towns and cities which make efforts to provide such facilities and amenities in the local areas

from their own funds and from the financial assistance and donation from the residents of the local areas and other resources. In order to encourage the urban local body and social and voluntary organisations to come up with more projects, it is proposed to augment their resources by giving financial assistance for such projects depending upon the plan priorities, merits, importance and social and economic benefits to the people for whom these projects are to be implemented. An outlay of Rs. 95 lakhs is provided for the scheme for 1980-85.

7.8.8. Loan assistance to Gujarat Housing Board, Urban Development / Area Development Authorities, Local self Government bodies to take up Urban Development Authorities.

7.8.8.1. The need to have State Level Board formulating projects for urban local bodies, approaching the financing institutions for securing loans, channelising of these funds to these bodies and to undertake implementation and execution of the project, if necessary, recover the funds from the local bodies and repay the same to the financing agencies has been felt for long. These objects are proposed to be achieved by expanding Gujarat Housing Board to undertake urban development activities also. The Board can also formulate and implement various Urban development projects. The existing Act relating to Gujarat Housing Board requires to be amended suitably so as to expand its activities. The proposed amendment is under consideration. An outlay of Rs. 10 lakhs is provided for the Sixth Five Year plan 1980-85.

7.8.9. Assistance to Municipal Finance Board:

7.8.9.1. The Gujarat Municipal Finance Board has been constituted under the Municipal Finance Board Act to streamline the finances of Urban Local bodies to enable them to manage their finances on sound lines, to recommend to the State Government the criteria governing the grant of loans and grants and also to disburse the loans and grants according to the criteria adopted by the Government. The Board is expected to promote and faster urban development activities in line with the thinking of the State Government. The Board has to meet with the administrative expenditure including staff, office and equipments. For this purpose an outlay of Rs. 25 lakhs is provided as grant for the Sixth Five Year Plan 1980-85.

7.8.10. Loans to Municipal Bodies.

7.8.10.1. Loans are given to Municipal bodies for Miscellaneous development activities which are not covered in the general sectoral programmes in the State plan. Loans worth Rs. 6.88 lakhs were given to Municipal bodies during the Fourth Five Year Plan and Loans worth Rs. 15.63 lakhs were advanced

during the Fifth Plan (1974-78). Loans worth Rs. 31.40 lakhs were given to Municipalities for purchase of fire fighters and for other purposes for the years 1978-79 and 1979-80. The scheme will be continued during the Sixth Five Year Plan 1980-85 and an outlay of Rs. 100.00 lakhs is provided for this scheme during Sixth Five Year Plan 1980-85.

7.8.11. Market Borrowing by Municipal Corporations :

7.8.11.1. Open market Borrowings are sanctioned to Municipal Corporations for developmental activities. Loans worth Rs. 677.00 lakhs and loans worth Rs. 340.00 lakhs and Rs. 303.00 lakhs were borrowed by Municipal Corporations of Ahmedabad, Vadodara, Rajkot and Surat during the year 1974-78, 1978-79 and 1979-80, respectively. The scheme will be continued during the Sixth Five Year Plan 1980-85. Urban/Area Development Authorities will also need assistance by way of Market Borrowing for developmental activities. An outlay of Rs. 560.00 lakhs is provided for the Sixth Five Year plan 1980-85.

7.8.12. Environmental Improvement in Slum Areas (MNP)

7.8.12.1. The Government of India has introduced the Environmental Improvement in slum areas scheme in 1972-73 under central sector covering cities with population of 8 lakhs and more, and accordingly only Ahmedabad city was covered.

7.8.12.2. From 1974-75 i.e. Fifth Plan, the scheme was transferred to State Sector and taken-up under Minimum Needs Programme. The scope of the scheme was extended to the cities with a population of 3 lakhs and more. Accordingly, Vadodara, Surat and Rajkot cities were covered in addition to Ahmedabad city. However, from February, 1980, the scope of the scheme has been extended to all urban areas with municipal corporations and municipalities.

7.8.12.3. The scheme envisages to give financial assistance of Rs. 150/- per capita to local bodies for providing certain basic facilities and services like water supply, drained community latrines and bath, street lights, road improvement, etc., in the slum areas which are not likely to be taken up for clearance for next ten years. Priority is given to the slum areas situated on Government/Municipality and/or inhabited by Scheduled Castes and Scheduled Tribes particularly scavengers.

7.8.12.4. The services under the scheme are to be provided in the existing slums on Government or Municipal land as well as lands belonging to private owners. The Government/Municipality lands are no longer easily available particularly in the major towns. In view of certain stipulations in the

scheme, it has been difficult to cover the slums on private land. The scheme envisages that the land covered under slum area is to be acquired by the Government, in future, the landlord should be prohibited by the legislation for not asking additional higher compensation and should not earn any benefit on account of the amenities provided with the assistance of Government. It is necessary to amend the Land Acquisition Act suitably. The necessary amendment in the Land Acquisition Act is under way to overcome the difficulties. An outlay of Rs. 500 lakhs is provided for Sixth Five Year Plan of 1980-85.

7.8.13. Integrated Urban Development of Small and Medium Towns.

7.8.13.1. According to the strategy for Urban Development in the Sixth Five Year Plan of 1980-85 the growth of small and medium towns is required to be fostered by positive state intervention for enabling the infrastructural basic facilities of these towns to reach a desired level. The Urban local bodies due to their poor financial conditions is not in a position to cope with the widening gap in urban services. Government of India has introduced during 1979-80 a centrally sponsored scheme for the integrated development of towns below 1 lakh population according to which the assistance limited to Rs. 40 lakhs per town will be available from the Central Government as loan. The rest is to be raised by the State Government and the implementing agencies as matching contribution.

7.8.13.2. The State Government had appointed an expert committee to study the problems, potential and prospects of the development of such towns and the committee has already submitted its report. This committee has identified that the towns falling in the population bracket of 50000-100000 need to be taken up in the first phase of this programme. Accordingly, as many as 18 towns have been identified and the project formulation work therefore has begun. In addition, it would be also necessary to take up the development of the growth centres identified by the Urban Development Authorities under this scheme. During 1979-80, five projects were submitted to Government of India and all the five were admitted.

7.8.13.3. It is proposed that at least 20 towns and growth centres could be developed under this scheme during the Sixth Five Year plan 1980-85. As a part of matching contribution an outlay of Rs. 200 lakhs is provided in the Sixth Five Year Plan 1980-85, which the State Government would be disbursing as loan to the implementing agencies i.e. local bodies and development authorities to supplement the resources raised by them.

STATEMENT

List of Schemes included in the Sixth Five Year Plan 1980-85 Outlays

Sector/Sub-Sector of Developments:—Urban Development.

(Rs. in lakhs).

Sr. No.	Number and Name of the Scheme.	Sixth Five Year Plan 1980-85 Outlay	
		Total	Capital
1	2	3	4
I. Urban Development Programme:			
1	UDP-1 Seed Capital to Urban/Area Development Authorities.	1000.00	1000.00
2	UDP-2 Urban Community Services-Urban Community Development Project.	40.00	..
3	UDP-3 Urban Local Development Programme.	95.00	..
4	UDP-4 Loan assistance to Gujarat Housing Board, Urban / Area Development Authorities, Local Self Government Bodies to take up Urban development activities.	10.00	10.00
5	UDP-5 Assistance to Municipal Finance Board.	25.00	25.00
6	UDP-6 Integrated urban Development of Small and medium Towns.	200.00	200.00
Sub-Total:—		1370.00	1235.00
II. Loans to Local Bodies.			
7	UDP-7 Loans to Municipalities for miscellaneous development activities.	190.00	100.00
8	UDP-6 Market Borrowing for miscellaneous development activities.	560.00	560.00
Sub-Total:—II.		660.00	660.00
III. Town Planning and Regional Planning:—			
9	UDP-9 Preparation of Regional Plan.	35.00	..
10	UDP-10 Preparation of Development Plan and Town Planning scheme.	25.00	..
11	UDP-11 Grant-in-aid for implementation of Development Plan and Town Planning Scheme.	160.00	..
12	UDP-12 Introduction of city survey around Ahmedabad Municipal Corporation.	100.00	..
Sub-Total:—III		320.00	..
IV. Minimum Needs Programme.			
13	UDP-13 Environmental improvement of slums.	500.00	..
Grand Total:—		2850.00	1895.00

7.9. CAPITAL PROJECT

7.9.1.1. Gandhinagar, the new capital of Gujarat, is situated on the bank of the river Sabarmati about 24 Kms. north of Ahmedabad City. The population of the capital township has risen to approximately 55,000 by the end of March, 1980.

7.9.1.2. The master plan of the township envisages the development in two phases of self-contained city with a population of about 1.50 lakhs (0.30 lakh families). The first phase contemplates development for a population of about 0.75 lakhs at an estimated cost (revised) of Rs. 4,577 lakhs. A large proportion of works to be taken up during the first phase, as also a few new works not included in the first phase, were completed by the end of March, 1980.

7.9.2. Review of Progress

7.9.2.1. Though the preliminary survey works, etc., for the Capital Project were started in the year 1960-61, the actual execution of works commenced in 1966-67. The expenditure incurred prior to 1966-67 was only Rs. 151 lakhs. The actual expenditure incurred by the end of March, 1980 was Rs. 5,337 lakhs.

7.9.2.2. The main items of work completed by the end of March, 1980 are: The acquisition of 4,234 hectares of land; the construction of 9,698 residential quarters and administrative buildings, and of buildings for schools, colleges, dispensaries, and a hospital, the laying of main and internal roads, and the provision of water supply, drainage and electricity in 15 Sectors out of the 30 Sectors the capital project area comprises. Owing to the development of infrastructure (roads, water supply, etc.), the demand for plots has been rising. Upto 1979-80, 1436 residential plots in various sectors had been sold. Land has also been sold to religious, educational and other institutions. Government has allotted land to the Gujarat Housing Board, and to the Gujarat Electricity Board for the construction of a Thermal Power Station and to the

Railways for railway lines and the construction of Gandhinagar Capital Railway Station.

7.9.2.3. The achievement recorded upto the end of 1979-80 is summarised in the following table :-

<i>Works</i>	<i>Expenditure</i> (Rs. in lakhs)
1. Construction of 9698 Residential Quarters (including 21 Bungalows of Ministers & M. L. A. Hostel with 168 units).	1816
2. Construction of Administrative Buildings including Interim Sachivalaya, Sachivalaya Blocks 10, 11, 12 and 13, Assembly Building, School, Colleges, Hospitals, Office Building for the Bureau of Economics and Statistics, Circuit House, Shops and Office Blocks in Sector Nos. 16, Swimming Pool and Club Building in Sector 19, Shopping Centres of A & B types in Sector Nos. 21 and 22.	1492
3. Construction of 12 Kms. of Main Roads and 144 Kms. of Internal roads.	311
4. Provision of Water Supply and drainage.	
5. Provision of Electric Supply and Street lightening.	1748
Total	5367

7.9.2.4. The spillover liability on account of the various works which were in progress on 1-4-1980 is estimated at Rs. 3104.85 lakhs as can be seen from the table below.

(Rs. in lakhs).

Sr. No.	Works.	Actual Estimated cost.	Expenditure incurred upto 31-3-1980	Spill-over liability as on 1-4-1980
1	2	3	4	5

1. Residential Quarters :

a. 1500-Nos : Residential Quarters.	302.57	277.77	24.80
b. Additional 4328 Residential Quarters.	878.70	111.73	766.97

1	2	3	4	5
2.	a. Sachivalaya, including six blocks.	939.44	497.05	442.39
	b. Electrical installation, Lift, Water Cooler and Compound light in Sachivalaya Complex.	234.06	23.23	210.83
	c. Providing Air-condition in Sachivalaya, and Assembly building.	127.00	..	127.00
3.	a. Assembly Buildings.	300.00	215.42	81.58
	b. Electrical installation, Lift, Water Cooler, Compound light in Assembly building.	94.68	11.88	82.80
4.	Town Hall.	51.28	32.45	18.83
5.	Police Headquarters	165.24	48.75	116.49
6.	Water Supply and Drainage.	615.22	164.49	450.73
7.	Miscellaneous items such as Ministers' Bungalow, Secretaries Bungalow, Staff Training College, High School Building, etc.,	1852.11	1072.68	779.43
	Total	5560.30	2455.45	3104.85

7.9.3. Disposal of Land

7.9.3.1. Of the land liable for construction in the township the greater part is set apart for Government and public buildings. The total area of land available for disposal by Government for various purposes is estimated at 840 Ha. of this about 400 Ha. have already been disposed off, yielding a cumulative resource of over Rs. 425 lakhs by the end of March, 1980. Of the remaining land (440 Ha.), about 200 Ha. is expected to be available for residential purposes and the rest for commercial, industrial and other purposes. The land that remains available for disposal occurs partly in sectors of the township that have been developed and partly in those that have not develop.

7.9.3.2. During the period 1980-85, approximately 80 Ha. of land in the township is expected to be disposed off by Government for various purposes, yielding a revenue (estimated) at over Rs. 1190 lakhs owing to the progress made in the construction of major Government buildings and in the provision of infrastructural facilities, the demand for land in the township area may be expected to rise appreciably. Accelerated development of the township would inevitably make for higher revenues from sales of land.

7.9.4. Development Programme : 1980-85

7.9.4.1. The programme during the Sixth Five Year Plan 1980-85 with an outlay of Rs. 3,000 lakhs will be directed largely to the completion of the following works in progress :—

- (1) Residential quarters
 - (a) 1500 Residential Quarters (nearing completion)

- (b) 3476 residential quarters out of 4328 additional residential quarters.
- (2) Sachivalaya Building including Heads of Departments Building.
- (3) Assembly Building.
- (4) Town Hall.
- (5) Olympic Size Swimming Pool.
- (6) Building for Police H. Q. (876 Nos. of Residential and Administrative Buildings).

7.9.4.2. The major new works proposed are those for the provision of community and infrastructural facilities (School buildings, shopping centres, water supply, drainage, etc.) in six sectors and in the industrial area allotted to the Gujarat Industrial Development Corporation. The outlays proposed for the major components of the programme are as under :—

	<i>Outlay</i> 1980-85 <i>(Rs. in lakhs).</i>
Works in progress	2,487.84
New Works.	170.64
Direction and Administration.	341.52
	3,000.00

Of the major works in progress, the works relating to the Sachivalaya building and about 2,056 units of residential accommodation (including 876 units for the Police Headquarters) are expected to be completed by the end of 1981-82.

STATEMENT

Capital Project

List of Schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Fiveyear Plan 1980-85 outlays	
		Total	Capital
1	2	3	4
1.	SCP--1. Direction and Administration.	341.52	341.52
2.	SCP--2. Construction of State Capital Project.	2658.48	2658.48
GRAND TOTAL		3000.00	3000.00

7.10 INFORMATION AND PUBLICITY

7.10.1. Nature and Scope of Development Activities

7.10.1.1. People's involvement in development activities has always been a crucial factor in the successful implementation of plan programmes. This is more so far in regard to the Sixth Plan because we are introducing in a big way household oriented programmes for reducing poverty. The success of these programmes will depend largely on the motivation generated in the individual head of the family to take up income generating activities.

7.10.1.2. The success of the information and publicity programmes will depend upon how effectively they carry the message of the plan to remote villages, rural, backward and tribal populations. This requires a multi-media approach utilising radio and TV broadcasting, films, exhibitions and special field publicity units for covering backward areas.

7.10.2. Programme for the Sixth Plan 1980-85 :

7.10.2.1. An outlay of Rs. 85 lakhs has been proposed for Information and Publicity during the period of the Sixth Five Year Plan 1980-85. The schemewise outlays are as under :—

(Rs. in lakhs)

Sr. No.	Number and Name of Scheme	Proposed outlay 1980-85
1	2	3
1	PUB--1. Rural Broadcasting.	
(i)	Establishment of Community viewing sets and rural broad casting sets.	46.00
(ii)	Exhibitions.	5.00
(iii)	Development of Film section and Film Libraries.	1.00
(iv)	Field Publicity and coverage of tribal areas.	6.10
2.	PUB-2. Strengthening of Information Offices.	11.25
3.	PUB-3. Building of Publicity Offices	15.65
	Total ..	85.00

7.10.3 Establishment of Community viewing sets and Rural Broad Casting sets

7.10.3.1. Radio and T. V. are the most powerful media of mass communication. Even illiterate people also can be approached successfully through this media to educate the common mass including those residing even in far off interior regions and informed about the policies of Government and progress achieved on different subjects like rural development, family welfare, agriculture, animal husbandry, sanitation, etc.

7.10.3.2. There are 18275 villages in the State and out of them only 7864 villages are covered under community radio listening scheme and about 638 villages under Community T. V. viewing scheme upto 31-3-1980.

7.10.3.3. During the Sixth Plan, it is proposed to install 1200 community Radio sets and 30 T. V. sets. Out of the above, it is proposed to install about 800 radio sets in tribal areas, economically backward areas and in villages where population is more than 25 % of Scheduled Castes and the remaining 400 radio sets in the villages in the remaining areas of the State.

7.10.3.4. During the Plan period 1980-85, a High Power. T. V. Transmitter is proposed to be installed. The State Government is committed to provide land free of Cost. As a result of acquisition, a compensation of Rs. 20 lakhs will be required to be paid. Accordingly, a provision of Rs. 20 lakhs is made. Besides, after the Commissioning of the T. V. Transmitter, it is expected that, heavy demand for installation of Community T. V. Sets from the villages will be forthcoming. An outlay of Rs. 46.00 lakhs is, therefore, provided for the installation of T. V. Transmitter as well as for meeting with the demand of Community T. V. Sets during 1980-85.

7.10.4. Exhibition.

7.10.4.1. Among the visual media exhibitions constitute one of the most effective and powerful media both for mass education as well as for spreading the message in the urban and rural areas, irrespective of the age group factor. The due importance has therefore, been given to this effective medium. Besides, maintaining the general exhibition material, it is proposed to add atleast two more mobile exhibition units in the State during the Plan period 1980-85.

7.10.4.2. These units will move even in the remote areas and especially in the backward and tribal areas of the State. The units will, *inter-alia* include various visuals pertaining to developmental activities of the State, in the context of the social economic change, being ushered in, at the national and the State levels. Exhibitions will be so equipped that the schemes and programmes formulated and being implemented for the uplift of the vulnerable groups are effectively and properly depicted. An outlay of Rs. 5.00 lakhs is, therefore, proposed in the Sixth Five Year Plan 1980-85 for the purpose.

7.10.5. Development of Film section and Film libraries.

7.10.5.1. A scheme of expansion of film unit by providing films and opening of film libraries is proposed to be continued during 1980-85. It is envisaged to expand the existing film units by providing additional latest cameras and technical services, scripts writers, scenarist, etc., so that documentaries on plan progress as well as feature sequences for the news-reels could be produced effectively. It is proposed to have latest machinery, equipments, raw-stock, etc., for improving the standard of films. In order to make film distribution more effective in the districts, it is proposed to provide prints of Films on loans to other departments, private agencies, schools, colleges etc.,. It is also proposed to open film libraries in the State and one central film library at the capital so as to meet with the demand of films at district level. An outlay of Rs. 1.00 lakh is proposed for the Plan 1980-85 for the purpose.

7.10.6. Field Publicity and Coverage of tribal areas.

7.10.6.1. News reels, documentaries as well as educative and training films play a vital role in field publicity and public relations and therefore fuller utilisation of this media is a matter of prime importance particularly in the tribal areas. To achieve this objective, a publicity van equipped with one projector, generator, films, allied equipments and publicity literature, will tour in tribal areas of

the respective districts of the State. Two information Centres are also proposed to be established in tribal areas. An outlay of Rs. 6.10 lakhs is, therefore, proposed for the Sixth Five Year Plan 1980-85.

7.10.7. Strengthening of Information Centres.

7.10.7.1. In order to implement various schemes proposed in the plan, it would be necessary to strengthen information offices at the Head quarter as well as at district level by providing necessary specialised and trained staff and also by providing latest equipments and machinery to gear up the publicity drive. It is also proposed to equip the information offices with the following facilities.

1. Uptodate and modern press-room
2. Film Auditorium
3. Reading Room
4. Enquiry desk
5. Educational Bureau
6. Reference Library
7. Research gallery
8. Exhibition Units

7.10.7.2. For this purpose an outlay of Rs. 11.25 lakhs is proposed for the Plan 1980-85.

7.10.8. Building for Publicity Offices

7.10.8.1. The work of construction of two office buildings at Amreli and Himatnagar is on the verge of completion. During the Plan 1980-85 it is proposed to construct three more office buildings for District Offices with sufficient facilities. An outlay of Rs. 15.65 lakhs has been proposed for the period of Sixth Five Year Plan 1980-85.

7.11 LABOUR AND LABOUR WELFARE

7.11.1.1. This sub-sector includes the development programmes pertaining to the activities relating to Labour and Labour Welfare and Employment Service and Training. A total outlay of Rs. 4000.00 lakhs is proposed for the programmes under this sub-sector for the Sixth Five Year Plan 1980-85. Broadly the break up of the proposed outlay is as under :—

(Rs. in lakhs)

Sr. No.	Minor Heads	Proposed Outlay for 1980-85
1	2	3
I. Labour and Labour Welfare--		
(a)	Industrial Relations	585.00
(b)	Working conditions and safety	15.00
	Total-I	600.00
II. Employment Service and Training--		
(a)	Direction and Administration	105.00
(b)	Education and Training	2025.00
(c)	Research and Statistics	11.00
(d)	Schemes for the educated unemployed	1241.00
(e)	Other expenditure	18.00
	Total—II	3400.00
	Grand Total	4000.00

The following paragraphs highlight the major development activities undertaken and envisaged in the Sixth Plan 1980-85 under this sub-sector.

7.11.2. Industrial Relations scene in Gujarat :

7.11.2.1. Owing to the progressive and pragmatic policies followed by the State Govt., there has been tremendous expansion of infrastructure base and the net work of supporting agencies, which has resulted in the State's taking rapid strides in the field of industry. The industrial base of the State, which was founded on textile mills, has been diversified as well as expanded many-fold. Industrial peace and tranquillity in

the State has made significant contribution to the achievement of such rapid progress. It has been possible to attract industrialists from outside the State and also to encourage local entrepreneurs to undertake varied enterprises due to the congenial industrial atmosphere of Gujarat. This success has been made possible by the effort of the disciplined workers of Gujarat as well as the enlightened managements with the support of the Industrial Relations Machinery of the State which has been always vigilant in anticipating labour situations and resolving the disputes as and when they arise by using the methods of negotiation, mediation, conciliation, arbitration, adjudication and other lawful means for resolving industrial disputes. The combined efforts of the Industrial Relations Machinery, the entrepreneurs and the workers and their unions have been instrumental in enabling the State Govt. to implement various measures for the growth of industries in the State, as the result of which the State occupies the second position industry-wise among all States in India and has the reputation of one of the fastest industrialising State in the country.

7.11.2.2. The last decade in the economic life of the State is marked by a steady climate of industrial peace as would be evident from the following facts.

7.11.2.3. There has been a substantial growth in the large, medium and small scale industries with the concomitant increase in the number of workers. The number of Trade Unions has increased from 773 to 978 in last five years i.e. from 1975 to 1979. During this period the number of registered factories has gone up from 9070 with 5.35 lakh workers in 1975 to 11887 factories with 6.39 lakh workers in 1979. According to available information, the number of strikes and lockouts and mandays lost due to them during these five years were as follows :—

Year	No. of strikes and lockouts	mandays lost (in lakh)	% to mandays lost in all India
1	2	3	4
1975	77	1.78	0.86
1976	56	0.43	0.35
1977	171	3.34	1.73
1978	174	3.40	1.77
1979 (P)	220	5.33	1.23

The loss of mandays per worker in Gujarat (all-India figures shown in brackets) was 0.34 (3.59), 0.08 (2.09), 0.62 (3.26), and 0.63 (3.25) during the years 1975, 1976, 1977 and 1978 respectively.

7.11.3. The approach to labour Policy

7.11.3.1. In broad terms the chief objective of the labour policy of the State during the Sixth Plan is to improve the existing legislation and other provisions intended to protect the interests of labour, to continually monitor their working and to assure that these provisions serve to implement the directive principles contained in the Constitution insofar as they relate to labour, and also subserve the larger national goals of eliminating poverty and ensuring full employment. The State Govt. has to ensure the right of workers to peaceful agitation if justice is denied to them, encourage mutual settlement, collective bargaining and voluntary arbitration, intervene in favour of the workers to ensure fairplay and justice, promote participative management, ensure reasonable and fair wages alongwith augmenting of production and increase in productivity, and, above all, maintain industrial peace, without, which economic growth would be impossible. Over the years, these goals have been increasingly realised in the case of organised and urban workers. However, not much has been done for the improvement of the working and living conditions of the agricultural labour, who constituted about 22 % (18.87 lakhs) of the total number of workers in the State according to 1971 census. Handicapped by years of economic and social subjugation, and unaided by strong organisation, they have not been in a position to express their grievances with as much effectiveness as their counterparts in the organised sector have done. They have also not benefitted to any significant extent by the progress in agriculture brought about by the green revolution. So, is the case with migrant and unorganised labour, who, due to the very nature of their work, continue to be exploited. The thrust of the labour policy of the State during the Sixth Plan would therefore be on giving a better deal to the underprivileged sections of workers consisting of agricultural labour, contract labour, migrant workers and workers in other unorganised categories. Surveying their conditions, identifying their pressing needs, locating their handicaps, strengthening their organisations, regulating their wages and working conditions and implementing schemes for their welfare would form the main plank of the labour policy during the Sixth Plan.

7.11.3.2. In the field of industrial relations State intervention would continue to play an important role to restore normalcy as quickly as possible, whenever

there is work stoppage, so that loss of production, mandays and wages is kept to the minimum. Frequent strikes and lockouts on flimsy grounds and go-slows are situations that a poor country like ours can ill afford. The State Govt. has to keep in view not merely the interests of the labour and managements but also the broad social and economic goals benefiting the community as a whole. The substantive and procedural laws enacted to regulate industrial relations have to be effectively implemented to fulfil these goals. It shall be the State Govt.'s endeavour to strengthen and streamline the institutional arrangements developed for evolving and implementing labour policies and programmes and remove their shortcomings. It is essential to direct the industrial relations machinery to the main objectives and, in order to do so, to anticipate events, pre-empt situations leading to work stoppages and in the event of work stoppages occurring, to intervene quickly and effectively. On the whole, the working of the industrial relations machinery has to become more purposeful and result-oriented than formal and procedure-oriented. A new sense of dynamism has to be infused in their working, by training, refresher courses and research.

7.11.3.3. In regard to the unorganised sector, what is called for is more innovative and experimental initiatives to formulate a total strategy that would lead to the amelioration of the conditions of the workers in this sector. A lot has to be done to build a network of institutions which will foster and sustain the welfare measures aimed at improving the lot of this section of workers. Reorganising and strengthening the regulatory machinery created for the implementation of the laws is the sine qua non for this task. This would go hand in hand with studies and research into the problems of these workers to obtain a better insight and concurrent evaluation of the schemes.

7.11.4. Review of Progress

7.11.4.1. The Industrial Relations Machinery for conciliation, adjudication and arbitration has been strengthened from time to time over the years to cope with the increasing volume of work. While this arrangement made mainly for the organised sector of labour has been growing, increasingly more attention has been paid to the programmes meant for the workers in the unorganised sector also. The programmes for protection and welfare of unorganised and unprotected labour, training to trade union workers, enforcement of the Payment of Gratuity Act, 1972, safety measures for prevention of accidents, implementation of Minimum Wages Act and grant-in-aid to trade unions and social institutions for socially desirable objectives are some of more significant measures already taken by the State Govt. In addition, machinery has been created for enforcement of the Payment of Bonus Act, 1965, the Bidi and Cigar Workers (Conditions of Employment) Act, 1966, the Contract Labour (Regulation and Abolition) Act, 1970 and the Payment of Gratuity Act, 1972.

7.11.4.2. In the ultimate analysis, the problem of industrial relations is essentially one of the attitudes of the parties concerned. In order to foster the spirit of co-operation alongwith safeguarding the rights and interests of the parties concerned, Joint Management Councils have been constituted by making statutory provisions in this regard in the Bombay Industrial Relations Act, 1946 and the Industrial Disputes Act, 1947. To assess the conditions of the unorganised and unprotected workers, several surveys were conducted in the past. The Mahatma Gandhi Institute of Labour Studies has been established with the objectives of improving the quality of data, imparting training to officers of Labour Department, and Labour Judiciary and trade union leaders and carrying out studies relevant to labour and employment.

7.11.4.3. In September 1977, the State Govt. appointed an *ad-hoc* tripartite Committee consisting of the representatives of employers, employees and Govt. under the chairmanship of Shri V.R.Mehta, for suggesting ways and means for effective enforcement of the Minimum Wages Act, 1948, in agriculture. The Committee submitted its report to the State Govt. in April 1978. The Committee made recommendations regarding simplification of forms which are required to be maintained by the agriculturists employing agricultural labour and the creation of a separate machinery for the enforcement of minimum wages in the employment in agriculture. The State Govt. has created 73 posts of Asstt. Govt. Labour Officers for being posted in talukas which have more than 10,000 agricultural labourers. 20 Govt Labour Officers also have been working for the implementation of the Minimum Wages Act in agriculture. Recently, the State Govt. has created a separate organisation of Rural Labour Commissioner to pay concerted attention to the implementation of Minimum Wages Act in the employment in agriculture and also to administer social security and welfare programmes for rural and agricultural labour. Advisory Committee has been constituted by the State Govt. for the purpose of revision of minimum wages in the employment in agriculture and for recommending on allied matters so as to enable the State Govt. to implement the law effectively but without harassment.

7.11.4.4. Considerable attention has been given to ensuring safety, hygiene and conducive working conditions for workers. The organisations of the Chief Inspector of Factories and the Chief Inspector of Steam Boilers have been in existence to implement the provisions of the Indian Factories Act and the Indian Boilers Act. These organisations have been strengthened to cope with the fast expanding number of factories and they would be further strengthened according to the needs of the situation in future.

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7.11.5. Employment Service and Training:

7.11.5.1. The number of the unemployed in the State has risen dramatically in recent years as against 1.58 lakh persons registered at Employment Exchanges at the end of 1970-71, unemployed persons on the Live Registers at the end of 1978-79 numbered 4.18 lakhs. It is thus necessary not only to increase employment opportunities but also to enhance the employability of job seekers through the provision of facilities for the acquisition of marketable skills. The Apprenticeship Training Scheme (which is a mode of "earning while learning") the Craftsmen Training Scheme and the module approach for short-term skill formation courses are significant in this context since they serve to open up avenues of both wage and self-employment.

7.11.5.2. At the end of the Fifth Plan 1974-79, the employment service in the State include :—

(a) an Employment Exchange in each district (seventeen of the nineteen Exchanges having a Vocational Guidance Unit attached to them).

(b) University Employment Information and Guidance Bureau at Five University towns.

(c) A Special Employment Exchange for the physically handicapped at Ahmedabad.

(d) Fourteen Employment Information and Assistance Bureau at taluka towns (to overcome difficulties experienced in registration/renewal by rural candidates.)

(e) Two Special Vocational Guidance Units in the tribal areas.

7.11.5.3. These facilities were augmented during the period of Annual Plans 1978-80 by establishing seven special Employment Exchanges in tribal areas replacing four Employment Information and Assistance Bureau and converting two Vocational Guidance Units, a Town Employment Exchange at Porbandar, a Job Development Unit in the Directorate of Employment and Training to explore the possibilities of employment in the private sector. Machinery in the Directorate for the enforcement of the provisions of the Compulsory Notification of Vacancies Act, 1959 was also strengthened during this period.

7.11.5.4. The Craftsmen Training Scheme is directed to developing skilled manpower for different operating levels in various industries, training under the scheme is imparted at Industrial Training Institute (ITIS.). At the end of 1979-80, there were 22 Industrial Training Institutes in the State with a total intake capacity of 8040 including Girls Wings with an intake capacity of 64 each started during 1979-80 in the Industrial Training Institutes

at Gandhinagar and Vadodara and three State-level diversified courses (intake capacity 152) have been run at the Industrial Training Institutes at Ankleshwar and Dahod since the Fifth Plan period for the benefit primarily of tribal youth. An advanced Vocational Training Institute has been set-up at the Industrial Training Institute, Vadodara with UNDP assistance for advanced training to candidates sponsored by industries.

7.11.5.5. The National Apprenticeship Training Scheme under the Apprenticeship Act, 1961 envisages systematic on-the-job training in industrial trades leading to, both wage and self-employment. Expansion under the scheme from its inception on 1st January, 1933 is indicated by the increase in the number of sanctioned seats.

At the end of	Sanctioned seat under the Apprenticeship Trg. Scheme (Nos.)
Third Five Year Plan (1931-66)	626
Three Annual Plans (1966-69)	1581
Fourth Five Year Plan (1969-74)	3431
Fifth Five Year Plan (1974-78)	6938
Annual Plan (1973-79)	7988
Annual Plan (1979-80)	12000

7.11.5.6. The number of seats allotted to industrial units which was 8,677 on 31st August, 1978 has risen to 11,681. The three Govt. Industrial Training Workshops in the State (Ahmedabad-10 courses, Vadodara-2 courses, Rajkot-3 courses) have a total intake capacity of 720 seats. These Workshops are intended to provide training facilities for industrial workers and their dependents.

7.11.5.7. Short-term courses of job-oriented training were introduced in 1970-71 towards increasing the employability of the educated unemployed. These courses which are run through Productivity Councils, Industrial Training Institutes, Polytechnics etc., have reference to such disciplines as Office Management, Secretaryship and Taxation, Computer Programming, Salesmanship, Industrial Engineering and Materials Management and such occupations as Stenographer, Receptionist-cum-PBX Operator, Driver-cum-Mechanic of Trucks/Auto rickshaws. The minimum educational qualification for admission varies, graduates, matriculates and non-matriculates are eligible for different courses. By the end of 1979-80, a total of about 27,000 persons had availed of these courses since their inception.

7.11.5.8. Two Multi-purpose workshops were established in the tribal areas of the State during the Fifth Plan period, these workshops which are intended to provide practical job training have a total intake capacity of 224 seats (Dahod 128, Mandvi 96). In 1979-80, the establishment of 19 Mini Industrial Training Institutes (intake capacity 2024) were sanctioned towards augmenting the availability of training facilities for tribal youths in Tribal Sub-Plan areas. Of these, 16 had commenced functioning by the end of 1979-80.

7.11.6. Programme for Labour and Labour Welfare for 1980-1985 :

7.11.6.1. Outlays of Rs. 600.00 lakhs are proposed for the Labour and Labour Welfare programmes during the Sixth Five Year Plan 1980-85. Broad break up of the proposed outlay is as follows:-

Programme	Outlay proposed for 1980-85. (Rs. in lakhs)
Labour Welfare	
(1) Industrial Relations	585.00
(2) Working conditions and safety	15.00
Total ..	600.00

Industrial Labour :

7.11.6.2. During the Sixth Plan period, it is proposed to strengthen and streamline the machinery which is already in existence for industrial relations. The machinery will be strengthened by opening offices of the Assistant Commissioners of Labour in various districts where there are no such offices at present, by increasing the number of Government Labour Officers and by providing transport for increasing mobility of the officers. Special attention will be paid to the growing industrial belts like Valsad, Vapi, Bharuch, Ankleshwar, Jamnagar and Porbandar. Expansion of the set up of Factory Inspectorates and assistance to the Safety Councils are other aspects which deserve mention in this connection. It is also proposed to devise training programmes for the officers to improve their understanding and knowledge of labour laws and labour situations. The Mahatma Gandhi Institute of Labour Studies are expected to play a leading role in this regard. The total outlay proposed for different programmes of industrial labour is Rs. 349 lakhs.

Agriculture Labour :

7.11.6.3. Agriculture labour constitutes about 22 % of the total work force in the rural area.

Most of the agricultural workers are either landless or belong to SC/ST and other backward communities. Their problems are compounded by seasonal unemployment, low and uncertain income and nutritional deficiencies. Their organizational strength is poor.

7.11.6.4. One of the significant measures taken during the Sixth Plan is to create a separate organisation of Rural Labour Commissioner. The field organisation already created for implementation of the minimum wages in the employment in agriculture comprising of Government Labour Officers and Assistant Government Labour Officers has been transferred to this new Head of Department. This Department will be strengthened further if necessary, to achieve effective implementation of minimum wages in agriculture.

7.11.6.5. The agriculture workers find it extremely difficult to earn their livelihood when they grow old. A pension scheme for them involves huge financial outlay. Nevertheless, the State has decided to make a beginning in this direction. To start with, the existing general scheme of old age Pension scheme has been liberalised in respect of agricultural workers of 60 years of age and above, whose family income does not exceed Rs. 600 per annum. They would get Rs. 15 per month more (i. e., a total of Rs. 45 per month including Rs. 30 per month under the general scheme), under the plan Scheme.

7.11.6.6. The condition of the agricultural labourers cannot be improved only by ensuring the payment of minimum wages. Socially and educationally they belong to the lowest strata of the society. In order to bring them on par with others, it would be necessary to devise welfare measures. It has been therefore, envisaged to establish a Rural Workers' Welfare Board to cater to their welfare, educational, recreational and cultural needs. The Board will run Rural Workers Welfare Centres which are expected to grow as nodal points for co-ordinating and channelising the various schemes of which the rural workers can take benefit. An outlay of Rs. 145 lakhs is proposed for the schemes meant for agricultural labourers and rural workers.

Unorganised and unprotected labour

7.11.6.7. Unorganised labour due to their very nature become victims of exploitation of several kinds. It is proposed to take up different programmes for the amelioration of their condition.

7.11.6.8. During the Sixth Plan it is proposed to start a Group Insurance Scheme for employees of shops and commercial establishments who are not getting the advantage of Provident Fund Scheme. The necessary legislation in this regard has been enacted already and the scheme has come into operation from 1st January 1981. The scheme

envisages payment upto Rs. 2,500 to a qualified employee in the event of his death while in service. A nominal premium is paid by the employer and employee and the scheme will be operated under the joint auspices of the LIC, Labour Department and the four Municipal Corporations of Ahmedabad, Vadodra, Rajkot and Surat where the scheme is introduced in the first stage. The scheme may be extended to further areas in due course of time.

7.11.6.9. The Gujarat Unprotected Manual Workers (Regulation of Employment and Welfare) Act, 1979 has been enacted for the benefit of unprotected manual workers. Under this Act, a Statutory Board has already been setup for the manual workers of cloth markets and shops in Ahmedabad. The Scheme is to be implemented from April 1981. The State Government has given loan assistance to this Board till it become self reliant. It is also proposed to establish more such Boards for different sections of unprotected manual workers during the Sixth Plan. An outlay of Rs. 23 lakhs is proposed for various activities connected with unprotected workers during the Sixth Plan.

Contract Labour

7.11.6.10. The contract Labour Advisory Board has been in existence for many years. The activities of the Board have been revamped to make its functioning more effective and speedy. This includes augmenting the staff and providing transport for the Board.

Migrant Labour

7.11.6.11. There is considerable seasonal migration of agricultural and construction labourers in search of jobs. It is necessary to pay attention to educational and nutritional problems of the children of such labourers. It is proposed to take up a scheme under which it is proposed to give grant-in-aid to those institutions which can undertake the task of imparting primary education and provide nutritional care to the children upto 10 years. The provision during Sixth Plan is Rs. 10 lakhs for this scheme.

Bonded Labour

7.11.6.12. The available surveys indicate that the system of bonded labour is hardly prevalent in the State of Gujarat. However, in order to make all possible efforts to trace out the cases of bonded labour, if any, and to eradicate the same, it is proposed to carry out intensive surveys especially in the backward and tribal areas of the State. It is also proposed to take up a scheme in conjunction with the Government of India's scheme for rehabilitating them during the Sixth Plan. A provision of Rs. 5 lakhs is proposed for these purposes during the Sixth Plan.

Workers Participation - Joint Management Councils

7.11.6.13. The constitution of Joint Management Council is important from the point of view of participation of workers in the industry. Such councils will go a long way in preventing settling the disputes expeditiously. The constitution of such councils was made mandatory in the State for certain industries covered under the Bombay Industrial Relations Act, 1946 and the Industrial Disputes Act, 1947. Accordingly, Joint Management Councils in cotton textile industry and other industries were formed in 1976 and were re-constituted in 1979. A provision of Rs. 5 lakhs is made for a scheme of undertaking evaluation studies regarding the working of such Joint Management Council. 13

Strengthening of Machinery and Other Schemes

7.11.6.14. In order to cope with the increasing volume of work arising out of the variety and multiplicity of factories it is considered necessary to strengthen the establishment of [Inspectorate of Factories during the Sixth Plan. For this purpose an outlay of Rs. 10 lakhs is proposed. Similarly for opening more offices under the labour wing and also to increase the mobility of the Officers by providing conveyance facilities, a provision of Rs. 15 lakhs is made. To improve the system of collection of data a provision of Rs. 5 lakhs is made. Modernization of library in the Office of the Labour Commissioner would be done with an outlay of Rs. 2 lakhs and a provision of Rs. 6 lakhs is made for training of trade union workers.

Workers Stadium at Ahmedabad

7.11.6.15. Under the Scheme it is proposed to construct a suitable building for workers' Stadium at Ahmedabad in the vicinity of the Lal Bahadur (Malek Saban) Stadium in Bapunagar area which is a concentrated working class locality in the city. Under the scheme it is intended to provide the necessary equipment and modicus of staff to look after the activities of the Workers' Stadium. It would also provide for open-air theatre which can be utilised as a pavilion as well as stage for open air cultural programmes. It is intended to provide indoor games facilities as well as outdoor games facilities. To start with, during the year 1980-81 it is intended to hire suitable accommodation in the Bapunagar area where the proposed activities can be undertaken so long as workers' Stadium is not constructed.

7.11.7. Programme for Employment Service and Training for 1980-85

7.11.7.1. Outlays of Rs. 3400.00 lakhs are proposed for the Employment Service Training Programmes during the Five Year Plan 1980-85.

Programme	Outlay (Proposed)
	1980-85
II. Employment Service & Training.	
(a) Direction & Administration	105.00
(b) Education & Training.	2025.00
(c) Research & Statistics.	11.00
(d) Scheme for the educated unemployed	1241.00
(e) Other expenditure	18.00
Total--II	3400.00

7.11.7.2. The process of development set in motion by the plan investments in the primary, secondary and tertiary sectors leads to employment generation. But merely creation of jobs does not need to more employment for the needy families. There has to be an agency which links the employers and the employment seekers and makes an active contribution to matching the job requirements with the abilities of the job seekers. The employment service will be geared to play this role more and more effectively in consonance with the distributive justice objective of the State policy. The employment service in the district will be given a new role of participating in the formation of the district employment plan by its representation on the district employment generation council. This will result in a new role of advising the registered candidates about new avenues of wage or self-employment instead of merely concentrating on its traditional role of obtaining mere placement against the notified vacancies. The procedures would also be suitably modified to lead to a better identification of the more needy families especially those in which no member has gainful employment. It is proposed to cover the rural areas of a few districts more intensively by providing suitable mobile vans to the district employment exchanges. Three more special Employment Exchanges for physically handicapped would be started under the scheme of the Directorate of Social Defence to pay special attention to the employment of physically handicapped. The employment data would be improved by more vigorous implementation of the Compulsory Notification of Vacancies Act. Door to door survey of the new establishments which are required to be brought to the employers register and undertaking area skill surveys of few district which are showing an accelerated industrial growth. The bigger Employment Exchanges would be bifurcated to lead to more effective service to the employment seekers. The construction of buildings for Employment Exchanges will be undertaken for those which do not have proper buildings.

Overseas Employment:—

7.11.7.3 Due to a large scale development taking place in the countries of middle east, the need for manpower in such countries is very considerable. This leads to a phenomena of emigration of skilled, semi-skilled and unskilled workers particularly to the countries of middle east for gainful employment. At present promotion of such employment is being undertaken by private agencies which fail to safeguard the contractual rights of the candidates. It is proposed to set up a cell in the Directorate for providing an agency to such candidates for reporting their grievances on which suitable action could be taken by the Government. It is also proposed to gradually increase the scope of this cell to actively promote overseas employment by establishing contacts with reputed employers in such countries.

District Employment Council:--

7.11.7.4 In order to promote a mutually beneficial relationship among education, employment and development, a decentralised approach is necessary and District Development Centres would play a very important role for employment planning. It has, therefore, become necessary to set up an Employment Generation Council at the district level. This Council will consist of eleven members with Collector as Chairman, District Panchayat President as Co-Chairman and other members will include the following.

- (a) Two MLAs of the District.
- (b) Chairman, District Co-operative Bank.
- (c) A representative of the lead bank.
- (d) District Development Officer.
- (e) General Manager, Dist. Industries Centre.
- (f) Project Officer, Special Programmes.
- (g) District Panning Officer.
- (h) Dist. Employment Officer-Member secretary.

7.11.7.5 The Council shall prepare an integrated district plan which will help to provide jobs in the Industrial, Agricultural and service sectors. It will also ensure that the District Employment Plans and the District Credit Plans are mutually supportive of each other. The constitution of the Council will also provide for incorporating the ideas and concept of programmes for employment generation set forth by the State level employment body.

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Physically and Mentally Handicapped:--

7.11.7.6 In spite of the fact that 4% of vacancies have been reserved by the State Government for the physically and mentally handicapped, special efforts are required for the placement of physically and mentally handicapped candidates registered with Employment Exchanges not only with Government and public sector units but also with the private sector establishments. This work is being done by the special Employment Exchange for physically handicapped in Almedalad and by respective Employment Exchanges in other districts. It is proposed to start three more special Employment Exchanges in three major towns of the State to increase the placement of physically and mentally handicapped through special and intensive efforts. Funds for these three Special Employment Exchanges will be provided by the Social Defence Directorate of the State and the scheme will be implemented by the Director of Employment and Training.

7.11.7.7 Since there is a waiting period before employment can be secured for physically and mentally handicapped the State Government has decided to extend the Retention Allowance Scheme to the Physically and mentally handicapped who were registered on the live Registers of the Employment Exchanges on or before 30-6-1979. The Retention Allowance beneficiaries are attached to Government and semi-Government offices with a view to provide them opportunities of knowing working of these offices and improve their employability through interaction with employees as well as employers. They are paid Rs. 50/75 and 100 per month respectively depending on their academic qualifications of matriculation, graduation or diploma in technical subjects and post-graduation or degree in technical subjects for part time work in such offices for one hour, one and a half hours and two hours respectively.

7.11.7.8 Special efforts for self-employment of physically and mentally handicapped will also be necessary to provide them with gainful employment in a large number than would be possible by merely promoting wage employment. The State Government will take steps to make institutional arrangements and give monetary assistance for increasing the scope of self-employment of physically and mentally handicapped.

7.11.7.9 In order to increase the employability of physically handicapped it will also be necessary to give them more opportunities in vocational and skill-formation courses conducted by the Directorate. It has been decided to give special preference to physically and mentally handicapped in admission with the help of Vocational Rehabilitation Centre of Government of India for assessing their suitability for such courses. Such training will prepare them for securing gainful, wage or self-employment more expeditiously.

Craftsmen Training Scheme:--

7.11.7.10 The features of the programme under the Craftsmen Training schemes during 1980-85.

Item	Unit	Physical target
		1980-85
(a) Establishment of new ITIs (including 1, ITI for women).	I.T.Is established/additional seats (Nos.)	5/1,000
(b) Increase in intake capacity of selected ITIs.	Additional seats (Nos.)	2,836
(c) Expansion of buildings housing I.T.Is.	ITIs covered (Nos.)	12
(d) Construction of ITIs of.	I.T.Is covered (Nos.)	
(i) Buildings		5
(ii) Staff quarters		16
(iii) Hostels		10

7.11.7.11 The programme envisage, in addition to the provisions of physical facilities, an increase in intake capacity from 8040 seats at the end of 1979-80 to 11,876 seats at the end of 1984-85.

7.11.7.12 A special provision for admission to the dependents of small and marginal farmers, rural artisans, landless labourer and the families living below poverty line has been made at Rural ITI, Sarkhej.

7.11.7.13 Those families who have no earning members and whose income is below Rs. 4800/- per annum will be given a facility for training to at least one of their members. This will ultimately result in providing gainful employment through vocational training to at least one member per family.

7.11.7.14 One third of the trainees in the ITIs are given stipend on merit-cum-means basis. An upward revision would be made in the amount of stipend to provide relief to the students belonging to the scheduled tribe, scheduled caste and other indigent families.

7.11.7.15 To upgrade the skill of industrial workers, an advanced vocational training scheme is

in operation at the ITI, Vadodara. It is proposed to extend these facilities to three other ITIs located in towns where there is a large number of industries. The total estimated cost for the scheme is Rs. 15 lakhs.

Career Development Scheme:--

7.11.7.16 With the active involvement of the Universities, scientific establishments, local training and educational organisations career development courses are proposed to be started in rural areas also. This will lead to higher employability in the matriculates and non-matriculates categories.

National Apprenticeship Training Scheme:—

7.11.7.17. It has been decided to accelerate the implementation of the National Apprenticeship Training scheme which is one of the items of 20-points programme. Accordingly, the number of sanctioned seats under the scheme is proposed to be increased to 17,000 during 1980-85, 5000 additional seats are to be sanctioned by the end of 1984-85. Provision is made in the 1980-85 programme for:—

(a) the establishment of four Basic Training Centres (for the provision of basic training facilities and related instructions to apprentices).

(b) the strengthening of the Directorate of Employment and Training to enable it to discharge the additional supervisory responsibility arising from the increased number of sanctioned seats.

(c) The increase in hostel facilities for apprentices.

Training for skill formation:—

7.11.7.18. An increase in educated unemployment is a de-stabilising factor in our country leading to general dis-satisfaction and sporadic social unrest as large number of candidates having qualifications of matriculation or above registered with the Employment Exchanges are waiting for longer periods in securing gainful employment. The main reason for such a situation is the fact that mere possession of educational qualifications is no longer adequate for securing employment. It has therefore been decided to launch a programme for increasing opportunities for training in trades and vocations which lead to quicker employment. For this purpose, existing training schemes for skill formation with various departments will be enhanced and the number of trainees under each scheme would be increased to tackle the problem of educated unemployed on a war-footing. Educational institutions having capacity to train more educated unemployed would be given

adequate grant-in-aid for increasing/setting up training facilities for skill formation, such a measure is expected not only to make more skilled or semi-skilled workers available for industrial development of the State but will also lead to self-employment in the production as well as service sectors in the rural and urban areas. It is expected that 31,000 more matriculates would be provided with avenues for training for skill formation per annum by 1984-85. Of these, 15000 will be under ITIS.

Scheme for the Educated Unemployed:—

7.11.7.19. The short-term job-oriented courses run to increase the employability of the educated unemployed are proposed to be so extended and diversified as to benefit both a large number of youth in rural areas and the physically handicapped. Further, in order better to match the needs of identified target groups, a measure of restructuring of the courses is proposed.

7.11.7.20. In view of the magnitude of unemployment amongst educated youth, the programme for 1980-85 envisages the maintenance of the following facilities/services created during 1978-80 and where possible, an increase in their coverage.

(a) Additional seats (256) in ITIs in the disciplines/trades of Refrigeration and Air-conditioning, Motor Mechanic, and Instrument Mechanic.

(b) Mini I. T. Is in Tribal areas (the programme for 1980-85 envisages the setting up of the three Mini ITIs that, though sanctioned, were not set up by the end of 1979-80, and the construction of buildings, staff quarters and hostels for all Mini. ITIS.)

(c) Short-term training courses for candidates for recruitment to the Defence Service (an increase in the number of training centres from three to ten is proposed during 1980-85).

(d) Pre-service examination training for scheduled Caste and scheduled Tribe candidates (this scheme is implemented through the Directorate of Social Welfare)

(e) Stipendiary employment for unemployed trained graduates under the scheme of coaching facilities for school drop-outs (this scheme is implemented through the Education Department).

(f) Informal apprenticeship:—type training in skilled trades such as Masonry, Carpantry, Plumbing, Blocksmithy etc.

(g) Margin money to skilled workers and small entrepreneurs to enable them take up self-employment (this scheme is implemented through the the Industries Department.)

(h) Financial assistance to enable persons trained in recognised vocational training institutions (for such vocations as electrician, Refrigeration Machanic, Carpenter and Mason) to take up self-employment (this scheme is implemented through DICS.)

(i) Monetary relife, through the payment of a retention allowance against part-time work/vocational training to persons belonging to indigent families who—

(i) do not belong to the SC/ST and have remained unemployed for 5 years or more on the live register of Employment Exchange on 30-11-79.

(ii) Belong to the SC/ST and have remained unemployed for 3 years or more on the live Register of Employment Exchange on 30-11-79.

(iii) Are physically handicapped and have remained unemployed for six months or more on the live Register of Employment Exchanges on 31-12-79.

(iv) Have no regular earning member in their families and were on the live Register on 31-3-80.

(j) Employment Information, through the supply, free of cost of the publication, Rojgar Samachar, to hard-core applicants on the live Register of Employment Exchanges.

Scheme for self-employed:—

7.11.7.21 In order to encourage self-employment which is imperative in view of large number of unemployed in the State, certain measures were initiated during 1979-80 to encourage self-employment.

7.11.7.22 District Industries Centres were asked to implement the scheme of Margin Money to skilled workers and small entrepreneurs to enable them to take up self-employment. This scheme has improved the scope for self-employment and is proposed to be continued during the current plan. It is expected that with provisions of infrastructural facilities in taluka places the benefit of this scheme would be taken by those who are able to give some contribution for establishing self-employment ventures.

7.11.7.23. The scheme for providing financial assistance to enable the persons trained in recognised vocational and technical training institutions to take up self-employment was introduced in 1979-80 and is expected to gain momentum during the period of current plan. with the enhancement of training

facilities, this scheme would be useful in providing avenues for self employment for those technically trained persons by providing assistance, training and credit under bankable schemes. This scheme will also be continued during the current plan.

7.11.7.24. The sector of the small self-employed man found behind the hand carts or on cycles or in cabines, in both urban and rural areas, manufacturing or trading goods or services required by the residents of the local areas, has remained a comparatively neglected sector so far. A scheme has been framed to carefully identify the members of this sector and provide them assistance in the

form of required assets in kind with the help of subsidy and institutional finance. A beginning is proposed to be made in 1981-82 and Rs. 20 lakhs have been provided in the budget for the scheme during this year.

7.11.7.25. It is proposed to make an effort to step up the growth of self-employment sector through the implementation of above mentioned schemes. An outlay of Rs. 100.00 lakhs proposed for this scheme for 1980-85 has been included in the total outlay of Rs. 1241.00 lakhs proposed for the entire programme for the educated unemployed.

STATEMENT

Labour and Labour welfare.

List of Schemes included in the Sixth Five Year Plan 1980-85

(Rs. in Lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980-85 Outlay	
		Total 3	Capital 4
I. Direction and Administration.			
1.	LBR—1 Strengthening the Directorate of Employment and Training.	20.00	..
2.	LBR—2 Job Development Machinery.	3.00	..
3.	LBR—3 Expansion of Employment Service.	65.00	12.00
4.	LBR—4 Youth Employment Service, occupational Information and Research Analysis.	1.00	..
5.	LBR—5 Studies and surveys for Employment Promotion Board.	6.00	..
6.	LBR—6 Formation of District Employment Generation Council.	10.00	..
	Total I	105.00	12.00
II. Industrial Relations.			
7.	LBR—7 Unit for Collection of labour Statistics	5.00	..
8.	LBR—8 Protection and Welfare of unorganised Labour including Satem Commission.	170.00	..
9.	LBR—9 Modernising Library in Headquarter offices.	2.00	..
10.	LBR—10 Training to Trade Union Workers and others.	6.00	..
11.	LBR—11 Enforcement of Payment of Gratuity Act, 1972.	4.00	..
12.	LBR—12 Grant-in-aid to Trade Unions and Social Institutions for Socially desirable objectives.	15.00	..
13.	LBR—13 Establishment of Institute for Research, Training and Development	170.00	125.00
14.	LBR—14 Workers Stadium at Ahmedabad.	10.00	5.00
15.	LBR—15 Establishment of Rural Labour Welfare Board.	60.00	..
16.	LBR—16 Old age Pension for Agricultural Labourers.	85.00	..
17.	LBR—17 Implementation of Gujarat Unprotected Manual Workers (Regulation of Employment & Welfare) Act, 1979. To constitute Statutory Board.	23.00	..
18.	LBR—18 Workers Participation-Joint Management Council.	5.00	..
19.	LBR—19 Welfare of Migrant Labour.	10.00	..
20.	LBR—20 Abolition of Bonded Labour System.	5.00	..
21.	LBR—21 Expansion of Labour Establishment.	15.00	..
	Total—II	585.00	130.00
III. Working Condition & Safety.			
22.	LBR—22 (A) Safety Cell for Prevention of Accidents.	5.00	..
	(B) District Establishment of Inspectorate of Factories	10.00	..
	Total—III	15.00	..

1	2	3	4
V. Education and Training			
23.	LBR—23 Craftsman Training Scheme	1182.00	514.48
24.	LBR—24 Grant-in-aid to private agencies for I.T.I. based courses	50.00	..
25.	LBR—25 Introduction of Additional seats under Vocational Programmes	568.00	..
26.	LBR—26 National Apprenticeship Training Scheme	200.00	66.00
27.	LBR—27 Expansion of Existing Government Industrial Training Workshops	25.00	25.00
Total—IV		2025.00	605.43
V. Research and Statistics			
28.	LBR—28 Collection of Employment Information	11.00	..
VI. Schemes for educated unemployed.			
29.	LBR—29 Career Development courses	200.00	..
VII. Incentive Schemes for Educated Unemployed			
30.	LBR—30 (A) Additional Seats in I.T.Is.	30.00	..
	(B) Scheme for grant of retention allowance against part time work/Training	150.00	..
	(C) Scheme for pre-service training for recruitment in defence service	20.00	..
	(D) Informal type of Apprenticeship Training	5.00	..
	(E) Job-Development Machinery	1.25	..
	(F) Pre-service training Scheme for competitive examination for Scheduled Castes/Scheduled Tribes.	5.00	..
	(G) Scheme for Margin money Assistance for self Employment	140.00	..
	(H) Supply of Rojgar samachar	20.00	..
	(I) Mini I. T. Is.	487.75	300.00
	(J) Pre-services examination scheme (D. S. W.)	6.00	..
	(K) Scheme for providing financial assistance for self employment	100.00	..
	(L) Financial Assistance to vocationally trained persons for self-employment	30.00	..
	(M) Nucleous Budget	45.00	..
	(N) Sachivalaya Cell	1.00	..
Total ..VII		1041.00	300.00
VIII. Other Expenditure			
31.	LBR—31 Multipurpose workshop for rural areas	18.00	1.00
Grand Total I—VIII		4000.00	1052.48

7.12. WELFARE OF BACKWARD CLASSES

7.12.1. Introduction

7.12.1.1. It has been directed in our constitution that "The State shall promote, with special care, the educational and economic interest of the weaker section of the people, and in particular of the Scheduled Castes and Scheduled Tribes and shall protect them from social injustice and all forms of exploitation." In conformity with these provisions, vigorous and systematic efforts are being made by the Government to bring about socio-economic amelioration of the weaker sections of the society in general and of the backward Classes in particular.

7.12.1.2. The Backward Classes of Gujarat comprise of Scheduled Castes, Scheduled Tribes, Nomadic Tribes and Denotified Tribes. According to 1971 census, the population of Scheduled Castes is 18.25 lakhs and that of Scheduled Tribes is 37.34 lakhs which comes to 6.84 and 13.99 percent respectively of the total population of 266.97 lakhs. The census figures for Nomadic Tribes and Denotified Tribes are not available. However they have been estimated to be 4 and 3 lakhs respectively. Thus Backward Class population is nearly 21% of the total population of the State.

7.12.1.3. The problems of raising substantially the socio economic levels of these groups, though quite difficult, can neither be postponed nor left to be taken care of by general economic growth. The Scheduled Castes and Scheduled Tribes not only share the general problems of poverty and unemployment with rest of the population but also face the additional problems arising out of age-old social and cultural handicaps. They continue to pursue traditional occupations. While the Scheduled Castes continue to be subjected to numerous indignities emanating from the practice of untouchability, the Scheduled Tribes by and large continue to remain outside the framework of the national economy. In their case, social poverty and economic poverty get merged into a single problem. Special programmes however were formulated for their socio-economic development in successive plans, but they proved inadequate. The Sixth Plan has therefore laid a special emphasis on the problem of these backward classes.

7.12.1.4. According to the 1971 census, literacy amongst the Scheduled Castes is 27.24% and amongst the Scheduled Tribes 14.12% as against the general literacy level of 35.79% for the State. The main emphasis will therefore, be on raising literacy and improving the educational levels of backward classes through schemes of pre and post matric scholarships, coaching classes, boarding grants, hostel facilities etc. A concerted drive will be undertaken for expanding adult literacy.

7.12.1.5. Among Scheduled Tribes, most backward tribes are Kotwalia, Kolcha, Kolgha, Kathodi, Padhar and Sidia. The literacy percentage amongst these communities is hardly 2%. Amongst Scheduled Castes, the most backward Communities are Bhangi, Hadi, Senva, Nadia, etc.

7.12.1.6. Since the main objectives of the Five Year Plan 1980-85 are removal of unemployment, reduction in poverty and provision for Minimum basic needs and services, it is imperative that the Scheduled Castes, Scheduled Tribes and Backward Classes, who constitute the poorer sections of the society, receive maximum benefits from the plan programmes designed to achieve these overall objectives. The programmes for the development of backward classes are now conceived as not merely additional but they are also to be integrated with the other development programmes of the Plan. The main approach will be identification of schemes under general sectors of development, which would be of particular benefit to them. Besides quantification of funds from beneficiary oriented programmes under each sector, specific target as to the number of individuals/families which would benefit from these programmes, would have to be determined. In the Five Year Plan 1980-85 the "Special component plan for the Scheduled Castes" so devised is expected to play a vital role in the overall welfare and upliftment of the Scheduled Castes population of the State. This approach is proposed to be followed during the period of the Sixth Five Year Plan.

7.12.1.7. Another objective to be pursued with vigor will be the eradication of untouchability in all forms so that social disabilities do not inhibit the economic and social development of the Scheduled Castes. For keeping vigilant watch over the eradication of untouchability "Special Cell" has been set up in the State for proper and speedy investigation of complaints involving offences against members of the Scheduled castes. Publicity and propaganda against the practice of untouchability will be intensified. Stiff punishment for violating the law in this respect will be administered.

7.12.2. Review of Progress

7.12.2.1. During the period of the planned development emphasis has been laid on special development programmes for the Welfare of scheduled castes, scheduled tribes, nomadic tribes and denotified tribes. Schemes aiming at their upliftment in the field of education, economic well being and other amenities such as health and housing facilities have been undertaken. The implementation of the Tribal Area Sub-Plan for the areas where tribal population is concentrated has also been initiated in the period of Fifth Plan. A Tribal Development Corporation has been set up in October, 1972 which is expected to help in the progress of ameliorating the conditions of the Tribal people. Similarly, the Scheduled Castes Economic Development Corporation has been set up in 1975. It has been registered under Company's Act. It is expected to help improving the economic condition of the harijans and providing employment opportunities to them through the Small Scale and other industries. A Special component Plan for Scheduled Castes is being formulated and implemented from the year 1979-80. Specific

amount is being earmarked proportionate their population under Special Component Plan for the Welfare of Scheduled Castes under various sectors/sub-sectors viz. Agriculture, Power, Industries, Social Services etc. An outlay of Rs. 9.06 crores was provided for the year 1979-80 which has been increased substantially to Rs. 27.59 crores during 1980-81. The

different programmes under the "Component Plan" are expected to benefit the population of Scheduled Castes appreciately.

7.12.2.2. The Category-wise and groupwise breakup of the Fifth Plan outlay & Expenditure for the period of 1974-75 to 1978-79 is shown below :—

(Rs. in lakhs)

Sr. No.	Category	(1974-79)			
		Education	Economic uplift	Healths, Housing and other Schemes.	Total
1	2	3	4	5	6
A. Outlays :					
(a) State Plan					
1.	Scheduled Castes.	245.12	141.52	195.09	586.73
2.	Scheduled Tribes.	326.09	149.87	122.55	633.51
3.	Nomadic Tribes.	16.68	17.50	6.60	40.78
4.	Denotified Tribes.	14.84	17.50	6.64	38.98
	Nucleus Budget	..	..	..	10.00
	Total (a)	602.73	326.89	330.88	1260.00
(b) Centrally Sponsored Programme :					
1.	Scheduled Castes.	878.85	..	15.33	894.18
2.	Scheduled Tribes	473.17	231.18	8.82	718.17
	Total (b)	1352.02	231.18	24.15	1607.35
	Total (a + b)	1954.75	557.57	355.03	2867.35
B. Expenditure :					
(a) State Plan.					
1.	Scheduled Castes.	300.51	62.00	141.52	504.03
2.	Scheduled Tribes.	448.03	121.26	15.31	655.55
3.	Nomadic Tribes.	51.85	3.13	15.31	70.29
4.	Denotified Tribes.	45.14	3.22	21.17	70.07
	Total (a)	845.53	189.71	264.70	1299.94
(b) Centrally Sponsored Programme.					
1.	Scheduled Castes.	566.01	..	7.54	573.55
2.	Scheduled Tribes.	315.30	188.56	15.97	569.53
	Total (b)	881.31	188.56	13.51	1083.38
	Total (a + b)	1726.84	378.27	278.21	2383.82

7.12.2.3. In the Fifth Plan 1974-79 against the outlay of Rs. 1260.00 lakhs provided for the programme of Welfare Backward Classes in the State Plan, an expenditure of Rs. 1299.94 lakhs has been incurred. Out of this an amount of Rs. 655.55 lakhs has been incurred on the programmes for welfare of Scheduled Tribes and Rs. 504.03 lakhs for the

programmes of welfare of Scheduled Castes. Comparatively more expenditure has been incurred on the programmes of education for Scheduled Tribes and Scheduled Castes. In respect of the Centrally Sponsored Programme also, bulk of the expenditure has been incurred on the schemes for education.

7.12.2.4. The Government has taken various measures during the Fifth Plan for the advancement of backward classes. The more important of these measures are indicated below :—

(1) The rates of pre-S.S.C. scholarships have been increased. The revised rates range from Rs. 30/- to Rs. 90/- per annum for different standards and different courses in educational institutions.

(2) The income limit for Pre-S.S.C. scholarships has been raised from Rs. 6,000 to Rs. 7,200 P. A.

(3) The rate of scholarships for professional courses has been increased from Rs. 30/- p.m. to Rs. 40/- p.m.

(4) The stipends to students in backward classes hostels and Ashram schools have been raised from Rs. 45/- to Rs. 55/- p.m.

(5) The scholarships in training-cum-production centres were raised from Rs. 55/- p.m. to Rs. 65/- p.m.

(6) The Government also raised the limit of the intercaste marriage incentive grant from Rs. 500/- to 5,000/-.

(7) The rate of post S.S.C. scholarships were increased and income limit raised from 1974-75.

(8) A scheme for grant to the Scheduled Castes and Scheduled Tribes Medical doctors for starting their own dispensaries is being implemented from 1976-77.

(9) The adoption of the new education policy of 10+2+3 during the year 1976-77 has resulted in awarding post S.C.C. scholarships in Classes of the Higher Schools to the Scheduled Castes, Scheduled Tribes, Nomadic Tribes and Denotified Tribes students under the State Plan and centrally sponsored programme.

(10) Scheduled Castes Economic Development Corporation has been set up in the year 1975-76.

7.12.2.5. The programme has benefitted a large number of individuals and institutions. The number of beneficiaries in selected items of the programme in the Fifth Plan is given hereunder :—

297542 Students were given tuition fees, examination Fees, and scholarships.

145775 Students were given free books and uniforms.

113231 Students were given post S.S.C. Scholarships.

100 New grant in aid hostels started.

3 New Government hostel started.

49 Grant-in-aid hostels granted building grants.

38 Ashram Schools and post basic Ashram schools started.

9888 Persons were given financial assistance for cottage industries, pumping set for irrigation and aid for development of agricultural land.

36 Scheduled Castes and Scheduled Tribes law graduates assisted for legal profession.

10 New "Tailoring Classes" started.

56 Medical doctors given financial assistance for starting their dispensarie.

6212 Youths were trained as approved artisans at workshops.

45 Inter-caste marriages.

100 New Balawadis started were encouraged by giving incentive grants

7403 Persons were given financial assistance for housing among them 4518 were Halpatis and 663 sweepers. Rs. 141.40 lakhs were given as loans and subsidies to co-operative housing societies of "Backward Classes".

7.12.2.6. Over the years the facilities and concessions granted to backward classes for education, economic uplift, health and housing have increased progressively. A broad list indicating the present features and concessions is given here under :—

Education :—

(1) Education upto S.S.C. is free to all students including Backward Class students.

(2) Grant of tuition fees to all Backward Class students studying in post S.S.C. courses.

(3) Grant of Examination fees to all Backward Class students at all levels.

(4) Scholarships to Backward Class students as per rules for standards V and VI for professional courses in I.T.Is. also.

(5) Scholarships to all Backward Class students in Colleges, as per scholarship rules of the Government of India.

(6) Free hostel facilities for students studying in Secondary School.

- (7) Free hostel facilities for college students at Ahmedabad, Vadodara, Surat, Rajkot and Junagadh. At Ahmedabad, Vadodara, Dahod and Surat there are also ladies hostels for college going backward class girls students.
- (8) Book Banks are started at Ahmedabad, Vadodara, Surat and Rajkot for B. C. students reading in Medical and Engineering courses.
- (9) Free Coaching classes are conducted for English, Science and Mathematics subjects in Std. VIII to XI.

Economic Uplift :—

- (1) Grant of loan-cum-subsidy for starting cottage industries and profession upto Rs. 1000 on the basis of 50% subsidy.
- (2) Grant of loan-cum-subsidy for starting dispensaries upto Rs. 10,000 on the basis of 50% subsidy and 50% loan to S.C. and S. T. doctors.
- (3) Thirteen training-cum-production centres are being run. In these centres Backward Class Youths are being imparted training in carpentry, smithy, tailoring, motor mechanics, welding, turning and fitting, masonry etc.
- (4) Backward Class Youths are also being imparted training as approved artisans at workshop.
- (5) 13 Tailoring classes are conducted for Nomadic Tribes and Denotified Tribes, Scheduled Castes and Scheduled Tribes women. The capacity of each class is of 20 seats.

Other Schemes (Housing) :—

- (1) Sweepers are given 100% subsidy to the extent of Rs. 500 for purchasing house sites and 75% subsidy to the extent of Rs. 900 for construction of houses.
- (2) Nomadic Tribes and Denotified Tribes members are given 75% subsidy to the extent of Rs. 900/- for housing construction.
- (3) The registered co-operative Housing Societies of Scheduled Castes and Scheduled Tribes are given financial assistance at the following rates :—

Land Subsidy at—

Rs. 5.00 per sq.yd. in rural areas.
 Rs. 7.50 per sq.yd. in urban areas.
 Rs. 10.00 per sq.yd. in Ahmedabad.

For House Construction—

For Scheduled Castes 70% loans and 20% subsidy.

For Scheduled Tribes 55% loans and 35% subsidy within the following ceiling.

Rs. 10,000 in Ahmedabad.

Rs. 8,000 in other urban areas.

Rs. 6,000 in rural areas.

- (4) Halpatis are given 100% subsidy to the extent of Rs. 450 for purchasing house sites and Rs. 1,000 for house construction subsidy and Rs. 650 interest free loan.
- (5) For inculcating good habits and culture among B. C. children, balwadis are run through voluntary agencies on grant-in-aid basis.
- (6) Nedly B.C. Members are given free Medical aid.
- (7) Posts for making propaganda for B.C. Welfare schemes and the programme for removal of untouchability are sanctioned to voluntary agencies. These agencies are paid grant-in-aid on their pay and allowances. Each propaganda worker is paid Rs. 250 per month and Rs. 75 fixed travelling allowances per month.
- (8) Under Bhangi Kashta Mukti Programme, local bodies are given financial assistance for purchasing wheel barrows, gum boots etc. To train workers sweepers and Inspectors, Shibiris are organised and short classes are also conducted. Local bodies and individuals are also given grant by Panchayats and the Government converting their dry latrines in to water-borne.
- (9) To study tribal problems and to undertake research on important subjects and also to train officials, workers etc. Government of India gives 100% grant to the Research Institute of the Gujarat Vidyapith.
- (10) A pre-examination Training Centre, is started at Ahmedabad to prepare B.C. candidates for competitive examination for recruitment to Government services. Trainees are paid Rs. 75 p.m. as stipend.
- (11) Special arrangement has been made for ensuring fulfilment of reservation of promotional quota for the Schedule Castes and the Scheduled Tribes.

(12) To enforce effectively the untouchability offence Act, 1965 and to attend immediately to the harrasment cases, Special Cells have been created at Vadodara and Rajkot headed by the Dy. Superintendent of Police. Cells also have been created at the headquarters of the Government and the office of the Inspector General of Police to attend to the work regarding the removal of untouchability and cases of harrasment etc.

7.12.2.7. A large number of institutions/classes/centres are being run for the benefits of Backward Classes as under :—

- 518 B.C. Hostels for students studying in Pre-S.S.C. classes.
- 10 B.C. Government Hostels for college going students.
- 177 Ashram Schools.
- 47 Cosmopolitan Hostels.
- 492 Balwadis.
- 18 Tailoring classes.
- 13 Training-cum-production centres.

7.12.3. Programmes for 1980-85

7.12.3.1. The Government of India have classified the Backward Classes into following four main categories :—

- (1) Selected castes who are considered as untouchable and Harijans.

- (2) Scheduled Tribes who live in rural, hilly and forest areas and whose main problems are isolation, poverty and exploitation.
- (3) Nomadic Tribes who mostly move from place to place in search of bread. They are not educating their children and not equipped with houses.
- (4) Denotified Tribes who formerly have so called tendencies which resulted into social contempt towards them.

7.12.3.2. The State Government had appointed a Commission to study the social and economic, conditios of the backward classes other than S.C., S.T., N.T. and D.N.T. This Commission is popularly known as Baxi Commission. The Government has decided to consider 82 Castes. Classes/Groups identified by the Bakshi Commission as Socially and Educationally and Econcmically Packward.

7.12.3.3. The above castes, classes and groups have remained backward as compared to the rest of the society, Education is the very lack bone of all welfare meastres undertaken for the integral development of the individual as well as of the Society. It enables the socially backward communities to achieve equally with the other sections of the society. Besides, a fundamental change in their environment and living conditions is also very essential for their assimilation with the rest of the society. In addition to the programme for welfare of Scheduled Castes, Scheduled Tribes, Nomadic Tribes and Denotified Nomadic Tribes which were undertaken so far the programme for welfare of socially, Educationally and Econcmically Packward e'arses au pr'op'd to be acceleratd in the Sixth Five year Plan 1980-85. The broad breakup is given as under :—

Sr. No.	Category	RS. in lakhs			
		Proposed outlay 1980-85			
		Education	Economic Uplift	Health, Housing and others	Total
1	2	3	4	5	6
1.	Scheduled Castes.	1200.00	750.00	850.00	2800.00
2.	Scheduled Tribes.	1335.00	790.00	875.00	3000.00
3.	Nomadio Tribes.	54.00	25.00	21.00	100.00
4.	Denotified Tribes.	50.00	27.00	23.00	100.00
5.	Socially and Educationally Backward Classes.	664.00	368.00	468.00	1500.00
6.	Economically Backward Classes	135.00	75.00	40.00	250.00
7.	Minority Communities.	158.00	45.00	47.00	250.00
Total		3596.00	2080.00	2324.00	8000.00

7.12.4. The Gujarat Tribal Development Corporation

7.12.4.1. The Gujarat Tribal Development Corporation has been established in October, 1972. The main objective of the Corporation is to take up socio-economic, welfare activities for the Tribal people. According to the provisions of the Act, the State Government has to provide the capital contribution upto Rs. 5 crores. The Corporation is supposed to plan and promote on its own or in collaboration with scheduled Tribes organisations, any programme pertaining to Agricultural Development Small Scale Industries, Building Constructions, Transport and such other activities as may be approved in this behalf. The revised schemes of differential rate of interest of Nationalised Banks is also implemented through Tribal Development Corporation. The State Government has granted guarantee to the banks for the differential rates of interest, while loan to be routed through the Corporation. Out of the loan sanctioned so far, under the differential interest rates scheme, about 32,000 families have been benefitted till 1979-80. Additional loan of Rs. 441.00 lakhs has been advanced by the various banks through the Corporation under D.I.R. Scheme, for various programmes like supply of Milch Cattle, Bullocks, Bullock-Cart, Poultry fisheries, lift irrigation etc. During the Sixth plan period 1980-85, an outlay of Rs. 450.00 lakhs is provided for the Tribal Development Corporation.

7.12.5. The Scheduled Castes Economic Development Corporation.

7.12.5.1. The Scheduled Castes Economic Development Corporation has been established in 1975. It is registered under the Company's Act. The objective of the Corporation is to identify the problems of socio economic backwardness of the Scheduled Castes and to plan and promote economic welfare activities either directly or through Panchayats, Co-operative banks, Government Departments or social organisations. The State Government provides grants to the Scheduled Castes Economic Development Corporation for implementing various

schemes and programmes benefitting of the Scheduled Castes. During the Sixth Plan period 1980-85, it is proposed to expand the activities of the Corporation. It is also proposed to cover 2 lakhs Scheduled Castes families under Economic Welfare Programmes so as to enable them to come above the poverty line. During the Sixth Five Year Plan 1980-85, an outlay of Rs. 290.00 lakhs is proposed for the purpose.

7.12.6. Programme for Socially, Educationally and Economically Backward Classes.

7.12.6.1. The Government has accepted all the recommendations of the socially and educationally backward class commission and 82 castes/classes/groups are declared as socially and educationally backward. They are eligible for special concessions similar to those being granted to the Scheduled Castes and Scheduled Tribes in pursuance of the provisions of the articles of the Constitution. The Government has also extended the benefits of various recommendations of the Commission except those relation to reservation in services and reservation in educational institutions to economically backward classes such as agricultural labourers, rural artisan, marginal farmers, unprotected and unorganised labourers and other persons who are self employed such as hand cart pullers, drivers of pedal and autorickshaws (Not owners of autorickshaws) drivers of horse or camel drawn vehicles and small shop keepers. The income limit for the above mentioned category of economically backward class people is fixed at Rs. 4800 per annum. An outlay of Rs. 1750.00 lakhs is provided for the welfare programmes for socially and educationally backwards classes and Economically backward classes in the Sixth Five Year Plan 1980-85.

7.12.6.2. The programmes for the socially and educationally backward classes and economically backward classes are also grouped under three main heads viz., Education, Economic uplift and Health, Housing and other Schemes. A broad break up of the outlay of Rs. 1750.00 lakhs is given as under :-

1980-85

(Rs. in lakhs)

Sr. No.	Category	Education	Economic uplift	Health, Housing and other/schemes	Total
1	2	3	4	5	6
1.	Socially and Educationally Backward Classes	664.00	368.00	488.00	1500.00
2.	Economically backward classes	135.00	75.00	40.00	250.00
Total		799.00	443.00	508.00	1750.00

68°

69°

70°

71°

72°

73°

74°

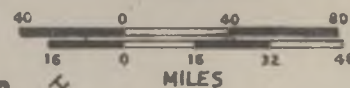
GUJARAT

CONCENTRATION OF
SCHEDULED CASTES
POPULATION

- INTERNATIONAL BOUNDARY
- STATE BOUNDARY
- DISTRICT BOUNDARY
- TALUKA BOUNDARY



KILOMETRES



TALUKAS WITH MORE THAN 7 PERCENT POPULATION
OF THE TOTAL POPULATION

68°

69°

70°

71°

72°

73°

74°

OR.NO. 714

7.12.6.3. The Gujarat Backward Class Board has also been set up under the Societies Registration Act, 1960 which is expected to formulate various schemes of economic uplift and health housing and other programmes as well as to undertake research studies and evaluation work. An outlay of Rs. 15.00 lakhs has been proposed for the Sixth Five Year Plan 1980-85.

7.12.7. Programmes for Minorities

7.12.7.1. Government has also constituted a Board for the welfare of Minorities. For the welfare of these classes, special schemes have been introduced during period of Sixth Five Year Plan. The schemes are more or less on par with schemes being implemented for S.E.B.C. and E.B.C. The programme is divided into three categories viz. Educational, Economic Uplift and Health, Housing and other Schemes. The benefit of these schemes will be made available to those persons whose annual income does not exceed Rs. 4800. This programme will help the poor persons of such classes and will provide opportunity for the educational and economical development. Under this programme, an outlay of Rs. 250.00 lakhs has been proposed for the purpose for the period 1980-85.

7.12.8. Component Plan for Scheduled Castes

7.12.8.1. According to 1971 census, the population of Scheduled Castes in Gujarat State is 18.25 lakhs which is 6.84% of the total population of 266.97 lakhs. Government is deeply concerned about the problems of Scheduled Castes. There is clear nexus between the economic plight of the Scheduled Castes and the atrocities and social disabilities to which they are subjected. With a view to ameliorate the lot of these people a special component plan has been introduced from the year 1979-80. According to the new strategy now to be adopted during the period of Sixth Five Year Plan, the objective of the various development programmes in the "Special Component Plan" is to enable Scheduled Castes families in the State to cross the poverty line within a short and specified period, if possible at least half of them in the Plan Period 1980-85 itself. Keeping in view the development needs of the Scheduled Caste in each occupational category, attempts have been made to identify available opportunities suitable for them and appropriate development programmes have been formulated for the period of Sixth Five Year Plan 1980-85. An outlay of Rs. 259.46 crores has been proposed for the purpose.

7.12.9. Community halls for Scheduled Castes

7.12.9.1. The Scheduled Castes people are treated as untouchables and therefore they find it difficult to arrange community functions like celebration of marriage, organising cultural activities, Sammelans etc. Even for organising economic activities, a common Meeting place for Scheduled Castes has been considered very necessary and

useful. With a view to mitigate these difficulties of Scheduled Castes, it is proposed to construct Community halls/centres during the Sixth Plan period 1980-85 for which an outlay of Rs. 90.00 lakhs is proposed. Although these community halls will be primarily for Scheduled Castes, it is envisaged that such halls can be utilised by all members of the weaker sections of the society.

7.12.10. Centrally sponsored programmes

7.12.10.1. For the period of Sixth Five Year Plan 1980-85 an outlay of Rs. 250.00 lakhs towards fully centrally sponsored programme and an outlay of Rs. 502.50 lakhs towards the 50 per cent aided centrally sponsored programme are expected from the centre. The broad break-up of the aided C.S.P. is as under :—

			(Rs. in lakhs).	
Sr. No.	Name of the Scheme		Proposed outlay 1980-85	
1	2		3	
I. Education				
1.	Pre. S.S.C. Scholarships for those who are engaged in unclean occupation	S.C.	35.00	
2.	Development and Maintenance of Book-Banks for medicals and Engineering student	S.C. S.T.	5.50 6.50	
3.	Grant-in-aid to voluntary agencies for construction of hostels for girls	S.C. S.T.	16.00 13.00	
4.	Construction of Government hostels for girls studying in colleges	S.C. S.T.	14.00 20.00	
5.	Pre-Examination, training-coaching for competitive examination.	S.C. S.T.	7.00 5.00	
II. Economic Uplift				
6.	Scheduled Castes Economic Development Corporation	S.C.	290.00	
III. Health, Housing and Others				
7.	Intensive drive for eradication of untouchability	S.C.	45.00	
8.	Tribal research and training Institute	S.T.	5.50	
9.	Full fledged hostel at Gandhinagar	S.C. S.T.	20.00 20.00	
		Total	S.C. 432.50	
		Total	S.T. 70.00	
Grand Total			502.50	

7.12.11. The physical targets proposed for the Sixth Five Year Plan period 1980-85 for

selected items under the sub-sector. "Welfare of Backward Classes" are given as under :—

Physical targets for selected items

Schemes	S. C.	S. T.	N. T. & D.N.T.	S.E.B.C. & E.B.C.
1	2	3	4	5
1. Examination Fees (Students)	19285	20000	5714	94285
2. Pre-S.S.C. Scholarship (Students)	138666	172000	55000	450000
3. Post S.S.C. Scholarship for Girl students	3600	1930	2416	..
4. Post S.S.C. Scholarship (students)	..	..	3800	..
5. Free Books and Clothes	381560	258000	4693	75000
6. Ashram Schools & Post Basic Ashram Schools	87	57	4	23
7. Coaching Centres	150	214	..	50
8. Balwadi/Anganwadi	450	330	10	750
9. Small Trade & Cottage Industries (Persons to be assisted)	40000	20000	1800	18000
10. Law Graduates (persons)	112	89	45	23
11. Medical Graduate (Persons)	167	134	20	53
12. Training to B. C. Artisans at approved work shops (Trainees)	1852	3704	556	8333
13. Inter Castes Marriage (Couples)	160	..	..	..
14. Halpati Housing (Houses)	15953	..	..	..
15. Housing on Individual basis (Houses)	16112	7083	833	13875
16. Housing for Sweepers & Scavengers (Houses)	5555	..	..	..
17. Co-operative Housing Societies (Societies)	40	7	12	8000 (Tenaments)

STATEMENT

Welfare of Backward Classes

List of Schemes included the Sixth Five Year Plan, 1980-85

(Rs. in lakhs).

Sr. No.	Name and Number of the Schemes	Sixth Five Year Plan 1980-85 outlay	
		Total	Capital
1	2	3	4
I Education			
1	BCK-1 Examination Fees	(a) S. C. 6.75 (b) S. T. 7.00 (c) N. T. 1.00 (d) D. N. T. 1.00 (e) S. E. B. C. 25.00 (f) E. B. C. 8.00 (g) Minority 15.00 Total 63.75	..............
2	BCK-2 Tuition Fees	(a) S. C. 2.50 (b) S. T. 3.00 (c) N. T. 0.20 (d) D. N. T. 0.20 Total 5.90	........
3	BCK-3 State Scholarship for Pre. S.S.C., Students	(a) S. C. 59.00 (b) S. T. 60.00 (c) N. T. 4.50 (d) D. N. T. 4.50 (e) S. E. B. C. 150.00 (f) E. B. C. 60.00 (g) Minority 60.00 Total 398.00	..............
4	BCK-4 State Scholarship for Pre. S.S.C. children of those who are engaged in unclean Occupation	(a) S. C. 35.00	..
5	BCK-5 State Scholarship for Post S.S.C. Girl students	(a) S. C. 36.00 (b) S. T. 30.00 (c) N. T. 4.25 (d) D. N. T. 2.80 (g) Minority 10.00 Total 83.05	..........
6	BCK-6 State Scholarship for Post S.S.C. Boy students	(e) N. T. 20.00 (d) D. N. T. 18.00 Total 38.00	....
7	BCK-7 State Scholarships for Higher Secondary students	(e) S. E. B. C. 85.00 (f) E. B. C. 39.00 (g) Minority 25.00 Total 149.00	......
8	BCK-8 State Scholarship for Technical diploma, professional and Industrial courses	(a) S. C. 10.00 (b) S. T. 7.50 (e) S. E. B. C. 50.00 (f) E. B. C. 8.00 (g) Minority 20.00 Total 95.50	..........

1	2	3	4
9	BCK-9 Free Books and Clothes to very needy student studying in primary upto I to VII std.	(a) S. C. 28.65 (b) S. T. 60.00 (c) N. T. 0.50 (d) D.N.T. 0.50 (e) S.E. B. C. 20.00 Total 109.65	............
10	BCK-10 Financial Assistance to very needy children studying in primary schools	(a) S. C. 440.00 (b) S. T. 60.00 (c) N. T. 1.20 (d) D. N. T. 1.10 (e) S. E. B. C. 13.00 Total 515.30	............
11	BCK-11 Oppertunity Cost of Education for very needy Children studying in Primary schools	(a) S. C. 8.00 (a) S. T. 20.00 (c) N. T. 1.20 (d) D. N. T. 1.10 (e) S. E. B. C. 15.00 Total 45.30	............
12	BCK-12 Free Books and clothes to very needy students studying in VIII to X. Std.	(a) S. C. 32.00 (b) S. T. 36.00 Total 68.00	......
13	BCK-3 Financial Assistance to very needy students studying in VIII to X standard.	(a) S. C. 8.50 (b) S. T. 15.00 Total 23.50	......
14	BCK-14 Development and Maintanance of Cook-Bank for Medical and Engineering students	(a) S. C. 5.50 (b) S. T. 6.50 (c) N. T. 2.00 (d) D. N. T. 2.00 Total 16.00	..........
15	BCK-15 Grant-in-Aid to Backward Class Hostels.	(a) S.C. 70.00 (b) S.T. 100.00 (c) N.T. 5.60 (d) D.N.T. 5.60 (e) S.E.B.C. 100.00 (g) Minority 8.00 Total 289.20	..............
16	BCK-16 Grant-in-Aid to Beckward Cless Boys Hostel for Building construction	(a) S.C. 16.70 (b) S.T. 20.00 (c) N.T. 3.00 (d) D.N.T. 2.60 (e) S.E.B.C. 20.00 Total 62.30	............
17	BCK-17 G.I.A. to B.C. Girls Hostel for Building construction	(a) S.C. 16.00 (b) S.T. 13.00 (c) S.E.B.C. 8.00 (f) E.B.C. 2.00 Total 39.00	..........

1	2		3	4
18	BCK-18	G.I.A. to B.C. Hostel for Electrification	(a) S.C. 12.00 (b) S.T. 10.00 (c) S.E.B.C. 6.00	......
		Total ..	28.00	..
19	BCK-19	G.I.A. to cosmopolitan Hostels	(a) S.C. 5.90 (b) S.T. 20.00 (c) N.T. 1.00 (d) D.N.T. 1.00 (e) S.E.B.C. 6.00 (g) Minority 0.75	............
		Total ..	34.65	..
20	BCK-20	I. G.I.A. To Higher Secondary & College Hostels.	(a) S.C. 0.25 (b) S.T. 2.00	....
		Total ..	2.25	..
	II	Admission to S.C. and S.T. students in Hostels attached with colleges	(a) S.C. 20.00 (b) S.T. 10.00	....
		Total ..	30.00	..
	III	Model Hostel for very bright students in all districts	(a) S.C. 25.00 (b) S.T. 15.00	....
		Total ..	40.00	..
21	BCK-21	I G.I.A. for additional coaching and studying centres	(a) S.C. 5.25 (b) S.T. 8.00 (c) S.E.B.C. 8.00	......
		Total ..	21.25	..
	II.	G.I.A. to B.C. Hostels for Amber Charkha sewing & Knitting Machine	(a) S.C. 0.25 (b) S.T. 1.00	....
		Total ..	1.25	..
22	BCK-22	Establishment of New B.C. Hostals and Development and Maintenance of Government	(a) S.C. 90.00 (b) S.T. 90.00 (c) N.T. 1.45 (d) D.N.T. 1.40 (e) S.E.B.C. 18.00 (f) E.B.C. 8.00 (g) Minority 7.00	..............
		Total ..	215.85	..
23	BCK-23	Establishment of New B.C. Hostals and Development and Maintenance of Government Hostels for Girls	(a) S.C. 65.00 (b) S.T. 75.00 (c) N.T. 1.40 (d) D.N.T. 1.40 (e) S.E.B.C. 15.00 (f) E.B.C. 5.00 (g) Minority 5.25	..............
		Total ..	168.05	..
24	BCK-24	Construction of Government Hostel for Boys	(a) S.C. 34.00 (b) S.T. 40.00 (c) S.E.B.C. 20.00	34.00 40.00 20.00
		Total ..	94.00	94.00
25	BCK-25	Construction of Government Hostel for Girls Studying in Colleges	(a) S.C. 14.00 (b) S.T. 20.00 (c) N.T. 2.70 (d) D.N.T. 2.70 (e) S.E.B.C. 10.00 (f) E.B.C. 5.00 (g) Minority 7.00	14.00 20.00 2.70 2.70 10.00 5.00 7.00
		Total ..	61.40	61.40

1	2		3	4	
26	BCK-26	Additonal coaching Centre in Government Hostel for Medical Engineering College going Students	(a) S.C. (b) S.T. Total ..	3.75 6.00 9.75	......
27	BCK-27	Lok Sahitya Vidyalaya	(e) S.E.B.C.	20.00	..
28	BCK-28	Ashram Schools	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. Total ..	150.00 450.00 4.00 4.10 75.00 683.10	30.00 50.00 10.00 90.00
29	BCK-29	Post basic Ashram School	(b) S.T.	150.00	..
		TOTAL EDUCATION	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. (f) E.B.C. (g) Minority Total ..	1200.00 1335.00 54.00 50.00 664.00 135.00 158.00 3596.00	78.00 110.00 2.70 2.70 40.00 5.00 7.00 245.40
		II—ECONOMIC UPLIFT			
30	BCK-30	Financial Assistance to agri. for Development of Agri. land	(a) S.C. (b) S.T. Total ..	30.00 25.00 55.00	......
31	BCK-31	Financial Assistance for Electrification of Agri. wells	(a) S.C.	6.00	..
32	BCK-32	I. Financial Assistance for Milch Cattle and Poultry	(c) N.T. (d) D.N.T. (e) S.E.B.C. (f) E.B.C. (g) Minority Total ..	4.00 5.00 40.00 15.00 3.00 67.00	............
		II. Training centre for farmers	(a) S.C.	0.50	..
33	BCK-33	Veternity aid to Socio Economic Council centre	(e) S.E.B.C.	3.00	..
34	BCK-34	F.A. to small trades/cottage Industries and Other professions	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. (f) E.B.C. (g) Minority Total ..	200.00 100.00 4.00 5.00 75.00 15.00 13.00 412.00	................
35	BCK-35	Subsidy for purchase of Bamboo	(a) S.C. (b) S.T. (e) S.E.B.C. Total ..	9.00 10.00 4.00 23.00	........
36	BCK-36	F.A. for purchase of inherited profession	(a) S.C. (b) S.T. (e) S.E.B.C. (g) Minority Total ..	3.00 7.50 6.00 2.00 18.50	..........
37	BCK-37	F.A. for Self Employed Persons	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. (f) E.B.C. (g) Minority Total ..	10.00 15.00 3.50 3.50 20.00 9.00 5.00 66.00	................

1	2		3	4	
38	BCK-38	F.A. for Ambar Charkhas Units	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. (f) E.B.C.	12.00 10.00 2.00 2.00 25.00 7.00	............
			Total ..	58.00	..
39	BCK-39	F. A. to for Law Graduates	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C.	5.00 4.00 1.00 1.00 1.00	2.77 2.22 0.55 0.55 0.55
			Total ..	12.00	6.64
40	BCK-40	F.A. to Medical Graduates	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C.	25.00 20.00 1.50 1.50 8.00	13.36 10.64 0.80 0.80 4.24
			Total ..	56.00	29.84
41	BCK-41	Training for women in Tailoring	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. (g) Minority	20.00 25.00 2.50 2.50 18.00 2.00	............
			Total ..	70.00	..
42	BCK-42	Training Centre for repairing of Radio and T.V. for Women	(a) S.C. (b) S.T.	9.00 15.00	....
			Total ..	24.00	..
43	BCK-43	Coaching Centre for Women for Field Job such as a teachers in Balwadi, Anganwad, Health and Paramedical Services	(a) S.C. (b) S.T. (e) S.E.B.C. (f) E.B.C.	4.00 4.00 2.00 2.00	........
			Total	12.00	..
44	BCK-44	Training to Backward Class artisans at approved Workshop	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. (f) E.B.C. (g) Minority	10.00 20.00 1.50 1.50 30.00 15.00 6.00	..............
			Total ..	84.00	..
45	BCK-45	Rehabilitation of scavengers and Sweepers in Other trades occupations	(a) S.C.	52.00	..
46	BCK-46	Stipend to Trainees in Training-cum-Production Centres	(e) S.E.B.C. (g) Minority	4.00 5.00	....
			Total ..	9.00	..
47	BCK-47	Building for Training-cum-Production Centres	(a) S.C. (b) S.T. (e) S.E.B.C. (g) Minority	8.00 12.00 30.00 2.00	8.00 12.00 30.00 2.00
			Total ..	52.00	52.00
48	BCK-48	Opening of New Training-cum-Production Centres	(e) S.E.B.C.	22.00	..
49	BCK-49	Maintenance and Development of Training-cum-Production Centres	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C.	2.50 5.00 0.50 0.50 40.00	..........
			Total ..	48.50	..

1	2		3	4	
50	BCK-50	Pre-Examination training coaching centre for competitive examination	(a) S.C. (b) S.T. (e) S.E.B.C.	7.00 5.00 10.00	......
			Total ..	22.00	..
51	BCK-51	Professional and Industrial Training and coaching centre.	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C.	8.00 10.00 2.00 2.00 8.00	..........
			Total ..	30.00	..
52	BCK-52	Coaching centre for Administrative Filed jobs such as constables Teachers and Paramedical Services	(b) S.T.	12.00	..
53	BCK-53	Full Fledge Hostel at Gandhinagar	(a) S.C. (b) S.T.	20.00 20.00	....
			Total ..	40.00	..
54	BCK-54	F.A. for Coaching central and State Services (IAS and IPS) Examination	(a) S.C. (b) S.T.	3.00 2.00	....
			Total ..	5.00	..
55	BCK-55	Special facilities for Girls students for the central and State Services (IAS and IPS) Examination	(a) S.C. (b) S.T.	1.00 1.50	....
			Total ..	2.50	..
56	BCK-56	Apprentice Hostels	(a) S.C. (b) S.T. (e) S.E.B.C.	3.00 6.00 2.00	......
			Total	11.00	..
57	BCK-57	Migrating working man shed	(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. (g) Minority	6.00 1.00 2.50 2.50 5.00 2.00	............
			Total ..	19.00	..
58	BCK-58	Working Men's Hostel	(a) S.C. (b) S.T.	6.00 10.00	....
			Total ..	16.00	..
59	BCK-59	Economical Development Corporation and Boards.	(a) S.C. (b) S.T. (e) S.E.B.C. (f) E.B.C. (g) Minority	290.00 450.00 15.00 12.00 5.00	200.00
			Total ..	772.00	200.00
TOTAL—ECONOMIC UPLIFT			(a) S.C. (b) S.T. (c) N.T. (d) D.N.T. (e) S.E.B.C. (f) E.B.C. (g) Minority	750.00 790.00 25.00 27.00 368.00 75.00 45.00	224.13 24.86 1.35 1.35 34.79 .. 2.00
TOTAL			..	2080.00	288.48

1	2		3	4	
III—HEALTH, HOUSING AND OTHER SCHEMES					
60	BCK-60	Free Medical Aid	(a) S.C. 40.00 (b) S.T. 90.00 (c) N.T. 2.70 (d) D.N.T. 3.70 (e) S.E.B.C. 39.00 (f) E.B.C. 7.00 (g) Minority 4.00
		Total	186.40	..	
61	BCK-61	Balwadi, Anganwadi and Primary Education Centres	(a) S.C. 35.00 (b) S.T. 24.00 (c) N.T. 3.00 (d) D.N.T. 3.00 (e) S.E.B.C. 35.00 (g) Minority 2.50
		Total	102.50	..	
62	BCK-62	Special facilities to children studying in Privates Balmandir.	(a) S.C. 4.00 (b) S.T. 6.00
		Total	10.00	..	
63	BCK-63	Free clothing to children in Balwadi	(a) S.C. 18.00 (b) S.T. 15.00 (c) N.T. 4.00 (d) D.N.T. 3.00
		Total	40.00	..	
64	BCK-64	F.A.to Youth Mandal and Mahila for supply of sport articles and cultural activities.	(a) S.C. 3.00 (b) S.T. 5.00 (c) S.E.B.C. 5.00 (f) E.B.C. 4.00 (g) Minority 1.00
		Total	18.00	..	
65	BCK-65	Community centre	(a) S.C. 45.00 (b) S.T. 35.00 (c) S.E.B.C. 10.00
		Total	90.00	..	
66	BCK-66	F.A. for Housing on individual basis	(a) S.C. 145.00 (b) S.T. 85.00 (c) N.T. 3.00 (d) D.N.T. 4.50 (e) S.E.B.C. 100.00 (f) E.B.C. 11.00 (g) Minority 16.00
		Total	364.50	..	
67	BCK-67	F.A. for Housing in urban area	(a) S.C. 85.00 (b) S.T. 35.00 (c) S.E.B.C. 40.00 (f) E.B.C. 10.00 (g) Minority 18.00
		Total	188.00	..	

1	2		3	4	
68	BCK-68	F. A. to Halpatis for Housesites	(b) S.T.	335.00	163.77
69	BCK-69	Subsidy for Housing and provision for sweepers and Soavangers.	(a) S.C.	50.00	..
70	BCK-70	Special Housing Scheme for Bhangi on individual basis	(a) S.C.	80.00	..
71	BCK-71	F. A. to Co-operative Housing Societies P.W.R. 219	(a) S.C.	20.00	14.00
			(b) S.T.	20.00	11.00
			(c) N.T.	4.70	2.58
			(d) D.N.T.	6.00	3.30
			Total ..	50.70	30.88
72	BCK-72	F.A. to Co-op. Housing Societies (thorough Rural H.B.)	(a) S.C.	7.00	..
			(b) S.T.	7.00	..
			(c) S.E.B.C.	60.00	..
			(d) E.B.C.	4.00	..
			Total ..	78.00	..
73	BCK-73	Free legal assistance for Civil and Criminal Proceedings	(a) S.C.	2.00	..
			(b) S.T.	2.00	..
			(c) S.E.B.C.	6.00	..
			Total ..	10.00	..
74	BCK-74	F.A. to Sch. Castes for social boycott and other calarity.	(a) S.C.	8.00	..
75	BCK-75	F.A. to victims victims of atrocities	(a) S.C.	5.00	..
			(b) S.T.	5.00	..
			(c) N.T.	0.80	..
			(d) D.N.T.	1.00	..
			Total ..	11.80	..
76	BCK-76	F.A. to encourages inter caste marriages between Harijans, and Hindu castes	(a) S.C.	8.00	..
77	BCK-77	Additional F.A. to local bodies for Purchasing of wheel barrows and organising shibirs for removal of untouchability	(a) S.C.	2.00	..
78	BCK-78	Grant-in-aid to district Panchayat for upliftment	(a) S.C.	45.00	..
			(b) S.T.	50.00	..
			(c) S.E.B.C.	30.00	..
			Total ..	125.00	..
79	BCK-79	Shibir for Bhangi Kasta Mukti and seminar on un-touchability and training classes for intensive drive for eradication of Untouchability.	(a) S.C.	10.00	..
80	BCK-80	Social Education Camps	(a) S.C.	2.00	..
			(b) S.T.	3.00	..
			(c) S.E.B.C.	6.00	..
			(f) E.B.C.	0.80	..
			(g) Minority	0.50	..
			Total ..	12.30	..

1	2		3	4	
81	BCK-81	Special Cell and Vehicles for intensive drive for eradication of untouchability	(a) S.C.	45.00	..
82	BCK-82	Civil Protection Right Act	(a) S.C.	20.00	..
83	BCK-83	Special Pracharak for Bhangi Welfare	(a) S.C.	25.00	..
84	BCK-84	F. A. to Voluntary agencies for propaganda Field Workers.	(a) S.C.	3.00	..
			(b) S.T.	4.00	..
			(c) N.T.	2.00	..
			(d) D.N.T.	1.00	..
			(e) S.E.B.C.	15.00	..
			(f) E.B.C.	0.02	..
		Total	..	25.02	..
85	BCK-85	Quantification Cell	(e) S.E.B.C.	0.40	..
			(f) E.B.C.	1.18	..
			(g) Minority	2.00	..
		Total	..	3.58	..
86	BCK-86	Administrative Machinery for Post S.S.C. Scholarships	(a) S.C.	9.00	..
			(b) S.T.	15.00	..
			(e) S.E.B.C.	3.60	..
		Total	..	27.60	..
87	BCK-87	Strengthening of administrative machinery at all levels	(a) S.C.	10.00	..
			(b) S.T.	60.00	..
			(e) S.E.B.C.	90.00	..
			(f) E.B.C.	1.60	..
			(g) Minority	3.00	..
		Total	..	164.60	..
88	BCK-88	Strengthening of staff for Special Component Plan	(a) S.C.	64.00	..
			(b) S.T.	15.00	..
			(e) S.E.B.C.	10.00	..
		Total	..	89.00	..
89	BCK-88	Technical Unit	(a) S.C.	3.00	..
			(b) S.T.	3.50	..
			(c) N.T.	0.80	..
			(d) D.N.T.	0.80	..
			(e) S.E.B.C.	1.00	..
			(f) E.B.C.	0.40	..
		Total	..	9.50	..
90	BCK-90	Survey of individual family oriented programmys for 282 villages under component plan	(a) S.C.	5.00	..
91	BCK-91	Research study and evaluation	(a) S.C.	2.00	..
			(e) S.E.B.C.	1.00	..
		Total	..	3.00	..

1	2		3	4	
92	BCK-92	Tribal Research and Training Institutes	(b) S.T.	5.50	..
93	BCK-93	Training Programme for improving qualify of personal to for for a division assesment of scheme.	(e) S.E.B.C.	4.00	..
94	BCK-94	Nuclues Budget	(a) S.C.	50.00	..
			(b) S.T.	55.00	..
			(e) S.E.B.C.	4.00	..
		Total	..	109.00	...
95	BCK-95	Purchase and Maintanance of Vehicle	(e) S.E.B.C.	8.00	..
		TOTAL HEALTH, HOUSING AND OTHERS SCHEME	(a) S.C.	850.00	14.00
			(b) S.T.	875.00	174.77
			(c) N.T.	21.00	2.58
			(d) D.N.T.	23.00	3.30
			(e) S.E.B.C.	468.00	..
			(f) E.B.C.	40.00	..
			(g) Minority	47.00	..
		Total	..	2324.00	194.65
		GRAND TOTAL	(a) S.C.	2800.00	316.13
			(b) S.T.	3000.00	309.63
			(c) N.T.	100.00	6.63
			(d) D.N.T.	100.00	7.35
			(e) S.E.B.C.	1500.00	74.79
			(f) E.B.C.	250.00	5.00
			(g) Minority	250.00	9.00
		TOTAL	..	8000.00	728.63

Note:— (a) S.C.—Schedule Castes.
 (b) S.T.—Scheduled Tribes.
 (c) N.T.—Nomadio Tribes.
 (d) D.N.T.—Denotified Tribes.
 (e) S.E.B.C.—Socially and Educationally Backward Classes.
 (f) E.B.C.—Economically Backward Classes.
 (g) Minority—Minority Communities.

7.13. SOCIAL WELFARE

7.13.1. Introduction

7.13.1.1. In our social and economic environment women, children and handicapped persons face special problems. Social Welfare in its wider connotation would mean the family and group welfare for those who are deprived and afflicted by operation of social and economic forces. However, it would be necessary to identify special problems of women, children, delinquents handicapped, destitutes and beggars.

7.13.1.2. Total population of Gujarat (1971) was 267 lakhs, of these women were 129 lakhs. 10.26 lakhs women were workers participating in various economic activities. Women employed as agricultural labourers, mining and quarrying, forestry, construction and other hazardous and arduous-activities should receive our special attention in view of the nature of their work. Vast majority of these women are found in rural areas. Women participating in economic activities in urban sectors, especially those who are employed in an unorganised sector of industries, casual labour and petty self-employment also face various hardships.

7.13.1.3. The programme under the social welfare mainly covers destitute and delinquent children afflicted young girls and women, young offenders, handicapped, old and physically handicapped destitutes and beggars. Measures are directed to provide relief and succour to those categories of weaker-sections of the society so that they can have an opportunity of overcoming the difficulties facing them. The various measures are carried out through institutional and non-institutional services. The activities under this sub-sector also cover educational and propaganda work on prohibition.

7.13.2. Approach

7.13.2.1. The programme for the period 1980-85 has been designed to increase self reliance among socially and physically handicapped persons who are the most vulnerable sections of the society. Due priority has been given to the Welfare programme for women, children and handicapped. In order to assist women to become self reliant through self-employment, it is proposed to establish a Women's Economic Development Corporation in the State. Provision is made for the care, protection and rehabilitation of children and for the effective implementation of the Children Act as well as the Probation of Offenders Act. In view of the strategy now adopted in the field of social welfare for the betterment of the weaker sections, suitable new schemes are also proposed to be taken up. An amount of Rs. 450.00 lakhs has been proposed for the Sixth five year plan 1980-85 for implementing the different programmes under this sub-sector.

7.13.3. Programme for 1980-85

7.13.3.1. An outlay of Rs. 450.00 lakhs has been proposed for the Sixth Five Year Plan 1980-85. The broad break up of the outlay is as under :—

(Rs. in lakhs)		
Sr. No.	Programme	Outlay 1980-85
1	2	3
1.	Direction and Administration	10.00
2.	Family and Child Welfare (including Women Welfare)	187.00
3.	Education and Welfare of Handicapped (International Year for Disabled persons)	70.00
4.	Welfare of Poor and Destitutes	5.00
5.	Grants to Voluntary Organisations	30.00
6.	Other Schemes of Social Defence	98.0
7.	Prohibition	50.00
Total ..		450.00

Direction and Administration

7.13.3.2. The various programmes are implemented through the Directorate of Social Defence. During the last ten year the activities have considerably expanded. It is, therefore, proposed to strengthen the administrative machinery at State Level. In order to co-ordinate the women welfare programme and to implement news services, a Women's Bureau has been suggested at Headquarters. The department is disbursing scholarships to the physically handicapped children. State scholarship is for students upto VIIIth Standard and the Government of India Scholarships is for students beyond VIIIth standard upto higher education. A Scholarship cell at headquarters is proposed. Similarly, it is proposed to establish a Monitoring Unit for effective feed-back of the programme. The Rehabilitation Colony established at Morbi for the flood affected women, children and old persons through central assistance is to be continued as the programmes will cover the new beneficiaries. Provision is also suggested to organise seminars, training programmes, to publish useful literature for the programmes of International Year of Child and as well as the programmes for the International year for Disabled persons (I.Y.D.P.).

Family and Child Welfare

Child Welfare.

7.13.5.3. Provision is proposed for the State share under the centrally sponsored schemes viz. services for children in need of care and protection and a programme for foster care. The programme of holiday homes for children, balwadi started in urban slum, rural and tribal areas, bal kendras etc. started during International Year of

Child will be continued. It is proposed to provide a vehicle at the Mental Hygiene Clinic, Ahmedabad for providing specialised services to the mentally retarded children. It is proposed to establish one more clinic to be established. It is also proposed to strengthen the administrative machinery at district level for the co-ordination of the programme and for the effective implementation of the Social Legislations by converting the existing posts of Child Marriage Prevention Officers as the District Social Defence Officers and creating some more posts of the Social Defence Officers in the remaining districts. Under the I.Y.C. Programme the various child welfare programmes including initiating Balbhavan activities in 16 towns have been undertaken. It is proposed to implement the welfare programme for the children working in an unorganised sector by establishing welfare centres and providing training programme for the children engaged in child labour work. It is also proposed to improve the facilities and to expand the programme for children in the Government as well as in the voluntary institutions.

Women Welfare

7.13.3.4. Under the Women Welfare Programme it is proposed to establish Socio-Economic unit every year for a specialised category of small industry, through which women will learn a new job to earn livelihood. It is proposed to study the health problems of women engaged in hazardous work. Mahila Mandals are given grant through State Social Welfare Board. It is proposed to organise such women groups through Taluka Panchayat. The training centres will be organised and the destitute widows will be assisted to become self-reliant by sanctioning them the financial assistance for maintenance at the rate of Rs. 30/- per month and the dependent children (upto two) will be given Rs. 25/- per month per child. They will have to join a training programme during which she will get stipend of Rs. 50/- per months. To coordinate and to implement new economic programme for women it is proposed to establish a Women's Development Corporation. In order to make an impact on the the problem of child mortality by improving the health of the mother it is proposed to provide foodgrains of the value of Rs 100/- for the first and second birth, provided they accept family planning practice. The expectant or nursing mothers will be covered from the landless labourers and working women in hazardous work living below the poverty line. This is a programme for the assistance in the Area Development Programme as social inputs

Education and Welfare of the Handicapped (International year for Disabled persons)

7.13.3.5. The welfare activities which are being carried out for the physically handicapped are educa-

tion, training and rehabilitation for blind, deaf-dumb, the orthopaedically handicapped, mentally retarded etc. The normal activities under this programme will be continued. In addition to these, one school for the blind and deaf-dumb children will be established in the tribal area. The application under the State Scholarship to the physically handicapped students and for the prosthetic aids to the physically handicapped persons are increase and it is proposed to cover all the beneficiaries during the International year for Disabled persons (I.Y.D.P.). It is proposed to revise the rates of prosthetic aid from Rs. 600/- to Rs 1000/- per case in relation to the income aslab so as to cover all the needy beneficiaries during I.Y.D.P. A new scheme has been proposed to encourage the parents to send their handicapped children to normal schools and it is proposed to give financial assistance at the rate of Rs 25/- per month in the form of food grains. This will enable to enhance the enrolment of physically handicapped children in normal schools and thereby strengthening the scheme of integrated Education for the physically handicapped children. Provisions has been made to develop the training programme in the existing schools and institutions for the physically handicapped. Similarly, the number of voluntary institutions serving the physically handicapped. are increasing. It is proposed to increase the rate of grant-in-aid to cover up the needy during the I.Y.D.P.

Welfare of Poor and Destitutes:

7.13.3.6. Under this programme, the orphan children are given scholarships for higher studies, the released prisoners and their dependent are given financial aid for their rehabilitation. It is proposed to increase the rate of aid from Rs. 600 to Rs. 1000 for the purchase of house-hold equipments etc. and Rs. 3000 in the form of National Saving Certificate to be given to the orphan girls in their rehabilitation and marriage.

Others

7.13.3.7. The activities pertaining to probation services under the probation of offender Act will be continued and expanded during the Sixth Plan period. The programme for the rehabilitation of beggars will also be continued.

Prohibition:

7.13.3.8. An outlay of Rs. 50.00 lakhs is provided mainly for starting of New Nashabandhi Sanskar Kendras, subsidy to Bhajan Mandlies, setting up of Vigilance and Prohibition intelligence squad and Subsidies to Yuvak Mandals and Mahila Mandals.

STATEMENT

Social Welfare.

List of Schemes included in the Sixth Five Year Plan 1980-85

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme.	Sixth Five Year Plan 1980-85 Outlay.	
		Total	Capital.
1	2	3	4
I. Direction and Administration.			
1	SCW—1. Strengthening of Administrative machinery at State level.	3.00	..
2	SCW—2. Training, Research and Seminar in the field of Social Welfare.	1.50	..
3	SCW—3. Establishment of Women's Bureau (Cell)	2.50	..
4	SCW—4. Establishment of Scholarship cell at Headquarter.	2.00	..
5	SCW—5. Monitoring Unit for Development Programme.	1.00	..
Total—I.		10.00	..
II. Family and child Welfare			
(i) child Welfare			
6	SCW—6. Services for children in need of care and protection (C. S. P.).	8.00	..
7	SCW—7. Holiday Homes for Children.	2.00	..
8	SCW—8. Development Programmes for Child Welfare Balwadies etc.	15.00	..
9	SCW—9. Setting up of machinery for implementation of Social Legislation and Social Reforms.	5.00	..
10	SCW—10. Setting up of Mental Hygiene Clinic for problematic children and mentally retarded children.	2.00	..
11	SCW—11. Established of an Institutional under Children Act and expansion of institutions services.	5.00	..
12	SCW—12. Training programme for children working as child labour.	2.00	..
13	SCW—13. Implementation of National Policy for children and establishment of Children's Board (I. Y. C. Programmes).	100.00	..
Total—(i)		139.00	..

1	2	3	4
(ii) Women Welfare			
14	SCW—14. (a) Setting up of Day Care Centres and Creches for working women (Gandhinagar complex)	3.00	..
	(b) Establishment of working women's Hostel	2.00	..
15	SCW—15. Setting up of Socio-economic units.	5.00	..
16	SCW—16. Study of the Health problem of women engaged in economic activities.	10.00	..
17	SCW—17. Grants to taluka Panchayats to organise Mahila Mandals.	2.00	..
18	SCW—18. Establishment of Women's Development Corporation.	7.00	..
19	SCW—19. Establishment and Expansion of Institutions and new services under S. I. T. Act.	5.00	..
20	SCW—20. Social inputs in Area Development Programme.	15.00	..
21	SCW—21. Grant of financial Assistance to destitutes widows for their rehabilitation.	5.00	..
22	SCW—22. Training Centre for the rehabilitation of the women in distress (C. S. P.)	3.00	..
Total (ii)		48.00	..
Total—II		187.00	..
III. Educyion and Welfare of Handicapped (International Year for Disabled Persons.)			
23	SCW—23. Establishment of one school for blind, deaf and mute children.	2.50	..
24	SCW—24. Scholarships to Physically Handicapped children.	13.00	..
25	SCW—25. Financial Assistance to parents of Handicapped children to encourage schoolling in the form of Food Grains.	2.00	..
26	SCW—26. Prosthetic aid and other relief to Physically Handicapped.	7.00	..
27	SCW—27. Expansion and Improvement of facilities in the existing institutions and schools for physically handicapped.	6.50	..
28	SCW—28. Grant in aid under the scheme of welfare of Physically Handicapped.	36.00	..
29	SCW—29. Integrated Education for Physically-Handicapped Children (C. S. P.).	1.00	..
30	SCW—30. Special Employment Exchange for Physically-Handicapped Persons (C. S. P.).	2.00	..
Total—III.		70.00	..

1	2	3	4	
IV. Welfare of Poor and Destitutes.				
31	SCW-31.	After Care and Rehabilitation programmes for orphans and persons released from Correctional and non-correctional Institutions.	5.00	..
		Total-IV.	5.00	..
V. Grant to Voluntary Organisations				
32	SCW-32.	Grant to Voluntary Organisations for expansion of existing services and for starting new services.	30.00	..
		Total-V.	30.00	..
VI. Other Schemes of Social Defence				
33	SCW-33.	After care and rehabilitation programmes for beggars in big cities and places of pilgrimages.	17.00	..
34	SCW-34.	Expansion for Probation Services under P. O. Act, and other Social Services.	5.00	..
35	SCW-35.	Provision for building Programmes of new and existing homes.	76.00	76.00
		Total-VI.	98.00	76.00
VII. Prohibition				
36	SCW-36.	Starting of New Nashabandhi Sansker Kendras.	15.75	..
37	SCW-37.	Subsidies to Bhajan Mandalies.	10.33	..
38	SCW-38.	Vigilance and Prohibition Intelligence squad.	13.87	..
39	SCW-39.	Subsidies to Yuvak Mandals and Mahila Mandals.	10.05	..
		Total-VII.	50.00	..
		GRAND TOTAL	450.00	76.00

7.14 NUTRITION

7.14.1. Surveys both elsewhere in the country and in the State have revealed deficiencies of calories and protein in the daily diet of the following groups.

Group	Deficiency in daily diet	
	Calories	Protein
a. Children below 6 years belonging to weaker sections.	300	10-12 gm.
b. Pregnant women and nursing mothers.	500	20-25 gm.

A large number of school going children also suffer from nutritional deficiencies. Nutritional deficiency in these groups correlates with morbidity and mortality and malnutrition amongst pregnant women and premature births. There is some evidence to show that the growth (including the cognitive development) of a child may be permanently affected if nutritional deficiency occurs during the terminal part of gestation in the uterus and the first year of postnatal life. These facts constitute the context of the inclusion of 'Nutrition' in the Minimum Needs Programme. Both the programmes under implementation in the State viz., (i) the Special Nutrition Programme and (ii) the Mid-day Meal Programme are primarily meant for supplementary feeding. The salient features of these schemes are summarised in the following table :—

	Special Nutrition Programme	Mid-day Meal Programme
A Target group(s)	Children in the age-group 0-6 years; expectant and nursing mothers.	School going children in the age group 6-11.
(b) Area of operation.	Tribal/rural area and urban slums	Rural area
(c) Supplementary protein supply	300 calories and 10-12 gm. of protein to children; 500 calories with 20-25 gms. of protein to pregnant women and nursing mothers.	300 calories; 10-12 gm of protein.
(d) Annual duration of supplementary feeding.	240 (CARE food materials) 300 days (WFP food materials)	200 days.
(e) Coverage at the end of 1979-80	7.70 lakhs	4.28 lakhs
(f) Implementing agency	Local bodies	Primary Schools

7.14.2. The Special Nutrition Programme envisages, further, the integration of medical care, immunization, health, and referral services and nutrition education with the provision of the nutritional supplement. These services are delivered through the organiser (balsevika) at the feeding centre under the supervision of health visitors, the auxiliary nurse mid-wife and the medical officer of a Primary Health Centre/dispensary. At the end of 1979-80, 550 feeding centres under the programme had been upgraded to integrated health-cum-nutrition centres. The nutrition component of ICDS projects is also served under the Special Nutrition Programme.

(Rs in lakhs)

Sr. No.	Programme	Proposed outlay 1980-85
1	2	3
1.	Special Nutrition Programme	1015.00
2.	Mid-day-Meal Programme	650.00
	Total	1665.00

7.14.3. Programme for 1980-85

7.14.3.1. An outlay of Rs. 1665 lakhs is proposed for the sub-sector "Nutrition" for the Sixth Five Year Plan 1980-85. The broad break up of the proposed outlay is as under :—

Out of an outlay of Rs. 1015.00 lakhs for Special Nutrition Programme, an outlay of Rs. 470.00 lakhs is proposed for Nutrition Component in non ICDS Projects while an outlay of Rs. 545.00 lakh is for ICDS Projects.

7.14.4. The Physical targets envisaged under the programmes are as under :—

	1980-85 (lakhs)
1—Special Nutrition Programme :	
(a) number of additional beneficiaries.	4.00
(b) number of additional feeding centres to be upgraded.	1200
2—Mid-day Meal Programme :	
number of additional beneficiaries	4.25

7.14.5. Integrated Child Development Services Schemes (Centrally Sponsored programme).

7.14.5.1. The objectives of the Scheme are :—

(i) to improve the nutritional and health status of Children in the age group 0-6 years and of nursing and expectant mothers;

(ii) to lay the foundation for proper psychological, physical and social development of the child;

(iii) to reduce the incidence of mortality, morbidity, malnutrition and school drop-out;

(iv) to achieve effective coordination of policy and implementation amongst the various departments to promote child development; and

(v) to enhance the capability of the mother to look after the normal health and nutritional needs of the Child through proper nutrition and health education.

The following is the package of Six Services provided to the children in the age group 0-6 and to pregnant and nursing mothers in the ICDS Project areas.

1. Supplementary nutrition,
2. Nutrition and health education.
3. Immunisation.
4. Health check-up;
5. Referral Services; and
6. Non-formal pre-school education.

7.14.5.2. Initially a project was started in Chhotaudepur tribal block on an experimental basis in the Fifth Plan. 11 more blocks namely Chikhali, Chotila, Ahmedabad, Dehgam, Valia, Talala, Danta, Valod, Dohad, Vadodara, Khedbrahma have been taken up during 1979-80. The UNICEF assists these projects through the provision of vehicles refrigeration equipment etc.

STATEMENT

Nutrition

List of Schemes included in the Sixth Five Year Plan 1980-85 outlays.

		(Rs. in lakh)	
Sr. No.	No. and name of the scheme	Sixth Five Year Plan 1980-85 outlays	
		Total	Capital
1	2	3	4
1	NTR-1 Special Nutrition Programme in non-ICDS.	470.00	..
2	NTR-2 Nutrition element in ICDS.	545.00	..
3	NTR-3 Mid-day Meal-Programme	650.00	..
Total		1665.00	..

7.15. CIVIL SUPPLIES, PUBLIC DISTRIBUTION AND CONSUMERS' PROTECTION

7.15.1.1. In the context of increasing price situation the need for adequate production as well as smooth distribution of essential commodities assumes critical importance. In Gujarat which has a significant tribal population and areas which have poor communication, implementation of this programme becomes all the more relevant, urgent and significant. The State Government at present does not have adequate machinery for open market purchase. Moreover, in the absence of a Central Agency it is very difficult to open fair price shops in remote places and tribal areas as private entrepreneurs are not willing to open shops at such places.

7.15.2. Gujarat State Civil Supplies Corporation :

7.15.2.1 The Gujarat State Civil Supplies Corporation was set up in October 1980 primarily with a view to achieve the following objectives viz., (i) streamlining of procurement, storage and distribution of food-grains and other essential commodities; (ii) strengthening of public distribution system by widening products mix of essential commodities sold through the fair price shops, (iii) to supplement existing outlets by opening outlets in remote and tribal areas to make essential commodities available easily to the vulnerable section of the society; and (iv) to act as an agency to get better deal for the vulnerable sections of the producers especially tribals and marginal farmers by achieving reasonable returns for their products.

7.15.2.2. A wide range of activities is visualised for the Civil Supplies Corporation. In the initial stages; it will supplement procurement operation of the agencies of the Government of India by undertaking procurement operation of coarse-grains and also the Corporation would actively try to increase the number of products sold through the fair price shops in co-ordination with agencies like State Textile Corporation, Handloom Corporation, etc., and the producer's items required by the common man like soap, matches, etc. The Corporation will be the model agency for negotiating with the producers of various products, arrange distribution through the existing fair price shops as well additional outlet will be opened. It is also expected to undertake agency for distribution of cooking gas in the first instance. A provision of Rs. 125 lakhs is proposed for the Corporation.

Creation of additional Storage Capacity :

7.15.2.3. Adequate warehousing and storage facility is an important element in the strategy for building

up requisite quantum of buffer stock of foodgrains and other essential commodities. At present there is a net work of nearly 412 godowns with a capacity of about 1.92 lakh tonnes. 45 Taluka Headquarters are without godowns. During the Sixth Plan period it is proposed to enhance this capacity to 2.12 lakh tonnes. It is proposed to set up standard type of godowns, in view of the need to provide outlets at remote places; it is also proposed to have godown-cum-shop outlets for which optimum design would be finalised. This aspect would achieve the objective of ensuring steady supplies of essential commodities in the Tribal and in remote areas of the State. An outlay of Rs. 10 lakhs is proposed for 1980-85.

Consumers' Protection :

7.15.2.4. With a view to bring down prices by streamlining procurement and distribution of essential commodities and to protect the rights and interests of the consumers against the exploitation by unscrupulous traders and adulteration in food-grains and other essential commodities, it is necessary to strengthen the consumers' protection movement by way of multi-media approach and thereby making consumers aware of their rights.

7.15.2.5. **Consumer Education.**—A systematic programme is visualised under which multi-media approach will be adopted for making consumers aware of their rights under the various orders relating to the Essential Commodities Act and Prevention of Food Adulteration Act, Weights and Measures Act, etc. Another aspect of the Consumer education would be to ensure that they do not become willing agencies for encouraging hoarding and speculation. This will involve display of cinema slides, advertisements in paper, TV and documentary films as well as booklets and pamphlets.

7.15.2.6. **Consumer Protection Societies.**—Under the consumer movement is it also proposed to encourage formation of active consumer guidance protection societies. The grant-in-aid for these institutions would be for activities like formation of consumer libraries, organising campaign for consumers' education and the scientific study of selected products with a view to improve their quality and reduction in prices. A provision of Rs. 15 lakhs is proposed in the Sixth Five Year Plan 1980-85 for this purpose.

STATEMENT

Civil Supplies

List of schemes included in the Sixth Five Year Plan 1980--85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan, 1980-85 outlays	
		Total	Capital
1	2	3	4
Public Distribution and Consumer Protection.			
PDS-1	Share capital contribution for Civil Supplies Corporation.	125	125
PDS-2	Grant-in-aid to consumers' Union	15	..
PDS-3	Creation Additional storage capacity.	10	10
Total		150	135

7.16 STATISTICS

7.16.1.1. The need for a comprehensive and integrated system of statistics arises from three inter-related considerations; the complexity both of the process of economic change and of inter-sectoral linkages in economic development; the role of Government in the determination of the direction and rate of economic change, the significance of details at all stages of the planning process (especially formulation and implementation), and the information needs of the machinery set up in the State for decentralised planning.

7.16.2. Review

7.16.2.1. Considerable impetus was given to the Statistics programme during the period of the Fifth Plan, 1974-78. In addition to strengthening the machinery for the collection of statistics at both district and taluka levels, encouraging the conduct of socio-economic surveys by research/professional institutions, and providing for the generation of regional/district level estimates from socio-economic data collected under the National Sample Survey, a data bank was established at the State Computer Centre to provide comprehensive and up-dated information for diverse planning needs. A third generation computer (Model : ICL-1901-A) with enhanced storage and processing capability was installed in 1975, and a large number of personnel have been trained in programming languages and software programmes for the computer.

7.16.2.2. In 1977-78, an economic census was conducted throughout the State in respect of establishments in the non-agricultural sector under the Central plan scheme of Economic Census and Surveys; this was followed in 1978-79 and 1979-80, by sample surveys of different segments of the unorganised non-agricultural sector to provide information on investment, employment, income input, output, etc.

7.16.2.3. A Training Division is established in the Bureau of Economics and Statistics in 1979-80 to cope up with training needs arising from expansion of the machinery for statistics at various levels and from the increased use of electronic data processing for the information needs of Government departments. Other schemes taken up in 1979-80 include the upgradation, in a phased manner, of the posts of District Statistical Officer in all except two districts of the State; and the creation of a Field Task Force for evaluation studies by the Directorate of Evaluation.

7.16.3. Programme for 1980-85 :

7.16.3.1. The major objectives of the programme for 1980-85 are :—

(a) to enhance capability for the collection and processing of data at the levels both the State and the district ;

(b) to make available reliable disaggregated information on socio-economic indicators in respect of sub-regions of the State.

(c) to increase the availability of specialist studies on various aspects of socio-economic development in the State.

7.16.3.2. The following table presents an activity-wise breakup of the outlay of Rs. 250 lakhs for the period 1980-85 :

(Rs. in lakhs)	
Programme	Outlay 1980-85
1. Strengthening of EDP Capability	77.00
2. Conduct of surveys, analyses, research and evaluation studies (including compilation of Regional Accounts)	38.40
3. Strengthening of statistical machinery at district level for data collection, project planning and evaluation.	55.10
4. Training	9.50
5. Other expenditure.	70.00
Total	250.00

Strengthening of Electronic Data Processing Capability :

7.16.3.3. Owing to the increasing use of electronic data processing by Government departments, Government corporations, and local bodies, the existing ICL-1901-A computer is proposed to be replaced by a computer with a larger memory and with multi-Programming capability. Steps have been initiated to select a model appropriate to the projected increase in work load; the new computer is expected to be installed by 1982-83. A micro-computer (ECIL-MICRO-78) has been acquired in 1980-81; its processing capability is proposed to be augmented. The acquisition, in a phased manner of key-to-floppy machines to replace the existing punching/varifying machines is also envisaged. An outlay of Rs. 77 lakhs is proposed for the purpose during the plan period 1980-85.

Surveys, Analysis, Research and Evaluation Studies :

7.16.3.4. In the context of decentralised planning, the need exists for a system of Regional (State) accounts which would present information on major economic indicators (production, consumption, capital formation, etc.); on transactions of the State with the rest of the economy; and on transactions of the State Government both with the Government of India and with local bodies and other economic institutions within the State. Such a system would involve the estimation of capital formation and savings (in the public, private, and household sectors), and the compilation of an index of industrial production for the State. The drawing up of a system of regional (State) accounts is thus a task of considerable magnitude requiring the resolution of a wide range of methodological and conceptual problems. Accordingly, it is proposed to appoint separate staff for the initiation of the necessary analysis. An outlay of Rs. 2.15 lakhs is proposed for the purpose for the period 1980-85.

7.16.3.5. The need is often felt in the conduct of evaluation studies for professional expertise that can be supplied by neither the Directorate of Evaluation nor the Administrative Departments concerned. To meet this need, the creation is envisaged of a consultancy fund for expenditure on professional services. An outlay of Rs. 6.00 lakhs has been proposed for the purpose.

7.16.3.6. Additional establishment was created in 1979-80 for the analysis of Social Statistics from data collected through various census, surveys, etc. This establishment is proposed to be continued and strengthened during the Plan period 1980-85 with an outlay of Rs. 6.00 lakhs. This establishment will be entrusted, in addition, with analysis (for the purpose of comparisons between Gujarat and other States in the country) of data made available by the agencies like the Reserve Bank of India, the National Sample Survey Organisation etc.

7.16.3.7 (a) It is proposed to continue the establishment created in the Directorate of Evaluation for the building up of district-wise development indicators and for the preparation of district-wise reports on development during plan period 1980-85 with an outlay of Rs. 8.50 lakhs. (b) The task force created in the Directorate of Evaluation for field inquiries forming part of evaluation studies is proposed to be continued during the Sixth Plan 1980-85 for which a provision of Rs. 5.75 lakhs is proposed. (c) The scheme of financial assistance to professional/academic institutions for undertaking socio-economic surveys and special studies of use in the planning process is proposed to be continued during the Sixth Plan 1980-85 for which an outlay of Rs. 10.00 lakhs is proposed.

Strengthening of Statistical Machinery at District Level :

7.16.3.8. The increased decentralisation of planning responsibilities to the level of the district and the emphasis in the area planning approach on areas smaller than that of the district (for instance, special programme for rural development and the Tribal Area Sub-Plan) require a much higher level of capability than that exists at present at district level for the formulation and evaluation of projects. Two schemes are, accordingly, proposed for the strengthening of the machinery for planning at district level.

7.16.3.9. Under a Central sector programme, a District Project Planning Cell was established during the Fifth Plan period in Panchmahals District. The establishment of the Cell (which works under the technical guidance of the Sardar Patel Institute of Social and Economic Research, Ahmedabad) has been made for Project formulation that is realistic, effective, and consonant with local needs and resources. It has been decided to continue the cell under state plan on completing its term as Central Project from 1981-82. In view of the encouraging results of the experiment in Panchmahals a similar cell is proposed to be established in another district under the State Plan. A provision of Rs. 18.00 lakhs is proposed for the Sixth Plan 1980-85.

7.16.3.10. Owing to differences in local conditions, concurrent project evaluation at State level is less capable of providing useful corrective feedback than district level evaluation machinery. It is therefore proposed to build evaluation capability into the existing machinery for planning at district level through the creation, in a phased manner, of evaluation cells that would be subordinate to the District Planning Boards. A provision of Rs. 1.35 lakhs is proposed for the plan period.

7.16.3.11. In view of the increased emphasis on district and block level planning, a scheme for the strengthening of statistical machinery at district level was taken up in 1979-80. The scheme envisages the creation of an additional post of Research Assistant in each district and the upgradation to Class I status of the post of District Statistical Officer in all but two districts (Dangs and Gandhinagar) in a phased manner. An outlay of Rs. 35.75 lakhs is proposed for the purpose for the period 1980-85.

7.16.3.12. The expansion of the machinery for planning at various levels and the decentralisation of the planning process argue the need for systematic training in the concepts, methods, and techniques of planning. It is therefore proposed to organise training courses for planning personnel with modern equipment and teaching aids and, as a supportive measure, to improve library and research facilities in the Directorate of Evaluation. An outlay of Rs. 2.32 lakhs is proposed for the purpose for the plan period 1980-85.

7.16.3.13. The Training Division has been established in the Bureau of Economics and Statistics in 1979-80 for imparting training to statistical personnel and for the running of courses having reference to electronic data processing. The Division is proposed to be strengthened during the plan period 1980-85. An outlay of Rs. 7.18 lakh proposed for the purpose.

Centre for Monitoring Gujarat Economy

7.16.3.14. A Centre for monitoring Gujarat Economy is proposed to be set up for the monitoring of major projects in the State and for the study of socio-economic aggregates viz., Prices, incomes, employment, production, consumption levels, etc. at micro level. Further, electronic data processing

systems consisting of a micro-processor with peripheral equipment are proposed to be introduced in a phased manner in a few districts towards improving the availability of district level data. A provision of Rs. 59.00 lakhs is proposed for this purpose for this plan period 1980-85.

Planning Atlas

7.10.3.15. For continuance of the schemes of Planning Atlas and for the strengthening of the establishment unit of the Bureau of Economics and Statistics as well as the projects initiated in 1979-80 for the preparation of a Planning Atlas of Gujarat suitable provisions is proposed in the Sixth Plan 1980-85.

STATEMENT

Statistics

Schemewise Outlays in the Sixth Five Year Plan 1980-85.

Statistics:—

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme.	Sixth Five Year Plan 1980-85.	
		Total	Capital
1	2	3	4
A. Bureau of Economics and Statistics.			
1.	STT-1 Development of Computer Centre.	77.00	..
2.	STT-2 Strengthening of Administration in Bureau of Economics and Statistics.	6.00	..
3.	STT-3 Strengthening of Statistical Machinery at district level in District Panchayat.	35.75	..
4.	STT-4 Financial Assistance to Research Institution.	10.00	..
5.	STT-5 Training Division.	7.18	..
6.	STT-6 Socio-Economic Research Studies and Economic analysis of statistical data.	6.00	..
7.	STT-7 Studies for compilation of Regional Accounts.	2.15	..
8.	STT-8 Setting up of a Centre for Monitoring Gujarat Economy.	50.00	..
9.	STT-9 Preparation of Planning Atlas of Gujarat.	20.00	..
Total (A)		214.08	..
B. Directorate of Evaluation.			
10.	STT-10 Strengthening of Directorate of Evaluation.	8.50	..
11.	STT-11 Creation of Field Task Force in the Directorate of Evaluation.	5.75	..
12.	STT-12 Creation of District Project Planning Cell.	18.00	..
13.	STT-13 Establishment of Training Units for Planning Personnel.	2.32	..
14.	STT-14 Creation of Evaluation Machinery at district level.	1.35	..
Total (B)		35.92	..
Grand Total (A+B)		250.00	..

7.17. PLANNING MACHINERY

7.17.1. The Planning Division in the General Administration Department headed by the Chief Secretary has been placed in charge of the Special Secretary (Planning) from 1978. This division provides general direction and looks after co-ordination of plan programmes and reviews the overall progress of plan implementation. It is obvious that to justify the work of the formulation of the appropriate economic policies, programmes and projects at different stages, their effective implementation is necessary. In order to achieve the objectives of the Plan for the next phase of development of the State, it was deemed necessary to strengthen and reorganise the Planning Division and, therefore, some new posts have been created and the division has been strengthened and reorganised with the following Units :—

1. Programming Unit
2. Financial Analyst Unit.
3. Perspective Planning Unit.
4. Multi-level Planning Unit.
5. Monitoring and Evaluation Unit.
6. State Planning Board Unit.
7. 20-Point Economic Programme Unit.

7.17.1.2. At the apex level the State Planning Board in its present form was constituted for the first time in August, 1973 under the Chairmanship of the Chief Minister. It underwent modifications from time to time. The State Planning Board has been reconstituted in September, 1980 with the Chief Minister as Chairman, Minister of Finance and Planning as Vice-Chairman and includes other members with considerable knowledge and distinguished record of service in different fields. The functions of the Board includes those relating to Plan formulation, monitoring and evaluation of plan programmes and training for Development Personnel.

7.17.1.3. Plan programmes at State level are implemented by the executive Heads of Departments under the directions and control of the various Administrative Departments of the Secretariat concerned with their respective sectors of development. At the district level schemes are divided into two parts *viz.*, those retained by the Government and those transferred to the District Panchayats. The schemes retained by the Government are implemented by the district executive heads of departments under the direction and supervision of the Government Departments directly while the transferred schemes are implemented by the District Panchayats.

7.17.1.4. In the Draft Sixth Five Year Plan 1980-85 prepared by the Planning Commission emphasis has been laid on grass-root planning by augmenting the capabilities of development administration both at the district level as well as the block level. Greater importance is also being attached to effective decentralisation of the planning process. In this context, systematic and realistic formulation and efficient implementation of district plan assumes considerable significance. It is of vital importance that planning at district level fully reflects the local aspirations and meaningful popular participation as also participation of experts and local leaders is ensured to the utmost extent possible both in the formulation and implementation of the plans. It is equally necessary that district plans are formulated having due regard to the State Plan objectives, strategies and priorities and within the limits of financial resources in sight.

7.17.1.5. In addition, effective linkages need to be established between the State level and the district level planning. Having regard to these considerations, the State Government has reconstituted in September, 1980, the District Planning Board in each district with District Collector as Chairman, President of the District Panchayat as Co-Chairman, Presidents of two or three Taluka Panchayats, all M.Ps. and all M.L.As. in the district, President/Mayor of one Municipality/Corporation, President of One Nagar Panchayat, expert from a Research Institution, Chairman, District Central Co-op. Bank, a member of the State Planning Board, a representative of the District Lead Bank, District Development Officer, Project Administrator, Tribal Area Sub-Plan as members and District Planning Officer and District Statistical Officer as Member-Secretary and Additional Member-Secretary respectively. A small Executive Planning Committee for ensuring effective working of the District Planning Board under the Chairmanship of the District Collector has also been constituted. The functions of the District Planning Board are wide enough to cover various aspects of the Plan formulation, monitoring and evaluation besides facilitating popular participation in the development process. Special monitoring and evaluation of the implementation of minimum needs programme also constitutes the vital function of the District Planning Board. A new element of discretionary and incentive outlay for district level schemes has been introduced with effect from the year 1980-81. The schemes are to be formulated by the District planning Board with complete freedom of choice keeping the local needs and balanced development of in view the district, mainly in the selected fields such as Agriculture, Minor Irrigation, Cottage Industries and the programmes covered under the Minimum Needs Programme.

7.17.1.6. Till the end of the Fifth Plan, there was no separate Planning Unit at the District

Level. During the year 1978-79, a District Planning Unit in each district under the control of the Collector has been established by Government. Each such unit has a small technical staff consisting of one Research Officer, one Research Assistant, one Statistical Assistant and a clerk and typist and is headed by a District Planning Officer. Posts of one Deputy Mamlatdar and a sub-auditor have also been added to the unit. In the context of the responsibilities now cast, the organisation and the structure of the district Planning Unit will be reviewed from time to time and suitable strengthening and improvement will be effected as and when necessary.

7.17.1.7. An outlay of Rs. 5 lakhs is proposed for the Sixth Five Year Plan 1980-85 as State's Share towards machinery in the Planning Division at apex level which is expected to be supplemented by the Central Government to the tune of Rs. 10 lakhs, thus resulting in the total outlay of Rs. 15 lakhs for the five year period 1980-85.

7.17.2 Training of Development personnel

7.17.2.1. Plan projects and programmes in the various sectors are being implemented by a number of agencies namely Government departments, public undertakings, Panchayats, other local bodies and even voluntary agencies. Realising the role of training in developing necessary skills, the State has been taking advantages of the training facilities available with the Government of India and the National Institutes working in the field of training and research etc. The State also runs certain training centres/courses for imparting training to suit the needs of programme in specific sectors like Community Development, Public Works, Medical and Health etc. Even though there is a functional division of work and responsibilities amongst various administrative and implementing agencies concerned with different sectoral projects and programmes, there has to be a close inter-relationship in the total scheme of plan formulation and implementation. The quality of formulation and implementation of plan programmes ultimately depends on the quality of personnel deployed on this task. It is, therefore, necessary to pay more-special attention to the training needs of development personnel. This is sought to be achieved by the development of Sardar Patel Institute of Public Administration which has been set up by the Government in 1962.

7.17.2.2. The Sardar Patel Institute of Public Administration imparts pre-service and in-service train-

ing to various categories of officers and staff. It is now proposed to improve the coverage and quality of training imparted through this institute and to develop it as the premier institute in the State for imparting training to improve the administrative, technical and managerial capabilities of the personnel engaged in the economic development, planning and implementation task. For this purpose, it has been considered necessary to provide suitable and adequate accommodation to the institute, better facilities for the trainees and to strengthen and improve the library and research facilities and to provide modern equipments and teaching aids, etc., on an adequate scale.

7.17.2.3. The institute does not have its own building at present. It is proposed to construct suitable building for the institute. Land for the building has already been acquired. The institute will also conduct research in the behavioural agencies, management techniques and district administration. It has therefore been proposed to set up a research cell in the institute. It is also proposed to strengthen and provide upto date facilities for library teaching equipments and aids etc. In view of the new strategy of decentralised planning which also calls for much more intimate popular participation in the development process and the massive programmes for accelerating the development of rural and backward areas and the upliftment of the weaker sections and the poor, it will also be necessary to impart the appropriate motivation and healthy attitudinal changes in the minds of the trainees. This aspect will be given due importance in the programme for faculty development.

7.17.2.4. An outlay of Rs. 75.00 lakhs is provided in the Sixth Five Year Plan, 1980-85 for development of the Sardar Patel Institute of Public Administration and the training programmes, etc. Broad break-up of the outlay is as under :—

	(Rs. in lakhs)
	Outlay 1980-85
1. Training, Research and Library.	15.00
2. Building, Training equipments aid, etc.	60.00
	<hr/> 75.00 <hr/>

STATEMENT

Planning Machinery and Training of Development Personnel

List of Schemes included in the Sixth Five Year Plan Plan 1980---85

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	Sixth Five Year Plan 1980—85 Outlays	
		Total	Capital
1	2	3	4
I. Training of Development Personnel.			
1.	TDP--1 Training Programme for Development of Personnel	15.00	..
2.	TDP--2 Building, Training Equipment aid, etc.	60.00	60.00
	Total..	75.00	60.00
II. Planning Machinery.			
3.	PLM--1 Planning Machinery.	5.00	..
	Grand Total..	80.00	60.00

STATEMENT-I

Major Headwise Summary of outlays for the Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	Head of Development	Outlays for the Sixth Five Year Plan 1980-85	
		Total	Capital
1	2	3	4
I.	1. Agricultural Research and Education	1000.00	..
	1. Crop Husbandry	3100.00	363.36
	3. Land Reforms	1000.00	..
	4. Minor Irrigation	8800.00	1240.00
	5. Soil and Water Conservation	2894.00	410.00
	6. Irrigation Command Area Development	1877.00	451.40
	7. Animal Husbandry	1770.00	363.25
	8. Dairy Development	205.00	50.00
	9. Fisheries	2000.00	994.76
	10. Forests	9000.00	7526.50
	11. Investment in Agricultural Financial Institutions.	350.00	350.00
	12. Marketing, storage and Warehousing	170.00	90.00
	13. Community Development and Panchayats	627.00	14.46
	14. Development of backward areas	250.00	..
	15. Special Programmes for Rural Development.	14407.00	492.00
	Total-Agriculture and Allied Services	47450.00	12345.73
II.	16. Co-operation	3200.00	2696.26
III.	17. Water Development (Irrigation)	100000.00	98045.00
IV.	18. Power Development	96484.00	96384.00
V.	Industries and Minerals		
	19. Village and Small Industries	9596.40	3790.42
	20. Large and Medium Industries	6363.60	5761.60
	21. Mining and Metallurgical Industries.	1150.00	800.00
	Total-Industries and Minerals	17110.00	10352.02
VI.	Transport and Communications		
	22. Road Development	22000.00	22000.00
	23. Road Transport	9000.00	9000.00
	24. Tourism	260.00	150.83
	25. Ports, Light Houses and shipping	2600.00	2580.00
	Total-Transport and Communications	33860.00	33730.83

1	2	3	4
VII. Social and Community Services			
26.	General Education	5560.00	564.48
27.	Technical Education	600.00	230.00
28.	Medical, Public Health and Sanitation	7000.00	725.76
29.	Social Inputs	500.00	..
30.	Sewerage and Water Supply	15076.00	13851.00
31.	Housing	8530.00	5253.00
32.	Urban Development	2850.00	1895.00
33.	State Capital Project	3000.00	3000.00
34.	Information and Publicity	85.00	15.65
35.	Labour and Labour Welfare	4000.00	1052.48
36.	Welfare of Backward Classes	8000.00	728.53
37.	Social Welfare	450.00	76.00
38.	Nutrition	1665.00	..
Total—Social and Community Services		.. 57316.00	27391.90
VIII. Economic Services			
39.	Secretariat Economics Services (Planning Machinery)	5.00	..
40.	Economic Advice and Statistics.	250.00	..
41.	Training of Development Personnel	75.00	60.00
42.	Administrative Machinery for Tribal Area Sub-Plan.	100.00	..
43.	Civil Supplies Corporation and Consumers Protection	150.00	135.00
Total—Economic Services		.. 580.00	195.00
IX. 44.	Decentralised District Planning	20000.00	..
GRAND TOTAL		.. 376000.00	281140.74

STATEMENT--II

Minor Headwise Outlays for the Sixth Five Year Plan 1980--85.

(Rs. in Lakhs)

Sr. No.	Minor Head of Development	Outlays for the Sixth Five Year Plan 1980-85.	
		Total	Capital
1	2	3	4
1.	Agricultural Research and Education.		
	1. Agricultural Education.	554.00	..
	2. Agricultural Research.	346.00	..
	3. Assistance from ICAR.	100.00	..
	Total	1000.00	..
2.	Crop Husbandary.		
	1. Direction and Administration.	999.49	202.00
	2. Multiplication and distribution of seeds.	171.95	0.25
	3. Manures and Fertilizers.	450.94	64.63
	4. Plant Protection.	237.45	3.27
	5. Commercial Crops.	354.55	..
	6. Extension and Farmer's Training.	304.00	93.21
	7. Agricultural Engineering.	191.28	..
	8. Agricultural Economics and Statistics.	95.43	..
	9. Horticulture	208.91	..
	10. Other Expenditure	20.00	..
	11. Contingency Plan.	45.00	..
	12. Nucleus Budget.	21.00	..
	Total..	3100.00	363.36
3.	Land Reforms.		
	1. Land Reforms.	820.00	..
	2. Consolidation of Holding.	180.00	..
	Total..	1000.00	..
4.	Minor Irrigation		
	1. Investigation and Development of Ground Water Resources.	6000.00	40.00
	2. Tubewells.	2350.00	1200.00
	3. Lift Irrigation Scheme.	80.00	..
	4. Other Minor Irrigation Works.	370.00	..
	Total..	8800.00	1240.00

1	2	3	4
5. Soil and Water Conservation.			
1.	Direction and Administration	50.00	..
2.	Research.	5.00	..
3.	Education and Training.	10.00	10.00
4.	Soil Conservation	1482.55	..
5.	Other Expenditure	946.45	..
6.	Ghad Area Development	400.00	400.00
Total..		2894.00	410.00
6. Irrigation Command Area Development.			
		1877.00	451.40
Total..		1877.00	451.40
7. Animal Husbandry.			
1.	Direction and Administration	70.00	45.00
2.	Veterinary Education and Training	12.00	..
3.	Veterinary Services and Animal Health	271.00	79.21
4.	Investigation and Statistics.	18.00	..
5.	Cattle Development.	663.00	66.00
6.	Poultry Development.	431.00	92.90
7.	Sheep and Wool Development	214.00	55.84
8.	Other Live stock Development.	41.00	24.30
9.	Feed and Fodder Development	50.00	..
Total..		1770.00	363.25
8. Dairy Development			
1.	Direction and Administration	4.00	..
2.	Dairy Development.	195.00	50.00
3.	Research, Education and Training.	6.00	..
Total..		205.00	50.00
9. Fisheries.			
1.	Direction and Administration.	25.00	..
2.	Extension.	50.00	..
3.	Research.	200.00	104.22
4.	Education and Training.	89.91	45.31
5.	Inland Fisheries.	636.00	220.89
6.	Deep Sea Fisheries.	76.40	..
7.	Processing, Preservation and Marketing.	350.00	275.00
8.	Mechanisation and Improvement of Fishing Crafts.	411.60	193.00
9.	Others.	161.09	156.34
Total..		2000.00	994.76

1	2	3	4
10. Forests.			
1.	Direction and Administration	110.30	..
2.	Research.	41.00	..
3.	Education and Training.	153.00	..
4.	Forest Conservation and Development.	630.90	630.90
5.	Plantation Schemes.	657.40	295.90
6.	Farm Forestry.	188.70	186.50
7.	Communication and Buildings.	179.30	179.30
8.	Preservation of Wild life.	310.00	..
9.	Extension.	6186.40	6186.40
10.	Management and Zamindari (Acquisition of Private Forests).	40.00	12.00
11.	Other Expenditure.	503.00	35.50
	Total..	9000.00	7526.50
11. Investment in Agricultural Financial Institutions.			
1.	Investment in Agricultural Financial Institutions.	350.00	350.00
	Total..	350.00	350.00
12. Marketing, Storage and Warehousing.			
1.	Development of Regulated Markets.	70.00	35.00
2.	Share-Capital to State Warehousing Corporation.	55.00	55.00
3.	Establishment of Directorate of Agricultural Marketing.	25.00	..
4.	Development of Rural Markets.	20.00	..
	Total..	170.00	90.00
13. Community Development and Panchayats.			
1.	Direction and Administration.	4.20	..
2.	Training.	42.05	14.46
3.	Assistance to Panchayati Raj Institutions.	355.00	..
4.	Community Development Programme.	225.75	..
	Total..	627.00	14.46
14. Development of Backward Areas.			
		250.00	..
15. Special Programme For Rural Development.			
1.	Integrated Rural Development.	3815.00	..
2.	National Rural Employment Programme.	4500.00	..
3.	Drought Prone Area Programme (including Desert Development Programme)	1950.00	..
4.	Antyodaya.	492.00	492.00
5.	Block Level Planning for Employment.	700.00	..
6.	Strengthening and Supporting Special Programme Organisation.	500.00	..
7.	Local Development Works Programme.	1250.00	..
8.	Abhinav Gram Nirman Karyakram.	1050.00	..
9.	Off-Season Unemployment Relief Works.	150.00	..
	Total:-	14407.00	492.00
	Total-I Agriculture and Allied Services.	47450.00	12345.73

1	2	3	4
II. Co-operation.			
1.	Direction and Administration.	50.00	..
2.	Credit Co-operatives.	1952.80	1690.90
3.	Labour Co-operatives.	6.00	2.53
4.	Farming Co-operatives.	5.20	1.50
5.	Warehousing and Marketing Co-operatives.	83.50	21.00
6.	Processing Co-operatives.	100.00	100.00
7.	Co-operative Sugar Mills.	500.00	485.00
8.	Consumer Co-operatives.	40.00	32.83
9.	Co-operative Training and Education.	100.00	..
10.	Others.	362.50	362.50
Total..		3200.00	2696.26
III. Water Development (Irrigation).			
1.	Multipurpose River Valley Projects.	38560.00	35557.00
2.	Major and Medium Irrigation Projects.		
	(a) Major Projects.	21207.00	21161.00
	(b) Medium Projects.	17068.00	17068.00
3.	Flood Control, Drainage, Prevention of Salinity Ingress, Water Development Services etc.	23165.00	21259.00
Total..		100000.00	98045.00
IV. Power Development :			
1.	Power Development (Survey, Investigation and Research.)	100.00	100.00
2.	Power Projects (Generation)	63095.00	63095.00
3.	Transmission and Distribution.	25000.00	25000.00
4.	Rural Electrification.	8024.00	8024.00
5.	General	265.00	165.00
Total IV : Power Development		96484.00	96384.00
V. Industries and Minerals.			
(A) Village and Small Industries :			
1.	Direction and Administration.	25.00	..
2.	Small Scale Industries.	6565.40	3347.00
3.	Handloom Industry.	470.00	121.00
4.	Handicraft Industries.	115.00	10.00
5.	Co-operative Industries	240.00	70.00

1	2	3	4
6.	Khadi Industries.	1450.00	171.52
7.	Others.	831.00	70.90
	Total—(A) ..	9596.40	3790.42
(B)	Large and Medium Industries.	6363.60	5761.60
(C)	Mining and Metallurgical Industries.		
1.	Mineral Exploration and Development	1150.00	800.00
	Total-V—Industries and Minerals.	17110.00	10352.02
VI. Transport and Communications.			
(1)	Road Development :		
1.	Minimum Needs Programme (Rural Roads).	16659.00	16659.00
2.	Other than M. N. P. Roads.	5341.00	5341.00
	Total ..	22000.00	22000.00
(2)	Road Transport.	9000.00	9000.00
(3)	Tourism.		
1.	Tourist Accommodation.	150.83	150.83
2.	Tourist Information and Publicity.	11.00	..
3.	Other expenditure	98.17	..
	Total ..	260.00	150.83
(4)	Ports, Light Houses and Shipping.		
1.	Development of Minor Ports.	1796.00	1776.00
2.	Investigation.	5.00	5.00
3.	Dredging and surveying.	250.00	250.00
4.	Ferry service.	542.00	542.00
5.	Light Houses and ships and construction and Development of other Navigational Aids.	7.00	7.00
	Total ..	2600.00	2680.00
	Total-VI—Transport and Communications ..	33860.00	33730.83
VII. Social and Community Services :			
(1)	General Education.		
1.	Primary Education.		
(i)	Elementary Education.	3256.74	138.70
(ii)	Teachers' Training.	53.26	21.00
(iii)	Special Education.	250.00	..
2.	Secondary and Higher Secondary Education.	822.29	172.00
3.	University and Higher Education.	507.90	..
4.	Games, Sports and Youth Welfare.	200.70	55.00
5.	Art and Culture.	369.11	177.78
6.	Development of Languages.	100.00	..
	Total ..	5560.00	564.48

1	2	3	4
(2)	Technical Education.		
	1. Direction and Administration.	10.00	..
	2. Technical Schools	130.00	40.00
	3. Polytechnics	195.00	60.00
	4. Engineering Colleges and assistance to non-Government Technical Colleges/Institutes.	160.00	50.00
	5. Scholarships.	0.50	..
	6. Research and Training.	10.00	..
	7. Other Expenditure.	94.50	80.00
	Total	600.00	230.00
(3)	Medical, Public Health and Sanitation.		
	1. Direction and Administration.	15.00	..
	2. Medical Relief	423.00	166.32
	3. Training.	25.00	2.00
	4. Medical Education and Research	660.00	240.00
	5. Indigenous system of Medicine, Ayurved and Homeopathy	120.00	11.00
	6. Employees' State Insurance Corporation	15.00	..
	7. Minimum Needs Programme	2009.00	273.80
	8. Other Programmes	0.60	1.00
	9. Health Services to the School going children	40.0	..
	10. Drugs Control Administration	142.00	15.00
	11. State share for Payment for additional incentive under Family Welfare Programme.	285.00	..
	12. Control of Communicable diseases and provision of Centrally sponsored scheme on sharing basis	3260.00	16.64
	Total	7000.00	725.76
(4)	Social Inputs.	500.00	..
(5)	Sewerage and Water Supply		
	1. Survey and Investigation	100.00	..
	2. Research	5.00	5.00
	3. Sewerage Scheme (Urban)	350.00	60.00
	4. Drainage Scheme (Rural).	28.00	..
	5. Urban Water Supply	487.00	436.00
	6. Rural Water Supply (GIA)	8.00	..
	7. Rural Water Supply (MNP)	3500.00	2750.00
	Total..	4476.00	3251.00
	Market Borrowing	1500.00	1500.00
	L. I. C.	2500.00	2500.00
	World Bank Projects	6600.00	6600.00
	Total..	15076.00	13851.00

1	2	3	4
(6) Housing			
1.	Integrated subsidised Housing scheme for Industrial workers and Economically weaker sections of the community	605.00	603.00
2.	Low Income Group Housing Scheme	400.00	400.00
3.	Rental Housing Scheme (Government Resi./Qrt.)	900.00	900.00
4.	Slum Clearance and Rehousing Scheme	100.00	60.00
5.	Village Housing Projects Scheme	404.00	399.00
6.	Assistance for construction of houses on the house sites allotted to landless labourers (MNP)	3085.00	..
7.	Police Housing Scheme and Jail Buildings	750.00	750.00
8.	Other Schemes	2286.00	2151.00
Total..		8530.00	5253.00
(7) Urban Development			
1.	Financial Assistance to local bodies for non-remunerative schemes	660.00	660.00
2.	Town and Regional Planning	320.00	..
3.	Environmental improvement of slums (MNP)	500.00	..
4.	Urban Development Programme	1370.00	1235.00
Total..		2850.00	1895.00
(8) State Capital Project		3000.00	3000.00
(9) Information and Publicity:			
1.	Information Centres	11.25	..
2.	Field Publicity	58.10	..
3.	Other expenditure	15.65	15.65
Total		85.00	15.65
(10) Labour and Labour Welfare			
1.	Direction and Administration	105.00	12.00
2.	Industrial Relationr	585.00	130.00
3.	Working conditions and Safety	15.00	..
4.	Education and Training,	2025.00	605.48
5.	Research and Statistics	11.00	..
6.	Career Development courses	200.00	..
7.	Incentive Scheme for Educated Unemployed	1041.00	300.00
8.	Other Schemes	18.00	5.00
Total..		4090.00	1052.48

1	2	3	4
(11) Welfare of Backward Classes :			
1.	Welfare of Scheduled Castes	2800.00	316.13
2.	Welfare of Scheduled Tribes	3000.00	309.63
3.	Welfare of Nomadic Tribes	100.00	6.63
4.	Welfare of Denotified Tribes	100.00	7.35
5.	Welfare of Socially and Educationally Backward Classes	1500.00	74.79
6.	Welfare of Economically Backward Classes	250.00	5.00
7.	Minorities and Linguistic	250.00	9.00
Total..		8000.00	728.53
(12) Social Welfare :			
1.	Direction and Administration	10.00	..
2.	Family and Child Welfare (including Women Welfare)	187.00	..
3.	Education and Welfare of Handicapped	70.00	..
4.	Welfare of Poor and Destitutes	5.00	..
5.	Grant to Voluntary Organisations	30.00	..
6.	Other Schemes of Social Defence	98.00	76.00
7.	Prohibition	50.00	..
Total		450.00	76.00
(13) Nutrition			
1.	Special Nutrition Programme	1015.00	..
2.	Mid-day-Meals Programme	650.00	..
Total..		1665.00	..
Total:—VII. Social and Community Services.		57316.00	26391.90
VIII Economic Services			
1.	Secretariat Economic Services (Planning Machinery)	5.00	..
2.	Economic Advice and Statistics	250.00	..
3.	Training of Development Personnel	75.00	60.00
4.	Administrative Machinery for Tribal Areas Sub-Plan.	100.00	..
5.	Civil Supplies Corporation and Consumers' Protection	150.00	135.00
Total..		580.00	195.00
IX. Decentralised District Planning		20000.00	..
Grand Total..		376000.00	281140.74

STATEMENT-III

Selected Targets and Achievements

Sr. No.	Item	Unit	Level of achievement at the end of			
			1977-78	1978-79	1979-80	1984-85 Target (Cumulative)
1	2	3	4	5	6	7
AGRICULTURE AND ALLIED SERVICES						
I. Food Grains						
Area to be covered :						
(a)	Paddy	Lakh Hect.	4.84	4.59	4.58	4.95
(b)	Bajra	"	13.69	14.61	12.56	13.20
(c)	Maize	"	2.73	2.94	3.05	2.90
(d)	Jowar	"	10.32	10.17	9.46	9.20
(e)	Wheat	"	6.84	6.20	6.81	7.35
(f)	Other cereals	"	1.82	1.84	1.96	1.60
(g)	Pulses	"	4.52	5.46	5.42	6.60
Total:- Foodgrains		"	44.76	45.80	43.84	45.80
2. Commercial Crops						
Area to be covered						
(a)	Groundnut	"	19.54	20.46	20.21	20.95
(b)	Sesamum	"	1.10	1.02	0.93	1.20
(c)	Rape and Mustard	"	1.00	1.04	1.08	1.15
(d)	Castor	"	1.01	1.01	1.24	1.20
Total:- Oil seeds		"	22.65	23.53	23.46	24.50
(e)	Cotton	"	18.29	17.59	17.17	17.00
(f)	Sugarcane	"	0.62	0.58	0.57	0.85
(g)	Tobacco	"	0.82	0.75	1.15	0.92
3. Production of foodgrains.						
(a)	Rice	Lakh tonnes	6.69	5.34	4.37	8.45
(b)	Wheat	"	12.21	11.92	12.15	14.00
(c)	Jowar	"	5.53	5.77	5.57	7.00
(d)	Bajra	"	10.19	15.54	13.32	14.69
(e)	Maize	"	1.22	2.44	1.39	1.93
(f)	Other cereals	"	1.41	1.53	1.34	1.43
(g)	Pulses	"	1.49	2.31	1.94	6.00
Total:- Foodgrains		"	38.74	44.85	40.08	53.50
4. Production of Commercial crops						
(a)	Groundnut	Lakh tonnes	17.23	18.23	17.69	23.28
(b)	Sesamum	"	0.23	0.30	0.33	0.50

1	2	3	4	5	6	7
(c)	Rape and Mustard	„	0.40	0.51	0.50	0.62
(d)	Castor	„	1.29	1.35	1.41	1.60
	Total:- Oilseeds	„	19.15	20.39	19.93	26.00
(e)	Cotton	Lakh bales (170 KG)	19.42	21.01	17.85	24.30
(f)	Sugarcane (in terms of gur)	Lakh tonnes	3.49	3.29	3.19	4.50
(g)	Tobacco	„	1.25	1.54	1.75	2.00
5. Area under High Yielding varieties of seeds.						
(a)	Paddy	Lakh Hect.	2.16	2.19	2.56	3.80
(b)	Wheat	„	5.82	4.56	4.60	5.60
(c)	Jowar	„	0.32	0.31	0.38	1.10
(d)	Bajra	„	10.46	11.63	10.46	13.00
(e)	Maize	„	0.58	0.70	0.76	1.00
	Total	„	19.34	19.39	18.76	24.50
6. Commercial Crop (H. Y.)						
(a)	Cotton	„	1.98	3.19	3.26	4.00
(b)	Castor	„	0.80	0.81	0.60	0.80
7. Fertilizers (Consumption)						
(a)	Nitrogenous (N)	Lakh tonnes	1.70	1.92	2.24	4.00
(b)	Phosphatic (P)	„	0.79	0.93	1.15	2.00
(c)	Potassic (K)	„	0.28	0.36	0.39	0.70
	Total	„	2.77	3.21	3.78	6.70
(d)	Urban Compost	„	2.15	2.15	1.89	3.00
(e)	Green Manuring (Area covered)	Lakh Hect.	1.51	1.61	1.98	2.50
8. Plant Protection (Area to be covered)						
(a)	Foodgrain crops	Lakh Hect.	..	14.62	10.97	18.92
(b)	Commercial crops	„	..	36.50	49.89	68.12
	Total	„	..	51.12	60.86	87.04
9. Soil Conservation						
	Area covered	Lakh Hect.	17.61	18.14	18.79	22.30
10. Area under Major, Medium and Minor Irrigation						
(a)	Minor Irrigation					
(i)	Potential	'000 Hect.	1659	1693	1734	2027
(ii)	Utilisation	„	1427	1448	1467	1698
(b)	Major and Medium Irrigation					
(i)	Potential created	„	924	953	1012	1272
(ii)	Utilisation	„	501	503	529	753
11. Agricultural Marketing.						
(a)	Regulated markets.	Nos.	274	283	287	307

1	2	3	4	5	6	7
12. Storage						
	Owned capacity with					
	(i) State warehousing Corporation	"000 tonnes	48	68	73	183
	(ii) Co-operative	"	..	310.00	319.00	322.85
13. Animal Husbandry and Dairy Products.						
	(i) Milk	"000 tonnes	2025	2188	2200	2640
	(ii) Eggs.	Million	198	215	240	360
	(iii) Wool	In lakh Kgs	18.19	18.19	18.34	21.00
14. Animal Husbandry Programmes						
	(i) Intensive Cattle Development Projects	Nos.	8	8	8	9
	(ii) Mobile Units.	"	10	13	13	22
	(iii) No. of inseminations performed with exotic bull semen (annual)	In lakhs	0.32	0.64	0.84	4.67
	(iv) Establishment of sheep breeding farms.	Nos.	3	3	3	4
	(v) Sheep and Wool Extension Centres.	"	88	88	88	102
	(vi) Intensive sheep Development Projects	"	2	2	2	4
	(vii) Intensive Eggs and Poultry production-cum-marketing Centres.	"	9	9	9	12
	(viii) Estt. of fodder seed production farms	"	4	4	4	4
	(ix) Veterinary hospitals	"	19	19	19	19
	(x) Veterinary Dispensaries.	"	211	211	211	220
	(xi) Veterinary stockmen Centres.	"	455	457	462	542
	(xii) Polyclinics	"	..	..	1	2
	(xiii) Frozen Semen Station.	"	..	1	1	1
15. Dairy programmes						
	(i) Fluid Milk Plants	Nos.	7	8	9	13
	(ii) Milk products factories	"	5	5	5	5
	(iii) Dairy cooperative Unions	"	18	18	18	18
	(iv) Dairy Co-operative Societies (Feeder Societies)	"	4520	5458	6158	7158
16. Fisheries						
	(I) Mechanised boats (with inboard engines and outboard motors)	Nos.	2952	3386	3734	6944
	(II) Torwers procured	"	10	10	10	11
	(III) Fish Seed farms established	"	9	12	12	23
	(IV) Fish production					
	(b) Marine	Lakh tonnes	1.77	2.30	2.07	3.45
	(b) Inland	"	0.13	0.16	0.16	0.55
	TOTAL	"	1.90	2.46	2.23	4.00

1	2	3	4	5	6	7
17. Forests :						
(a)	Plantation of quick growing species	000' Hect.	32.00	34.12	36.22	45.20
(b)	Economic and commercial Plantations	„	54.50	59.56	64.76	90.20
(c)	Farm Forestry	Nos. in crores	..	8.82	13.65	44.00
(d)	Improvement of existing roads	Kms.	344	435	481	577
18. Co-operation						
(a)	Short term loans	Rs. in crores	138.76	141.00	155.00	225.00
(b)	Medium term loans	„		8.46	10.00	90.00
(c)	Long term loans	„	209.96 (cumulative)	2.82	3.82	55.00
(d)	Retail sales of fertilizers	„	77.00	87.00	98.00	175.00
(e)	Agricultural produce marketed	„	190.00	195.00	195.00	300.00
(f)	Retail sales of consumer goods by urban consumer co-operatives	„	43.00	44.00	46.60	55.00
(g)	Retail sales of consumer goods through co-operatives in rural areas	„	98.00	98.00	98.20	140.00
(h)	Co-operative storage	In lakh tonnes	3.18	3.10	3.19	3.85
	(i) Processing Units :					
	(1) Organised	No.	157	158	159	165
	(2) Installed	„	157	158	159	165
19. Power						
1.	Installed Capacity	M. W.	1907	2188	2384	3730
2.	Rural Electrification :					
	(a) Villages Electrified	Nos.	8121	9464	10867	18275
	(b) Pump sets energised by electricity	No. in lakhs	1.56	1.78	2.03	3.28
20. Transport and Communications						
1. Roads :						
I. State Highways						
(a)	Surfaced	Kms.	8445	8517	8654	9104
(b)	Unsurfaced	„	582	541	443	293
(c)	Total	„	9027	9058	9097	9397
II. Major District Roads						
(a)	Surfaced	„	7392	7673	8316	10716
(b)	Unsurfaced	„	2438	2370	2226	1326
(c)	Total	„	9830	10043	10542	12042
III. Other District Roads						
(a)	Surfaced	„	4721	5022	5922	8772
(b)	Unsurfaced	„	4918	4812	4649	3299
(c)	Total	„	9639	9834	10571	12071

1	2	3	4	5	6	7
IV. Village Roads						
(a) Surfaced		Kms.	4814	4885	5568	12768
(b) Unsurfaced		"	8160	8011	7895	5295
(c) Total		"	12480	12896	18463	18063
V. Total Roads						
(a) Surfaced		"	24872	26097	28460	41360
(b) Unsurfaced		"	16104	15784	15213	10213
(c) Total		"	40976	41881	43673	51573
4. Education :						
I. General Education :						
A. Elementary Education						
1. Classes I-V (Agr Group 6-11)						
(i) Enrolment						
(a) Boys		'000	2378	2399	2480	2497
(b) Girls		"	1598	1615	1658	2153
(c) Total		"	3971	4014	4138	4650
(ii) Percentage to age group						
(a) Boys		Percent	115	115.77	118.77	114.38
(b) Girls		"	88	88.82	84.86	105.88
(c) Total		"	99	99.80	102.14	110.00
2. Classes VI-VIII (Age Group 11-14)						
(i) Enrolment						
(a) Boys		'000	675	689	699	1050
(b) Girls		"	376	398	403	668
(c) Total		"	1051	1087	1102	1718
(ii) Percentage to age-group						
(a) Boys		Percent	56	57.40	58.01	83.33
(b) Girls		"	24	25.16	25.44	56.32
(c) Total		"	45	46.68	47.05	70.29
B. Secondary Education						
1. Classes IX-X						
(i) Enrolment						
(a) Boys		'000	278	282	291	341
(b) Girls		"	144	149	155	185
(c) Total		"	419	431	446	526
2. Classes XI-XII (General classes)						
(i) Enrolment						
(a) Boys		'000	94	121	148	288
(b) Girls		"	41	44	47	62
(c) Total		"	135	165	195	345

1	2	3	4	5	6	7
C. Enrolment in Non-Formal (Part-Time) Continuation Classes						
(a) Age group 9-14	Nos.	..	15383	23107	24000	
D. Adult Education						
(a) Number of participants (Age Group 15-35)	'000		215	516	869	3530
(b) No. of Centres opened under						
(i) Central Programme	Nos.	..	5935	6202	30850	
(ii) State Programme	"	..	6270	8820	16620	
(iii) Voluntary Agencies	"	..	5020	13318	70187	
E. Teachers						
(i) Primary Classes I-V						
(ii) Middle Classes VI-VIII	} Nos.		114861	117861	122011	130111
(iii) Secondary Classes IX-X		..	36215	36420	37170	43270
(iv) Higher Secondary Classes (XI-XII) (Additional new)	..	..	160	64	14515	
II. Technical Education						
(i) Degree Courses						
(a) No. of Institutions	Nos.		7	7	7	7
(b) Seats (Intake)	"		1840	1840	1885	2320
(ii) Diploma Courses						
(a) No. of Institutions	Nos.		19	19	19	19
(b) Seats (Intake)	"		3255	3315	3706	4982
5. Health and Family Welfare						
1. Hospitals and Dispensaries						
(a) Urban	Nos.		295	297	298	300
(b) Rural	"		395	395	399	417
2. Beds						
(a) Urban Hospitals and dispensaries	Nos.		10997	11025	11217	11414
(b) Rural hospitals and dispensaries	"		4464	4479	4569	5960
3. Primary Health Centres						
(a) Main Centres	Nos.		251	251	251	276
(b) Sub-Centres	"		2400	2400	2500	3400
4. Training of auxiliary Nurses-mid-wives						
Institutes	Nos.		22	19	19	22
(a) Annual Intake	Nos.		113	266	266	415
(b) Annual Outturn	"		125	206	206	400
5. Family Welfare Programme						
No. of voluntary Sterilisations done—						
(a) Tubectomy	In lakhs	}	1.12	1.97	2.20	3.00
(b) Vasectomy	"					
(c) No. of IUD insertions	In lakhs		0.30	0.35	0.38	4.20
(d) Conventional Contraceptives-Free Supply	"		1.72	2.05	1.87	13.36

1	2	3	4	5	6	7
6. Sewerage and Water Supply						
A. Urban Water Supply						
Towns (Other than Muni. Corporation)						
(i) Towns covered	Nos.	154	158	167	192	
(ii) Population covered	Lakhs	68.66	69.05	71.17	73.00	
B. Urban Sanitation						
1. Sewerage scheme						
(a) Towns covered	No.	20	20	22	22	
(b) Population covered	Lakhs	32.82	32.82	34.13	39.15	
2. Latrines-conversion programme						
(i) Latrines converted	Nos.	68846	72010	76383	106363	
(ii) Population covered	Lakhs	4.19	4.41	4.67	6.60	
C. Rural Water Supply						
1. Rural Water Supply Programme						
(a) Piped Water Supply						
(i) Village covered	Nos.	1656	2606	2442	4940	
(ii) Population covered	Lakhs	20.54	25.12	30.50	37.74	
(b) Hand Pump/Tubewells						
(i) Villages covered	Nos.	978	1169	1293	2375	
(ii) Population covered	Lakhs	3.88	4.61	4.60	7.45	
(c) Open Dugs (Simple) Wells						
(i) Villages covered	Nos.	282	633	779	2233	
(ii) Population covered	Lakhs	0.78	1.49	2.10	3.72	
Total villages covered	Nos.	2916	3608	4514	7601	
7. Rural Housing						
(1) Assistance for construction of houses on the house sites allotted to landless labourers	Nos. of houses Constructed	56013	75558	111860	122263	
8. Urban Development						
1. Environmental Improvement of Slums (MNP)						
(i) Persons benefitted	Nos.	109875	132048	149338	482671	
(ii) Preparation of development Plans	No.	..	1	11	16	
(iii) Town Planning Schemes	No.	9	1	5	10	
9. Labour and Labour Welfare						
<i>Craftsmen Training Scheme (including Vocationalisation)</i>						
(a) Institutions	No.	20	20	22	27	
(b) Seats						
(i) Craftsmen training	Seats No.	6460	6940	8040	11376	
(ii) Vocationalisation	"	..	..	..	15000	

1	2	3	4	5	6	7
10. Welfare of Backward Classes						
1. Pre-matric educational incentives						
(i)	Scholarships/Stipends	No. of Students	244000	199000	205000	840000
(ii)	Other incentives like boarding, grants, books, stationery and uniforms, etc.	" (Net)	80,000	52,000	66000	902487
(iii)	Ashram Schools	"	177	190	204	820
5. Economic Aid						
(i)	For agriculture	No. of families	480	1068	1668	11000
(ii)	For Animal Husbandry	"	950	4129	2600	6700
(iii)	For Cottage Industry	"	2275	20128	21100	82600

STATEMENT-IV.

Minimum Needs Programme-outlays for the Sixth Five Year Plan 1980-85

(Rs. in Lakhs)

Sr. No.	Name of the Programme.	Outlays for the Sixth Five Year Plan 1980-85.
1	2	3
1.	Rural Electrification*	364.00*
2.	Rural Roads.	16659.00
3.	Elementary Education including Adult Education.	3560.00
4.	Rural Health.	2009.00
5.	Rural Water Supply.	6500.00
6.	Housing assistance to Rural Landless Labourers.	3085.00
7.	Environmental Improvement of Slums.	500.00
8.	Nutrition.	1665.00
Total		34342.00

(*) A total outlay of Rs. 8024 lakhs is provided in the State Plan for Rural Electrification.

STATEMENT—V

Minimum Needs Programme for the Sixth Five Year Plan 1980-85—Targets and Physical

Sr. No.	Programme/Item	Unit	Level of achievement at the end of			
			1977-78	1978-79	1979-80 (Base Year level)	1984-85 (Target Cumulative)
1	2	3	4	5	6	7
1	Rural Electrification :					
	(a) Villages	No.	8121	9464	10867	18275
	(b) Pumpssets/Tubewells	No. in lakhs.	1.56	1.78	2.03	3.28
2	Rural Roads ;					
	(a) Length	Kms	22119	22730	24034	31634
	(b) Villages Connected :					
	(i) Having Population of 1500 and above	No.	2038	2146	2441	3664
	(ii) Having Population between 1000-1500	No.	1118	1168	1402	2183
3	Elementary Education					
(1)	Enrolment					
	(a) Classes I-V (age group 6-11 years) Enrolment	'000	3971	4014	4138	4650
	(b) Classes VI-VIII (age group 11-14 years) Enrolment	'000	1051	1087	1102	1713
(2)	Percentage to age group					
	(a) Classes I-IV-(Age group 6-11 years) Enrolment	percent	99	99.80	102.14	110.00
	(b) Classes VI-VIII (age group 11-14 years) Enrolment	Percent	45	46.63	47.05	70.29
4	Rural Health					
	Primary Health Centres					
	(i) Main Centres	No.	251	251	251	276
	(ii) Sub-Centres	No.	2400	2400	2500	3400
5	Rural Water Supply ;					
	(a) Villages covered	No.	2916	3698	4514	9600
6	Rural Housing :					
	(a) Assistance for construction of houses on the house sites allotted to landless labourers.	No. of houses constructed.	56013	78889	111866	42386
7	Environmental Improvement of Slum :					
	(a) Beneficiaries	No.	109375	132048	149338	482871
8	Nutrition :					
	(a) Beneficiaries under Special Nutrition Programme	No. in lakhs	5.40	6.93	7.70	11.70
	(b) Beneficiaries under Mid-Day-Meals Programme	"	2.40	3.80	4.28	8.53

STATEMENT-VI

Outlays for Centrally Sponsored Schemes for the Sixth Five year Plan 1980-85

(Continued on sharing basis)

(Rs. in lakhs)

Sr. No.	Sector/Sub-Sector	Total outlay (State share + Central share) 1980-85	Sr. No.	Sector/Sub-Sector	Total outlay (State share + Central share) 1980-85
1	2	3	1	2	3
1	Agricultural Education and Research	35.00	11.	Forests	363.65
2	Crop Husbandry	4116.26	12	Industries and Minerals	620.00
3	Land Reforms	165.76	13	Ports, Light houses and shipping	7.00
4	National Rural Employment Programme	9000.00	14	Road Development	778.00
5	Drought Prone Area Programme	3900.00	15	General Education	36.00
6	Integrated Rural Development	7630.00	16	Medical and Public Health	8488.50
7	Soil and Water Conservation	160.00	17	Urban Development	1000.00
8	Command Area Development	2673.60	18	Welfare of Backward Classes	1005.00
9	Animal Husbandry	331.58	19	Social Welfare	36.00
10	Fisheries	3018.17		Grand Total	43364.52

1	2	3	1	2	3
10.	Establishment of Area Development Authority of Ukai-Kakrapar, Surat.	47.00	10. Fisheries :		
11.	Introduction of Warabandhi in Ukai-Kakrapar Command Areas.	93.00	1.	Landing and berthing facilities at minor ports.	409.00
12.	On farm Development Works in the projects of Area Development Authority for Ukai-Kakrapar, Surat.	671.80	2.	Infrastructure facilities and fish based ancillary industries.	24.00
13.	Opening of Regional Soil and Water Management Pilot Project at Bardoli.	20.60	3.	Fish Farmtr's Development Agency, Godhra/Surat.	48.78
14.	Ayacut Development Programme in Surat District.	6.00	4.	Fish seed production and augmentation of inland fish resources (ICAR)	15.39
15.	Establishment of TCD farm in Ukai Damanganga Project.	107.20	5.	Water Supply-World Bank Project Veraval-Mangrol.	2521.00
16.	Special loan account for ineligible farmers.	200.00		Total ..	3018.17
17.	Subsidy for Small and Marginal farmers.	160.00	11. Forests :		
	Total ..	2673.60	1.	Dantiwada River Valley Project.	124.60
9. Animal Husbandry :			2.	Rural Fuel Wood Plantations.	205.38
1.	Assistance to SF/MF/AL for poultry, sheep and piggery production programme.	240.00	3.	Development of Gir Lion Sanctuary.	24.12
2.	Assistance to Small farmers for cross-bred heifers.	50.00	4.	Development of sanctuary for Wild ass and black buck.	9.55
3.	Rinder-pest Eradication Programme.			Total ..	363.65
(a)	Establishment of Vigilance Unit.	14.05	12. Industries and Minerals :		
(b)	Rinder-Pest Surveillance and Containment Vaccination Programme.	4.00	1.	District Industries Centres.	320.00
4.	Disease control programme for foot and mouth disease (purchase of Vaccine)	18.51	2.	Rural Industrial Projects and Rural Artisan's Project.	300.00
5.	All India Co-ordinated Research Project for Study of foot and mouth disease (ICAR)	5.02		Total ..	620.00
	Total ..	331.58	13. Ports, Lighthouses and Shipping		
			1.	Inland Water Transport Scheme-Landing facilities at River Bank.	7.00
			14. Road Development		
			1.	Roads of Economic Importance	778.00
			15. General Education :		
			1.	Introduction of National Service Scheme.	36.00

1	2	3	1	2	3
16. Medical and Public Health :			5. Pre-examination training and coaching for competitive examination.		
1.	Filaria Control Programme	36.00		Scheduled Castes	14.00
2.	National T. B. Control Programme.	70.00		Scheduled Tribes	10.00
3.	Prevention of Visual impairment and Control of blindness.	210.00	6. Scheduled Castes Economic Development Corporation.		
4.	National Leprosy Control Programme.	80.00		Scheduled Castes	580.00
5.	Multipurpose Workers scheme.	302.50	7. Intensive drive for eradication of untouchability.		
6.	Reorientation of Medical Education.	60.00		Scheduled Castes	90.00
7.	National Malaria Eradication Programme.	6230.00	8. Tribal Research and Training Institute.		
8.	Community Health Volunteers Scheme.	1500.00		Scheduled Tribes	11.00
	Total ..	8488.50	9. Full Fledged Hostel at Gandhinagar.		
17. Urban Development				Scheduled Castes	40.00
1.	Integrated development of Small and Medium Towns.	1000.00		Scheduled Tribes	40.00
18. Welfare of Backward classes :			Summary :—		
1.	Pre-S. S. C. children of those who are engaged in unclean occupations.			Scheduled Castes	865.00
	Scheduled Castes	70.00		Scheduled Tribes	140.00
2.	Development and Maintenance of Book Bank for Medical and Engineering Students.			Total ..	1005.00
	Scheduled Castes	11.00	19. Social Welfare.		
	Scheduled Tribes	13.00	1.	Welfare of destitute children.	16.00
3.	Grant-in-aid to voluntary agencies for Construction of hostels for girls.		2.	Training Centre for rehabilitation of Women in distress.	6.00
	Scheduled Castes	32.00	3.	Establishment of working women's hostel	8.00
	Scheduled Tribes	26.00	4.	Integrated education of handicapped children.	2.00
4.	Construction of Government Hostels for girls Studying in Colleges.		5.	Special Employment exchanges for physically handicapped persons.	4.00
	Scheduled Castes	28.00		Total ..	36.00
	Scheduled Tribes	40.00		Grand Total	43364.52

STATEMENT—VII.

Outlays proposed by the Departments for the Fully Centrally Sponsored Schemes.

(Rs. in lakhs.)					
Sr. No.	Name of the Scheme.	Total outlay 1983-85	1	2	3
1	2	3			
1.	Agricultural Credit Stabilisation Fund.	590.00	7.	Accelerated Rural Water Supply Scheme.	2100.00
2.	Payment of 10% out-right Central Subsidy	1500.00	8.	General Education Schemes.	892.50
3.	Promotion of Electronics	7.00	9.	Technical Education Schemes.	25.00
4.	Interest Subsidy to Engineer Entrepreneurs	7.00	10.	Upgrading the Department of Post Graduate Training and Research in Kayachikitsa	10.00
5.	Family Welfare Programme.	6477.04	11.	Development of ISM Pharmacy and Drugs Testing Laboratory.	10.00
6.	Roads of Inter-State Importance	598.00	12.	Post Matric Scholarships	250.00
			13.	Integrated Child Development Services	350.00
				Grand Total ..	12816.54

APPENDIX-A

STATE-WISE PUBLIC SECTOR PLAN OUTLAY: 1980-85.

Major States	Plan Outlay	
	Rs. in crores.	Per Capita.
Haryana	1,800	1,385
Punjab	1,957	1,179
Gujarat	3,760	1,096
Maharashtra	6,175	983
Madhya Pradesh	3,800	687
Tamil Nadu	3,150	651
Karnataka	2,265	614
West Bengal	3,500	600
Andhra Pradesh	3,100	584
Kerala	1,550	578
Rajasthan	2,025	577
Orissa	1,500	536
Uttar Pradesh	5,850	535
Assam	1,115	526
Bihar	3,225	456

States are ranked by per capita outlay

Per capita outlay is worked out by taking into account the estimated population as on 1st March, 1983.

Source:- Table 2.5 Centre for Monitoring Indian Economy-Feb. 1981.

APPENDIX—B

Statewise Sixth Plan Outlays for Selected sectors of Development

(Rupees in crores)

Major States	Fisheries	Forestry	Special Pro-gramme for Rural Development	Irrigation (Minor, Major & C.A.D.)	Power	Large and Medium Industries	Small Scale Industries	Transport & communications	Health	Nutrition
1	2	3	4	5	6	7	8	9	10	11
Andhra Pradesh	14	10	87	925	790	76	30	236	65	11
Assam	6	25	42	161	371	25	30	104	32	3
Bihar	7	18	190	1209	800	52	47	250	82	10
Gujarat	20 (3)	90(1)	144(4)	1107(5)	965(5)	75(8)	96(2)	339(3)	70(6)	17(5)
Haryana	2	14	29	569	545	11	19	170	48	4
Karnataka	13	31	49	555	601	89	74	145	66	23
Kerala	20	19	25	328	313	110	50	107	37	17
Madhya Pradesh	7	38	155	1147	1500	36	33	162	94	20
Maharashtra	12	49	81	1331	2157	132	60	441	89	26
Orissa	10	12	105	470	410	38	27	108	30	6
Punjab	2	13	36	397	733	61	20	113	49	1
Rajasthan	2	15	106	521	675	64	19	136	41	3
Tamil Nadu	24	59	120	225	1023	92	80	234	68	26
Uttar Pradesh	7	71	148	1547	2126	198	125	450	135	9
West Bengal	27	22	126	603	887	213	60	285	84	25

Note—Number in brackets against Gujarat indicates its rank amongst the States.

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Sub. Systems Unit,
National Institute of Educational
Planning and Administration
17-B, SriAurobindo Marg, New Delhi-110016
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