

Confidential



GOVERNMENT OF GUJARAT

DRAFT
SIXTH FIVE YEAR PLAN
1980-85
AND
ANNUAL PLAN
1981-82

SECTORAL PROGRAMMES

GENERAL ADMINISTRATION DEPARTMENT
(PLANNING)

OCTOBER, 1980.

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STATEMENT-I

Draft Sixth Five Year Plan 1980-85 And Annual Plan 1981-82

Major Head wise Summary of outlays and Expenditure.

(Rs. in lakhs)

Sr. No.	Head of Development	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
I	1. Agricultural Research and Education	231.91	200.00	200.00	1245.00	..	225.00	..
	2. Crop Husbandry	666.11	551.00	1948.17*	3345.00	381.09	600.00	89.24
	3. Land Reforms	162.61	185.00	189.97	1075.00	25.00	273.00	5.00
	4. Minor Irrigation	1449.86	1450.00	1467.50	10055.00	1880.00	1933.00	310.00
	5. Soil and Water Conservation	497.37	380.00	388.60	3555.00	715.00	465.00	102.00
	6. Area Development	47.01	76.00	114.21	1950.00	334.76	330.00	70.10
	7. Animal Husbandry	292.56	270.00	270.00	1825.00	377.81	300.00	45.57
	8. Dairy Development	281.85	30.00	30.00	265.00	100.00	40.00	15.00
	9. Fisheries	315.66	325.00	327.59	2150.00	1083.99	470.00	249.06
	10. Forests	733.70	1331.00	1375.00	9000.00	7526.50	1800.00	1482.13
	11. Investment in Agricultural Financial Investments.	35.11	90.00	90.00	610.00	610.00	90.00	90.00
	12. Marketing storage and Warehousing	3.10	26.00	26.00	210.00	125.00	30.00	13.00
	13. Community Development and Panchayats	98.85	181.00	122.70	740.00	14.46	98.00	8.24
	14. Special Programmes for Rural Development							
	(a) Small Farmers, Marginal Farmers and Agricultural Labourers	162.35	165.00	165.00	1270.00	..	175.00	..
	(b) Drought Prone Area	422.74	386.00	386.00	2380.00	..	400.00	..
	(c) Integrated Rural Development	230.14	350.00	350.00	1675.00	..	400.00	..
	(d) Local Development Works	306.07	250.00	250.00	1250.00	..	250.00	..
	(e) Abhinav Gram Nirman Karyakarama	183.23	350.00	350.00	2370.00	..	457.00	..
	(f) Antyodaya	120.00	200.00	200.00	2260.00	..	220.00	..
	(g) Development of Backward Areas	50.00	50.00	50.00	250.00	..	50.00	..
	(h) Block Level Planning for employment	339.46	500.00	413.00	3510.00	..	550.00	..
	(i) Off-season Unemployment Relief Works	38.56	100.00	100.00	500.00	..	100.00	..
	Sub-Total (14)	1852.55	2351.00	2264.00	15465.00	..	2602.00	..
	TOTAL Agriculture and Allied Services.	6668.25	7446.00	8813.74	51490.00	13173.61	9256.00	2479.34

* Including Rs. 930 lakhs for fertiliser subsidy.

1	2	3	4	5	6	7	8	9
II. 15.	Co-operation	372.11	581.00	581.00	3545.00	3041.26	600.00	500.87
III 16.	Water Development (Irrigation)	11707.81	13150.00	15459.50	114100.00	111557.00	22500.00	22339.00
IV. 17.	Power Development	9108.80	11000.00	12425.00	105100.00	104950.00	18505.00	18480.00
	18. Village and Small Industries	1774.37	1529.70	2171.70	11300.00	5016.00	2013.80	919.00
	19. Large & Medium Industries	2196.67	1152.30	1848.50	9850.00	8841.00	1646.20	1502.00
	20. Mining & Metallurgical Industries.	179.96	161.00	161.00	1850.00	1400.00	340.00	250.00
V	Total Industries & Minerals.	4151.00	2843.00	4181.20	23000.00	15257.00	4000.00	2671.00
	21. Road Development	3125.81	3850.00	3850.00	26412.00	26412.00	4500.00	4500.00
	22. Road Transport	1990.95	1450.00	1450.00	10000.00	..	2000.00	..
	23. Tourism	28.30	40.00	40.00	300.00	169.23	75.00	27.00
	24. Ports, Light Houses & shipping	175.20	600.00	600.00	2600.00	2600.00	600.00	592.00
VI.	Total Transport and Communication.	5320.26	5940.00	5940.00	39312.00	29181.23	7175.00	5119.00
	25. General Education	701.71	835.00	831.75	9000.00	1022.18	1200.00	139.61
	26. Technical Education	91.93	95.00	95.00	995.00	333.00	200.00	78.00
	27. Medical, Public Health & Sanitation.	348.97	1120.00	1124.72	5000.00	1508.76	700.00	229.75
	28. Social Inputs	..	..	..	1800.00	..	270.00	..
	29. Sewerage & water Supply	2313.68	2040.00	2037.00	15000.00	14009.00	2300.00	2092.00
	30. Housing	1925.29	1560.00	3664.50	9026.00	4749.00	1616.00	866.00
	31. Urban Development	832.99	400.00	420.00	2810.00	1975.00	500.00	209.00
	32. State Capital Project	763.31	550.00	931.49	3000.00	3000.00	600.00	600.00
	33. Information & Publicity	8.66	10.00	10.00	100.00	14.00	35.00	4.51
	34. Labour & Labour Welfare	237.80	385.00	479.00	5000.00	791.13	1010.00	112.52
	35. Welfare of Backward Classes.	761.76	1456.00	1456.00	8000.00	612.81	1600.00	195.11
	36. Social Welfare	114.65	70.00	80.00	600.00	95.00	180.00	21.00
	37. Nutrition.	144.97	115.00	115.00	2000.00	88.00	300.00	18.00
VII	Total Social and Community Services	8245.72	8636.00	11244.46	62331.00	28197.88	10511.00	4565.50
	38. Secretariat Economic Service (Planning Machinery)	5.00	1.00	1.00	25.00	..	1.00	..
	39. Other General Economic Service (Statistics.)	17.60	24.00	28.58	300.00	100.00	30.00	..
	40. Training of Development Personnel	..	10.00	10.00	115.00	..	40.00	..
	41. Administrative Machinery for Tribal Area Sub-Plan.	20.00	20.00	20.00	115.00	..	20.00	..
	42. Civil Supplies Corporation & Consumers Protection.	..	12.00	85.00	395.00	..	67.00	..
VIII	Total Economic Services.	42.60	67.00	144.58	950.00	100.00	158.00	..
IX	43. Decentralised District Planning	..	2800.00	2800.00	23000.00	..	4200.00	..
	GRAND TOTAL	45616.55	52463.00	61589.48	422828.00	305457.98	76905.00	56154.71

AGRICULTURE AND 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 pursuit 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 are proposed to be made to increase the share of more valuable sections in the total agricultural production. Intensive programmes for Scheduled Caste 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 irri-

gated areas and special dry farming programmes in water shed is also proposed to be implemented. Efforts are also proposed to be made to raise output 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 specially 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. 4,22,918 lakhs and Rs. 76,938 lakhs for the Sixth Five Year Plan 1980-85 and Annual Plan 1981-82 respectively, an outlay of Rs. 55,035 lakhs and Rs. 9,856 lakhs have been proposed for agriculture and allied programme including Co-operation. The broad break-up of these outlays are as under:—

(Rs. in lakhs)

Sr. No.	Sector/Sub-Sector.	1979-80 actual expenditure	1980-81		1980-85 Outlay	1981-82 Outlay
			Outlay	Anticipated expenditure		
1	2	3	4	5	6	7
1.	Research and Education.	231.91	200.00	200.00	1245.00	225.00
2.	Crop Husbandry	666.11	551.00 930.00*	1018.17 930.00*	3345.00	600.00
3.	Land Reform	162.61	185.00	185.00	1075.00	273.00
4.	Minor Irrigation.	1449.86	1450.00	1467.50	10055.00	1933.00
5.	Soil and Water Conservation.	498.22	380.00	380.00	3555.00	465.00
6.	Command Area Development	47.01	76.00	76.00	1950.00	330.00
7.	Animal Husbandry	292.56	270.00	270.00	1825.00	300.00
8.	Dairy Development	281.85	30.00	30.00	265.00	40.00
9.	Fisheries.	315.66	325.00	327.59	2150.00	470.00
10.	Forests.	733.69	1331.00	1331.00	9000.00	1800.00
11.	Investments in Agri. Financial Institutions.	35.11	90.00	90.00	610.00	90.00
12.	Marketing, Storage and Warehousing.	3.10	26.00	26.00	210.00	30.00
13.	C. D. ann Panchayats.	98.85	181.00	122.70	740.00	98.00

1	2	3	4	5	6	7
14.	Special Programmes for Rural Development (Poverty Eradication Programmes).					
(i)	S. F. D. A./S. F. A. L.	162.35	165.00	165.00	1270.00	175.00
(ii)	D. P. A. P.	422.74	386.00	386.00	2380.00	400.00
(iii)	Integrated Rural Development	230.14	350.00	350.00	1675.00	4000.00
(iv)	Local Development Works Programme.	306.07	250.00	250.00	1250.00	2500.00
(v)	Abinav Gram Nirman Karyakram.	183.23	350.00	350.00	2370.00	457.00
(vi)	Antyodaya	120.00	200.00	200.00	2260.00	220.00
(vii)	Development of Backward Areas.	50.00	50.00	50.00	250.00	500.00
(viii)	Block Level Planning for Employment.	339.46	500.00	413.00	3510.00	550.00
(ix)	Off-Season unemployment Relief Works.	38.56	100.00	100.00	500.00	100.00
	Sub-Total (14) ..	1852.55	2351.00	2264.00	15465.00	2602.00
	Total: Agriculture and Allied Services ..	6669.09	7446.00 +930.00*	7787.96 +930.00*	51490.00	9256.00
			8376.00	8717.96		
15.	Co-operation.	372.11	581.00	581.00	3545.00	600.00

*Subsidy on fertilizers.

5. The proposals for each of these sector/sub-sectors are outlined in 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. The teaching, research and extension education activities of the State Departments of Agriculture and Animal Husbandry and the Institute of Agriculture, Anand were transferred to the University.

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 University has established 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 Namatology, Department of Bio-Chemistry and the Department of Horticulture with the financial assistance from I.C.A.R. 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 Banakantha. The University has introduced semester system of education. All the undergraduate 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.

1.1.1.3. The University alongwith teaching and research also undertakes agricultural extension education and training programmes through which research findings in the agricultural technology and package of practices are made available to farmers. This is done through 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 temples for farmers,

extension and field workers and the students. The net-work of other extension training institutions are ten agriocultural 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. Farm advisory services are 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. The University has also participated actively in "Lab-to-Land" programme of I C A R With the introduction of the T & V Bior system in the State, the University imparts to training subject matter specialists of the Department of Agriculture

1.1.1.4. Research activities are carried out through 54 research farms (vide Annexure-I) located in varied agro-climatic conditions. The work is undertaken on cereals, pulses, millets, cotton, tobacco, oil-seeds, sugarcane, fruits 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.

1.1.1.5. 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 for adoption by the farmers.(vide Annexure--II).

1.1.1.6. Gujarat State is pioneer in evolving hybrid in bajra, similarly Gujarat was the first State to develop and release castor hybrid, it also stands first in per hectare production in the country. The first commercial cotton hybrid in the world was developed and released by the Gujarat State, also first budded cotton combining characteristics of annual and perennial cotton was released and recommended for cultivation in tribal areas and for marginal farmers. Tobacco is one of the important cash crops of the State. The excellent research work on tobacco has helped to tribal the yield of the crop after inception of the Research Station in 1954 largely due to evolution and adoption by the farmers of high yielding varieties and improved crop practices and protection techniques. The most effective, economical and easier method for establishment of grafted mango by grafting in Situ' grown mango seedling in dry regions of state has been evolve. Considering in the several aspects of work and progress on horticultural crops, I.C.A.R. has now established a Horticultural Research centre in Gujarat at Vejalpur. To find out superior germ-plasm for obtaining suckers for vege-

tative propagation in case of date crop a research station has been located at Mundra in Kutch and date-suckers from abroad have been brought and planted condition and development of which is far better than at other places in India. Agronomic practices are also worked out for newly developed varieties. 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.

1.1.1.7. 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 now transport of neera, without any fear of spoilage, from interior producing places to selling centres has become possible.

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

1.1.1.9. Besides, crops, the livestock plays a significant role in the rural economy of the State. Gujarat is well-known as dairy State of India and its agriculture in many areas being mixed-type, increase in livestock productivity by proper management as well as genetic improvement would not only help the average and marginal farmers, but will also help the landless farmers in increasing their income. Considerable progress has been made for increasing the milk yield per lactation and the decrease of mortality rate by development of suitable techniques for prevention and curative measures. Similarly, the genetic improvement of indigenous breeds of cattle and undertaking 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 breed 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 projects, 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. Commendable work and recommendations in case of nutritional aspects of animals have been made.

1.2. Programme for Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

1.2.2.1. The Gujarat Agricultural University has chalked out the programmes for the Five Year Plan based on the following considerations.

(i) Strengthening of undergraduate teaching by establishing and developing instruction farms, laboratories etc. and postgraduate teaching and research in Agriculture, Veterinary and Dairying disciplines;

(ii) Strengthening of existing departments and establishment of new departments;

(iii) Strengthening and expansion of extension education and training;

(iv) to continue and strengthen the research activities;

(v) to continue and strengthen the veterinary and dairy science education and research activities;

(vi) to undertake necessary construction works at four campuses of the Gujarat Agricultural University.

1.2.2.2. An outlay of Rs. 1245 lakhs has been proposed for the Sixth Five Year Plan and Rs. 225 lakhs for the Annual Plan 1981-82.

The details of the proposals are briefly as under:-

(Rs. in lakhs)						
Sr. No	Programme	1979-80 Actuals	1980-81 outlay	1980-81 anticipated Expenditure	1980-85 proposed outlay	1981-82 proposed outlay
1	2	3	4	5	6	7
A.	Agricultural Education	143.91	117.35	118.35	753.00	1136.60
B.	Agricultural Research	67.00	61.65	60.65	387.00	69.40
C.	Assistance from I.C.A.R.	21.00	21.00	21.00	105.00	19.00
Total		231.91	200.00	200.00	1245.00	2225.00

1.2.2.3. Out of the Sixth Plan and Annual Plan 1981-82 outlays of Rs. 1245 lakhs and Rs. 225 lakhs, the flow of to the Tribal Areas Sub-Plan proposed is Rs. 120 lakhs and Rs. 22 lakhs respectively. It is expected that in addition to the flow from the State Plan outlay, special Central assistance of Rs. 380 lakhs and 6 lakhs would be made available for Sixth Plan 1980-85 and Annual Plan 1981-82 respectively.

1.2.2.4. Education in Agriculture, Dairy and Veterinary has been thoroughly revised through a 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 10+2+3 system of education makes agricultural education more relevant to the practical needs of the society and linking of education with production. This necessitates the 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 will necessitate the strengthening of the existing departments for under graduate and post

graduate teaching as well as establishment of the new departments of agricultural meteorology, post-harvest technology, farm forestry, basic sciences and other department to support and associate interdisciplinary research programmes. In addition Faculty of Home Economics and College of Home Science 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 is also proposed.

1.2.2.5. 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) Scheme for mobile ambulatory clinic for veterinary and animal husbandry at Sardar Krishinagar, (6) Strengthening of livestock inspector's training, (7) establishment of home science schools, (8) up-grading of Sardar Smruti Kendra and establishing extension wing at veterinary college, (9) establishment of tribal development centres and operational research project in extension education, (10) correspondence course etc. In addition, programmes pertaining to students welfare and strengthening of libraries are also proposed for Sixth Plan.

1.2.2.6. In 1981-82 the scheme of faculty improvement through advanced training of teachers, workshop, seminars, study tour, scholarships and fellowships to best students, strengthening of U.G. and P.G teaching, library development, book bank and production of textbooks, students welfare programme etc. have been proposed to be continued. In addition, Development of Dantiwada campus, and other campus at Junagadh, Anand and Navsari, extension education trainings, demonstrations and farm advisory programmes shall be continued in addition to up-grading/strengthening of agricultural schools, Livestock Inspectors, school of Baking etc. and farm development at Dantiwada.

Campus Development :

1.2.2.7 The University is a multi-campus University and has four Campuses namely Anand, Junagadi, Navsari and Dantiwada with its principal Campus at Sardar Krishinagar. The main Campus is baptised as Sardar Krish nagar 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, would require 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 scaping,

service complex centres, canteen and gymkhana etc. are required to be developed. An outlay of Rs. 200 lakhs, is proposed for Campus development in Sixth Plan.

Agricultural Research :

1.2.2.8. Under this programme 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. It is proposed to continue, expand and strengthen the University's following research activities in Sixth Plan.

- (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-plantation;
- (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.

1.2.2.9. In 1980-81 the Gujarat Agricultural University evolved and recommended/released following varieties:-

Sr. No.	Crop	Varieties
1.	Wheat	Lok-1, evolved at Lok Bharti, Sanosara
2.	Sorghum	CSH-82, CSH-6, B-98-2.
3.	Pulse	Urid T-9
4.	Cotton	Herbaceum 1949 Hirsutum Hybrid cotton HH-3
5.	Spices and condiments	Garlics-97-1.

1.2.2.10. Subject to availability of funds, in 1981-82 following additional programmes are proposed to be taken up.

1. Strengthening of research stations at Waghai and Dahod under tribal plan.

2. Strengthening of research stations at Paria, Vadodara, Mahuva under State Plan assistance as per recommendations of I.C.A.R. Research Review Committee for G.A.U.

3. Strengthening of crop improvement programme, plant protection and agronomic researches and subject matter research in agricultural economics, extension and statistics, soil science, agricultural engineering and water management, horticulture and vegetable crops and to meet other research gaps.

4. Establishment of college of Home Science at Dantiwada and strengthening of Agricultural School at Junagadh.

5. Purchase of Lands for expansion of various research and educational activities for National Agricultural Research Programme and University Programme.

Research Gaps and Priorities

1.2.2.11. The four campuses of the University namely 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, Godhara 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. From the past performance the crop improvement particularly cotton, wheat, rice, bajra, tobacco groundnut and sorghum have 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 indicated 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 :

1.2.2.12. The National Agricultural Research Project (N. A. R. P.) has been formulated by the 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 local. 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 pattern for more efficient use of natural resources and ecological potential. The Gujarat 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. 50.00 crores from which I.C.A.R. has already sanctioned sub-projects at Arnej, Targhadia and expansion of Directorate of Research to the tune of Rs. 1.41 crores. 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 A.I.C.R. Support.
 - a. Four Regional Research Stations ((Dantiwada, Anand, Junagadh and Navsari..)
 - b. Seven special stations (Surat, Arnej, Godhara, Targhadia, Jamnagar, Vijapur, and Nawagam).
 - c. Four sub-stations (Bharuch, Daxool, Bhachau and Dhari).
2. Under State Plan Support.
 - a. One special station (Waghai) under tribal plan.
 - b. Four sub-stations (Paria, Vadodara, Mahuva and Dahod.)

Necessary provisions will also have to be made for, State Plan support programmes and State liability for infrastructural facilities for land, maintenance and utilities and farm operational costs.

Veterinary Sciences, Animal Husbandry and Dairy †

1.2.2.13. Gujarat is well known for its milk co-operatives, milch breeds like Surti and Mahesana buffaloes and dual breeds of Gir and Kankrej cows. Pure breeding and cross breeding work for the improvement of cows 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.

1.2.2.14. 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.

1.2.2.15. Academic programmes in the Veterinary and Dairy sciences for under-graduate and post-graduate 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.

ANNEXURE-I

Existing Research Stations of Gujarat Agricultural University

Zone No.	Agro-climatic Zone	Major crops in the Zone	Existing Research Station	
			Main Stations	Sub-Stations
1	2	3	4	5
NAVSARI ZONE				
I.	South Gujarat (Heavy Rainfall)	Rice, Millet, Fruit Crops.	(1) Navsari, (2) Waghai	(1) Gandevi (2) Paria (3) Danti-Ubham (4) Vyara
II.	South Gujarat	Cotton, Sorghum	(1) Surat	(1) Bharuch (2) Bardoli (3) Hansot (4) Achhalia, (5) Tanchha.
ANAND ZONE				
III.	Middle Gujarat	Tabacco, Pearl-Millet, Maize, Cotton, Rice, Pulses	(1) Anand (2) Godhra (3) Nawagam	(1) Derol, (2) Dabhoi, (3) Dahod, (4) Thasra (5) Vadodara (9) Dharamaj (New) (7) Devgadhbharat
IV.	Bhal Coastal Area	Rainfed Wheat, Cotton, Sorghum, Gram.	(1) Arnej	(0) Vallabhipur, (2) Dhandhuka
DANTIWADA ZONE				
V.	North Gujarat	Pearlmillet, Cotton, Wheat, Pulses, Castor, Rape and Mustard.	(1) Dantiwada (2) Vijapur	(1) Ladol (2) Dehgam (3) Talod (4) Khed- bhrasma (5) Deesa (6) Jagudan (7) (7) Sanand (New).
VI.	North-West Zone	Pearlmillet, Sorghum, Kidney, bean, Cotton, Date-palam	(1) Mundra	(1) Bhachau (2) Virangam (3) Kothara (4) Chharodi (5) Radhanpur (6) Khado
JUNAGADH ZONE				
VII.	North Saurashtra	Groundnut, Pearl-millet, Sorghum, Cotton	(1) Targhadia, (2) Jamnagar	(1) Amreli (2) Dhari (3) Chotila (4) Jamkhambhalia
VIII.	South Saurashtra	Groundnut, Coconut	(1) Junagadh	(1) Mahuva (2) Ratia (3) Mangrol (4) Khapat, (5) Kodinar (6) Manavadar
Total			12 Main Stations	42 Sub-Stations

ANNEXURE—II

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	GAHW-10, A-28, GW-40, GW-18
3.	Bajra	GUB-J-1399
4.	Sowar	CSH-5, CSV-3, CJ-108, CSH-6, CSH-82, GJ-9
5.	Bull Millets	G-Nagli-1, G-Kodra-1, G-Vari-1
6.	Pulses	Urid- G-75, GAU-Muth-1, Urid-T.o.
7.	Spices & condiments	Fennel PF-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.
9.	Tobacco	G-T-4.
10.	Oilseeds	Groundnut-GAU-G-1, GAU-G-10, M-13, Caster-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	Isabgul-GAU-I-1.

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Outlays and Expenditure

Head of Development:—Agricultural Education and Research.

(Rs. in lakhs)

Sr. No.	Head/Sub-Head of Development	1979-80 Actuals	1980-81		1980-85 Proposed Outlay	Capital content	1981-82 Proposed Outlay	Capital content
			Outlay	Anticipated Expenditure				
1	2	3	4	5	6	7	8	9
A.	Agricultural Education	143.91	117.35	118.35	753.00	..	136.60	..
B.	Agricultural Research	67.00	61.65	60.65	387.00	..	69.40	..
C.	Assistance from ICAR.	21.00	21.00	21.00	105.00	..	19.00	..
	Grand Total	231.91	200.00	200.00	1245.00	..	225.00	..

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 181-82

Outlay and Expenditure

Development Schemes/Projects (Minor Heads)

(Rs. in lakhs)

Sr. No.	Name of the Scheme/Project	1979-80 Actuals	1980-81		1980-85		1981-82 Proposed Outlay
			Out-lay	Anticipated Expenditure	Proposed Out-lay	Capital content	
1	2	3	4	5	6	7	8
A. Agricultural Education :							
(1)	LER-1. Post-graduate Degree training in India and Abroad	1.91	3.00	3.00	20.00	..	3.00
(2)	LER-2 Grant in aid to GAU for Education	121.00	94.35	95.35	604.00	..	108.60
(3)	LER-3 Development of Veterinary College	11.00	11.00	11.00	79.00	..	16.00
(4)	LER-4 Development of Dairy Science College	10.00	9.00	9.00	50.00	..	9.00
Total (A) Agricultural Education		143.91	117.35	118.35	753.00	..	136.60
B. Agricultural Research.							
(5)	LER-5 Grant-in-aid to GAU for Research	39.00	38.65	37.65	237.00	..	41.40
(6)	LER-6 Estt. of Livestock Research Station	28.00	23.00	23.00	150.00	..	28.00
Total (B) : Agricultural Research		67.00	61.65	60.65	387.00	..	69.40
C. Assistance from I.C.A.R.							
..							
(7)	LER-7 State share to ICAR. Schemes						
	Agricultural Research Schemes	15.00	15.00	15.00	87.00	..	16.00
	Veterinary Research Schemes	6.00	6.00	6.00	18.00	..	3.00
Total (C)		21.00	21.00	21.00	105.00	..	19.00
Grand Total : A + B + C		231.91	200.00	200.00	1245.00	..	225.00

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Centrally Sponsored Schemes—Out-lays

(R.s. in Lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 outlay proposed			1980-81 Outlay			1981-82 Outlay		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Centrally sponsored scheme on intensive cotton district programme Scheme nucleus and foundation seeds of Cotton, Surat	3.015	3.015	6.03	17.50	17.50	35.00	3.155	3.155	6.33	3.50	3.50	7.00

1.2 CROP HUSBANDRY

1.2.1.1. The total geographical area of the Gujarat State is 1,96,984 sq. Kms. accounting for about 6% of the total geographical area of the Indian Union. Extreme variability in the distribution and 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 alluvium and the Saurashtra region have medium black soils of basaltic origin. All along the coast the saline alluvium 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. Coefficient 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 has retarded the economic growth of the State.

1.2.1.2. The land utilisation statistics show that in Gujarat, 56.1% of the reported area is put under cultivated crops against 54.7% in India. 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 1971 census, only 4.7% of the operational holdings were irrigated and they formed about 16% of the total irrigated area, while 23.5% of the holdings of the State were partly irrigated. Thus, as many as 71.8% of the holdings in the State have no facilities of irrigation and as many as 71.6% of the wholly irrigated holdings fall in the size of upto 2 hectares. The irrigation facilities, still continue to be meagre in the State. Only 16% of the reported area of the State is irrigated from various sources; like canals, tubewells, surface wells, tanks and Bandharas. Of the total area irrigated as much as 78% is irrigated by surface wells, 16% by canals, 7% by tubewells, 3% by tanks and about 1% by other sources.

1.2.1.4. The principal food crops of Gujarat are bajra, Jowar, maize and wheat, while cotton, groundnut and tobacco are the main commercial crops. In South Gujarat, the deep black retentive soils are suitable for paddy, while in central and 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 groundnut.

1.2.2. Review of Progress

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

Sr. No.	Plan Period	Area in lakh hectares				
		Production in lakh tonnes Yield in Kgs/hect.				
		Food-grains	Oilseed	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	0.11
	Prodn.	18.75	4.40	8.34**	0.41	0.57
	Y/H.	333	362	107	679	5182
2. Second Five Year Plan 1956-57 to 1960-61	Area	49.80	18.99	17.50	0.81	0.18
	Prodn.	20.88	11.07	10.57**	0.56	0.94
	Y/H.	407	586	108	692	5222
3. Third Five Year Plan 1961-62 to 1965-66	Area	47.96	23.44	17.57	0.86	0.29
	Prodn.	25.79	13.58	14.39**	0.83	1.65
	Y/H.	538	581	147	963	5594
4. Average of the three Annual Plans 1966-67 to 1968-69	Area	51.90	21.61	16.89	0.91	0.33
	Prodn.	28.11	11.31	14.62**	0.93	1.81
	Y/H.	539	522	155	1026	5476

1	2	3	4	5	6	7
5. Fourth Five Year Plan 1969-70 to 1973-74	Area	49.93	19.23	17.97	0.88	0.46
	Prod'n.	37.09	13.07	17.43**	1.13	2.53
	Y/H.	735	676	175	1288	5500
6. Fifth Five Year Plan 1974-75 to 1977-78	Area	45.43	20.11	17.32	0.87	0.53
	Prod'n.	36.44	16.88	16.76*	1.34	2.79
	Y/H.	802	839	164	1540	5262
7. 1978-79	Area	45.79	23.52	17.59	0.75	0.58
	Prod'n.	44.83	20.39	21.01*	1.54	3.29
	Y/H.	979	860	203	2060	5677
8. 1979-80	Area	40.02	23.23	17.17	0.90	0.57
	Prod'n.	40.46	19.87	17.85*	1.31	3.19
	Y/H.	919	855	177	1460	5610

**Production of cotton is in terms of number of bales each of 180 kgs.

*Production of cotton is in terms of number of bales each of 170 kgs.

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 26 years there has been reduction in the food crops acreage to the extent of 12.09 lakh hectares. The production of food grains had reached a record figures 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 year, this rate of growth has declined due to recurrence of droughts, floods and heavy unseasonal rains. Linear and compound rates of growth of production of selected crops and groups of crops for period since 1960-61 to 1978-79 and for the Fifth Plan period, (1974-75 to 1977-78) are given below:—

(Base period : triennium ending 1969-70)

Crop/crop group	1960-61 to 1978-79		1974-75 to 1977-78 Fifth Plan period	
	Linear growth rate	Compound growth rate	Linear growth rate	Compound growth rate
	2	3	4	5
Total foodgrains	4.55	3.30	0.95	0.90
Groundnut	1.82	1.49	1.47	1.80
Total oilseeds	2.45	1.90	1.40	1.80
Sugarcane	8.72	5.20	0.57	0.50
Cotton	2.76	1.00	0.51	0.50
Tobacco	5.28	4.00	0.52	0.50
Total foodcrops	4.89	3.40	0.92	0.90
Total non-food crops	1.96	1.70	0.98	0.90
All crops	3.09	2.50	0.94	0.90

1.2.2.4. 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 production. The targetted levels of production of foodgrains and cotton could not be reached. In case of sugarcane also production was below the targetted 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.

1.2.2.5. 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 yield of Bajra which normally accounts for 50% of the foodcrops 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 attacked 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 menance in the groundnut growing areas 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 continuous heavy rain 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 from want of last spell of rains in 1979-80, the food-grain crops were affected on account of heavy rains and floods in the districts of Saurashtra and Kheda District 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.

Crops	Unit	Level of achievement at the end of—					
		1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
1	2	3	4	5	6	7	8
Food-grains	lakh tonnes	21.52	45.20	40.27	88.73	44.83	40.46
Oilseed	„	5.52	21.73	20.72	19.15	20.39	19.83
*Cotton	Lakh bales	14.55	16.77	16.30	19.42	21.01	17.85
Sugarcane (gul)	Lakh tonnes	2.00	2.98	2.72	3.49	3.29	3.19
Tobacco	„	1.27	1.17	1.65	1.25	1.54	1.31

*Production in lakhs bales of 170 Kg.

High Yielding Varieties Programmes

1.2.2.6. To increase the foodgrains production in the State high yielding varieties programme was

continued in the Fifth Five Year Plan and subsequent years. The progress made under this programme is given below :—

Crop	Level of achievement at the end of					
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
1	2	3	4	5	6	7
Paddy ..	0.94	1.72	1.78	2.16	2.19	2.56
Bajra ..	9.30	12.92	9.81	10.46	11.63	10.46
Jowar ..	0.16	0.69	0.38	0.32	0.31	0.38
Maize ..	0.40	0.48	0.49	0.58	0.70	0.78
Wheat ..	3.29	4.52	5.06	5.82	4.56	4.60

Fertilizers and Manures

1.2.2.7. 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. during the Fifth Five Year Plan period and the years 1978-79 and 1979-80, 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					
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
1	2	3	4	5	6	7
N ..	0.86	1.10	1.31	1.70	1.92	2.24
P ..	0.35	0.33	0.52	0.79	0.93	1.15
K ..	0.13	0.06	0.12	0.28	0.36	0.39
TOTAL ..	1.34	1.49	1.95	2.77	3.21	3.78

1.2.2.8. The consumption of the above fertilizers was low during 1974-75 due to scarcity conditions which prevailed in the State, low purchasing capacity of farmers due to previous year's scarcities and high prices of fertilizers during the year 1975-76. From the year 1976-77, consumption of fertilizers has been

increasing.

1.2.2.9. In addition to chemical fertilizers, organic manures like compost and green manures are necessary for improving soil structure. The progress achieved was as under:—

Item	Level of achievement at the end of					
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
1	2	3	4	5	6	7
Urban compost (Lakh tonnes) ..	2.23	2.30	2.30	2.15	2.15	1.89
Green manuring (Lakh hq.) ..	1.27	1.31	1.76	1.51	1.61	1.98

Plant Protection Measures

1.2.2.10. 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 during 1974-75 to 1979-80 is as under :—

(Area covered in lakh hq.)

Crop	Level of achievement at the end of					
	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
1	2	3	4	5	6	7
Food crops ..	13.80	19.75	18.00	15.21	14.62	11.00
Commercial crops ..	17.30	20.90	23.00	21.55	36.50	49.89
TOTAL ..	31.10	40.65	41.00	36.76	51.12	60.86

1.2.2.11. Under the scheme for assistance to farmers for aerial spraying of pesticides during 1978-79 and 1979-80 area covered was 185030 ha. and 123166

ha. respectively. Consumption of pesticides (Technical grade material) in tonnes is given below :—

1974-75	1975-76	1976-77	1977-78	1978-79	1979-80
4900	3634	5000	4412	5500	6500

Farmers' Training Programme

1.2.2.1. 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' fields i.e. outside the training institutions. The farmers training Centres one at Amreli and second at Rajkot was functioning at the end of year 1979-80.

Dry Farming

1.2.2.13. A scheme for dry farming in banded area is being implemented since 1965-66 in five districts viz Kachchh, Jamnagar, Banaskantha, Sabarkantha and Panchmahals as non-plan scheme and merged in T.V. system. Considering the importance of dry farming technology in major parts of the state, the scheme of dry farming technology is now functioning as internal 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

1.2.2.14. Under the horticultural programme development of major crops like Banana, Mango and Bor is emphasised, besides imparting training and rendering services to farmer 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 was launched in Kachchh district in 1978-79.

Objective and Strategy

1.2.3.1. In the strategy of agricultural development high priority is accorded to resources conservation and development which forms the base for expanding agricultural production. Simultaneously, efforts are made for (a) technology improvement for efficient production, (b) expansion of farm-business to increase total earning from farming, (c) upliftment of weaker section of farming community such that instead of being burdensome, they may make significant contribution to State economy by enlarging their farm produce beyond the subsistence level, and (d) strengthening organisation for agriculture so that the march of progress helps going on at a faster pace.

1.2.3.2. General measures for increasing agricultural production will be to push the use of inputs, the help of T & V system and institutional training; and to develop natural resources with watershed approach with greater concentration in drought prone areas. Package of dry farming practices will be combined with the watershed approach. The extension machinery and watershed machinery will work jointly in each watershed so as to achieve the optimum result from moisture conservation; coverage under HYV seed of foodgrain crops and commercial crops and chemical fertilizers will be increased. The coverage under plant protection measures and soil conservation measures will also be increased. Imp-

proved wateruse management practices will be emphasised in irrigated farming.

1.2.3.3. In particular, specific measures are designed for different crops. In case of foodgrains big jump of four lakh tonnes of additional production is planned for pulse crops. This will be done by bringing about 50 percent of the area of cotton and castor crops under mixed cropping with pulses over and above the area of mixed crop of pulse with bajra and other cereals. It is also envisaged to expand cultivation of summer Mug after wheat in 0.50 lakh hectares. This will be a short duration variety of Mug.

1.2.3.4. Special efforts will be made through denaestration and easy supply of seed to cover additional area of 0.72 lakh hectares under hybrid jowar, raising its total production to 7 lakhs tonnes by the end of Sixth plan.

1.2.3.5. Similarly, one lakh and 1.24 lakhs hectares of HYV of wheat and paddy will be added respectively. In case of bajra besides more coverage under HYV seed, summer bajra crop will be expanded in canal areas.

1.2.3.6. In case of oil seeds productivity of the groundnut will be increased through fertilizers use, supplementary irrigation in Kharif crop and proper pest control measures. It is also planned to expand summer groundnut crop to one lakh hectares. Area under HYV of sesamum as sole crop will be expanded besides mixed cropping. Short duration soyabean and sunflower will be stressed in Bhal area in place of dry wheat. Mustard crop will be increased in non-traditional area of Saurashtra region 50 percent of the area under castor will be covered under hybrid variety. In case of cotton 4.40 per cent common growth rate sought to be achieved through increase in area under HYV from 3.26 lakh hectares to 4.00 lakh hectares and scientific pest control management.

1.2.3.7. Under horticulture programme, development of Banana and Mango for export promotion will be enhanced in irrigated area of south Gujarat and development of BOR (Zizyphus) will be emphasised on sub-marginal lands in drought prone area of Kachchh and Saurashtra.

1.2.3.8. On farm development and utilisation of modern production inputs on the farm holding the operated by cultivators belonging to weaker sections of the society viz; Scheduled tribe, scheduled castes, small farmers and marginal farmers will be subsidised.

1.2.3.9. In order to augment farm income of small and marginal farmers they will be encouraged through appropriate financial assistance, subsidy and infrastructure development, to undertake supplementary occupations.

1.2.4. Programme for Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

lakhs for the Annual Plan 19781-82.

1.2.4.1. An outlay of Rs. 3345 lakhs has been proposed for the Sixth Five Year Plan and Rs. 600

The details of these proposals are briefly given below :—

Sr. No.	Minor Head of Development	Expenditure 1979-80	1980-81		1984-85	1981-82
			Outlay	Anti-Expenditure	Proposed Outlay	Proposed Outlay
1	2	3	4	5	6	7
1	Direction and Administration	152.89	208.34	521.75	1072.24	198.90
2	Multiplication and Distribution of Seeds	29.79	23.25	25.51	246.95	30.88
3	Manures and Fertilizers	90.89	992.79*	991.99*	408.94	54.15
4	Plant protection	116.09	42.74	162.54	262.45	45.86
5	Commercial crops	172.49	78.19	123.50	409.55	72.78
6	Extension and Farmers' Training	39.39	51.87	49.04	339.20	97.40
7	Agricultural Engineering	12.81	3.80	3.60	188.28	6.73
8	Agriculture Economics and Statistics	13.84	14.53	14.90	90.43	17.75
9	Horticulture	18.66	35.49	35.34	208.96	42.55
10	Other Expenditure	10.00	10.00	10.00	50.00	10.00
11	Contingency Plan	9.26	10.00	10.00	45.00	10.00
12	Nucleus Budget	..	10.00	..	23.00	13.00
Total ..		666.11	1481.00	1948.17	3345.00	600.00

*Inclusive of subsidy on fertilizers (Rs. 930 lakhs in 1980-81).

1.2.4.2. The allocation of the outlays have been proposed keeping in view the strategy referred to in the earlier paragraphs. Key elements of the action strategy for increasing crop production are :—

the use of rhizobium culture and fertilising the pulses crops by phosphatic fertilizers.

Production Targets

(1) to increase the coverage under HYV seed of foodgrain crops and commercial crops by 30 and 25 per cent respectively ;

(2) to raise the level of consumption of fertilizers by 95 per cent ;

(3) to increase the coverage under plant protection measures and soil conservation measures by 43 per cent and 16 per cent respectively ;

(4) to bring additional area under irrigation by about 4 lakh hectares; and

(5) to adopt a strategy to bring more area under pulses as a mixed crop in Bajra, Jowar, Sugarcane, cotton and Rice.

1.2.4.3. As a result of various measures envisaged for the period 1980-85, it is estimated that an additional foodgrains production potential of 12 lakh tonnes would be created bringing the level of production at 53.50 lakh tonnes. Componentwise the targets are as under :—

Particulars	Lakh tonnes
Fertilizers	6.12
High yielding varieties	3.78
Soil conservation	0.18
Irrigation	1.20
Other measures	0.88
	<u>12.16</u>

It has also been decided to bring more area under pulses after wheat in canal irrigated project areas. The per hectare yield is proposed to be increased by

1.2.4.4. The target of production potential envisaged for the important crops are as under :—

Crop	Unit	Base year Level (Average of Triennium dur- ing 1979-80	Target 1984-85	Annual growth rate	
				Linear	Compound
1	2	3	4	5	6
1. Food-grains	Lakh tonnes	41.36	53.50	5.05	4.90
2. Oilseeds	Lakh tonnes	19.94	26.00	5.25	5.20
3. Cotton	Lakh bales of 170 kgs. each	19.43	24.30	4.50	4.40
4. Sugarcane (in terms of gur)	Lakh tonnes	3.32	4.50	6.10	5.90
5. Tobacco	Lakh tonnes	1.37	2.00	8.00	7.70

Agricultural Extension System

1.2.4.5 An examination of productivity of different regions in the State indicates that several areas will have to be given special attention. These areas are DPAP, SFDA, and Tribal Sub-Plan areas. These areas will have to be given priority for larger coverage under high yielding varieties programme of crops, supply of larger quantities of fertilisers and intensive efforts to combat pests and diseases and in adopting dry farming practices on a massive scale. A new strategy in agricultural extension work has already been initiated (Bennor System). The innovation being introduced in the present system relates to continuous training and visits of the Gramsevak about a particular task to be done by the farmers, only a week or two in advance of the time of its implementation. The gramsevak will visit the contact farmers in the specified villages on specified days every week/fortnight depending upon the task in hand. The advantage of this system is that there will be single line of technical direction and administrative control, right from the Directorate

of Agriculture to the Gram Sevak through the agriculture staff working in the Panchayat organisation.

1.2.4.6. The Cultivators are becoming increasingly aware of the advantages of better agronomic practices like deep ploughing, proper placement of seeds, seasonal, and timely inter-culturing and weeding etc. This increases the yield potential to the extent of about 0.5 to 1.0 quintal per hectare. It is proposed to convert at least 50% of the total farmers, in a very intensive way. The farmers will be imparted one latest technological training.

Fertilizers

1.2.4.7. The use of fertilizers in the State is increasing progressively. As the use is progressively picking up and more and more factories coming up which can supply sufficient quantity of fertilizers, it is proposed to increase the use of fertilizers to 7.38 lakh tonnes by the end of the Sixth Five Year Plan.

Nutrients	Unit	Achievement		Target	
		1979-80	1980-81	1981-82	1984-85
1	2	3	4	5	6
Nitrogenous (N)	Lakh tonnes	2.24	2.67	3.01	4.35
Phosphatic (P)	Lakh tonnes	1.15	1.36	1.53	2.21
Potassic (K)	Lakh tonnes	0.39	0.50	0.56	0.82
	Total	3.78	4.53	5.10	7.38

High yielding varieties programme.

1.2.4.8. An additional area of 5.74 lakh hectares

is proposed to be brought under the high yield varieties programme. The area proposed to be brought under different crops is as under :—

Crops	Areas in lakhs hectares.			
	1979-80	1980-81	1981-82	1984-85
(1) Wheat	4.60	4.80	5.00	5.60
(2) Paddy	2.56	2.85	3.10	3.80
(3) Bajra	10.46	11.00	11.50	13.00
(4) Jowar	0.38	0.55	0.70	1.10
(5) Maize	0.76	0.80	0.85	1.00
	18.76	20.00	21.15	24.50

Plant Protection.

1.2.4.9. With the advent of high yielding varieties and high yielding crops the incidence of pests and diseases has increased considerably. It is proposed to strengthen the present plant protection machinery to make inspection and control system more rigid. The ground spray of pesticides is proposed to be increased. It is proposed to cover an area of 87.04 lakh hectares during the Sixth Plan and 66.31 lakh hectares during 1981-83.

Cotton

1.2.4.10. It is proposed to achieve total production of 24.30 lakh bales of cotton by the end of Sixth Plan from 19.43 lakh bales of triemum ending 1979-80 at a linear growth rate of about 5.25 percent. It is decided to plan systematic plant protection measures in specified vulnerable areas of the state by regularly scouting appearance of pests and taking measures as required. An area of 1.5 lakh hectares is covered under scouting method of pest surveillance and meeting the menace by aerial and ground spraying three times in the rainfed cotton areas and six times in irrigated cotton areas. With the liberalised pattern of assistance by the Government of India and advancing short term loans it will be possible to achieve targetted production.

Groundnut .

1.2.4.11. It is contemplated to reach a production level of about 23.28 lakh tonnes under groundnut form 17.85 lakh tonnes triemum ending 1980,

which will be 6% linear rate during the Sixth Plan. This will be achieved by introducing better varieties of groundnut, prospective irrigation, the crop during drought period wherever possible, adequate use of fertilisers and bringing more area under rabi, summer groundnut cultivation progressively by taking the present area under summer groundnut irrigation from 60000 ha. to about 100000 ha. by the end of Sixth Plan.

1.2.4.12. A new scheme for introducing groundnut as a new crop in non-traditional groundnut areas under irrigated commands of Ukai and Kadav projects of Kheda, Panchmahals, Bharuch, Surat and Bulsar districts and in eastern zone of the State comprising of adivasi areas of Panchmahals, Vadodara, Bhauch and Surat district is being introduced during the Sixth Plan. It is expected that at the end of the Sixth Five Year Plan 2 lakh hectares additional land will thus come under groundnut in non-traditional irrigated and adivasi areas of the State.

Sugarcane.

1.2.4.13. The production of sugarcane is 1.2 lakh tonnes in form of Gur for triemum ending 1980. The same is contemplated to be increased to 4.50 lakh tonnes during the Sixth Plan. More and more factories are coming up in South Gujarat and emphasis will be given to these areas in developing sugarcane crop as water is adequate and as more area is coming under various irrigation projects, the area under this crop will also increase.

1.2.5. Re-organisation and strengthening of extension services (T and V System).

1.2.5.1. The scheme intends to reorganise and strengthen the extension services in 18 of the 49 districts of State. It aims to improve 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. The Five Year Project would comprise the reorganisation and strengthening of the agricultural extension services by provisions of additional staff, offices, equipments, vehicles and staff training.

1.2.5.2. Under the Programme the special schemes are intergrated into a single extension programme. The major thrust would be the implementation of integrated approach to increase crop/production of major crops. This programme would require, the VLW to maintain an intensive training and visit schedule and would serve as a model for extension programme. Cotton, groundnut, pearl millet, sorghum, paddy and wheat are the important crops for which the extension service 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.

Structure of Organisation.

1.2.5.3. The Project was introduced in 10 districts in the first phase i. e. 1978-79 and eight districts were covered in the year 1979-80. Full time village level agricultural workers are working in each group to cover about 500 families in irrigated area and 800 families in dryland farming. The VEW attends the training held once a fortnight by subject matter specialist where he is provided with latest technology to be fed to the farmers during the next fortnight. In all 3440 Gram Sevaks have been provided for the whole State.

1.2.5.4. To support the VEWs there is one Agricultural Extension Officer for a group of 8 VEWs. In all 431 AEOs are provided in the State. These AEOs supervise and guide the VEWs in recent technology.

1.2.5.5. For the group of 8 Agricultural Extension Officers there is a sub-divisional Agricultural Officer supported by Additional Sub-divisional Agricultural Officers. There are two subject matter specialists for each sub-division, who organise fortnightly training programmes for the AEOs and VEWs. There are 37 Sub-divisions the State.

1.2.5.6. At district level here are three subject matter specialists, who collect the technological developments and communicate them in various training programmes organised in the district.

1.2.5.7. The State has been sub-divided in four zones according to agroclimatic conditions. In each zone, there is one Joint Director of Agriculture who supervises and guides the staff in his area. He plans the adoptive research suited to local conditions. Each Joint Director of Agriculture is supported by one Dy. Director of Agriculture.

1.2.5.8. At State level programme is manned by Additional Director of Agriculture with three subject matter specialists to organise the programme in the State.

The Extension Methodology

1.2.5.9. 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. This system enables a VEW to visit each group of farmers once a fortnight after he has received an intensive training in the Agricultural practices and recommendations which relate directly to farm operations during that fortnight. The fixed schedule of visits enable close supervision.

1.2.5.10. In the Gujarat State 2.4 million farm families are divided into about 3420 groups. Each group cover about 800 farm families and is divided into 8 units of about 100 farm families. Each of these groups (units) is visited by the VEW on a fixed day of week, once every two weeks. Thus, a VEW covers four groups in one week and four groups in other week. 10 farmers of each group are the contact farmers. The VEW contacts these farmers when he visits that group. The VEW spends full day with the scheduled farmers group. During the morning hours he visits their farms and in afternoon holds an open meeting in the village at a pre-determined place and hour. One of the four remaining working days, each fortnight would be devoted for training during which he learns recommended practices to be given to farmers during the following fortnight and have an opportunity to bring problems of farmers for solution to specialists when he comes to attend training. One day in a following week he meets with their supervisors, where training is reinforced and problems encountered are resolved. In remaining two-days he would attempt to visit and supervise the field trials, arrange special extension activities or take-up visits missed because of odd reasons.

Concentrated efforts

Contact Farmers:-

1.2.5.11. To achieve a visible impact on production, VEW concentrates on selected contact farmers. He selects 10 farmers from each group. He also concentrate on few important crops, focusing mainly on those practices which bring the best economic results and on making optimum use of available resources.

Inservice Training.

1.2.5.12. Continuous in-service training in an essential part of the new approach to extension. Each fortnight on each fixed day VEW receives instructions. The training is organised by SMS at sub-divisional level and at district level. The trainings are practical oriented and provide VEW to carry with him specific recommendations. They get an opportunity to practice the same to create confidence in him. The group of trainees consists of 30-35 VEW only so that personal attention can be paid. Two-pre-seasonal training services are organised every year for about 2-3 days each wherein the SMS and specialists of Gujaat Agricultural University. participate.

AEOs Training :-

1.2.5.13. Once a month, the Agril. Extension Officers attend one day training at sub-divisional level. The training is supported by SMS at district level. During this training session a detailed schedule of activities would be fixed. Also the script for training of VEW is prepared. Two pre-seasonal training sessions are organised annually prior to season.

Subject Matter Specialists Training.

1.2.6.14. The subject matter specialists are trained two to 3 days in a month at University campuses to keep them upto date in their know-how

of the subject. The SMS receives two week's training every year to refresh their knowledge at University

1.2.5.15. There is also a provision of orientation training and Refresher training to VEW under the programme. Provisions are also made for scholarships, equipments and materials; vehicles staff quarters etc.

1.2.5.16. The project is envisaged for the period of 5 years i. e. from 1978-79 to 1982-83. The total cost of the project as per project report approved by World Bank is about Rs. 12.72 cores. Out of this project cost of Rs. 12.72 cores about 47% i.e. about Rs. 6.00 cores (7 million dollars) will be received as world Bank Assistane.

In the State Plan during 1980-81 a provision of Rs. 202.24 lakhs has been made. This includes construction equipments and training, operating and increased staff salaries etc.

An outlay of Rs. 977.74 lakhs and Rs. 178 lakhs has been proposed for the Sixth Plan 1980-85 and Annual Plan 1981-82 respectively.

Draft Sixth Five Year Plan 1980--85 and Annual Plan 1981--82

Minor Head-Wise outlays and expenditure.

Crop Husbandry.

(Rs. in lakhs)

Sr. No.	Minor Head	1979-80 actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure	Proposed Outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Direction & Administration.	152.89	208.34	521.75	1072.24	220.00	198.90	20.00
2.	Multiplication & Distribution of Seeds.	29.79	23.25	25.51	246.95	0.25	30.88	00.05
3.	Manures & Fertilizers.	90.89	62.79	61.99	408.94	64.63	54.15	16.00
4.	Plant Protection.	116.09	42.74	162.54	262.45	3.00	45.86	..
5.	Commercial Crops.	172.49	78.19	123.50	409.55	..	72.78	..
6.	Extension & Farmers Training.	39.39	51.87	49.04	339.20	93.21	97.40	53.19
7.	Agriculture Engineering.	12.81	3.80	3.60	188.28	..	6.73	..
8.	Agriculture Economics & Statistics.	13.84	14.53	14.90	90.43	..	17.75	..
9.	Horticulture.	18.66	35.49	35.34	208.96	..	42.55	..
10.	Other Expenditure.	10.00	10.00	10.00	50.00	..	10.00	..
11.	Contingency Plan.	9.26	10.00	10.00	45.00	..	10.00	..
12.	Nucleus Budget.	..	10.00	..	23.00	..	13.00	..
Total:--		666.11	551.00 +930.00*	1018.17 +930.00*	3345.00	381.09	600.00	89.24
			1481.00	1948.17				

*Subsidy on fertilisers

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82
Schemewis outlays and Expenditure

(Rs. in lakhs).

Sr. No.	No. & Name of the Scheme	1979-80 Actuals.	1980-81		1980-85		1981-82		
			Outlay	Anticipated Expr.	Proposed Outlay	Capital content	Proposed Outlay	Capital content.	
1	2	3	4	5	6	7	8	9	
1. Direction and Administration.									
1.	AGR-1								
	Strengthening of accounts and Administration of States/Regional Staff.	..	..	..	..	..	..	..
2.	AGR-2								
	Reorganisation and strengthening of extension services.	133.80	187.24	442.00	824.74	200.00	150.00	20.00	
3.	AGR-2(A)								
	Adj. Establishment of world Bank Cofl.	..	5.00	5.00	..	..	..	..
4.	AGR-2								
	Adj. Re organisation & Strengthening for TASP.	18.05	15.00	74.00	153.00	20.00	28.00	..	
5.	AGR-3								
	Creation of staff for tribal area sub-Plan works.	..	..	..	52.00	..	12.00	..
6.	AGR-4								
	Planning Machinery for Agriculture Development.	1.04	1.10	0.75	42.50	..	8.90	..	
Total :		..	152.89	208.34	521.75	1072.24	220.00	198.90	20.00
2. Multiplication & Distribution of Seeds :									
7.	AGR-5								
	Strengthening of seed testing laboratories.	2.01	1.42	0.92	18.52	0.25	4.00	0.05	
8.	AGR-6								
	Strengthening of seed certification agency.	10.20	1.00	2.00	1.00	..	..	..
9.	AGR-7								
	Production of Hybrid cotton seed.	7.34	7.90	3.66	20.86	..	4.48	..	
10.	AGR-8								
	Free distribution of seeds in Dangs district GIA to Panchayats.	0.35	0.36	0.36	2.31	..	0.40	..	
11.	AGR-9.								
	Extension of seed multiplication farm providing irrigation facilities.	..	..	..	4.00	..	1.00	..
12.	AGR-10								
	Distribution of seed, fertilizer and pesticides at sub-subsidised rate in tribal area.	..	0.30	0.30	99.49	..	1.00	..	
13.	AGR-11								
	Subsidised supply of hybrid/high yielding varieties seed to tribal cultivators.	2.43	4.37	4.37	25.37	..	5.00	..	
14.	AGR-12								
	Establishment of seed cell.	..	..	..	..	..	..	..
15.	AGR-13								
	Distribution of seeds to harijan cultivators.	2.46	2.90	2.90	20.40	..	4.00	..	
15(a)	AGR-13								
	Adj. Distribution of seeds, pesticides at subsidised rate to S. C. cultivators, in Gujarat.	..	..	6.00	30.00	..	6.00	..
16.	AGR-14								
	Foundation of Seed Corporation.	5.00	5.00	5.00	25.00	..	5.00	..	
17.	AGR-15								
	Flying squad for seed certification work.	..	..	..	..	..	..	..
Total :		..	29.79	23.25	25.51	246.95	0.25	30.88	0.05

1	2	3	4	5	6	7	8	9	
(3) Manures & Fertilizers :									
18	AGR—16	Multicrop Demonstration Scheme	3.40	3.75	3.75	20.00	..	3.75	--
19	AGR—17	Distribution of Ammonium Sulphats & Ferti.	..	..	..	..	..	..	--
20	AGR—18	Subsidised supply of Fertilizer to tribal cultivators for TASP	14.70	1.86	1.86	162.86	..	1.00	--
21	AGR—19	Subsidised supply of chemical fertiliser to ST/SC cultivators in the state	20.88	6.00	6.00	39.00	..	7.00	--
21-A	AGR—19A	Subsidy on fertilizers	..	..	..	..	..	..	--
22	AGR—20	Creation of cell under pollution of gas and water.	..	..	..	..	..	..	--
23.	AGR—21	Strengthening of organisation of fertilizer section of the Deptt.	..	..	..	..	..	..	--
24.	AGR—22	Adj. Scheme for development of quality control of inputs-fertilizer quality control laboratory.	4.64	5.62	5.62	36.42	..	7.30	--
25.	AGR—23	Grant of subsidy in preparing poccoo compost pits.	..	..	..	..	..	..	--
26.	AGR—24	Adj. Gobar Gas Plants.	33.59	1.50	1.50	7.50	..	1.50	--
	AGR—25	Strengthening of soil testing laboratories and soil testing van in T.A.S.P.	12.29	11.13	11.13	66.13	..	13.00	--
27.	AGR—25	Adj. Establishment of soil testing laboratories in the State.	..	4.80	4.00	12.40	..	4.60	--
28.	AGR—26	Strengthening of soil testing laboratory building works in TASP-office & staff quarters.	..	24.31	24.31	59.31	59.31	15.00	15.00
29.	AGR—27	Strengthening of STL. at Thasra in Kadana command Area and Bhuj in Kachohh District.	..	..	..	..	..	..	--
30.	AGR—28	Construction of fourth floor of Krishi Bhavan'	1.39	3.82	3.82	5.32	5.32	1.00	1.00
		Total :	.. 90.89	62.79	61.99	408.94	64.63	54.15	16.00

4. Plant Protection :

31.	AGR—29	Training of Extension Staff in Plant Protection.	0.92	1.30	1.30	7.05	..	1.40	--
	AGR—30	Estt. of Central Agri. input testing laboratory at Gandhinagar.	0.17	4.00	4.00	22.75	..	4.00	--
33.	AGR—31	Assistance to farmers using pesticides for a serial spraying only.	18.38	5.20	50.00	58.82	..	8.62	--
34.	AGR—31(1)	Adj. Scheme to help farmers in eradication of pest and disease on crop in endemic area by aereochemical operation.	15.63	16.00	16.00	40.00	..	5.00	--
35.	AGR—31(2)	Adj. Scheme for the control of prodonia pest.	0.38	1.00	1.00	5.00	..	1.00	--
36.	AGR—31(3)	Adj. Scheme for subsidy on purchase of tractor mounted sprayers.	9.82	2.00	8.00	15.04	..	2.54	--
37.	AGR—31(4)	Scheme for subsidy on ground spraying of insecticides.	61.26	1.00	65.00	22.00	..	4.00	--

1	2	3	4	5	6	7	8	9		
38.	AGR-32	Distribution of pesticides and plant protection appliances under subsidy scheme in tribal area.	3.46	4.30	4.30	22.90	..	4.30	..	
39.	AGR-33.	Control of white grubs.	1.71	2.00	2.00	18.00	..	4.00	..	
40.	AGR-34	Surveillance of pest diseases.	..	..	..	..	..	..	..
41.	AGR-35	Adtl. staff for plant protection.	1.80	1.30	1.30	6.85	..	1.30	..	
42.	AGR-36	Estt. of plant quarantine station.	1.31	3.08	3.08	8.83	3.00	1.10	..	
43.	AGR-37	Demonstration of plant protection measures on cultivators fields.	0.48	0.61	0.61	3.01	..	0.60	..	
44.	AGR-38	Promotion of plant protection activities.	..	..	..	..	..	..	..
45.	AGR-39	Encouraging co-operative societies for custom spraying.	0.77	0.95	0.95	5.20	..	1.00	..	
46.	AGR-40	Scheme for subsidy on Insecticides and plant protection appliances to scheduled Caste cultivators.	..	..	5.00	27.00	..	7.00	..
		Total:—	..	116.09	42.74	162.54	262.45	3.00	45.86	..

5. Commercial Crops :

47.	AGR-40	Intensive cotton production programme irrigation cotton.	2.56	1.00	3.00	15.50	..	3.00	..	
48.	AGR-40(1)	Intensive cotton production programme in tribal area of the State.	4.46	2.00	2.00	26.00	..	5.00	..	
49.	AGR-41	Scouting scheme for intensive plant protection measures on cotton in selected area.	8.00	8.50	8.50	38.11	..	7.03	..	
50.	AGR-42	Intensive oilseed development including summer programme in tribal areas.	6.07	10.00	10.00	71.75	..	12.75	..	
51.	AGR-42	Adj. Intensive oilseed development programme (Groundnut)	25.33	20.00	47.52	103.00	..	20.00	..	
52.	AGR-43	Intensive production of groundnut summer.	97.50	..	..	15.00	..	2.00	..
53.	AGR-43.	Adj. Scheme for Development of castor in Kachhh District.	..	1.90	1.90	5.90	..	1.00	..	
54.	AGR-44	Scheme for sugarcane development.	3.68	3.03	3.03	12.53	..	2.00	..	
55.	AGR-45	Scheme for VFC tobacco.	0.62	..	..	..	..	..	..
56.	AGR-46	Scheme for intensive cotton district programme in Bharuch, Vadodara, Surendranagar and Sabarkantha district.	24.27	31.76	47.55	121.76	..	20.00	..	
		Total :—	..	172.49	78.19	123.50	409.55	..	72.78	..

6. Extension & Farmers Training.

57.	AGR-47	Extension of information unit.	..	..	..	..	..	..	..
58.	AGR-48	Publicity through State Transport.	0.34	0.60	0.60	3.00	..	0.60	..
59.	AGR-49	Provision of audio visual vans to Dist.	0.41	0.70	0.70	4.70	..	1.00	..

1	2	3	4	5	6	7	8	9	
10.	AGR—49	Adj. Provision of audio visual vans to District for TASP.	2.92	4.30	4.30	32.30	12.00	13.00	9.00
31.	AGR—50	Audio visual vans for Kadana Command Areas	..	..	..	..	..	..	..
32.	AGR—51	Farmers Training & Education in tribal area equipping with aid cum exhibition units TASP	..	0.90	0.90	5.70	5.70	3.00	3.00
63.	AGR—52	Agriculture education tour by Tribal cultivators.	0.01	0.01	0.01	2.31	..	0.50	..
64.	AGR—53	Establishment of farmers training centres in Guj. State including Construction of Inst. Building & Staff quarters.	18.58	12.19	9.86	125.76	20.00	24.74	8.24
65.	AGR—53	Adj. Establishment of farmers Training Centres under TASP.	10.60	9.30	9.30	102.25	55.51	42.95	32.95
66.	AGR—54	Scheme for farmers training and Education (C.S.) Prog. in Gujarat State.	..	10.58	10.58	..	..	..	..
67.	AGR—55	Co-ordination unit at head quarter for training centres activities.	..	..	..	..	..	..	..
68.	AGR—56	Organisation of crop competition.	0.14	0.16	0.16	0.72	..	0.14	..
69.	AGR—56	Adj. Organisation of crop competition under TASP.	0.20	0.27	0.27	1.35	..	0.27	..
70.	AGR—57	Increased production of pulses.	2.60	4.76	4.76	24.31	..	4.60	..
71.	AGR—58	Schemes for development of pulses.	2.57	4.50	4.50	26.30	..	5.00	..
72.	AGR—59	Strengthening of adoptive research Programme.	1.02	3.60	3.10	10.30	..	1.60	..
73.	AGR—59	Scheme for Integrated Dry land Agricultural Development Project.	..	..	..	..	..	..	..
Total		..	39.39	51.87	49.04	339.20	93.21	97.40	53.19

7. Agriculture Engineering:

74.	AGR—61	Improved Agril. Implements at subsidised rate to Harijan and backward class farmers.	0.45	0.50	0.40	2.10	..	0.40	..
75.	AGR—61(A)	Adj. Improved Agril. Implements at subsidised rates to Harijan and backward class farmers for TASP.	0.57	1.02	1.02	6.15	..	1.23	..
75.	(A)AGR—61(2)	Adj. Scheme for supply of bullocks male buffaloes to S. C. cultivators at Sub-sidised rate in Guj. State.	..	..	0.05	0.25	..	0.05	..
75.	(B)AGR—61(3)	Adj. Scheme for supply of bullock carts to Scheduled Caste cultivators at sub-sidised rate in Guj. State.	..	..	0.05	0.25	..	0.05	..
76.	AGR—62	Supply of bullock at subsidised rate to tribal cultivators.	11.79	0.98	0.98	136.98	..	1.00	..
77.	AGR—63	Supply of bullock carts at subsidised rates to in tribal cultivators.	..	0.50	0.50	37.50	..	3.00	..
78.	AGR—64	Improved Agril. Implements at subsidised rates to weaker farmers.	..	..	..	..	..	..	..
79.	AGR—65	Agriculture Engineering activities.	..	..	..	..	..	..	..
80.	AGR—66	Standardisation of Agriculture Machinery and implements.	..	0.80	0.60	5.05	..	1.00	..

1.	2.	3.	4.	5.	6.	7.	8.	8.
81. AGR—67	Popularisation of improved agriculture implements.	..	..	..	..	..	..	..
	Total	12.81	3.80	3.60	188.28	..	6.73	..
(8) Agriculture Economic and Statistics								
82. AGR—68	Investigation in artificial rain making Tribal area.	6.75	7.28	8.60	39.28	..	8.00	..
83. AGR—69.	Strengthening of Mechanical tabulation unit (EDC Cell)	0.51	1.00	0.60	6.00	..	1.00	..
84. AGR—70	Installation of rain guages and collection of rainfall data.	..	0.37	0.22	2.27	..	0.40	..
85. AGR—71	Agricultural marketing.	..	..	..	..	..	..	..
86. AGR—72	Study and investigation in Agriculture activities in Gujarat State.	..	..	..	7.60	..	1.60	..
87. AGR—73	Sample survey for methodological investigation in high yielding area.	0.56	..	..	..	..	..	..
88. AGR—74	Integrated survey for estimation of availability of vegetable and losses taking place in their transit from field to market	0.75	..	..	..	..	..	..
89. AGR—75	Pilot sample survey for determining the cost of production of important fruits and spice and studying their market practices.	1.45	0.87	0.87	4.87	..	1.00	..
90. AGR—75	Adj. Scheme for co-ordination programme at pre-harvest forecasting yield of crop of groundnut.	..	0.57	0.17	4.57	..	1.00	..
91. AGR—76	Scheme for timely reporting of estimates of area and production of principal crops.	2.32	2.81	2.81	15.71	..	3.00	..
92. AGR—77	Schemes for improvement of irrigation statistics.	..	..	..	..	..	..	..
93. AGR—78	Scheme for improvement of crop statistics.	1.50	1.63	1.63	10.13	..	1.75	..
	Total	13.84	14.53	14.90	90.43	..	17.75	..
(9) Horticulture.								
94—AGR—79	Supervision of development activities pertaining to Horticulture vegetables, fruits grafts, other plants & Horticulure.	1.45	1.57	1.57	8.97	..	1.80	..
95. AGR—80	Subsidised supply of fruit grafts and plants.	2.57	3.00	3.00	15.00	..	3.00	..
96. AGR—80	Adj. Subsidised supply of fruit grafts and plants for TASP	2.81	4.86	4.85	24.86	..	5.00	..
97. AGR—81	Development of Fruit nurseries and supply of grafts and plants etc.	2.81	3.14	3.14	23.14	..	5.00	..
98. AGR—82	Development of fruits production for export of banana.	1.19	2.52	2.37	9.82	..	1.70	..
99AGR—	Scheme for package programme on mango in Gujarat State.	0.51	2.77	2.77	19.67	..	4.00	..
100 AGR—83	Adj. Scheme for package programme on Mango plant protection squad.	..	..	..	..	..	..	..
101. AGR—84	Development of fruit nurseries.	1.00	..	..	4.00	..	1.00	..
102. AGR—85	Date palm production in Kachchhh district.	0.54	1.80	1.80	11.55	..	2.25	..

1.	2.	3.	4.	5.	6.	7.	8.	9.
103.	AGR-86 Bor cultivation in Gujarat State.	0.42	1.80	1.80	13.26	..	2.80	--
104.	AGR-87 Estt. of community canning centres and Kitchen gardening.	1.40	3.83	3.83	24.49	..	5.00	--
105.	AGR-88 Promotion of vegetable cultivation in tribal area.	3.08	5.64	5.64	29.64	..	6.00	--
106.	AGR-89 Crop development scheme for potato (Dangs.)	1.61	4.56	4.56	24.56	..	5.00	--
Total		18.66	35.49	35.34	208.96	..	42.55	--
(10) Other Expenditure.								
107.	AGR-90 Agro-Industries Corporation.	10.00	10.00	10.00	50.00	..	10.00	--
		10.00	10.00	10.00	50.00	..	10.00	--
(11) Contingency Plan								
108.	AGR-91. Investigation and Survey for preparation of a shalf of projects.	9.26	10.00	10.00	45.00	..	10.00	--
TOTAL--(1 to 11)		566.11	1471.00	1948.17	3322.00	381.09	587.00	30.24
Nucleus budget.		..	10.00	..	23.00	..	13.00	--
GRAND TOTAL..		566.11	551.00 +930.00 ×	1018.17 +960.00 ×	3345.00	381.09	600.00	30.24
			1481.00	1948.17				

× Subsidy on fertilifers

Targets of production and physical achievement.

Sr. No.	Item	Unit	1978-79	Level of achievement at the end of				
				Base year level average of triennium ending 1979-80	1981-82 proposed Target (Level)	1981-82 Target (Level)	1980-81 Target (Revised)	1980-81 Likely achievement	1981-82 proposed Target (Level)
1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Food grains.								
		Area to be covered.						
(a)	Paddy	Lakh Hect.	4.59	4.67	4.95	4.75	4.75	4.80
(b)	Bajra	"	14.60	13.71	10.20	13.60	13.60	13.50
(c)	Maize	"	2.94	2.91	2.90	2.90	2.90	2.90
(d)	Jowar	"	10.16	9.97	9.20	9.80	9.80	9.65
(e)	Wheat	"	6.20	6.61	7.35	6.75	6.75	6.90
(f)	Other cereals	"	1.84	1.88	1.60	1.80	1.80	1.75
(g)	Pulses	"	5.46	5.10	6.60	5.40	5.40	5.70
	Total		45.79	44.85	45.80	45.80	45.00	45.20
2. Commercial Crops.								
(a)	Groundnut	"	20.46	20.13	20.95	20.35	20.35	20.50
(b)	Sesamum	"	1.01	1.01	1.20	1.04	1.04	1.08
(c)	Rape & Mustard	"	1.04	1.04	1.15	1.06	1.06	1.08
(d)	Castor	"	1.01	1.01	1.20	1.05	1.05	1.08
	Total Oilseed		23.52	23.19	24.50	23.40	23.40	23.64
(e)	Cotton	"	17.59	17.68	17.40	17.50	17.50	17.40
(f)	Sugarcae	"	0.58	0.59	0.85	0.65	0.65	0.80
(g)	Tobacco	"	0.75	0.82	0.92	0.84	0.84	0.86
3. Food-grains (Production)								
(a)	Paddy (Rice)	Lakh Tonnes	5.34	5.47	8.45	6.05	6.05	6.66
(b)	Bajra	"	15.54	13.05	14.69	13.38	13.38	13.71
(c)	Maize	"	2.44	1.68	1.93	1.74	1.74	1.78
(d)	Jowar	"	5.77	5.63	7.00	5.90	5.90	6.18
(e)	Wheat	"	11.92	12.09	14.00	12.50	12.50	12.84
(f)	Other cereals	"	1.52	1.43	1.43	1.43	1.43	1.43
(g)	Pulses	"	2.30	2.01	6.00	3.00	3.00	4.00
	Total		44.83	41.36	53.50	44.00	44.00	46.60
4. Commercial Crop.								
(a)	Groundnut	"	18.23	17.85	23.28	19.00	19.00	20.12
(b)	Sesamum	"	0.30	0.29	0.50	0.35	0.35	0.40
(c)	Rape & Mustard	"	0.51	0.47	0.62	0.50	0.50	0.53
(d)	Castor	"	1.35	1.33	1.60	1.40	1.40	1.45
	Total Oilseeds		20.39	19.94	26.00	21.25	21.25	22.50
(e)	Cotton	Lakh bales (170 Kg. each)	21.01	19.43	24.30	20.40	20.40	21.40

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 outlay proposed			1980-81 outlay			1981-82 outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1.	Production of Hybrid Cotton seeds	7.34	14.01	14.68	50.86	101.72	7.90	7.90	15.80	10.48	10.48	10.96	
2.	Scheme to help farmers in eradication of pest and diseases on crop in endemic area	00.11	00.81	01.01	88.11								
3.	Control of white grubs	1.45	1.45	2.90	18.00	18.00	36.00	2.00	2.00	4.00	4.00	8.00	
4.	Intensive oilseed development programme (Gnut)	25.33	25.33	50.66	103.00	103.00	206.00	20.00	20.00	40.00	20.00	40.00	
5.	Intensive cotton district programme	24.27	24.27	48.54	121.76	121.76	243.52	63.53	63.53	127.06	63.53	127.06	
6.	Development of pluses	2.57	2.57	5.14	26.50	26.50	53.00	4.50	4.50	9.00	9.00	18.00	
7.	Pilot sample survey for determining the cost of production of important fruits and spices and studying their market practices	02.0	02.0	04.0	03.0	03.0	06.0						
8.	Timely reporting of estimates of area and production of principal crops	2.32	2.32	4.64	15.71	15.71	31.42	2.81	2.81	5.62	5.62	11.24	
9.	Improvement of crop statistics	1.50	1.50	3.00	10.10	10.10	20.20	1.63	1.63	3.26	3.26	6.52	
10.	Scheme for Co-ordinated programme at preharvest forecasting yield of crop of groundnut	..	..	..	4.57	4.57	9.14	0.57	0.57	1.14	1.00	2.00
Total		81.86	81.86	163.72	395.40	395.40	790.80	88.04	88.07	176.11	71.23	142.46	

1	2	3	4	5	6	7	8	9
(f)	Sugarcane	(Lakh Tonnes (in term of Gul)	3.29	3.32	4.50	3.56	1.56	3.80
(g)	Tobacco	Lakh tonnes	1.54	1.37	2.00	1.50	1.50	1.62
5. High Yielding varieties of Seeds (Area to be covered)								
(a)	Wheat	Lakh Hect.	4.56	4.60	5.60	4.80	4.80	5.00
(b)	Paddy	"	2.19	2.56	3.80	2.85	2.85	3.10
(c)	Jowar	"	0.31	0.38	1.10	0.55	0.55	0.70
(d)	Bajra	"	11.63	10.46	13.00	11.00	11.00	11.50
(e)	Maize	"	0.70	0.76	1.00	0.80	0.80	0.85
Total		"	19.39	18.76	24.50	20.00	20.00	21.15
6. Commercial Crop (H.Y.P.)								
(a)	Cotton	Lakh Hect.	3.19	3.26	4.00	3.40	3.40	3.55
(b)	Castor	"	0.81	0.60	0.80	0.60	0.60	0.65
7. Fertilizer(Consumption)								
(a)	Nitrogenou (N)	Lakh Tonnes	1.92	2.24	4.35	2.67	2.67	3.01
(b)	Phosphatio (P)	"	0.93	1.15	2.21	1.36	1.36	1.53
(c)	Potassic (K)	"	0.36	0.39	0.82	0.50	0.50	0.56
Total		"	3.21	3.78	7.38	4.53	4.53	5.10
(d)	Urban Compost	"	2.15	1.89	3.00	2.00	2.00	2.25
(e)	Green manuring (Area covered)	Lakh Hect.	1.61	1.98	2.50	2.10	2.10	2.20
8. Plant protection (area to be covered)								
(a)	Foodgrain crops	Lakh Hect.	14.62	10.97	18.92	11.35	11.35	12.17
(b)	Commercial Crops	"	36.50	49.89	68.12	52.30	52.30	54.15
Total		"	51.12	60.86	87.04	63.65	63.65	66.31

1.3. LAND REFORMS

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

Review of Progress.

1.3.2. In the first phase of land reforms in the Gujarat State, legislations 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 Kachcha areas of the State under the Barkhali Abolition Act, 1951 and the Bombay Inam (Kachcha) 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 116.42 lakh acres of land.

1.3.3. 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.

1.3.4. Occupancy rights are conferred in respect of an area of 24.31 lakh acres 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.

1.3.5. 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 these categories. This ceiling legislation has been fully implemented. About 44,491 acres of surplus land has been taken over under this pre-revised Act. Out of this 43,845 acres of surplus land has been distributed to 14,729 beneficiaries. Out of this 43,845 acres of surplus land 25,000 acres of land have been distributed to the scheduled castes and scheduled tribes beneficiaries.

1.3.6 Over and above this surplus land 13.43 lakh acres of Government waste land out of 14.47 lakh acres of Government waste land have been distributed to 2.49 lakh persons. Majority of the beneficiaries have been persons belonging to the scheduled castes, scheduled tribes and other backward classes etc.

1.3.7. 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.

1.3.8. In view of the recommendation of the State Level Committee the Government had also issued 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 dispensed 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 16275 acres of land in 1240 cases has been taken upto 30th June, 1980, the possession in remaining cases is being taken over. Out of the land taken, possession of 1992 acres is disposed of on permanent basis while 1735 acres is given on Eksali basis, as the land declared surplus in Surat, Bharuch, 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 is being lifted and as a result other 22510 acres of land is likely to be declared surplus and distributed to eligible allottees primarily belonging to scheduled Castes and Scheduled Tribes.

1.3.9. 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. 1,000 per hectare considering of Rs. 500/- for Land development and Rs. 500/- for inputs is already sanctioned.

1.3.10. The Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947 is in force in the State. Anti-fragmentation 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 restrictions

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.

1.3.11 Provisions are also made for the ongoing programmes of updating the record of rights and loans to tenant cultivators for purchase of occupancy rights. Specific schemes for the tribal areas *viz*, (1) Protection against unauthorised alienation of land held by tribal and (2) Grant of subsidy interest payable by tribal tenants are also included in the plan.

1.3.12. The deemed purchasers under the B.T. and L.R. 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 assistance to the scheduled Castses tenants purchasers to acquire their occupancy rights.

Proposals for the Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

1.3.13. An outlay of Rs. 1075 lakhs for the period 1980-85 and Rs. 273 lakhs for the year 1981-82 is proposed for the Land Reforms Sub-sector. A broad break up of the outlay proposed is as under :—

(Rs. in lakhs)						
Sr. No.	Programme	Actuals 1979-80	Outlay 1980-81	Anticipated Expenditure 1980-81	Proposed outlay 1980-85	Proposed outlay 1981-82
1	2	3	4	5	6	7
1.	Consolidation of Holdings.	35.60	35.25	35.25	180.00	35.75
2.	Resurvey and revision survey of Villages.	38.47	31.65	31.65	147.00	28.35
3.	Rewriting and reconstruction of torn Land records.	13.14	17.00	17.00	90.00	18.00
4.	Introduction of village site survey.	17.89	31.12	27.59	211.59	70.15
5.	Gujarat Survey Training Institute.	..	..	..	30.00	9.50
6.	Record of Rights.	21.18	21.48	24.50	110.00	32.38
7.	Protection against unauthorised alienation of land held by tribals.	2.36	2.00	4.48	13.04	1.00
8.	Grant of subsidy on interest payable by tribal tenants for acquiring occupancy rights.	0.54	0.50	1.00	1.37	0.37
9.	Implementation of Agricultural Land Ceiling Act; Financial assistance to the allottees of surplus lands.					
	(a) Administrative setup.				42.00	10.00
	(b) Financial assistance.	6.43	35.00	37.50	99.50	27.50
10.	(c) Government waste Lands.	..	..	..	46.00	23.50
11.	Loans to tenantis cultivators for acquiring occupancy rights.	27.00	11.00	11.00	104.50	16.50
Total :—		162.61	185.00	189.97	1075.00	273.00

1.3.14. The programmes relating to the consolidation of holdings, Records of rights, Survey and revision surveys being of a continuous nature are proposed to be accelerated. The major elements of the programmes would be the implementation of Agricultural land ceiling Act, the financial assistance to the allottees of surplus lands, assistance to the allottees of waste land and the Gujarat Survey Training Institute.

Consolidation of Holdings.

1.3.15. During the Sixth Five Year Plan period 1980-85 it is proposed to continue the programme in 900 villages covering 450 thousand hectares. During the year 1980-81 it is expected to complete the work in 180 villages covering 90 thousand hectares. In 1981-82 the target is fixed to complete the work in 180 villages covering 90 thousand hectares. For the Sixth Five Year Plan period 1980-85 it is proposed to provide an outlay of Rs. 180 lakhs and for 1981-82 it is proposed to provide Rs. 35.75 lakhs.

Resurvey and Revision Survey of villages

1.3.16. 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. During the Sixth Five Year period it is proposed to continue the programme in 350 villages. During the year 1980-81 it is expected to complete the work in 180 villages. The target proposed for 1981-82 is to complete the work in 180 villages with the proposed outlay of Rs. 28.35 lakhs.

Rewriting and Reconstruction of Torn Land Records

1.3.17. In the Sixth Five Year Plan 1980-85 the total outlay of Rs. 90.00 lakhs is proposed to complete the work of 60 lakh units and 15.00 lakh pages. The provision of Rs. 50.00 lakhs is proposed to complete the work of 35 lakh units and 16 lakh pages under State Plan scheme and Rs. 40 lakhs is proposed to complete the work of 25 lakh units and 5 lakh pages under T.A. Sub-Plan Scheme. The target proposed for the year 1980-81 is to do the work of 12 lakh units and 3 lakh pages. The programme proposed for the year 1981-82 is to do the work of 12 lakh units and 3 lakh pages, with an outlay proposed at Rs. 18 lakhs.

Introduction of Village Site Survey

1.3.18. Village site Survey in developing villages having population below 2000 is carried out under Section 95 read with Section 135-G of Land Revenue Code, where regular city survey cannot be introduced. In the Villages having population above 2000, such survey is done under Section 195 read with Section 131 of L.R.C.

1.3.19. The work of introduction of village. Site Survey was completed in 102 villages by the end of 1979-80. During the year 1980-81 it is expected to complete the work in 20 villages. During Sixth Plan period it is proposed to continue the programme with an outlay of Rs. 15 lakhs and for year 1981-82 it is proposed to provide Rs. 4.90 lakhs with a target of completing the work in 20 villages.

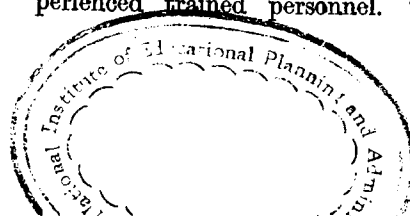
1.3.20. It is proposed to expand the programme of the work of village site Survey in Surat/Ahmedabad Municipal Corporation areas and the villages within the area of 5/1 K.Ms. from the urban agglomeration covered under Urban Land Ceiling Act. It is also proposed to introduce the programmes in the Sixth Year Plan period namely (a) Villages Site Survey in Tribal Area villages under Tribal Area Sub-Plan (b) Village site Survey having population over Five thousand inhabitants ; (c) City survey operations in Extended Area of Jamnagar; (d) updating the maintenance work of Vadodara City Survey Extended Areas; (e) updating the maintenance work of the Land Records of the District Survey Offices of the State; (f) re-classification of the lands of the villages of Jamnagar District (g) purchase of Xerox machines for supply of true copies.

Gujarat Survey Training Institute

1.3.21. Land Records Department carries out survey and classification operations, measurement of lands, recommending assessment measurement for introduction of village site, city survey and survey for acquisition purposes and for upto date maintenance of the land records.

1.3.22. After the formation of the State of Gujarat, State development activities have acquired speedy momentum and accordingly various schemes are being implemented through the Land Records Department. As such there has been considerable increase in the establishment of the officers and subordinate staff. During 1980-81 staff of Land Records Department consisted of 2962 officers/subordinates.

1.3.23. In addition to the above during the Sixth Five Year Plan the programme for introduction of village site survey of the villages having population over 5000 inhabitants is to be commenced for 1980-81 and the additional staff of 400 surveyors will be required to be recruited for this scheme. Similarly personnel will also be required for the Narmada Project and various other irrigation projects. Public organisation like Municipalities G.I.D.C. G.E.B. Town Planning Department etc. often request to spare qualified personnel on deputation for their work. In view of the above circumstances it is obviously necessary to employ and train personnel to cope up the need of the Department. Due to rapid development activities in recent years there will be a great paucity of experienced trained personnel. To overcome the



above position it is absolutely necessary to impart pre and post recruitment training including refresher courses on particular subject/works for increasing the efficiency and quality of the work.

1.3.24. The Training institute will have the necessity of its own building accommodation with lodging and boarding facilities for the trainees etc. The approximate cost for the building is estimated to be about Rs. 35 lakhs. As the institution is required to start functioning urgently and with a view to observe utmost economy in expenditure it is decided to start the institute in a hired premises. After the institute is well organised, buildings requirement will be considered at proper time.

1.3.25. The training in Survey and Settlement matters is being given to the Mamlatdars/T.D.Os. Deputy Collectors and Supernumerary Assistant Collectors. This training is being imparted by Departmental Officers at various district levels. With a view to observe uniformity in training such training is proposed to be imparted through this Survey Training institute.

1.3.26. As envisaged 400 personnel will be trained at the above Institute after obtaining names of S.S.C./Graduate candidate from the Employment Exchange offices having good landwriting and Arithmetical subject and knowledge of drawing will be additional qualification. The Recruitment committee of the Land Records Department will select suitable personnel as per rules. Such selected personnel will be given three month's training and they will be paid stipend during the training period. The candidate who will successfully undergo training and pass the final test/examination will be appointed as Surveyors in the normal time-scale, of pay and admissible allowances.

1.3.27. After the training Institute is organised trained surveyors/officers will be available as per the need of the department and their services will be conveniently utilised for the Narmada Project and other irrigation projects and the need of the local bodies, Public undertakings and Municipalities.

1.3.28. It has been decided to impart three month's refresher's Course to the Officers/employees through this Institute for specific and particular schemes works. Accordingly, 415 officers/employees will be trained in a year and this will help in increasing the efficiency of the Department.

1.3.29. An outlay of Rs. 30/- lakhs is proposed in the Sixth Five Year Plan. To begin with in the first instance, Rs. 9.50 lakhs is proposed to be provided in 1981-82.

Record of Rights.

1.3.30. In order to discover concealed tenancies and to update the record of rights to ensure the position as on field tallies with the position as on records a programme to update the record of rights had been introduced from the Fourth Five Year Plan Period.

1.3.31. Upto 31st March 1980 the work is completed in 16258 villages in the First Round and 9226 villages in the Second round. The total work in 31341 villages (18376 FR+12965 SR) is to be completed against which the work in 25686 villages is completed and at the end of the year 1980-81 the work is likely to be completed in 28341 villages.

1.3.32. It is proposed to carry out work of updating the records in 8640 villages during the remaining plan period of 1982-83 to 1984-85 with an estimated outlay of Rs. 35.38 lakhs. The work in TASA area of 540 villages is likely to be completed during the year 1980-81. The remaining 1462 villages will be completed during 1981-82. In all the villages the work will again be taken up in those tribal villages of the district where the work was completed before three years and it is proposed to cover 1200 villages each during 1983-84 and 84-85.

Protection against unauthorised alienation of lands held by tribals.

1.3.33. 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.

1.3.34. Upto 31-3-1980 the detection work is completed in 3691 villages and 17005 cases have been detected and 20127 acres of land, in 6518 cases is restored to tribals. up to 30-6-80, 17171 cases are detected and 21986 acres of land is restored in 5783 cases. The remaining work is likely to be completed during current year.

1.3.35. The work of regularising transaction between the tribals and make entries in the village records relating to restriction on transfer to lands held by tribals will have to be taken up. All the tribal villages have to be covered for this purpose. During 1981-82 it is proposed to cover 1800 villages. The scheme will be continued during the period of the Sixth Plan.

Grant of subsidy in interest payable to Tribal Tenants

1.3.36 Under the Bombay Tenancy and Agriculture Lands Act 1948, the occupancy right 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 tenants purchasers. As the rate of interest on such loans charged by the said Bank is eleven and a half percent 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 the Plan since 1976-77.

1.3.37. About 2702 beneficiaries got the advantage of the scheme upto 31st March, 1980. The beneficiaries of this scheme are only Tribals.

Implementation of Agricultural Lands Ceiling Act:—

(a) Administrative Set-up

1.3.38. In the year 1960 Gujarat Agricultural Lands Ceiling Act was enacted with a view to imposing Ceiling on lands holding and for acquisition of surplus land for distribution preferably amongst Co-operative Societies, Scheduled Tribes and Scheduled Caste persons, landless labourers and other individuals agricultural labourers. This Act was materially amended with a view to bring the same in line with guide-lines issued by Central Government and the amended Act was brought into force with effect from 1st April, 1976 and the Scheme was included as a plan Scheme from the year 1976-77.

1.3.39. Under the pre-revised Ceiling Act, agricultural land admeasuring 44,491 acres was declared surplus out of which 43845 acres have been permanently disposed of to eligible beneficiaries. Under the revised Ceiling Act 44325 acres of land is declared surplus in 2672 cases out of which possession is taken in 1240 cases of 16295 acres of land and 1735 acres of land is distributed on Eksali basis and 1992 acres of land is disposed of permanently upto 30th June, 1980.

1.3.40. The ban on disposal of land declared surplus is lifted with effect from 5th March, 1980. Ban on disposal of cases resulting in declaration of surplus land is also being lifted. As a result the scheme in required to be continued during the year 1980-81 and 1981-82 and thereby to dispose of 12,000 pending cases, the proposed outlay is Rs. 10 lakhs for 1981-82.

(b) Financial Assistance for development and cultivation of surplus lands allotted under the G.A.L.C. Act, 1960.

1.3.41. A Centrally sponsored Scheme for granting financial assistance to the extent of Rs. 1,000/- per hectre for development of land and for inputs is in operation at present. 50% of the expenditure is borne by the State Government and 50% is received as assistance from the Government of India.

1.3.42. The original scheme was sanctioned on 15th November, 1976 which provided for 25 % as loan component and 75% as grant. The Scheme was amended on 25th January, 1980 and the entire amount is now treated as subsidy.

1.3.43. The Scheme requires to be modified in respect of the following points to make it more comprehensive and of real help to economically weaker sections of the Community and more particularly to allottees of surplus land who will be primarily belonging to Scheduled Caste and Scheduled Tribes.

1.3.44. As per Government of India's direction Central assistance is available for half the area of the surplus land distributed under the G. A. L. C. Act. The Government of India, Ministry of Rural Reconstruction was moved to extend the Scheme of Financial Assistance to all the surplus lands. This proposals has not been accepted by the Government of India.

1.3.45. The Land Ceiling Act provides option to the surplus holders to retain the lands they would like to retain. They are, therefore, bound to retain all the good lands and surrender lands of poor and inferior quality. It has been observed from the lands taken over possession that the surplus lands made available are of very inferior quality. The other aspect is that Scheduled Tribes and Scheduled Caste persons are given priority in the matter of allotment of surplus land. Their condition is economically very poor. Under the revised ceiling Act a total of 1173 hectares have been distributed of which 795 hectares equal to 68% of the surplus land have been allotted to Scheduled Tribes and Scheduled Castes persons. It is being emphasised that allotment of surplus lands must be in favour of Scheduled Caste and Scheduled Tribe persons to the maximum extent possible and attempt must be made to reach 100% as far as possible. Looking to the economic condition of allottees belonging to these classes, it is necessary to grant financial assistance to all the allottees of surplus lands without restricting such assistance to 50% of the distributed land.

1.3.46. The assistance under the present scheme is not available in talukas covered under the following Schemes :

(1) Small Farmer's Development Agency....
(S. F. D. A.)

(2) Marginal Farmers and Agricultural Labourer's Programme. (M. F. A. L.)

(3) Drought Prone Area Programme (D. P. A. P.)

(4) Command Area Development Programme. (C. A. D. P.)

1.3.47. It is necessary for implementing this scheme independent of the other Schemes operated in the programme areas so as to give assistance on a uniform basis. It is, therefore, necessary to remove the condition of not granting the assistance in the programme areas.

1.3.48. Lands to the extent of economic holding *i. e.* 16 acres can be allotted as per the Scheme of the present Ceiling Act. The Schemes operated in the programme areas provide for grant of assistance only to holdings *i. e.* up to 1 hectre under the Marginal Farmers and 2 hectres under the Small Farmers Agency Programme and 3 1/2 hectres under the D. P. A. Programme. The criteria for grant of financial assistance under the schemes operated in programme areas is also not uniform. The aim of the present Scheme is to assist the weaker Section of the society, and to enable them to bring under the cultivation lands which are of inferior quality and require hard labour and more input, before tangible results are achieved. It is quite likely that number of allottees who are given or are likely to be given more than 2 hectares of area being totally left out from getting assistance under any of the Schemes even though they will be most eligible to get. Another factor required to be taken into consideration is that the allottees are required to pay occupancy price for the lands allotted to them equivalent to compensation paid to the surplus holders. The land Ceiling Act provides for compensation for land only ranging from 80 times to 200 times, of the revenue assessment. Even if the maximum instalments are granted for the allottees they will have to pay seven to 15 times the assessment per year plus interest accruing thereon. It is a sizable financial burden to the allottees of surplus land who will be primarily belonging to Scheduled Castes and Scheduled Tribes and in some cases to other economically weaker sections of the Community. It is, therefore, necessary to give assistance to the allottees of surplus lands in the programme areas on the same pattern as allottees of non programme areas. To safeguard against payment of assistance under both the Schemes the competent Authority sanctioning financial assistance under this Scheme should send list of such allottees to the authorities in the programme areas and on that basis the latter will not sanction assistance under the Scheme of programme areas.

(3) To extend the scheme to lands allotted under the pre revised ceiling Act and remaining undeveloped. The assistance under the scheme is available only in respect of lands actually distributed after 1st January, 1975. No land was distributed under the revised Ceiling Act till April, 1980 due to the ban imposed by Government in May, 1977, which has been removed since 5th March, 1980,

1.3.49. Under the pre-revised Ceiling Act the following lands have been allotted.

1	2	No. of beneficiaries	Percentage	Land allotted in areas (in hectares)	Percentage
1	2	3	4	5	6
1.	Scheduled Tribes	9937	68%	7812	44%
2.	Scheduled Caste	1486	10%	2453	14%
3.	Other backward classes				
	Others	3386	22%	7558	42%
	Total	14809		17823	

Most of these lands were allotted prior to 1975. This includes 4271 hectares of lands which was made available under the Rajinama Scheme in Valsad District where agitation for cultivation of grass land was going on. These lands are of very inferior quality. The lands of other Districts are also inferior quality. Even at this stage most of these lands are not brought under cultivation or efforts of the allottees for cultivation have not proved successful. It is, therefore, necessary to cover the following types of cases for grant of financial assistance after modifying the conditions that assistance cannot be given in respect of land distributed prior to 1975.

(1) Lands which are still cultivable but not cultivated and

(2) Land which according to the opinion of the Agriculture Department still need development like land levelling, land shaping, contour bunding etc.

1.3.50. The assistance should be limited to the extent necessary for land developments certified by the Agricultural Department. It is estimated that out of 17823 hectares of lands distributed under the pre revised Ceiling Act approximately 1000 hectares of lands will need such assistance.

1.3.51. Approximately 8000 hectares of lands have been declared surplus and its possession is being taken over. This includes 3800 hectares of lands of lands of programme areas also. The cases resulting in surplus lands were kept in abeyance. Now Government have given directions to decide such cases and it is anticipated that lands to the extent of 10,900 hectares will be made available when the pending cases are decided hereafter. This

includes 5,500 hectares of anticipated surplus land of programme areas. Thus in all 18900 hectares of lands are likely to be available for distribution under the Scheme which includes 9300 hectares of surplus lands of programme areas. The expenditure will, therefore, be as under :—

Rate of financial assistance Rs. 1000/- per hectares	Area to be covered	Total expenditure (Rs. in lakhs)
Non-Programme areas	9600	56
Programme areas	9900	93
Total ..	18900	189

1.3.52. Under the Pre-revised Ceiling Act, 17823 hectares, were distributed. It is estimated that approximately 1000 hectares will need assistance under the Scheme on the basis of verification to be made by the Agriculture Department as to the need for development, land levelling land shaping and for inputs in respect of lands which are still not brought under cultivation. The expenditure will be as under :—

Unit	Rate Rs.	Area	Total expenditure (Rs. in lakhs)
Hectre	1,000	1000 hectares	10.00

3. The total expenditure will, therefore, be as under :—

Rs. 189 lakhs for lands allotted under the revised Ceiling Act.

Rs. 10 lakhs for undeveloped lands under the pre-revised Ceiling Act on the basis of verification by Agriculture Department.

Rs. 199 lakhs

1.3.53. The Bulk of the allottees in the Programme Areas being Scheduled Castes and Scheduled Tribes, the State Government intends to extend the scheme to all areas on a uniform basis and expects that the Central Government would share the expenditure on a matching basis on a centrally sponsored programme. For total cost of the scheme bearing Rs. 199 lakhs; the State share of Rs. 99.5 lakhs is provided in the State Plan for 1980-85 Sixth Plan period and Rs. 27.50 lakhs for Annual Plan 1981-82. It is hoped that equivalent amount will be available from the Government of India as its contribution on a matching basis.

(e) Granting financial assistance to grantees of Government waste lands for development of lands etc.

1.3.54. The disposal of Government waste lands is being made as per Government orders and the same is granted as per priorities mentioned. These orders give priority to Scheduled Castes and Scheduled Tribes next only to ex-servicemen. However, with introduction of 20 point economic programme from 1975, Government waste lands are being granted on priority to grantees coming from Scheduled Castes and Scheduled Tribes communities. These persons come from most economically weaker sections of the community and the lands granted being of the inferior quality they have not put the lands granted to them into effective cultivation and some of them remained fallow. Government waste lands granted to such grantees during the last four years is as under is as under :

Year	No. of grantees from scheduled caste tribes	Area	No. of gran from scheduled castes	Area
1976	3240	9435	3239	12234
1977	1650	5507	2550	10128
1978	720	2878	1501	5453
1979	184	793	720	2055
	5794	18613	8010	29870

1.3.55. Total land distributed is 48483 acres out of which approximate 2/3 of the area situated in programme areas will have received assistance under the various scheme applicable in the programme areas. In the remaining 66 talukas the grantees holding about 16,000 acres of land who are not entitled to any such assistance will need assistance for development of land and to put the lands in to efficient cultivation.

1.3.56. It is expected approximately 11,500 acres i.e. 4,600 hectares of lands will need such assistance. It is proposed to grant such assistance at the rate of such 1,000 per hectare out of this Rs. 500/- will be for land development and Rs. 500/- for inputs. It will require an outlay of Rs. 46 lakhs for this purpose. The proposed outlay and lands likely to be covered under the Programme is as under :—

Year	Amount (Rs. in lakhs)	Area likely to be covered (Area in Hect.)
1981-82	23.50	2350
1982-83	22.50	2250
Total ..	46.00	4600

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

1.3.57. In order to protect the right of tenenats on lands who are in arrears of payment of purchase price this scheme has been introduced during the Fifth Five Year Plan for advancing loans to such tenant cultivators.

1.3.58 Upto 31st March 1980 an amount of Rs. 113.03 lakhs has been spent by way of advancing loans to 11071 beneficiaries tenant cultivators.

1.3.59. During 1980-81 an outlay of Rs. 11.00 lakhs is likely to bespent towards advancing loans to tenant cultivators and an outlay of Rs. 5 lakhs been proposed for the year 1981-82 and Rs. 20 lakhs for the Sixth Five Year Plan 1980-85.

Subsidy of financial assistance to Tribal Tenants purchasers to acquire occupancy rights. under the B.T. and A.L. Act, 1948 (T.A.S.P.)

1.3.57. 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 accodiingly. There is a general scheme for advancing tagavi loan bearing 7% interest in operation in the State to pay up the arrears of instalments.

1.3.61. It is proposed to sanction financial assistance to the Tribal tenant purchasers under the Tribal Area Sub-Plan Programme to enable them to acquire occupancy right, in respect of lands for which purchase rights are conferred under the B.T. and A.L. Act. Under this programme 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 from the financial year 1981-82 with an outlay of Rs. 10 lakhs and the proposed outlay for 1980-85 is Rs. 60.50 lakhs. This is likely to benefit 35,000 tribal tenant purchasers who are marginal or small farmers.

Subsidy of financial assistance to Scheduled Castes Tenants purchasers to acquire the occupancy rights under the B.T. and A.L. Act.

1.3.62. The deemed purchasers under the B.T. & 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 for advancing tagavi loans to pay the arrears of instalments.

1.3.63. It is proposed to introduce the scheme of financial assistance to the S.C. tenants purchasers under the Special Component plan for scheduled castes to enable them to acquire occupancy rights, in respect of lands for which purchase rights are conferred under the B.T. & A.L. Act, 1948. 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 from the financial year 1981-82 with an outlay of Rs. 5 lakhs and with an outlay of Rs. 24 lakhs for the year 1981-82to 1984-85. This is likely to benefit Scheduled tenant purchasers numbering 6000 who are also marginal or small farmers.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Minor Head wise:- Outlays and Expenditure

Sector-Sub Sector : **Land Reforms**

(Rs. in lakhs)

Serial No.	Head/Sub-Head of Development	1979-80 Actuals	1980-81		1980-85		1981-82	
			outlay	Anticipated Expenditure	Proposed outlay	Capital Content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1	Land Reforms	127.01	149.75	154.72	895.00	25.00	237.25	5.00
2	Consolidation of Holdings	35.60	35.25	35.25	180.00	..	35.75	..
	Total	162.61	185.00	189.97	1075.00	25.00	273.00	5.00

Draft Sixth Five Year Plan, 1980-85, and Annual Plan, 1981-82

Schemewise Outlays and Expenditure

Land Reforms :

(Rs. in lakhs)

Sr. No.	Number and name of the Scheme	1979-80	1980-81		1980-85		1981-82	
		Actuals	Outlay	Anticipated Expenditure	Proposed Expenditure	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	LND-1 Consolidation of Holdings	35.60	35.25	35.25	180.00	..	35.75	..
2.	LND-2 Resurvey and revision survey of villages	38.47	31.65	31.65	147.00	..	28.35	..
	LND-3 Rewriting and reconstruction for torn land records	13.14	17.60	17.00	90.00	..	18.00	..
4.	LND-4 Introduction of village site survey	-17.89	31.12	27.59	211.59	..	75.65	..
5.	LND-5 Gujarat Survey Training Institute	..	..	..	30.00	..	9.50	..
6.	LND-6 Records of Rights	21.18	21.48	24.50	110.00	..	32.38	..
7.	LND-7 Protection against unauthorised alienation of land held by tribals	2.36	2.00	4.48	13.04	..	1.00	..
8.	LND-8 Grant of subsidy on interest payable by tribal tenants for acquiring occupancy rights	0.54	6.50	1.00	1.37	..	0.37	..
	LND-9 Implementation of Agricultural Land Ceiling Act: financial assistance to the allottees of surplus lands							
	(a) Administrative Set-up				42.08	..	10.00	..
	(b) Financial assistance to allottees of Surplus lands	6.43	35.00	37.50	99.50	..	27.50	..
10.	LND-10 Granting financial assistance to grantees of Government Waste lands				46.00	..	23.50	..
11.	LND-11 Loans to tenant cultivators for acquiring occupancy rights	27.00	11.00	11.00	104.50	25.00	16.50	5.00
	Total	162.61	185.00	189.97	1075.00	25.00	273.00	5.00

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Targets of Production and Physical Achievements

Sr. No.	Item	Unit	Level of achievement at the end of					
			1978-79	1979-80 Base Year Level	1980-85 terminal Target Year	1980-81 Target (Level)	1981-82 Achievement	
1	2	3	4	5	6	7	8	9
<i>Land Reforms</i>								
1	Consolidation of Holdings	Villages	173	207	900	180	180	180
		Thousand Hectars	145	140	450	90	90	90
2	Resurvey/Revision survey of the villages	,,	69	69	450	90	90	90
3	Special Measures for Land Reforms (Records of Rights)	Villages	2643	804	3000	2857	2857	3000

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

CENTRALLY SPONSORED SCHEME : OUTLAYS

Sector/Sub-Sector : Land Reforms

(Rs. in Lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 outlay proposed			1980-81 Outlay			1981-82 Outlay		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Financial Assistance to Allottees of Surplus Lands	..	..	..	99.50	99.50	199.00	12.50	12.50	25.00	27.50	27.50	55.00

1.4. MINOR IRRIGATION

1.4.1. Introduction

Water is one of the important primary inputs necessary to increase agricultural production. Minor irrigation modestly plays a very important role in irrigated farming. Minor irrigation works though small, are numerous and gives quick results. Many of them are taken-up at the instance of local public to give quick benefits of irrigation and thus, has a more pronounced public participation resulting in maximum utility. They are comparatively of similar nature and their planning and execution are comparatively quick.

1.4.1.2. The annual rain-fall in Gujarat varies from 24.9 cm. in Lakhpat taluka of Kachchh district to 241.0 cm. in Dharampur taluka of Valsad district. Paradoxically larger rivers like Narmada, Tapi and Mahi traverse the areas of comparatively more rain-fall. A more number of irrigation projects of larger magnitude would thus be possible in comparatively higher rain-fall area. The areas of Kachchh, Saurashtra and North Gujarat with comparatively lower rain-fall have small rivulets and streams but they are many in number. Only Minor Irrigation schemes can tap all these available natural resources promising irrigation facilities in such areas where benefits from large irrigation projects would be difficult. Similarly, tribal areas in Panchmahals, Sabarkantha, Vadodara, Bharuch, Surat and Valsad districts, and some pockets in Banaskantha district are mainly hilly tracts. Here also due to the topography, there is greater potential for minor irrigation works.

1.4.2.3. In addition, contrary to larger irrigation projects which provide concentrated employment at few locations, the minor irrigation schemes have the advantage of distributing the employment potential over wider areas, practically at the door steps. These schemes, therefore, provide an important source of employment against scarcity conditions.

1.4.2.4. The programme under this sub-sector is comprised of tanks and bandharas, check dams and percolation tanks, tube wells, cooperative lift irrigation, boring and blasting and assistance to backward classes for irrigation facilities.

1.4.3. An outlay of Rs. 10055 lakhs and Rs. 1933 lakhs is proposed for the programme in this sub-sector for the Sixth Five Year Plan 1980-85 and the Annual Plan 1981-82. Its broad break-up is as under :—

(Rs. in lakhs)

Programme	Proposed Outlay.	
	1980-85	1981-82
1	2	3
1 Tanks and Bandaras	6000	1150
2 Tube Wells.	3600	700

	1	2	3
3 Cooperative Lift Irrigation		85	20
4 Boring, Blasting and subsidies to Harijans and tribals for irrigation.		370	63
Total		10055	1933

1.4.4. Minor Irrigation Works (Tanks and Bandharas)

1.4.4.1. The minor irrigation works taken up under this sub sector consists of irrigation tanks, percolation tanks, check dams and lift irrigation schemes.

Progress through Plans

1.4.4.2 The ultimate utilisation of surface water resources of the State through minor irrigation schemes is 1.90 maft. which can provide irrigation potential of 2.49 lakh hectares.

1.4.4.3. The total expenditure incurred upto March, 1980 on development of irrigation through minor irrigation schemes is Rs.7428.70 lakhs and the total irrigation potential created by the end of June, 1980 through this programme is 1.28 lakh hectares. This is after taking into consideration the reappraisal done of the irrigation potential created at the end of June, 1978.

1.4.4.4. With the programme staken up so far, easy and promising sites have already been exploited. Now, difficult and interior areas will have to be explored during the Sixth Five Year Plan.

1.4.5. The strategy and priority for the Minor Irrigation schemes under the Sixth Five Year Plan is as under :—

1.4.5.1. Tribal and backward areas of the State are accorded high priority in providing irrigation facilities during the Sixth Five Year Plan 1980-85. 20% of the outlay under the minor irrigation sub sector, is proposed for TASP whereas the tribal population in the State forms only 14% of the total population. Efforts are also being made to provide irrigation facilities as far as practicable, even to such areas where small pockets having such population are existing.

1.4.5.2. Minor irrigation works can be completed within a period of 2 to 3 years and irrigation can start immediately thereafter. To get early benefits and achieve 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.

1.4.5.3. New programme of modernisation for improving distribution system of the old and existing tanks is also proposed to be implemented. This will help in increasing the irrigation facilities in the areas which are backward.

1.4.5.4. 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.

1.4.5.6. Priority is proposed to be given to areas classified as drought prone areas and inhabited by scheduled castes population.

1.4.5.7. Areas which are not likely to be covered under the command of Narmada Project are also given preference.

1.4.5.8. Among different types of works under this programme of minor irrigation, priority is given for irrigation tanks and bandharas which give direct 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.

1.4.5.9. For the implementation of a programme as discussed in the preceding paragraphs it is essential to have properly investigated and designed schemes ready well in advance. The State Government has already strengthened the organisation required for this by creating 8 divisions and 40 sub-divisions. This is in addition to the existing minor irrigation project circle (C.D.O.) with two design units attached to it and two divisions for the field work. Under the centrally sponsored schemes of strengthening surface water and ground water organisation, one circle with 4 divisions has been created to involve designs based on rational methods instead of the present practice of empirical method of design procedure.

1.4.5.10. Projects having a spillover liability of Rs. 2974 lakhs are already in progress. It is planned to investigate with the help of the existing staff and prepare detailed plans and estimates for the new schemes in a phased manner so that the tempo on the works is maintained. The estimated cost of such new schemes is assessed at Rs. 8200 lakhs, of which schemes estimated to cost Rs. 6500 lakhs would be taken up for execution.

Proposals for Sixth Five Year Plan-1980-85.

1.4.5.11. 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 proposed for Minor Irrigation (Surface) schemes. This includes an outlay of Rs. 2973.91 lakhs for spillover works. The remaining outlay of Rs. 3026.09 lakhs is proposed for new works to be taken up during the period of five years.

1.4.5.12. By the end of March, 1980, in all, 1121 works of various types such as irrigation tanks, percolation tanks, check-dams etc. costing about Rs. 5578 lakhs and with a spill over liability of Rs. 2974 lakhs spilled into the Sixth Five Year Plan. This also included a spill over liability of Rs. 711 lakhs of Tribal Area schemes. The spillover liabilities with break-up for normal programme and tribal programme is given in Statement-B attached for different categories of works. The outlays proposed for spillover works and new works to be taken up during the Sixth Five Year Plan under normal programme and Tribal Area Sub-Plan is as under:—

(Rs. in lakhs)

Name of Programme	Spillover amount/ Estimated cost	Outlay proposed for Sixth Plan.	Spillover to Seventh Plan.
1	2	3	4

I. Normal Programme.

(i) Works in progress	2262.54	2262.54	..
(ii) New works (including modernisation)	5200.00	2537.46	2662.54
Total	7462.54	4800.00	2662.54

II. Tribal Programmes

(i) Works in progress.	711.37	711.37	..
(ii) New Works (including modernisation)	1300.00	488.63	811.37
Total	2011.37	1200.00	811.37

Total for Normal and Tribal Programmes

(i) Works in progress.	2973.91	2973.91	..
(ii) New Works.	6500.00	3026.09	3473.91
Total	9473.91	6000.00	3473.91

Physical Targets

1.4.5.13. With the outlay of Rs. 6000 lakhs, it is proposed that about 30,000 hectares of additional irrigation potential will be created during the Sixth Five Year Plan. As compared to this, the target of

additional utilisation is fixed at 20,000 hectares. Thus, the level of achievement at the end of the Sixth Plan, 1980-85 will be 1.58 lakh hectares potential and 1.00 lakh hectares utilisation. An outlay of Rs. 1150 lakh is proposed for 1981-82 with a target of bringing the potential to 1.45 lakh hectares and utilisation of 0.90 lakh hectares.

1.4.6. Tube Wells

1.4.6.1. 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 for by pumps and distribution through pipe lines or open channels. Feasibility surveys are carried out in advance and the programme of harnessing the ground water potential is drawn up.

1.4.6.2. Progress through Plans

There were only 27 tubewells of ex-Baroda State in 1951, when the drilling of tubewells was started along with the commencement of the First Five Year Plan. The irrigation potential created during the various plan period has now reached the level of 1.25 lakh hectares.

Creation of Gujarat Water Resources Development Corporation Limited.

1.4.6.3. The Government of Gujarat created in 1971 'The Gujarat Water Resources development Corporation Limited' for speedy development of ground water through tubewells by borrowing money from financial institutions. The functions of ground water investigations were also entrusted to it. After remaining demands for 5 years the Corporation started its activities in 1976.

1.4.6.4. The Corporation undertook surveys about the availability of underground water in each district and suitability of the same for irrigation purpose and prepared a feasibility report for drilling 3200 tubewells in the various districts of Gujarat State.

1.4.6.5. Under the scheme of Agriculture Refinance and Development Corporation, the State Government has to contribute 20% of the cost of the project as share capital contribution and also to act as guarantor for repayment of capital and interest of the loans given by the Agriculture Refinance and Development Corporation. Agriculture Refinance and Development Corporation gives loans for the remaining 80% of the estimated cost to the Gujarat Water Resources Development Corporation Ltd. at 10 1/2% (now 9 1/2%) interest which are refundable in a period of 10 years including the first year of moratorium.

Progress between 1976 and April, 1980.

1.4.6.6. By April, 1980, the Corporation had successfully drilled 785 tubewells under different

programmes. Out of these tubewells, 376 tubewells were commissioned by April, 1980, creating an irrigation potential of 23,300 hectares of which 14500 hectares were actually irrigated.

1.4.6.7. Except for the tubewells in mahesana district all the Government tubewells, totalling to 886 were transferred to the Corporation in 1978-79 for management of irrigation. The overall position of the irrigation potential available through all the tubewells is given in the table below:—

	Position at the end of		
	1974	1978	1980
Potential created by Tubewells. (in hectares)	81,106	1,11,000	1,25,000

1.4.7. Sixth Five Year Plan.

1.4.7.1. Out of the programme of 3200 tubewells as approved by the Agriculture Refinance and Development Corporation, the Corporation is now in a position to construct about 500 tubewells every year. However, it is proposed to complete 2100 tubewells during the Sixth Plan period, District-wise details are given in **Statement-A**.

1.4.8. Strategy for the Sixth Five Year Plan 1980-85.

1.4.8.1. Strategy for priority is based in the following order:—

1. As tubewells get completed in a period shorter than a year, all works in progress are accorded the highest priority.
2. Tubewells in tribal areas ;
3. Tubewells in drought prone areas ;
4. Tubewells in desert areas ;
5. Tubewells in areas predominantly inhabited by scheduled castes forming part of component plan ;
6. Modernisation of tubewells ;
7. Investigation of hydrology in hard rock areas
8. Survey and investigations of ground water resources including recharge ;
9. Research and development.

1.4.8.2. Under the new tubewells programme, priority would be as under:—

1. Constructing the remaining 1920 tubewells;
2. Constructing 200 tubewells for conjunctive use in Dantiwada Command ;

New Programme of 1920 Tubewells

1.4.8.3. The feasibility report of 3200 tubewells as approved by Agriculture Refinance and Development Corporation and the programme of 785 tubewells is already undertaken and the drilling work has also been completed. Out of these tubewells, 409 tubewells have spilled into Sixth Five Year Plan. It is proposed to carry out the work of 1920 tubewells during the Sixth Five Year Plan. Thus, out of

2329 tubewells taken up during the Sixth Five Year Plan, 2100 tube wells will be completed during this period and 229 tubewells will spill into Seventh Five Year Plan. These tubewells will create an additional irrigation potential of 1,63,000 hectares during the Sixth Plan.

Dantiwada Project (200 Tubewells).

1.4.8.4. Due to shortage of surface water in the command area of the Dantiwada command and surplus available ground water in the area, it is proposed to undertake the pilot project for conjunctive use of surface and ground water. It is proposed to construct 200 tubewells in 67 clusters along the main canal, distributaries sub minors in the upper reaches of Dantiwada command areas. Each tubewell will have discharging capacity of 1.25 cusecs. Thus, mainly 225 cusecs of additional water (considering 10 percent of transit loss) will be available for irrigation from these tubewells. This amount of water can be utilised through the canal net work in the upper reaches and an equal amount of surface water from the canal will be diverted to lower reaches where irrigation potential is low. It will be possible to irrigate additional 4,500 hectares per year with this water in the tail end portion of the command area. In addition to this the water will be supplemented for irrigation in lean years and will, also help anti-water logging in the area. The total project cost is Rs. 410 lakhs including maintenance. The cost of construction would be Rs. 300 lakhs.

1.4.8.5. Under modernisation programme priority would be as under :—

1. Extension of pipelines by 300 tube wells.
2. Redrilling of 100 tubewells in mahesana and the districts.

Extension of Pipe Lines in the Command Area of 300 Tube-Wells.

1.4.8.6. Projects of extensions of pipe lines in 270 tubewells and 275 (Mahi Right Bank Canal) tubewells projects are under clearance with the Agriculture Refinance and Development Corporation. In fact the ARDC insists for length of pipe lines 50 mt/hect which correspond to an outlet for every 4 hectares. In view of this a provision is made for extension of pipelines by 300 tubewells of the Corporation.

1.4.8.7. An outlay of Rs. 3600 lakhs is proposed during the Sixth Five Year Plan towards the States share. This outlay includes the spill over liabilities of Rs. 1,344 lakhs as given in the table below.

Table
Spillover liabilities as on 1st April, 1980.
(Rs. in Lakhs)

(A) Share Capital	
(i) Remaining 20% share of Government for continuing schemes	75.00
(ii) Loan to G. W. R. D. C. during Sixth Plan for meeting liabilities	968.00
(iii) Modernisation of tubewells	10.00
(B) Construction of tubewells under special programme redrilling of tubewells civil works on Government tubewells transferred	102.00
(C) Construction of civil works centrally sponsored schemes survey and investigation works etc	89.00
(D) Loans for electrification to Gujarat Electricity Board	100.00
Total—(A+B+C+D)	1344.00

1.4.8.8. An outlay of Rs. 2256 lakhs is proposed for new programmes and works to be undertaken during Sixth Five Year Plan. These details are as under :—

Item/Programme	(Rs. in lakhs) Outlay
(A) Share Capital.	
(i) Additional 1920 new tubewells programme	942.00
(ii) Extension of pipelines of 300 tubewells	60.00
(iii) Programme of 200 tubewells in Dantiwada Project for conjunctive use	60.00
(iv) Loan to G. W. R. D. C. during Sixth Five Year Plan for meeting liabilities	324.00
(B) (i) Construction of 500 tubewells every year under special programme	} 230.00
(ii) Redrilling of 100 tubewells in Mahesana district and other districts	
(iii) Renovation and modernisation of existing Government Tubewells of (a) Other than mahesana district, and	
(b) Mahesana district	
(C) (i) Construction of civil works on Government tubewells	} 205.00
(ii) Strengthening of existing ground water investigation 1983-84 and 1984-85	
(iii) Contribution for land acquisition	
(iv) Survey and Investigation of ground water resources including recharge	
(D) (i) Loan for electrification of 1920 tubewells to G. E. B.	435.00
Total ..	2256.00

1.4.8.9. Thus, the total outlay for the Sixth Five Year Plan proposed for tubewells programme is Rs. 3,600 lakhs. With this outlay, it is proposed to create an additional irrigation potential of 1,72,500 hectares in all (1,68,000 hectares through 2,100 tubewells and 4,500 hectares in Dantiawada areas). For the year 1981-82, an outlay of Rs. 700 lakhs is proposed, with a target of additional potential of 1,000 hectares.

Utilisation

1.4.8.10. As stated earlier, Government tubewells have been transferred to the Corporation for irrigation management. However, tubewells of Mahesana district are being maintained by the Jilla Panchayat Mahesana. Out of 886 tubewells transferred, 174 tubewells are closed due to various reasons, such as siltation, silting, tubewells requiring redrilling, etc. Against the potential of 1,25,000 hectares created upto March, 1980 (available potential is only 21,000 hectares) the maximum utilisation achieved is 70,000 hectares.

4.8.12 Reasons of less utilisation

1.4.8.12. The reasons for less utilisation of tubewells are as under :—

- (1) Inadequate pucca pipelines and dilapidated open pucca channels.
- (2) Non-replacement of pumps which have exhausted their life.
- (3) Redrilling required for rehabilitation of tubewells.

1.4.8.13. At present pipelines are constructed in such a way that one outlet serve about 8 hectares, which leads to construction of earthen field channels of about 200 metres length. If the existing pipelines are extended so that one outlet can serve 4 hectares, additional irrigation can be done to an extent of about 10% in a year. It may be stated that there are pucca open channels on about 200 tubewells which have become dilapidated due to constant use. These need to be replaced by underground pipelines.

1.4.8.14. The life of a pump is about 8 to 10 years. Pumps on about 600 existing tubewells have exhausted their life. These pumps are working with low efficiency resulting less discharge and therefore, less irrigation. If these pumps are replaced, irrigation can be increased.

1.4.8.15. By incurring little extra cost redrilling of closed tubewells due to mechanical failure or reduction in discharge will help increasing irrigation.

Survey and Investigation of underground hydrology

1.4.8.16. This Corporation is now closely collaborating with Physical Research Laboratory on one side for quantitative assessment of ground water with radio-isotope tracer technique and on the other with Indian Space Research Organisation (ISRO) for the help of satellite imaginerics. This sphere involves fairly good amount of fieldwork for ground truth checks. Recharge studies are also being planned in collaboration with UNDP and CCWB. An amount of Rs. 125 lakhs is proposed for the Sixth Plan. Provision of Rs. 13 lakhs is made for research and development. This is very essential for the recently developed subject of underground hydrology.

Centrally Sponsored Scheme (Surface Water and Ground Water)

1.4.8.17. The Government of India has sanctioned the scheme for strengthening of Surface/Ground Water Organisation as centrally sponsored scheme. This Organisation (Surface Water Development) is entrusted with the basic work of rationalising the design procedure which at present is based on empirical formula evolved long ago on scanty data. It is also entrusted with the work of drafting of standard specifications for Minor Irrigation Works.

1.4.8.18. The scheme was originally sanctioned for two years i.e. 1977-78 and 1978-79. Subsequently Government of India has agreed to continue this scheme upto 1981-82. The State Government proposes to continue this scheme upto 1984-85. An outlay of Rs. 16.20 lakhs is provided for 1980-81 towards the State share and it is anticipated that full outlay will be utilised during the year. Total outlay of Rs. 116.40 lakhs is proposed for the entire period of five year plan 1980-85 towards the share of the State. For 1981-82 an outlay of Rs. 21.70 lakhs is proposed against the State share.

1.4.9. Cooperative Lift Irrigation Societies.

1.4.9.1. Minor Irrigation plays a very important role in the irrigation farming. The minor irrigation works are of a simpler nature and their planning and execution are comparatively quicker. This has rendered significant contribution towards the development of areas where major and medium irrigation projects are not feasible and thus serve as an instrument for balanced development. These works can be taken up in tribal and backward tracts which are useful for improving income levels of the people. The Minor Irrigation Programme also generate significant potential of employment for local labour forces.

1.4.9.2. Lift irrigation schemes are taken up either on the banks of rivers or nalas where sufficient flow of water is available in monsoon and on private wells. Minor Irrigation is organised in the form of cooperative lift irrigation societies. Government gives 45% of cost of the scheme as subsidy. In tribal area,

the subsidy is raised to 75%. In order to encourage more and more members of scheduled castes to join and benefit from cooperative lift irrigation scheme, Government gives 50% subsidy towards the share capital contribution. Further it is proposed to give 50% subsidy towards repayment of capital cost in the form of water charges recovered from the scheduled caste members for 5 years since the commission of the scheme.

1.4.9.3. Achievements

There are 520 lift irrigation societies at the end of 1979-80 with the membership of 16,800 and the irrigation potential of 46,580 hectares. An amount of Rs. 5.12 lakhs was spent during 1979-80.

1.4.9.4. Programme for 1980-85

It is proposed to organise 133 lift irrigation societies during the Sixth Five Year Plan. Target set for the year 1981-82 is 26 societies. It is proposed to provide Rs. 455 lakhs for 1980-85. It is proposed to provide Rs. 83 lakhs for 1981-82.

1.4.9.5. Grant of subsidy to Harijan (SC) cultivators for Irrigation facilities

The State Government has been encouraging the construction of new wells and installation of pumping sets to scheduled castes cultivators for utilising irrigation potentiality increasing in agricultural production. During 1979-80, 84 new wells were constructed and 227 pumping sets installed and the number of beneficiaries was 270. In 1980-81, it is likely that 50 new wells be constructed and 140 pumping sets be installed and the likely number of beneficiaries will be 165. In the year 1981-82 it is proposed to provide assistance for the construction of 50 new wells and installation of 150 pumping sets. In the Sixth Five Year Plan period it is proposed to provide assistance for the construction of 925 new wells 21000 pumping sets and to extend the benefit through pipeline and the likely number of beneficiaries will be around 5,500. It is proposed to provide Rs. 150 lakhs for 1980-85 and Rs. 12 lakhs for 1981-82 for this programme.

1.3.9.6. Grant of Subsidy to ST cultivators for Irrigation facilities including pipeline on wells

The State Government is encouraging the construction of new wells, and installation of pumping sets

by giving financial assistance to adivasi cultivators for utilising irrigation potentiality in increasing agricultural production. Under the programme during the year 1979-80, 495 new wells were constructed 1217 pumpsets were installed and the number of beneficiaries benefited were 1462. In the year 1979-80, it is anticipated that 450 new wells will be constructed and 560 pump sets will be installed and the number of beneficiaries will be 1375 (including 300 beneficiaries of pipelines). In the year 1981-82 it is proposed to provide assistance to construct 150 new wells and 150 installation of pumpsets. The number of beneficiaries likely to benefit will be 825. During the Sixth Five Year Plan period 1980-85, it is proposed to provide assistance for the construction of 1200 and 2200 installation of pumpsets. The total number of beneficiaries who will get benefit will be about 4,300. It is proposed to provide Rs. 100 lakhs for 1980-85 and Rs. 13 lakhs for 1981-82.

1.4.9.7. Extension Activity Resources

It is proposed to provide guidance and advisory service to cultivators on proper selection of agriculture machinery and to provide training and operation and in maintenance of agricultural machinery. It is therefore proposed to introduce this new programme in the Sixth Five Year Plan 1980-85. About 4680 trainees will get benefit under this programme in the period 1980-85 and in the next year 1981-82 about 600 trainees are likely to be trained under this programme.

1.4.9.8. Improvement of Irrigation wells by boring and blasting

The boring and blasting operation make it possible to dig and deepen wells expeditiously and thereby to increase water storage capacity in the wells. To carry out boring/blasting operation within the paying capacity of the cultivators so that irrigation facilities are improved thereby increases agricultural production.

1.4.9.9. Under this programme during 1979-80 boring was done in 329 metres and number of shots under blasting operations was 12356. During 1980-85 it is proposed to do boring upto 600 metres and blasting shots operations to 70,000. It is proposed to provide Rs. 70 lakhs for 1980-85 and Rs. 15 lakhs for 1981-82.

STATEMENT—'A'

Statement giving details of Tubewells to be Implemented under various programmes

Sr. No.	Name of District	No. of Tubewells successfully drilled on 1-4-1980	No. of Tubewells put to commission as on 1-4-1980	No. of Tubewells proposed during Sixth Plan			Total No. of Corporation Tubewells at the end of sixth Plan (4+7)
				Spill-over works	New	Total	
1	2	3	4	5	6	7	8
1.	Bharuch	56	38	18	260	278	316
2.	Vadodara	95	63	32	238	270	333
3.	Kheda	234	110	124	209	233	543
4.	Ahmedabad	114	76	38	83	121	197
5.	Gandhinagar .. ..	..	..	..	..	..	..
6.	Mahesana	31	21	10	206	216	237
7.	Sabarkantha	28	19	9	41	50	69
8.	Banaskantha	178	33	145	597	742	775
9.	Surendranagar .. ..	..	..	..	50	50	50
10.	Kachohh	49	16	33	136	169	185
Total		786	409	409	1920 ×	2329	2705

*Note : 229 works will spill in the Seventh Plan.

Total tubewells at the end of the Sixth Plan completed in all respects.

2100+376 = 2476 (Col. 4+7)

STATEMENT—' B '

Spillover liabilities on account of Minor Irrigation Schemes at the end of March, 1980

(Rs. in lakhs)

Sr. No.	Category of Works	No. of works	Total estimated cost	Expenditure upto March, 1980	Balance cost at the end of 3/80 (spillover liabilities.)
1	2	3	4	5	6
(A) TANKS AND BANDHARAS					
(1)	Normal programme ..	.. 451	3526.82	1594.87	1931.95
(2)	Tribal Area ..	.. 140	1401.33	750.64	650.69
	Total (A)	.. 591	4928.15	2345.51	2582.64
(B) CHECK-DAMS					
(1)	Normal programme	.. 407	471.31	173.50	297.31
(2)	Tribal Area ..	.. 91	117.55	62.35	55.20
	Total (B)	.. 498	588.86	235.85	353.01
(C) LIFT IRRIGATION					
(1)	Normal programme	.. 11	40.04	7.26	32.78
(2)	Tribal Area ..	.. 21	20.99	15.51	5.48
	Total (C)	.. 32	61.03	22.77	38.26
	Total Normal Programme	.. 869	4038.17	1775.63	2262.54
	Total Tribal Area ..	.. 252	1539.87	828.50	711.37
	GRAND TOTAL	.. 1121	5578.04	2604.13	2973.91

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Minor Irrigation

Minor Headwise Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Programme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
(A) Minor Irrigation :								
	Investigation and Development of Ground Water Resources	996.05	1040.00	1040.00	6000.00	40.00	1150.00	10.00
	(B) Tube Wells	399.92	360.00	360.00	3600.00	1840.00	700.00	300.00
	Total	1393.97	1400.00	1400.00	9600.00	1880.00	1850.00	310.00
	(C) Lift Irrigation Schemes	5.12	20.00	20.00	85.00	..	20.00	..
	(D) Other Minor Irrigation works	50.77	30.00	47.50	370.00	..	63.00	..
	Total : A+B+C+D	1449.86	1450.00	1467.50	10055.00	1880.00	1933.00	310.00

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Minor Irrigation

Schemewise Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
1. MNR-1	Surface Irrigation from Minor Irrigation Tanks and Bandharas Check-dams, percolation Tanks etc.	996.05	1040.00	1040.00	6000.00	40.00	1150.00	10.00
2. MNR-2	Tubewells including ground Water survey and investigation	397.92	360.00	360.00	3600.00	1840.00	700.00	300.00
	Total (1+2)	1393.97	1400.00	1400.00	9600.00	1880.00	1850.00	310.00
3. MNR-3	Cooperative Lift Irrigation	5.12	20.00	20.00	85.00	..	20.00	..
4. MNR-4	Grant of subsidy to Harijans, Scheduled Castes and Scheduled Tribes cultivators for irrigation facilities	41.23	19.20	36.70	250.00	..	43.00	..
5. MNR-5	Extension activity services in minor irrigation	..	..	..	50.00	..	5.00	..
6. MNR-6	Improvement of Irrigation wells by boring and blasting	9.54	10.80	10.80	70.00	..	15.00	..
	Grand Total	1449.86	1450.00	1467.50	10055.00	1880.00	1933.00	310.00

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Minor Irrigation

Targets of Production and Physical Achievements

(Rs. in lakhs)

Sr. No.	Programme	1978-79		1979-80		1980-81		1980-85		1981-82	
		Potential	Utilisation	Potential	Utilisation	Potential	Utilisation	Potential	Utilisation	Potential	Utilisation
1	2	3	4	5	6	7	8	9	10	11	12
1.	Surface Water (Tanks, Bandharas etc.)	119.00	76.00	128.00	80.50	137.00	85.00	158.50	100.50	145.00	90.00
2.	Ground Water (Tube wells)	111.00	65.00	125.00	65.00	155.00	80.00	297.00	160.00	185.00	95.00
3.	Wells	1421.00	1279.00	1437.00	1293.00	1453.00	1307.00	1500.00	1350.00	1469.00	1322.00
4.	Lift Irrigation	41.70	28.50	44.20	28.90	47.10	29.60	57.50	36.80	49.70	31.10
	Total	1692.70	1448.50	1734.20	1467.40	1792.10	1501.60	2013.90	1647.30	1848.90	1538.10

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Minor Irrigation

Centrally Sponsored Schemes—Outlays

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 outlay proposed			1980-81 Outlay			1981-82 Outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Strengthening of the Existing Organisations for Survey and investigation of Surface and Ground Water —												
	a. Surface Water	8.20	8.20	16.40	57.00	57.00	114.00	7.87	7.87	15.74	10.75	10.75	21.50
	b. Ground Water	8.90	8.90	17.80	59.40	59.40	118.80	8.33	8.33	16.66	10.95	10.95	21.90
	Total	17.10	17.10	34.20	116.40	116.40	232.80	16.20	16.20	32.40	21.70	21.70	43.40

1. 5. SOIL AND WATER CONSERVATION

1.5.1. Introduction :

1.5.1.1. Soil and Water are the precious natural resources. A large part of the State suffers from poor soil, undulating terrain and undependable rainfall. Measures for prevention of soil erosion and conservation on the moisturassume crucial importance in the State. The soil and water conservation works are now planned to be undertaken on water shed basis. The programme of soil and water conservation-ravine land reclamation and khar land development has a significant contribution to benefit the tribal, backward, rural and other weaker sections of the society and in providing them gainful employment and thereby raising their level of income.

1.5.1.2. It has been estimated that an area of of nearly 150 lakh hectares need various soil and water conservation measures. The State has also a large area under ravine in about 4 lakh hectares on various rivers viz. Banas, Saraswati, Meshwo, Watrak, Mahi, Narmada, Tapi, Shetrunji and their tributories flowing in the districts of Banaskantha, Sabarkantha, Mahesana, Kheda, Vadodara, Panchmahals, Bharuch, Surat and Bhavnagar, The continuous progress of erosion has cut down the fertile core of vulnerable adjoining lands. This occurs due to vagaries of nature and man made mistakes. There is also a large part of the area adjoining the coastal line under the 12 districts of the State cover-

ring an area of about 2 lakh hectares. The ingress of tidal waters has removed the fertility of the upper area of these kharlands. The soils of the northern districts viz. Banaskantha Sabarkantha, and Mahesana and the area of Kachchh district are generally sandy in nature which suffers from wind erosion problems.

1.5.2. Review of Progress :

1.5.2.1. In the past, the approach of this programme was limited on small catchment basis and scattered and hence the benefits accrued could not be visualised. In order to reap the benefits of erosion control and water conservation for complete harvesting of rainfall water to increase the agricultural production and to solve the varied problems like flood prevention, gully control, land reclamation, improvement of pasture, village and farm forestry etc. the programme is now planned to be undertaken on the watershed basis on a large areas from the year 1976-77. By adopting this new management system, the State Government proposes to provide, opportunities for stimulating the economic growth and act as a catalyst to the whole rural development. This approach also benefits the weaker sections as there will be adequate employment opportunities and help in building up the economic viability of the areas. The physical progress achieved during the past and the targets proposed are summarised below:-

(in lakh hectares)

Item	Achievement at the end of			
	1977-78	1978-79	1979-80	1980-81
1	2	3	4	(T) 5
1. Land covered under soil conservation works	17.61	18.14 (0.53)	18.79 (0.65)	19.40 (0.61)
2. Ravine land reclamation.	0.42	0.44 (0.02)	0.48 (0.04)	0.51 (0.03)
3. Khar land reclamation.	0.18	0.182 (0.002)	0.182 (-)	0.185 (0.003)

(Figures in the brackets indicate the net achievements)

1.5.3. Programme for the Sixth Plan :

1.5.3.1. The plan proposals for the soil and-water conservation sub sector for the Sixth Plan-1980-85 have been formulated with following targets-

(1) It is proposed to accelerate the pace of implementation of the integrated approach towards land and water utilisation by adopting the new management system on watershed basis.

(2) It is proposed to increase the coverage of land under various soil conservation works from 17.61 lakh hectares at the end of 1977-78 to

21.71 lakh hectares at the end of 1984-85. The target for 1981-82 is placed at 19.76 lakh hectares.

(3) The programme contemplates increasing the ravine land reclamation works from 0.42 lakh hectares during 1977-78 to 0.63 lakh hectares by the end of 1984-85. The target for 1981-82 is placed at 0.03 lakh hectares

(4) Taking up of protection and reclamation measures in about 0.176 lakh hectares of lands (Khar land reclamation.)

1. 5. 4. Outlay for the Sixth Plan and Annual Plan.
(1980-85) (1981-82)

1.5.4.1. An outlay of Rs. 3555 lakhs is proposed for the soil and water conservation programme for the Sixth Plan 1980-85 whereas Rs. 465 lakhs for the Annual Plan 1981-82. Out of this, the soil conservation programmes under Agriculture Department, accounts for Rs. 2855 lakhs for the Sixth Plan and Rs. 365 lakhs for the Annual Plan 1981-82, where as,

the programme of ghed area development of the Irrigation Department accounts for Rs. 700 lakhs and Rs. 100 lakhs for the Sixth Plan and Annual Plan 1981-82 respectively. Of the State Plan, an amount of 711 lakhs is proposed under the Tribal Area sub-Plan for the Sixth Plan and Rs. 151 lakhs for the Annual Plan 1981-82. The State Plan outlay is likely to be supplemented by way of special central assistance for the Tribal Area Sub-Plan. The details of the outlays are given in the following table:-

(Rs. in lakhs).

Sr. No.	Programme	1979-80 Expdr.	1980-81		1981-82 Proposed Cutlay	1980-85 Proposed. Outlay.
			Outlay	Anti. Expdr.		
1	2	3	4	5	6	7
afcd						
1.	Direction and Administration	4.76	7.38	7.38	8.00	50.00
2.	Research	0.88	1.00	1.00	1.00	55.00
3.	Education and Training.	5.00	2.18	2.18	2.00	15.00
4.	Soil Conservation.	350.15	216.39	216.39	239.40	1739.55
5.	Other Programmes	115.43	123.05	123.05	114.60	1045.45
Total—AFCD Programmes		476.22	350.00	350.00	365.00	2855.00
id						
6.	Ghed Area Development	21.15	30.00	38.60	100.00	700.00
Grand Total : (Soil and Water Conservation)		497.37	380.00	388.60	465.00	3555.00

1.5. 5. Programmes for the Development Plan:

Direction and Administration :-

1.5.5.1. Soil survey provides some basic information about the characteristics of soil and their extent, use, capability and locations etc. The interpretation of soils for their different use and purposes will help for better use and maximum production. Soil survey and its study provides systematic studies of Soil water crop relationship for proper utilisation of land and water for maximum agricultural production. Three soil survey units at Nadiad Bhavnagar and Navsari are functioning in the State for this purpose. Out of these, two units (Nadiad and Bhavnagar) are started under the scheme for strengthening of State soil survey organisation (central sector scheme). A provision of Rs. 50 lakhs is proposed for the Sixth Five Year Plan 1980-85 and for the year 1981-82, Rs. 8 lakhs is proposed under the Direction and Administration Programme.

Research:

1.5.5.2. Under the research programme, the soil investigation works are proposed to be continued in problematic area viz at Limbhoi (Sabarkantha), Akru (Ahmedabad) and at Radhanpur (Banaskantha). An outlay of Rs. 5 lakhs is proposed for the Sixth Plan 1980-85 and Rs. 1 lakh for the Annual Plan 1981-82 to carry out the research works.

Education and Training :

1.5.5.3. The training programme for the officers and the field assistants will be continued to meet the requirement of the technical manpower under various programme It is proposed to impart training to about 1000 persons. An outlay of Rs. 15 lakhs for the Sixth Plan and Rs. 2 lakhs for the Annual Plan 1981-82 is proposed for this programmes.

Khar Land Development Programme :-

1.5.5.4. The Khar Land Development Board, established under the Khar Land Act, 1963, will undertake the protective works by constructing earthen embankments alongwith the cross drainage works. With a view to accelerate the process of development of protection and reclamation of area under khar lands, the proposals for Ukai-Kakrapar and Kadana Command Areas have already been submitted to the Government of India for obtaining financial assistance from the World Bank. It is proposed to protect and reclaim an area of 0.55 lakh hectares (0.20 lakh hectares for Ukai-Kakrapar and 0.35 lakh hectares for Kadana Command Areas) over and above the area of 8000 hectares already proposed under the State Plan under reclamation works during 1980-85. It is also proposed to continue the mobile testing laboratory in Ahmedabad district under khar land development programme to ascertain progressive reduction in salinity and to recommend correction measures to the farmers. Demonstrations will also be organised for the benefits of khar land reclamation and methods of improvement under the areas of Ukai-Kakrapar and Shetruni Irrigation Projects. As per the provision of the Khar Land Act, the expenditure on land reclamation is to be borne by the State Government and the beneficiary in the ratio of 40:60, the Government share being the subsidy. An amount of Rs. 330.69 lakhs in proposed for the reclamation of Khar land programmes for the Sixth Plan.

Soil Conservation Works:

1.5.5. Soil and water conservation measures like contour bunding, nala plugging, terracing, land reclamation, improvement of pastures including village forests, farm forests, underground pipeline works, construction of farm pond, kyari making works etc. are now planned in an integrated-manner on watershed basis. The soil and water conservation works will be carried out in 446 sub-watersheds already demarcated in the State having an area of 13.89 lakh hectares. Out of this area, an area of about 0.89 lakh hectares (contour bunding equivalent) will be covered in 17 districts except Gandhinagar and Dangs in the year 1981-82. In 500 sub watersheds having an approximate area of 14.97 lakh hectares, an area of about 2.92 lakh hectares contour bunding equivalent) will be covered in 19 districts of the State during the Sixth plan 1980-85 period. The existing staff of 6 divisions and 23 sub-divisions will be utilised for the soil and water conservation works in the watershed area. It is proposed to take up follow up programme of dry farming practices in watershed area in 1.00 lakh hectares in the year 1981-82 and continuing the same at equal rate in the remaining years of the Sixth Plan bringing total area of 5.00 lakh hectares at the end of 1984-85. The works will be carried out on demarcated watersheds on an intergrated scale in tribal and other areas.

Watershed Programme:

1.5.5.6. The scheme for advance survey and planning for water-shed management is to be strengthened in ravinous and other areas of the State. To solve the problem of wind erosion in the northern districts of the State, shelter belts are proposed to be established and to protect agricultural lands of the State. Gujarat State Land Development Corporation (at Gandhinagar) will be given share capital contribution to the tune of Rs. 100 lakhs for the Sixth Plan and Rs. 5 lakhs for the Annual Plan 1981-82 for undertaking its various activities in about 0.80 lakh hectares under kotar land reclamation works.

Paddy Cultivation :

1.5.5.7. The agricultural land of Surat and Valsad districts which is under tribal area are suitable for paddy cultivation. About 1.37 lakh adivasi cultivators are residing in these districts. Government have formulated a scheme under which one acre of the land will be covered into a kyari for paddy cultivation to encourage adivasis to undertake paddy cultivation and thereby to increase their level of income. Necessary technical guidance will also be provided by the State Government. The adivasis will be paid Rs. 500 or the 50% of the total expenditure whichever is less, as a subsidy. It is proposed to extent this benefit to about 30000 families covering an area of 12000 hectares (30000 acres) during the Sixth Plan period. An amount of Rs. 150 lakhs is proposed for the Sixth Plan and Rs. 30 lakhs for the Annual plan 1981-82 under this scheme.

1.5.6 Central Sector/Centrally Sponsored Schemes:

1.5.6.1. The Government of India have provided 2 additional soil survey units to the existing one unit of the State, totalling to 3 units in the State under the central sector scheme "Strengthening/creation of state soil survey organisation" from 1977-78. It is proposed to continue these units during the Sixth Plan period for the soil survey works in the State.

1.5.6.2. The centrally sponsored scheme for carrying out soil conservation works in the catchment areas of river valley projects for the Ukai, Mahi and Demanganga irrigation projects along with the headquarters cell has been proposed to be continued so as to check run off of water and sedimentation progress. The State Government has proposed an outlay (State share) of Rs. 80 lakhs for the Sixth Plan and Rs. 19 lakhs for the Annual Plan 1981-82 for these centrally sponsored schemes. Government of India contribute 25% loan and 25% subsidy and the remaining 50% expenditure is shared by the State Government.

1.5.7. Development of Ghed Areas :

1.5.7.1. The Ghed area is situated in about 1425 sq. kms. divided in two parts-Bardaghed and Sorathi ghed in the north-west of Junagadh district. The Barda ghed comprises of 30455 hectares of the cultivable land while the Sorathi ghed comprises of 79,950 hectares. The ghed area is a vast deltatic region of the major west flowing river viz. Minsar, Bhadar, Ozat, Madhuyati, 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 deltatic area are very flat and most of the rivers loose their regime, the flood waters causes innudation and erosion of the surrounding cultivable lands along with the salt efflores-scenee. 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, facilities, providing new outlets, 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, it is

expected to bring about 51300 hectares-38900 hectares of Sorathi ghed area and 12400 hectares of Barda ghed area under cultivation. For the development of these area two comprehensive master plans are prepared costing about Rs. 417 lakhs for sorathi and Rs. 904.31 lakhs (including Rs. 810 lakhs for Medha crack reclamation schemes, which is a part sanctioned schemes and is posed to the world Bank for assistance) for the Barda ghed area. The master plans provides, for quick drainage facilities, closing of off shcots, construction of C. D. works cum regulators on established cart tracts construction of percolation tanks and reclamation works etc. The preliminary works on the rivers-Minsar, Ozat and Madhuwanti are nearing completion.

1.5.7.3. An outlay of Rs. 700 lakhs is proposed for the development of ghed areas for the Sixth Plan and Rs. 100 lakhs for the Annual Plan 1981-82.

1.5.8. Employment :-

1.5.8.1. Under the various employment oriented programmes, it is estimated to generate about 250.46 lakh mandays of indirect employment during 1980-85 Plan and 38.91 lakh mandays during 1981-82. About 1100 technical persons will also get the direct employment during the Sixth Plan period.

Draft Sixth Five Year Plan 1980--85 and Annual Plan 1981--82.

Minor Headwise Outlays and Expenditure.

Soil and Water Conservation :

(Rs. in lakhs)

Sr. No.	Minor Head of Development	1979-80 Actual Expdr.	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Outlay Proposed	Capital Content	Outlay Proposed	Capital Content
1	2	3	4	5	6	7	8	9
I. AFCD Programmes:—								
1.	Direction and Administration.	4.76	7.38	7.38	50.00	..	8.00	..
2.	Research.	0.88	1.00	1.00	5.00	..	1.00	..
3.	Education & Training.	5.00	2.18	2.18	15.00	15.00	2.00	2.00
4.	Soil Conservation.	350.15	216.39	216.39	1739.55	..	239.40	..
5.	Other programmes.	115.43	123.05	123.05	1045.45	..	114.60	..
TOTAL:--I.		476.22	350.00	350.00	2855.00	15.00	365.00	2.00
II. ID Programme:—								
6.	Ghed Area Development.	21.15	30.00	38.60	700.00	700.00	100.00	100.00
GRAND TOTAL:--I+II.		497.37	380.00	388.60	3555.00	715.00	465.00	102.00

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

**Scheme-wise Outlays and Expenditure
Soil and Water Conservation.**

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme.	1979-80 Actual Expdr.	1980-81		1980-85		1981-82	
			Outlay	Anticipa- ted Expdr.	Proposed Outlay	Capital Content.	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
I. Direction and Administration:								
11.	SLC--1 Strengthening of soil survey organisation.	4.76	7.38	7.38	50.00	..	8.00	..
II. Research:								
2.	SLC--2 Soil survey and investigation.	0.88	1.00	1.00	5.00	..	1.00	..
III. Education and Training:								
3.	SLC--3 Soil conservation training.	5.00	2.18	2.18	15.00	15.00	2.00	2.00
IV. Soil Conservation:								
4.	SEC--4 Soil conservation including contour bunding, nala plugging, terracing, etc.	350.15	216.39	216.39	1739.55	..	239.40	..
V. Other Programmes :-								
5.	SLO-5 Afforestation and reclamation of kotar lands.	..	11.34	..	290.00	..	11.00	..
6.	SLC--6 Area planning and reclamation of kotar Lands.	3.02	9.00	9.00	30.00	..	9.00	..
7.	SLC--7 Pilot project for soil conservation in water shed.	1.77	1.85	1.85	10.00	..	2.00	..
8.	SLC--8 Pilot project for wind erosion.	2.13	3.10	3.10	14.76	..	2.50	..
9.	SLC--9 Reclamation of khar Land under Khar Land Act, protection of reclamation measures, mobile soil testing laboratories, including drainage works in water logged saline and alkaline areas.	27.05	21.10	21.10	330.69	..	22.10	..
10.	SLC--10 Share capital contribution for Land Development Corporation.	40.00	5.00	5.00	100.00	..	5.00	..
11.	SLC--11 Kyari making for paddy cultivation in Surat & Valsad districts.	19.17	27.20	27.20	150.00	..	30.00	..
12.	SLC--12 Kyari making for paddy cultivation in Dangs district.	5.20	10.21	10.21	..	..	..	..
13.	SLC--13 Development of ghed areas.	21.15	30.00	38.60	700.00	700.00	100.00	100.00
14.	SLC--14 Carrying out soil conservation works in river vally projects (State Share).	17.29	18.25	18.25	80.00	..	19.00	..
15.	SLC--15 Pilot project for protection of table land and stablisation of ravine areas.	..	6.00	6.00	190.00	..	1.00	..
16.	Nucleus Budget.	..	10.00	10.00	..	..	13.00	..
GRAND TOTAL:--		497.37	380.00	388.60	3555.00	715.00	465.00	102.00

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Targets of Production and Physical Achievement.

Soil and Water Conservation:—

Sr. No.	Item	Unit	Level of achievement at the end of					
			1978-79	1979-80 (Base Year Level)	1984-85 Terminal Year Target	1980-81		1981-82 Proposed Target
1	2	3	4	5	6	7	8	9
1.	Area covered under Soil Conservation works.	Lakh Hectares.	18.14	18.79	21.71	19.40	19.40	19.76

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Centrally Sponsored Schemes.

Soil and Water Conservation.

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actual Expendr.			1980-85 Proposed Outlay			1980-81 Outlay			1981-82 Proposed Outlay		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Carrying out soil conservation works in river valley projects.	8.64	8.65	17.29	80.00	80.00	160.00	18.25	18.25	36.50	19.00	19.00	38.00

1.6 Command Area Development

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 co-operative 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 1981-82/1980-85-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 the 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.

Mahi-Kadana

1.6.2.2. The project for Mahi-Kadana Command area was sanctioned for a period of three years ending 31st March, 1977 by Government of India at an estimated cost of Rs. 9.58 lakhs, the Project is continued in the Sixth Plan also with a view to give more correct picture of the activities of the Command Area Development. The Government of India would give 50% central share if the pilot project is shifted to left bank canal of the project area. From 1981-82 this Pilot project would be shifted to L. B. C. 30 demonstrations are targeted for each year during plan period 1980-85.

Area Development Authority North Gujarat & Saurashtra regions.

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. 75 demonstrations are likely to be done during 1980-81. 75 more demonstration are targeted for 1981-82. During the plan period 1980-85 it is proposed to carry out 375 demonstrations.

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 & it has adversely affected the fertile land reducing its productivity. The area of Bardoli, Kamarej & Palsana Taluka in command area are adversely affected. The programme of field demonstration, composite demonstration and construction of drains 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.

1.6.2.5. The provision for small staff carrying out demonstration work for showing extension method to the farmers of CAD project is made. The

provision for each project for 1981-82/ 1980-85 is proposed as under:-

	(Rs. in lakhs)	
	1981-82	1980-85
Mahi-Kadana	1.10	5.50
Shetrunji	1.20	6.00
Ukai-Kakrapar	4.65	21.65
	<u>6.95</u>	<u>33.15</u>

On Farm Development Works:

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

Area Development Authorities 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. D. C.)

(2) The target for land levelling was fixed at 24,972 hectares. Land levelling work has been undertaken upto March, 1980 for 24,662 hectares. The target for 1980-81 is 202 hectares.

(3) As regards field channel, 1,34,234 hectares have been covered upto March 1980. The target fixed for 1980-81 is 8000 hectares (Revised). It is proposed to cover 8000 hectares during the year 1981-82, and 40,000 hectares during the plan period 1980-85.

(4) Field drains in the Kadana Command area are to be constructed in 20,000 hectares. The works depend upon prior constructions of main drains and lateral and sub-lateral drains. A master plan has already been sanctioned by Government. The target for 1980-81 and 1981-82 is 5000 and 2000 hectares. The likely achievement for 1980-81 is 1000 only.

(5) The details of works done and the programme proposed for 1981-82/1980-85 are given below:-

Sr. No.	Item	Unit	Project target.	Achievement up to March 1980.	1980-81 target	Target proposed for 81-82.	Target proposed for 1980-85.
1	2	3	4	5	6	7	8
1	Land Levelling	Hect.	24972	24662	202	..	1800
2	Field Channel	..	224235	134234	8000	8000	40000
3	Field Drain	..	20000	..	5000	2000	20000

(6) As per the revised pattern of Centrally Sponsored Schemes, this is shared on a matching basis. A provision of Rs. 12.50 lakhs has been proposed for the year 1981-82. It is also proposed to provide Rs. 60.00 lakhs for 1980-85 for O.F.D. works under Command Area Development.

Panam Project :

1.6.2.8. The details of works done and the programme proposed for 1981-82/1980-85 are given below:—

Sr. No.	Item	Unit	Project target	Achievement upto March 1980	1980-81 Target	Target proposed for 1981-82	Target proposed for 1980-85.
1	2	3	4	5	6	7	8
(1)	Field Channel	Hect.	41120	658	7431	5000	25000

1.6.2.9. This is a centrally sponsored scheme, on the line of Kadana Project. During the year 1980-81 the provision under the plan has been kept to the tune of Rs. 9.10 lakhs for one sub-division. Afterwards two sub-divisions have been sanctioned

in January 1980 and it is proposed to create two additional sub-divisions. An outlay of Rs. 20.00 lakhs as State share has been proposed for the year 1981-82 and Rs. 100.00 lakhs for the plan period 1980-85.

1.6.2.10. It is also proposed to take OFD work in Fatehwadi, Kharicut and Heran projects during the plan period 1980-85. Rs. 42.00 lakhs are proposed for 1980-85.

Area Development Authority

North and Gujarat Saurashtra Region.

Shetrunji Project :

1.6.2.11. On farm Development works in this

project consists of construction and remodelling of field channel works in 34800 hectares, land levelling works in 9606 hectares and field drain works in 4046 hectares.

1.6.2.12 The details of works done and the programme proposed for 1981-82/1980-85 are given below:-

Sr. No.	Item	Unit	Project target	Achievement upto March 1980.	1980-81 target	Target proposed for 1981-82	Target proposed for 1980-85
1	2	3	4	5	6	7	8
1.	Land Levelling.	Heet.	9606	4270	500	500	4000
2.	Field Channel	..	34800	21539	4000	4000	13261
3.	Field drains.	..	4046	300	2000	750	3200
4.	Soil Survey	..	34800	19235	4000	4000	15565

1.6.2.13 This is a centrally sponsored scheme. As per the revised pattern, the State share is proposed under the plan scheme.

1.6.2.14. It is also proposed to take OFD Works in Dharoi, Dantiwada, Hathimati, Mashwo, Bhadar, "Machhundri, Sukhbadar, Kalubhar, Khodiar, Venue II Machhu I Sipu and Vatrak Projects during, 1980-85

1.6.2.15. O. F. D. works under other projects situated under this area development authority are also proposed to be taken up from 1981-82. The total outlay of Rs. 72.97 lakhs from State Plan is proposed

for 1981-82 and Rs. 458.92 lakhs for plan period 1980-85.

Area Development Authority Ukai-Kakrapar:

1.6.2.16. Land Levelling by field channal circles, Surat is being done in Ukai Left bank canal, blook number 12 to 14 and this being voluntary, work is done to the extent of consents available. The farmers are expected to carry out the land levelling once they see the water running into canals. The progress of achievement and the target envisaged for 1981-82/1980-85 are given below:-

Sr. No.	Item	Unit	Project Target	Achievement upto March 1980	1980-81 Target	Target proposed for 1981-82.	Target proposed for 1980-85
8	2	3	4	5	6	7	8
1.	Land Levelling and Kyari making.	Heet.	116900	21700	8800	14100	77400
2.	Ravihe Channel.	-do-	468200	2,06400	2000	27000	285200
3.	Field Drain.	-do-	251300	1000	10000	53200	240700
4.	Drainage	KMS	6321	1554	1100	2200	4700

1.6.2.17 The OFD works are to be taken up in Ukai-Kakrapar, Damanganga and Karjan Projects:-

Pilot Project for Reclamation of Khar Land in Surat and Valsad District

1.6.2.18. 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 envisage construction of protective earthen dams, reclamation of land by construction of internal drains, field channels,

land levelling etc. An amount of Rs. 12/- lakhs has been earmarked for 1980-81 programme. It is expected to utilise the full amount by the end of the year.

1.6.2.19. 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 and hence no amount has been proposed for the period of Sixth Plan.

Ayacut Development Programme:-

1.6.2.20. The Ayacut Development Programme was taken up in 27 villages near Kim in Ukai--Kakrapar area development. The results have been encouraging. It has, therefore, been extended in 43 villages covering 8 villages from Ankleshwar Taluka, 20 from Hansol Taluka and 15 from Margrol Taluka. It is proposed to continue the scheme on existing basis during five year plan with a view to demonstrate proper method of irrigated Agriculture Crops. 45 to 50 demonstrations of various agril. practices are carried out yearly. This programme is implemented by Command Area Development Authority Ukai Kakrapar.

1.6.2.21. 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.

Implements Workshop at Navsari.

1.6.2.22. To train village farmers for use and repairing of improved agricultural appliances and machineries, the cultivators are paid Rs. 150/- per month as stipened 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. It is proposed to provide Rs. 6.60 lakhs for 1981-82 and Rs. 22.16 lakhs for plan period 1980-85.

Trial-cum: Demonstration Farm:

1.6.2.23. It is proposed to start 4 tribal-cum-Demonstration farms in command area of Ukai, Dumanganga and Karajan Projects. The T. C. D. Farms are proposed on the line of existing pattern of T. C. D. farm Kakrapar Project. It is proposed to procure 120 hectares land for 4 T.C.D. Farms. The amount of Rs. 47.95 lakhs is proposed for 1981-82 and Rs. 97.23 lakhs is proposed for plan period 1980-85.

Establishment of T. C. D. Farms in Narmada Irrigation Project under the Department of Agriculture:-

1.6.2.24. At present there are 16 T.C.D. Farms in the State. It is proposed to start 3 new T.C.D. Farms during the plan period in the command area of Narmada project for maximum utilisation of available water for sustained production. For this purpose, it is proposed to provide Rs. 11.40 lakhs during 1981-82 and Rs. 89.40 lakhs during the plan period 1980-85.

World Bank aided scheme:-

Command Area Development Authority Mahi Kadana:-

Water Management area in Panam Project:

1.6.2.25. As per the proposal contained in the Aide-Memoria of Dr. Shanani World Bank consultant of May 14, 1980 it has been decided to implement the programme of undertaking water Management Activities Pilot Programme with 2000 acres in the current year in the Panam Project. ultimately it will cover 11400 acres in Morva distributary. The staff requirements would entail expenditure of Rs 4.34 lakhs and work portion of Rs. 8.20 lakhs. Annual recurrent expenditure will be to the tune of Rs. 8.68 lakhs. An outlay of Rs. 15.08 lakhs has been proposed for the year 1981-82 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 engineering agricultural staff;
- (5) To establish demonstration farms where farmers can observe efficient field irrigation;
- (6) To train staff in adopting advanced methodology and operational procedure to other irrigation projects;

Establishment of Land Development and Training Centre:-

1.6.2.26. 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. 3.2 crores. The centre

is to be located in the Mahi Kadana Command area which offer a good traing ground for personnell involved in irrigation management. Until a suitable location is available in the command area, it has been proposed to start the training centre during the current year at the P. W. D. staff training college at Gandhinagar.

1.6.2.27. The programme of training varying 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 Dy. Director of Agriculture serving as Divisional Soil conservation Officer. It is proposed to conduct a one week workshop as well as thres-weeks refresher course during 1980-81. An outlay of Rs. 55 lakhs is proposed for 1980-85 and Rs. 12 lakhs for 1981-82.

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

1.6.2.28. 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 hectares out of which 30,000 hect ares will be in Mahi-Kadana Command areas.

1.6.2.29. Before the agreement was signed in April, this year, 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 1970-80 Rabi Season.

1.6.2.30. It is proposed to introduce Warabandhi in an additional area of 6900 hectares in Mahi Kadana command area in 1980-81 An outlay of Rs. 23.00 lakhs has been proposed for the year 1981-82. It is also proposed to provide Rs. 70.00 lakhs for 1980-85.

1.6.2.31. An estimated expenditure for 60,000 hectares is Rs. two crores and the approximate expenditure per hectares 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 contol structures.

Introduction of Warabandhi system in Ukai-Kakrapar Command areas

1.6.2.32. It is proposed to introduce warabandhi in selected area of Ukai Kakrapar Project from the Kharif 1980. The area proposed to be covered in Kakrapar is 8222 hectres and in Ukai 1200 hectares totaling 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. L. in the entire system in one week/two weeks rotation period. It is proposed to incur the expenditure on establishment under the plan Sector. 50% central assistance is admissible under the scheme. The expenditure on works will be debited to grant. The area under warabandhi is liklely to be increased in the ensuling years.

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Command Area Development

Schemewise Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme	1979-80	1980-81		1980-85		1981-82	
		Actuals	Outlay	Anticipated outlay expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1	CAD-1 Establishment of Area Development Authority for mahi kadana Ahmedabad	2.80	3.50	3.50	20.00	..	4.00	..
2	CAD-2 Agricultural Support Programme for Kadana Project (G.D.A.'s Office)	1.99	2.40	2.40	12.50	..	2.40	..
3	CAD-3 Pilot Project for Soil and Water Management in Kadana Project	1.07	1.10	1.10	5.50	..	1.10	..
4	CAD-4 On Farm Development Works in Area Development Authority of Mahi Kadana, Ahmedabad							
	(1) Kadana Project	..	..	..	60.00	..	12.50	..
	(2) Panam Project	5.07	9.10	9.10	100.00	..	20.00	..
	(3) Karicut Project	..	..	..	14.00	..	..	..
	(4) Fatewadi Project	..	..	..	14.00	..	..	..
	(5) Haran Project	..	..	..	14.00	..	..	..
5	CAD-5 Training centre for land Development and Water Management in Mahi Kadana Authority	..	..	5.00	55.00	..	12.00	..
6	CAD-6 "Water Management Area" in Panam Project	..	..	12.54	75.00	..	15.00	..
7	CAD-7 Warabandhi in Mahi Kadana Project	..	..	30.00	70.00	..	23.00	..
8	CAD-8 Establishment Area Development authority for Saurashtra and North Gujarat region, Gandhinagar	0.20	3.00	3.00	16.80	..	3.30	..
9	CAD-9 Agricultural Support Programme for Shetrunji Project	1.90	1.90	1.90	10.50	..	2.00	..
10	CAD-10 Pilot Project for Soil and Water Management in Shetrunji Project	4.63	1.20	1.20	6.00	..	1.20	..
11	CAD-11 Establishment of Joint Director's office at Gandhinagar	..	..	..	18.28	..	2.53	..
12	CAD-12 On Farm Development Works in Saurashtra and North Gujarat region Area Development Authority, Gandhinagar							
	(1) Shetrunji Project	..	..	..	52.91	..	12.60	..
	(2) Dharoi Project	..	..	..	140.32	..	23.13	..
	(3) Dantiwada Project	..	..	..	64.50	..	14.87	..
	(4) Hathmati Project	..	..	..	21.05	..	4.75	..
	(5) Meshwo Project	..	..	..	20.70	..	4.30	..
	(6) Bhadar Project	..	..	..	2.67	..	0.72	..
	(7) Mahhundri Project	..	..	..	18.14	..	1.55	..
	(8) Sukhbhadra Project	..	..	..	18.60	..	2.60	..
	(10) Kalubhar Project	..	..	..	17.50	..	1.85	..
	(11) Khodiar Project	..	..	..	25.50	..	2.60	..
	(12) Yenu-II Project	..	..	..	18.03	..	2.00	..

1	2	3	4	5	6	7	8	9
	(13) Machhu-I Project	..	..	..	7.50	..	..	..
	(14) Sipu Project	..	..	..	11.00	..	..	..
	(15) Watrak Project	..	..	..	30.00	..	..	..
13	CAD-13 Establishment of Area Development Authority Ukai Kakrapar Surat	2.43	2.95	2.95	18.00	..	4.35	..
14	CAD-14 Opening of regional Soil and Water Management Pilot Project at Barodoli	4.16	4.33	..	21.65	..	4.65	..
15	CAD-15 Pilot Project for reclamation Khar Land in Surat and Valsad Districts	9.95	12.00	12.00	12.00	8.00	..	..
16	CAD-16 Ayaout Development programme in Surat District	1.04	1.12	1.12	5.75	..	1.15	..
17	CAD-17 Bunglow for Area Development Commissioner, Surat	0.75	0.55	0.55	0.55	0.55	..	..
18	CAD-18 Staff quarters for staff of Area Development Commissioner Surat	1.37	1.36	1.36	7.11	7.11	1.75	1.75
19	CAD-19 Office Building for the Office of Area Development Commissioner and Joint Director of Agriculture, Surat	0.06	2.00	2.00	11.50	11.50	4.00	4.00
20	CAD-20 Establishment of workshop at Navsari	2.61	3.40	3.40	22.16	2.60	6.60	2.60
21	CAD-21 Operational Staff for Bulldozer for carrying out Soil conservation works in Ukai Kakrapar Command area.	..	1.00	1.00	31.80	17.30	17.30	2.50
22	CAD-22 Establishment of T.C.D. Farm in Ukai Daman Ganga Project.	..	3.95	3.95	97.23	30.25	47.95	30.25
23	CAD-23 Introduction of Warabandi in Ukai Kakrapar command Area.	..	..	..	31.25	..	6.25	..
24	CAD-24 On Farm Development works in Area Development Authority of Ukai Kakrapar Authority, Surat :							
	(i) Ukai-Kakrapar Project	..	..	..	..	..	..	..
	(ii) Karjan Project	..	..	..	255.00	65.00	..	..
	(iii) Daman Ganga Project	..	5.14	5.14	346.00	100.00	46.00	16.00
Director of Agriculture, Gujarat State, Ahmedabad								
25	CAD-25 Strengthening of TCD Farms	..	..	..	6.70	..	1.45	..
26	CAD-26 Construction of Residential Buildings and Shed and works in progress.	4.13	9.10	9.10	20.05	20.05	3.00	3.00
27	CAD-27 Populisation improved Agril Implements	0.73	0.60	0.60	4.30	..	0.85	..
28	CAD-28 Ayaout Development Programme in Irrigation Projects of seven districts of the State	..	..	..	..	..	..	..
		2.12	1.30	1.30	11.30	..	2.30	..
29	CAD-29 Irrigation Demonstration in the medium irrigation project	..	..	..	8.25	1.00	..	..
30	CAD-30 Establishment of NEW T.C.D. Farm in Irrigation Projects.	..	..	..	89.40	71.40	11.40	10.00
31	CAD-31 Development of command Area of the World Bank Assisted projects for composite Irrigation Projects	..	5.00	..	10.00	..	1.00	..
Total		47.01	76.00	114.21	1950.00	334.76	330.00	70.10

DARFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Command Area Development

Target of Production and Physical achievements

Sr. No.	Name of Scheme/Project	Unit	Level of achievement at the end of—					1981-82 proposed target (level)	Project Target	
			1978-79	1979-80 (basis year level)	1984-85 Terminal year Target	1980-81				
1	2	3	4	5	6	7	8	9	10	
1	Kadana Project	FC	Ha	125953	132234	174234	142238	142234	150234	224235
		LL	Ha	22965	24002	24962	24862	24862	24862	24972
		FD	Ha	..	..	20000	5000	1000	3000	20000
2	Panam Project	FC	Ha	..	658	25000	8089	3658	8658	41120
		LL	Ha	..	..	..	..	..	..	..
3	Kharicut Project	FC	Ha	..	..	2500	..	..	..	14610
		LL	Ha	..	..	..	..	..	..	..
4	Fatewadi Project	FC	Ha	..	..	2500	..	..	..	32119
		LL	Ha	..	..	..	..	..	..	..
5	Heran Project	FC	Ha	..	..	2500	..	..	..	9 8030
		LL	Ha	..	..	..	..	..	..	..
6	Agricultural Support Programme and O. G. D. works in Dantiwada Project—									
	(i)	Field Channel	Hect.	N.A.	N.A.	3000	700	700	1500	..
	(ii)	Land levelling	Hect.	N.A.	..	6000	..	..	500	..
	(iii)	Field Drain	Hect.	N.A.	..	200	..	..	60	..
	(iv)	Crop Demonstration	No	N.A.	N.A.	375	75	75	150	..
7	Agricultural Support Programme and O. F. D. Works in Dhaxoi Project.									
	(i)	Field channel	Hect.	..	..	30,000	1,500	1,500	5,500	..
	(ii)	Land levelling	Hect.	..	..	8,000	600	600	1,200	..
	(iii)	Field Drain	Hect.	..	..	..	..	..	..	..
8	Agricultural Support Programme and O.F.D. works in Hathmati Project									
	(i)	Field channel	Hect.	N.A.	N.A.	7,200	1,000	1,000	1,000	..
	(ii)	Land levelling	Hect.	N.A.	N.A.	2,100	100	100	600	..
	(iii)	Field Drain	Hect.	..	..	200	40	40	80	..
	(iv)	Crop Demonstration	No.	N.A.	N.A.	375	75	75	150	..
9	Agricultural Support Programme of O.F.D. works in Meswo Project									
	(i)	Field Channel	Hect.	N.A.	N.A.	5,800	..	..	600	..
	(ii)	Land levelling	Hect.	..	..	1,500	..	..	400	..
	(iii)	Field Drain	Hect.	..	..	60	..	..	15	..

	2	3	4	5	6	7	8	9	10
1) Agricultural Support Programme of O.F.D. works in Bhadar Project									
(i) Field channel	Hect.		N.A.	N.A.	1,783	300	300	500	..
(ii) Land levelling	Hect.		N.A.	N.A.	2,500	300	300	800	..
(iii) Field Drain	Hect.		..	..	200	40	40	80	..
(iv) Crop Demonstration	No.		N.A.	N.A.	375	75	75	150	..
1 Agricultural Support Programme and O.F.D. works in Machhundri Project									
(i) Field hannel	Hect.		..	..	8,095	..	..	300	..
(ii) Land levelling	Hect.		..	..	810	..	..	..	..
(iii) Field Drain	Hect.		..	..	..	..	..	..	..
2 Agricultural Support Programme and O.F.D. works in Sukhbhadar Project									
(i) Field channel	Hect.		..	..	7,400	..	..	400	..
(ii) Land levelling	Hect.		..	..	600	..	..	..	..
(iii) Field Drain	Hect.		..	..	..	..	..	..	..
3 Agricultural Support Programme and O.F.D. works in Kalubhar Project									
(i) Field channel	Hect.		..	..	5,830	..	..	400	..
(ii) Land levelling	Hect.		..	..	510	..	..	..	..
(iii) Field Drain	Hect.		..	..	..	..	..	..	..
4 Agricultural Support Programme and O.F.D. works in venu-II Project									
(i) Field Channel	Hect.		..	..	5,353	..	..	400	..
(ii) Land levelling	Hect.		..	..	550	..	..	..	..
(iii) Field Drain	Hect.		..	..	..	..	..	..	..
Agricultural Support Programme and O.F.D. works in Khodiar Project									
(i) Field Channel	Hect.		N.A.	N.A.	7,000	..	..	500	..
(ii) Land levelling	Hect.		N.A.	N.A.	700	..	..	..	..
(iii) Field Drain	Hect.		..	..	..	..	..	..	..
Agricultural Support Programme and O.F.D. works in Machhu Project									
(i) Field Channel	Hect.		M.N.A.	N.A.	..	..	..	..	..
(ii) Land levelling	Hect.		N.A.	N.A.	1500	..	..	..	..
(iii) Field Drain	Hect.		..	..	..	..	..	..	..
Agricultural Support Programme and O.F.D. works in SIPU. Project									
(i) Field Channel	Hect.		..	..	4,000	..	..	..	..
(ii) Land levelling	Hect.		..	..	1,000	..	..	..	..
(iii) Field Drain	Hect.		..	..	..	..	..	..	..
Agricultural Support Programme and O.F.D. works in Watrak Project									
(i) Field Channel	Hect.		..	..	10,000	..	..	..	..
(ii) Land levelling	Hect.		..	..	2,500	..	..	..	..
(iii) Field Drain	Hect.		..	..	..	..	..	..	..

1	2	3	4	5	6	7	8	9	10
19	Agricultural Support Programme and O.F.D. works in Shetrunji Project								
(i)	Field channel	Hect.	17,123	211,539	34,800	25,539	25,539	29,539	34,800
(ii)	Land levelling	Hect.	4,249	4,270	8,270	4,770	4,770	5,270	..
(iii)	Field drains	Hect.	288	300	3,500	500	500	1,200	4,046
20	CAD-Spilot project for soil and water management in Shetrunji Project								
		Crop Demonstration	39	39	432	114	114	189	..
21	Area Programme —								
	On Farm development works in the projects of Area development authority Surat								
(1)	Field channel	Hect.	205000	206400	391600	208400	208400	235400	468200
(2)	Field Draine	Hect.	400	1000	241700	11000	11000	64200	25130
(3)	Land leveling	Hect.	17000	21700	99100	30500	30500	44600	11690

Draft sixth Five Year Plan 1980--85 and Annual Plan 1981--82.

Centrally Sponsored Scheme--Outlays

Command Area Development

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actual			1980-85 outlay proposed			1980-81 Outlay			1981-82 Outlay		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	CAD-1 Establishment of Area Development Authority for Kadana Project, A'bad.	2.80	2.80	5.60	20.00	20.00	40.00	3.50	3.50	7.00	4.00	4.00	8.00
2.	CAD-2 Agricultural Support Programme for Kadana Project(J.D.A's office)	1.99	1.99	3.98	12.50	12.50	25.00	2.40	2.40	4.40	2.40	2.40	4.80
3.	CAD-3 Soil and Water Management in Mahi-Kadana Project.	..	..	..	5.50	5.50	11.00	..	..	..	1.10	1.10	2.20
4.	CAD-4 On farm Development works in the Projects of Area Development Authority for Kadana, A'bad.												
	(1) Kadana	..	..	..	60.00	60.00	120.00	..	..	..	12.50	12.50	25.00
	(2) Panam	5.07	..	5.07	100.00	100.00	200.00	9.10	9.10	18.20	20.00	20.00	40.00
	(3) Fatewadi	..	..	..	14.00	14.00	28.00	..	..	..	..	..	..
	(4) Khariet	..	..	..	14.00	14.00	28.00	..	..	..	..	..	..
	(5) Heran	..	..	..	14.00	14.00	28.00	..	..	..	..	..	..
5.	CAD-8 Establishment of Area Development Authority for North Gujarat and Saurashtra Region, Gandhinagar.	0.20	0.20	0.40	16.80	16.80	33.60	3.00	3.00	6.00	3.30	3.30	6.60
6.	CAD-9 Agricultural Support Programme for Shetrunji Project(Dy. Director of Agril. Office).	1.90	1.90	3.80	10.50	10.50	21.00	1.90	1.90	3.80	2.00	2.00	4.00
7.	CAD-11 Establishment of Jt. Director's office at G'nagar.	..	..	..	18.28	18.28	36.56	2.08	2.07	4.15	2.53	2.53	5.06

1	2	3	4	5	6	7	8	9	10	11	12	13	14
8.	CAD-12 On farm Development works in the projects of Area Development Authority for North Gujarat & Saurashtra region, Gandhinagar.												
(1)	Shetrunji	9.54	9.53	19.07	52.91	52.91	105.82	23.10	23.10	46.20	12.60	12.60	25.20
(2)	Dharoi	..	..	..	140.32	140.32	280.64	12.66	12.67	25.33	23.13	23.13	46.26
(3)	Dantieada	..	..	..	64.50	64.50	129.00	..	..	..	14.87	14.87	29.74
(4)	Hathmati	..	..	..	21.05	21.05	42.10	4.00	4.00	8.00	4.75	4.75	9.50
(5)	Meshwo	..	..	..	20.70	20.70	41.40	..	..	..	4.30	4.30	8.60
(6)	Bhadar	..	..	..	2.67	2.67	5.34	0.45	0.45	0.90	0.72	0.72	1.44
(7)	Machhundri	..	..	..	18.14	18.14	36.28	..	..	..	1.55	1.55	3.10
(8)	Sukhbhadar	..	..	..	18.60	18.60	37.20	..	..	..	2.60	2.60	5.20
(9)	Kalubha	..	..	..	17.50	17.50	35.00	..	..	..	1.85	1.85	3.70
(10)	Khodiar	..	..	..	25.50	25.50	51.00	..	..	..	2.60	2.60	5.20
(11)	Venu-II.	..	..	..	18.03	18.03	36.06	..	..	..	2.00	2.00	4.00
(12)	Machhu-I	..	..	..	7.50	7.50	15.00	..	..	..	..	..	..
(13)	Sipu	..	..	..	11.00	11.00	22.00	..	..	..	..	..	..
(14)	Watrak	..	..	..	30.00	30.00	60.00	..	..	..	..	..	..
9.	CAD-13 Establishment of Area Development Authority for Ukai-Kakrapar Surat.	2.43	2.43	4.86	18.00	18.00	36.00	2.95	2.95	5.90	4.35	4.35	8.70
10.	CAD-23 Introduction of Warabandhi in Ukai Karpapar command areas.	..	..	..	31.25	31.25	62.50	3.00	3.00	6.00	6.25	6.25	12.50
11.	CAD-24 On farm Development works in the projects of Area Development Authority for Ukai Kakrapar, Surat.												
(1)	Daman Garga	..	..	..	346.00	346.00	692.00	2.57	2.57	5.14	46.00	46.00	92.00
(2)	Karjan	..	..	..	255.00	255.00	510.00	..	..	..	..	..	..
Total:—		23.93	18.85	42.78	1384.25	1384.25	2768.50	70.71	70.71	141.42	175.40	175.40	350.80

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. Gujarat is endowed with very good livestock wealth. The livestock population as per 1972 and 1977 censuses 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

1.7.1.2. 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 manufactures. 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 of the sector. One of the solutions to the poverty and rural unemployment is that of providing gainful employment to the vast number of persons and put them on productive work. From this point of view, animal husbandry can provide gainful employment even to the weaker sections of the society.

1.7.2 Strategy of Development :

1.7.2.1 The animal husbandry development policy has the objective of diversification of the agricultural production, improvement of human nutrition, provision of supplementary income to the weaker sections and increasing the employment potential.

1.7.2.2 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 livestock free from hazards of animal diseases for ensuring optimum production.

1.7.3. Review of Progress :

1.7.3.1. 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. Progress achieved

during the Fifth Plan and there after is outlined as under :—

1.7.3.2. 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, 33906 artificial inseminations were performed under this programme. During 1980-81, about 30,000 artificial inseminations are envisaged to be performed. Six units for cross-breeding programme in non-I.C.D.P. areas in the districts of Valsad, Bharuch, Vadodara, Sabarkantha, Ahmedabad and Kachchh have been established. 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.

1.7.3.3. 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-bred heifers has been subsidised till 1979-80. During 1980-81, assistance will be given for rearing of 1000 cross bred heifers. Under the Tribal Area Sub-Plan, 11176 milch animals were subsidised at 50 per cent subsidised rate to the adivasis for supplementing their source of income till the end of 1979-80. During 1980-81, it is proposed to assist the tribals for purchase of about 2700 milch animals. It is envisaged to construct the building for Artificial Insemination Laboratory at Kadod (Surat) during 1980-81.

1.7.3.4. 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 co-ordinated 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. During 1980-81, about 1000 beneficiaries are proposed to be assisted for establishing poultry units.

1.7.3.5. 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 Co-operative Poultry Farmers' Federation Ltd., during the year 1978-79 for providing better marketing of eggs and poultry. During 1980-81, the farmer's training programme to impart training to about 2000 poultry farmers will be continued. It is envisaged to assist about 1500 adivasis for establishment of poultry units during 1980-81.

1.7.3.6. Under the sheep and wool development programme, two intensive sheep development blocks were established at Bhuj (Kachchh) and Bhavnagar for 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 in the State. Under the special development programme, assistance was given for the establishment of 984 sheep units till the end of 1979-80. It is envisaged to assist beneficiaries for establishing 400 sheep units during 1980-81. Gujarat Sheep and Wool Development Corporation has been provided the share capital contribution to undertake its activities. During 1980-81, it is envisaged to provide a statistical unit under the intensive sheep development block, Bhavnagar to carry out the bench mark and assessment surveys in the project areas.

1.7.3.7. 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. During 1980-81, it is envisaged to establish 52 first aid centres and to undertake construction work of 11 veterinary dispensary buildings. The expansion of Biological Products 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. For the foot and mouth disease control programme, about 1.58 lakh doses of vaccine were utilised till 1979-80. It is envisaged to assist the beneficiaries for purchase of 0.35 lakh doses of foot and mouth disease vaccine during 1980-81. Under the scheme for training for departmental personnel, the department has already deputed 8 officers for M.V.Sc. and 2 officers for post-graduate diploma/training. It is envisaged to depute 5 officers for the training in the year 1980-81.

1.7.3.8. 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. It is envisaged to assist 4 multi-purpose societies, 4 vasahat mandlies and 1 taluka sangh during 1980-81.

Integrated fodder development programme has been undertaken from 1977 under which assistance is provided for 1911 demonstration plots, 46 chaff cutters, 39 silopits etc. till the end of 1979-80. It is envisaged to assist 1700 demonstration plots, 8 silopits and 120 chaff cutters during 1980-81. 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 buffaloe bull mother farm near Gandhinagar is also proposed to be continued. It is also envisaged to establish 2 village fodder farms for growing green fodder during 1980-81.

1.7.4. Outlays for the Sixth Plan 1980-85 and Annual Plan 1981-82 :

1.7.4.1. An outlay of Rs. 1825 lakhs is proposed for the Sixth Five Year Plan 1980-85 and Rs. 300 lakhs for the Annual Plan 1981-82. 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 programme-wise details are as under :—

(Rs. in lakhs)

Sr. No.	Programme	1979-80 Actual Expendi- ture.	1980-81		1980-85 Propo- sed Outlay.	1981-82 Proposed Outlay.
			Outlay.	Anti. Expdr.		
1.	Direction & Administration	0.92	6.17	6.17	70.00	2.00
2.	Veterinary Education and Research	2.40	1.50	1.50	12.00	1.50
3.	Veterinary Services and Animal Health. ..	26.45	48.46	48.46	295.00	35.38
4.	Investigation & Statistics	1.67	2.60	2.60	13.00	3.00
5.	Cattle Development	180.91	106.25	106.25	703.00	120.85
6.	Poultry Development	53.96	63.10	63.10	431.00	74.47
7.	Sheep & Wool development	20.30	15.71	15.71	219.00	27.00
8.	Other Livestock development.	0.75	3.75	3.75	32.00	5.80
9.	Feeds & Fodder Development	5.20	5.46	5.46	50.00	8.00
10.	Nucleus budget for T. A. S. P. .. ..	..	17.00	17.00	..	22.00
Total:-		292.56	270.00	270.00	1825.00	300.00

1.7.4.2. An amount of Rs. 646 lakhs is proposed under the Tribal Area Sub-Plan for the Sixth Plan 1980-85 and Rs. 136 lakhs for the Annual Plan 1981-82.

1.7.4.3. A broad programme contents of the Sixth Five Year Plan 1980-85 is summarised below:—

(1) An overall scientific development of cattle and buffaloe for increased production of milk from 21.88 lakh tonnes at the end of 1978-79 to

26.40 lakh tonnes by the end of 1980-85. The target for 1981-82 plan is placed at 23.76 lakh tonnes.

(2) Increasing wool production from 18.19 lakh kgs. in 1978-79 to 19.24 lakh kgs. till the end of 1984-85. The target for 1981-82 is placed at 18.70 lakh kgs. of wool.

(3) Increasing egg production from 215 millions in 1978-79 to 330 millions till the end of 1984-85. The target for 1981-82 is placed at 288 millions.

(4) Development of horses and camels by providing necessary service centres and ;

(5) Strengthening of veterinary services and disease control programme.

Direction and Administration :

1.7.4.4. The objective of this scheme 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. The strategy proposed is to strengthen the planning cell, marketing cell and poultry branch of this department by providing additional staff. It is also proposed 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 1980-85 Plan and Rs. 2 lakhs for Annual Plan 1981-82 under this programme.

Veterinary Education and Training :

1.7.4.5. 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 advanced knowledge. It is proposed to provide post-graduate diploma training, M. V. Sc. degree and Ph. D. to 15, 25 and 2 officers respectively and training abroad to 2 Officers during the plan period 1980-85. An outlay of Rs. 12 lakhs is proposed for the Sixth Plan 1980-85 and Rs. 1.50 lakhs for the Annual Plan 1981-82.

Veterinary Services and Animal Health :

1.7.4.6. Adequate health cover measures are to be ensured to improve the production capacity of livestock. During the Sixth Plan, it is proposed to strengthen the veterinary services by opening 80 first aid veterinary centres (including 40 under T.A.S.P.), 9 mobile veterinary units (in T.A.S.P.), 2 poly-clinics and 1 State Level Disease Investigation Laboratory at Gandhinagar. In addition, it is also proposed to establish 8 sexual 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 vaccines like H. S., B. Q., enterotoxaemia, Ranikhet disease, antirabic, fowl pox vaccines etc. in a phased manner. It is proposed to construct the buildings of Tissue Culture Laboratory. Under the disease control programme of foot and mouth disease, it is proposed to purchase about 2.00 lakh doses of vaccine for protection of valuable animals during

1980-85, of which about 0.32 lakh doses of vaccine will be utilised during 1981-82. An outlay of Rs. 295 lakhs is proposed for 1980-85 Plan and Rs. 35.38 lakhs for Annual Plan 1981-82 under this programme.

Investigation and Statistics :

1.7.4.7. The State Government has undertaken the work of integrated survey of livestock and livestock products on yearly basis. Further as per recommendation 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. 13 lakhs is proposed for 1980-85 Plan and Rs. 3 lakhs for Annual Plan 1981-82 for this programme.

Cattle Development :

1.7.4.8. During the Sixth Plan 1980-85, it is proposed to perform about 4.00 lakh artificial inseminations under cross breeding programme. It is proposed to perform about 0.30 lakh artificial inseminations during 1981-82 under this 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, Surat, Ahmedabad-Sabarkantha and Mahesana are full-fledged blocks. The remaining 4 projects at Vadodra-Bharuch, Rajkot, Banaskantha and Junagadh are incomplete blocks. During the Sixth Plan, it is proposed to complete these 4 projects. It is proposed to establish a new I.C.D. project covering Amreli-Bhavnagar Districts. It is also proposed to establish 15 livestock production centres for providing necessary extension services under the Tribal Area Sub-Plan during 1980-85, of which, it is proposed to establish 5 centres during 1981-82. The State has four cattle breeding farms at Morvi (now being shifted to Bhutwad in Dhoraji taluka of Rajkot district), Bhuj, Thara and Mandvi. The farms at Bhuj and Thara are for Kankrej cattle, the farm at Morvi is for Gir cattle whereas the farm at Mandvi (Surat) is for cross-bred animals. On an average, each farm maintains about 75 adult animal units. In order to take up progeny testing work, it is proposed to increase the number of adult animals to 200 each so as to have tangible result.

1.7.4.9. 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 the 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 proposed to assist the tribals for purchase of 20,000 milch animals of which about 2800 milch animals will be assisted for purchase during 1981-82. Similar scheme has also been introduced for the benefit of the scheduled caste members of society and it is envisaged to assist the beneficiaries for purchase of 333 milch animals during 1980-85 and during 1981-82, it is proposed to assist for purchase of 890 milch animals. 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 caste members for construction of cattle sheds and purchase of fodder for their animals. Similarly other backward class members of society as declared under 'Baxi Panch Award' are also proposed to be assisted for purchase of 560 milch animals during 1980-85 and 110 milch animals during 1981-82.

1.7.4.10. A centrally sponsored scheme to assist SF/MF/AL for rearing of cross-bred heifers is proposed to be continued during the Sixth Plan. It is proposed to assist rearing of 3700 cross-bred heifers during 1980-85. During 1981-82, the target is that of rearing of 1000 cross bred heifers.

1.7.4.11. There are good number of ashramshalas in the adivasi areas who are maintaining small dairy units. It is proposed 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.

1.7.4.12. An outlay of Rs. 703 lakhs is proposed under this programme for 1980-85 Plan and Rs. 120.85 lakhs for Annual Plan 1981-82.

Poultry Development :

1.7.4.13. 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 intensive 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.

1.7.4.14. During the Plan period 1980-85, it is proposed to assist 4000 beneficiaries for establishment of 8000 poultry units under special development programmes of which it is proposed to assist 1000 beneficiaries during 1981-82. It will be ensured that at least 7% of the benefits will flow to the scheduled caste people. Similarly under the Tribal Area Sub-Plan it is proposed to assist 4025 beneficiaries for establishment of 8050 poultry units during 1980-85, of which 745 beneficiaries are proposed to be assisted during 1981-82. 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 all 8625 beneficiaries are proposed to be assisted for establishment of 166550 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 10000 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 this Poultry Farmers Co-operative Societies organised during the Plan period.

1.7.4.15. An outlay of Rs. 431 lakhs is proposed under this programme for 1980-85 Plan and Rs. 74.47 lakhs for the Annual Plan 1981-82.

Sheep and Wool Development. :

1.7.4.16. There is a sizable sheep population in Gujarat. 88 Sheep extension centres and two intensive sheep development blocks have been established in the State for providing necessary extensive 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 Mehsana-Sabarkantha (composite). Four service centres for migratory sheep flocks are proposed to be established during the Plan period 1980-85 at Aliabet (Bharuch), Modasa (Sabarkantha), Viramgam (Ahmedabad) and Chotila (Surendranagar) of which one at Modasa is proposed during 1981-82.

1.7.4.17. The scheme of cross breeding of local Patanwadi sheep breeds with Russian Merino rams is to be undertaken. For this purpose, establishment of one more large scale sheep breeding farm in Bhavnagar district and establishment of 12 centres for breeding purpose are proposed in the districts of Kachchh, Bhavnagar 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 weaker sections for establishment of

3800 sheep units during 1980-85 Plan. It is proposed to assist the beneficiaries to establish 800 sheep units during 1981-82. Necessary credit facilities will be provided to the beneficiaries from the financial institutions through the respective implementing agencies. During 1981-82, it is proposed to assist 4 sheep breeders co-operatives to take up grading and marketing of wool. Formation of Wool Board is also envisaged for regulation and control of the wool trade. It is also proposed to expand wool analysis laboratory established at Morvi to enable to analyse 8000 wool samples during the Sixth Plan period 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.

1.7.4.18. An outlay of Rs. 219 lakhs is proposed under this programme for 1980-85 Plan and Rs. 27 lakhs for Annual Plan 1981-82.

Other Livestock Development :

1.7.4.19. 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 vashahats and 2 taluka gopalak sanghs during the Sixth Plan with a target of 2 societies and 2 mandies (vashahats) during 1981-82 Plan. An outlay of Rs. 32 lakhs is proposed for the other livestock development programmes for 1980-85 Plan and Rs. 5.80 lakhs for 1981-82 Plan.

Fodder and Feeds Development :

1.7.4.20 It is proposed to take up the integrated fodder development programme comprising of 18200 demonstration plots, 123 silopits, 696 chaff cutters and seed multiplication work in 500 hectares during 1980-85 Plan. The programme envisaged for 1981-82 is 3000 demonstration plots, 30 silopits, 130 chaff cutters and seed multiplication centres in about 60 hectares. It is also envisaged to take up grassland development in 1150 hectares of land in possession of panchayats and such other institutions during the Plan period. Establishment of 3 village fodder development farms is also envisaged during the Plan period 1980-85. An outlay of Rs. 50 lakhs for 1980-85 Plan and Rs. 8 lakhs for the Annual Plan has been proposed for this programme.

1.7.5 Centrally Sponsored Scheme :

1.7.5.1. The following four centrally sponsored Schemes and one ICA scheme are proposed to be continued during the Sixth Plan period 1980-85

1. Scheme for assistance to SF/MF/AL for poultry, sheep and pig production programme.

2. Assistance to small farmers for cross-bred 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 co-ordinated Research Project for study of foot and mouth disease.

1.7.6 Employment :

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 Sixth Plan period out of which 386 persons would get employment during 1981-82. In addition, it is also estimated that there will be indirect employment as a result of the following beneficiary oriented programmes.

Sr. No.	Item	Unit	1980-85	1981-82
1.	Assistance for rearing of cross-bred heifers.	No. of beneficiaries.	3530	1000
2.	Supply of milch animals.	--do--	23890	3800
3.	Assistance for establishing poultry units.	--do--	8650	1865
4.	Assistance for establishing sheep units.	--do--	3700	700
Total:--			39770	7365

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.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Animal Husbandry

Outlays and Expenditure.

(Rs. in lakhs)

Sr. No.	Minor Heads	1979-80 Actuals.	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay.	Capital Content.	Proposed Outlay	Capital Content.
1	2	3	4	5	6	7	8	9
1.	Direction and Administration.	0.92	6.17	6.17	70.00	45.00	2.00	..
2.	Veterinary Education and Training.	2.40	1.50	1.50	12.00	..	1.50	..
3.	Veterinary Services & Animal Health.	26.45	48.46	48.46	295.00	85.42	35.38	7.00
4.	Investigation and Statistics	1.67	2.60	2.60	13.00	..	3.00	..
5.	Cattle Development	180.91	106.25	106.25	703.00	73.35	120.85	11.00
6.	Poultry Development	53.96	63.10	63.10	431.00	92.90	74.47	16.27
7.	Sheep and Wool Development	20.30	15.71	15.71	219.00	60.84	27.00	8.40
8.	Other Livestock Development	0.75	3.75	3.75	32.00	20.30	5.80	2.90
9.	Feeds and Fodder Development.	5.20	5.46	5.46	50.00	..	8.00	..
10.	Nucleus fund under Tribal Area Sub Plan.	..	17.00	17.00	..	..	22.00	..
GRAND TOTAL;		292.56	270.00	270.00	1825.00	377.81	300.00	45.57

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82.

ANIMAL HUSBANDRY

SCHEMEWISE OUTLAYS AND EXPENDITURE

(Rs. in lakhs).

Sr. No.	Number and Name of the Scheme	1979-80 Actuals.	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure.	Proposed Outlay	Capital Content.	Proposed Outlay	Capital Content.
1	2	3	4	5	6	7	8	9
Direction and Administration.								
1.	ANH-1. Expansion of Directorate of Animal Husbandry.	0.92	6.17	6.17	70.00	45.00	2.00	..
Total : I		0.92	6.17	6.17	70.00	45.00	2.00	..
II. Veterinary Education and Training.								
2.	ANH-2. Development of Departmental Personnel.	2.40	1.50	1.50	12.00	..	1.50	..
Total II		2.40	1.50	1.50	12.00	..	1.50	..
III. Veterinary Services and Animal Health								
3.	ANH-3. Improvement of veterinary aid.	7.95	23.53	23.53	200.00	71.21	19.33	7.00
4.	ANH-4. Disease control programme.	6.88	5.21	5.21	50.00	4.21	4.05	..
5.	ANH-5. Strengthening of Biological Products Station.	11.62	19.72	19.72	45.00	10.00	12.00	..
Total : III		26.45	48.46	48.46	295.00	85.42	35.38	7.00
IV. Investigation and Statistics.								
6.	ANH-6. Strengthening of statistical wing.	1.67	2.60	2.60	10.00	..	3.00	..
7.	ANH-7. Estimation of structure and indices of cost of production of live stock 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 :		1.67	2.60	2.60	13.00	..	3.00	..
V. Cattle Development.								
11.	ANH-11. Artificial insemination scheme with semen bank and stud farm.	15.78	18.17	18.17	92.30	25.00	13.53	..
12.	ANH-12. Intensive cattle development programme.	10.15	17.64	17.64	144.00	7.00	20.50	3.00

1	2	3	4	5	6	7	8	9		
13.	ANH-13.	State farm for Gir and Kankrej cattle.	1.30	3.77	3.77	50.00	12.00	5.00	1.00	
14.	ANH-14	Buffloe bull mother farm	..	5.99	5.99	24.00	10.00	1.00	..	
15.	ANH-15	Subsidy to cattle breeding institutions & gaushalas.	34.94	26.14	26.14	80.00	..	21.00	..	
16.	ANH-16	Supply of milch animals in tribal area.	116.70	16.02	16.02	245.70	..	42.02	..	
17.	ANH-17	Locations of cross-bred bulls in tribal areas.	0.34	0.93	0.93	12.00	1.00	1.00	..	
18.	ANH-18	Progeny testing scheme in co-operation with cattle breeding institutions and gaushalas.	..	..	..	2.00	..	1.00	..
19.	ANH-19	Training of adivasis in animal husbandry practices.	0.28	2.78	2.78	5.00	2.35	2.60	2.00	
20.	ANH-20	Establishment of cattle breeding-cum-dairy farming centres at ashramshalas.	..	1.00	1.00	3.00	..	1.00	..	
21.	ANH-21	Assistance to small farmers for cross-bred heifers.	1.29	5.30	5.30	25.00	6.00	6.00	..	
22.	ANH-22	Establishment of livestock production centres in tribal areas.	0.13	8.51	8.51	20.00	10.00	6.20	5.00	
		Total :—V	..	180.91	106.25	106.25	703.00	73.35	120.85	11.00
VI. Poultry Development :										
23.	ANH-23	Former's training	3.02	2.18	2.18	24.00	12.00	1.47	1.07	
24.	ANH-24	Co-ordinated poultry breeding programme	4.69	9.55	9.55	43.00	16.00	8.00	1.50	
25.	ANH-25	Expansion of poultry feed testing testing laboratory	..	..	..	4.00	2.00	..	..
26.	ANH-26	Intensive poultry development Projects	12.35	20.76	20.76	120.00	50.00	31.00	12.00	
27.	ANH-27	State egg marketing federation	0.03	2.90	2.90	20.00	12.90	2.00	1.70	
28.	ANH-28	Development of economically weaker section society by taking poultry farming.	30.27	20.86	20.86	140.00	..	23.00	..	
29.	ANH-29	Integrated poultry development pro ramme	3.60	6.85	8.85	80.00	..	8.00	..	
		Total : VI	..	53.96	63.10	63.10	431.00	92.90	84.47	16.27
VII. Sheep and Wool Development:										
30.	ANH-30	Intensive sheep development block	0.46	11.65	11.56	80.00	2.94	9.00	..	
31.	ANH-31	Pig breeding farm	..	0.20	0.20	0.20	0.20	..	..
32.	ANH-32	Strengthening of sheep beeding farms at Patan and Movvi.	..	..	..	4.00	..	1.00	..
33.	ANH-33	Supervisory unit for sheep extension centres.	1.26	0.70	0.70	18.00	0.80	3.00	0.80	
34.	ANH-34	Service centers for migratory flocks.	..	..	..	25.00	8.00	1.50	0.50
35.	ANH-35	Wool grading centres.	1.58	1.25	1.25	8.00	3.00	1.00	..	
36.	ANH-36	Share capital contribution to the Gujarat Sheep and Wool Development Corporation.	8.00	2.00	2.00	11.00	11.00	2.00	2.00	

0	2	3	4	5	6	7	8	9	
37. ANH-37	Wool utilisation unit.	..	..	..	..	..	..	..
38. ANH-38	Audio-Visual aid.	..	..	..	4.00	..	..	..
39. ANH-39	Modernisation of Wool Analysis Labouratory	..	..	..	4.00	..	0.50	..
40. ANH-40	Sheep breeders co-operative societies	..	..	..	20.00	20.00	4.00	4.00
41. ANH-41	Large scale sheep breeding farms	..	..	..	21.00	5.00	1.50	..
42. ANH-42	Fermentation of Wool Board.	..	..	..	5.00	5.00	1.00	1.00
43. ANH-43	Establishment of goat breeding farm.	..	..	..	8.00	2.00	1.50	..
44. ANH-44	Location of exotic cross-bred rams.	..	..	..	10.80	2.90	1.00	0.10
Total : VII.		..	20.30	15.71	15.71	219.00	60.84	27.00	8.40
VIII. Other Livestock Development.									
45. ANH-45	Expansion of existing exhibition unit.	..	0.50	0.50	3.00	..	0.50	..	
46. ANH-46	Expansion of horse breeding farm.	..	..	..	5.00	2.00	1.50	0.50
47. ANH-47	Expansion of Camel breeding farm.	0.14	0.25	0.25	1.00	..	0.50	..	
48. ANH-48	Rabari bharwad rehabilitation scheme.	0.61	3.00	3.00	15.00	12.00	3.00	2.40	
49. ANH-49	Modernisation of slaughter house.	..	..	..	5.00	5.00	..	..
50. ANH-50	Financial assistance to Cattle Market	..	..	..	2.00	1.30	..	..
51. ANH-51	Scheme for preservation of milch animals (expansion programme)	..	..	..	1.00	..	0.30	..
Total : VIII.		..	0.75	3.75	3.75	32.00	20.30	5.80	2.90
IX. Fodder and Feed Development									
52. ANH-52	Feeds and Fodder Development Programme	5.20	5.46	5.46	50.00	..	8.00	..	
53.	Amount earmarked under Nucleus budget for Tribal Area Sub-Plan.	..	17.00	17.00	..	..	22.00	..
Grand Total :		..	292.56	270.00	270.00	1825.00	371.92	300.00	45.57

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Animal Husbandry

Targets of production and physical achievements (Cumulative)

Sr. No.	Item	Unit	Level of achievement at the end of					
			1978-79	1979-80 (Base year level)	1980-85 Terminal year target.	1980-81		1981-82 (proposed target)
1	2	3	4	5	6	7 Target (level)	8 Likely achievement.	9
I. Animal Husbandry and Dairy Products.								
(i)	Milk	'000 Tonnes	2188	2200	2640	2288	2288	2376
(ii)	Eggs.	Millions	215	240	360	264	264	288
(iii)	Wool.	In lakh kgs.	18.19	18.34	19.24	18.52	18.52	18.70
II. Animal Husbandry Programme.								
(i)	Intensive Cattle Development Projects.	Nos.	8	8	9	8	8	8
(ii)	Mobile Units.	Nos.	13	13	22	17	17	17
(iii)	No. of Inseminations performed with exotic bull semen (annual)	In lakhs.	0.64	0.84	4.67	0.87	0.87	1.17
(iv)	Establishment of Sheeo Breeding Farms.	Nos.	3	4	4	3	3	3
(v)	Sheep and Wool Extension Centres.	„	88	88	102	88	88	94
(vi)	Intensive Sheep Development Projects.	„	2	2	4	2	2	2
(vii)	Intensive Eggs and Poultry Production-cum-Marketing Centres.	„	9	9	12	9	9	11
(viii)	Establishment of fodder seed production farms.	„	4	4	4	4	44	
(ix)	Veterinary Hospitals.	„	19	19	19	19	19	19
(x)	Veterinary Dispensaries.	„	211	211	211	211	211	211
(xi)	Veterinary Stockman Centres.	„	457	462	542	514	514	514
(xii)	Poly Clinics.	„	..	..	2	1	1	1

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

ANIMAL HUSBANDRY

CENTRALLY SPONSORED SCHEMES-OUTLAYS

(Rs. in lakhs)

Sr. No.	Name of the scheme	1979-80 Actuals			1980-85 Proposed Outlay			1980-81 Outlay			1981-82 Outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Scheme for assistance to SF/MF/AL for poultry, sheep and pig production programme	27.40	27.40	54.80	120.00	120.00	240.00	18.83	18.83	37.66	19.00	19.00	38.00
2.	Assistance to small farmers for cross-bred heifers	1.31	1.31	2.62	25.00	25.00	50.00	5.30	5.30	10.60	6.00	6.00	12.00
3.	Rinderpest Eradication :												
	(A) Establishment of vigilance unit	0.54	0.54	1.08	7.03	0.02	14.05	0.62	0.62	1.24	0.70	0.70	1.40
	(B) Rinderpest surveillance and containment vaccination programme	0.12	0.12	0.24	2.00	2.00	4.00	0.30	0.30	0.60	0.35	0.35	0.70
4.	Disease control programme for foot and mouth disease (Purchase of vaccine)	1.90	2.30	4.20	12.29	6.22	18.51	2.15	1.16	3.24	2.00	1.00	3.00
	Total	31.27	31.67	62.94	166.32	160.24	326.56	27.21	26.21	53.34	28.05	27.05	55.10
I. C. A. R. Scheme :													
5.	All India Coordinated Research Project for study of foot and mouth disease	0.14	0.42	0.56	1.26	3.76	5.02	0.16	0.46	0.62	0.20	0.60	0.80

1.8. DAIRY DEVELOPMENT

1.8.1. Introduction.

1.8.1.1. Dairying, which is an effective instrument for bringing about socio-economic changes in the rural areas ensures economic uplift of small and marginal farmers, milk producers, and agricultural labourers, by encouraging them to take up dairy activities as a means of increasing their income. The State Government has been following policy of the encouraging dairy development in co-operative sector offering gainful subsidiary occupation to the milk-producers with a view to improving their present economic condition. In the State, where there is no co-operative union or the union is weak to take up dairy development, this work is done through Gujarat Dairy Development Corporation Limited.

1.8.2. Review of Progress

1.8.2.1. Out of 19 districts in the State, 13 districts have modern dairies. In the remaining six districts except Dangs district. *viz.* Valsad, Panchmahals, Kachchh, Surendranagar and Gandhinagar, the dairies are at different stages of construction/erection. At the end of 1977-78, the installed capacity of milk product factories and liquid milk plants was 18.52 lakh litres per day and this has risen to 20.28 lakh litres per day at the end of 1979-80. The handling capacity of these units increased from 13.96 lakh litres per day at the end of 1977-78 to 17.32 lakh litres per day at the end of 1979-80. The number of cattle feed factories which was 6 at the end of 1977-78 rose to 7 at the end of 1979-80. The installed capacity of the cattle feed factories which was 800 tonnes per day rose to 900 tonnes per day.

1.8.2.2. During 1978-79, 5 district milk producer's unions had been assisted for establishment/expansion of dairies/chilling centres and about 425 primary co-operative societies were established. The financial assistance to the extent of about Rs. 45 lakhs was given to the unions and feeder societies. This included about Rs. 36 lakhs under Tribal Area Sub-Plan.

1.8.2.3. During 1979-80, five district unions were assisted for the above purpose and about 300 primary societies have been formed. Gujarat Dairy Development Corporation has taken over Ahmedabad dairy from Ahmedabad Municipal Corporation. Government has given Rs. 232 lakhs as share capital contribution for the purchase of this dairy. In addition, Rs. 7 lakhs were provided as share capital to Gujarat Dairy Development Corporation for its activities.

Operation Flood Programme-I

1.8.2.4. The Government of India with 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 was approved by the Government of India. This project was started in July 1970 and six districts *viz.* 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 per day and from 5 to 7 lakh litres per day respectively and two new dairies at Palanpur and Himatnagar were established to handle 1.5 lakh litres each per day. 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 activities were also provided to the members of the societies in these districts. About Rs. 10 crores have been paid to the above district unions as loan and subsidy in the ratio of 70% loan and 30% grant respectively upto 1977-78. During 1978-79 an amount of about Rs. 5 crores was further provided to these unions for expansion/installation of dairies and cattle feed plants and technical inputs etc. During 1979-80, an amount of about Rs. 3 crores has been paid to these unions under Operation Flood Programme-I. The programme is expected to be continued upto March 1981.

Operation Flood Programme-II

1.8.2.5. This programme has commenced from 2nd October, 1979 in the Country. In Gujarat State, out of 19 districts, 16 districts except Amreli, Bhavnagar, and Dangs districts, are covered in the two clusters. The cluster-I comprises districts of Banaskantha, Sabarkantha, Kheda, Mahesana, Panchmahals, Vadodara, Surat, Bharuch, and Valsad. An amount of Rs. 41.56 crores has been proposed for this. This project will be implemented by Gujarat Co-op. Milk Marketing Federation Ltd. The Cluster-II comprises districts of Kachchh, Jamnagar, Surendranagar, Junagadh, Rajkot, Ahmedabad and Gandhinagar. An amount of Rs. 15.63 crores has been proposed for this. This project will be implemented by Gujarat Dairy Development Corporation.

1.8.2.6. At the end of 1979-80, more than six thousand primary societies comprising of about 7.53 lakh members of the milk producers (agricultural labourers, small and marginal farmers) were supplying milk to the respective district milk plants.

1.8.3. Programme for Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

1.8.3.1. The main features of the Dairy Development Programme for the Sixth Five Year 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 handing capacity from around 17 lakh litres a day to around 20 lakh litres a day and to increase the installed

capacity from around 20 lakh litres a day to around 27 lakh litres a day;

4. To establish 4 liquid milk plants, 6 instant milk cooling centres and 10 chilling centres to cover more milkshed areas.

1.8.3.2. An outlay of Rs. 265 lakhs has been proposed for the Sixth Five Year Plan and Rs. 40 lakhs for the Annual Plan 1981-82. The details of these outlays are briefly as under:-

(Rs. in lakhs)

Sr. No.	Programme	1979-80 Actuals	1980-81		1980-85 Proposed Outlay	1981-82 Proposed Outlay
			Outlay	Anticipated Expenditure		
1	2	3	4	5	6	7
1.	Direction and Administration	..	..	..	4	..
2.	Dairy Development	278	28	28	255	39
3.	Research, Education and Training	4	2	2	6	1
Total		282	30	30	265	40

1.8.3.3. Out of the Sixth Plan and Annual Plan 1981-82 outlays of Rs. 265 lakhs and Rs. 40 lakhs respectively, the flow to the Tribal Area Sub-Plan proposed is at Rs. 86 lakhs and Rs. 14 lakhs respectively. It is expected that in addition to the flow from the State Plan, outlays, special central assistance of Rs. 39 lakhs and Rs. 7 lakhs would be made available for Sixth Plan 1980-85 and Annual Plan 1981-82 respectively.

Financial Assistance to District Cooperative Milk Producers Unions and Feeder Societies.

1.8.3.4. 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 nationalised banks. In addition, financial assistance will also be given to primary cooperative milk societies for purchase of cans utensils etc. at the rate of Rs. 2000 each and for managerial subsidy at the rate of Rs. 100 per month per society for two years in tribal area.

1.8.3.5. Provision of Rs. 110 lakhs for the Sixth Plan and Rs. 20 lakhs for the Annual Plan 1981-82 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 1500 primary

cooperative societies will be formed in the milkshed areas of the district unions and the dairies under Gujarat Dairy Development Corporation to supply milk to the organised dairy plants.

1.8.3.6. This will generate direct employment for about 3000 persons and provide indirect benefit to 75,000 milk producing families, who are members of the societies. This scheme will benefit the tribal areas, small and marginal farmers and agricultural labourers also.

1.8.3.7. It is proposed to assist 5 district milk unions and to establish 100 primary cooperative societies during 1981-82.

Financial Assistance to Consumers Cooperative Societies.

1.8.3.8. 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. Consumer 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 Sixth Plan period. An amount of Rs. 5 lakhs has been proposed for the Sixth Plan for giving financial assistance to consumers' cooperative societies. This will create employment for more than 100 persons. The consumers of such towns will get the pasteurised milk and milk products of the dairies at a reasonable rate.

Banni Development Scheme:-

1.8.3.9. The area of Banni lies on northern side of main land of Kachchh. It has reclaimed alluvial flat area of 828 Sq. miles covering population of about 11,000. It is mostly inhabited by nomadic cattle breeders with good numbers 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 drought due to 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. An outlay of Rs 20 lakhs has been proposed for the Sixth Plan with a target of collecting 5000 kgs. of grass seeds and land development in 2500 hectares. An outlay of Rs 4 lakhs has been proposed for the Annual Plan 1981-82 envisaging collection of 500 kgs. of grass seeds and land development in 500 hectares.

Share Capital Contribution to Gujarat Dairy Development Corporation Limited, Gandhinagar.

1.8.3.10. Government has formed Gujarat Dairy Development Corporation with authorised share capital of Rs 200.00 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 handover 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 any equipments, materials and construction of building, plants etc.

1.8.3.11. By the end of 1979-80, share capital of Rs 339.38 lakhs has been paid and an amount of Rs. 100.00 lakhs is proposed to be paid during the Sixth Plan period. An amount of Rs 15 lakhs has been proposed for the year 1981-82 as share capital.

Financial Assistance to District Cooperative Milk-Producer's Unions administered through Gujarat Dairy Development Corporation for milk enhancement programme in their milkshed areas.

1.8.3.12. The Gujarat Dairy Development Corporation has been taking up dairy development in

the State on massive scale. To increase the milk production, it will be necessary to take up milk enhancement programme such as artificial insemination, cross-breeding, fodder development, balanced cattle feed etc. By this programme, the milk production is expected to be increased by about 1.50 lakh litres a day. The veterinary officers and technical staff will be required for implementing this programme. Under this scheme financial assistance will be given to the district cooperative milk producer's unions on the intensive cattle development programme pattern i.e. assistance is given to district cooperative milk producer's unions for running intensive cattle development programme.

The pattern is as under:-

Year	Assistance
First Five Years	100%
Sixth Year	75%
Seventh Year	50%
Eight Year	25%

An outlay of Rs. 20 lakhs is proposed for 1980-85 which is likely to generate employment for about 300 persons.

Technicians Training Centre, Mahesana (Grant-in-Aid to National Dairy Development Board, Anand)

1.8.3.13. The training programme which was started in Fifth Plan period is proposed to be continued during Sixth Plan period. It will cater to the needs of providing technicians for different dairy plants. The scheme will also ensure continued supply of the technicians for cattle development and other animal husbandry programme. The State Government will give grant-in-aid to National Dairy Development Board, Anand for running this scheme. An amount of Rs. 6 lakhs is, therefore, proposed for this purpose for Sixth Plan period and for 1981-82, an amount of Rs. 1 lakh is proposed.

Strengthening of Organisation.

1.8.3.14. 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 Agriculture 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 1980-85 for this programme.

Statement showing the handling of milk by organised dairies of the Gujarat State during 1979-80.

(in lakh litres)

Sr. No.	Name of the Dairy	Installed capacity of milk per day	Handling capacity of Milk per day
I. Co-operative Milk Product Factories :			
1.	Kaira District Co-operative Milk Producers' Union Ltd; Anand.	7.00	4.88
2.	Mehsana District Co-operative Milk Producers' Union Ltd; Mehsana.	4.50	4.05
3.	Rajkot District Goralak Co-operative Milk Producers' Union Ltd; Rajkot.	0.40	0.20
4.	Banaskantha District Cooperative Milk Producers Union Ltd; Palanpur.	1.50	1.30
5.	Sabarkantha District Cooperative Milk Producers' Union Ltd ; Himatnagar.	1.50	2.17
II. Liquid Milk Plants.			
6.	Ahmedabad Municipal Dairy, Ahmedabad.	1.40	1.61
7.	Surat District Co-operative Milk Producers' Union Ltd; Surat.	1.50	1.54
8.	Baroda District Co-operative Milk Producers' Union Ltd; Baroda.	1.00	0.84
9.	Bharuch District Co-operative Milk Producers' Union Ltd; Bharuch.	0.40	0.25
III Under Gujarat Dairy Development Corporation, Gandhinagar.			
10.	Junagadh Dairy, Junagadh.	0.25	0.09
11.	Jamnagr Dairy, Jamnagar.	0.25	0.04

12.	Dudhsarita Dairy, Bhavnagar.	0.08	0.08
13.	Amreli Dairy, Amreli.	0.20	0.06
14.	Godhra Dairy, Godhra.	0.30	0.21
Total :		20.28	17.32

Sixth Five Year Plan-Targets and Achievement 1980-85).

Sr. No.	Items.	Base year level 1979-80	Anticipated achievement 1980-81	Target 1984-85
1	2	3	4	5
1.	(a) Milk Product factories.	5	5	5
	(b) Liquid milk plants	9	10	13
	Total :	14	15	18
2.	Installed capacity in lakh litres per day.	20.28	22.00	27.00
Dairy Co-operatives				
(Primary Cooperative Milk Producers Societies).				
(a)	Number	6200	6350	7000
(b)	Total membership (in lakh).	7.53	7.63	8.03
(c)	Quantity of milk handled in lakh litres, per day	17.32	17.82	20.00
3.	Cattle Feed Factories.			
(a)	Number	7	7	8
(b)	Installed capacity in tonnes per day.	900	900	1200

Draft Sixth Five Plan 1980-85 and Annual Plan 1981-82

Dairy Development

Minor Headwise Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Minor Head	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
1.	Direction and Administration	..	..	..	4.00	..	..	..
2.	Dairy Development	277.85	28.00	28.00	255.00	100.00	39.00	15.00
3.	Research, Education and Training	4.00	2.00	2.00	6.00	..	1.00	..
	Total	281.85	30.00	30.00	265.00	100.00	40.00	15.00

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Dairy Development

Schemewise Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
I. Direction and Administration								
	DMS-1. State Level Organisation		..	..	4.00	..	..	..
II. Dairy Development								
2.	DMS-2. Financial assistance to District Cooperative Milk Producers' Unions and Fedder Societies	19.83	14.00	14.00	110.00	..	20.00	..
3.	DMS-3. Financial assistance to Consumers Co-op. Societies	..	..	..	5.00	..	..	..
4.	DMS-4. Banni Development Scheme	1.02	4.00	4.00	20.00	..	4.00	..
5.	DMS-5. Share Capital Contribution to Gujarat Dairy Development Corporation	257.00	10.00	10.00	100.00	100.00	15.00	15.00
6.	DMS-6. Financial assistance to Dist. Co-op. Milk Producers' Unions administrated through GDDC. for milk enhancement programme	..	..	..	20.00	..	..	..
III. Research, Education and Training :								
7.	DMS-7. Technician's Training Centre, Mehsana (Grant-in-aid to National Dairy Development Board, Anand)	4.00	2.00	2.00	6.00	..	1.00	..
	Total	281.85	30.00	30.00	265.00	100.00	40.00	15.00

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Dairy Development

Targets of Production and Physical Achievements

Sr. No.	Item	Unit	Level of achievement at the end of—					
			1978-79	1979-80 (Base year level)	1980-85 Terminal Year Target	1980-81 Target	1980-81 Likely Achievement	1981-82 Proposed Target
1	2	3	4	5	6	7	8	9
(i)	Fluid milk plants (including composite and feeder/balancing milk plants) in operation	No. (Cumulative)	8	9	13	10	10	10
(ii)	Milk products factories including creameries in operation	-do-	5	5	5	5	5	5
(iii)	Dairy cooperative unions	-do-	18	18	18	18	18	18

1.9 FISHERIES

1.9.1. Introduction

1.9.1.1. The State has an excellent marine, 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 1600 kms from Lakhpat in Kachchh District to Umargaon 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 potential fishable inshore, off shore and deep sea fishing areas. Besides, the coastal belt of Gujarat provides large numbers 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, 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 do offer considerable scope to support lacustrine fisheries in the State.

1.9.1.3. Our Marine waters surrounding Saurashtra Peninsula comprises the richest fishing grounds consisting of the most important commercial varieties of fish such as Pomfrets, Hilsa, Gol-dara, Perches, Sharks, Cat fish, Bombay ducks, Tuna in these waters, besides availability of crustaceans namely Prawns Shrimps, Crabs,lobsters among our marine life. It has been now an established fact that the waters off 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, chanks 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 and 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 to in the fuel, fishermen were compelled to restrict their fishing voyages. As a result fish landed in Gujarat during the year 1979-80 works out to be 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 generating significant permanent self-employment of the fisherman, assistance was provided for mechanisation of 1946 fishing vessel (Powered with 1050 inboard marine diesel engines and 896 outboard motors) and for construction of 947 wooden boats hulls all along. 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 year (1979-78) of the Fifth Five Year Plan. Against this assistance for 784 Mechanised fishing vessels. 342 fully meachanised trawellers of 11.5 mt. size and above on 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 speel of past two Annual Plans (1978-80), 12 fish seed farm for supporting inland fisheries including last 3 being completed in 1980-81 have been established being spill over works in progress. About 900 h/a of village tanks have been improved for inland pisciculture. Reservior fisheries have been takes up in 29 reservoirs so far. 1261 fisher youths/girls have been trained in various aspects of marine fisheries and 1229 Tribals/Weaker Section 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 existance by now, this include 60 co-operatives on marine fishies side and 107 co-operative in inland fisheries including 46 societies in tribal areas.

1.9.2.3. Apart from above the progress of activities under this sector are as under.

1.9.2.4. In addition to the progress ventilated the following supporting facilities have also been created during last 29 years of the development programme. Service stations at Veraval, Mangrol, Porbandar, Umargam, Valsad, Mandhwad, Okha, Jamnagar and Salaya for installation and repairs of engines in the mechanised fishing vessels of the State.

(i) Boat building yards through Government aid at Veraval, Porbandar, Mangrol, Umorgam Valsad and Jafrabad.

(ii) Ice factory and cold storages through Government aid at Kandla, Jamnagar, Porbandar, Veraval and Umergam.

(iii) 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.

(iv) 3 Training Centres for imparting training to fisher youths and girls in marine fisheries at Veraval, Porbandar and Valsad.

(v) 3 training centres two at Ukai and one at Vansda to impart training on inland fisheries to adivasis and weaker section.

(vi) Research stations on marine fisheries at Okha with sub-stations at Sikka, Bhavnagar and Bharuch.

(vii) Research station in inland fisheries at Ukai.

(viii) Fish farmer Development Agencies at Surat and Godhra.

(ix) Level of exporting of fish and its bye-products 3954 tonnes worth Rs. 12.69 crores in 1978-79.

1.9.2.5. It is estimated that 59,000 fishermen including 3000 adivasis are involved in fishing industry permanently by now.

1.9.3. Proposals for the Sixth Five Year Plan 1980-85 and the Annual Plan 1981-82.

1.9.3.1. Approach and Strategy

1.9.3.2. Keeping in view the vast potentiality and resources to richly available 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 at an estimated cost of Rs.2150.00 lakhs.

(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 and thereby.

(4) To enhance the income of this 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-mari-culture and coastal aquaculture resources aiming at intensifying scientific approach in fish farming, fish culture of selected varieties of commercial importance and increase fish production systematically in these so far untapped and unexploited virgin field.

(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.

(9) to further streng then the integrated rural development programme involving tribals and weaker section in fish farming along with cropping, animal husbandry, poultry, flowery, duckery, apiary and piggery.

1.9.3.3. 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 castes. The efforts has, therefore, been in the direction to improve the economic condition 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 employment opportunities by way of imparting skills through training on modern method and opening spheres of activities has been a part of this sectoral programme.

1.9.3.4. It is, therefore, proposed on marine fisheries side to give aid to the fishermen to increase mechanised fishing vessels, provide them with ancillaries such as nets, twines, floats, winches, gundies and shore facilities for landing and berthing, processing, preservation and quick transport, provide training to them and their children on modern fishing technology, processing, preservation, boat building, shore mechanics, engine drivers, master fishermen, deckhands, institute a survey to assess all the fishery resources and to explore them to the optimum, whereas on inland fishery side, also it is envisaged to set up additional fish seed production/rearing farms and to expand the existing ones as required, to augment the resources of reservoirs and tanks and all suitable

fresh water sheets and water logged area, to develop composite fish culture in the village tanks and farm ponds especially in the backward area and tribal area by improving them suitably for pisciculture, to institute training programme for the tribals and weaker sections.

1.9.4. A broad distribution of the outlays over the various programmes for the Sixth Five Year Plan 1980-85 and Annual Plan 1981-82 is shown in the following table.

(Rs. in lakhs)

Sr. No.	Programme	1979-80 Actuals	1980-81		1980-85 proposed outlay	1981-82 proposed-outlay
			outlay	Anticipated Expenditure.		
1	2	3	4	5	6	7
1.	Direction and Administration.	1.07	1.44	1.44	45.00	8.58
2.	Extension	3.15	3.40	3.40	90.00	41.46
3.	Research.	11.37	33.56	28.95	218.51	44.53
4.	Education and Training.	7.30	21.59	20.21	89.91	26.85
5.	Inland fisheries.	72.17	97.92	99.19	636.25	121.48
6.	Deep Sea fisheries.	5.83	4.40	12.40	76.40	9.00
7.	Processing, preservation and marketing.	97.08	74.90	74.90	421.09	120.24
8.	Mechanisation and improvement of fishing crafts.	82.48	61.64	61.55	411.60	74.93
9.	Other programmes.	35.21	26.15	25.55	161.24	22.93
Total		315.66	325.00	327.59	2150.00	470.00

1.9.4.1. Out of the Sixth Plan and Annual Plan 1981-82 outlays of Rs. 2150 lakhs and Rs. 470 lakhs, the flow to the Tribal Area Sub-Plan is Rs. 350 lakhs and Rs. 72 lakhs to the T. A. S. P. It is expected that in addition to the flow from the State Plan outlay, special Central assistance of Rs. 90 lakhs and Rs. 18 lakhs would be made available for the Sixth Plan 1980-85 and Annual Plan 1981-82.

1.9.4.2. The expected level of fish production in 1984-85 is likely to be about 4 lakh tonnes.

1.9.4.3. Direction and Administration:- This envisages the organisation of the ministerial staff for the following purposes.

- (1) Audit and reconciliation cell,
- (2) Budget and Budget performance
- (3) Strengthening the statistical cell,
- (4) Strengthening planning and monitoring cell.
- (5) Strengthening the setup for other administrative personnel management work.

1.9.4.4. Extension.—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 needed and the problems, success and failures of the performance actually done by the fish farmers in their own field and solved them on the spot itself and in required cases to take such problems to the laboratory.

1.9.4.5. Research : Survey, investigation and exploitation programmes are taken up to support the production oriented programme of the fisheries sub-sector through various research and investigation. 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 of Saurashtra waters off Dwarka to Jakhau and in the Gulf of Kachchh to know habits and habitats of various marine life 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 is to continue various research studies on plankton off Gujarat water, survey and availability of various flora and fauna in the Gulf of Kachchh, hydrographical survey and analysis of sea water, biological studies of different fisheries oysters and marine life, problem on water pollution and its effect on marine life, survey rearing and culture of sea weeds, edible oysters, pearl

oysters, prawns, processing of trash fish which has no commercial value to create bye-products and various edible preparation to fetch better value and better utilisation of the same, preparation of shell grit, fish protein concentrate (FPC) powder, survey of coastal aquaculture resources, establishment of brackish water fish and mariculture fish farming.

1.9.4.6. The physical programme envisaged during 1980-85 and 1981-82 is as under :—

Brackish water fish farms,—

- (a) Jodia:—Completion of 6 ponds/5 ha. in 1981--82 and expansion of 10 ha. to be completed in 1984--85.
- (b) Mundra:— Completion of 6 ponds 5ha. in 1982-83 and further expansion of 6 ha. in 1984--85.
- (c) Mengam:— Completion of 4 ha. by 1982--83.
- (d) Sultanpur:— Completion of 5 ha. by 1983--84.
- (e) Naginawadi (Ahmedabad) :—Aquarium to be completed by 1984--85.
- (f) Edible Oyster Farm and office-cum-laboratory at Sikka to be commissioned in 1983--84.

To fulfil the above requirements it is proposed to provide Rs. 218.51 lakhs for 1980-85.

1.9.4.7. Education and Training.—The Programme includes (1) Training to departmental personnel and (2) training to fisher-youths and girls on various aspects of fisheries, fish processing, gear technology, engine driver and allied courses on marine fisheries training centres at Veraval, Porbandar and Valsad are to continue and a new one is envisaged at Umargam and training complex at Porbandar is to come up during the Sixth Plan 1980-85 period.

1.9.4.8. Inland Fisheries.—While Gujarat offers vast potential scope for development of inland fisheries, the programme in this field is slow due to natural conditions as also partially due to local causes. The programme covers mainly two programmes:

- (1) Fish seed production and augmentation of inland fisheries resources.
- (2) Exploitation of inland and fisheries resources.

It is envisaged to establish fish seed production/rearing farms in direction to self-sufficient in fish seed procurement from the State resources itself. About 5/6 crores fish seeds are procured from Calcutta (West Bengal) on an average every year. It is anticipated that about 11 crores of fish seeds would be annual requirement to stock potential water sheets in the State. At present six fish seed farms at Dantiwadga, Prantij, Lingda, Godhra and Kakrapar are run departmentally. Besides two fish seed rearing farms at Sanjti and Bhadar are established by other

agencies like Panchayat and Central Fisheries Corporation (now run by Gujarat Fisheries Central Co-operative Association Ltd.) respectively. It also envisages reservoir fisheries exploitation through weaker sections, improvement of village tanks and ponds for pisciculture, aquaculture in fresh water, sheets, besides there is a special integrated rural development programme in tribal area only for fish farming along with cropping, poultry, animal husbandry, apiary, piggery, duckery and flowery. 50% of subsidy is granted on this aspect at maximum of Rs. 25,000 per unit. 14 such units have been assisted during 1979-80. Village tanks covering 900 hectares have been improved during 1978-79 (two years) for fish culture. 50% subsidy limited to Rs. 3,000 per hectare is granted for improvement of the tank for the 1st year only whereas subsidy on input is granted @50%, 40% 30%, 20% and 10% respectively over a period of 5 years from the year of commencement to the beneficiaries. The subsidy is reimbursed to the banks granting loan to the beneficiaries for the purpose. Activities of Fish Farmers Development agencies at Surat and Godhra are to be strengthened, the cost on this activity is to be shared at 50:50% between the State and the Government of India.

1.9.4.9. Similary I. C. A. R. Scheme for fish seed production through composite fish culture of Indian and exotic varieties and ecological study of reservoir fisheries taken up during 1975-76 is to continue during 1981-82. The expenditure envisaged of Rs. 3.12 lakhs is to be shared at 25:75% between the State and the I. C. A. R. respectively.

1.9.4.10. Tribal Area Sub-Plan:— Rs. 71.83 lakhs and Rs. 350.41 lakhs are earmarked from an outlay of Rs. 121.48 lakhs and Rs. 636.25 lakhs proposed respectively for Annual Plan 1981-82 and Sixth Plan 1980-85 for inland fisheries under the State Plan since only inland fisheries resources are available in all the districts and tribal pockets identified in Gujarat for Tribal area development. Besides, Rs. 90.34 lakhs and Rs. 18.15 lakhs are also proposed for the Sixth Plan 1980-85 and Annual Plan 1981-82. Under special central assistance for tribal area sub-plan it includes integrated rural development programme which envisages establishment of unit comprising of fish farming, cropping, animal husbandry, poultry, flowery, apiary etc., mobile units for rendering service to adivasis in transplanting fish seeds, fry/fingerlings rearing, fish culture, supply of inputs, technical guidance in fish culture, capture of fish and its marketing through co-operatives, renovation of tanks/ponds in tribal area for composite fish culture, reservoir fisheries and training. This is in addition to the normal tribal plan of the State which covers procurement of fish seeds from West Bengal and various local sources of the State for rearing and stocking the same in suitable water sheets in tribal area, subsidy for various inputs, training in reservoir fisheries and engaging adivasis in improvement of village tanks.

1.9.4.11. Three existing training centres, two at Ukai and one at Vansda with capacity of 130 seats per annum are to continue to impart training to adivasis and weaker sections in all modern aspects on inland fisheries in fresh water sheets and reservoirs during 1981-82.

1.9.4.12. Fish seeds farms at Valan (Vansda) and Pipodara are expected to be completed during 1980-81 and additional ones at Vanzana (Kakrapar command area) and Ukai (new farm) and Kadana are proposed to be taken up during 1981-82. In addition 5 fish farms would be established during Sixth Plan period.

1.9.4.13. Deep Sea Fisheries: Rs. 12 lakhs are proposed for 1981-82 which envisages operation of two department steel trawlers based at Porbandar for exploratory deep sea fishing off Saurashtra Waters beyond 25 fathoms to 40 fathoms and grant of subsidy to the Gujarat Agro Marine Products Ltd., towards interest to be paid by the Corporation on the loan raised for procurement of two Mexican trawlers, is to be granted in accordance with guarantee given in the terms and conditions agreed by the Government.

1.9.4.14. The aim of the programme is to explore the deep sea fisheries grounds through demonstration voyages and transmit the data of available good resources for deep sea fisheries. During 1980-85 it is proposed to provide an outlay of Rs. 76.40 lakhs and for 1981-82 Rs. 9 lakhs is proposed.

1.9.4.15. Processing and preservation and Marketing. Since loans for marketing and other activities undertaken by the co-operatives are now forthcoming through National Co-operative Development Corporation, no provision is proposed in the State plan budget since last two years for the scheme--Marketing of fish through co-operatives. Similarly the scheme namely Processing and Preservation under the planned programme is kept in abeyance as the activities are now covered under the research programme at Okha. The scheme, "Infrastructural facilities" and fish based ancillary industries is now to continue under this programme the same being one of the backbones for sustenance and growth of fishing industry in the State.

Infrastructural/Shore facilities:

1.9.4.16. By now Gujarat fishermen have 9301 fishing vessels which include 3284 mechanised fishing vessels (2454 powered with the inboard marine diesel engines for off-shore fisheries and 830 powered with the outboard motors for inshore fisheries). Due to inadequate landing and berthing facilities in South Gujarat, about 45 mechanised fishing trawlers of Gujarat operated off Bombay and landed their catch directly at Bombay. These catch would be about 67,500 tonnes of fish of an estimated cost above Rs. 14.85 crores.

1.9.4.17. Foreseeing these types of difficulties we had approached for creating adequate landing and berthing facilities in Gujarat as early as in 1976. Improved through the systematic, balanced and study development of fisheries in Gujarat and its richest potentialities the World Bank, in the first instance has approved an "Integrated Marine Fisheries Project" for the development of Veraval and Mangrol as fishing harbours with all facilities at an estimated cost of Rs. 34.17 crores.

1.9.4.18. Integrated Marine Fisheries Project- A World Bank assisted Project:-

The progress made so far under this project is summarised as under:-

(1) An auction hall, a Management building and a Canteen building at Veraval and working sheds surrounding Seven fishing villages of the project area are completed.

(2) A western breakwater at Veraval has been completed upto a length of 100 meters out of total projected length of 334 metres. Eastern break water work is to be initiated in September, 1980. Out of 7.08 lakhs cu.m. of basin, excavation of 3.00 lakhs cu.m. is completed.

(3) At Mangrol, a western breakwater has been completed to the extent of 300 mts. length out of the total projected length of 445 mts. secondary breakwater with a full length 190 mts. is completed.

(4) Out of 33.5 Kms. of approach roads, about 3.5 Kms. of road is remaining to be completed during 1980-81.

(5) Water supply scheme of five fishing Villages have been taken up. Out of these five schemes, a water supply scheme for Mangrol-Bara has been linked up with the similar programme for Mangrol proper and the work is in progress. While the work for the remaining 4 villages is in tendering stage.

(6) An independent water supply scheme for Veraval port has been designed in collaboration with the Gujarat Industrial Development Corporation of the State with an estimated cost of Rs. 195.89 lakhs for the requirement 2,00 MGD of water per day. This scheme is being revised keeping in view the observations made by the Government of India.

(7) Test fishing surveys have been undertaken along the Gujarat Coast since January, 1979 through a Dutch "Vessel" (40.5 m. size) and along the Andhra Pradesh coast since April, 1979.

(8) Market Study through Indian Institute of Management Ahmedabad has been initiated since April, 1979.

(9) Out of 270 mechanised fishing vessels of 14.8 m. size, 85 MFVs have been supplied to the fisherman. It is envisaged to supply another 95 MFVs during the year 1980-81.

(10) Out of 1400 OBMs to be supplied 500 OBMs are expected to be received by the end of March, 1981. Two Net Making machines are also expected to be received by the end of December, 1980. Out of 350 canoes of 9 m. size about 100 canoes are expected to be ready by the end of March, 1981 and the remaining would be ready by the end of December 1981.

1.9.4.19. World Bank Finance and Government of India Share.

As per the agreement between IDA-India and IBRD-India, the World Bank finance would be under :-

- | | |
|--|------|
| 1. Dredging equipment and spares. | 100% |
| 2. Civil works under harbour and other civil works under traditional fishermen sub project. | 50% |
| 3. consultancy services | 100% |
| 4. Test 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. | 55% |

1.9.4.20. (a) Based on this agreement the World Bank project has been implemented since September 1977 and till the end of March, 1979 the GOI was releasing funds on the basis of 100% central assistance for these two parts. However, in November 1979, the GOI released the funds (GOI share) at the rate of 50% only on the entire expenditure stating that the remaining 50% would be shared by the State Government in view of the changed pattern by the Planning Commission. This revised policy increases the State share as the State Government will have to provide for this finance in Plan budget which was never anticipated at the time of acceptance of this World Bank aided project. Even while approving the purchase of a Dredging equipment recently the GOI has mentioned that the 50% of the cost of the equipment will have to be borne by the State Government and the Central assistance would be to the extent of 50% only. This seems to be unreasonable especially when the World Bank aid towards this item is to the extent of 100% of foreign expenditure or 100% of local expenditure. Thus,

it would be seen that even though the GOI is to receive 100+ finance from the IDA/IBRD, the State Government will have to share on the basis of 50:50. In view of the fact that the World Bank Project has been taken up for implementation by the State in 1977 as per agreement with the World Bank by the Government of India when 100% central assistance for the civil works was assured by the Government of India and that the project work is in its full swing and has now already reached the half way and as it is expected to be completed in 1982-83. the Government of India may now honour its obligation to continue especially this World Bank Project as a fully centrally sponsored scheme.

1.9.4.20. (b) Since the World Bank is contributing 50% and more of the expenditure on this Project, the remaining expenditure upto 50% should be spared by the GOI from Central funds for this project because of the fact that even in case of normal schemes of landing and berthing facilities outside the World Bank Project, 50% of the expenditure is made available from the GOI funds.

1.9.4.21. The work on the project for Jakhau and Madhwad will be completed by 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 station are being completed at these centres where insulated trailer vans for quick transport of fish are also provided.

1.9.4.22. 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.

1.9.4.23. 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.

1.9.4.24 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 ports.

1.9.4.25 Marine Fisheries.

The proposals envisaged under the 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.

1.9.4.26. 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 from 1978-79.

1.9.4.27. 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 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 supply of fishing requisites only for non-mechanised vessels in the State.

1.9.4.28 The progress of the main components viz., financial and physical for mechanised fishing vessels canoes fitted with outboard motors, 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 Unit Nos.	Canoes fitted with out-board motor unit Nos.	Inboard engines Nos.	Out-board motors Nos.	Wooden boats Nos.
1	2	3	4	5	6	7
1978-79	..	125	..	309	..	..
1979-80	82.48	217	..	131	..	13
1980-81 (anticipated)	61.64	120	100	90	235	80
Proposed						
1981-82	74.93	130	125	120	565	90
1980-85	411.60	700	380	750	1400	500

1.9.4.29 It is estimated that additional employment for over 4,570, 7,250 and 22,500 will be generated during 1980-81, 1981-82 and during Sixth Plan period (1980-85) on implementation of this programme.

1.9.4.30. 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 (Kachchh) and Shivrajpur (Jamnagar district) is envisaged in the Sixth plan by 1983-84. 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 its repairs at scheduled rates.

1.9.4.31 Other Programmes:

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.

1.9.4.32 Managerial subsidy is granted at, 100%, 75% and 50% respectively in the first

second and third year to the society. It is envisaged to grant managerial subsidy to 10, 8 and 10 Co-operatives respectively and share capital contribution to 126, 15 and 25 Co-operatives during 1980-85 (Sixth Plan period), and 1981-82.

1.9.4.33 Works for construction of 129 quarters at various places are in progress and new works for 2 office buildings and 19 quarters are proposed for 1981-82 and during 1980-85 (Sixth plan period) it is expected to complete work for 129 quarters which is in progress and to take up 145 quarters and two office buildings one each at Jakhau and Umargam. To continue the activities it is proposed to provide an outlay of Rs. 161.24 lakhs for 1980-85 and Rs. 22.93 lakhs during 1981-82.

Employment :

1.9.4.34, It is estimated that about 29,250 persons (fishermen and adivasis) would get permanent self-employment. Table below indicates the employment that may generate during Sixth plan period 1980-85.

Item	Permanent self-employment generated No. of persons.		
	1980-85 Sixth Plan	1980-81	1981-82
1	2	3	4
Marine Fisheries	22500	4570	7270
Inland Fisheries	7750	1030	1080
Total : ..	29250	5600	8250

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Fisheries

Minor Headwise Outlays and Expenditure

(Rs. in Lakhs)

Sr. No.	Programme	1979-80 Actuals	1980-81		1980-85		1981-82	
			outlay	Anticipated expdt.	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Direction and administration.	1.07	1.44	1.44	45.00	..	8.58	..
2.	Extension.	3.15	3.40	3.40	90.00	..	41.46	..
3.	Fish farm	Provision of this programme has been under programme for Inland fisheries programme of this State as at Item No. 7 in this statement.						
4.	Hatcheries							
5.	Research	11.37	33.56	28.95	218.51	104.22	44.53	27.00
6.	Education and training.	7.30	21.59	20.21	89.91	45.31	26.85	16.50
7.	Inland fisheries.	72.17	97.92	99.19	636.25	240.89	121.48	40.02
8.	Fishing harbour and landing facilities.	Provision for this programme is included in the State Programme after "processing and preservation & marketing" as at item No. 11 as sub-project namely "Infrastructure facilities fish base ancilliary industries (FSH-11).						
9.	Off shore fisheries.	Provision for this item has been included in the State programme for deep sea fisheries as a serial No. 10.						
10.	Deep sea fisheries.	5.83	4.40	12.40	76.40	..	9.00	..
11.	Processing preservation and marketing.	97.08	74.90	74.90	421.09	344.08	120.24	105.14
12.	Mechanisaton and improvement of fishing crafts.	82.48	61.64	61.55	411.60	193.00	74.93	38.75
13.	Other Programmes	35.21	26.15	25.55	161.24	156.49	22.93	21.65
TOTAL:--		315.66	325.00	327.59	2150.00	1083.99	470.00	249.06

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Fisheries

Schemewise Outlays and Expenditure

(Rs, in lakhs)

Sr. No.	No. and name of scheme	1979-80	1980-81		1980-85		1981-82	
		Actuals	outlay	Anticipated expdt.	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
I. DIRECTION AND ADMINISTRATION.								
	FSH-1--Strengthening of supervison planning and statistics.	1.07	1.44	1.44	45.00	..	8.58	..
	TOTAL-I.	1.07	1.44	1.44	45.00	..	8.58	..
II. EXTENSION								
	2. FSH-2--Strengthening of publicity and extension.	3.15	3.40	3.40	90.00	..	41.46	..
	TOTAL-II.	3.15	3.40	3.40	90.00	..	41.46	..
III. RESEARCH								
	3. FSH-3--Survey investigation & exploitation.	11.37	33.56	28.95	218.51	104.22	44.53	27.00
	Total-III.	11.37	33.56	28.95	218.51	104.22	44.53	27.00
IV-EDUCATION AND TRAINING.								
	4. FSH-4-Training for departmental personnel.	2.92	2.70	2.70	18.00	..	3.20	..
	5. FSH-5-Training of fisher-Youths.	4.38	18.89	17.51	71.91	45.31	23.65	16.50
	TOTAL-IV	7.30	21.59	20.21	89.91	45.31	26.85	16.50
V-INLAND FISHERIES								
	6. FSH-6 Fish seed production and augmentation of Inland fisheries resources.	47.27	77.60	76.87	525.06	192.44	90.97	25.82
	7. FSH-7 Exploitation of inland fisheries resources.	24.90	20.32	22.32	111.19	48.45	30.51	14.20
	TOTAL-V	72.17	97.92	99.19	636.25	240.89	121.48	40.02
VI-DEEP SEA FISHERIES								
	8. FSH-8 Deep sea fisheries.	5.83	4.40	12.40	76.40	..	9.00	..
	TOTAL-VI	5.83	4.40	12.40	76.40	..	9.00	..
VII. PROCESSING, PRESERVATION & MARKETING.								
	9. FSH-9 Marketing of fish through cooperatives.	..	..	..	..	..	..	..

1	2	3	4	5	6	7	8	9
10. FSH-10-Processing and preservation.	0.07	..	..	..	..	..	..	..
11. FSH-11-Infrastructural facilities and fish based ancilliary industries.	97.01	74.90	74.90	421.09	344.08	120.24	105.14	(11.64)
TOTAL-VII	97.08	74.90	74.90	421.09	344.08	120.24	105.14	
VIII-MECHANISATION AND IMPROVEMENT OF FISHING CRAFTS								
12. FSH-12-Mechanisation of fishing crafts.	79.01	54.84	54.84	358.00	193.00 (Loan)	66.10	38.75	(Loan)
13. FSH-13-Incentive for improvement of traditional fishing.	0.31	0.50	0.50	4.00	..	0.76	..	
14. FSH-14 Financial assistance for improved designed boats.	0.07	4.00	4.00	25.00	..	4.50	..	
15. FSH-15-Supply of modern requisities.	1.07	0.50	0.50	5.00	..	0.75	..	
16. FSH-16 Establishment of service station.	2.02	1.80	1.71	19.60	..	2.82	..	
TOTAL VIII	82.48	61.64	61.55	411.60	193.00	74.93	38.75	
IX-OTHER PROGRAMMES								
17. FSH-17 Programmes for strength-thening of cooperatives.	12.98	2.06	1.46	47.25	42.50 (Share Capital)	14.48	13.20	(Share capital)
18. FSH-18 Construction of building and quarters.	22.23	24.09	24.09	113.99	113.99	8.45	8.45	
TOTAL IX	35.21	26.15	25.55	161.24	156.49	22.93	21.65	
GRAND TOTAL	315.66	325.00	327.59	2150.00	1083.99	470.00	249.06	

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Targets of Production and Physical Achievement
Fisheries

Sr. No.	ITEM	Unit	LEVEL OF ACHIEVEMENT OF THE END OF						
			1978-79	1979-80	1984-85	1980-81		1981-82	
				(Base year level)	Terminal year target	Target level	Likely achievement.	Proposed (level)	Target
1	2	3	4	5	6	7	8	9	10
1.	Mechanisation of boats (with in abroad engines and out-board motors.	Nos.	3386	3734	6944	4279	4279	5219	
2.	Trawlers procured.	Nos.	10	10	11	10	10	10	
2.	Fish seed farm established	Nos in hectare.	12	12	23	13	12	23	
4.	Fish production (Level)								
1.	Inland	Lakh/- Tonnes.	2.30	2.07	3.45	2.75	2.75	3.00	
2.	Marine	Lakhs/Tonnes	0.16	0.16	0.55	0.25	0.25	0.30	
			2.46	2.23	4.00	3.00	3.00	3.30	

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Centrally Sponsored Schemes—Outlays

Fisheries

(Rs. in lakhs.)

Sr. No.	Name of the Scheme.	1979—80 Actuals.			1980-85 outlay proposed.			1980—81 outlay			1981-82 outlay proposed.		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
I. CENTRALLY SPONSORED SCHEMES.													
1	Landing & berthing facilities at minor ports.	2.12	2.13	4.25	204.50	204.50	409.00	27.50	27.50	55.00	57.00	57.00	114.00
2	Infrastructure facilities and fish based ancilliary industries (FSH-11) at World Bank Project Area, Veraval and Mangrol.	—	—	—	9.00	9.00	18.00	8.00	8.00	16.00	1.00	1.00	2.00
3	Integrated Marine fisheries project for development of Veraval/Mangrol as fisheries Harbours (World Bank Project).	—	126.45	126.45	—	2121.00	2121.00	—	458.40	458.40	—	423.20	423.20
4	Fish Farmers' Development Agency Godhra/Surat.	2.36	2.36	4.72	5.00	5.00	10.00	5.00	5.00	10.00	—	—	—
Total : I		4.48	130.94	135.42	218.50	2330.50	2557.00	40.50	498.90	539.40	58.00	481.20	539.20
		0.732	202.93		3.85	11.54	15.99	0.65	1.94	2.59	0.78	2.34	3.12
II. CENTRAL SECTOR SCHEME.													
Fish production and augmentation of inland fisheries resources (ICAR)													
Total II. . .		0.73	2.20	2.93	3.85	11.54	15.39	0.65	1.94	2.59	0.78	2.34	3.12

* * Central Government is sharing 50 % of the expenditure on all the programmes for development of fishing harbours-landling and berthing facilities at Porbandar, Jakhau-Madhwad, Umargam, Umarsadi, Kolak and similar other civil works not covered under World Bank Project. Whereas in this World bank Project 50 % of the total expenditure is to be re-imbursed as loan/credit by the IDA, remaining 50 % of the total expenditure may be continued to be borne by the Government of India as its is old commitment to the World Bank in 1977. Hence 10 % on this account be allowed to be provided a centrally funded programme.

1.10 FORESTS

1.10.1 Introduction :

1.10.1.1. Forestry in Gujarat is the largest single land use next only to agriculture. Forests play an important multifunctional role in the State and national economy. Besides providing timber, firewood, fodder and host of minor forest products, they protect the soil, improve the subsoil water regime, prevent floods and influence the environment and quality of life. Forests are the renewable natural resources. They are the home of wildlife and supports a host of industries such as building construction, paper, rayon, matches etc.

1.10.1.2. Bulk of the productive forests are concentrated along the eastern border of southern part of the State which is hilly. The plains are almost devoid of forests, with approximately 10% of the land area under forest cover, the per capita forest area is less than 0.06 hectare which is less than 50% of all India figure of 0.13 hectares, and far below the world figure of 1.04 hectare. The fuel wood is the main source of domestic energy especially in the rural areas and it will continue to be so far a long time to come. Forests in Gujarat play an important role in providing fodder to the cattle especially during scarcity years. Forestry operations are labour intensive generating labour opportunities mostly during, agricultural off season in the interior areas of the State. Various small and cottage industries such as pulp mills, katha manufacturing, saw mills, bidi, toys, soap manufacturing, ayurvedic pharmacy etc. based on the forests.

1.10.2. Review of Progress:

1.10.2.1. The forestry development activities under the earlier development plans were aimed at satisfying the present and prospective demands for major and minor forest products and for ensuring the productive and recreative effects of forests. The activities were, therefore, directed to preserve and maintain adequate forest cover for increasing the productivity of the land, for conservation of soil and moisture, for the protection of water reservoirs and for ameliorating climatic excesses generating in the process. Grass velds were improved and grass godowns were constructed for the collection and storage. The economic value of forests valuable species like teak, khair, bamboos were raised through man made forests. Coastal and desert areas which were subjected to violent winds, which blow saline sand were treated on a much larger scale than hitherto. More than 60% of the outlay was allotted to the social forestry programme. A World Bank assisted programme viz., community Forestry Project was also started since November, 1979. In the field of nature conservation, great achievements were registered. Gir sanctuary was elevated to the status of a national park. The shifting of

maldharies from within the sanctuary area was accomplished with credit. Velavadar sanctuary has been developed for black bucks. The Gujarat State Forestry Development Corporation has been established in the year 1976 to look after various activities mainly collection, development and marketing of the forest produce.

1.10.3 Basic Considerations of the Plan:

1.10.3.1. India being primarily an agrarian country the rural mass by and large use firewood, agricultural waste and dung cake for their daily domestic needs. Of the total forest of 19.59 lakh hectares, less than half or only about 8 to 9 lakh hectares most of it situated in south Gujarat region is in a position to support commercially productive forests. Hardly an area of 0.96 lakh hectares could be converted into man made plantations till the end of 1979-80.

1.10.4. Strategy and Objectives for the Plan:

1.10.4.1. The Prime Minister of India has stressed the need for maintenance of the ecological balance and has suggested the following specific measures to achieve this objective.

1. officers with the right attitude should be posted in reserved forests and sanctuary areas; if possible a special corps of such officers could be identified for duties relating to wild life and forest and environment conservation.

2. Forest Development Corporations of similar agencies should be asked to take up plantations of steep hill sites, catchment areas and clear-felled forest areas, so that productive forestry and protective forestry go hand in hand.

3. A massive programme of social forestry should be taken up both under the food for work programme and under other specific schemes. The waste lands in villages, all community lands, field bunds, canal bunds etc. could be clothed with fast growing species under this useful scheme.

4. The tribals depend heavily on forests for their livelihood, they should be involved in replanting the species that they are already exploiting. A scheme of forest farming should be undertaken. Particular attention must be paid to the replanting or fresh planting of fruit trees.

5. The existing regulations and security arrangements in sanctuaries should be tightened. Poaching should be dealt very severely.

6. Intelligence machinery to detect, smuggling of valuable species like red sanders and sandwood or of animal furs and skins must be strengthened and personal interest must be shown by top people in administration to see that such activities are ruthlessly suppressed.

7. The system of contracting away forest areas should be replaced or modified to see that every tree felled should be replaced by the a planting of atleast another one if not more.

8. Tree plantation programmes should be undertaken by schools and institutions. Some countries have initiated a programme of tree for every child.

9. Serious attempts must be made to change the orientation of all persons, working in the forest services and forest administration with a system of rewards and incentives for those who do better in preserving or extending the forest areas of the wild life areas.

1.10.4.2. The strategy recommended by the Planning Commission for the Sixth Plan 1980-85 recognises the intimate relation, the forestry has with the agriculture and has also recommended- "Intensification of efforts to bring back ecological balance through massive afforestation programme and planned utilisation and soil conservation measures leading to more assuring agricultural future than at present". The Planning Commission has also recommended that extension organisation for effective transfer of technology should be set up on the lines suggested by the National Commission on Agriculture so as to increase production particularly under farm forestry. In confirmity with this observation, the major thrust of the forests programmes will be towards ecological balance, employment generation, energy conservation and economic stability of the tribal population. This will be achieved by adopting the following strategy :-

1. Undertaking a massive programe of community forestry to meet the growing rural fuel energy needs ;

2. Improving environment by protecting forests and undertaking massive afforestation in the degraded areas ;

3. Preserving nature, flora and fana through the establishment and development of national parks, sanctuaries and nature reserves etc ;

4. Providing employment to the rural population with pecial attention to the weaker sections of the society i.e. tribals, so as to give 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.

1.10.4.3. 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 plantation schemes including conservation measures and protective plantations. Nearly 85 % of the proposed outlay are proposed to be earmarked for this programme. In consonance with the objectives and strategy enumerated above, the priorities are given to the production conservation, community forestry-environment forestry (including nature conservatibn) and tribal welfare programmes accordingly. Most of forestry activities are designed to increase production and improve the environment which concomitantly improve the socio-economic condition of the tribals.

1.10.5. Outlays for the Sixth Plan 1980-85 and Annual Plan 1981-82 :

1.10.5.1. An outlay of Rs. 9000 lakhs for the Sixth Plan 1980-85 and Rs. 1800 lakhs for the Annual Plan 1981-82 under the forests is proposed to be provided. Out of this State Plan outlay, an amount of Rs. 3780 lakhs for the Sixth Plan and Rs. 540 lakhs for the Annual plan 1981-82 is proposed to flow to the Tribal Area Sub-Plan. The State Plan outlay is likely to be supplemented substantially by way of special central assistance for the Tribal Area Sub-Plan. The details of the outlay and expenditure is given in the following table:-

(Rs. in lakhs).

Sr. No.	Programme.	1979-80 Expdtr.	1980-81		1980-85 Proposed Outlay.	1981-82 Proposed Outlay.
			Outlay	Anti. Expdtr.		
1	2	3	4	5	6	7
1.	Direction and Administration.	10.25	11.88	11.88	110.30	23.40
2.	Research	8.74	5.54	5.54	41.00	7.36
3.	Education and Training.	36.23	36.04	36.04	153.00	33.11
4.	Forest Conservation and Development.	95.13	112.56	129.12	630.90	145.46
5.	Plantation Schemes.	102.04	100.82	124.82	657.40	139.67
6.	Farm Forestry.	..	41.24	44.68	188.70	34.38
7.	Communieation and Buildings.	12.80	25.66	25.66	179.30	51.54
8.	Preservation of Wildlife.	22.86	77.10	77.10	310.00	81.28
9.	Extension (World Bank Project).	405.98	847.56	847.56	6186.40	1180.07
10.	Management of Zamindari.	7.65	8.11	8.11	40.00	12.35
11.	Other Programmes.	32.01	64.49	64.49	503.00	91.43
Grand Total:		.. 733.69	1331.00	1331.00	9000.00	1800.00

1.10.5.2. Bulk of the outlays are provided for extension (World Bank Project), forest conservation and development programme, plantation schemes, preservation of wild life and the farm forestry programmes.

1.10.6. Programme for the Sixth Plan :

1.10.6.1. Keeping in view the objectives and strategy enumerated above the programmes proposed to be under taken during the Sixth Plan period are outlined in the subsequent paragraphs.

Direction and Administration :

1.10.6.2. This programme provides for giving additional jodi guards in such of those beats where the forest offenders are more active and desperate. Upto the end of 1979-80, 309 jodi guards have been appointed. It is now proposed to appoint 50 more jodi guards during the Sixth Plan period. It is also proposed to establish mobile squads for intercepting and checking of forest produce in transit and also to detect forest offenders and apprehend the culprits. By the end of 1979-80, 13 mobile squads have been established in the State. It is proposed to provide 6 more mobile squads during the Sixth Plan. In addition to the mobile squads, it is proposed to establish armed mobile police petrol to give a boost to the morale of forest subordinates. It is also proposed to establish a mobile court for the speedy justice of the forest offence cases booked by the forest authorities during the Sixth Plan.

1.10.6.3. Industrialisation, fast moving vehicles, road development, dwindling fuel resources and land hunger have contributed to increase in unauthorised cutting of trees, cultivation grazing etc. Another cause of serious concern is the continuing encroachment of forest land use other than forestry. Trees are got illicitly cut through the local adivasis and other people residing within or on the outskirts of the forest areas. Many applications giving important information regarding illicit cuttings, serious allegations against staff members etc. are received in the Department. A separate independent vigilance cell/organisation at the State level to deal speedily with such applications and enquiry cases was created during 1978-79. During the Sixth Plan, it is proposed to further strengthen this cell. Systemetic and correct statistical data made available at the appropriate time can smoothen the function of planning and also eval-

uation of the ongoing programmes. It is proposed to strengthen the planning, evaluation and statistical cells of the Forest Department during Sixth plan period 1980-85.

1.10.6.4. An outlay of Rs. 110.30 lakhs for the Sixth Plan and Rs. 23.40 lakhs for the Annual Plan 1981-82 is proposed for the Direction and Administration Programmes.

Research :

1.10.6.5. For successful implementation of forestry programmes and to enhance productivity of forest areas, research is an essential support activity. All basic forest research and forest product research was till recently centralised at Dehra-Dun. The State had only 6 field research stations at the end of Fifth Plan. During 1979-80, a Forest Research Institution has been set up at Rajpipla. This institute is now in a formative stage and is proposed to be developed into a full fledged institute to play an effective developmental role in the forestry programmes. The average annual yield of timber and fire wood per hectare from our forests is very low. The yield can be stepped up by selecting and propagating high yield strains and hybridisation of various species. An outlay of Rs. 41.00 lakhs for the Sixth Plan and Rs. 7.36 lakhs for the Annual Plan 1981-82 is proposed under the research programmes.

Education and Training :

1.10.6.6. Forestry is a technical subject requiring technically qualified personnel for its proper management and development. The State has started, during April, 1979, its own Rangers' Training College at Rajpipla to train Range Forest officers. The college and its campus are in a developmental stage. There is also a training school for the training of foresters and guards at Kakrapar (Surat). It is necessary to expand the training facilities at this school. Upto the end of 1979-80, about 3450 forestry personnel of various categories were trained. To make the tribals skilled for different professions, a school for training adivasi youths in carpentry was started at Waghai (Dangs) about 3 years ago. Annually, about 30 adivasi youths are being enrolled for training in this school. so far, 59 youths are trained till the end of 1979-80. It is proposed to train about 150 adivasi youths in carpentry during the Sixth Plan period. An outlay of Rs. 153.00 lakhs for the Sixth plan 1980-85 and Rs. 33.11 lakhs for the Annual Plan 1981-82 is proposed under Education and Training Programme.

Forest Conservation and Development :

1.10.6.7. Adverse biotic measures are a major cause for the degradation of forests. Destruction of forests, indiscriminate grazing and repeated fires are the main causes of denudation of forests. Due to destruction of forests, accelerated soil erosion has washed away the top soil. It is estimated that about one half of the State's forest area is urgently in need of soil conservation measures, afforestation and planting them with economically important fuel wood and timber species. Upto the end of 1979-80, soil and moisture conservation and afforestation works were carried out in 78355 hectares. During the Sixth Plan, it is proposed to cover 30,000 hectares of land under this scheme. The little and large runn of Kachchh which are vast saline wastes are sandwiched between Kachchh in the north and west, main land Gujarat in the east and Saurashtra in the south. The winds flowing from the desert carry with them fine particles of silt heavily laden with salt. Where these particles are deposited in the adjoining agricultural lands, they reduce the fertility and gradually, making them uncultivable due to accumulation of salt in the soil. This scheme of "afforestation on desert border," was initiated during the Third Plan with the objective of creating shelter belts along the border of the desert so as to act as barrier against the desert winds. Till the end of 1979-80, 21,600 hectares of desert border areas have been planted up with "Prosopis Juliflora" which is highly tolerant to saline conditions in the soil. During the Sixth Plan, it is proposed to continue this scheme and to raise plantations on desert border over an area of 6000 hectares.

1.10.6.8. The salinity ingress problem is assuming serious dimension with the passage of time. The high level committee appointed by the Government to go into the problem has identified vegetative measures as one of the means to improve percolation of rain water and reduce ingress of sea water into the main land. This scheme of "arresting advancing salinity in the coastal tract of Saurashtra" was started during 1977-78 with the assistance of the World Bank and has raised the plantations in 392 hectares and 91 kms. of shelter belt. It is proposed to continue the scheme, and carry out soil and moisture conservation and plantation over an area of 8000 hectares during the Sixth Plan.

1.10.6.9. An outlay of Rs. 630.90 lakhs for the Sixth Plan and Rs. 145.46 lakhs for the Annual Plan 1981-82 is proposed for the Forest Conservation and Development Programmes.

Plantation Schemes :

1.10.6.10. The demand for fire wood and raw material for paper and other industries has been increasing rapidly. The scheme of 'plantation of fast growing species', therefore, aims at raising of plantations of fast growing species wherever possible in the forest areas. By the end of 1979-80, about 36700 hectares have been covered under this scheme. It is proposed to cover an additional area of 10000 hectares during the Sixth Plan span of 1980-85. In its natural state, the forest vegetation consists of mixture of a variety of species many of which have a low economic value due to their limited utility. By converting such forests into man made plantations of economically important species like teak, khair, bamboos etc., the productive value of such forests can be raised. The scheme of 'Economic Plantations' proposes to clear fell mixed forests and convert them into a man made forests. By the end of 1979-80, about 59300 hectares of such plantations have been raised in the forest areas. It is proposed to cover an additional area of 20500 hectares during the Sixth Plan period.

1.10.6.11. Gujarat has a coast line of 1663 kms. Due to the heavy wind action along the coastal belt, the sand gradually drifts inwards converting agricultural lands into sandy waste. The object of this scheme of 'Plantation on coastal border' is to stabilise the sand and also to obtain returns in the form of fuel wood and small timber by raising plantations of suitable species like 'Cassia acutifolia and Prosopis Juliflora'. Under plantations, an area of about 7500 hectares has been covered by the end of 1979-80. It is proposed to cover 3000 hectares along the coastal region of the State during the Sixth Plan period.

1.10.6.12. There is a critical storage of good land for extension of forests. One of the alternative of increasing the production of timber and firewood is to intensify tree farming by applying fertilizer and irrigation. A large number of irrigation projects are now coming up in the State and in suitable locations water for irrigating forest plantation is available with little additional investment. With the application of irrigation, fertilizer and selection of suitable fast growing species, the production of wood can be increased upto 4 to 5 times than what is today, per annum. In addition, under Irrigated conditions, bamboos intermixed with tree species can be raised economically, with higher inputs. The "irrigated plantations" are much more economical and attractive compared to unirrigated plantations. This scheme of raising 'irrigated plantations' was started on a pilot scale during 1979-80 and 10 hectares of irrigated plantation was raised. It is proposed to raise irrigated plantations over an area of 1400 hectares during the Sixth Plan.

1.10.6.13. In a rapidly developing state like Gujarat, adequate availability of power at reasonable cost is essential for economic, industrial, agricultural and commercial growth. Among the many possibilities, 'energy plantations' stands out on a number of counts including availability and simplicity of technology, economy as well as and ecological consideration. The energy plantations can be define as one that grows plant material for its full value. Some of the benefits of using wood as fuel are (1) it is the cheapest fuel available which is a renewable natural resource and can be stored safely for long periods, (2) it has no sulphur content and therefore no air and other pollution hazard. The Gujarat Energy Development Authority recently appointed by the Government has given high priority for raising energy plantations over an area of 700 hectares during the Sixth Plan period.

1.10.6.14. An amount of Rs. 657.40 lakhs is proposed for the Sixth Plan and Rs. 139.67 lakhs for the Annual Plan 1981-82 under the various plantation schemes under forests subsector of development.

Farm Forestry :

1.10.6.15. The role of the tree in improving the quality of life has been well recognised in Gujarat. This is reflected by the huge demand from the public for seedlings of tree species during Vanmahotsava season. Nearly 500 lakh seedlings were distributed by 1979. It is still rising at a very steep rate. This scheme of "Farm Forestry", therefore, proposes to raise about 1000 lakh seedlings during the Sixth Plan period and distribute the same to the public free of cost to encourage people to raise trees in their lands. Marginal, Sub-marginal and ordered land having low fertility, productivity and much deterioration could be better utilised for raising tree crops. This would help in bridging the gap between the supply and demand of firewood and small timber in the State.

1.10.6.16. It is estimated that an area of 97.6 lakh hectares of land is under agriculture, of this, almost 20 % area is considered as marginal and sub-marginal and other 1.75 lakh hectares severely affected by erosion along the banks of various rivers. It will be necessary to provide a subsistence allowance to the tribals and small farmers through out the duration. The scheme of 'rehabilitation of farm lands', therefore, proposed to raise tree crops on degraded and uneconomic and marginal farm lands, belonging to the tribals, scheduled castes and other small farmers. The plantations will consist of raising small timber, firewood and fruit trees. It will be done on ridges after thoroughly ploughing the area or where ploughing is not possible. For execution of this scheme, a cadre of 'Van Sevaks' will be built up. The van-sevaks will be recruited and given training for a

period of three months at the Forestry Training School at Kakrapar and then placed in the field. They will also work as extension workers in the farm forestry programme by giving technical guidance to other farmers who will be given seedlings free of cost under the scheme. They will also monitor the survival of seedlings planted under this programme. Van sevaks will be engaged on a regular salary equivalent to that of forest beat guard. An initial cadre of 120 van sevaks will be built up during the current year i. e., 1980-81. During the training period, they will also be paid stipend of Rs. 120 per month. It is proposed to rehabilitate degraded and marginal farm lands in an area of 1000 hectares and train 300 van sevaks during the Sixth Plan period.

1.10.6.17. Beginning from 1977-78, a scheme for raising teak and bamboo plantations in the marginal lands belonging to the tribals is being implemented. From 1980-81, as far as Dangs district is concerned, the activity has been transferred to the Community Forestry Project. However, maintenance of past plantations and execution of the schemes in tribal areas other than Dangs still forms a component of this scheme. The scheme also provides for payment of subsistence allowance of Rs. 250 per hectare per annum to the advisis in view of long gestation period of the tree crop. The subsistence allowance paid will be recovered at the time of harvesting of the plantation. Plantations has been carried out in about 100 hectares by the end of 1979-80.

1.10.6.18. An outlay of Rs. 188.70 lakhs for the Sixth Plan 1980-85 and Rs. 34.38 lakhs for the Annual Plan 1981-82 has been proposed for the farm forestry programme.

Communication and Buildings :

1.10.6.19. 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 interior of the forests. The scheme of "development of communication" aims at converting some of the existing cart tracks into motorable roads and also lay out new alignments and construction of roads. Under this scheme, up to the end of 1979-80, improvement/metalling of 481 kms. of roads has been carried out. It is proposed to improve/metal roads over a length of 56 kms. during the Sixth Five Year Plan. West and North Gujarat regions are chronically subjected to drought conditions due to scanty or untimely rains. At such times grass becomes a scarce commodity. When it (grass) is stored in godown it remains edible for 4 to 5 years. At present there are 126 godowns with a capacity to store 222 lakh kgs. of grass. The existing capacity of godowns is inadequate to store 2 to 3 years grass production from the grass lands. It is proposed to construct 5 additional godowns and

provide them with chowkidar quarters, fencing, fire fighting equipment etc. during the Sixth Plan.

1.10.6.20. Forest guards, range clerks, foresters and rangers are entitled to rent free residential Government accommodation. However, more than half the number of such subordinates, who have to stay in remote places in the forest areas, are still not been provided with such accommodation. Upto the end of 1979-80, about 2000 quarters have been constructed so that they can perform their duties effectively. It is proposed to construct additional 300 quarters during the Sixth Plan period.

1.10.6.21. An outlay of Rs. 179.30 lakhs for the Sixth Plan 1980-85 and Rs. 51.54 lakhs for the Annual Plan 1981-82 has been proposed under the communication and buildings programme.

Wild Life Preservation :

1.10.6.22. Gujarat is relatively well endowed with wild fauna, in that it possesses several rare and valuable species like the lion and the indian wild ass which do not occur elsewhere in the country. Several other important wild life species such as the tiger, panther, sloth bear, three species of deer, black buck, chinkara, blue bull, wild bear, wolf, etc., and among birds the great indian bustard, flamingo, peafowl, grey jungle fowl, partridges, etc., also occur in this State. A number of wild life sanctuaries and national parks have been established all over the State for the proper protection, preservation and development of this faunal wealth under the scheme for nature conservancy including conservation of wild life. This includes Gir sanctuary-cum-national park, the wild ass sanctuary in the little runn of Kachchh, Velavadar national park and Nalsarovar bird sanctuary. Wild life lovers from within and outside the country visit the Gir wild life sanctuary in large number of every year to have a glimpse of the rare and magnificent asiatic lion. The present method of showing the lions to visitors by hankering them on artificial baits has come in for lot of criticism. It has, therefore, been decided to set up natural looking lion safari park in 400 hectares enclosure in the Devalia block of the sanctuary.

1.10.6.23. The Jasore hill area near Dantiwada in Banaskantha district which still contains sizeable population of sloth bear, has been notified as a wild life sanctuary in 1978. It is now necessary to develop this sanctuary on scientific lines so as to give complete protection for the wild life existing therein so that they can multiply and flourish. This scheme is therefore included in the Sixth Five Year Plan. The Bansda forest of Valsad district adjoining the Dangs forest is a well preserved forest and has been notified as a national park in 1979 with the view to protect the wild life which already exists therein including panther,

deer species, four-horned antelope etc., It is now necessary to develop this national park so as to rehabilitate the existing wild life and to protect the tiger to return to the old amount. This scheme is, therefore, included in the Sixth Five Year Plan.

1.10.6.24. At present the entire population of Asiatic lions occur in the Gir sanctuary-cum-national park. As the asiatic lion, a rare and endangered species, it has, therefore been decided to provide an alternative home for the Gir lions in the Barda forests near Porbandar, and to improve the existing degraded habitat for the rehabilitation of Gir lions. It is proposed to set up an elaborate natural history museum complex at Indroda near Gandhinagar (State Capital). Apart from imparting knowledge to the general public in various aspects of natural history through multi media presentation with major emphasis on ecology, it will be developed as a Regional Museum of Natural History highlighting flora and fauna and geological wealth of Gujarat. A detailed master plan prepared for this prestigious project is roughly estimated to cost. Rs. 50 lakhs or more.

1.10.6.25 Under the scheme of reintroduction of black buck in the eastern Gir, it is proposed to reintroduce black buck into the eastern part of the Gir sanctuary which is considered as a suitable habitat for the blackbuck. It is therefore proposed to translocate some of the surplus black bucks from the Velavadar national park for reintroduction into the eastern Gir. It has been decided to establish a nature education sanctuary at Hingolghadh in Rajkot district and to arrange a series of nature education camps to learn about the various aspects of nature and its conservation. Although Gujarat has a fairly extensive coast line, it contains live coral formations, along the southern coast of the Gulf of Kachchh from port Okha to Jodia in Jamnagar district. Most forms of the marine life seek shelter in the gulf of Kachchh which has been described by the experts as the finest biological heaven in any marine habitat in this part of Asia. It has been decided to establish a marine national park in this area in order to prevent any further degradation of this unique marine ecosystem.

1.10.6.26 The runn of Kachchh is the only known breeding ground of the flamingo in this sub-continent. This breeding ground has been given the name of flaming city. It is very necessary to ensure complete freedom from human disturbance in this area. It has been proposed to establish a flamingo sanctuary in this area. During the two year period of 1978-79 and 1979-80, the Government of India had sanctioned an adhoc grant of Rs. 70,000 for undertaking a project for the ringing of flamingo chicks. Unfortunately, due to the unfavourable climatic conditions prevailing in the runn, no flamingo breeding has taken place for the last two years. This work is now proposed to be formulated into a regular scheme. The muggar or the marsh

crocodile (*Crocodylus Palustis*) is the only species of crocodile found in Gujarat. It has been decided to undertake artificial breeding of this species with a view to building up adequate breeding stocks for re-stocking our rivers and lakes with crocodiles. For this purpose, a crocodile breeding centre has already been set up in the Gir lion sanctuary. Eggs and hatcheries from this centre have also been supplied for breeding purposes to other States Like Maharashtra and Andhra Pradesh. The Government of India so far sanctioned Rs. 8.85 lakhs only for the two years from 1979-80 to 1980-81. This scheme is proposed to be continue during the Sixth Five Year Plan.

1.10.6.27 sizeable population of about 200 chinkaras still exists in the north-western part of Kachehh district covering Lakhpat and Abdasa talukas, steps have been taken to notify this area as a sanctuary for chinkaras so as to afford them timely protection against poaching and to save them from total extinction. This new sanctuary is proposed to be established during the current year i. e., in 1980-81. This scheme has therefore been included in the Sixth Five Year Plan. The scheme to rear wild fowl in captivity and release them in the Danger forest is also proposed in the Plan.

1.10.6.28 An outlay of Rs. 310.00 lakhs is proposed for the Sixth Plan 1980-85 and Rs. 81.33 lakhs for the Annual Plan 1981-82 for the preservation of wild life programmes.

Extension

Social Forestry :

1.10.6.29 Gujarat is perhaps the only State in the country which has broken new ground in evolving a suitable structure for the social forestry organisation and for evolving suitable techniques for dealing with various aspects of social forestry. It has become a major plank of the forestry development programme. Under this activity,, the land lying waste along sides of roads, canal banks, village gaucher are successfully planted up with useful tree species. Community forestry particularly the village forest activity has a significant effect on the people. It has created a tree consciousness among the rural people as evident from the increased demand for seedlings during the vanmahotsava celebrations. A good number of farmers have set aside some of their farm lands for raising tree farms. The annual demand for vanmahotsava seedlings which are distributed free of cost, has reached a figure of five crores.

Community Forestry Project (World Bank assisted Project) :

1.10.6.30. In order to meet the requirement of fire wood of the rural population in the shortest time possible, to induce the village community to actively participate in the plantation programme

through appropriate extension and sharing of the plantation revenue, to provide additional employment opportunity particularly to the landless agricultural labourers and also conserve energy by introducing improved stoves and cremation facilities, a Community Forestry Project with the assistance of the World Bank has been formulated. The project has started since November, 1979 and has become operative from 1980-81. The project envisages taking advantage of available vacant land, through assigned to other specific uses and to diversify productive and multiple use of land wherever feasible. The project will cover the following activities (targets) at an estimated cost of about Rs. 62 crores (Rs. 6,136.40 lakhs).

Activity	Target 1980-85	Target 1981-82
Strip plantations		
Road side	31,600 ha	} 6000 ha.
Canal banks	2,000 ha	
Railway banks	3,400 ha	
Village & woodlots		
Irrigated	2,880 ha	} 6000 ha.
Rain Fed	34,560 ha	
Forest areas		
Reforestation of degraded forests	30,000 ha	6000 ha.
Tree farms		
Plantations in malki lands	1,000 ha	200 ha.
Seedlings for farm forestry	1,500 lakhs	..
Wood saving devises		
Improved crematoria	1,000	..
Smokoless stoves (Chula)	10,000	..

1.10.6.31. Research, training and buildings form support component of the project. To optimise land use and to suit varying edaphic and climatic conditions, a total of 1257 lakh plants will be raised in Government lands. 1500 lakh seedlings will be distributed to the public under the farm forestry programme. The project covered a period of 5 years coinciding with the Sixth Five Year Plan period of 1980-85. Preparatory works under this project were initiated in the second half of 1979 and an amount of Rs. 150 lakhs was spent on raising of nurseries, ground preparation, fencing etc. The Extension Forestry Scheme which was started in 1969-70, has been now merged with the Community Forestry Project. Upto the end

of 1979-80, about Rs. 10.80 lakhs were spent on raising 5917 km. of strip plantation along road sides and canal banks, and 13,746 hectares of village wood lots. It is proposed to incur an expenditure of Rs. 1180.07 lakhs for this programme during 1981-82 Annual Plan.

Management of Zamindari. (Acquisition of private forests)

1.10.6.32. The Government had acquired nearly 1,040 sq. kms. of privately owned forest areas in 1973 for bringing them under scientific management. Under the Private Forests Acquisition Act, 1973, the ex-owners of the private forests are eligible for compensation as per the provisions of the act. Upto the end of 1979-80, an amount of around Rs. 85 lakhs was spent by way of compensation and for management of the forests. Since the proceedings are not yet completed, provision for payment of awards and for management of the forest will have to be made during the Sixth Five Year Plan 1980-85. An outlay of Rs. 40.00 lakhs for the Sixth Plan 1980-85 and Rs. 12.35 lakhs for the Annual Plan 1981-82 has been proposed for the management of zamindari programme.

Other Programmes

1.10.6.33. Survey and demarcation of forest areas recently acquired or transferred to the forests department is essential to prevent unauthorised encroachment and for effective protection. These areas are required to be settled and demarcated for their development and scientific management. Uptill now 10,854 hectares of forest areas have been demarcated. It is proposed to demarcate 2.5 lakh hectares of forest areas during the Sixth Five Year Plan 1980-85. The old logging methods followed in harvesting forests involves considerable wastage in felling and conversion operations. By using modern and improved logging technique the wastage of valuable wood can be reduced to the minimum. The scheme also proposed to procure trucks for transport of forest products from the coups to the depots. Uptill now, 18 trucks and logging equipments were purchased. The scheme of fire protection proposes to install wireless sets at strategic locations where the forests are economically very valuable. lay out fire lines, engage fire watches, construct fire tours, purchase equipments and vehicles for protecting the forests from fires. Due to consequence of scarcity conditions, the prices of timber and fire wood have been increasing steeply in recent years. This has encouraged unsocial elements to indulge in illicit removal of forests produce. Checking nakes with barricades at strategic locations along the border of the forests and on the roads can keep under control noforious activities, such as illicit removal of forests producing. Upto the end of 1979-80, 66 checking nakes have been established. It is proposed to establish additional 30 checking nakas during the Sixth Five Year Plan 1980-85. It is proposed to strengthen the

publicity wing of the forest department and to equip it with suitable machinery and audiovisual aid so as to make it an effective instrument of publicity.

1.10.6.34. Victoria park situated on the outskirts of Bhavnagar city is an ideal recreational spot. It is being developed into a mini wild life cum-botanical park by the department. Botanical gardens provide an opportunity to study the flora of not only the local region but also of other regions both moist as well as arid. A botanical garden has already been established by the department at Waghai in Dangs district.

Schemes Benefitting the Tribals :

1.10.6.35. Welfare of the tribals depend on the wellbeing of the forest. For employment, housing, cooking, fodder, natural foods like fruits and flowers, tribals lean heavily on forests. The collection and sale of minor forest produces also provides them a means of livelihood. The following schemes are proposed to be continued for the welfare of tribals under the forests sub-sector of development.

Amenities to F.L.C.S. :

1.10.6.36. Gujarat has the distinction of initiating co-operative movement in the working of annual forest coupes. By now, about 155 Forest labourer's Cooperative Societies which are formed with a view to provide work to the labourers and to prevent their being exploited by contractors, are organised in the State for providing forest amenities. It is proposed to organise 5 FLCSs during 1980-85 and 1 FLCS during 1981-82.

(2) Tagavi Loans to the Cultivators of Forest lands :

1.10.6.37. The inforest settlers are not eligible for tagavi loans from Revenue Department since they do not reside in revenue villages. This scheme therefore propose to give tagavi loans to the residents of the inforest settlement villages so that they can improve their agricultural practices. During the Sixth Five Year Plan. it is proposed to give tagavi loans to the extent of Rs. 4.10 lakhs.

(3) Kotwalia's Welfare :

1.10.6.38. Kotwalias (primitive tribal community depending on manufacture and sale of bamboo articles for livelihood) are provided with advances for purchase of bamboos, which are given at concessional rate for manufacture of bamboo articles. The articles produced are sold by the Forest Department and the net profits after deducting the advances and loans are given to the tribals. Upto the end of 1979-80, 577 kotwalias families have been covered for giving loans etc. It is proposed for raising 40 hectares of bamboo plantation and giving loan to the 100 Kotwalias families during the Sixth Five Year Plan.

Food Grain Banks :

1.10.6.39. During the last 4 years, 20 food grain banks have been established in the interior of the forest areas from where the tribals can take on loan food grains during the lean season. This helps them keep free of dependence on money lenders and shopkeepers.

(4) Mobile grain shops :

1.10.6.40. In some of the remote forest areas even the basic necessity of life such as food grains, sugar pulses, oil etc. are not available within easy distance of the forest villages. In order to help them procure those articles of day to day necessity a mobile grain shop has been started by the Department in 1979-80. It is proposed to continue to operate this mobile grain shop and to establish more food grain banks during the Sixth Plan.

(6) firewood depots :

1.10.6.41. The object of the scheme is to operate firewood depots with a view to make available timber, fire wood and bamboos at reasonable prices to the adivasis and others residing in/or along the periphery of the forests. 21 fire wood depots have been started in the State upto 1979-80. It is proposed to continue these depots during the Sixth Plan.

(7) Seed Banks :

1.10.6.42. Large scale plantations which form the core components of forestry programme calls for utilisation of quality seeds for best results. The scheme envisages to identify, select, collect, grade testing of seed viability and germination percentage and storing of the seeds. Under this scheme, 5 seed banks have been established in different climatic regions of the State to ensure supply of viable and good quality seeds. It is also proposed to instal new and modern machinery in the saw mill at Waghai.

(8) Gujarat State Forests Development Corporation (G. S. F. D. C.)

1.10.6.43. For ensuring fair wages to tribals and eliminating middlemen in the process of collecting and marketing of minor forest products, a Gujarat State Forest Development Corporation was established in the year 1976 and assigned mainly with the task of collecting, processing, development, marketing, harvesting improving and augmenting the production of minor forest products. The GSFDC has initiated programme to train the tribals in bidi preparation and scientific collection of timru leaves. The State Govt. has recently handed over the management of forest in one division viz. Valsad division to the GSFDC for intensive treatment and working with a view to achieve rapid development with the

assistance from the financial institutions. The share capital contribution to the corporation has recently been increased from Rs. 2 crores to Rs. 5 crores. The corporation has taken over management of the forest areas in Valsad district. The Corporation has proposed to expand its activities in other fields such as establishment of integrated wood workshaping Bandsa tribal, area manufacture of toys etc. Upto the end of 1979-80, an amount of Rs. 100.01 lakhs has already been paid to the corporation by way of share capital contribution. It is proposed to contribute additional amount of Rs. 31 lakhs to the corporation during the Sixth Five Year Plan period.

Van Rakshak Dal:

1.10.6.44 It is necessary to create an institution of Van Rakshak Dal to protect forest property effectively. Local villages are proposed to be enrolled in this dal.

1.10.6.45. Forest settlement villages do not receive any financial assistance or loans from Revenue or Panchayat Departments. These settlements are devoid of even the primary facilities like proper roads, street lights, drinking water facilities etc. It is therefore, proposed to provide these primary amenities to the forest settlement villages.

1.10.6.46. To meet the polythene bag requirement for various plantation activities, a factory for manufacture of polythene bags has been established at Rajpipla. It is proposed to expand this Factory.

1.10.6.47. There is an old Baniyan tree known as Kabirvad with large number of prop roots and with a historical background at Shukalathirth in Bharuch district, on the banks of river Narmada. A garden along with some facilities for the picnieers is located near this trees. It is proposed to maintain the garden and preserving this historical baniyan tree during the plan.

Development of Adivasi Children :

1.10.6.48. In the absence of proper guidance and educational facilities, the children of Dangi adivasis residing in Dangs district tend to remain backward and uncivilised. Though Dangs is a forest rich district, it is backward in many other respects. In order to inculcate in the children of the Dangi adivasis, the values of learning and better living right from their childhood, a centre for the development of adivasi children is proposed to be started for Dangi adivasis during the Sixth Plan.

Fodder Banks :

1.10.6.49. Harvesting and storing of the grass provides labour to the tribals residing in the forest areas. It is proposed to construct more godowns and to harvest and store 10 lakh kgs. of grass during the Sixth Plan.

1.10.7. Centrally Sponsored Schemes:-

(1) Soil Conservation in the catchment areas of Dantiwada River Valley Project:

1.10.7.1. The scheme aims at reducing the silt discharge into the Dantiwada reservoir from the catchment area which falls in Gujarat and Rajasthan. Upto 1978-79, the Government of India was releasing the entire expenditure on this schemes by way of 50% grant and 50% loan. However, from the 1979-80, the pattern of assistance has been changed and the State is now required to make provision for the 50% of expenditure in the State Plan. Accordingly, a provision of Rs. 62.31 lakhs by way of state share for this scheme has been made for the Sixth Plan period and Rs. 10 lakhs for the Annual Plan 1981-82.

(2) Wild Life schemes:

1.10.7.2. The Government of India have approved the following wildlife schemes in Gujarat as centrally sponsored schemes. These are:

- (a) Development of Gir lion sanctuary;
- (b) Development of wild ass sanctuary and black buck national park;

(c) Crocodile breeding.

In the past, the entire expenditure on non-recurrent item was borne by the Government of India. From 1979-80, the pattern of assistance is changed. While full expenditure on recurring continues to be the burden of the State, only items 50% of the non-recurring expenditure will now come as Central grant and the remaining 50% expenditure will have to be borne by the State. Accordingly, Rs. 10.00 lakhs is proposed to be received as central assistance for the Sixth Plan and Rs. 3.50 lakhs for the Annual Plan 1981-82 for the above three schemes. The state share is proposed to be provided at Rs. 24.50 lakhs for the Sixth Plan and Rs. 7.79 lakhs for the Annual Plan 1981-82 for the above schemes.

1.10.8. Employment:

1.10.8.1. By and large, the major schemes under the forestry activities have a large component of generating labour employment. It is estimated that during the five year period 1980-85, about 578 lakh mandays of labour and 105 lakh mandays of labour during Annual Plan 1981-82 will be generated. In the field of educated employment, about 4991 persons are proposed to get the employment opportunities during 1980-85 Plan.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Forests

Minor Headwise outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Minor Head Development	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Exp.	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Direction and Administration.	10.25	11.88	11.88	110.30	..	23.40	..
2.	Research.	8.74	5.54	5.54	41.00	..	7.36	..
3.	Education and Training.	36.23	36.04	36.04	153.00	..	33.11	..
4.	Forest Conservation & Development.	95.13	112.56	129.12	630.90	630.90	145.46	145.46
5.	Survey of Forest Resources.	..	..	..	..	..	..	..
6.	Plantation Schemes.	102.04	100.82	124.82	657.40	295.90	139.67	61.34
7.	Farm Forestry.	..	41.24	44.68	188.70	186.50	34.38	34.05
8.	Forest Prodees.	..	..	..	..	..	..	..
9.	Resin and Turpentine Products.	..	..	..	..	..	..	..
10.	Communivation and Buildings.	12.80	25.66	25.66	179.30	179.30	51.54	51.54
11.	Preservation of Wildlife.	22.86	77.10	77.10	310.00	..	81.23	..
12.	Nurseries.	..	..	..	..	..	..	..
13.	Extension.	405.98	847.56	847.56	6186.40	6186.40	1180.07	1180.07
14.	Management of Zamindari (Acquisition of Private forests)	7.65	8.11	8.11	40.00	12.00	12.35	4.00
15.	Forests Assets.	..	..	..	..	..	..	..
16.	Other Expenditure.	32.02	64.49	64.49	503.00	35.50	91.45	5.67
Total:—		783.70	1331.00	1375.00	9000.00	7526.50	1800.00	1432.13

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Forests

Scheme wise Outlays and Expenditure.

(Rs. in lakhs)

Sr. No.	No. and Name of the scheme.	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Exp.	Proposed outlay	Capital content.	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
I. Direction and Administration.								
1.	FST 1 Appointment of Jodi Guards	2.89	3.94	3.94	22.20	..	4.66	..
2.	FST 2 Establishment of Mobile Squad.	5.01	3.24	3.24	32.60	..	7.18	..
3.	FST 3 Establishment of Mobile Court.	..	..	..	13.40	..	3.84	..
4.	FST 4 Vigilance Squad.	0.93	1.22	1.22	17.00	..	2.11	..
5.	FST 5 Planning & Statistical Cell.	1.42	3.48	3.48	25.10	..	5.61	..
Total		10.25	11.88	11.88	110.30	..	23.40	..
II. Research.								
6.	FST 6 Forest Research.	8.74	5.54	5.54	41.00	..	7.36	..
III. Education and Training.								
7.	FST 7 Training of staff.	34.78	34.41	34.41	149.00	..	31.53	..
8.	FST-8 Establishment of wood Workshop-cum-Production-cum-Carpenter's Training Centre at Waghai.	1.45	1.63	1.63	4.00	..	1.58	..
Total :		36.23	36.04	36.04	153.00	..	33.11	..
IV. Forest Conservation & Development								
9.	FST-9 Soil and moisture conservation and afforestation in denuded areas	76.27	68.41	84.97	426.20	426.20	110.77	110.77
10.	FST-10 Afforestation of desert border	6.94	11.93	11.93	82.10	82.10	15.32	15.32
11.	FST-11 Arresting advancing salinity in coastal tract of Saurashtra	11.92	14.07	14.07	12.60	122.60	19.37	19.37
	Rural fuel wood plantations	..	18-15	18-15	..	..	..	..
Total ..		95.13	112.56	129.12	630.90	630.90	145.46	145.46
V. Survey of Forest Resources								
VI. Plantation Scheme								
12.	FST-12 Plantation of Fast Growing Species	23.42	26.56	26.56	172.17	130.00	33.48	25.00
13.	FST-13 Economic Plantation	64.36	49.63	73.63	287.70	..	65.71	..
14.	FST-14 Plantation on Coastal Border	13.15	16.88	16.88	91.70	60.00	16.14	12.00
15.	FST-15 Irrigated Plantations	1.11	5.55	5.55	82.30	82.30	19.65	19.65
16.	FST-16 Energy Plantation	..	2.20	2.20	23.60	23.60	4.69	4.69
Total ..		102.04	100.82	124.82	657.40	295.90	139.67	61.34
VII. Farm Forestry								
17.	FST-17 Farm Forestry	..	37.18	46.62	128.60	128.60	28.46	28.46
18.	FST-18 Rehabilitation of degraded farm lands	..	2.84	2.84	57.90	57.90	5.59	5.59
19.	FST-19 Malki Teak Plantation	..	1.22	1.22	2.20	..	0.33	..
Total ..		..	41.24	44.68	188.70	186.50	34.38	34.05

1	2	3	3	4	5	6	7	8	9
	VIII. Forest Produces		..	..	..	..	..	..	..
	IX. Resine and Turpentine Products		..	..	..	..	..	..	..
	X. Communication and Buildings								
20	FST-20	Development of Communciation	0.95	1.85	1.85	23.30	23.30	13.79	13.79
21	FST-21	Construction of Groass Godowns	0.74	0.77	0.77	16.00	16.00	2.75	2.75
22	FST-22	Construction of Buildings	11.11	23.04	23.04	140.00	140.00	35.00	35.00
		Total ..	12.80	25.66	25.66	179.30	179.30	51.54	51.54
	XI. Preservation of Wild Life								
23	FST-23	Wildlife management and Conservation	14.20	25.91	25.91	104.70	..	30.10	..
24	FST-24	Establishment of Safari Park	1.90	5.92	5.92	18.70	..	5.33	..
25	FST-25	Zoological and Public Gardens	0.21	0.25	0.25	5.50	..	0.75	..
26	FST-26	Establishment of Sanctuary at Jessor	..	3.35	3.35	17.50	..	3.22	..
27	FST-27	Establishment of National Park at Bansda.	..	3.06	3.06	15.30	..	1.82	..
28	FST-28	Asstic Lions in Barda Forests	3.16	10.08	10.08	40.00	..	15.00	..
29	FST-29	Establishment of Natural History Museum at Gandhinagar	2.97	14.50	14.58	40.00	..	10.00	..
30	FST-30	Introduction of Black Buck in eastern part of Gir Forests	0.07	0.15	0.15	1.00	..	0.19	..
31	FST-31	Holding Nature Education Camp at Hingolghadh	0.35	2.00	2.00	8.40	..	1.55	..
32	FST-32	Establishment of Marine National Park	..	11.80	11.80	40.00	..	8.00	..
33	FST-33	Establishment of Flamingo Sanctuary at Little Runn of Kachchh	..	..	..	2.80	..	1.40	..
34	FST-34	Crocodile breeding	..	..	..	2.60	..	0.65	..
35	FST-35	Establishment of Chinkara Sanctuary at Narayan Sarovar in Kachchh	..	..	..	12.00	..	3.22	..
36	FST-36	Introduction of Wild Fowles in Dange Forest	..	..	..	1.50	..	..	..
		Total ..	22.86	77.10	77.10	310.00	..	81.23	..
	XII. Nurseries			..	..	..	..	..	..
	XIII. Extension								
37	FST-37	Community Forestry Project	404.82	847.30	847.30	6186.00	6186.00	1180.00	1180.00
38	FST-38	Plantation at Nalia, Bhuj, Kandla, Vadodara and Jamnagar	1.16	0.26	0.26	0.40	0.40	0.07	0.07
		Total ..	405.98	847.56	847.56	6186.40	6186.40	1180.07	1180.07
	XIV. Management of Zamindari								
39	FST-39	Acquisition of private forests	7.65	8.11	8.11	40.00	12.00	12.35	4.00
	XV. Forest Assets		..	..	..	..	..	..	..
	XVI. Ohter Expenditure								
40	FST-40	Demonstration and Survey	2.37	3.39	3.39	39.80	..	8.19	..
41	FST-41	Improved logging	..	1.76	1.76	2.20	..	..	..
42	FST-42	Fire Protection	4.45	6.05	6.05	24.70	..	7.13	..
43	FST-43	Establishment of Checking Nakas	2.57	3.21	3.21	22.50	..	5.33	..
44	FST-44	Forest Publicity	0.71	0.84	0.84	19.60	..	1.95	..

1	2	3	3	4	5	6	7	8	9
45	FST-45	Development of Victoria Park	1.02	1.50	1.50	9.00	..	2.16	..
46	FST-46	Development of Botanical Garden	1.60	1.20	1.20	11.10	..	1.24	..
47	FST-47	Amenities of F.L.C.S.	..	0.10	0.10	8.50	..	0.10	..
48	FST-48	Tagavi loans	0.10	0.97	0.97	4.10	..	0.77	..
49	FST-49	Kotwali's Welfare	..	7.07	7.07	22.10	..	..	..
50	FST-50	Establishment of Grain Bank and Mobile Grain Shop	0.53	0.27	0.27	4.50	4.50	0.67	0.67
51	FST-51	Opening of Firewood Depots	4.41	8.11	8.11	40.00	..	11.22	..
52	FST-52	Establishment of Seed Bank	..	2.90	2.90	12.70	..	2.30	..
53	FST-53	Expansion of Saw Mill at Waghai	..	..	..	5.00	..	2.00	..
54	FST-54	Share Capital Contribution to G.S.F.D.C.	..	1.00	1.00	31.00	31.00	5.00	5.00
55	FST-55	State share for Centrally Sponsored Schemes (including Wild Life)	5.41	16.26	16.26	189.00	..	32.94	..
56	FST-56	Van Rakshak Dal	0.05	0.15	0.15	3.90	..	0.83	..
57	FST-57	Development of Forest Settlement	..	0.92	0.92	1.00	..	..	..
58	FST-58	Polythene bag manufacturing Unit	0.92	3.63	3.63	28.70	..	2.38	..
59	FST-59	Kabirvad	0.14	0.16	0.16	0.90	..	0.15	..
60	FST-60	Adivasi children Development	..	..	..	0.60	..	0.15	..
61	FST-61	Fodder Bank in Tribal Area	..	..	..	5.18	..	0.92	..
62		Nuelues Budget	5.00	5.00	5.00	25.00	..	6.00	..
63		Other expenditure (schemes not including in the Sixth Five Year Plan)	2.74	..	..	..	..	..	..
Total XVI ..			32.02	64.49	64.49	503.00	35.50	91.43	5.67
GRAND TOTAL ..			733.70	1331.00	1375.00	9000.00	7526.50	1800.00	1482.13

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Forests

Targets of Productions and Physical Achievements

Sr. No.	Item	Unit	Level of achievements at the end of					
			1978-79	1979-80 Base year level	1984-85 Terminal year target	1980-81		1980-82 Proped Target
1	2	3	4	5	6	7 Target	8 Likely achieve- ment	9
(a)	Plantation of quick growing species.	'000 ha.	34.12	36.22	45.20	37.20	37.20	39.20
(b)	Economic & Commercial plantations.	'000 he.	59.56	64.76	90.20	69.80	69.80	74.90
(c)	Farm Forestry	No in crore	8.82	13.65	44.00	17.56	18.60	24.10
(d) Communication								
	Improvement of existing roads.	Km.	435	481	577	482	482	502

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Forests

Centrally Sponsored Schemes Outlays.

(Rs. in lakhs)

Sr. No.	Name of the scheme	1979-80 Actuals			1980-85 Outlay proposed			1980-81 Outlay			1981-82 Outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
(1)	Dantiwada River Valley Projects	14.16	14.16	28.32	62.30	62.30	124.60	7.50	7.50	15.00	10.00	10.00	20.00
(2)	Rural Fuel Wood Plantation.	..	..	..	102.18	103.20	205.38	8.15	10.00	18.15	15.15	20.00	35.15
(3)	Development of Gir Lion Sanctuary.	3.23	1.25	4.48	16.02	8.10	24.12	4.93	3.00	7.93	5.35	3.00	8.35
(4)	Development of Sanctuary for Wild Ass and Black Buck.	1.89	0.29	2.18	7.98	1.57	9.55	3.25	1.50	4.75	2.44	0.50	2.94
(5)	Crocodile Breeding.	0.28	0.10	0.38	0.50	0.33	0.83	0.57	0.29	0.86	..	..	..
	Total:-	19.56	15.80	35.36	188.98	175.50	364.48	24.40	22.29	46.69	32.94	33.50	66.44

1.11 INVESTMENT IN AGRICULTURAL FINANCIAL INSTITUTIONS.

1.11.1 Progressive institutionalisation of the agricultural credit is the strategy adopted in the field of agricultural credit. The long term finance to the agriculturists is provided by Gujarat State Co-operative Land Development Bank for construction of wells, repairs or deepening of old wells, pump sets (engines and motors), tractors, purchase of occupancy rights under Land Reforms Act and other miscellaneous purposes.

1.11.2 Review of progress :

1.11.2.1 Govt. is participating in lending programme of the bank by making investments in its ordinary and special debentures. There has been a progressive increase in the advances up to the end of the Fourth Plan. But thereafter there has been a decline due to heavy overdues at the branch level and consequent ineligibility of branches of the bank for fresh loaning.

1.11.2.2 Steps are being taken for boosting up the loaning programme of the Gujarat State

Cooperative Land Development Bank. Upto 1979-80 State Govt. has contributed Rs. 101 lakhs for strengthening the capital base of the Land Development Bank. The problem of overdues is engaging the attention of the Government.

1.11.3 Programme for Sixth Plan and Annual Plan 1981-82.

1.11.3.1 The total long term advances up to 1979-80 is of the order of Rs. 211.80 crores. It is proposed to make additional long term advance of Rs. 10 crores during 1981-82 and Rs. 55 crores during the Sixth Five Year Plan bringing the cumulative advances to Rs. 266.80 crores.

1.11.3.2. The State Govt. would provide support by purchasing debentures floated by the bank so as to enable it to carry-out its loaning programme. An outlay of Rs. 610 lakhs is provided for the Sixth Plan 1980-85 and Rs. 90 lakhs for the Annual Plan 1981-82.

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Investments in Agricultural Financial Institutions

Schemewise Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
1	AGC-1. Investment in Agricultural Financial Institutions	35.11	90.00	90.00	610.00	610.00	90.00	90.00

1.13 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 helping stabilisation of prices of agricultural products. The programme of regulated markets is undertaken to help agriculturists to secure fair prices for their products and to prevent malpractices on the part of the traders.

1.12.2 Review of Progress :

1.12.2.1 The State Warehousing Corporation is in charge of development of warehousing facilities. The storage capacity with the State warehousing Corporation is 49, 175 tonnes at 73 centres 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 Agricultural Produce Market Committees consisting of elected members are in charge of regulated markets. There are 287 markets including sub-yards by the end of 1979-80 out of which 70 are in the tribal area. The State Government gives loan to the agriculture produce market committees for the purchase of land. An amount of Rs. 2.03 lakhs is given as loans to the market committees in 1978-80.

1.12.3. Programme for Sixth Five Year Plan and Annual Plan 1981--82.

1.12.3.1 An outlay of Rs. 210 lakhs has been proposed for the Sixth Five Year Plan and Rs. 30 lakhs has been proposed for Annual Plan 1981-82; the details of which are briefly shown below :

(Rs. in lakhs)

Sr. No.	Programme	1979-80 Actuals	1980-81		1980-85	1981-82
			Outlay	Anticipated Expenditure	Proposed Outlay	Proposed Outlay
1	2	3	4	5	6	7
1.	Development of Regulated Markets	3	9	9	70	16
2.	Share Capital to State Warehousing Corporation	..	13	13	90	6
3.	Establishment of Directorate of Agricultural Marketing	..	..	..	30	4
4.	Development of Rural Markets	..	4	4	20	4
Total 1		3	26	26	210	30

1.12.3.2. Out of the proposed outlay of 210 lakhs for the Sixth Five Year Plan and Rs. 30 lakhs for the Annual Plan 1981-82 the flow proposed to the tribal Area Sub-Plan is Rs. 70 lakhs and Rs. 16 lakhs respectively. It is expected that Special Central Assistance of Rs. 95 lakhs for the Sixth Five Year Plan and Rs. 20 lakhs for Annual Plan 1981-82 would be made available for the Tribal Area Sub-Plan.

1.12.3.3. The storage capacity of warehousing Corporation is proposed to be increased to 1.83 lakh tonnes by the end of 1984-85. The increase in the storage capacity envisaged for the year 1980-82 is 1.05 lakh tonnes. It is proposed to regulate

20 more markets during the Sixth Five Year 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, ground-nut, wheat and rajara. For the year 1981-82 four markets are targetted to be regulated. A Directorate of Agricultural Marketing is proposed to be set up with a view to supervise the regulated markets, anticipate problems of marketing agricultural produce, collect market information, analyse data, give information, under take marketing survey and research and to give timely advice to the Government on measures necessary to protect the interests of the producers.

DRAFT SIXTH FIVE YEAR PLAN-1986-85 AND ANNUAL PLAN-1981-82

Marketing Storage and Warehousing.

Scheme-wise Outlays and Expenditure.

(Rs in lakhs).

Sr. No.	Number and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated-Expenditure.	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	WRH-1—Development of Regulated Markets.							
	Loan	2.03	6.00	6.00	35.00	35.00	7.00	7.00
	Subsidy	1.07	3.50	3.50	35.00	..	9.00	..
	Total :	3.10	9.50	9.50	70.00	35.00	16.00	7.00
2.	WRH-2—State warehousing Corporation.							
	Share capital.	..	12.50	12.50	90.00	90.00	6.00	6.00
3.	WRH-3—Establishment of Directorate of Agril. Marketing.							
	Staff Subsidy.	..	..	..	30.00	..	4.00	..
4.	WRH-4—Development of Rural markets (Old centrally sponsored scheme)							
	Staff Subsidy.	..	4.00	4.00	20.00	..	4.00	..
	Grand Total :	3.10	26.00	26.00	210.00	125.00	30.00	13.00

DRAFT SIXTH FIVE YEAR PLAN, 1980-85 AND ANNUAL PLAN 1981-82

Marketing, Storage and Warehousing

Targets of Production and Physical achievement

Sr. No.	Item	Unit	Level of achievement at the end of					1981-82
			1978-79	1979-80 (Base Year level)	1984-85 Terminal Year target	1980-81		Proposed target (level)
1	2	3	4	5	6	7	8	9
1. Agricultural Marketing :								
	(a) Regulated markets	Nos.	283	287	307	293	293	297
	(b) Sub-market Yards							
2. Storage :								
Owned capacity with :								
(i)	State Warehousing Corporation	'000 tonnes (cumulative)	68	73	183	95	95	105
(ii)	Cooperatives	-do-	310	319	385	328	328	847

1.10 COMMUNITY DEVELOPMENT AND PANCHAYATS

1.13.1. Introduction :

1.13.1.1. Community Development Programme was first introduced in 1952 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 remained 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 CPA 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. Units of Community Development Blocks 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

1.13.3.2. 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 alongwith adequate powers, resources and manpower.

1.13.2.3. The Programme during the Sixth Five Year Plan will comprise of the maintenance of Post State 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 for creating additional posts of Panchayat Secretaries is taken up in the current plan period alongwith other development activities.

1.13.3. Programme proposed for Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

1.13.3.1. An outlay of Rs. 740 lakhs is proposed for the Sixth Five Year Plan and Rs. 98 lakhs for the Annual Plan 1981-82 for the programmes under Community Development and Panchayats. The programmewise details of the outlays proposed are as under :—

(Rs in lakhs)

Sr No	Programme	1979-80 Actuals	1980-81		1980-85 Proposed Outlay	1981-82 Proposed Outlay
			Outlay	Anticipated Expenditure		
1	2	3	4	5	6	7
1	Direction and Administration	0.05	1.00	1.00	4.25	1.00
2	Training	3.12	8.81	8.81	47.81	9.00
3	Assistance to Panchayati Raj Institutions	5.66	37.94	37.94	337.94	45.00
4	Community Development Programme	90.02	133.25	74.95	300.00	43.00
TOTAL		98.85	181.00	122.70	740.00	98.00

1.13.3.2. Out of the State Plan outlay of Rs. 740 lakhs for the Sixth Five Year Plan and Rs. 98 lakhs for the Annual Plan 1981-82 the flow to the tribal Area Sub-Plan is Rs. 90 lakhs and Rs. 23 lakhs respectively. The Programmes pertaining to Antyodaya and Abhinav Gram Nirman Karyakram are now placed under the Sub-sector of Special Programme for Rural Development.

Community Development Blocks :

1.13.3.3. 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 Commu-

nity 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 Development programme and local works. It is proposed to continue this Scheme for Post Stage-II Community Development Blocks during the Sixth Five Year Plan 1980-85. An outlay of Rs. 125 lakhs has been proposed for the Sixth Five Year Plan at the rate of Rs. 10,000 per CPA Unit of C. D. Block per year.

1.13.3.4. Out of 250.00 CPA. Units of Post Stage II Blocks, 63.75 CPA Units are covered

under Tribal Area Sub-Plan. Hence Rs. 31.85 lakhs will be earmarked for Tribal Area Sub-Plan. The remaining amount of Rs. 93.15 lakhs will be utilised in the areas other than Tribal Areas. Similarly for the Annual Plan 1981-82 an outlay of Rs. 25 lakhs has been proposed. Of this the flow to the Tribal area sub-Plan will be Rs. 6.37 lakhs towards 63.75 CP4 Units covered under Tribal Area Sub-Plan.

Additional Posts of Panchayat Secretaries :

1.13.3.5. There are 12857 Village Panchayats (Provisionally) in the State as on 31st March, 1978 against which 10766 posts of Panchayat Secretaries are existing at the end of 1979-80. It would be necessary to strengthen basic minimum administrative structure at the village level by providing one Panchayat Secretary for each Village Panchayat. To achieve goal of one independent Panchayat Secretary for each Village Panchayat by the end of 1984-85, 2091 posts of Panchayat Secretaries shall have to be created. It is, therefore proposed to create 2091 (including 210 in Tribal areas) additional posts of Panchayat Secretaries during 1980-85. In addition to the existing 10766 posts of Panchayat Secretaries at the end of 1979-80, additional 500 posts including 50 for tribal areas are expected to be created during 1980-81. The target for the year 1981-82 is to create additional 500 posts including 50 for tribal areas.

Training, Education and Research in Panchayati Raj:

1.13.3.6. 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 building, staff quarters and water supply facilities at this Institute. The old institute building also requires some additions and alterations. Under this programme training courses for Office bearers of District Panchayats, Taluka Panchayats and Village Panchayats under the auspices of Gujarat Pradesh Panchayat Parishad, Gandhinagar are also organised. For this scheme an outlay of Rs. 47.81 lakhs for the Sixth Five Year Plan 1980-85 and Rs. 9 lakhs for the Annual Plan 1981-82 has been proposed.

Gram Safai Shibirs:

1.13.3.7. In Order to encourage people in rural areas for maintaining cleanliness and public health through better sanitation and to provide the facilities like sockage pits, somkeless 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 tragetted to organise

920 such shibirs (one Shibir per year per taluka for 5 years) including 160 shibirs in tribal area during 1980-85; for which an outlay of Rs. 55.12 lakhs has been proposed.

Planning Cell for District Plans :

1.13.3.8. Having regard to the need for ensuring better co-ordination and supervision as also for guiding and assisting the Panchayati Raj Institutions in formulating Plan programmes and watching, reviewing and monitoring the programmes implemented at the ditirect level a special planning cell has been created in the Office of the Development Commissioner. It is proposed to continue and strengthen the cell with a view to ensure effective supervision for implementation, review and monitoring. An outlay of Rs. 4.25 lakhs has been proposed for the Sixth Five Year Plan and Rs. 1 lakh for the Annual Plan 1981-82.

Padadhikari Sammelans :

1.13.3.9. 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 lakh for the Sixth Five Year Plan and Rs. 0.25 lakh for the Annual Plan 1981-82 has been proposed for this programme.

Block Level Agencies :

1.13.3.10. The Sub-Group of Community Development and Panchayats, appointed by the Govt. of India for the formulation of Five Year Plan 1978-83 and Annual Plan 1979-80 recommended strengthening of Block level agencies. They have stressed the need for strengthening of the Block level (taluka level) agencies in view of the introduction of Training and Visit (T & V) system of extension. The High Level Committee (Shri Rikhavdas Shah Committee) on Panchayats has also recommended creation of a Post of Assistant Taluka Development Officer in Taluka having 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 taluka. The Sate

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 and (13) Navsari taluka. An outlay of Rs. 8.63 lakhs for the Sixth Plan 1980-85 and Rs. 1.75 lakhs for the Annual Plan 1981-82 has been proposed for continuing these posts.

Rural Development through Voluntary Agencies

1.13.3.11. The Government of India has given top priority to the Rural Development Programme looking to its importance in the present time. In view of this two new sections i.e. Section 35CC and 35CCA have been inserted in the Income tax Act 1961 under which relaxation of the Income-tax to the voluntary agencies such as Public Trusts, Companies etc. for the amount expended in their approved rural development projects has been given.

1.13.3.12. The State Government is also eager and anxious to see that such activities may spread in the State and also may get momentum so that the backward and under developed rural areas, rural poor and weaker sections may get the benefit

of such projects to be implemented by the Voluntary agencies. Therefore, the State Government has taken various steps such as appointment of High Powered Committee and opening of a Special Cell for Integrated Rural Development Programme at Ahmedabad. This Cell functions for coordination and liaison work for the rural development programmes. The State Government has made a provision amounting to Rs. 5.00 lakhs for the purpose for 1980-81. This cell recommends the projects for approval of the State Level Committee consisting of two persons viz. (1) The Commissioner of Income-tax as Chairman and (2) Secretary Agriculture, Forests and Cooperation Department as member. Since the functioning of the State Level Committee for Gujarat State, 74 institutions who have applied to State Level Committee have got approval for their projects wherein an amount of Rs. 2349.57 lakhs is proposed to be spent for the rural development programme within 1 to 3 year's time limit. These projects have covered 1533 villages all over the State under its various activities.

1.13.3.13. It is proposed to continue the Cell during the Sixth Plan to carry out these activities for which a provision of Rs. 20 lakhs for the Sixth Plan and Rs. 5 lakhs for the Annual Plan 1981-82 is proposed.

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Community Development and Panchayats

Minor Headwise outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Minor Head of Development	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay	Capital Outlay	Proposed Outlay	Capital Outlay
1	2	3	4	5	6	7	8	9
1.	Direction and Administration	0.05	1.00	1.00	4.25	..	1.00	..
2.	Training	3.12	8.81	8.81	47.81	14.46	9.00	8.24
3.	Assistance to Panchayati Raj institutions	5.66	37.94	37.94	387.94	..	45.00	..
4.	Community Development Programme	90.02	133.25	74.95	300.00	..	43.00	..
Grand Total		98.85	181.00	122.70	740.00,	14.46	98.00	8.24

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Community Development and Panchayats

Schemewise Outlays and Expenditure

(Rs in lakhs)

Sr No.	No. and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay	Capital content	Proposed Outlay	Capital content
1	2	3	4	5	6	7	8	9
A GENERAL (PANCHAYATS)								
I. Direction and Administration								
1	CDP-1 Planning Cell for District Plan	0.05	1.00	1.00	4.25	..	1.00	..
	Sub-Total I	0.05	1.00	1.00	4.25	..	1.00	..
II. Training								
2	CDP-2 Training, Education and Research	3.12	8.81	8.81	47.81	14.46	9.00	8.24
	Sub-Total : II	3.12	8.81	8.81	47.81	14.46	9.00	8.24
III. Assistance to Panchayati Raj Institutions								
3.	CDP-3 Additional Post of Panchayat Secretaries	5.66	37.94	37.94	387.94	..	45.00	..
	Sub-Total - III	5.66	37.94	37.94	387.94	..	45.00	..
	Sub-Total-A(General)	8.83	47.75	47.75	440.00	14.46	55.00	8.24
B COMMUNITY DEVELOPMENT								
4.	CDP-4 Community Development	23.63	25.00	25.00	125.00	..	25.00	..
5.	CDP-5 Sarvodaya	54.60	90.00	32.20	90.00	..	..	..
6.	CDP-6 Rural Development undertaken by voluntary Agencies	2.25	5.00	4.50	20.00	..	5.00	..
7.	CDP-7 Gram Safai Sibirs	8.45	11.37	11.37	55.12	..	11.00	..
8.	CDP-8 Strengthening of Block Level agency	0.78	1.63	1.63	8.63	..	1.75	..
9.	CDP-9 Padadhikari Sammanvan	0.31	0.25	0.25	1.25	..	0.25	..
	Sub-Total B (Community Development)	90.02	133.25	74.95	300.00	..	43.00	..
	GRAND TOTAL	98.85	181.00	122.70	740.00	14.46	98.00	8.24

4 SPECIAL PROGRAMMES FOR RURAL DEVELOPMENT (POVERTY ERADICATION PROGRAMME)

The main thrust of the development activities on rural development, providing employment through investments in infrastructure and social networks for eradication of poverty and improving the quality of life. In addition to the outlays provided in the sectoral programmes benefiting the rural areas, specific provision is also made for special programmes. An outlay of Rs. 15465 lakhs is proposed to be provided for the Sixth Plan 1980-85 and Rs. 2602 lakhs for the Annual Plan 1981-82. This

programme covers the (1) Small Farmers Development Programme (2) Drought Prone Area Programme (3) Integrated Rural Development, (4) Local Development Works Programme, (5) Abhinav Gram Nirman Karyakram (6) Antyodaya Programme, (7) Development of Backward Areas, (8) Block Level Planning for Employment and (9) offseason unemployment Relief Works. The programme-wise details of the expenditure and outlay are as under :

(Rs. in lakhs)

Sr. No.	Programme	1979-80 Actuals	1980-81		1980-85 proposed Outlay	1981-82 proposed Outlay
			Outlay	Anticipated expenditure		
1	2	3	4	5	6	7
1.	Small Farmers Development Programme and Small Farmers and Agricultural labourers ..	162.35	165.00	165.00	1270.00	175.00
2.	Drought Prone Area Programme ..	422.74	386.00	386.00	2380.00	400.00
3.	Integrated Rural Development ..	230.14	350.00	350.00	1675.00	400.00
4.	Local Development Works ..	306.07	250.00	250.00	1250.00	250.00
5.	Abhinav Gram Nirman Karyakram ..	183.23	350.00	350.00	2370.00	457.00
6.	Antyodaya ..	120.00	200.00	200.00	2260.00	220.00
7.	Development of Backward Areas ..	50.00	50.00	50.00	250.00	50.00
8.	Block level planning for employment ..	339.46	500.00	413.00	3510.00	550.00
9.	Off-season employment Relief Works ..	38.56	100.00	100.00	500.00	100.00
	Total..	1852.55	2351.00	2264.00	15465.00	2602.00

An outline of each of the above programme is given in subsequent paragraphs.

1.14.1 Small Farmers Development Programme.

1.14.1.1 With a view to improving the lot of the rural poor consisting of mainly the small farmers, marginal farmers and agricultural labourers, the small farmers development projects have been formulated under Central Sector programme since 1971. The main objective of these projects is to assist the weaker section of the rural community in their economic development so as to make them economically viable and thereby to bring them above

the poverty line. It was with this view in mind that the programme under these projects have been so devised that they would be practically feasible for implementation and also economically viable having the potentiality of raising the standard of living of these rural poor. The programme mainly consists of making available subsidy for milch cattle, agricultural implements, plant protection equipment, poultry farming, cattle sheds, marketing transport vehicles, soil conservation, strengthening of cooperative institutions, etc. to persons identified as small/marginal farmers and agricultural labourers. Upto the end of 1978-79, it was a fully Centrally

funded programme. The responsibility of supervision and the implementation of the programme through the established Small Farmers Development Agencies in the programme area is that of the State Government.

1.14.1.2 In the State five projects were sanctioned in the first phase (1971 to 1976) in the district of Junagadh, Sabarkantha, Vadodara, Valsad and Surat. Some of the main programme items viz. dugwells constructed, milch animals supplied, pump-sets installed and rural artisans trained exceeded the target fixed. Out of the total 257194 beneficiaries identified by these five agencies 159223 beneficiaries have been benefitted. During the period of second phase commencing from 1-4-76 to 31-3-79, 67083 more beneficiaries were benefitted under the five agencies viz. Surat, Valsad, Vadodara, Sabarkantha and Junagadh.

In the year 1974-75 i. e. in the beginning of the Fifth Five Year Plan the Government of India however sanctioned one more project of Bharuch district.

During the year 1979-80 and 1980-81 18138 and 24730 SFS/MFLS/ALS are likely to be benefitted under all the six projects.

1.14.1.4 Upto the end of the year 1978-79 the Small Farmers Development Agencies Programme was funded fully by the Central Government. In view of the reclassification of the Centrally Sponsored Schemes the expenditure is to be shared equally by the Centre and the State with effect from 1st April, 1979.

1.14.1.5 An outlay of Rs. 710 lakhs is proposed for the period of the Sixth Plan 1980-85 with the target of benefitting 1.42 lakhs SF/MFS/ALS. During the year 1981-82 it has been proposed to provide Rs. 94 lakhs as State share with the target to benefit additional 26250 SFS/MFS/ALS.

Small farmers and Agricultural Labourers Development Programme.

1.14.1.6 The Central Sector Programme of SFDA/MFAL is being implemented in the six districts of Valsad, Surat, Bharuch, Vadodara, Sabarkantha and Junagadh. The State Government has set up a similar agency in each (SFAL) of the

districts of Dangs, Kheda, Gandhinagar, Bhavnagar and Jamnagar. Small Farmers and Agricultural Labourers Development Agencies Programme identify vulnerable sections of rural poor and improve their agricultural productivity by providing agricultural inputs, implements etc. and by extending activities. Development of dairying and agriculture are two main important programme elements to provide supplementary source of income to the rural poor.

1.14.1.7 Since 1974-75 the projects for small farmers and agricultural labourers on the pattern of central sector SFDA/MFAL projects have been started by the State Government. The main objective of these projects is to assist the small farmers in making investment for agriculture, land development and subsidiary occupations. Subsidies large on the pattern of central sector projects at the rate of 25 % of the small farmer and 33 1/3% to the marginal farmers and agricultural labourers are given for the above investments. The flow of institutional credit to these sections is proposed to be increased by strengthening of co-operatives through contribution of risk fund and managerial subsidy. These projects are implemented by agencies under the Chairmanship of District Development Officers.

1.14.1.8 From the year 1978-79, this programme is also implemented in the Districts Ahmedabad, Amreli, Kachchh, Panchmahals, Banaskantha, Mehsana, Rajkot and Vadodara. The programme had started in all the twelve districts and 24254 SFS/MFS/ALS were benefitted under various programmes implemented by these agencies during the year 1979-80. During the year 1980-81 about 9 to 10 thousand SFS/MFS/ALS are likely to be benefitted.

Programme for Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

1.14.1.9 It is proposed to continue the programme during the Sixth Plan period 1980-85. An outlay of Rs. 560.00 lakhs has been proposed for the period of Sixth Plan. During the Sixth Plan period about 0.40 lakh SFS/MFS/ALS are likely to be benefitted under the programme.

1.14.1.10 An outlay of Rs. 77 lakhs is proposed for the year 1981-82. It is estimated to cover 9340 SFS/MFS/ALS during the year 1981-82.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Schemewise outlays and expenditure
Sector/Sub-Sector of Development SFDA Programme and SFAL Programme
(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme.	1979-80 actuals.	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content.
1	2	3	4	5	6	7	8	9
1	Small Farmers Development Programme	59.66	90.00	90.00	710.00	—	98.00	—
2	Small Farmers and Agricultural Labourers Programme.	91.69	40.30	40.30	350.00	—	39.00	—
3	Supporting Staff.	11.00	34.70	34.70	210.00	—	38.00	—
	Total	162.35	165.00	165.00	1270.00	—	175.00	—

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Target of Production and physical achievements.

Sr. No.	Item.	Unit	Level of achievement at the end of				1981-82 Proposed Target (level).	
			1978-79	1979-80 (Base year level)	1984-85 Terminal year Target.	1980-81 Target (level) / Likely achievement.		
1	2	3	4	5	6	7	8	9
(A) S. F. D. A. Programme.								
1	Demonstration plots.	No.	3925	7596	19796	11446	11446	15426
2	Agricultural implements.	„	1998	2710	11882	5610	5610	8593
3	Input kits.	„	265	1550	5890	2820	2820	4220
4	Dug wells	„	290	519	1734	859	859	1234
5	Wells deepened	„	110	168	1083	438	438	733
6	Pumpsets	„	875	1603	3050	1985	1985	2400
7	Milch Animals	„	9581	15803	29273	19753	19753	23933
8	Bullocks/Camel supplied	„	2315	2841	6641	3941	3941	5166
9	Bullocks/Camelcarts supplied	„	311	494	2279	1019	1019	1579
10	Poultry Units	„	403	403	473	408	408	423
11	Rural artisans to be trained	„	2733	4008	5778	4428	4428	4998
12	No. of indentified beneficiaries to be trained.	„	27422	45560	129030	70290	70290	96540
(B) S. F. A. L. Programme.								
1	Demonstration plots.		2433	5291	11641	8341	6341	8341
2	Agricultural implements		231	543	2273	1843	1293	1293
3	Input kits.		3434	5563	8163	7063	6363	7063
4	Milch animals		2250	9040	16157	12687	10687	12887
5	Bullocks/ camels supplied		1391	3142	5872	4104	3572	4022
6	Bullocks/camel-carts supplied		259	442	1342	992	567	877
7	Poultry units.		5	73	423	269	173	273
8	No. of identified beneficiaries to be trained.		14339	38593	72803	59550	47793	57133

Draft Sixth Five Year Plan 1980--85 and Annual Plan 1981--82.

Centrally Sponsored Schemes--Outlays.

(Ro. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 outlay proposed			1980-81 outlay			1981-82 outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Small Farmers Development programme.	59.66	59.67	119.33	710.00	710.00	1420.00	90.00	90.00	180.00	98.00	98.00	196.00

1.14.2. Drought Prone Area Programme.

1.14.2.1. Centrally Sponsored Scheme for Drought Prone Area Programme is being implemented in 41 talukas of the Ahmedabad, Amreli, Banaskantha, Bhavnagar, Jamnagar, Kachchh, Mahesana, Panchmahals, Rajkot and Surendranagar districts of the State. Programme lays stress on integrated area development to restore the ecological balance and to make the best use of the limited resources in the drought affected areas. The ultimate objective is to reduce through appropriate investment and technology the severity of drought conditions and create a long term stable basis for production and employment. The important programme elements are, (i) development and management on water resources (ii) afforestation and grass land development (iii) soil and moisture conservation on watershed basis (iv) drinking water supply (v) animal husbandry

and dairy development (vi) introduction and propagation of dry farming technology and strengthening of the cooperative institutions in drought affected areas. The programme elements are being implemented in each district by an agency set up under the Registration of Societies Act 1960 under the Chairmanship of District Development Officer.

1.14.2.2. The programme also includes beneficiaries schemes where subsidy is given to SF at the rate of 25% and to MF/AL at the rate of 33 1/3%. Tribal beneficiaries are entitled to 50% subsidy. The maximum limit of subsidy is Rs. 4000 per beneficiary.

Review of Progress:-

1.14.2.3. The details of yearly outlays approved by Government of India and expenditure incurred under the programmes during 1974-75 to 1979-80 are as follows:-

Year	Yearly outlays approved by Govt. of India Total	State Plan Share	(Rs. in lakhs)	
			Expenditure incurred Total	State Plan
1974-75	825.00	200.00	893.14	214.14
1975-76	564.00	282.00	478.93	196.83
1976-77	567.00	247.00	473.12	253.12
1977-78	794.25	471.25	624.95	301.95
1978-79	1198.02	773.93	809.63	646.74
1979-80	751.94	375.97	629.46	514.73
Total . .	4700.21	2350.15	3855.23	1927.61

Programme for Sixth Five Year Plan 1980-85.

1.14.2.4. The pattern of central assistance during Sixth Plan continues to be on 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 proposed. A total programme outlay of Rs. 3243 is however envisaged for Sixth Plan period keeping Rs. 168 lakhs as uncommitted amount to come up with likely additional requirement. Main highlights of financial and physical programmes are as under.

Sr. No.	Sector	Outlay (Rs. in lakhs)	Physical targets		
			Item	Unit	Target
1	2	3	4	5	6
1	Minor Irrigation	941.60	(1) Direct Irrigation potential	Hect.	19289
2	Afforestation and Grass land Development	406.49	(2) Indirect Irrigation potential		10461
			(i) Current Plantation		26455
			(ii) Soil & Moisture Conservation		12120
			(iii) Grassland Development		2680

1	2	3	4	5	6
3	Soil Conservation	315.74	(i) Area Covered under S.C. measuring	"	18194
			(ii) Farm Ponds	No.	1384
4	Drinking Water Supply	1.00	(i) DWSS to be contd.	No.	2
5	A. H. & Dairy Development	749.55	(1) Estt. of Milk Coop. Socys.	No.	424
			(2) Supply/Maintennance of bulls	No.	329
			(3) Supply of Milch animals	"	8876
			(4) Poultry Units	"	30
			(5) Sheep Units	"	925
			(6) Sheep Socys.	"	51
			(7) Chilling/Cooling plant	"	5/3
6	Agriculture	155.92	(1) Demonstration	No.	3300
			(2) Supply of improved agri. implements and P. P. appliances	No.	3250
7	Co-op. Credit management	67.92	(1) Subsidy for enrolment of new members from SF/MF	No.	383
			(2) Share capital loan to SF/MF	No.	11383
9	Fisheries	45.96	(1) Supply of boats	No.	685
10	Organisation and Management	390.82			
		<u>3075.00</u>			
	Uncommitted	168.00			
		<u>3243.00</u>			

1.14.2.5. An outlay of Rs. 615 lakhs is proposed for 1981-82 as per pattern of yearly allocation discussed above.

	(Rs. in lakhs)
(1) State share :	
(a) Tribal Area	80.00
(b) Non-Tribal Area.	227.50
Total (1)	<u>307.50</u>
(2) Central share	<u>307.50</u>
Total (I) and (2)	615.00

The Sectorwise allocation of the outlay is as follows:-

(1) Minor Irrigation	..	197.43
(2) Afforestation and grass land development.		116.42
(3) Soil Conservation		42.78
(4) Drinking Water supply Scheme.	..	
(5) Animal Husbandry and Dairying	..	130.59

(6) Agriculture ..	29.00	4. Bhavnagar	15.00
(7) Credit Management ..	14.19	5. Jamnagar	30.00
(8) Organisation and Management	84.49	6. Kachchh	105.00
		7. Mahesana	30.00
		8. Panchmahals	105.00
		9. Rajkot	30.00
		10. Surendranagar.	120.00
	Total:- 615.00		615.00

The District-wise tentative allocation of the outlay of Rs. 615 lakhs is as follows :—

	(Rs. in lakhs)
(1) Ahmedabad	30.00
(2) Amreli	60.00
(3) Banaskantha	20.00

Employment Potential

1.14.2.6. The details of likely employment during 1981-82 are given below :—

(Rs. in lakhs)

Sr. No.	Sector	Outlay			Employment mandays		
		Total	Central	State	Total	Central	State
1	2	3	4	5	6	7	8
1.	Minor Irrigation	197.43	98.71	98.72	8.97	4.49	4.48
2.	Afforestation and grass land development	116.42	58.21	58.21	16.93	8.46	8.47
3.	Soil Conservation	42.78	21.39	21.39	8.56	4.28	4.28
	Total	356.63	178.31	178.32	34.46	17.23	17.23

1.14.2.7 In calculating the employment potential wage component and wage rate of the above sectors are as follows :—

	Wage component %	Wage rate Rs.
1. Minor Irrigation	50	11.00
2. Afforestation and grass-land development	80	5.50
3. Soil Conservation	60	3.00

Desert Development Programme

1.14.2.8. The main objective of the programme is integrated development of the desert areas by increasing the productivity, income level and employment opportunities for the inhabitants through optimal utilisation of physical, human, livestock

and other biological resources. while striving to achieve this ultimate objective, the programme emphasises prevention of further deterioration of the desert areas and the spread of deserts conditions. The pattern of central assistance is 50 percent.

1.14.2.9. The Programme was introduced in the State in 1977-78 and is in the operation in following eleven talukas of the State.

Sr.	District	Talukas
1.	Banaskantha	1. Deodar 2. Tharad 3. Kankrej 4. Randhanpur 5. Santalpur 6. Wav
2.	Mahesana	1. Sami 2. Harij
3.	Kachchh	1. Abdasa 2. Nakhtrana 3. Lakhpat.

Review of progress.

1.14.2.10. The financial and physical progress under the programme for the period 1977-78 to 1979-80 was as under :—

Sr. No.	Scheme	Expenditure (Rs. in lakhs)	Physical Achievement			
			Item	Unit	Achievement	
1	2	3	4	5	6	
1	Afforestation	89.09	1	Plantation	Hect.	4800
			2	Shelter belts	K.M.	310
			3	Grassland Development	Hect.	1300
			4	Seedling	No. in lakhs	30
2	Rural Electrification	41.18	1	No. of wells energised	No	225
3	Ground Water Development	121.85	1	Tube wells energised	No	44
			2	Tubewells modernised	No	11
4	Foodder Development	13.65	1	No. of farms	No	4
5	Wool utilisation centre	8.00	1	No. of centre	No	1
		<u>273.77</u>				

Programme for Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

sixth Plan period. An amount of Rs. 15 lakhs is proposed per taluka per year.

1.14.2.11. An outlay of Rs. 825 lakhs is proposed for eleven talukas under this programme for

1.14.2.12. During 1981-82 an amount of Rs. 165 lakhs is proposed for the programme as per details given below :—

Sr. No.	Scheme	Outlay Proposed (Rs. in lakhs)	Physical Programme			
			Item	Unit	Target	
1	2	3	4	5	6	
1	Afforestation and Grassland Development	80.94	(i)	Mixed Plantation	Hect.	2575
			(ii)	Grass Improvement	Hect.	600
			(iii)	Shelter belt	Km.	136
			(iv)	Farm belt	Km.	350
2	Animal Husbandry and Dairying					
	(a) Distribution of bulls	15.62		Maintenance of bull mothers	No.	250

1	2	3	4	5	6
(b) Livestock Research		8.80	Centre	No.	1
(c) Sheep Development		7.00	Purchase of sheep	No.	250
(d) Camel Development		9.00	Camel	No.	10
(e) Staff for Animal Husbandry and Dairying		2.64			
..	Total (2)	43.06	..	..	..
3	Fodder Development	29.00	(1) Fodder Farm	No.	10 (cont.)
			(2) Rural Milk Centre	No.	10 (cont.)
4	Uncommitted	21.00			
		165.00			

Special Minor Irrigation subsidy scheme for Small/Marginal farmers/Other Farmers.

1.14.2.13. Following two schemes of giving subsidy for minor irrigation works like dug-wells, tubewells, pumpset oil engine etc, are implemented in the State with 50% Central assistance.

(a) Minor Irrigation Scheme for Small and Marginal farmers in areas not covered by centrally assisted special programme like SFDA, DPAP and CAD. Small/marginal farmers holding land upto 2 hectares are to be given the subsidy under the scheme. The pattern of subsidy is 25% for small farmers, while it is 50% for community works.

(b) Minor Irrigation scheme for farmers with 2 to 4 hectares of land.

Under this scheme farmers with 2 to 4 hectares of land can avail of the benefit of the subsidy. The rate of subsidy is 20% for individual beneficiaries works and 40% for community works.

Under the above two schemes a total amount of Rs. 22.83 lakhs was spent during 1978-80 covering 1834 beneficiaries and 21 societies.

1.14.2.14. Since these schemes cover all the 184 talukas of the State, a total outlay of Rs. 388 lakhs

at the rate of Rs. 2 lakhs for talukas is proposed for Sixth Plan. Of this the State share would be Rs. 184 lakhs. An outlay of Rs. 20 lakhs is proposed for the year 1981-82 of which the State share would be 20 lakhs.

GUJARAT STATE RURAL DEVELOPMENT CORPORATION LIMITED

1.14.2.15. Gujarat State Rural Development Corporation Limited was set up on 9th July, 1977. The Registered office of the Corporation is at Gandhinagar. It has field offices one each in the districts of Panchmahals, Kachchh, Surendranagar, Valsad and Banaskantha. The Corporation's authorised capital is Rs. 2.00 crores. The subscribed capital is Rs. 38/- lacs. It is a fully shared State Government Company.

1.14.2.16. The main objective of the Corporation is to promote integrated rural development programme in the State. The corporation has started activities like Integrated Rural Development Projects for Cattle cum Fodder Development Fodder Development Project under Desert Development Programme, Rural Milk Processing Centre Dolatpur, Food for work Programme, Preparation of Project for Rural Development, Rural Planning and Holding of Technical Seminars and Workshops. An outlay of Rs. 162 lacs is proposed towards share capital contribution to the Corporation during the Sixth Plan period.

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Schemewise outlays and expenditure

Draught Prone Area Programme.

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82		
			Outlays	Anticipated expenditure	Proposed outlay	Capital contents	Proposed outlay	Capital content	
1	2	3	4	5	6	7	8	9	
1. Agriculture and allied services									
(a) Draught Prone Areas Programme									
	1. Minor Irrigation	IRD-2	88.93	99.11	99.79	470.80	..	98.71	..
	2. Afforestation and pasture Development	IRD-3	55.66	54.61	40.74	203.25	..	58.21	..
	3. Soil Conservation	IRD-4	23.86	20.75	30.27	157.87	..	21.39	..
	4. Drinking water supply	IRD-5	2.36	0.75	0.50	0.50	..	..	..
	5. Animal Husbandry & Dairying	IRD-6	84.46	67.78	70.70	374.77	..	65.35	..
	6. Agriculture	IRD-7	11.70	17.13	16.86	100.94	..	14.50	..
	7. Cooperation and Credit Management	IRD-8	4.11	4.76	6.34	33.96	..	7.09	..
	8. Organisation and Management	IRD-9	43.65	42.61	42.30	195.41	..	42.25	..
	9. Uncommitted		..	..	..	84.00	..	..	..
	Total		314.73	307.50	307.50	1621.50	..	307.50	..
	(b) Desert Development Programme		96.60	71.00	71.00	412.50	..	32.50	..
	(c) Special Minor Irrigation Subsidy schemes for SF/MF and other farmers		11.41	7.50	7.50	184.00	..	10.00	..
	(d) Share Capital contribution to the Gujarat State Rural Development Corporation		..	..	..	162.00	162.00	..	..
	Total ..		422.74	386.00	386.00	2380.00	162.00	400.00	..

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Targets of production and Physical Achievements

Drought Prone Area Programme

Sr. No.	Item	Unit	1978-79	Five Year Plan 80-85		1979-80 Achievement	1980-81		1981-82
				1979-80 Base year level	1984-85 Terminal year target		Target	Anticipated achievement	Proposed target
1	2	3	3	4	5	6	7	8	9
(A) Drought Prone Areas Programme									
Minor Irrigation									
	Direct Irrigation potential	Hect.	2390	18875	38164	2142	5684	7349	2175
	Indirect Irrigation potential	..	..	12819	23280	944	1615	1615	2738
2 Afforestation and grass land Development									
	(a) Plantation	..	15727	42243/461	68698/545	7625	6867	4495/20	3965/21
	(b) Soil and Moisture	Hect.	12015	52328	64448	824	200	200	2100
	(c) Grassland Development	..	7688	26146	23826	1250	1600	1600	505

1	2	3	3-A	4	5	6	7	8	9
Soil Conservation									
(a)	Area to be covered under S. C. measures	„	2359	159923	178117	2413	4112	3110	3376
(b)	Farms Ponds	No.	188	2320	3704	172	128	205	280
4	D. W. S. S.								
1	No. of D.W.S.S. to be completed	No.	17	95	97	6	7	8	..
5	Animal Husbandry and Dairy Development :								
(a)	No. of Milk Coop. Societies	Nos.	233	1092	1526	180	126	126	94
(b)	Supply of Milch animals	Nos.	675	1879	10755	325	3875	1116	1580
(c)	Chilling Plan/Cooling Units	Nos.	5+5	3/2	..	..	1(oontd)	1/5	2/1/3
(d)	Poultry Units	Nos.	..	104	134	3	27	8	27
(e)	Poultry Societies	Nos.	..	..	1	..	..	..	..
(f)	Sheep Societies	No.	60	20	71	8	20	30	..
6	Agriculture :								
(a)	Demonstration	No.	5392	25068	35814	3270	2405	2364	2055
(b)	Supply of Agriculture Implements and Plant Protection applications	Nos.	670	2244	9484	604	797	2328	1278
(c)	Supply of boats	Nos.	26	26	711	26	80	110	135
7	Co-operation and Credit Management								
(a)	Finance assistance to Societies	Nos.	991	2232	418	185	1231	459	462
(b)	Financial assistance to SF/MP	Nos.	993	3661	38850	12332	7070	1745	8263
B.	Desert Development Programme								
(a)	Plantation	Hects.	1200	4800	Not fixed	3000	1020	1020	2575
(b)	Shelter belt	Kms.	90	310	„	200	789	789	136
(c)	Pasture Development	Hect.	300	1300	„	600	3740	3740	600
(d)	Fodder Development by R.D.G.	Hect.	No. Programme	..	..	..	..	..	10
(2)	Animal Husbandry and Dairying								
(a)	Maintenance of bull motors	No.	..	..	..	..	..	..	260
(b)	Livestock Research Centre	No.	..	..	..	..	..	..	1
(c)	Sheep Development purchase of Sheep	No.	..	..	..	..	..	..	250 curies & 110 Ram
(d)	Camel Development (camel stud)	No.	..	..	..	..	..	..	10
(3)	Rural Electrification :								
(a)	No. of wells electrified	No.	124	225	225	..	..	..	..
(4)	Ground Water Development :								
(a)	No. of tubewells drill	No.	7	44	44	..	..	..	..
(b)	No. of tubewells modernised	..	44	44	..	..	..	..	..
(c)	Special supply schemes To SF/MP & Others funds								
(1)	No. of beneficiaries	No.	87	1834	Not fixed	1696	1200	1200	To be fixed

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82.

Centrally Sponsored Schemes—Outlays

Draught Prone Area Programme.

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-81 Outlays proposed			1980-85 Outlay			1981-82 Outlay proposed		
		State	Centre	Total	State	Centre	Total	State	Centre	Total	State	Centre	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Agriculture and Allied Services. Special Programmes of Rural Development. (a) Draught Prone areas Programme.												
1.	Minor Irrigation	88.93	88.93	177.86	470.80	470.80	941.60	99.79	99.79	199.58	98.71	98.72	197.43
2.	Afforestation and grass land Development.	55.66	55.66	111.32	203.25	203.24	406.49	40.74	40.74	81.48	58.21	58.21	116.42
3.	Soil Conservation.	23.86	23.86	47.72	157.87	157.87	315.74	30.27	30.27	60.54	21.39	21.39	42.78
4.	Drinking Water supply.	2.36	2.36	4.72	0.50	0.50	1.00	0.50	0.50	1.00	..	..	..
5.	Animal Husbandry & Dairying.	84.46	84.46	168.92	374.77	374.78	749.55	70.70	70.70	141.40	65.35	65.34	130.69
6.	Agriculture.	11.70	11.70	23.40	100.94	100.94	201.88	16.86	16.87	33.73	14.50	14.50	29.00
7.	Credit Management.	4.11	4.11	8.22	33.96	33.96	67.92	6.34	6.34	12.68	7.09	7.10	14.19
8.	O. & M.	43.65	43.65	87.30	195.41	195.41	390.82	42.30	42.29	84.59	42.25	42.24	84.49
	Uncommitted ..	..	..	..	84.00	84.00	168.00	..	..	..	..	..	..
	Total DPAP ..	314.73	314.73	629.46	1621.50	1621.50	3243.00	307.50	307.50	615.00	307.50	307.50	615.00
(b)	Desert Development Programme	96.60	96.60	192.40	412.50	412.50	825.00	71.00	71.00	142.00	82.50	82.50	165.50
(c)	Special Minor Irrigation Subsidy Scheme	11.41	11.41	22.82	184.00	184.00	368.00	7.50	7.50	15.00	10.00	10.00	20.00
	Grand Total ..	422.34	422.34	844.68	2218.00	2218.00	4436.00	386.00	386.00	772.00	400.00	400.00	800.00

1.14.3. Integrated Rural Development Programme.

1.14.3.1. A new Programme for Intensive Development of Blocks under the programmes for Integrated Rural Development has been launched from the year, 1978-79. Under this programme, it has been decided to integrate all the programmes implemented under the Small Farmer's Development Projects, Drought Prone Areas Programme and Command Areas Development Projects. IRD 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.

1.14.3.2. The Government of India allotted 100 blocks from the year 1978-79, comprising 25 blocks from DPAP areas, 52 blocks from SFDA areas, 19 blocks from CAD areas and 4 blocks from areas uncovered by any of these special programmes for implementation under this programme. There will also be an addition of some new blocks under Area Planning Programme every year. Accordingly 3 new blocks have been started during the year 1979-80 and 7 new blocks that have been allotted to this State during 1980-81, will be started after the approval of Government of India. The Programme would be implemented by the staff of the DPAP/SFDA/SFAL Agencies already established in every District of the State.

1.14.3.3. The Programme is production oriented and it was necessary to identify such schemes i. e. demonstration plots, agricultural implements, bullocks/camels, bullock/camel-carts, milch animals, wells pumpsets etc. that could suit the target group with reference to availability of resources, credit facilities and marketing arrangements.

1.14.3.4. Originally, this programme was started from the last quarter of the year 1978-79 as a central sector programme. Thereafter, 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.

1.14.3.5. An outlay of Rs. 33.50 Crores to be shared equally by the Centre and the State has been proposed for the Sixth Five Year Plan from 1980-81 to 1984-85.

1.14.3.6. During the year 1981-82 an outlay of Rs. 400.00 lakhs has been proposed and about 1.43 lakh identified beneficiaries will be covered under different types of schemes like demonstration, bullocks, agricultural implements, pumpsets, wells, etc. whereby they will get subsidiary occupations for augmenting their level of income. This, ultimately will result in to the improvement of their standard of living which may assist in bringing them above poverty line.

DRAFT SIXTH FIVE YEAR PLAN-1980-85 AND ANNUAL PLAN 1981-82.

Schemewise Outlays and Expenditure.

Integrated Rural Development.

(Rs. in lakhs).

Sr. No.	Number and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay	Capital content	Proposed Outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	IRD-3. Integrated Rural Development.	230.14	350.00	350.00	1675.00	..	400.00	..

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Targets of production and physical achievements.

Integrated Rural Development.

G

Sr.No.	Items	Unit	Level of achievement at the end of			1980-81		1981-82 proposed target (level)
			1978-79	1979-80 (Base year level)	1984-85 Terminal year target	Target (Level)	Likely achievement	
1	2	3	4	5	6	7	8	9
1	Demonstration plots.	No.	6207	15999	45361	25521	25521	35381
2	Agricultural implements.	No.	719	3397	26309	10412	10412	17864
3	Storage bins.	No.	191	1229	16134	6825	6825	10894
4	Dug wells.	No.	221	1070	6883	2778	2778	4718
5	Wells deepened.	No.	41	353	3506	1256	1256	2306
6	Pumpsets.	No.	389	2154	10908	4817	4817	7662
7	Milch animals.	No.	9883	31370	113899	55819	55819	81219
8	Bullocks/camels supplied.	No.	1359	6330	31787	13797	13797	22027
9	Bullock/Camel-carts supplied.	No.	182	685	10318	3908	3908	6748
10	Poultry units.	No.	284	859	10273	3803	3803	6803
11	Rural Artisans to be trained.	No.	739	11522	47846	20421	20421	32501
12	No. of identified beneficiaries to be benefitted.	No.	24734	99829	541996	238736	238736	381306

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82.

Centrally Sponsored Scheme Outlays.

Integrated Rural Development.

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 Outlays proposed			1980-81 Outlay			1981-82 Outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Integrated Rural Development.	230.14	230.15	460.29	1675.00	1675.00	3350.00	350.00	350.00	700.00	400.00	400.00	800.00

1.14.4. Local Development Works Programme.

1.14.4.1. 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 back ground.

1.14.4.2. With the introduction of the Panchayati Raj, a good administrative and institutional frame has been set up at the village level i. e. village co-operative, village primary school, yuvak Mandals etc., Many of these institutions have yet to develop as the basic instrument for bringing about rural development in several directions. The specific needs of the local areas cannot always be fitted into the standardised pattern of the Scheme in the Plan.

1.14.4.3. In view of the emphasis on rural development particularly rural infrastructure and generation of large employment opportunities in rural areas, it is considered necessary to review the local Development Works Programme in a re-oriented form on a large scale in rural areas. The Programme is designed to achieve the important objective of encouraging initiative and participation and involvement of Panchayati Raj bodies in the process of planning and implementation. The Programme will provide employment opportunities to the needy in the rural works through investment in infrastructure and social overheads. Accordingly, a suitable Programme was formulated and introduced in the State during 1978-79.

1.14.4.4. An outlay of Rs. 1250 lakhs is proposed to be provided for 1980-85 at the rate of Rs.

250.00 lakhs per annum. There are 250.00 C. P. A. Units of Community Development Blocks in the State. The amount proposed is to be distributed at the rate of Re 1 lakh per C. P. A. Unit of Community Development Block and placed at the disposal of the District Panchayats. An outlay of Rs. 250 lakh is proposed for the year 1981-82.

1.14.4.5. The programme is to be formulated and implemented by the District Panchayats and the grant is given at the rate of Rs. 1 lakh per each unit of CPA Block in the State for taking up works of water supply, village road and approach roads, land improvement works, construction of school buildings and class rooms of primary schools, works for improvement of sanitation, construction of godowns, veterinary dispensaries, development of fisheries, construction of minor irrigation dam, building of dispensary, primary health centres, Sanitary latrines, village afforestation programme and village gauchar development etc., The District Panchayats will be authorised to make suitable variation to suit the local needs of the programme components.

1.14.4.6. The rate of popular contribution will be 50 % of the total cost of the works, but in the case of backward village, out of 50 % popular contribution, 25 % should be paid by the District Panchayat out of District Equalisation Fund and the remaining 25 % by the village. Villages are identified as backward on the basis of non-availability of specified basic facilities.

1.14.4.7. A broad programme is to be formulated by the District Panchayats and announced for general public information. Gram/Nagar/Taluka Panchayats, along with Voluntary Agencies/Organisations, will be invited to suggest location of specific works with offers of contribution. Reputed Voluntary agencies/organisations may also be entrusted with the actual execution of the works on the usual terms and conditions. The works under the Programme are to be sanctioned subject to the conditions which have been specified.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Schemewise outlays and Expenditure

Local Development works Programme

(Rs. in lakhs)

Sr. No.	No. and Name of the scheme	1979 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed out ay	Capital content
1	2	3	4	5	6	7	8	9
	Local Deve lopment Works Programme.	306.07	250.00	250.00	1250.00	..	250.00	..

1.14.5 Abhinav Gram Nirman Karyakram

1.14.5.1.1. In rural areas efforts have been made in the past to cater to the local needs and aspirations of the people by providing them basic necessities for their uplift, welfare and development in various spheres through Community Development Programme. But these efforts have not materialised to the desired extent and a large number of villages are yet devoid of basic minimum level of amenities and economic development. It has also been observed that lack of adequate employment opportunities in rural areas is not the only reason for the exodus of the people to urban areas. Lack of modern facilities and amenities in the villages is yet another reason for such exodus. The objective of the Abhinav Gram Nirman Karyakram is to provide certain minimum necessary facilities and amenities in the villages with a view to reducing the imbalance in respect of such facilities between rural and urban areas so that the temptation to leave the villages to migrate to urban areas is lessened. This would help reducing the pressure on facilities in urban areas like water supply, and sewerage, housing, transport and other civic amenities.

1.14.5.1.2. The Programme of Abhinav Gram Nirman envisaging to provide basic civil amenities in the villages viz (i) construction/conversion of latrines with bio-gas linkages (2) improvement of houses with roof tops, smokeless cholas, ventilation bathrooms etc. (3) stone/bricks paving of the streets with water drain and (4) cultural community centre cum-work place has generated unprece, dented enthusiasm among the people and has raised a good deal of hope and aspirations among the rural areas of the State. The programme is reoriented and extended to all the villages in the State having population of 200 and above. The number of such villages is 16221. Under this programme varying

amount of assistance is provided to villages in different population range. The villages are categorised as having population of 200 to 1000 1000 to 3000 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 year each and Rs. 40 000 for the third and last year).

1.14.5.2. Review of Progress

1.14.5.2.1. Under this programme 1700 villages have been covered by the end of 1979-80. It is expected that additional 900 villages will be covered during 1980-81 The details of the villages covered are as under :—

Population size	Villages covered at the end of	
	1979-80 (Level)	1980-81 (Likely)
200-1000	1000	700
1000-3000	600	200
3000 and above	100	..
Total	1700	900

1.14.5.3. Programme proposed for Sixth Five Year Plan and Annual Plan 1981-82.

1.14.5.3.1. An outlay of Rs. 2 370 lakhs has been proposed for the Sixth Five Year Plan and Rs. 4.57 lakhs for the Annual Plan 1981-82. The programme envisages coverage of additional 5 670 villages during the Sixth Five Year Plan and 670 villages in the population Gram 200-1000 during 1981-82 bringing the total number of villages covered to 7 370 at the end of 1980-85 and to 3 270 at the end of 1981-82.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Abhinav Gram Nirman Karyakram

Outlay and Expenditure

(Rs. in lakhs)

Sr. No.	Scheme	1979-80 actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Abhinav Gram Nirman Karyakram	183.23	350.0	350.00	2370.00	..	457.00	..

Draft Sixth Five Year Plan and Annual Plan 1981-82

Abhinav Gram Nirman Karyakram

Targets of Production and Achievements

Sr. No.	Item	Unit	Level of achievement of the end of					
			1978-79	1979-80 (Base year level)	1980-85 (Terminal year target)	1980-81		1981-82 proposed Target (level)
1	2	3	4	5	6	7	8	9
1.	Abhinav Gram Nirman Karyakram	No. of villages	100	1700	7370	2600	2600	3270

1.14.6. Antyodaya.

1.14.6.1. One of the factors constituting the plan strategy for the Sixth Five Year Plan is to uplift the lowest of the low of the socio-economic strata above the poverty line. A number of programmes have been proposed in the plan in one form or the other for achieving this goal directly or indirectly. The "Antyodaya" is one of such programmes having a direct bearing on the target group families. The programme is meant for the poorest among the poor families living below the poverty line. The programme envisages providing social security and assistance for the purchase of equipments etc., to enable the needy person to take up suitable economic activity so as to generate additional income. The assistance, under the programme is given to the identified families.

1.14.6.2. The criteria for selection of the families is chiefly the annual income of the family besides the meagre assets, if any, irrespective of any other consideration like caste, creed or colour. The identification and selection is proposed to be done with the help of Gram Sabha (Village Assembly) or where Gram Sabha is not able to act for one reason or the other by the village Panchayat. However, for selection of poorest families for assistance under this programmes the following order of priorities is to be observed:

(1) Families having no productive assets, having one or more working members but where annual income does not exceed Rs. 1200 for a family of five persons. This will comprise mainly families of landless labourers and artisans.

(2) Families residing in rural areas having no productive assets and having one or more earning members and which are below the poverty line.

(3) Families residing in rural areas having some land and other productive assets but who are below the poverty line. Families of small farmers will not be included in this category,

but the families of rural artisans and families covered in the definition of marginal farmers under the Integrated Rural Development Programme etc. can be included. Those families whose per capita income from all sources is less than Rs. 57 (now Rs. 63 per month) i.e. the families whose annual income is less than Rs. 4,320 can be considered to be families living below the poverty line.

1.14.6.3. The Antyodaya families falling under the above three categories would be given first preference for the individual family oriented programmes in all ongoing programmes including special economic programmes such as Integrated Rural Development, Drought Prone Area Programme, Small Farmers Development Agency Programme, Small Farmers and Agricultural labourers' programme and Command Area Development programme. The provision under this programme would supplement the various ongoing economic programmes. The families which may not be eligible for assistance under the existing ongoing programmes would be covered under Antyodaya programme to the extent possible. The assistance under this programme would generally be in the form of grant of soft loan-cum-subsidy for milch cattle, goats, poultry, carts, implements for cattle industries, wage employment in the neighbouring factories or on construction and relief works of Panchayats of the State Government. An outlay of Rs. 2,260 lakhs for the Sixth Five Year Plan 1980-85 and Rs. 220 lakhs for the Annual Plan 1981-82 has been proposed. The provision of Rs. 2,260 lakhs proposed for the Sixth Five Year Plan includes Rs. 150 lakhs towards administrative machinery, Rs. 150 lakhs towards soft loan and Rs. 1,960 lakhs towards subsidy. Similarly the provision of Rs. 220 lakhs proposed for the Annual Plan 1981-82 includes Rs. 30 lakhs for administrative machinery, Rs. 30 lakhs for soft loan and Rs. 160 lakhs for subsidy.

1.14.6.4. It is proposed to identify 1.19 lakh families in the State during the Sixth Five Year Plan 1980-85 bringing the total number of such families to 1.4 lakh at the end of 1984-85. The target for 1981-82 is to identify additional 20,000 families.

Draft Sixth Five Year Plan 1980--85 and Annual Plan 1981--82

Antyodaya

Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Programme	1979 80 Actuals	1980 81		1980 85		1981 82	
			Outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	
1.	Antyodaya.	120	200	200	2260	..	220	..

Draft Sixth Five Year Plan 1980--85 and Annual Plan 1981--82

Antyodaya

Targets of production of physical achievements

Sr. No.	Item	Unit	Level of achievement at the end of					
			1978--79	1979--80	1984--85	1980--81		1981--82
				(Base year level)	Terminal year Target	Target (level)	Likely achievement	Target proposed (level)
1	2	3	4	5	6	7	8	9
1.	Beneficiaries.	No. of families.	..	4,700	1,23,700	20,700	20,700	40,700

1.14.7. Development of Backward Areas.

1.14.7.1. 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 for the purpose is being made every year at the rate of Rs. 2 lakhs per taluka for 25 such talukas. Under this programme the amount is being placed at the disposal of the concerned District Panchayat 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.

1.14.7.2. An outlay of Rs. 250 lakhs has been proposed for this programme for the Sixth Five Year Plan and Rs. 50 lakhs for the Annual Plan 1981-82.

Draft Sixth Five Year Plan and Annual Plan 1981-82

Development of Backward Areas

Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Programme	1979-80 Actuals	1980-81		1980-85		1981.82	
			Outlay	Antici- pated Expdtr.	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Development of Back- ward Areas	50.00	50.00	50.00	250.00	..	50.00	..

1.14.8. Block Level Planning for Employment.

1.14.8.1. Keeping in view the magnitude of the problem of unemployment and under employment and the need for a suitable action programme, it has been decided to select compact areas, for comprehensive block level planning for employment generation.

1.14.8.2. The task of preparing the taluka plan for employment is being entrusted to the academic/professional voluntary institutions. The institutions have prepared taluka plans of first batch of twenty talukas. The institutions have also undertaken the work of preparing taluka plans for additional talukas selected during the year 1979-80.

1.14.8.3. In the absence of comprehensive taluka plans it was necessary to undertake employment intensive programmes during 1978-79. Accordingly, programmes pertaining to Ambar Parishramalaya, Pramodyog wadi, Mini Industrial Estates were sanctioned. The work of operating the taluka plans prepared by the institutions and implementing the schemes has now been entrusted to the concerned Districts Planning Board. Guidance in formulation, implementation and monitoring this programme is with the State Level Committee of Direction under

the Chairmanship of the Minister, Finance and Planning.

1.14.8.4. While the number of persons who would be securing gainful employment opportunities in each taluka would differ according to the programme mix, a rough estimate, of employment potential of this programme is 56.82 lakh mandays (or about 21 thousand person years assuming 273 days of employment per annum).

1.14.8.5. The programme was initiated in 1978-79 by selection of 20 talukas. 20 more talukas were added during the year 1979-80. During the year 1980-81, no new talukas are to be selected, but the scheme will be implemented intensively in the 40 talukas selected earlier.

1.14.8.6. An outlay of Rs. 3510 lakhs is proposed for the Sixth Five Year Plan. 20 talukas will be added every year from the year 1981-82. Thus, 80 talukas are proposed to be added to the present 40 talukas during the period of the Sixth Plan.

1.14.8.7. An outlay of Rs. 550 lakhs is proposed for the year 1981-82. The physical target proposed is to cover additional 20 talukas under the programme.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Block level Planning for Employment

Schemewise outlay and Expenditure

(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme	1970-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1		3	4	5	6	7	8	9
1.	Block Level Planning for Employment.	339.46	500.00	413.00	3510.00	..	550.00	..

Draft Sixth Five Year Plan-1980-85 and Annual Plan 1981-82

Block Level Planning for Employment

Targets of production and physical achievements.

Sr. No.	Item	Unit	Level of achievement at the end of					
			1978-79	1979-80 (Base year level)	1984-85 Terminal year Target	1980-81		1981-82 Proposed target
						Target	Likely Achieve- ment	
1	2	3	4	5	6	7	8	9
1.	Setting up of Block level Planning Units.	..	20	40	120	40	40	60 Talukas (including 20 more talukas during the year 1981-82)

1.14.9. 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 situations. The schemes was introduced in the districts of Banaskantha, Panchmahals, Vadodara, Bharuch, Ahmedabad, Rajkot, Surendranagar, Mehsana 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 was 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 4,50,000 mandays and expenditure incurred was Rs. 12,25,000. The scheme has been introduced during the current lean agricultural situation in the districts of Sabarkantha, Banaskantha, Panchmahals and Valsad with effect from 16th October, 1979. An outlay of Rs. 100 lakhs is provided for 1980-81 which is likely to generate Employment for 10 lakh mandays.

1.15.9.2. An outlay of Rs. 500 lakhs is proposed for the Sixth Five Year Plan 1980-85 to generate employment of 50 lakh mandays. During 1981-82, an outlay of Rs. 100 lakhs is proposed to be provided.

Draft Six Five Year Plan 1980--85 and Annual Plan 1981--82

Schemewise outlays and Expenditure

Off-season Unemployment Relief Works

(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme	1970—80 Actuals	1980—81		1980—85		1981—92	
			Outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1.	Off-Season Unemployment relief works.	38.56	100	100	500	..	100	..

1.15 CO-OPERATION

1.15.1. Co-operation is conceived to be an instrument for encouraging decentralisation and local initiative in our developmental process with the overall purpose of having a society based on democracy and socialism. Co-operative development has, therefore, been accorded a significant place in the successive plans.

1.15.1.2. 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 and has become truly voluntary. 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.

Credit Co-operatives :

1.15.1.3. Credit co-operatives perform the task of providing credit to the agriculturists to improve their economic conditions and lift them out of morass of stagnation for which purpose co-operation was introduced in India in the early years of 20th century. For supporting the massive agricultural programme, the State has a strong credit structure. It consists of primary agricultural co-operatives, district central co-operatives, co-operative banks and State co-operative bank. The State's assistance to these co-operatives is in the form of loans and grants for undertaking specific tasks and share capital contributions. The main programmes under the credit co-operatives are briefly detailed hereunder :

(a) Out-right grant is given by the State to primary agricultural credit societies and the central financing agencies as an incentive to provide more and more production loans to the weaker section of the society. This amount is to be utilised to create a special bad debt reserve.

(b) Share capital loans is given to the PACs by the Government to be passed on to the members of the weaker sections of the society to enable them to get enrolled in the PACs so that they can get production loans.

(c) State Government gives branch subsidy to the Central Co-operative Bank in case the Bank suffers losses in opening branches in 26 economically backward and under-developed talukas.

(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 co-operative credit institutions when such arrears assume a magnitude which threatens stability of co-operative credit structure.

and when they 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 and strengthen their capital base to enable them to borrow adequately from higher financing institutions for carrying out the lending programme.

(f) State Agricultural 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 loans into rephasing and a similar fund is created at the level of land development bank also.

(g) Contribution to the risk fund by the State Government to the co-operative societies at 7.5% and the Central finance agencies at 2.5% of the consumption finance provided by them to weaker section of the society so that their dependence on non-institutional sources for this kind of finance may be eradicated.

(h) Under the scheme of redemption of frozen debts government grants loans to scheduled castes and small and marginal farmers upto Rs. 500 plus interest repayable in 10 annual equal instalments to PACs so that the debt on account of natural calamities do not prevent the flow of credit to them.

1.15.2. Review of Progress

1.15.2.1. Total number of Primary Agricultural Co-operatives (PACs) stood at 7,647 for the year 1979 out of which 2,535 were viable and 2,735 were potentially viable and 2,377 were non-viable. The membership of PACs stood at 18.30 lakhs at the end of 1978-79 and 18.57 lakhs at the end of 1979-80. Of these, 13.24 lakh members belonged to weaker sections. 41 Farmer Service Societies and 51 LAMPs have been registered. Short and medium term advances of PACs are estimated to be of the order of Rs. 176 crores by the end of 1979-80 out of which 13.50 crores is estimated for weaker sections. The total loans advanced by the Land Development Bank during 1979-79 was of the order of Rs. 3.82 crores. Percentage of overdues outstanding against shortterm and medium term credits is 37.59 and the long term advance is 61 in the year 1978-79. An amount of Rs. 4.66 crores has been spent for rick funds. 39 branches were learned by the central co-operative banks in economically backward and undeveloped talukas and Rs. 7,500 is given to the branches as subsidy in the year 1989-80. Agri-

Cultural 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.

1.15.3 Programme for Sixth Five Year Plan and Annual Plan 1981-82.

1.15.3.1. An outlay of Rs. 3 545 lakhs has been

proposed for the Sixth Five Year Plan and Rs. 600 lakhs for Annual Plan 1981-82 for co-operation sector. Of these outlays, an amount of Rs. 851 lakhs for the Sixth Plan and Rs. 179 lakhs for the Annual Plan 1981-82 is proposed for the Tribal Area Sub-Plan. The Special Central Assistance for TASP to the extent of Rs. 473 lakhs for the Sixth Plan and Rs. 72 lakhs for the Annual Plan is expected to be received from the Government of India. The broad break-up of the outlays proposed for the Sixth Five Year Plan and Annual Plan 1981-82 is as under :—

(Rs. in lakhs)

Sr. No.	Programme	1979-80	1980-81		1980-85	1981-82	
		Actuals	Outlay	Anticipated-Expdr.	Proposed Outlay	Proposed Outlay	
1	2	3	4	5	6	7	
1.	Direction and Administration	4.26	7.83	7.83	50.00	8.00	
2.	Credit Co-operatives	151.65	419.28	419.28	2297.80	343.12	
3.	Labour Co-operatives	0.21	1.61	1.61	6.00	0.96	
4.	Farming Co-operatives	0.25	1.20	1.20	5.20	1.00	
5.	Warehousing and marketing Co-operatives	6.52	13.00	13.00	83.50	15.00	
6.	Processing Co-operatives	1.46	26.00	26.00	100.00	26.00	
7.	Co-operative Sugar Mills	194.63	5.00	5.00	500.00	5.00	
8.	Consumers' Co-operatives	0.70	6.58	6.58	40.00	3.22	
9.	Co-operative Training and Education	12.33	20.00	20.00	100.00	22.00	
10.	Other Co-operatives	0.10	70.50	70.50	362.50	175.70	
11.	Nucleus Budget	..	10.00	10.00	..	..
	Total—Co-operation	..	372.11	581.00	581.00	3545.00	600.00

1.15.3.2. By means of liquidation, amalgamation, reorganisation, non-viable PACs are to be phased out. The total number of the PACs is to be brought down to 6,617 by the year 1984-85. Membership for the PACs is to be increased by 1,000 every year reaching the level of 21 lakhs by the end of 1984-85. Of this 1, membership of weaker sections would be 3.60 lakhs. 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. 212 crores by the end of 1981-82 and Rs. 235 crores by the end of 1984-85 of which Rs. 23 crores will be for weaker sections. The

long term advances are to be increased to Rs. 10 crores by 1981-82 and to Rs. 55 crores by 1984-85. The consumption finance to the weaker section of the society is projected to reach the level of Rs. 300 lakhs for the Sixth Five Year Plan and Rs. 60 lakhs for the year 1981-82. Government share capital contribution to the co-operatives is expected to be of the order of Rs. 203.10 lakhs for the year 1981-82 and Rs. 1,485.90 lakhs for the Sixth Five Year Plan. An outlay of Rs. 20 lakhs for the year 1981-82 and Rs. 250 lakhs for the Sixth Five Year Plan is envisaged for the scheme for redemption of the frozen debt.

Labour Co-operative Societies

1.15.3.3. Labour co-operatives are organised by the labourers in order to prevent exploitation by contractors and also to enable them 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 is being made available to scheduled caste members to enable them to become members of labour co-operatives. So far 743 societies with a total membership of 48,681 have been organised. It is proposed to organise 18 more (including six in tribal areas) during 1981-82 and to organise 93 societies (including 30 societies in tribal areas) during the plan period 1980-85.

Farming Co-operatives

1.15.3.4. Farming co-operative societies are established to help agriculturists with the small holdings to adopt better techniques of agricultural production and to raise their income. There are 371 co-operative farming societies by the end of June 1980 with the membership of 12,504 (upto June, 1978). 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 classes. It is proposed to organise 50 new co-operative farming societies during the Sixth Five Year Plan and to organise 10 such societies during 1981-82.

Warehousing, Marketing and Processing :

1.15.3.5. The co-operative marketing structure in the State consists of the Gujarat Co-operative Marketing Society at the apex level, District Purchase and Sale Union at the District level and the Taluka Purchase and Sale Union at primary level. These co-operatives are engaged in the distribution of agricultural in-puts 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 as also a subsidy for price fluctuation funds of the value of the agricultural produce,

purchased directly from the small and marginal farmers. Target for the sale of agricultural produce is supposed to be Rs. 200 crores in 1981-82 and 210 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 3.47 lakh tonnes at the end of the year 1981-82 and 3.85 lakh tonnes by the end of the Sixth Five Year Plan.

1.15.3.6. 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.

1.15.3.7. Sugar co-operative is given share capital to the extent of Rs. 160 lakhs. It is proposed to establish one more co-operative sugar factory during 1980-85 bringing the total number of the sugar factories to 16. Government has so far contributed Rs. 1420 lakhs as share capital to these sugar co-operatives. 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 establish sugar by-product industries in suitable areas for which assistance is also proposed to be provided.

1.15.3.8. There are 111 ginning and pressing co-operatives, 48 rice mills, and 5 oil mills at present. It is proposed to organise 2 more rice mills during the year 1981-82 and 5 more rice mills during the Sixth Five Year Plan 1980-85.

Consumers Co-operatives

1.15.3.9. Consumers' co-operatives are meant to supply essential articles to the consumers at the fair prices. These consumers co-operatives which have 50 and more members of scheduled castes are given special benefits. The Government gives share capital contribution to the rural consumer co-operatives. By the end of June, 1978, 1015 primary consumer co-operatives, 24 wholesale public sector stores and a State federation of consumers were organised. Besides, there were 55 branches, primary stores. The targets for the sale of consumer articles in rural and urban area is proposed to be fixed at Rs. 100 Crores and Rs. 52.00 crores respectively during the Sixth Five Year Plan period.

DRAFT SIXTH FIVE YEAR PLAN-1980-85 AND ANNUAL PLAN 1981-82

Co-operation

Minor Headwise outlays and expenditure.

(Rs. in lakhs)

Sr. No.	Minor Heads	1979—80 Actuals	1980—81		1980—85		1981—82	
			Outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
I.	Direction and Administration	4.26	7.83	7.83	50.00	..	8.00	..
II.	Credit Co-operatives	151.65	419.28	419.28	2297.80	2035.90	343.12	285.92
III.	Labour Co-operatives	0.21	1.61	1.61	6.00	2.53	0.96	0.36
IV.	Farming Co-operatives	0.25	1.20	1.20	5.20	1.50	1.00	0.30
V.	Warehousing and Marketing Cooperatives	6.52	13.00	13.00	83.50	21.00	15.00	4.50
VI.	Processing Cooperatives	1.46	26.00	26.00	100.00	100.00	26.00	26.00
VII.	Cooperative Sugar Mills	194.63	5.00	5.00	500.00	485.00	5.00	5.00
VIII.	Consumers' Cooperatives	0.70	6.58	6.53	40.00	32.83	3.22	3.09
IX.	Cooperative Training & Education	12.33	20.00	20.00	100.00	..	22.00	..
X.	Other Cooperatives	0.10	70.50	70.50	362.50	362.50	175.70	175.70
	Nucleus Budget	..	10.00	10.00	..	..	..	..
Total—Cooperation		372.11	581.00	581.00	3545.00	3041.26	600.00	500.00

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ACTUAL PLAN 1981-82

Co-operation.

Schemewise Outlays and Expenditure.

(Rs. in lakhs).

Sr. No.	Number and Name of the Scheme	1979-80 Actuals.	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure	Proposed Outlay	Capital costant	Proposed Outlay	Capital costant
1	2	3	4	5	6	7	8	9
II(A) Direction and Administration.								
1.	COP-1 Expansion of Administrative and supervisory staff.							
	(a) Staff Subsidy	2.11	5.88	5.88	35.00	..	6.00	..
2.	COP-2. Expansion of Statistical staff							
	(a) Subsidy	2.15	1.95	1.95	10.00	..	2.00	..
3.	COP-3 Training for staff							
	(a) Subsidy	..	..	..	5.00	..	..	..
	Total—I	4.26	7.83	7.83	50.00	..	8.00	..
II(B) Credit Co-operatives :								
4.	COP-1 Village Co-operatives :							
	(a) Outright Grant Subsidy	3.36	2.50	2.50	15.00	..	3.30	..
	(b) Revitalisation subsidy	0.31	1.02	1.02	2.00	..	1.40	..
	(c) Share capital (Loan)	8.12	0.20	0.20	1.00	1.00	0.24	0.24
	Sub-Total—II(B).4	3.79	3.72	3.72	18.00	1.00	4.94	0.24
5.	COP-5 Full Coverage Scheme for Projects in Tribal areas.							
	(a) Subsidy	1.59	6.57	6.57	..	..	..	..
6.	COP-6 New Redemption of Frozen Debts							
	(a) Loan	..	110.00	110.00	250.00	250.00	20.00	20.00
	Sub-Total—5+6	1.59	116.57	116.57	250.00	250.00	20.00	20.00
7.	COP-7 Risk Fund for consumption finance							
	(a) Subsidy	1.36	10.00	10.00	30.00	..	5.00	..
	Total—7	1.36	10.00	10.00	30.00	..	5.00	..
8.	COP-8 Central Co-operative Bank/Land Development Bank							
	(a) Branches-(Subsidy)	..	0.50	0.50	1.40	..	2.30	..
	(b) Out Right Grant to Co-opves. (Subsidy)	2.47	2.50	2.50	13.50	..	0.20	..
	Sub-Total—8	2.47	3.00	3.00	14.90	..	2.50	..

1	2	3	4	5	6	7	8	9
9.	COP—9 Agricultural Relief and Guarantee Fund.							
	Subsidy	7.50	7.50	7.50	50.00	..	7.50	..
	Sub-Total:—9.	7.50	7.50	7.50	50.00	..	7.00	..
10.	COP—10 Stabilisation arrangement for flow of co-operative credit (short and medium term) Loan.	68.00	50.00	50.00	250.00	250.00	50.00	50.00
	Sub-Total—(10)	68.00	50.00	50.00	250.00	250.00	50.00	50.00
11.	COP—11 Credit Stabilisation Fund to State Co-op. Land Development Bank for long term advances							
	(a) Loan	..	12.50	12.50	50.00	50.00	12.50	12.50
	(b) Subsidy	..	37.50	37.50	150.00	..	37.50	..
	Sub-Total—(ii)	..	50.00	50.00	200.00	50.00	50.00	12.50
12.	COP—12 Share capital contribution to Agricultural Credit Institutions							
	(a) Share capital							
	(1) Apex and Dist. Co-op. Bank	47.71	147.49	147.49	1244.00	1244.00	180.00	180.00
	(2) Service Co-operatives	19.23	31.00	31.00	240.90	240.90	23.18	23.18
	Sub Total—(12)	66.94	178.49	178.49	1484.90	1484.90	203.18	203.18
	Total-II—(B)	151.65	419.28	419.28	2297.80	2035.90	343.12	285.92
III.	Labour Co-operatives :							
13.	COP—13 Labour Co-operatives							
	(a) Share capital	0.16	0.81	0.81	2.53	2.53	0.36	0.36
	(b) Loan	..	..	..	..	..	..	..
	(c) Subsidy	0.05	0.80	0.80	3.47	..	0.60	..
	Total—III	0.21	1.61	1.61	6.00	2.53	0.96	0.36
IV.	Farming Co-operatives :							
14.	COP—14 Co-operative Farming							
	(a) Share capital		0.30	0.30	1.50	1.50	0.30	0.30
	(b) Loan	0.25	..	..	..	..	..	..
	(c) Subsidy		0.90	0.90	3.70	..	0.70	..
	Total—IV	0.25	1.20	1.20	5.20	1.50	1.00	0.30
V.	Warehousing and Marketing Co-operatives							
15.	COP—15 Apex Marketing Societies							
	(a) Share capital	..	..	..	6.00	6.00	1.00	1.00
	Sub-Total—15	..	..	..	6.00	6.00	1.00	1.00

1	2	3	4	5	6	7	8	9
16. COP—16 District Marketing Socys								
(a) Share capital		..	0.50	0.50	5.00	5.00	1.00	1.0
Sub-Total—16.		..	0.50	0.50	5.00	5.00	1.00	1.0
17. COP—17 Assistance to Marketing and Processing Socy. for Purchase of truck.								
(a) Loan	
Sub-Total—17	
18. COP—18 Primary Marketing Socy.								
(a) Share capital		1.85	2.25	2.25	10.00	10.00	2.50	2.5
Sub-Total—18.		1.85	2.25	2.25	10.00	10.00	2.50	2.5
19. COP—19 District Marketing Godowns								
(a) Subsidy		0.25	1.25	1.25	6.25	..	1.25	..
Sub-Total—19		0.25	1.25	1.25	6.25	..	1.25	..
20. COP—20 Price factuation Fund								
(a) Subsidy		3.28	5.00	5.00	40.00	..	6.00	..
Sub-Total—20		3.28	5.00	5.00	40.00	..	6.00	..
21. COP—21 Primary Marketing Socys. Godowns								
(a) Subsidy		0.25	1.25	1.25	6.25	..	1.25	..
Total—21		0.25	1.25	1.25	6.25	..	1.25	..
22. COP—22 Rural Societies Godowns								
(a) Loan	
(b) Subsidy		0.89	2.75	2.75	10.00	..	2.00	.
Sub-Total—22		0.89	2.75	2.75	10.00	..	2.00	.
Total—V		6.52	13.00	13.00	83.50	21.00	15.00	4.50
VI. Processing Co-operatives								
23. COP—23 Other Processing Socys								
(a) Share capital		1.46	26.00	26.00	100.00	100.00	26.00	26.00
(b) Subsidy	
Total—(VI)		1.46	26.00	26.00	100.00	100.00	26.00	26.00

1	2	3	4	5	6	7	8	9
Co-operative Sugar Mills								
24.COP-24	Co-operative Sugar Factories							
(a)	Share capital		5.00	5.00	480.00	80.00	5.00	5.00
(b)	Loan	194.63	..	..	5.00	5.00	..	..
(c)	Subsidy		..	..	15.00	..	..	..
	Total-VII	..194.63	5.00	5.00	500.00	485.00	5.00	5.00
VIII. Consumer's Co-operatives		tives						
25.COP-25	Distribution of consumers articles in rural areas through village and Marketing Societies.							
(a)	Share capital	0.04	2.20	2.20	2.55	2.55	0.10	0.10
(b)	Loan	..	0.93	0.93	1.80	1.80	0.09	0.09
(c)	Subsidy	..	0.47	0.47	0.65	..	0.03	..
	Sub-Total-25	.. 0.04	3.60	3.60	5.00	4.35	0.22	0.19
26.COP-26.	Urban Consumer's							
(a)	Share capital		1.85	1.85	14.65	14.65	1.60	1.60
(b)	Loan	0.66	1.03	1.03	13.83	13.83	1.30	1.30
(c)	Subsidy		0.10	0.10	6.52	..	0.10	..
	Sub-Total-26	.. 0.66	2.98	2.98	35.00	28.48	3.00	2.90
	Total-(VIII)	.. 0.70	6.58	6.58	40.00	32.83	3.22	3.09
IX. Education								
27.COP-27	Co-operative Training and Education							
(a)	Subsidy	12.33	20.00	20.00	100.00	..	22.00	..
	Total-IX.	.. 12.33	20.00	20.00	100.00	..	22.00	..
Other Co-operatives :								
28.COP-28	Grain Depot							
(a)	Loan	..	..	..	..	..	..	..
	Sub-Total-28	.. ..	..	..	..	..	..	..

1	2	3	4	5	6	7	8	9	
29.	COP--29	Auto Rickshaw & Redda Pullers							
	(a)	Share Capital	0.10	0.50	0.50	2.00	2.00	0.50	0.50
		Sub-Total--29	0.10	0.50	0.50	2.00	2.00	0.50	0.50
30.	COP--30	Transport Societies							
	(a)	Share capital	..	..	..	0.50	0.50	0.10	0.10
		Sub-Total--30	..	..	..	0.50	0.50	0.10	0.10
31.	COP--31	Rural Electricity Socys.							
	(a)	Share capital	..	1.00	1.00	10.00	10.00	0.10	0.10
		Sub-Total--31	..	1.00	1.00	10.00	10.00	0.10	0.10
32.	COP--32	Share capital contribution to co-operatives for contribution towards participation in share capital of IFFCO (Phulpur) by Co-operatives							
	(a)	Loan	..	69.00	69.00	350.00	350.00	175.00	175.00
		Sub-Total--32	..	69.00	69.00	350.00	350.00	175.00	175.00
		Total--X	0.10	70.50	70.50	362.50	362.50	175.70	175.70
		Nucleus Budget	..	10.00	10.00	..	..	..	..
		Total--Co-operation	372.11	581.00	581.00	3545.00	3041.26	600.00	500.87

DRAFT SIXTH FIVE EYAR PLAN-1980-85 AND ANNUAL PLAN 1981-82

Co-operation

Targets of production and the physical achievements

Sr. No.	Item	Unit	Level of achievement at the end of					
			1978-79	1979-80 Base Year level	1984-85 Termi- nal year target	1980-81		1981-82
1	2	3	4	5	6	7 Target (level)	8 Likely achieve- ment	9 Proposed target (level)
(a)	Short-term loans	Rs. Crores	145.00	176.00	235.00	193.00	193.00	212.00
(b)	Medium Term loans							
(c)	Long term loans	,,	2.82	3.82	55.00	21.52	21.52	10.00
(d)	Retail sale of fertilizers	,,	87.00	98.00	140.00	121.00	121.00	125.00
(e)	Agri. Produce Market	,,	195.00	195.00	210.00	198.00	198.00	200.00
(f)	Retail sales of consumers goods by Urban Consumers Cooperatives	,,	44.00	46.60	52.00	48.40	48.40	50.20
(g)	Retail sales of consumers goods through Cooperatives in rural areas.	,,	98.00	98.00	100.00	98.00	98.80	99.40
(h)	Cooperative Storage	lakh Tonns	3.10	3.19	3.85	3.28	3.28	3.47
(i)	Processing Units	No. Cumulative	158.00	159.00	165.00	162.00	162.00	162.00
(a)	Organised	No. Cumulative	158.00	159.00	165.00	162.00	162.00	162.00
(b)	Installed							

DRAFT SIXTH FIVE YEAR PLAN 1980--85 AND ANNUAL PLAN 1981---82

Co-operation

CENTRALLY SPONSORED SCHEME-OUTLAYS

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979 80 Actuals			1980-85 Out lays			1980-85 Out lays			1981-82		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Fully Centrally Sponsored Scheme												
	Agricultural Credit stabilisation Fund.	..	..	..	..	590	590	..	118	118	..	118	118

2. WATER DEVELOPMENT (IRRIGATION).

2.1.1. Agriculture in the State is essentially rainfed and dependent upon the vagaries of the monsoon with hardly 16 percent of the culturable area being provided with irrigation facilities from all sources. Irrigation as an important input for increasing agricultural productivity has a potential of increasing the productivity per hectare more than three times. Besides, expenditure on other inputs like seeds, fertilizers, land development etc. becomes worthwhile only if there is an assured water supply for irrigation. Provision of irrigation facilities through

various water development projects has therefore, been a prime concern of the State Government in the formulation of its development plans.

2.1.2. Gujarat is one of the States in the country with relatively limited water resources for irrigation. It is found from the basin-wise studies that only 21.44 maft of water can be eventually harnessed. The overall estimates of irrigation potential of the State may be traced as under :—

Item 1	Ultimate Potential estimated (in Maft.) 2	Ultimate irrigation potential (Lakh hect.) 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.)
Total:	21.46	50.39

2.1.3. As against this ultimate irrigation potential possible the present status of developme (June, 1980) is as under :—

Item. 1	Harnessed potential estimated. (lakh Ha.) 2	Utilisation (lakh Ha.) 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

2.1.4. The total resources are harnessed to the extent of about 53.4 percent while the surface resources are harnessed to the extent of about 35.2 percent. The total culturable area in the State (base year 1971) is 11.69 million hectares of which presently only 16.8 percent is under irrigation (utilisation) Out of this, the contribution of the surface waters is not more than about one-third. The ultimate irrigation according to the above table with a culturable area of 11.60 million hectares would work out to about 43 percent only. It would be very much below the ultimate figure of 55 percent estimated for the country as a whole. The real percentage would be even smaller if depletion of ground water resources is considered with the present rate of drawals in

irrigation. Provision of irrigation facilities through deficient areas. As such the importance of evolving an effective strategy for irrigation development can hardly be over emphasised.

2.2 Review of Progress.

2.2.1. 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 plan period 1980-85, the same can start yielding physical benefits early in the plan. Thus, the results of concentration on ongoing projects have been significant. The following table depicts the pattern of expenditure and realisation of benefits during the course of the Fifth Plan and subsequent two annual plans i.e. 1978-79 and 1979-80.

Sr. No.	Year	Outlay (Rs. in Crores).	Expenditure. (Rs. in crores)	Creation of potential.	
				Target (^{'000} Ha.)	Actual achievement. (^{'000} Ha.)
1	2	3	4	5	6
1.	1974-75	31.49	44.80	55	58
2.	1975-76	45.80	46.63	80	81
3.	1976-77	54.13	57.10	85	75
4.	1977-78	72.74	92.30	118	88
Total:		204.16	240.83	338	302

2.2.2. The State has been able to step up significantly the pace of irrigation development during the Fifth Plan. An irrigation potential of 3.38 lakh hectares was targetted for the revised Fifth Plan. The actual achievement in the 4 years has been 3.02

lakh hectares which comes to about 90% of the target.

2.2.3. The following table indicates the expenditure incurred and the potential created during the two years 1978-79 and 1979-80.

Sr. No.	Year	Expenditure (Rs. in crores)	Actual potential created (^{'000} Ha.)
1	2	3	4
1.	1978-79	92.98	29* (*) reconciled
2.	1979-80	117.08	59*
Total:		210.06	88

2.2.4 It may be observed that the concentration on ongoing major and medium projects (as much as 85 to 90 percent of the outlays were spent on them in the initial 2 to 3 years) brought about a virtual moratorium on taking up new irrigation schemes during the Fifth Plan. In Gujarat where the availability of new irrigation projects has been limited and considering that all irrigation projects need adequate gestation periods this would have a special significance in as much as it would inevitably bring about the tapering down of irrigation development in the subsequent years. Realising the possibility of this underirable development the State Government had decided to generate momentum since 1977-78 on schemes which would create significant potential in the plan for 1980-85. This intended to ensure that there should not be any significant gap in the development

of irrigation in the State during the course of the 1980-85 Plan. With the increase in cost of irrigation development per hectare and with the exhaustion of relatively easy dam and diversion sites, this decision was timely. As a result, works on the Damanganga project which could not be given priority hitherto have been accelerated. Similarly, significant provisions were made during the year 1977-78, to 1979-80 for Sukhi, Karjan and Haran projects. Modernisation of the existing canal system has already been introduced in a big way from the year 1977-78 and the State Government has taken vigorous steps towards investigation, preparation of plans and estimates and getting these schemes in the pipeline for execution. Measures to arrest salinity ingress along the Saurashtra coast and anti-water logging measures (Drainage measures) could not

be taken up effectively in previous years. Therefore, substantial provisions for these items were made in the year 1977-78 to 1979-80

2.2.5 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 1980-85 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. Notwithstanding this, the level, of overall physical achievement will only be marginally better than that registered in the Fifth Plan.

2.2.6 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

2.2.7 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.

2.3.1 Approach and Strategy.

2.3.1 Water development is one of the sectors in which more funds will need to be provided during the Five Year Plan 1980-85. The outlays for

various projects will have to be so planned as to ensure that the rate of irrigation development through new, 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 can be derived progressively from the initial years of the Five Year Plan for 1985-90. Thus, the Five Year period 1980-85, in effect, has to serve as a transition from effective development of irrigation through other major and medium irrigation projects (barring Narmada) to the realisation of benefits from Narmada project in the plan for 1985-90 progressively. The main potential creating projects other than Narmada are expected to be essentially completed or put on way to completion during that period. Another dimension of the proposals for the period 1980-85 should obviously be to optimise benefits not only through the creation of irrigation potential by available major and medium irrigation projects but also through significant improvements in the status of utilisation of the existing irrigation potential by drawing an effective and concerted multidisciplinary strategy and also by way of comprehensive modernisation. A start in the direction of modernisation programme is made by the State in the last few years. About eleven existing medium irrigation schemes under this programme have already been taken up through the World Bank Aid, programme under Medium Line of Credit. Modernisation of Ukai-Kakrapar project is also taken up in a big way under the World Bank Aid Programme of Gujarat Irrigation Major Composite Projects. Over and above these two programmes, other existing schemes have also been taken up under this programme. For economical use and equitable distribution of water among all the beneficiaries the scheme of "Rotational system of supply of water" (i.e. warabandhi system) is recently introduced by the Government. This Programme would be given high priority during the plan period. Besides, for maximising utilisation of the potential created, it is also planned to extend the irrigation channels from 40 ha. chak to 8 ha.chak. With development of irrigation in command areas of major projects specially under Ukai-Kakrapar and Mahi-kadana projects the aspect of drainage has also to be given high priority. Besides, problems created by the increasing ingress of salinity along a part of the Saurashtra coast have also to be adequately controlled. This project is also partly included in the World Bank Aid Programme under major composite group. As a part of the anti-water logging strategy and with a view to optimise benefits from the available water resources, conjunctive use of ground water with surface water is also proposed to be brought into effective play during the five year period 1980-85. In the well developed command areas etc. of the Mahi-Kadana complex, Fatehwadi System, Dantiwada Command area etc. it has been proposed separately to drill augmentation tubewells for conjunctive use. These are the basic considerations that have shaped the formulation of the proposals for the 1980-85 Plan.

2.4. Perspective of Development.

2.4.1 The concentration on on-going projects in the Fifth Plan resulted in the creation of an irrigation potential of 3.02 lakh hectares, giving an average rate of about 0.75 lakh hectare per year. 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 on going 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 Kachchh, 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 new plan, adequate pipeline of new schemes is being inducted under the overall programme.

2.4.2 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 atleast Rs. 411 crores net (gross Rs. 623 crores inclusive of share of other beneficiary States) will have to be provided during 1980-85. In fact even larger outlay will be needed for the project but at the present stage this may be considered as base and further augmentation may be considered later on depending upon further detailing of project schedules and overall arrangements for financing. 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.

2.4.3 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 project 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. If adequate provisions for amelioration of the affected areas (about 6 lakh acres) are not made, it would be too late to plan any meaningful measures later.

2.4.4 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 downstream 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. A meaningful impact in the form of realisation of protections from the schemes can be achieved only if a reasonable provision is made in the plan 1980-85.

2.5 Key considerations:

2.5.1 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.

2.6. Programme proposed for Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Proposed Outlay.

2.6.1. Keeping in view the strategy narrated above and for achieving the physical targets based on the key considerations enumerated above, an outlay of Rs. 1141 crores is proposed for the Sixth Five Year Plan (1980-85) and an outlay of Rs. 225 crores for the Annual Plan, 1981-82 as detailed below :—

(Rs. in crore)

Sr. No.	Programme	Spillover liability as on 1-4-80	Estimated cost of new programme	Total	Outlay proposed for Sixth Plan 1980-85	Outlay proposed for Annual Plan 1981-82
1	2	3	4	5	6	7
1.	Major Projects in progress as on 1-4-76	14.99	..	14.99	14.99	5.08
2.	World Bank Projects—					
	(a) Medium Line of Credit	281.06	..	281.06	276.05	85.42
	(b) Major Composite Group of Projects	283.80	..	283.80	230.29 + 12.00*	56.90 4.00*
		*Share of Union Territories			242.29	60.90
3.	On-going Projects					
	(a) Major	6.71	..	6.71	6.71	2.53
	(b) Medium	23.53	..	23.53	23.53	7.64
		30.24	..	30.24	30.24	10.17
	Total : 1 to 3	610.09	..	610.09	551.57 + 12.00	157.57 + 4.00
4.	Narmada Project	2703.52	..	2703.52	411.00	61.60@
		@Excluding share of other States.				
	Total 1 to 4	3313.61	..	3313.61	962.57 +12.00	219.17 +4.00
5.	Warabandhi System	..	41.00	41.00	22.00	0.50
6.	Extension of Irrigation canals from 40 Ha. chak to 8 Ha. chak	..	41.00	41.00	20.50	0.26
7.	Modernisation of canals (other than World Bank)	23.00	..	23.00	11.50	0.50
8.	Water Development Services	20.00	..	20.00	20.00	2.00
	Flood Control and Antierosion works	9.50	20.50	30.00	20.00	0.50
	New schemes of 1978-80.	173.89	..	173.89	38.37	1.07
	New Schemes of VI Plan	..	199.63	199.63	3.06	..
	Modification and improvements to the existing schemes due to revision in hydrology	..	40.00 (Tentative)	40.00	20.00	..
	Drainage	21.00	..	21.00	17.00	1.00
	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	178.43	3.83
	Total of 1 to 14	3561.00	379.13	3940.13	1141.00 +12.00	225.00 + 4.00

The Projectwise details are given in the Appendix.

2.6.2. During the Sixth Five Year Plan, 1980-85, it is estimated that an irrigation potential of 4.25 lakh hectares would be created bringing the level of available irrigation potential to 14.37 lakh hectares at the end of 1984-85. Similarly, the target for

irrigation utilisation is 2.50 lakh hectares bringing the level of utilisation of irrigation potential 7.79 lakh hectares at the end of 1984-85. For the year 1981-82, additional irrigation potential of 0.74 lakh hectares is targetted to be created with additional utilisation of 0.39 lakh hectares. This is presented in the statement below :—

Sr. No.	Item	Unit	Level of achievement—					
			1977-78	1978-79	1979-80	1980-85	1980-81	1981-82
1	2	3	4	5	6	7	8	9
1.	Potential	Lakh Hec.	9.24	9.53	10.12	14.37	10.99	11.73
2.	Utilisation	Lakh Hec.	5.01	5.03	5.29	7.79	5.57	5.96

Details of the programme.

2.7.1. 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.

2.7.2. 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 proposed for these schemes during the first three years of the Plan, and they would create an additional irrigation potential of 0.36 lakh hectares. For 1981-82, an outlay of Rs. 5.08 Crores is proposed.

Other on-going major and medium projects.

(a) Major Projects :

2.7.3. Only 2 projects viz. Mahi (Stage-I) and Kakrapar 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 proposed towards our share in Mahi Bajajsaagar Project. For 1981-82, an outlay of Rs. 2.53 Crores is proposed. Full potential envisaged under these projects is already created.

(b) Medium Projects :

2.7.4. 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. 2.79 crores is required for completing them so as to create an additional potential of 17310 hectares. Out of these 13 schemes 3 are in tribal areas and one in drought prone area. These

projects are Kalindri, Baldeva, Pigut, Vaidy, Phoph Bagad, Shinghoda, Chhaparvadi, Ambajal, Rava Godhathad, Hiren (S) and Rajawala.

2.7.5. Out of the remaining 18 schemes, 14 schemes are in progress through contracts. For completion of these 14 schemes, which would create an additional potential of 48,640 hectares, a provision of Rs. 16.46 crores is proposed. Of the 14 schemes in progress, 10 schemes benefit tribal or drought prone areas. These 14 projects are Rami, Nara, Amipur, Godi dhari, Bhukhi, Jangadia, Mitti, Lakhigam, Kabutara Sankara, Umaria etc.

2.7.6. The remaining 4 schemes which are at various stages are either in tribal or drought-prone area. A provision of Rs. 5.50 crores is proposed for these schemes, which would create an additional irrigation potential of 12,370 hectares. These projects are Harnav-II, Wankleshwar Bhay, Dam Nani-Vahial and Dholi.

2.7.7. All these on-going medium projects are proposed to be completed during the Sixth Plan period thereby creating an additional potential of 78,320 hectares. Total outlay proposed for these schemes is Rs. 23.59 crores for Five Year Plan 1980-85. For Annual Plan 1981-82, an outlay of Rs. 7.64 crores is proposed.

Narmada Project.

2.7.8. This project is the life-line of Gujarat. Speedy implementation of this project is assured in the State Manifesto. A minimum provision of Rs. 411 crores is provided for this project during the Sixth Plan period towards the share of Gujarat in the irrigation sector. The gross outlay for this project including the share of other beneficiary States is Rs. 623 crores. For 1981-82, an outlay of Rs. 61.60 crores is proposed for this project against the State share.

World Bank Projects :

2.7.9. 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, 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.

2.7.10. 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.

2.7.11. 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 Kachh, Panchmahals, Banaskantha, Bhavnagar and Surendranagar.

2.7.12. An agreement for credit assistance of 85 million dollars has been signed with the World Bank in July, 1978 and for 50 million dollars with USAID in August, 1978, for the medium irrigation projects. An outlay of Rs. 276.05 crores is proposed for these projects under Sixth Five Year Plan whereas for the year 1981-82 an outlay of Rs. 85.42 crores has been proposed.

MAJOR COMPOSITE PROJECTS.

2.7.13. Projects of Damngaga (with CAD 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, 1980 for 175 million dollars for these projects. An outlay of Rs. 230.29 crores has been proposed for the Sixth Five Year Plan whereas for the year 1981-82 an outlay of Rs. 56.90 crores is proposed.

NEW SCHEMES OF 1978-80

2.7.14. In all 66 schemes estimated to cost Rs. 176.96 crores and taken up during 1978-80 are considered under this programme. Out of these schemes, contract is finalised or being finalised in respect of 15 schemes and for which a provision of Rs. 23.70 crores is made in the plan. These 15 schemes of which 8 schemes are either in tribal or drought prone areas will create an irrigation potential of 10,080 hectares. Of the remaining 51 schemes, project reports for 12 schemes are under consideration. These schemes are estimated to cost

Rs. 36.99 crores and will create an ultimate potential of 16,560 hectares. 7 out of these 12 schemes are either in tribal or drought-prone areas.

2.7.15. After investigation 7 schemes estimated to cost Rs. 13.23 crores are not found to be feasible and therefore they are now proposed to be dropped. The remaining 32 schemes are under various stages of investigation. Of these, 10 schemes estimated to cost Rs. 29.97 crores are either in tribal or drought-prone areas.

2.7.16. Looking to the resources position of the State, it is proposed to phase out the schemes in such a way that the schemes for which contracts are finalised or nearly finalised would be nearly completed during the Sixth Plan period and the schemes in the tribal and drought-prone area will be given preference over the other schemes. The remaining schemes will be taken up in the last one or two years of the Plan. A total outlay of Rs. 38.37 crores is proposed for the schemes under this programme. For the year 1981-82 an outlay of Rs. 1.07 crore is proposed.

DRAINAGE

2.7.17. With the rapid progress of irrigation 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. 1100 lakhs respectively. An outlay of Rs. 2100 lakhs is required as per programme. But an outlay of Rs. 1700 lakhs only is proposed looking to the resources available. For Annual plan, 1981-82 an outlay of Rs. 100 lakhs is proposed.

MODERNISATION OF EXISTING IRRIGATION CHANNELS

2.7.13. 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 proposed 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

2.7.19. 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. 11.50 crores is proposed for the programme during the Sixth Five Year Plan. During 1981-82, an outlay of Rs. 0.50 crore is proposed for this programme.

WATER DEVELOPMENT SERVICES

2.7.20. This provide for surveys and investigation of irrigation projects and research activities carried out through the Gujarat Engineering Research Institute, Vadodara.

2.7.21. The tempo on the irrigation activities can be maintained only if a self 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.

2.7.22. 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.

2.7.23. Looking to the type and size of the problems involved, an outlay of Rs. 20 crores for the Sixth Five Year Plan and Rs. 2.00 crores for the Annual Plan 1981-82 is proposed for this programme. The break-up of outlays for these programme is as under :—

	(Rs. in crores)	
	Sixth Plan	Annual Plan
(1) Survey and Investigation	14.80	1.40
(2) Research	5.20	0.60
Total ..	20.00	2.00

FLOOD CONTROL AND ANTI-EROSION SCHEMES

2.7.24. 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.

2.7.25. 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 proposed for Sixth Plan. Against this an outlay of Rs. 0.58 crore is proposed for Annual Plan 1981-82.

PREVENTION OF SALINITY INGRESS

2.7.26. 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 recharge 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 12,562. 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. This programme also forms part of the National Manifesto.

NEW PROGRAMMES

2.7.27. Besides, the framework of the plan will have to include the following inevitable programmes also :—

(a) Warabandhi System

2.7.28. 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 "Warabandhi" or "Rotational water supply System". For efficient implementation of this systems on all the existing schemes, minor structural improvements will be required to be made in the existing canal system. The irrigation potential created upto the end of June, 1980 is 10.12 lakh hectares. Considering a rate of Rs. 400/Hectare as the cost for this type of work, an amount of Rs. 41 crores will be required to cover the potential of 10.12 lakh hectares. However, an outlay of Rs. 22 crores is proposed for the Sixth Five Year Plan. For the Annual Plan 1981-82, an outlay of Rs. 50 lakhs is proposed for this programme.

(b) Extension of irrigation channels from 40 Ha. Chak to 8 Ha. Chak

2.7.29. 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.

2.7.30. By end of June 1980 as irrigation potential of 10.12 lakh hectares is created. For covering this, an amount of about Rs. 41 crores would be needed under this programme. However, an outlay of Rs. 20.50 crores is proposed for Sixth Five Year Plan. For Annual Plan 1981-82, an outlay of Rs. 26 lakhs is proposed.

(c) Modifications and improvements to the existing schemes due to revision in hydrology.

2.7.31. It has been observed that since last few years there is a significant change in the rainfall pattern especially in Saurashtra and Kachchh 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. 20 crores is proposed for this programme during the Sixth Plan period. However, no provision is proposed for the Annual Plan 1981-82.

(d) New Schemes of Sixth Plan

2.7.32. 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 in either tribal or drought prone areas. In order to maintain the tempo on development works 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 proposed for the works under this programme during the Sixth Plan. No provision is, however, proposed for the year 1981-82.

2.8. IRRIGATION DEVELOPMENT IN THE TRIBAL AREAS

2.8.1. 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 Orsang 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. Since irrigation development in these areas would provide effective means for the amelioration of the economic conditions of the tribals.

2.8.2. 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 1979-80. 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 Fifth Five Year Plan would come to 4.25 lakh hectares of which projects under the tribal area sub-plan would yield 0.34 lakh hectares. The overall percentage of irrigation in the tribal area would come to about 14.70 at the end of the five year period 1980-85. Thus, even with good potential sites existing in the tribal areas the overall percentage of irrigation would be less than the corresponding figure for the State as a whole. This is because of topographical situation where the benefits of potential storage are shared in a good measure by the non-tribal areas. This would clearly indicate the need for bringing more areas under irrigation through minor irrigation schemes in the tribal region. An outlay of Rs. 78.80 crores is proposed for Five Year Plan 1980-85 and for 1981-82 an outlay of Rs. 17.80 crores is proposed for this programme.

2.9. 20-POINT PROGRAMME OF CREATION OF IRRIGATION POTENTIAL

2.9.1. Creation of irrigation potential through planned programme and increasing utilisation thereof is one of the important programme 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 4.25 lakh ha. Thus the total irrigation potential of 10.12 lakh hectares at the end of June, 1980 shall increase to 14.37 lakh hectares at the end of the Sixth Five Year Plan.

2.9.2. 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) Narabandhi 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. 42.50 crores is proposed for these two programmes.

2.10. Strategy for increasing the utilisation of irrigation potential created during the Sixth Five Year Plan period.

2.10.1. By 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

2.10.2. The State Government is fully seized of all the serious implications of this 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 the 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 per cent 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 and large provide for a cropping pattern with 40 to 60 per cent irrigation in kharif. Therefore, more emphasis is required to be laid on increasing the actual irrigation during kharif season. Moreover, it is proposed to take the following steps in a phased manner:

(a) Introduction of the rotational water delivery system (Warebandhi system).

2.10.3. In this discipline the farmers at the tail end also are ensured of irrigation. Each irrigation in the command area is given uniform treatment keeping in view the size of the holding. On account of this discipline it is estimated that 10 to 15 per cent additional area will be covered by irrigation with the same amount of water.

(b) Introduction of water Co-operatives and selling water on volumetric basis.

2.10.4. In flow irrigation schemes it has not been possible so far to introduce volumetric measurements of water sold to the irrigators. With the result that the irrigators waste lot of water because water rate is fixed on the basis of seasons and cropped area. The irrigators are spread in wide area of the command area and it is physically impossible to measure water given to each irrigator on volumetric basis. Therefore, if a small group of such irrigators combine together and form water co-operative, water can be sold to such co-operative in bulk and the rate for water can be charged on the volume of such water. This will also provide necessary incentive to the users for minimising the wasteful use of water. Besides, the irrigators will also have a sense of involvements in the maintenance and operation of the project on average.

(c) Sanctioning water applications inspite of arrears of water dues by relaxing canal rules from time to time.

2.10.5. According to the prevailing rules, no application for irrigation water can be sanctioned if the irrigator is in arrears of water dues. At times on account of adversities of flood and famine the irrigators are not able to clear their arrears and the water potential available in various reservoirs can not be utilised for optimum agricultural production, if these rules are enforced rigidly. The State Government is therefore relaxing such rules from time to time so as to finally ensure that the water potential is used to its maximum efficiency and at the same time the recovery of arrears of water dues is also not very adversely affected.

(d) The activities such as on farm development works undertaken by command area development authorities.

2.10.6 The three Area Development Authorities are responsible for on farm development works in command areas of the projects under their purview. The simultaneous completion of such works along with the canal system of the irrigation projects goes along way towards increasing the rate of utilisation of created irrigation potential. For this purpose in Mahi-Kadana and Ukai-Kakrapar Project areas special machinery has been set up both in the Department of Agriculture and in Irrigation Department for expediting the completion of land levelling operations and the field channels etc. Such on farm development works are also pre-requisite for introduction of the rotational water delivery system.

(e) Conversion of large tracts of grass lands under Kakrapar and Damanganga Projects into irrigation lands

2.10.7. On account of the apprehension that the surplus irrigated land may have to be surrendered under the Land Ceiling Act of the State the holders of large tracts of grass land under Kakrapar and Damanganga project areas do not come forward for taking advantage of the irrigation facilities available to them. The State Government is considering this question with a view to come out of this situation without jeopardising the interests of the individual holders of such lands as well as the interests of the State. The solution may lie either in suitably modifying the Land Ceiling Act or in providing some incentives for such holders of the land to come forward for adopting irrigation.

(f) Fixing seasonwise optimum targets of Annual irrigation and reviewing the performance at the end of every irrigation season at the level of Chief Engineer etc.

2.10.8. The optimum targets of irrigation are fixed in advance for each season at the level of Chief Engineer and the performance is also periodically reviewed by him. The targets are fixed slightly on the higher side with a view to stimulate necessary effort on the part of local officers to accomplish the same.

2.10.9 (g) The State Government has undertaken a massive programme of modernising the old schemes with a view to improve upon its operational efficiency and thereby to increase the utilisation of the available water potential. Eleven existing schemes taken up under Modernisation Programme and also part of Kakrapar Project are posed for the World Bank assistance. On completion of the modernisation of all the schemes it is expected that not only additional irrigation potential of 36178 hectares will be created but it will also help in increasing efficiency in use of irrigation waters which will result in increased coverage of the area irrigated in each project. Over and above the projects for modernisation posed for World Bank assistance, there is a similar programme for modernising other medium schemes which will be financed from the State budget for which an outlay of Rs. 1150 lakhs has been proposed during the Sixth Five Year Plan.

2.10.10(h) The Planning Commission has issued general directives for extending the water course upto 8 hectare block at the cost of project. This is being done in respect of the projects posed for World Bank assistance. The programme of covering other schemes where the potential is already created is proposed to be implemented during Sixth Plan. This will boost up the rate of utilisation of the irrigation potential already created.

2.10.11 A water management Institute is being set up.

2.11. An outline of important projects.

Ukai Project

2.11.1. All principal components are essentially completed in the Fifth Plan. An expenditure of only Rs. 178 lakhs will spill 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. Against the likely expenditure of Rs. 150 lakhs during 1980-81 an outlay of Rs. 28 lakhs is proposed for 1981-82.

2.11.2. Narmada Project.

2.11.2.1. 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.

2.11.2.2. The Narmada Water Disputes Tribunal has assessed the total availability of utilisable quantum of water upto the proposed Navgam Dam site in the State as 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 on the following pattern of allocation to Gujarat :-

Water allocation	CCA proposed for Irrigation	Intenstiy proposed
9.00 Maft.	52.36 lakh acres	70 percent

2.11.2.3. 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 oft-take with F. S. L. 300 Ft. from Navgam Dam which would serve the command areas in Gujarat and in Rajasthan.

2.11.2.4. 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 per cent 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 respectively. Gujarat is entitled to 16 per cent of the power benefits from this project.

2.11.2.5. The project report is prepared and

is 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. This could be brought down to Rs. 1,600 crores if canals with capacities over 100 cusecs are only lined. Unit III Hydro-power is estimated to cost Rs. 360 crores which is under review with C. E. A. 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				
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

2.11.2.6. 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.

2.11.2.7. A twelve year programme of construction for 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 twentieth year. Command area development works are proposed to be taken-up from the fourth year and completed by the fifteenth year.

2.11.2.8. Setting up of an autonomous corporation with full delegation of 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.

2.11.2.9. The benefits likely to flow from this project to Gujarat are briefly as under :—

(i) 38 percent 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 Narmadnagar, would also partly help flood control and benefit villages and towns down stream of Navagam Dam.

2.11.2.10. 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 five year period-1980-85 have been worked out. According to the project schedule that is in view an outlay of atleast Rs. 623 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. 411 crores which is proposed to be provided in the State Plan. 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. For the Annual Plan 1981-82 an outlay of Rs. 61.60 crores is proposed for this project in the State Plan.

2.11.3. Kadana Project :

2.11.3.1. 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 would be 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 effected by backwater (including rehabilitation) and also a certain spillover on account of project liabilities. A provision of Rs. 353 lakhs is proposed 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. An expenditure of Rs. 3676 lakhs has been incurred till the end of 1979-80. During 1980-81 there is a provision of Rs. 200 lakhs. The remaining balance of Rs. 153 lakhs is proposed for 1981-82. Thus, this project will be completed by the end of June, 1981.

Sabarmati (Dharoi) Project.

2.11.4. Wasna Barrage is already completed and the feeder channel would be completed soon. The project would be completed by June, 1982 in all respects. The outlay proposed for 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 35680 hectares, out of the total potential of 56,630 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 project to an advanced Stage. Total ex-

penditure till the end of March, 1980 is Rs. 5432 lakhs. There is a provision of Rs. 338 lakhs during 1980-81. An outlay of Rs. 327 lakhs is proposed for 1981-82.

Pannam Project.

2.11.5. 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 Hectares 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 26900 hectares is created by June, 1980 and the balance of 26,520 hectares will be achieved during the plan period 1980-85. This project would be the largest single potential creator in the plan 1980-85 and is expected to be completed by June, 1982.

Mahi Stage-I

2.11.6. 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 Mahi-Stage-I command areas.

Mahi Bajajsagar.

2.11.7. 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 1982-84. The schedule for the completion of this project was June, 1982 which will not be materially affected. For 1980-81 an outlay of Rs. 250 lakhs is provided where as for 1981-82 an outlay of Rs. 200 lakhs is proposed.

Watrak Project.

2.11.8. This is also a spillover project. The spillover will be to the extent of Rs. 1523 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 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 proposed for

1930-35 Plan. During 1980-81 Rs. 550 lakhs is provided whereas an outlay of Rs. 554 lakhs is proposed for 1981-82.

2.11.9. Projects of Narmada Basin.

2.11.9. 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.

2.11.9.1. 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. 8960 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. 8960 lakhs, cost allocable to irrigation component is Rs. 7368.84 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) Hectares 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. 7120 lakhs is proposed in the plan 1980-85. as against the spillover amount of Rs. 7838 lakhs. An important strategy would be to push-through canal works simultaneously with dam works. Out of the potential of 77,570 hectares 60,000 hectares is proposed to be achieved during the plan 1980-85. This is World Bank project covered under major composite group. An expenditure of Rs. 11.23 lakhs is incurred till the end of March, 1980. During 1980-81 an outlay of Rs. 1420 lakhs provided, whereas for 1981-82 an outlay of Rs. 1970 lakhs is proposed.

HERAN

2.11.9.2. 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. 5064 lakhs and the planned potential has also been increased from 36,420 hectares to 39,507 hectares. Out of the total cost of Rs. 5064 lakhs cost allocable to irrigation component is Rs. 3954 lakhs, while remaining cost provides for C.A.D. activities and construction of roads. Out of the potential of 3950 hectares about 20,000 hectares is proposed to be achieved during the plan 1980-85. An outlay of Rs. 4450 lakhs has been proposed 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. During 1980-81 it is proposed to spend Rs. 890 lakhs whereas an outlay of Rs. 1280 lakhs is proposed for 1981-82.

SUKHI

2.11.9.3. 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. 3578 lakhs and the planned potential has also been increased from 21,250 hectares to 25205 hectares. Out of the total of Rs. 3578 lakhs the cost allocable to irrigation component is Rs. 3249 lakhs, while the remaining amount provides for construction of roads in the command area. The expenditure spilling into the plan period 1980-85 would be Rs. 2207 lakhs. Full outlay is proposed to be 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.

2.11.10. Damanganga Project

2.11.10.1. An expenditure of Rs. 5647 lakhs will spill into the plan period 1980-85. Out of the estimated cost of Rs. 9684 lakhs, an amount of Rs. 5500 lakhs is proposed for the Dam and Canal world. This is an Inter-State project benefitting areas of Gujarat and Union Territories of Dadra, Nagar Haveli and Daman.

2.11.10.2. 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 of 6630 hectares in the plan 1980-85. Thus, an irrigation potential of 50000 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. During 1980-81 the likely expenditure is Rs. 1590 lakhs of which Rs. 500 lakhs will be from Union Territory. For 1981-82 an outlay of Rs. 1750 lakhs inclusive of Rs. 400 lakhs as share from Union Territory is proposed.

SIPU PROJECT

2.11.11. The project is 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 specific mention of this project as having potentialities as an anti desertification project. It is therefore proposed to give it a high priority. An outlay of Rs. 1700 lakhs is proposed during the plan period 1980-85

Out of the total potential of about 32100 hectares, 5000 hectares will be created during the plan period 1980-85. An expenditure of Rs. 104 lakhs has been incurred upto March 1980. This is a World Bank aided Project. During 1980-81 an amount of Rs. 150 lakhs will be spent. For 1981-82 an outlay of Rs. 250 lakhs is proposed.

ZANKHARI PROJECT :

2.11.12. This project is estimated to cost Rs. 3443 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. 3318 lakhs is proposed in the Sixth Plan. Irrigation potential of 5090 hectares, out of the total of 24200 hectares will be achieved during the plan 1980-85. The project will be solely benefitting the tribal area of Songadh taluka in Surat District. During 1980-81 Rs. 5 lakhs will be spent whereas for 1981-82 an outlay of Rs. 663 lakhs is proposed.

SIDHUMBER PROJECT

2.11.13. This is a new project of 1978-79. It is estimated to cost Rs. 1824 lakhs with an irrigation potential of 11340 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

2.11.14. 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 Khijadia and (vii) Khakhria are proposed to be dropped as they are not feasible. At the beginning of the Sixth Plan, i. e., 1980-85, total 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. 171.12 crores is proposed for these schemes with the target of completing only a few schemes during the plan period. Out of the total 2.52 lakh hectares of spillover potential of these schemes into the Sixth Plan, 1.55 lakhs hect. of potential is targetted to be created during the plan period. In order to continue the tempo of irrigation development during subsequent plans beyond 1985, new medium schemes with an estimated cost of Rs. 199.63 crores are proposed to be launched during the Sixth Plan and an outlay of Rs. 306 lakhs is proposed for these schemes 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.

r. No.	Name of Programme	Latest Estimates cost.	Expdr. upto 1978-79	Expdr. during 1979-80	Total Expdr. upto 3-80	Spill over to VI Plan 1980-85
1	2	3	4	5	6	7
I	Major Projects in Progress as on 1-4-1976.	282.17	256.23	10.95	267.18	14.99
II.	World Bank Project :					
	(a) Medium Line of Credit.	364.12	52.58	30.48	83.06	281.06
	(b) Major Composite Projects	343.75	41.79	18.16	59.95	283.80
III.	On-going Projects					
	(a) Major Projects	100.79	88.50	5.58	94.08	6.71
	(b) Medium Projects	63.59	30.41	9.65	40.06	23.53
IV.	Narmada	2755.00	23.55	27.93	51.48	2703.52
V	New Schemes of 1978-79 and 1979-80	187.09	0.73	2.61	3.34	182.19
VI	New Schemes of VI Plan 1980-85	199.63	..	..	..	..
VII	Ware bandhy system	41.00	..	..	..	..
XIII	Extension of Irrigation Channels from 40 Ha. chak to 8 Ha. chak.	41.00	..	..	..	..
IX	Water Development services.	Y.E.	..	..	20.60	..
X	Drainage.	..	..	..	..	21-00
XII	Modernisation of canals (other than W. B.)	1.01	..	..	..	23.00
XII	Prevention of salinity Ingress (Other than W.B.)	37.00	..	..	..	..
XIII	Food control & Anti-Erosion works.	..	..	..	..	30.00
XIX	Modification and improvements to the existing scheme due to revision in technology.	40.00	..	..	..	..
	Total ..	4455.65	493.79	105.36	619.75	3539.80

STATEMENT

Financia 1) WaterDev elopment Sctore (Irrigation).

(Rs. in crores).

1980-81	Phasing of Outlay during VI Plan				Total for ffitve Year 1980-85	Spill over to XII Plad	Remarks
	1981-82	1982-83	1983-84	1984-85			
8	9	10	11	12	13	14	15
6.88	5.08	3.03	..	..	14.99	..	
58.38	85.42	69.92	37.70	24.63	276.05	5.01	
40.70	56.90	58.20	46.40	28.09	230.29	53.51	
%5.00 U.T.	%4.00 U.T.	%3.00 U.T.			12.00 U.T.		
3.05	2.53	1.13	..	..	6.71	..	
7.00	7.64	5.51	2.24	1.14	23.53	..	
27.80	61.60	80.00	108.00	133.60	411.00	2292.52	
1.25	1.07	6.46	13.06	16.53	38.37	143.82	
..	..	..	1.50	1.56	3.06	196.57	
..	0.50	6.00	7.00	8.50	22.00	19.00	
..	0.50	5.50	7.00	7.50	20.50	20.50	
3.00	2.00	5.00	5.00	5.00	20.00	..	
4.50	1.00	3.50	4.00	4.50	17.00	4.00	
0.54	0.50	2.00	3.50	4.96	11.50	111.50	
..	..	1.50	2.00	2.50	6.00	31.00	
2.00	0.50	3.50	6.00	8.00	20.00	10.00	
..	..	5.00	7.00	8.00	20.00	20.00	
154.60	225.24	256.25	250.40	254.51	1141.00	2807.43	
+5.00	+4.00	+3.00			+12.00		

APPENDIX

Statement showing Projectwise details of draft

(Rs. in Crores)

Sr. No.	Name of Scheme	Latest estimated cost	Expdr. upto 3/79	Actual expdr. during 1979-80.	Total expdr. upto 3/80	Spill over to VIth Plan 1980-85
1	2	3	4	5	6	7
I. Major Projects in Progress on 1-4-76.						
1.	Kadana (Mahi State-II)	91.20	83.98	3.69	87.67	3.53
2.	Sabarmati	64.00	50.74	3.58	54.32	9.68
3.	Ukai.	126.97	121.51	3.68	125.19	1.78
Total:		282.17	256.23	10.95	267.18	14.99

Sixth Five Year Plan 1980-85 water development Sector.

Phasing of Outlay during 1980-85					Total for VI Plan 1980-85	Spill over to VII Plan	Remarks
1980-81	1981-82	1982-83	1983-84	1984-85			
8	9	10	11	12	13	14	15
2.00	1.53	..	..	..	3.53	..	
3.38	3.27	3.03	..	..	9.68	..	
1.50	0.28	..	..	..	1.78	..	
6.88	5.08	3.03	..	..	14.99	..	

Statement showing outlay for 1980-85 for scheme posed

Sr. No.	Name of Scheme.	Latest estimated cost	Expdtr. upto 3/79	Actual Expdtr. during 1979-80	Total Expdtr. upto 3/80	Spill over to Vi thplan 1980-85	
1	2	3	4	5	6	7	
(a) Medium line of Credit :							
1.	Panam	41.36	19.62	5.46	25.08	16.28	
2.	Sukhi	32.49	6.62	3.80	10.42	22.07	
3.	Watrak	24.00	7.61	1.20	9.81	15.28	
4.	Sukhbhadar.	5.88	1.35	0.49	1.84	4.04	
5.	Machhundri.	7.34	2.75	0.95	3.70	3.64	
6.	Kalubhar.	6.31	1.63	0.91	2.54	3.77	
7.	Machan-Nala.	4.73	1.13	0.71	1.84	2.89	
8.	Ver-II.	6.44	1.00	1.32	2.92	3.52	
9.	Deo.	16.06	1.28	1.52	2.80	13.26	
10.	Venu-II.	8.92	0.81	0.89	1.70	7.22	
11.	Aji II.	3.19	..	0.30	0.30	2.89	
12.	Und (Jivapur).	15.06	1.59	1.76	3.35	11.71	
13.	Bhadar(Pms.)	13.81	1.63	1.17	2.80	11.01	
14.	Sipu	22.62	0.69	0.35	1.04	21.58	
15.	Aji-III.	6.25	0.03	1.06	1.09	5.16	
16.	Mazam	3.99	0.03	0.46	0.40	3.50	
17.	Demi-II.	5.69	0.16	0.70	0.86	4.83	
18.	Hadaf.	7.86	0.39	0.40	0.79	7.07	
19.	Guhai.	14.28	0.04	0.16	0.20	14.08	
20.	Zunkhari.	34.43	..	1.25	1.25	33.18	
21.	Kelia.	6.17	0.02	0.40	0.42	5.75	
22.	Jhuj.	10.04	..	0.22	0.22	9.82	
23.	Uben	3.81	0.16	0.83	0.99	2.82	
24.	Modernisation of Canals.						
(1)	Niruna.	0.49	..	..	..	..
(2)	Rudramata.	0.61	..	..	..	..
(3)	Maohhu-I.	3.46	..	..	..	..
(4)	Maohhu-II.	1.48	..	..	..	..
(5)	Shetrunji (k)	1.56	..	..	..	..
(6)	Shetrunji (P)	6.88	..	..	..	..
(7)	Dantiwada.	18.24	..	..	..	..
(8)	Hathmati.	3.45	..	..	..	..
(9)	Khariout.	4.40	..	..	..	..
(10)	Fatehwadi.	9.00	..	..	..	..
(11)	Bhadar	10.01	..	..	..	..
		63.30	3.44	4.17	7.61	55.69	
	Total	..	364.12	52.58	30.48	83.06	281.06

Statement showing Outlay for 1980-85 on Major

Sr. No.	Name of Scheme	Latest estimated cost	Expenditure disbursing upto 3/79	Actual expdtr. during 1979-80	Total expdtr. upto 3/80	Spill over to Vith Plan 1980-85
1	2	3	4	5	6	7
(b) Major Composite Projects.						
1.	Karjan	89.60	8.48	2.75	11.23	78.37
2.	Heran	50.64	3.98	0.74	4.72	45.92
3.	Damanganga	96.84	28.07	12.30	40.37	56.47
4.	Modernisation of canals of Ukai--Kakrapar	48.73	0.01	0.64	0.65	48.08
5.	Saurashtra Coastal Project-Pre-vention of Salinity Ingress	35.85	1.25	1.73	2.98	32.87
6.	Narmada Planning Unit	22.09	..	..	..	22.09
Total		.. 343.75	41.79	18.16	59.95	283.80

III Other on going Projects.

(a) Major Projects.

Composite Projects passed for World Bank Assistance.

(Rs. in crores).

Phasing of outlay during 1981—85					Total for VIth Plan 1980—85	Spill Over to VIIth Plan.	Remarks
1980 81	1981 82	1982 83	1983 84	1984 85			
8	9	10	11	12	13	14	15
14.20	19.70	20.60	11.00	5.70	71.20	7.17	
8.90	12.80	12.70	8.80	1.30	44.50	1.42	
10.90 +5.00 (U.T.)	13.50 +4.00	9.90 +3.00	9.20	5.20	48.70 +12.00 (U.T.)	7.77	
2.40	5.10	7.20	8.50	8.20	31.40	16.68	
4.30	5.80	7.90	8.20	7.00	32.60	0.27	
..	..	0.50	0.70	0.69	1.89	20.20	
40.70 +5.00 (U.T.)	56.90 +4.00	58.20 +3.00	46.40	28.09	230.29 +12.00 (U.T.)	53.51	

Statement showing outlay for 1980--85 on-going Major Projects

(Rs. in crores)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
(a) Major Projects													
1.	Mahi Stage--I.	40.45	37.59	2.07	39.66	0.79	0.50	0.29	..	..	..	0.79	..
2.	Kakrapar.	20.85	20.41	0.15	20.56	0.29	0.05	0.24	..	..	..	0.29	..
3.	Bajaj-sagar.	39.49	30.50	3.36	33.86	5.63	2.50	2.00	1.13	..	..	5.63	..
Total (a) ..		100.79	88.50	5.58	94.08	6.71	3.05	2.53	1.13	..	..	6.71	..

Statement showing outlay for 1980-85 on going Medium Schemes

(Rs. in crores)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
(b) Medium Projects													
1.	Kalindri	1.43	1.39	..	1.39	0.04	0.02	0.02	..	..	..	0.04	..
2.	Harnav-II	2.00	0.21	0.58	0.79	1.21	0.40	0.50	0.31	..	..	1.21	..
3.	Rami	1.49	0.44	0.20	0.64	0.85	0.12	0.15	0.58	..	..	0.85	..
4.	Baldeva	1.20	0.82	0.13	0.95	0.25	0.07	0.18	..	..	..	0.25	..
5.	Pigut	1.32	0.39	0.64	1.03	0.19	0.25	0.04	..	..	..	0.29	..
6.	Vaidya	1.12	0.43	0.65	1.08	0.04	0.04	..	..	..	..	0.04	..
7.	Phophal	3.20	3.08	0.04	3.12	0.08	0.08	..	..	..	..	0.08	..
8.	Bagad	1.65	1.23	1.38	2.61	0.04	0.04	..	..	..	..	0.04	..
9.	Shinghodu	3.00	2.50	0.05	2.55	0.45	0.05	0.25	0.15	..	..	0.45	..
10.	Chaparwadi	2.90	2.24	0.13	2.37	0.53	0.10	0.25	0.18	..	..	0.53	..
11.	Amhajal	0.97	0.92	0.02	0.94	0.03	0.01	0.02	..	..	..	0.03	..
12.	Raval	3.48	2.87	0.05	2.92	0.56	0.20	0.36	..	..	..	0.56	..
13.	Nara	2.10	1.30	0.18	1.48	0.62	0.08	0.35	0.19	..	..	0.62	..
14.	Sani	1.86	0.06	0.51	0.57	1.21	0.25	0.25	0.40	0.39	..	1.29	..
15.	Godhathad	0.49	0.40	0.03	0.43	0.06	0.02	0.04	..	..	..	0.06	..
16.	Amipur	3.63	0.83	0.33	1.16	2.47	0.80	1.00	0.50	0.17	..	2.47	..
17.	Ghodadharoi	1.77	0.78	0.23	1.01	0.76	0.40	0.30	0.06	..	..	0.76	..
18.	Hiran (S)	4.68	4.19	0.21	4.40	0.28	0.19	0.09	..	..	..	0.28	..
19.	Jangadha	1.02	0.08	0.44	0.52	0.50	0.38	0.12	..	..	..	0.50	..
20.	Bhukhi	1.66	0.28	0.40	0.68	0.98	0.40	0.40	0.18	..	..	0.98	..
21.	Wankieshuwar Bhey	1.31	0.77	0.09	0.86	0.45	0.10	0.15	0.20	..	..	0.45	..
22.	Rajwal	2.62	1.80	0.77	2.37	0.25	0.20	0.05	..	..	..	0.25	..
23.	Mitti (Kachuchh)	1.75	0.70	0.55	1.25	0.50	0.30	0.30	..	..	..	0.50	..
24.	Dam on Navi Vahial	1.89	..	..	..	1.89	..	0.20	0.30	0.60	0.79	1.89	..
25.	Lakhigam	0.74	..	0.47	0.47	0.27	0.25	0.02	..	..	..	0.27	..
26.	Kabutari	1.14	0.19	0.30	0.49	0.65	0.30	0.25	0.10	..	..	0.65	..
27.	Sunkara	1.74	0.07	0.20	0.27	1.47	0.25	0.40	0.60	0.22	..	1.47	..
28.	Dholi	2.11	..	0.20	0.20	1.91	0.25	0.40	0.60	0.23	0.31	1.91	..
29.	Umacia	1.11	0.13	0.17	0.30	0.81	0.35	0.25	0.15	0.16	..	0.81	..
30.	Shadhi Branch Ex-M. R. B. C. I.	4.71	1.23	0.39	1.62	3.09	1.10	1.00	0.60	0.35	0.04	3.09	..
31.	Lift Irrigation Scheme from rivers or Canals	3.50	1.98	1.31	2.59	0.91	0.10	0.40	0.41	..	..	0.91	..
Total (b)		63.59	30.41	9.65	40.06	23.53	7.00	7.64	5.51	2.24	1.14	23.53	..

Statement showing outlay for 1980--85 on On-going Major Projects

(Rs. in crores)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
IV. Narmada Projects.		2755.00	23.55	27.93	51.48	2703.52	27.80	61.60	80.00	108.00	133.60	411.00	2292.52
	Total	2755.00	23.55	27.93	51.48	2703.52	27.80	61.60	80.00	108.00	133.60	411.00	2292.52
												+212.00*	
												623.00	

*Beneficiary states share.

NEW SCHEMES OF 1978-80

(Rs. in crores)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Vrajaui		2.8	..	0.27	0.27	1.91	0.05	0.05	0.50	0.80	0.51	0.91	..
2. Datardi		1.88	..	0.01	0.01	1.87	0.05	0.05	0.50	0.70	0.57	1.87	..
3. Dai (Minsar)		3.53	..	..	..	3.53	0.01	0.05	0.55	0.80	1.40	2.81	0.78
4. Khara		1.80	0.06	0.54	0.60	1.90	0.05	0.05	0.30	0.50	0.30	1.20	..
5. Lakhania		1.85	..	..	..	1.85	0.01	0.05	0.25	0.40	0.52	1.23	0.62
6. Karmal		1.76	0.46	0.48	0.94	0.82	0.04	0.05	0.15	0.25	0.33	0.82	..
7. Mathaj		1.62	0.16	0.37	0.53	1.09	0.04	0.05	0.25	0.40	0.35	1.00	..
8. Edalwada		1.20	0.02	0.16	0.18	1.02	0.18	0.20	0.25	0.39	..	1.02	..
9. Chopadvav		1.99	..	0.21	0.21	1.78	0.10	0.05	0.25	0.50	0.88	1.78	..
10. Mukteswar		3.84	0.02	0.20	0.22	3.63	0.05	0.05	0.40	0.60	1.53	2.62	1.00
11. Perachla		0.89	..	0.04	0.04	0.85	0.05	0.01	0.20	0.30	0.335	0.85	..
12. Fategadhd		1.21	..	0.16	0.16	1.05	0.01	0.01	0.25	0.40	0.38	1.05	..
13. Don		0.68	..	..	..	0.68	0.05	0.02	0.05	0.05	0.05	0.18	0.50
14. Falia (Nankavati)		1.48	..	..	..	1.48	0.02	0.02	0.30	0.30	0.505	0.98	0.50
15. Koakolimaba		1.46	..	0.17	0.17	1.29	0.10	0.10	0.25	0.40	0.44	1.29	..
		27.37	0.72	2.61	3.33	24.94	0.71	0.81	4.30	6.79	8.090	20.70	3.34
16. Bakrol		6.66	0.01	..	0.01	6.64	0.01	0.01	0.10	0.25	0.27	0.64	6.00
17. Malgadh		0.63	..	..	..	0.63	0.005	0.01	0.03	0.04	0.045	0.13	0.50
18. Men		9.00	..	..	..	9.00	0.05	0.01	0.25	0.30	0.39	1.00	8.00
19. Ani		6.60	..	..	..	6.60	0.05	0.01	0.05	0.20	0.29	0.60	6.00
20. Kaniyad		0.78	..	..	..	0.78	0.005	0.01	0.02	0.05	0.10	0.18	0.60
21. Kalagogha		0.90	..	..	..	0.90	0.005	0.005	0.02	0.07	0.10	0.20	0.70
22. Limbadi		1.85	..	..	..	1.85	0.005	0.005	0.05	0.10	0.19	0.35	1.50
23. Dared Metam		4.46	..	..	..	4.46	0.005	0.005	0.05	0.15	0.25	0.46	4.00
24. Sodavadar		0.55	..	..	..	0.55	0.005	0.005	0.10	0.20	0.24	0.55	..
25. Ishvaria		0.88	..	..	..	0.88	0.005	0.005	0.10	0.25	0.52	0.88	..
26. Khambhalav		1.60	..	..	..	1.60	0.01	0.005	0.10	0.15	0.335	0.60	1.00
27. Sidhumber.		18.24	..	..	..	18.24	0.05	0.05	0.50	3.20	3.96	7.76	10.46
		52.14	0.01	..	0.01	52.13	0.205	0.125	1.37	4.960	6.69	13.35	38.70
28. Bangawadi		0.90	..	..	..	0.90	0.005	0.005	0.05	0.10	0.09	0.25	0.65
29. Laliyana		1.35	..	..	..	1.35	0.005	0.005	0.05	0.15	0.29	0.50	0.85
30. Und-II		5.89	..	..	..	5.89	0.005	0.005	0.10	0.40	0.49	1.00	4.89
31. Hamirpur		1.10	..	..	..	1.10	0.005	0.005	0.05	0.10	0.09	0.35	0.85
32. Ozat		2.00	..	..	..	2.00	..	0.005	0.05	0.05	0.05	0.20	1.80
33. Sonmati		1.34	..	..	..	1.34	..	0.005	0.05	0.05	0.095	0.20	1.14
34. Raidi		1.97	..	..	..	1.97	0.01	0.005	0.05	0.05	0.085	0.20	1.77
35. Nyari-II		3.61	..	..	..	3.61	0.005	0.005	0.10	0.10	0.19	0.40	3.21
		18.16	..	..	..	18.16	0.025	0.040	0.50	1.00	1.425	3.00	15.16

1	2	3	4	5	6	7	8	9	10	11	12	13	14
36.	Sangawadi	0.94	..	..	..	0.94	0.005	0.005	0.01	0.01	0.01	0.04	0.90
37.	Ramath	2.37	..	..	..	2.37	0.01	0.006	0.005	0.01	0.01	0.004	2.33
38.	Hanol	1.39	..	..	..	1.39	0.005	0.005	0.01	0.01	0.01	0.04	1.25
39.	Fulka	1.96	..	..	..	1.96	0.005	0.005	0.01	0.01	0.01	0.04	1.92
40.	Sarangpur Gala (Ningala)	1.90	..	..	..	1.90	0.005	0.005	0.01	0.01	0.01	0.04	1.86
41.	Rangameti	1.33	..	..	..	1.33	0.005	0.005	0.01	0.01	0.01	0.04	1.29
42.	Aji-IV	4.88	..	..	..	4.88	0.005	0.005	0.02	0.03	0.04	0.10	4.78
43.	Shell-Dedumal	2.59	..	..	..	2.69	0.005	0.005	0.01	0.01	0.01	0.04	2.55
44.	Vadi-Thebi	2.47	..	..	..	2.47	0.005	0.005	0.01	0.01	0.01	0.04	2.43
45.	Jaspur-Mandva	0.70	..	..	..	0.70	0.005	0.005	0.01	0.01	0.01	0.04	0.66
46.	Gunda	2.96	..	..	..	2.96	0.005	0.005	0.01	0.01	0.01	0.04	2.92
		23.49	..	..	..	23.49	0.060	0.055	0.115	0.13	0.14	0.50	22.99
47.	Mithapur	6.00	..	..	..	6.00	0.005	0.005	0.03	0.03	0.10	0.10	5.00
48.	Maachhu-III	3.80	..	..	..	3.80	0.005	0.03	0.03	0.03	0.10	0.10	3.70
49.	Ozat-II	15.92	..	..	..	15.92	0.005	0.005	0.03	0.03	0.10	0.10	15.82
		25.72	..	..	..	25.72	0.015	0.015	0.09	0.09	0.09	0.30	25.42
50.	Veradi	1.65	..	..	..	1.65	0.005	0.005	0.03	0.03	0.03	0.10	1.55
51.	Saran	1.28	..	..	..	1.28	0.005	0.005	0.03	0.03	0.03	0.10	1.13
52.	Hathivan	1.81	..	..	..	1.81	..	0.005	0.03	0.03	0.035	0.10	1.71
		4.74	..	..	..	4.74	0.010	0.015	0.09	0.09	0.95	0.30	4.44
53.	Phophal-II	3.50	..	..	..	3.50	0.01	..	..	..	..	0.01	3.49
54.	Rupen	1.60	..	..	..	1.60	0.16	..	..	..	..	0.16	1.44
55.	Rel	8.30	..	..	..	8.30	0.005	..	..	..	..	0.005	8.295
56.	Satali	3.80	..	..	..	3.80	0.005	..	..	..	..	0.005	3.795
57.	Karen	1.00	..	..	..	1.00	0.005	..	..	..	..	0.05	0.99
58.	Uben	9.06	..	..	..	9.06	0.005	0.005	..	..	..	..	9.050
59.	Kajipur	0.50	..	..	..	0.50	..	0.005	..	..	..	0.005	0.495
		27.76	..	..	..	27.76	0.19	0.01	..	..	..	0.20	27.560
60.	Sumadhiala	1.80	..	..	..	1.80	..	..	..	..	..	..	1.80
61.	Brahmani-II	1.56	..	..	..	..	0.005	..	..	..	..	0.005	..
62.	Fulpari	1.42	..	..	..	1.42	..	..	..	..	..	..	1.42
63.	Barriyawa	0.93	..	..	..	0.93	0.005	..	..	..	..	0.005	0.925
64.	Khari-II	0.40	..	..	..	0.40	0.005	..	..	..	..	0.005	0.395
65.	Khari-Khijadia	0.60	..	..	..	0.60	0.005	..	..	..	..	0.025	0.595
66.	Khakharia	1.00	..	..	..	1.00	0.005	..	..	..	..	0.005	0.99
		7.71	..	..	..	6.15	0.025	..	..	..	..	0.025	6.130
	Total for New Schemes 1978-80.	187.09	0.73	2.61	3.34	182.19	1.25	1.07	6.46	13.06	16.53	38.37	143.82

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

WATER DEVELOPMENT (IRRIGATION)

Minor Headwise outlays and expenditure

(Rs. in lakhs).

Sr. No.	Minor Heads	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Multipurpose River Valley Projects	5999.58	5418.00 41.00	5408.00	49660.00	49657.00	8718.00	8717.00
2.	Major and Medium Irrigation on Projects							
(a)	Major Projects	1233.68	2990.00	3810.00	21207.00	21161.00	5687.00	5687.00
(b)	Medium Projects	2731.77	2647.00	3745.50	17418.00	17418.00	5074.00	5074.00
	Sub-Total-2	3965.45	5637.00	7555.50	38625.00	38579.00	10761.00	10761.00
3.	Flood Control, Drainage prevention of salinity ingress, water deve- lopment service etc.	1742.78	2054.00	2496.00	25815.00	23321.00	3021.00	2861.00
	GRAND TOTAL	11707.81	13109.00 +41.00	15459.50	114100.00	111557.00	22500.00	22339.00

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Water Development (Irrigation)

Scheme-wise outlay and expenditure

(Rs. in lakhs).

Sr. No.	No. and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82		Remarks
			outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content	
1	2	3	4	5	6	7	8	9	10
(A) Pre-Fifth Plan Schemes									
(I) Multipurpose Projects									
1.	IRG-1 Uka	367.84	150.00	150.00	178.00	175.00	28.00	27.00	
2.	IRG-2 Narmada	2792.77	2780.00	2780.00	41100.00	41100.00	7160.00	6160.00	
3.	IRG-3 Kadana	368.95	200.00	200.00	353.00	353.00	153.00	153.00	
4.	IRG-4 Sabarmati	358.04	338.00	338.00	968.00	968.00	327.00	327.00	
5.	IRG-5 Damanganga	1229.87	1100.00 +500.00 (UT)	1090.00 +500.00 (UT)	4870.00 +1200.00 (UT)	4870.00 +1200.00 (UT)	1350.00 +400.00 (UT)	1350.00 +400.00 (UT)	
6.	IRG-6 Panam	546.15	600.00	600.00	1628.00	1628.00	500.00	500.00	
IRG-7	Bajajagar	335.96	250.00	250.00	563.00	563.00	200.00	200.00	
Total (I)		5999.58	5418.00 +500.00	5408.00 +500.00 +41.00	49660.00 +1200.00	49657.00 +1200.00	8718.00 +400.00	8717.00 +400.00	
(II) Irrigation Projects									
(a) Major Projects									
8.	IRG-8 Mahi-Stage-I	206.55	50.00	50.00	79.00	33.00	29.00	29.00	
9.	IRG-9 Kakrapar	14.94	5.00	5.00	29.00	29.00	24.00	24.00	
10.	IRG-10 Watrak	122.97	300.00	550.00	1528.00	1528.00	554.00	554.00	
11.	IRG-11 Sipu	35.44	150.00	150.00	1700.00	1700.00	250.00	250.00	
12.	IRG-12 Karjan	275.12	1000.00	1420.00	7120.00	7120.00	1970.00	1970.00	
Total (a)		655.02	1505.00	2175.00	10456.00	10410.00	2827.00	2827.00	
(B) Medium Projects									
13.	IRG-13 Saraswati	0.19	..	..	..	..	..	..
14.	IRG-14 Dhatarwadi	..	..	..	..	..	..	..
15.	IRG-15 Kalindri	0.13	2.00	2.00	4.00	4.00	2.00	2.00	
16.	IRG-16 Ver-II	132.06	150.00	212.00	353.00	352.00	140.00	140.00	
17.	IRG-17 Harnav-II	58.25	40.00	40.00	121.00	121.00	50.00	50.00	
18.	IRG-18 Maohau-nala	71.44	90.00	172.00	289.00	289.00	117.00	117.00	
19.	IRG-19 Rami	20.20	12.00	12.00	85.00	85.00	15.00	15.00	
20.	IRG-20 Baldeva	12.76	7.00	7.00	25.00	25.00	18.00	18.00	
21.	IRG-21 Pigut	64.70	25.00	25.00	29.00	29.00	4.00	4.00	
22.	IRG-22 Vaidy	65.30	4.00	4.00	4.00	4.00	..	..
23.	IRG-23 Wadhuvanti	1.57	..	..	..	..	..	..
24.	IRG-24 Phophal	4.59	8.00	8.00	8.00	8.00	..	..
25.	IRG-25 Fulzar-II	0.20	..	..	..	..	..	..

1	2	3	4	5	6	7	8	9	10
26.	IRG-26 Sukhbhadar	137.78	100.00	152.00	404.00	404.00	160.00	160.00	
27.	IRG-27 Dhari	7.63	..	..	..	..	..	..
28.	IRG-28 Bagad	38.34	4.00	4.00	4.00	4.00	..	..
29.	IRG-29 Shinghoda	4.38	5.00	5.00	45.00	45.00	25.00	25.00	
30.	IRG-30 Chaparwadi(J)	13.31	10.00	10.00	53.00	53.00	25.00	25.00	
31.	IRG-31 Chaparwadi(L)	1.52	..	..	..	..	..	..
32.	IRG-32 Anbajal	1.88	1.00	1.00	3.00	3.00	2.00	2.00	
33.	IRG-33 Raval	4.82	20.00	20.00	56.00	56.00	36.00	36.00	
34.	IRG-34 Machhundri	94.94	120.00	214.00	364.00	364.00	150.00	150.00	
35.	IRG-35 Vomu-II	88.79	125.00	184.00	722.00	722.00	213.00	213.00	
36.	IRG-36 Kaswati	1.35	..	..	..	..	..	..
37.	IRG-37 Nara	17.73	8.00	8.00	62.00	62.00	35.00	35.00	
38.	IRG-38 Doo	152.18	200.00	267.00	1326.00	1326.00	625.00	625.00	
39.	IRG-39 Sani	50.69	25.00	25.00	129.00	129.00	25.00	25.00	
40.	IRG-40 Chodathad	2.91	2.00	2.00	6.00	6.00	4.00	4.00	
41.	IRG-41 Bhadar (P)	116.69	135.00	330.00	1101.00	1101.00	349.00	349.00	
42.	IRG-42 Kalubhar	90.94	135.00	213.00	377.00	377.00	150.00	150.00	
43.	IRG-43 Amipur	33.43	80.00	80.00	247.00	247.00	100.00	100.00	
44.	IRG-44 Jivapur(Und)	176.05	130.00	277.00	1171.00	1171.00	358.00	358.00	
45.	IRG-45 Ghodhadharoi	22.78	40.00	40.00	76.00	76.00	30.00	30.00	
46.	IRIRG-46 Hiran (S)(Now)	21.30	19.00	19.00	28.00	28.00	9.00	9.00	
47.	IRG-47 Jangadia	44.47	38.00	38.00	50.00	50.00	12.00	12.00	
48.	IRG-48 Bhukhi	39.90	40.00	40.00	98.00	98.00	40.00	40.00	
49.	IRG-49 Wankleshwar Bhay	9.52	10.00	10.00	45.00	45.00	15.00	15.00	
50.	IRG-50 Rajwal	77.08	20.00	20.00	25.00	25.00	5.00	5.00	
Total--(B)		1681.00	1605.00	2441.00	7309.00	7309.00	2714.00	2714.00	
Total - (II) (A+B)		2336.82	3110.00	4616.00	17765.00	17719.00	5541.00	5541.00	

(B. L.) New Scheme of Fifth Plan

(1) Multipurpose Projects

(2) Irrigation Projects

(A) Major Projects

51.	IRG-51 Heran (Vadpada)	73.82	590.00	890.00	4450.00	4450.00	1280.00	1280.00	
52.	IRG-52 Sakhi	379.82	730.00	735.00	2297.00	2297.00	912.00	912.00	
53.	IRG-53 Zankhari	125.02	200.00	5.00	3318.00	3318.00	663.00	663.00	

Total (A) 578.66 1480.00 1630.00 9975.00 9975.00 2855.00 2855.00

1	2	3	4	5	6	7	8	9	10
(B) Medium Projects									
54.	IRG-54	Mitti (Kachchh)	55.42	30.00	30.00	50.00	50.00	20.00	20.00
55.	IRG-55	Dam Nanin Vahial	..	..	..	189.00	189.00	20.00	20.00
56.	IRG-56	Hadaf(PWS)	40.46	80.00	167.00	707.00	707.00	364.00	364.00
57.	IRG-57	Guhai	16.18	100.00	100.00	1408.00	1408.00	409.00	409.00
58.	IRG-58	Mazam (S.K.)	45.67	50.00	50.00	350.00	350.00	80.00	80.00
59.	IRG-59	Lakhigam	46.61	25.00	25.00	27.00	27.00	2.00	2.00
60.	IRG-60	Kabutari	30.25	30.00	30.00	65.00	65.00	25.00	25.00
61.	IRG-61	Sankara	20.08	25.00	25.00	147.00	137.00	40.00	40.00
62.	IRG-62	Kolia	39.79	80.00	141.00	575.00	575.00	228.00	228.00
63.	IRG-63	Dholi	20.08	25.00	25.00	191.00	191.00	40.00	40.00
64.	IRG-64	Umaria	17.11	25.00	25.00	81.00	81.00	25.00	25.00
65.	IRG-65	Constructing shelhi Branch from M.R.B.C.I	38.70	110.00	110.00	309.00	309.00	100.00	100.00
66.	IRG-66	Constructing lift irrigation Schemes for River or canals	1.31	10.00	10.00	91.00	91.00	40.00	40.00
67.	IRG-67	Schemes bear- ing completion including Ex- tension and improvements	105.11	..	..	..	..	..	..
Total (B)			476.77	590.00	738.00	4190.00	4190.00	1393.00	1393.00
Total (B) (A+B)			1055.43	2070.00	2368.00	14165.00	14165.00	4248.00	4248.00

**(C) New Schemes of 1978-80
Irrigation Projects**

(a) Major Projects

68.	IRG-68	Sidhmber	..	5.00	5.00	776.00	776.00	5.00	5.00
Total (a)			..	5.00	5.00	776.00	776.00	5.00	5.00

(b) Medium Schemes—

69.	IRG-69	Vrajani	26.97	5.00	5.00	191.00	191.00	5.00	5.00
70.	IRG-70	Uben	82.95	100.00	100.00	282.00	281.00	100.00	100.00
71.	IRG-71	Datard	0.71	5.00	5.00	187.00	187.00	5.00	5.00
72.	IRG-72	Osat	..	..	..	20.00	20.00	0.50	0.50
73.	IRG-73	Sonmati	0.03	..	..	20.00	20.00	0.50	0.50
74.	IRG-74	Dai (Minsar)	0.10	1.00	1.00	281.00	281.00	5.00	5.00
75.	IRG-75	Kharo	54.82	5.00	5.00	120.00	120.00	5.00	5.00
76.	IRG-76	Lakhanka	..	1.00	1.00	123.00	123.00	5.00	5.00
77.	IRG-77	Karmal	48.86	4.00	4.00	82.00	82.00	5.00	5.00
78.	IRG-78	Demi-II	69.69	60.00	60.00	483.00	483.00	229.00	229.00
79.	IRG-79	Aji-II	30.14	2.00	2.00	289.00	289.00	50.00	50.00
80.	IRG-80	Phophal-II	..	1.00	1.00	1.00	1.00	..	..

1	2	3	4	5	6	7	8	9	10
81.	IRG-81 Raidi	..	1.00	1.00	20.00	20.00	0.50	0.50	
82.	IRG-82 Rupen	..	16.00	13.00	16.00	16.00	..	..
83.	IRG-83 Mathal	37.16	4.00	4.00	109.00	109.00	5.00	5.00	
84.	IRG-84 Edalwada	16.04	18.00	18.00	102.00	102.00	20.00	20.00	
85.	IRG-85 Chopadvav	21.17	10.00	10.00	178.00	178.00	5.00	5.00	
86.	IRG-86 Kakadiamba	16.64	10.00	10.00	120.00	120.00	10.00	10.00	
87.	IRG-87 Khambhala	0.01	1.00	1.00	60.00	60.00	0.50	0.50	
88.	IRG-88 Bakrol	..	1.00	1.00	64.00	64.00	1.00	1.00	
89.	IRG-89 Mukteshwar	19.69	5.00	5.00	262.00	262.00	5.00	5.00	
90.	IRG-90 Aji-III	106.05	120.00	120.00	516.00	516.00	150.00	150.00	
91.	IRG-91 Sagawadi	..	0.50	0.50	4.00	4.00	0.50	0.50	
92.	IRG-92 Rangawadi	..	0.50	0.50	25.00	25.00	0.50	0.50	
93.	IRG-93 Malgadh	..	0.50	0.50	13.00	13.00	1.00	1.00	
94.	IRG-94 Barachia	3.99	0.50	0.50	85.00	85.00	1.00	1.00	
95.	IRG-95 Fategadh	16.00	1.00	1.00	105.00	105.00	1.00	1.00	
96.	IRG-96 Mithapur	..	0.50	0.50	10.00	10.00	0.50	0.50	
97.	IRG-97 Ramnath	..	1.00	1.00	4.00	4.00	0.50	0.50	
98.	IRG-98 Don	0.23	1.00	1.00	18.00	18.00	2.00	2.00	
99.	IRG-99 Drahmani-II	..	0.50	0.50	0.50	0.50	..	..	Proposed to be dropped.
100.	IRG-100 Nyari-II	..	0.50	0.50	40.00	40.00	0.50	0.50	
101.	IRG-101 Mon	..	5.00	5.00	100.00	100.00	1.00	1.00	
102.	IRG-102 Jhuj	21.86	50.00	165.00	982.00	982.00	336.00	336.00	
103.	IRG-103 Kajipur	..	..	..	0.50	0.50	0.50	0.50	
104.	IRG-104 Rel	..	0.50	0.50	0.50	0.50	..	..
105.	IRG-105 Ani	..	5.00	5.00	60.00	60.00	1.00	1.00	
106.	IRG-106 Kaniyad	..	0.50	0.50	18.00	18.00	0.50	0.50	
107.	IRG-107 Falla (Kankavati)	0.07	0.50	0.50	98.00	98.00	2.00	2.00	
108.	IRG-108 Veradi	..	0.50	0.50	10.00	10.00	0.50	0.50	
109.	IRG-109 Kalaghoga	..	0.50	0.50	20.00	20.00	0.50	0.50	
110.	IRG-110 Baiyava	..	0.50	0.50	0.50	0.50	..	..	Proposed to be dropped.
111.	IRG-111 Sarana	..	0.50	0.50	10.00	10.00	0.50	0.50	
112.	IRG-112 Limbid	..	0.50	0.50	35.00	35.00	0.50	0.50	
113.	IRG-113 Hanol	..	0.50	0.50	4.00	4.00	0.50	0.50	
114.	IRG-114 Darod(Malana) (Navagam)	..	0.50	0.50	46.00	46.00	0.50	0.50	
115.	IRG-115 Loliyana	..	0.50	0.50	50.00	50.00	0.50	0.50	
116.	IRG-116 Hathivan	..	..	..	10.00	10.00	0.50	0.50	
117.	IRG-117 Gunda	..	0.50	0.50	4.00	4.00	0.50	0.50	
118.	IRG-118 Fulka	..	0.50	0.50	4.00	4.00	0.50	0.50	
119.	IRG-119 Khari-II	0.00	0.50	0.25	0.25	0.25	..	..	Proposed to be dropped.
120.	IRG-120 Sarangpur Gala (Mingala)	..	0.50	0.50	4.00	4.00	0.50	0.50	

1	2	3	4	5	6	7	8	9	10
121. IRG-121	Rangamati	0.00	0.50	0.50	4.00	4.00	0.50	0.50	
122. IRG-122	Aji--IV	..	0.50	0.50	10.00	10.00	0.50	0.50	
123. IRG-123	Und--II	..	0.50	0.50	100.00	100.00	0.50	0.50	
124. IRG-124	Khari Khijadia	..	0.50	0.25	0.25	0.25	..	..	Proposed to be dropped.
125. IRG-125	Satali	..	0.50	0.50	0.50	0.50	..	..
126. IRG-126	Karan	..	0.50	0.50	0.50	0.50	..	..
127. IRG-127	Sholl (Dedumal) (Hathisani)	..	0.50	0.50	4.00	4.00	0.50	0.50	
128. IRG-128	Khakharia	..	0.50	0.50	0.50	0.50	..	..
129. IRG-129	Vadi Thebi	..	0.50	0.50	4.00	4.00	0.50	0.50	
130. IRG-130	Machui-III	..	0.50	0.50	10.00	10.00	0.50	0.50	
131. IRG-131	Hamirpur	..	0.50	0.50	25.00	25.00	0.50	0.50	
132. IRG-132	Sodavadar	..	0.50	0.50	55.00	55.00	0.50	0.50	
133. IRG-133	Jaspur Maudva	..	0.50	0.50	4.00	4.00	0.50	0.50	
134. IRG-134	Ishvaria	..	0.50	0.50	88.00	88.00	0.50	0.50	
135. IRG-135	Ozat--II	..	0.50	0.50	10.00	10.00	0.50	0.50	
136. IRG-136	Uben--II	..	0.50	0.50	1.00	1.00	0.50	0.50	
Total		573.20	452.00	567.00	5613.50	5613.50	967.00	967.00	
Total (C) (a+b)		573.20	478.00	572.00	6389.50	6389.50	972.00	972.00	
(D) New schemes of VI Plan.		..	..	..	306.00	306.00	..	..
Total (D)		..	..	..	306.00	306.00	..	..
(E) Water Development Services									
(a) Survey and Investigation		234.35							
(b) Research		126.36	300.00	300.00	2000.00	2000.00	200.00	200.00	
(c) Working and Training		34.93							
Total (E) ..		395.64	300.00	300.00	2000.00	2000.00	200.00	200.00	
(F)	Drainage	474.18	400.00	400.00	1700.00	1462.00	100.00	182.00	
(G)	Modernisation of canals	482.34	854.00	1166.00	9816.00	8620.00	20.15.00	1900.00	This program is also include in World Bank Project.
(H)	Flood Control and Anti Erosion works	217.67	200.00	200.00	2000.00	940.00	50.00	23.00	
(I)	Prevention of Salinity Ingress Saurashtra Coastal Projects	172.95	300.00	430.00	3260.00	3260.00	580.00	580.00	
(J)	Narmada Planning Unit	..	..	..	189.00	189.00	..	..
(K)	Warabandhi System	..	..	..	2200.00	2200.00	50.00	50.00	
(L)	Extension of Irrigation Channel from 40 He. chek to 8 ha. chak	..	..	..	2050.00	2050.00	26.00	26.00	
(M)	Modification and improvements to the existing schemes due to revision in Hydrology	..	..	..	2000.00	2000.00	..	..
(N)	Prevention of Salinity Ingress (Other than World Bank)	..	..	..	600.00	600.00	..	..
Total (F) to (N)		1347.14	1754.00	2196.00	23815.00	21321.00	2821.00	2661.00	
GRAND TOTAL		11707.81 +41.00	13109.00	15459.50	114100.50	11557.00	22500.00	22339.00	
		13150.00							

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Water Development

Targets of production and physical achievement Water Development(Irrigation)

Sr. No.	Item	Unit	Level of achievement at the end of					
			1978-79	1979-80	1984-85	1980-81		1981-82
1	2	3	4	(Base year level)	Terminal year Target	Target (level)	Likely achievement	Proposed target (level)
					6	7	8	9
1.	Potential	000 ha	953.00	1012.00	1437.00	1099.00	1099.00	1173.00
2.	Utilisation	000 ha	503.00	529.00	779.00	557.00	577.00	596.00

3. POWER DEVELOPMENT

3.1.1. Electrical power is a basic infrastructure for allround economic growth. It is an effective instrument for influencing spreading out of industrial development and accelerating agricultural growth. Acknowledging the significance of the power sector, ever 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 the 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 G.E.B. 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 and Haryana.

3.1 Energy Policy.

3.1.2. 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 of the installed capacity and economic utilisation of the power generated. Side by side, every effort would have to be made to harness all possible alternatives as well as renewable sources of energy. An attempt has been made to give effect to such a total energy policy during the course of the Sixth Five Year Plan period itself.

3.1.3. In the Sixth Five Year Plan period new generation projects, of course, would have to be largely based on coal. However, the problem of transportation of coal has been recognised and possibilities of obviating this difficulty are being explored. The possible alternatives would be setting up of coal pit-head power stations, coal slurry pipelines, transportation by the sea-route. All these would have to be pursued vigorously.

3.1.4. The cost of establishing new generating stations and transmission facilities are steeply increasing. To reduce the impact on tariff, efforts would have to be continued to improve performance of existing power stations and to keep transmission and distribution losses, including losses in the consumers' power system as low as possible. Thus, adequate importance would have to be given to research and development activities not only in improving designs of power plant equipments but also in the design of industrial appliances as well as manufacturing processes so as to ensure optimal energy availability and its utilisation. All this will require intensive research and development.

3.1.5. An essential part of this energy policy would be to promote rural electrification so as to ensure acceleration of agricultural development in particular and rural development in general.

Multi-Dimensional approach for implementing the total Energy Policy:

3.1.6. The plan proposals in the power sector for the Sixth Five Year Plan is the first step towards implementing a total energy policy enumerated in the preceding paragraphs. The individual schemes have been formulated in such a manner as to have a multi-dimensional approach at the macro-level. Thus alongwith the proposals for augmenting generating capacity, the transmission and distribution system, proposals have also been dovetailed for rationalising the distribution network. At the same time considerable emphasis has been placed on rural electrification and it is hoped that all the villages in the State would be electrified by 1984-85. Special emphasis has also been laid to electrifying Harijan Bastis and tribal areas.

3.1.7. Efforts have already been initiated for dealing with the problem of transportation of coal to the State. A study has been commissioned through Engineers India Limited for establishing techno-economic feasibility of a coal slurry pipeline and provision has been made in the Plan for this project. The State Government has also approached the Government of Madhya Pradesh with the proposal for setting up a joint-pit-head power station for which a token provision has also been made in the draft plan. Side by side, the Atomic Energy Commission has been assured about availability of infrastructure facilities at the proposed site of a new Atomic power Plant to be located in Gujarat.

3.1.8. A special feature in the present plan is the proposal for exploration of non-conventional as well as renewable energy sources. Thus, the State Government is already pursuing vigorously the proposal for exploiting the recognised tidal energy potentials in the Gulfs of Kachchh

and Cambay, which is already with the Central Electricity Authority. To supplement the efforts of Central Electricity Authority, a token provision has also been made in the present Plan proposals. With regard to alternative energy sources, an independent agency named "Gujarat Energy Development Agency" has been set-up. This agency has already taken up a sizeable energy plantation project and is also initiating steps for popularising use of solar energy and wind mills. Through this agency it is hoped that a decentralised energy system, based on alternative sources, would be conceived in the future.

3.1.9. Along with exploration of possibilities of utilising non-conventional energy sources, effective steps are being contemplated for bringing in the third dimension of the total energy policy, namely, that of conservation. Thus, the Gujarat Energy Development Agency is also addressing itself to the task of conservation of energy, including energy audit. Steps are also being initiated for ensuring efficient utilisation of power in the agricultural sector by demonstrating the possibilities of economising energy consumption by the agricultural pump sets. Measures are also being taken to identify the nature and source of faults in the generation units as well as transmission and distribution system and specific programmes for preventive maintenance have been drawn up.

3.1.10. It would be, therefore, apparent that the key-note of the multi-dimensional approach is the integration of augmentation of capacity, both in the conventional and non-conventional spheres, with a wider and more rational distributional network, ensuring lower energy losses, and a conscious effort to optimise the utilisation pattern and potential.

3.2. Review of progress:

3.2.1. In 1951 electricity was available only in a few urban and semi-urban areas. At the time of the formation of the State, the total generating capacity was only 315 MW and power distribution was restricted to areas around the power stations. During the Third Five Year Plan (1961-66), additional generating capacity of the order of 342.5 MW was added raising the total installed capacity to 657.5 MW, and a common grid network was established for the first time. During the Three Annual Plan periods (1966-69) emphasis was laid on the strengthening of transmission lines and setting up more sub-stations. To transmit Gujarat's 50% share in the power generation from the Tarapore Atomic Power Station, the first inter-State line connecting Gujarat and Maharashtra State was constructed.

3.2.2. The Fourth Five Year Plan (1969-74) envisaged addition of installed generating capacity of 874 MW as under :-

1. Dhuvaran Thermal Extension.	280 MW
2. Ukai Hydro Project.	300 MW
3. Ukai Thermal Power Station.	240 MW
4. Gas Turbine.	54 MW
Total ..	874 MW

3.2.3. The work on Dhuvaran Thermal Extension (280 MW) and Gas turbine (54 MW) was completed according to schedule and installed capacity of 334 MW was added. Allowing for retiring of old sets, the total installed capacity at the end of the Fourth Five Year Plan was 1127 MW including 190 MW in Tarapore Power Station.

3.2.4. The works on Ukai Hydro Project (300 MW) and Ukai Thermal Power Station (240 MW), delayed due to late delivery of equipments by BHEL, were completed during the Fifth Five Year Plan period.

3.2.5. Steps were taken to expand the transmission and distribution network during the Fourth Plan period. The important feature was construction of 132 KV transmission line from Wankaner to Bhuj inter-connecting Kachchh region with the grid. The progress made in erection of transmission line is shown below :-

Voltage.	Length of line in Circuit Kil. Mtrs.	
	As on 31-3-60	As on 31-3-74
220 KV	..	1292
132 KV	..	2585
66 KV	567	3964
33 KV	567	3562
22 KV	1208	5263
11 KV	1812	26803

3.2.6. With the extension of distribution network, implementation of rural electrification programme on a fairly large scale became possible. By the end of 1960-61 only 716 villages and 5401 pump-sets were energised. This increased to 5674 villages and 98,993 pump-sets by 31st March, 1974.

3.2.7. During the Fifth Five Year Plan 1974-79 and the year 1979-80 the following generation schemes have been planned and completed :-

1. Ukai Hydro (4×75 MW)	300 MW
2. Ukai Thermal (2×120 MW)	240 MW
3. Gandhinagar Thermal (2×120 MW)	240 MW
4. Ukai Thermal Extension (2×200 MW)	400 MW
5. Extension by A.E.Co. (1×110 MW)	110 MW
Total ..	1290 MW

3.2.8. In order to evacuate power from the generation schemes included in the Fifth Plan, transmission lines of various voltages had been planned for execution during the Fifth Plan. The length of such lines erected during 1974-80 was as under :—

Voltage	Length of lines in Circuit	Kilometres
220 KV	1570	
132 KV	671	
66 KV	1324	

3.2.9. To accelerate rural electrification and bring the benefits of electricity to rural areas an ambitious programme was formulated which comprised of village electrification, energisation of pump-sets and Government Tubewells. The following table indicates the level of achievement during the period 1974-80.

	Achievement as on 31-3-1974	Achievement during the period 1974-80	Achievement as on 31-3-1980
1. Villages electrified	5674	5193	10867
2. Pump-sets energised	97915	103375	201290
3. Government Tubewells	978	585	1563

3.2.10. The details of available capacity as well as power projects under construction as on 1st April, 1980 are given below :—

(A) Available Generating Capacity :

1. Dhuvaran Thermal Power Station	588 MW
2. Utran Thermal Power Station	67.5 MW
3. Shapur Thermal Power Station	16.0 MW
4. Kandla Thermal Power Station	15.0 MW
5. Ukai Hydro Power Station	300.0 MW
6. Ukai Thermal Power Station	240.0 MW
7. Ukai Thermal Extension	400.0 MW
8. Gandhinagar Thermal Power Station	240.0 MW
9. A. E. Company	327.5 MW
10. Share in Tarapore Atomic Power Station	190.0 MW
Total ..	2384.0 MW

(B) Power Projects Under Construction:

1. Wanakbori Thermal Project (3 X 210 MW)	630.0 MW
2. Wanakbori Thermal Project Extension (3 X 210 MW)	630.0 MW
3. Ukai Thermal Power Station Extension Unit-V (1 X 210 MW)	210.0 MW
4. Ukai Left Bank Cantal Power Station (2 X 2.5 MW)	5.0 MW
5. Kadana Hydro Power Station (2 X 60 MW)	120.0 MW
6. Lignite Based Thermal Power Station in Kachelh (2 X 60 MW)	120.0 MW
Total ..	1715.0 MW

3.3. Perspective Planning

3.3.1. 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 have 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 cannot 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 Groups of Sarabhai Chemicals indicates that the load growth in Gujarat will be higher than the estimates of the 11th A. P. S. The comparative statements of load projections of 11th A. P. S., C. 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

3.3.2. 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 at the higher level. Keeping this in view power planning should be atleast made on the basis of the load estimates of O. R. G.

3.3.3. At present the installed capacity in Gujarat is 2384 MW. Allowing for retirement of old and uneconomical sets the net available generating capacity is 2300 MW. Based on load estimates of O. R. G. the installed capacity required by 1984-85 will be 4822 MW 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.

3.3.4. To meet the demand during the Sixth Five Year Plan the following schemes have been so far cleared by CEA/Planning Commission :

1. Wanakbori Thermal Project (3 X 210 MW)	630	MW
2. Wanakbori Thermal Extension (3 X 210 MW)	630	MW
3. Ukai Thermal Extension Unit-V. (1 X 210 MW)	210	MW
4. Ukai Left Bank Canal Power House (2 X 2.5 MW)	5	MW
5. Kadana Hydro (2 X 60 MW)	120	MW
6. Lignite Thermal Power Station in Kachchh (2 X 60 MW)	120	MW
Total ..	1715	MW

3.3.5. These projects have already been taken-up for execution on a priority basis so that benefits will become available 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.

3.3.6. 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.	210	MW
2. Replacement of Small Units at Shapur and Sikka by installing one 120 MW Thermal Unit at Sikka	120	MW
3. Replacement of small units at Utran by installing one unit of 120 MW.	120	MW
4. Replacement of small units at Kandla	60	MW
5. Gas Based Thermal Power station at Mahuva (2 X 210 MW)	420	MW
Total ..	930	MW

3.3.7. The schemes at Sr. No. 1 to 4 being extension schemes can be completed in shorter time. It is essential that these schemes are cleared so that the work on these projects is completed by the end of Sixth Plan and its benefits atleast become available at the beginning of the Seventh Plan.

Meeting Demand during Seventh Plan :

3.3.8. 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 7th Plan period. The schemes discussed below are in view.

Narmada Hydro;

3.3.9. Gujarat is having limited hydro resources. Hydro potential of Ukai has already been exploited. The tribunal had declared award on Narmada water and it will be possible to undertake work on Narmada Hydro Project during the 6th Plan. However Gujarat's share in Narmada Hydro power is only 16% which works out to about 170 MW.

Atomic Power Station:

3.3.10. The oil and natural gas available in Gujarat is fully utilised. There are no other sources of possible fuel in Gujarat. The power development during the Fifth and Sixth Five Year Plans is from thermal stations based on coal to be transported 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 at Kakrapar. Immediate decision needs to be taken on this project and work should be started expeditiously so that the benefits of this scheme become available by the end of Seventh Plan.

Super Thermal Station:

3.3.11. The Government of India have accepted, in principle, to set up super thermal station at pit head to meet the regional power needs. At present the super thermal station at Korba is under construction. The Government of India has 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 imperative that whatever power is needed by Gujarat should be allocated from this central generation.

Thermal Station on Narmada Canal:

3.3.12. To meet the power demand during the Seventh Plan, one of the schemes under investigation

is establishment of thermal station on Narmada Canal. It is proposed to instal four sets each of 500 MW. The availability of coal for this station and its transportation by railway needs to be examined right now and requirement included in the plans of Coal India and Railways.

Joint sector with M. P. pit head power Station:

3.3.13. There is a proposal to examine the feasibility of a super thermal power station at pit head in M. P. to be constructed, operated and maintained jointly by G. E. B. and M. P. E. B. The details of this are being worked out but since work is expected to be started during the Sixth Plan period a provision of Rs. 25 crores has been made in the Plan.

3.4 Programme For 1980-85 and 1981-82:

3.4.1. An outlay of Rs. 105100 lakhs is proposed for the power development sector for 1980-85 Plan. For Annual Plan 1981-82, it is proposed to provide Rs. 18,505 lakhs. The broad break-up of the proposed outlays is as under :—

Programme	(Rs. in lakhs)	
	1980-85 Five Year Plan Outlay proposed	1981-82 Annual Plan Outlay proposed
1. Power Development (Survey and Investigations)	200	16
2. Power Projects (Generation)		
(a) Continuing Generation Schemes	56995	10600
(b) New Generation Schemes	15500	2043
3. Transmission and Distribution	22500	4000
4. Rural Electrification	8690	1271
5. General	1215	575
Total	105100	18505

3.4.2. A broad outline of the projects, physical targets etc. is given in the following paragraphs :—

(1) Kadana Hydro (2 X 60 MW)

3.4.2.1. 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 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 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, and a provision of Rs. 500 lakhs is proposed for the year 1981-82.

(2) Ukai Left Bank Canal Power House (2 X 2.5 MW)

3.4.2.2. 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 targetted for completion in the year 1982-83. An outlay of Rs. 252 lakhs is proposed for the Sixth Plan 1980-85 and a provision of Rs. 100 lakhs is proposed for the year 1981-82.

(3) Wanakbori Thermal Project (3 X 210 MW)

3.4.2.3. 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 March, 1981 followed by the second and third units in September, 1981 and March, 1982.

3.4.2.4. The expenditure incurred by the end of March, 1980 is Rs. 9393 lakhs. An outlay of Rs. 13,000 lakhs has been proposed in the plan for 1980-85. An outlay of Rs. 4,000 lakhs is proposed in the year 1981-82.

(4) Ukai Thermal Extension Unit-V. (210 MW)

3.4.2.5. This scheme envisages installation of further 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 targetted for completion in the year 1982-83. An outlay of Rs. 5,366 lakhs is proposed for the Sixth Plan 1980-85 and a provision of Rs. 2,500 lakhs is proposed for the year 1981-82.

(5) Wanakbori Thermal Extension (3 X 210 MW)

3.4.2.6. This scheme envisages installation of further three 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 C. E. A. and Planning Commission. Global tenders have been invited for boilers and turbo-generator sets. The orders for the main equipments will be finalised shortly. This scheme is targetted for completion by 1983-84 and 1984-85. An outlay of Rs. 23,400 lakhs has been provided in the Five Year Plan 1980-85 and a provision of Rs. 2,100 lakhs is proposed for the year 1981-82.

**(6) Lignite based thermal Power Station
(2 X 60 MW) :**

3.4.2.7. 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 targeted for completion in 1984-85. An outlay of Rs. 6,400 lakhs is proposed for the Sixth Plan 1980-85 and a provision of Rs. 800 lakhs is proposed for the year 1981-82.

(7) Replacement of small Units at Shapur and Sikka :

3.4.2.8. 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, coloney, trained personnel, etc. The estimated cost of this project is Rs. 4,414 lakhs. The scheme has already been posed to C. E. A. and Planning Commission for their consideration. Initial steps are being taken for execution of this scheme. Hence, initially, an outlay of Rs. 4,000 lakhs is proposed for the Sixth Plan 1980-85. A provision of Rs. 300 lakhs is proposed for the year 1981-82.

(8) Replacement of small units at Kandla :

3.4.2.9. 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 CEA and Planning Commission. Initial steps are being taken for execution of this scheme and hence, initially an outlay of Rs. 2,400 lakhs is proposed for the 6th Plan 1980-85. A provision of Rs. 250 lakhs is proposed for the year 1981-82.

(9) Replacement of small Units at Utran Thermal Station

3.4.2.10. 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. If this scheme is cleared immediately it will be possible to complete it by the end of 1984-85. An outlay of Rs. 1,100 lakhs is proposed for Five Year Plan 1980-85 and Rs. 100 lakhs are proposed for the year 1981-82.

**(10) Gandhinagar Thermal Project Extension
(1 X 210 MW) :**

3.4.2.11. 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. If the scheme is approved early it will be possible to complete the work on this scheme by the end of 1984-85. An outlay of Rs. 3,000 lakhs is proposed for the Sixth Plan 1980-85 and a provision of Rs. 200 lakhs is proposed for the year 1981-82.

(11) Gas based Thermal Station at Mahuva :

3.4.2.12. 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 focile 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. The work on this project is proposed to be started during the present plan. (If the project is cleared early it will be possible to commission first unit in 1985-86 followed by second unit in 1986-87). An outlay of Rs. 100 lakhs is proposed for Sixth Plan 1980-85 and a provision of Rs. 20 lakhs is proposed for the year 1981-82, to carryout preliminaries. If the project is cleared early and taken-up for execution, the outlays will have to be stepped up.

(12) Narmada Hydro Project :

3.4.2.13 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. 3000 lakhs is proposed for the Sixth Plan 1980-85 and a provision of Rs. 573 lakhs is proposed for the year 1981-82.

(13) Kadana Hydro Project—(Units 3 and 4).

3.4.2.14 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. The work of these units can be completed by 1984-85. An outlay of Rs. 1600 lakhs is proposed for 6th Plan 1980-85 and a provision of Rs. 150 lakhs is proposed for the year 1981-82.

(14) Ahmedabad Electricity Company's projects:

3.4.2.15 The Company has completed installation of 110 MW unit and commissioned it. The State Government has been the major partner in financing this project. In the context of shortage of electricity in the State, the company has initiated to install further 110 MW.

3.4.2.16 The Company has already submitted its proposal for installing the second 110 MW unit to Central Electricity Authority.

3.4.2.17 The total cost of the project is estimated at Rs. 6000 lakhs. As against this, the assistance required by the Company during the Sixth Plan period is estimated at Rs. 20 crores.

3.4.2.18 However, it is proposed to assist the A. E. Co. by Rs. 2000 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.

3.4.2.19 The Company's requirement in the form of loan assistance from Government has been estimated at Rs. 1000 lakhs for 1981-82. As against this requirement, it is proposed to provide assistance to the extent of Rs. 740 lakhs to the Company during the year 1981-82.

OTHER NEW SCHEMES :

Slurry Pipeline:

3.4.2.20 At present the annual requirement of coal for the power stations in the State is around 4 million tonnes which would be more than doubled 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. 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. In view of the urgency of the problem, a provision of Rs. 2000 lakhs has been made for the Sixth Five Year Plan period.

Pit Head Power Station.

3.4.2.21 Another possibility arising out of the difficulties in transportation of coal is that for establishing a joint coal pit head power station with the Government of Madhya Pradesh, the State Government have already approached the Government of Madhya Pradesh and discussions are taking place at the level of the concerned State Electricity Board. A provision of Rs. 2500 lakhs has been made for this project during the Sixth Plan period.

Tidal Power:

3.4.2.22 The study undertaken by the UNDP Expert, Prof. Wilson, indicates tremendous power generation potentially 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 preliminary investigations should be initiated for which funds should be made available. To supplement efforts being made in this regard, a token provision of Rs. 100 lakhs has been made for the Sixth Plan period and Rs. 30 lakhs for 1981-82.

Atomic Power Station:

3.4.2.23 Atomic Energy Commission had sought from the State Government assurance regarding availability of infrastructure facilities at the proposed site of the Atomic Power Station in the State. This related to the availability of land, water and accommodation for construction staff. The State Government has assured about the availability of adequate facilities at the site. While details in this regard are being ascertained, a token provision of Rs. 100 lakhs has been made for the Sixth Plan period.

(15) Transmission & Distribution Schemes:

3.4.2.24 Development of Transmission and Distribution network is a continuous process and has to keep pace with the growth of generating capacity. 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, alongwith the execution of power generation projects, suitable transmission and distribution schemes are always planned and executed simultaneously.

3.4.2.25 So far the grid system consisted of transmission lines and sub-stations with maximum voltage of 220 KV. 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 line.	Additions proposed in Sixth Plan in Circuit Kks.
1.	400 KV	1085
2.	220 KV	1606
3.	132 KV	558
4.	66 KV	2086

Sr. No.	Sub-Stations.	Additions as proposed in 6th Plan (Nos.)	
		New	Augmentation.
1.	400 KV	4	..
2.	220 KV	5	12
3.	132 KV	4	11
4.	66 KV	78	65

3.4.2.26 To reduce losses and to improve voltage and power factor conditions, installation of capacitor banks and strengthening of transmission lines are also proposed.

3.4.2.27 An outlay of Rs. 22500 lakhs is proposed for Sixth Plan period 1980-85 and an amount of Rs. 4000 lakhs is proposed for the year 1981-82.

Acquisition of Licences:

3.4.2.28 Gujarat Electricity Board has taken over most of the Licenses on the expiry of their licenses and when the Licensees have requested for premature revocation. This has accelerated the process of acquisition of licenses and suitable provision has to be made in the plan for taking over the remaining licensees.

3.4.2.29 Rs. 165 lakhs are proposed for the Five Year Plan period 1980-85 for this scheme. An outlay of Rs. 50 lakhs is proposed for the year 1981-82.

Survey & Investigations :

3.4.2.30 During the Sixth Five Year Plan 1980-85, it is envisaged to undertake various studies regarding conservation of energy plantation, tidal power, micro-hydel and system studies.

3.4.2.31 For this purpose a provision of Rs. 200 lakhs is proposed in the Sixth Plan and a provision of Rs. 16 lakhs for the year 1981-82.

Rural Electrification :

3.4.2.32 Rural Electrification is a Socio-economic activity and with a view to change the pattern of living in rural areas and to accelerate growth of rural economy, it is proposed to extend the benefits of electricity to as many villages as possible.

3.4.2.33 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. During the first quarter of 1980-81, 301 villages and 4,803 wells have been electrified.

3.4.2.34 Under the rural electrification programme for the Sixth Five Year Plan-1980-85, it is proposed to electrify all the balance villages, thereby it is proposed to achieve 100% village electrification in the State. Also it is 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 pump-sets electrified to 3,27,853 by end of 1984-85.

3.4.2.35 In order to develop the tribal areas and improve their living standards, special emphasis is given for electrification of tribal areas. So far 2,018 villages have been electrified in tribal areas. During the Five Year Plan 1980-85, it is proposed to electrify 1000 villages under tribal area sub-plan and the rest under other schemes. All tribal villages are proposed to be covered in the Sixth Plan.

3.4.2.36 Whenever a village is electrified for domestic connection, street lights, etc. the Harijan Bastis of the village is also being electrified at the time of initial electrification. Thus in the villages which are electrified for all propose the Harijan Bastis have also been covered. This policy will be continued during the Sixth Five Year Plan while electrifying new villages for all purposes.

3.4.2.37 About 1000 villages electrified in tribal area for irrigation purpose will be electrified for all purpose under tribal area sub-plan. Till 1979-80, in all 10,867 villages have been electrified for agricultural purpose. Out of this, 7,867 villages have been converted from agricultural to all purpose, and there still remain 3,000 villages to be converted from agricultural to all purpose. An amount of Rs. 20 crores is, therefore, included under the Rural Electrification Programme for the electrification of these villages for all purpose for the Sixth Plan.

3.4.2.38 To undertake the Rural Electrification Programme during the Sixth Plan as proposed, an outlay of Rs. 8,690 lakhs has been proposed in the State Plan. It is also proposed to raise Rs. 4100 lakhs from financial agencies. For the year 1981-82, a provision of Rs. 1271 lakhs is proposed in the State Plan and Rs. 800 lakhs is proposed outside the State Plan.

Captive Power Plant—G.I.I.C.

3.4.2.39 Gujarat State is experiencing considerable power shortage due to inadequate supply of fuel for stations. 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. Where 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.

3.4.2.40 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.

3.4.2.41. For this scheme, a provision of Rs. 900 lakhs is proposed for Sixth Five Year Plan and Rs. 500 lakhs in the Annual Plan 1981-82.

Assistance to Gujarat Energy Development Agency.

3.4.2.42 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 sizeable funds so that the agency cannot only function effectively but is also able to attract funds from other sources. A provision of Rs. 25 lakhs as a grant in aid to the Agency is made for the year 1980-81. For the Sixth Plan, a provision of Rs. 150 lakhs and for the Annual Plan 1981-82, a provision of Rs. 25 lakhs is proposed.

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

POWER DEVELOPMENT

Development Scheme/Projects (Minor Heads)—OUTLAYS AND EXPENDITURE

(Rs. in lakhs)

Sr. No.	Minor Heads	1979-80 (Tentative actuals)	1980-81		1980-85		1981-82	
			Outlay	Tentative expendi- ture	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Power Development (Survey, Investigation & Research)	..	15	15	200	200	16	16
2.	Power Projects (Generation)	5081.4	6411	7635	72495	72495	12643	12643
3.	Transmission and Distribution	3192.5	3389	3190	22500	22500	4000	4000
4.	Rural Electrification	798.3	1100	1100	8690	8690	1271	1271
5.	General	36.6	85	485	1215	1065	575	550
	Total..	9108.8	11000	12425	105100	104950	18505	18480

DRAFT SIXTH FIVE YEAR PLAN-1980-85 AND ANNUAL PLAN 1981-82

POWER DEVELOPMENT

Schemewise Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Number and name of the Scheme	1979-80 (tentative actuals)	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
(I) GENERATION								
(A) Approved and on-going schemes								
1.	PWR-1 Ukai Hydro Project, (4x75 MW)	.. (-)1.4	50	50	100	100	50	50
2.	PWR-2 Kadana Hydro Electric Project (2x60 MW)	.. 324.8	650	700	1852	1852	500	500
3.	PWR-3 Ukai L. B. Canal Power House. (2x2.5 MW)	.. (-)4.0	50	50	252	252	100	100
4.	PWR-4 Gandhinagar Thermal Project. (2x120 MW)	.. 42.7	125	125	125	125	..	..
5.	PWR-5 Ukai Thermal Project. Extension (2x200 MW)	584.5	100	100	100	100	..	..
6.	PWR-6 Wanakbori Thermal Project. (3x210 MW)	3097.4	3300	3300	13000	13000	4000	4000
7.	PWR-7 Ukai Thermal Project Extension Unit-5. (1x210 MW)	.. 730.2	460	610	5366	5366	2500	2500
8.	PWR-8 Wanakbori Thermal Project Extension. (3x210 MW)	.. ..	950	1750	23400	23400	2100	2100
9.	PWR-9 Lignite Based Thermal Power Station in Kachchh (2x60 MW)	.. 7.2	250	264	6400	6400	800	800
10.	PWR-10 Replacement of 120 MW Units at Sikka and Shapur	.. ..	20	20	4000	4000	300	300
11.	PWR-11 Replacement of 60 MW units at Kandla.	.. ..	20	20	2400	2400	250	250
Sub-Total-(A)..		4781.4	5975	6989	56995	56995	10600	10600

1	2	3	4	5	6	7	8	9
(B) New Schemes/Projects proposed to be started								
12.	PWR—12 Replacement of 120 MW units at Utran ..	..	20	20	1100	1100	100	100
13.	PWR—13 Gandhinagar Thermal Project Extension (1 X 210 MW) ..	..	20	20	3000	3000	200	200
14.	PWR—14 Gas Based Thermal Project at Mahuva (2 X 210 MW) ..	..	10	20	100	100	20	20
15.	PWR—15 Narmada Hydro Project	200	286	286	3000	3000	573	573
16.	PWR—16 Kadana Hydro Electric Project Units-III and IV. (2 X 60 MW) ..	..	..	..	1600	1600	150	150
17.	PWR—17 A.E.Co. Estension ..	100	100	300	2000	2000	740	740
18.	PWR—18 Slurry Pipe-line ..	..	..	..	2000	2000	100	100
19.	PWR—19 Joint Pit Head Station	..	..	..	2500	2500	100	100
20.	PWR—20 Tidal Power Station ..	..	..	..	100	100	30	30
21.	PWR—21 Atomic Power Plant ..	..	..	..	100	100	30	30
Sub—Total (B)..		300	436	646	15500	15500	2043	2043
Sub-Total Generation (A + B)		5081.4	6441	7635	72495	72495	12643	12643
II. TRANSMISSION & DISTRIBUTION								
22.	PWR—22 Transmission and Distribution ..	3192.5	3389	3190	22500	22500	4000	4000
Sub-Total—II..		3192.5	3389	3190	22500	22500	4000	4000
III. RURAL ELECTRIFICATION								
23.	PWR—23 Rural Electrification ..	798.3	1100	1100	8690*	8690	1271	1271
Sub-Total—III..		798.3	1100	1100	8690	8690	1271	1271
IV. SURVEY & INVESTIGATION								
24.	PWD—24 Survey and Investigation	..	15	15	200	200	16	16
Sub-Total—IV		..	15	15	200	200	16	16

1	2	3	4	5	6	7	8	9
V. GENERAL								
25.	PWR—25 Acquisition of Licensees	26.6	60	60	165	165	50	50
26.	PWR—26 Financial Assistance to Gujarat Energy Development Agency ..	10	25	25	150	..	25	..
27.	PWR—27 Financial Assistance for Captive Power Generation G.I.L.C.	..	..	400	900	900	500	500
	Sub—Total—V	36.6	85	485	1215	1065	575	550
	GRAND TOTAL (I to V)	9108.8	11000	12425	105100	104950	18505	18480

* Includes Rs. 20 crores for conversion of 3000 villages from agricultural to all purpose.

DRAFT SIXTH FIVE YEAR PLAN—1980-85 AND ANNUAL PLAN 1981-82.

POWER DEVELOPMENT

Targets of Production and physicals Achievements

Sr. No.	Item.	Unit	Level of Achievement at the end of					Remarks.	
			1978-79	1979-80 (Based year)	1984-85 Terminal year target	1980-81 Target	1981-82 Likely achieve- ment target.		
1	2	3	4	5	6	7	8	9	10
I. POWER.									
(i)	Installed capacity.	MW	2188	2384	4660	2594	2594	3014	State as a whole.
(ii) (a)	Electricity Generated.	MKWH	6607	74086	14380	8488	8488	9623	Retirement con- sidered and in- cluding share in TAPP.
(b)	Electricity purchased.	MKWH	1111.7	845.9	1290	1050	1050	1000	G. E. B. Generation
Total (a & b)			7719.2	8254.5	15670	9538	9538	10623	
(iii)	Electricity sold.	MKWH	5833.6	6243.8	11586	7070	7070	7870	G.E.B. Sales.
(iv)	Transmission lines, (220 KV and above)	Ckt.kms.	2632	2862	5366	3306	3306	3486	
(v)	Rural Electrification (As per 1971 Census Report).								
(a)	Villages Electrified.	Nos.	9464	10867	18275	12367	12367	13867	
(b)	Pump-sets energised by electricity.	Nos.	177798	202853	327853	227853	227853	252853	
(c)	Tubewells energised by Electricity.								

DRAFT SIXTH FIVE YEAR PLAN-1980-85 AND ANNUAL PLAN 1982-82

POWER DEVELOPMENT

Revised Minimum Needs Programme-Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Name of the programme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Rural Electrification	39.9	100	100	250	250	50	50

DRAFT SIXTH FIVE YEAR PLAN-1980-85 AND ANNUAL PLAN 1981-82

POWER DEVELOPMENT

Targets and Physical Achievements-Physical Programme-Revised Minimum Needs Programme.

Sr. No.	Programme	Item	Unit	1978-79	1979-80	1984-85	1980-81		1981-82
					Base year level	Ter- minal year Target	Target level	Likely achieve- ment	Proposed target (level)
1	2	3	4	5	6	7	8	9	10
1.	Revised Minimum Needs Programme	Pumpsets/ Tubewells	Nos.	..	78	2000	500	500	500
		Villages	Nos.	..	25	650	250	250	250

4. INDUSTRIES AND MINERAL

4.1. Introduction.

4.1.1. 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. Fortunately, the State industries sector is well equipped to fulfil its due role in this regard. It has an excellent industrial climate based on long traditions of business and industry. Our principal assets are enterprising and talented people on the one hand and disciplined skilled labour force on the other. The State is endowed with good natural resources--mineral, marine, agricultural etc., on which to build a viable industrial base. Since the formation of Gujarat State in 1960, successive State Governments have contributed in building a good infrastructure base, an integrated net work of agencies to support industrial ventures and have established a reputation of enlightened and pragmatic administration of the State Government.

4.1.2. The industries sector will have to take growing responsibility in generating employment and income is evident from the past trends also. The share of primary sector in the Net State Domestic Product (NSDP) has declined from 48.9% to 38.4% by 1978-79. Contribution from manufacturing activities in the NSDP has gone up from 16.9% in 1970-71 to 20.71% by 1978-79. The growing contribution of industries sector in the State economy is further revealed by the fact that the real increase in the output of the factories sector has increased at the rate of 7% between 1965-66 to 1977-78. Similar sectoral changes have been observed in the sphere of employment also.

4.1.3. Our 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.

4.2. Retrospect and Prospects.

4.2.1. As mentioned earlier, 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 ASI (1978), with Rs. 4300 crores worth output from 9,800 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. Besides, it is significant to note that between 1970 to 1976 the income from the manufacturing sector in Gujarat has increased by 147%.

4.2.2. Apart from the overall developments achieved in terms of total output etc., as outlined above, 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 is, 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.

4.2.3. The steps initiated towards industrialisation of backward regions will have to be reinforced by appropriate infrastructure, financial and fiscal measures. The District Industries Centres set up in all the Districts would have to be made more active to serve the objectives of promoting rural, cottage and small scale sectors on the widest possible spectrum.

4.3. Review of progress :

4.3.1. 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 considerable scope for wide spectrum of industries in the State. Alongwith this, salt production and mineral exploration received added impetus.

4.3.2. On 31st December, 1969, 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 lakh respectively by the end of 1973 and to 9892 and 5.89 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 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.

4.3.3. Between 1960 and 1977-78 the share of industries sector in the total work force of the state rose from 10% to 13%. The industries sector has been growing at an average rate of 5 1/2% to 6% which is higher than other sectors of the economy.

4.3.4. 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 Departments in 1961 was 2169. This increased to 18093 in 1971 and over 41,000 by the end of June 1980.

4.3.5. 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. During 1980-81, 22,400 people will benefit with the total financial investment of Rs. 5.34 crores.

4.3.6. Similarly, the production of Khadi increased from 56.3 lakh metres in the year 1978-79 to 65.35 lakh metres in 1979-80 and will go upto 80 lakh metres 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 the manufacture of leather, neera, pottery and joggery.

4.3.7. On the infrastructure and finance front, the Gujarat Industrial Development Corporation (G.I.D.C.) 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. metres. About 5,400 units are functioning with annual production of over Rs. 700 crores and total employment of 81,500. In 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. It has an ambitious programme of constructing another 2,335 quarters during 1980-81. Industrial sheds developed at innumerable small, intermediate and rural locations such as Vapi, Ankleshwar, Kalol in Mehsana and Kalol (Panchmahals) have provided large employment to the surrounding areas and has prevented migration of workers from hinterland to metropolitan cities.

4.3.8. The Corporation has stepped up its investments in 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 and is estimated to be at Rs. 35 crores during 1980-81.

4.3.9. On the investment side, the GIIC has assisted units under three schemes; Technicians Scheme, New Entrepreneurs scheme and the General Scheme. Under the Technician's Scheme the number of units assisted on 31st March 1980 would come to 1,111 with an assistance of Rs. 863.45 lakhs. This assistance has generated direct and indirect gainful employment for 10,790 persons which would mean that employment for one person was generated at an investment of Rs. 8,600/- It may be worth mentioning here that Gujarat Industrial Investment Corporation has pioneered in starting the Technician's scheme in 1968-69 thereunder, 100% finance was provided to techno-entrepreneurs who had viable schemes but did not possess the requisite financial backing. More than 60% of the units assisted so far are working in a viable manner and are regularly paying loan instalments and interest to the Corporation. The other 40% of the units are facing difficulties such as working capital, finance, raw materials availability, marketing difficulty, etc. which are being pointed out by the State level Sick Units Committee on a continuous basis.

4.3.10. So far as the large and medium industrial units are concerned, the Corporation has sanctioned Rs. 7380.86 lakhs as on 31st March 1980 to 568 units which would give employment both direct and indirect to about 50,000 persons. This

again would mean that even in medium and large industries sector, the assistance per person employed comes to about Rs. 15,000/- which is quite reasonable considering that the industries are medium and large sector and considering that the sanction of Gujarat Industrial Investment Corporation would catalyse a total investment of Rs. 31,668.64 lakhs.

4.3.11. 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 loanes who are companies or co-operative societies and for partnership and proprietary concerns the limit of loan is fixed at Rs. 15 lakhs.

4.3.12. The 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.

4.3.13. To provide self employment opportunities, the Corporation has already evolved a scheme known as New Enterprenours Scheme. Under the Scheme till 31st March 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 of eliminating unemployment amongst the technically qualified persons.

4.3.14. 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 31st March, 1980.

4.3.15. Fertilizer 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 firmed up and efforts under way for a third gas-based fertilizers plant.

4.3.16. On the Electronic side, the Gujarat Communications and Electronics Limited, Vadodra 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.

4.4. Policy framework and programme linkages :

4.4.1. The policies and programmes for the Sixth Five Year Plan would revolve around the principal objectives of removing poverty through gene-

ration 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 schemes.

(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.

4.4.2. 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 programmes.

4.4.3. 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. 34 crores is proposed. Besides, accelerating the traditional programme of Khadi, leather, handcrafts, 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 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 spread to the length and breath of the State. Similar would be the case with th handlom 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. The total programme covering more than 20 activities would create new employment opportunities for the people and simulataneously would also raise the income of abo u

5 lakh families already engaged in household industrial activities. Important infrastructural services in the area of marketing technology provided by the GRIMCO and RTI would be further improved.

4.4.4. 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 materials 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.

4.4.5. 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 programme of GIIC, GMDC and GSTC 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. These projects besides broadening the industrial base of the State and helping in maximum utilisation of the local resources would also support growth of SSI and cottage industries sector by making available critical raw materials such as soda ash, cement, cotton yarn etc. Most of them, as they would be located nearest to the sources of raw material, would also pioneer development of undeveloped backward and coastal areas.

4.4.6. 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&EL would be called upon to play a leading role by taking up projects of high technology professional electronic projects 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 aegis of a suitable agency like GC&EL or Trade Centre of GSIC to support development of electronic industry in the cottage and small scale sector on widest possible basis.

4.4.7 Talent and enterprise displayed by the people of the State is our most important asset. With a view to harness this important resource, a network 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. The Corporation would also act as a biggest pioneer by opening up many new backward areas and initiate industrial development of virgin centres by setting up Mini and Rural Estates. Moreover, this investment in infrastructure will have tremendous multiplier impact on the Gujarat economy by generating investment and employment.

4.4.8 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. 50 crores and provide employment opportunities both direct and indirect to 20 lakh persons. The financial assistance expected during the plan period through GSFC would be of the order of Rs. 230 crores to about 6,000 units most of which would be in the small scale sector, Talking an average employment of about 8 persons per SSI unit, the employment generated would be 48,000. The other important infrastructure principally aimed at helping the small scale sector would be setting up of a Trade Centre with an estimated outlay of Rs. 67.60 lakhs, Testing and quality control facilities at an estimated outlay of Rs. 160 lakhs, Hire Purchase scheme of machinery at a target of Rs. 300 lakhs and support for pollution control facilities for which a provision of Rs. 47/- lakhs is proposed.

4.4.9. While progressing in all the three directions mentioned above the basic objective of "backward area development" would be kept at the centre of attention. Conscious efforts would be made to divert the flow of resources so as to pull the industries for backward area development. Thus for instance, the share of infrastructure expenditure by the GIDC in backward areas will be raised gradually from its present level of 35% to 50% by 1983-84 and to a level of 55 to 60% by the end of Sixth Plan. In the case of GSFC, of the total assistance of Rs. 230 crores envisaged for the Sixth Five Year Plan as much as Rs. 127 crores will go to backward areas.

4.4.10. 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 going to rural and backward areas so as to compensate them for extra economic burden and handicaps such units have to bear. Adequate provision i.e. an amount of Rs. 30 crores 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.

Sixth Plan and Annual Plan 1981--82 proposals :

4.5.1. The outlay proposed for 'Industries and Minerals' Sector for the Sixth Plan 1980-85 is Rs. 23000 lakhs and for Annual Plan 1981--82 Rs. 4000 lakhs. The broad break-up of these outlays is as under:—

(Rs. in lakhs)			
Sr. No.	Sub-Head of Development	Proposed outlay for Sixth Plan	Proposed outlay for Annual Plan 1981--82
1.	General Industries	970.00	148.95
2.	Large and Medium Industries.	8871.00	1497.25
3.	Village & Small Industries.		
	(a) Small Industries	7900.90	1417.80
	(b) Village & Cottage Industries	3400.00	596.00
4.	Mining and Metallurgical Industries.	1850.00	340.00
	Total	23000.00	4000.00

4.5.2. Out of the proposed Sixth Plan and Annual Plan 1981--82 outlays mentioned above, the flow to the Tribal Area Sub-Plan has been proposed at Rs. 1360 lakhs for Sixth Plan and Rs. 232 lakhs for Annual Plan.

4.5.3. The details of the programmes proposed are given in the subsequent paragraphs.

4.5.4. General Industries :

4.5.4.1. The programmes covered under this group are shown below along with the outlays proposed for the Sixth Five Year Plan 1980-85 and Annual Plan 1981--82.

(Rs. in lakhs)		
Programme	Outlays proposed for	
	Sixth Plan 1980-85	Annual Plan 1981-82
1. Direction and Administration.	48.00	12.05
2. Weights and Measures.	100.00	14.00

1	2	3	4
3.	Industrial Education, Research & Training.	725.00	100.00
4.	Other Expenditure		
	(a) Export Award	2.00	0.40
	(b) Pollution Control	47.00	7.50
	(c) Financial Incentives to Film Studios setup in the State.	35.00	4.00
	(d) Quarters for employees of Govt. Press.	22.00	11.00
		979.00	148.95

Strengthening of Technical & Statistical wing in the office of the Industries Commissioner.

4.5.4.2. Basis for well knit planning and judicious decisions is the data. This data base was a long felt need with the development of industries in State which is taking place at a faster rate. The data on important indication of industrial development is needed from time to time. Though there has been a small cell for collection of industrial statistics in the Head office for the past several years, it is difficult to get information regularly from industrial units which are created all over the State. It is proposed to create staff in each district for this purpose so also in Head office for collection of primary and secondary data. Presently, there is no mechanism for collecting information on small scale industries as also to know the trend in this sector. In 1973, a census of small scale industries was conducted which gave for the first time some fruitful economic indicators regarding small scale sector. Government of India has decided to undertake sample-cum-census of small scale industries in order to supplement the earlier results. For collection, compilation and analysis of this information, cadre of field staff such as economic enumerators, investigators are proposed to be recruited. The staff will also be useful for continuous collection of data from SSI sector on sample basis for selected important items.

4.5.4.3. To carry out these activities it is proposed to strengthen the organisation at various levels to meet the requirement of technical and statistical wings for which a provision of Rs. 43 lakhs is proposed for the Sixth Plan 1980--85 and Rs. 10.80 lakhs for Annual Plan 1981--82.

Weights and Measures

4.5.4.4. Bombay Weights and Measures Enforcement Act, 1958 is the consumer's oriented Act and project consumers' interests. The Government of India has passed the New Act *i. e.* Standards of Weights and Measures Act, 1976 in April, 1976. The State Government have been provided with model thereof for implementing in their respective territories. The introduction of the New Act in the State is under active consideration of State Government.

4.5.4.5. The New Act has very wide coverage over and above routine type activity of varification of the stamping of weights and measures etc. It will cover calibration of temperature measuring instruments *viz.* Clinical Thermometer, Taximeter, Rickshawmeter, Electricity meter etc. in the final stage. The New Act solely emphasis consumers protection.

4.5.4.6. 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 measures department has been made independent department with effect from 1st February 1979.

4.5.4.7. 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 Taxi meters, inter-state verification of weights and measures, verification and stamping of clinical Thermometers, implementation of Numeration Act etc. an outlay of Rs. 100 lakhs is proposed for the Sixth Plan and Rs. 14 lakhs for the Annual Plan 1981-82.

Industrial Education, Research & Training :

4.5.4.8. Industrial development in Gujarat is taking place in various fields. The specimen of industries in the State above shows wide range of industrial activities. 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 petrochemicals 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.

4.5.4.9. To carry out these various research and developmental activities, an outlay of Rs. 200.00 lakhs is proposed in the Sixth Five Year Plan 1980-85 and Rs. 35.00 lakhs for the Annual Plan 1981-82.

Hosiery Training and Research Institute :

4.5.4.10. The hosiery Industry is based on acrylic yarn fibres. It requires skilled workers trained on the modern imported knitting machine. The need for such trained workers become more appropriate when the hosiery items of the export market are to be manufactured with a view to encourage and to develop hosiery industry in the State and to make available trained workers. The State Govt. has approved the scheme in the year 1979-80, to be operated through C.E.D. which is a semi-Government body. Following are the main aspects which will cover the activities of the Centre.

1. Demonstration on the use of new synthetic yarn like Acrylic.
2. To provide common facility for the industry.
3. To prepare hosiery designing.
4. Consultancy.
5. Development to hosiery machines and their design.
6. Research and Development in the area of hosiery items.

4.5.4.11. During the year 1979.80 Rs. 5 lakhs were spent for this Centre. A provision of Rs. 1 lakh made for the year 1980-81 is likely to be fully utilised. For the Sixth Plan, Rs. 25 lakhs, and for the Annual Plan 1981-82 a provision of Rs. 1.00 lakh is proposed.

Industrial Research & Development Institute-Vadodara.

4.5.4.12. The Industrial Research Laboratory at Vadodara is equipped for testing paint, varnish ink, soaps, oil, boot polish, water, Chemicals 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. CSPCL. The Committee had recommended establishment of plastic and polymers wing to strengthen industrial research Laboratory. The expenditure estimated to strengthen this wing will be to the tune of Rs. 740 lakhs.

4.5.4.13. 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 polymers grades as the programme of products application and development division in liaison with the processing and conversion industries etc.

4.5.4.14. During the year 1980-81 an amount of Rs. 6 lakhs has been sanctioned to the Institute For the Sixth Five Year Plan 1980-85 a provision of Rs. 400 lakhs and for Annual Plan 1981-82 Rs. 50 lakhs are proposed.

Grant-in-aid to Centre for Entrepreneurship Development-Industrial Self employment in Rural and Backward Areas.

4.5.4.15. The following training programmes are proposed to be taken up during the Sixth Five Year Plan period under this scheme:—

1) Manufacturing Entrepreneurs Training Programme (BDP) :—

The basic task of CED is to develop manufacturing entrepreneurs and CED has been working in this field since 1970. Under this scheme respective entrepreneurs desirous of setting up their own industry are given the required training, guidance and encouragement. These training programmes are run in the major cities as well as the backward areas of Gujarat, like the 20 backward talukas declared by the Government of Gujarat as well as other backward talukas. Under this scheme the educated unemployed are also given training.

Non-Manufacturing Training Programme:—

This scheme primarily aims to develop educated unemployed persons who do not possess any technical expertise but who can be absorbed in small scale industries. Under this scheme the trainees are trained for self employment for getting suitable employment in industry ; as Store keepers, Time Keepers, Accountants, Salesmen, Technicians and Managers, etc. The programme is being run in major cities like Ahmedabad, Vadodara, Surat, Rajkot, Bhavnagar, Gandhinagar, Bharuch etc.

(3) I. T. W. Scheme for developing semi-skilled workers for catering to the need for industrial employment:—

Having obtained financial assistance from the Government CED has established a workshop at Odhav, Ahmedabad. This workshop develops semi-skilled workers. The trainees are given on the job practical training so that they may be in a position to obtain employment immediately after the completion of the course. Under this scheme it is now proposed to give training in additional areas like automobile, refrigeration and air-condition repairing and servicing etc.

(4) Feasibility Study Programme :—

To gauge the industrial potential in villages and others under developed areas it becomes extremely useful to have training programmes for feasibility studies. As a part of this programme the trainees are made to prepare feasibility reports for particular items selected by them. For this programme class-room theoretical training is imparted. Also during the day time the trainees are made to collect the required data/details for the selected items for which the report has to be prepared. This report proves useful in future both to the trainees as also to entrepreneurs interested in starting their units.

(5) Training for Development of Village Entrepreneurs:—

To ensure that entrepreneurs come forward and set up their units successfully during the initial teething years particularly in backward and rural areas, it is necessary to provide specialised training to them. Under this scheme entrepreneurs are given special technical training for production of items selected by them for setting up units in potential areas. Besides, training for product selection, management and project report preparation is also given so that the entrepreneurs are equipped with skills to successfully set up and manage their units.

4.5.4.16. By imparting training under the above mentioned schemes, the Centre for Entrepreneurship Development aiming to achieve higher and higher targets for increasing employment opportunities in the State. An outlay of Rs. 100.00 lakhs for the Sixth Plan 1980-85 and Rs. 14 lakhs for Annual Plan 1981-82 is proposed towards grant-in-aid to CED to implement this scheme.

Export Award

4.5.4.17. The Scheme is to provide incentive to registered exporters, export houses and merchant exporters to boost exports of products of both small and large scale units from Gujarat. The export

awards to be given since 1979-80 is in the form of 'Silver Replica' instead of merit certificate which used to be awarded earlier. As recommended to Government by Export Award Committee, there will be 16 commodity groups instead of 13 and 32 awards instead of 26 awards will be given. For this scheme an amount of Rs. 0.30 lakhs were spent during 1979-80 and for the year 1980-81 also, the expenditure is likely to be of the same order. An amount of Rs. 2 lakhs for the Sixth Plan and Rs. 0.40 lakhs for the Annual Plan 1981-82 has been proposed for the programme.

Pollution Control Schemes :

4.5.4.18. A successful pollution control programme should have well planned monitoring system and system for characterisation of effluents, with a view to providing a service facility to the industry. 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 effluents including the facilities for analysis of industrial effluent cases and omissions 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.

4.5.4.19. 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 source 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%.

4.5.4.20. 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 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.

4.5.4.21. For the Sixth Five Year Plan 1980-85, a provision of Rs. 47 lakhs and for the Annual Plan 1981-82, Rs. 7.50 lakhs are proposed in the form of subsidy.

Financial incentive to the studios set up in the State.

4.5.4.22. The scheme envisages giving financial incentive to the Film-studios to be set up in the State and to give encouragement to the film industry in Gujarat. The assistance is given to each studio at the rate of Rs. 20,000 per film up to 12 films. 3 Film studios have been given assistance worth Rs. 6.00 lakhs during the year 1977-78. During 1978-79 the assistance to the extent of Rs. 2.60 lakhs was given and in 1979-80 the studios were assisted to the extent of Rs. 6.00 lakhs. A provision of Rs. 3.00 lakhs made for the year 1980-81 is likely to be fully utilised. For the Sixth Plan, Rs. 35 lakhs and for the Annual Plan 1981-82 Rs. 4.00 lakhs are proposed.

Construction of residential quarters for employees of Government Press.

4.5.4.23. The Government Printing and Stationery Department has to provide to the industrial workers of the Presses with residential quarters at economic rent. An outlay of Rs. 22 lakhs for 1980-85 and Rs. 11 lakhs for 1981-82 is proposed to construct the quarters at Bhavnagar and, Ahmedabad.

4.5.5. Large and Medium Industries

4.5.5.1. The programmes covered under this group are shown below along with their outlays proposed for the Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

(Rs. in lakhs).

Sr. No.	Programme.	Outlays proposed for the	
		Sixth Plan 1980-85	Annual Plan 1981-82
1	2	3	4
1	Petroleum, Chemicals and Fertilisers Industries.		
	(a) Gujarat Petrochemical Corporation.	3300.00	400.00
	(b) Gujarat Narmada Fertiliser Company—Water Supply Plant.	495.00	100.00
	(c) New Fertiliser Project based on Bombay High Gas.	300.00	..

1	2	3	4
2	Ship Building and Aeronautical Industries.		
	M/s. Alcock Ashdown Co.	22.00	1.00
3	Gujarat Communication and Electronics Ltd.	250.00	105.00
4	Consumer Industries.		
(a)	Gujarat State Textile Corporation.	25.00	1.00
(b)	Government contribution to Narmada Cement Company.	53.00	..
(c)	Girnar Scooter Project	180.00	50.00
5	Industrial Financial Institutions.		
(a)	G.I.I.C. (Market Borrowing).	550.00	110.00
(b)	G.I.I.C. (Projects)	3100.00	600.00
6	Other Programmes.		
(a)	Index Grant for promotional activities.	50.00	6.25
(b)	Grant of Loan to Industries for amount of Sales Tax paid on the sale of finished products.	500.00	100.00
(c)	Woolen carpet cell in Gujarat State Export Corporation.	46.00	24.00
	Total	8871.00	1497.25

Petroleum-Chemicals and Fertilizers Industries

Gujarat Petrochemical complex.

4.5.5.2 The State Government has constituted Gujarat State Petrochemicals Corporation Limited for setting up a petrochemical complex in Gujarat based on offshore gas with an authorised capital of Rs. 10 crores. The proposed petrochemicals 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 crore based on the erected plant cost of Rs. 440 crore 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

an equity of 26%. The estimated total outlay in the 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.

4.5.5.3 On the basis of the technology evaluation and short listing of process licensors the Corporation has issued tender enquiries for various process plants and the responses from leading process licensors have been received. The committee constituted by the Government of India for recommendations regarding the landfill point for the gas pipe line and site for the petrochemical complex have finalised their reports.

4.5.5.4 In view of the above, a provision of Rs. 3300 lakhs as share capital contribution of State Government to GSPCL is proposed in the Sixth Five Year Plan 1980-85, and for Annual Plan 1981-82, Rs. 400 lakhs are proposed. An ad-hoc provision of Rs. 3 crores for the year 1980-81 is made as share capital contribution by the State Government to GSPCL.

4.5.5.5 The total project outlay as indicated in the revised application for letter of intent submitted in July, 1979 is as follows:—

Land	Rs. 1 Crore
Building	Rs. 8 Crores.
Machinery—	
(i) Indigenous	Rs. 570 ..
(ii) Imported including the fees for know-how engineering.	Rs. 201 ..
Total.	..Rs. 780 ..

4.5.5.6 The basis for this has been worked out from the EIL viability study as follows:—

- (1) Battery limit cost Rs. 140.30 Crores. of gas separation and gas cracker.
- (2) Utilities and off-site facilities common to gas cracker as well as the downstream plants (for the entire complex)

Add 69% as per the average working an erected plant cost :

Total :	..Rs. 430.85 Crores.
Say :	..Rs. 431 ..

4.5.5.7 For the downstream units as shown in the letter of intent application, the break up of battery limit cost is as follows :—

Products.	Tonnes per annum.	Investment in Crore Rs.
Low Density Polythylene	1,00,000	51.6
High Density Polythylene	70,000	24.0
VC/Polyvinyl Chloride	90,000	35.00
Vinyl Acetate Monomer	40,000	30.00
Styrene	30,000	14.0
Polystyrene	15,000	7.5
Enthylene glycol.	45,000	21.5
Dodecyl Bensene	25,000	14.00
Total		197.6
Say Rs.		198.0 Crores.
Add 69 % to arrive at the erected plant cost		Rs. 136.6
Total		Rs. 334.6
Say		Rs. 335.0

4.5.5.8 For the purposes of equity requirement calculations, it is assumed that Gas separation, Gas cracker and the utilities and off-site facilities will be provided by the Corporation, wherein the Corporation will be holding 40 % of the equity and 11% by the Government agencies and the downstream units will be in the joint sector with the Corporation holding 26 % of the equity. On a 3:1 ratio to equity basis, the equity requirements are worked out as follows :—

Gas separation, Gas cracker and off-site facilities.

(a) Total outlay	Rs. 440	Crores.
(b) Equity	Rs. 110	"
(c) Corporation's share	Rs. 44	"

Downstream units :

(a) Total outlay	Rs. 340	Crores.
(b) Equity	Rs. 85	"
(c) Corporation's share	Rs. 22	"

Gujarat Narmada Fertilizer Company.

Incorporation of the Company.

4.5.5.9. With a view to meet with the increasing demand for chemical fertilizers in the country, the Government of Gujarat and Gujarat State Fertilizer Company Limited promoted a new Company namely Gujarat Narmada Valley Fertilizers Company Limited to undertake the establishment of a large sized fuel oil based fertilizers project near Bharuch. The Company was incorporated on 10th May, 1976. The Company has been granted an Industrial Licence for the production of 1350 MT of Ammonia and 1800 MT of Urea per day. There will be surplus ammonia of 270 MT per day, after captive consumption for Urea Production, which will be available for diverse uses. The contracts for Licence, Know-how Engineering and Supply of Imported Equipments and Machinery for Amonia Plant have been awarded to M/s. Linde of West Germany and those for the Urea Plant to M/s. Snamporgetti of Italy. The contracts for various off-site and utilities have also been awarded. The contracts for indigenous engineering and construction Supervision have been awarded to M/s. Engineers India Limited, New Delhi, M/s. Tata Consulting Engineers Bombay and M/s. Fertilizer (Planning and Development) India Ltd. Sindri.

Project cost and Means of Eninaeing :

4.5.5.10. The cost of the Project has been estimated at Rs. 445/- crores out of which the foreign exchange component will be Rs. 117 crores. The arrangements for financing this project have been made as follows :—

	<i>Rs. in crores.</i>	
A. Share Capital	..	89.00
(a) Government of Gujarat	23.14	.
(b) Gujarat State Fertilizers Co. Ltd.,	22.25	..
(c) To be offered to public (underwritten by IDBI, Other financial institutions and banks).	43.61	305.59
B. Loans from IDBI	197.59	..
Other Financial Institutions.	21.00	..
Banks	87.00	..
C. Funding of Interest by Financial Institutions and Banks.	..	50.41

4.5.5.11. The Foreign Exchange requirement for the Ammonia Plants has been provided by M/s. FW-A West German Bank by way of credit on Government to Government basis.

Progress on the Projects

4.5.5.12. All Engineering works for Ammonia and Urea Plants have been completed and most of the items of imported equipment have been received at site. The orders for all indigenous equipments have been placed and in the case of the Ammonia plant, out of 188 indigenous equipments, 155 have been received at site and in the case of Urea Plant, out of 101 indigenous equipments 84 have been received at site. The civil and structural works for Ammonia and Urea Plants have been completed and creation works are in full swing. Erection of the major equipments like Ammonia Synthesis Converter Weighing 91 Mt, the Rectisol Wash Tower weighing 325 Mt, all the 4 Centrifugal Compressors and Air Separation Units (Cold Box) has been completed. 5 MGD Main Water Supply Scheme for drawing water for the factory and township has been commissioned. The 132 KV receiving sub-station has been energised. The Raw-water treatment facility and DM water system are in operation. All works on boiler No. 1 and 2 have been completed and work on boiler No. 3 is in full swing. Coal/ash handling system has been completed and creation of the conveyor virtually completed. The total expenditure on the Project as on 30th June, 1980 is to the tune of Rs. 249.48 crores. The above expenditure has been met with from Promoters, share capital of Rs. 38.64 crores (inclusive of Rs. 23.14 crores towards share capital and Rs. 1.05 crores towards water supply scheme from Government of Gujarat); Central/State Cash subsidy of Rs. 0.17 crore and balance on loans from IDBI, other financial institutions and Banks. The project is expected to start commercial production by middle of 1981 and will provide direct employment to about 1,000 persons. In addition, the project will generate considerable secondary and tertiary employment. For Sixth plan, no provision is proposed.

Third GNVFC Plant (Water Supply)

4.5.5.13. Gujarat Narmada Valley Fertilisers Company Limited is implementing a fertiliser 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 74% 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).

4.5.5.14. 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.

4.5.5.15. Considering the requirement of reliable water supply to Bharuch Municipality/City and the requirement of a new fertiliser 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.

4.5.5.16. 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.

4.5.5.17. 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.

4.5.5.18. So far as amount of Rs. 1.05 crore has already been released to Gujarat Narmada Valley Fertilizers Company Limited.

4.5.5.19. The final location for drawal of water will be decided and the work on the project will start immediately. The Company anticipates that before March, 1981 the total expenditure will be around Rs. 2.5 crores.

New Fertilizers Project based on Bombay High Gas

4.5.5.20. 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 applications for expansion of capacity by Gujarat State Fertiliser Company and Gujarat Narmada Fertilizer Co. In this connection, indications were given to the State Government that the Centre would be agreeable to the setting up of one more Fertilisers 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 26% 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 proposed.

Ship Building and Aeronautical Industries.

Alcock Ashdown Company Limited.

4.5.5.21. M/s. Alcock Ashdown Co. Ltd., went into liquidation in 1971-. The Government of India nationalised this company in 1973 and appointed the Industries Commissioner as the manager of its Bhavnagar unit. The State Government has decided to form a new company taking over the management of the unit. In this company the State Government and the Mazgaon Dock Bombay proposed to participate to the extent of 33 percent and 67 percent respectively in the equity capital. The Government of India have approved of the arrangements and the company will be formed and registered as soon as the writ petition in the High Court of Bombay is disposed of. Until the Company is formed, the State Government has appointed a Management Committee for Supervising the management of the Bhavnagar unit. The unit has been given a loan of Rs. 5.39 lakhs by the State Government as well as the Gujarat Industrial Investment Corporation upto 1976-77. Technical guidance is provided to the unit by the Mazgaon Dock Bombay. The unit started production from 1st September, 1975 with technical assistance and supervision of Mazgaon Docks who have also provided designs and drawings for the construction of barges. After reactivation, the unit has carried out job work worth Rs. 172.00 lakhs upto 10th August, 1978. Progress of Barges Constructed is as under :—

1. 6 barges of 500 tonnes with engine.
2. 4 barges of 300 tonnes without engine for Iron.
3. Barges without engine for Norway and Potons capacity 4000 Tonnes.
4. 45 barges 150/25 tonnes without engine for Iron.
5. 2 barges with engine for Gujarat Government.

4.5.5.22. A provision of Rs. 22.00 lakhs is proposed for the Sixth Plan and for the year 1981-82, a token provision of Rs. 1 lakh is proposed.

Tile Communication and Electronics Industries.

Gujarat Communication and Electronics Ltd.,

4.5.5.23. 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. crores. The Company is engaged in manufacturing of highly sophisticated professional electronic equipments which are presently imported or are in short supply.

4.5.5.24. The Scheme for setting up this unit envisages fulfilment of certain socio-economic objectives which are as under :—

(a) Providing employment, directly and indirectly.

(b) Development of the States, manpower resources through training schemes.

(c) Regional development of the electronic industry in the State.

(d) Acquiring technological base in the State either by Research and Development within the Company or by acquiring it from the national laboratories or by obtaining technical know-how from abroad.

(e) Obtaining reasonable rate of return on investment.

(f) Development of ancillaries and import substitution.

4.5.5.25. The Company has embarked on a policy of meeting the above objectives by creating greater employment prospects, increasing production, harnessing capacity of small scale industries and providing a training ground for the development of special skills required for the production of quality products. In this the Company is very successful and the results are encouraging. Without investing large sums of money in the capital, equipment and tools, the Company has been able to embark on its production programmes by encouraging small scale industries to provide fabricated parts and components.

4.5.5.26. Total revenue outlay of the Company during the five year plan 1980-85 is Rs. 3979 lakhs and Rs. 888 lakhs is required from State Government in the form of share capital being approximately 40% of the total capital outlay during the Sixth Five Year Plan. This includes.—

(a) Capital expenditure for production need

(b) Capital expenditure for Research and Development,

(c) Revenue expenses for ongoing research and development programmes.

(d) Revenue expenses for new Research and Development programmes.

(e) Other Miscellaneous expenditure such as repayment of loans and payment of advances to state

4.5.5.27. The following are the activities of the Company :—

(A) Instrument Landing System.

4.5.5.28. The Instrument landing system is a navigational aid which renders assistance to the pilot of an aircraft during the initial period of approach and touch down. The total project cost is Rs. 133.18 lakhs to be met by Government equity-share Capital contribution of Rs. 48 lakhs and from the loans of Rs. 72 lakhs from the financial institutions. The Company has got annual licenced capacity of five ILS system per annum. The company has concluded the foreign collaboration licence agreement with NDS Heassey Radar Ltd ; U. K. and the full know-how fees have been paid. The first ILS system has been delivered to the Civil Aviation authorities by the stipulated delivery data after it had passed, without deviations, all the prescribed evaluation tests.

4.5.5.29. The Company has negotiated with Air Headquarters and orders also received for five ILS systems amounting to Rs. 2 crores. In addition DGCA is also processing a case for 6 (six) ILS systems and the orders for these can be expected by end of current year. The licenced capacity for ILS is given system plus 25% additional *i. e.* for six ILS system. Negotiations with Navy have also been finalised for supply of one ILS system for GOA order which is expected shortly.

(B) Telephones

4.5.5.30. The Company has annual licenced capacity for manufacture of 2,00,000 telephone instruments per annum. The total project cost is Rs. 77.84 lakhs to be met by equity share capital contribution of Rs. 24.00 lakhs from the Government of Gujarat and Rs. 36.00 lakhs from the loan from financial institutions. The Company has developed Electronic Push button telephones instrument. For the mechanical dial telephones the Company has made an agreement with M/s. Electronics Trade and Technology Development Corporation, a public sector unit. The licenced capacity for telephones is 2,00,000 against which Company intends proceeding continuously in marketing this item as it has a consumer bias. The railway alone would be prepared to take a minimum of 25000 telephones and there are large requirements from the P and T and other users who have PABX and require instruments to expand their dedicated note but are unable to obtain telephones. The Company is therefore planning to supply one initial lot of instruments to the Technical Research Centre (TRC) of the P & T Department who will be providing it with a report after six months of laboratory and field trials. The development of telephone instrument is now complete and production has been launched starting with 10,000 telephones at a cost of approximately Rs. 50/- lakhs annually to build up production to the level of 2,00,000 telephones, in the immediate future representing a production level of 10 to 11 crores.

(C) Communication equipments.

4.5.5.31. As per the present Government policy, Electronics equipments which have been indigenously developed by a recognised B & D unit such as GCEL are exempted after the scrutiny by the Department of Science and Technology from the necessity for obtaining an industrial licence for production. Such exemption has been given to the manufacture of communication equipment with an annual capacity of 100 terminals per annum. The total project cost is Rs. 94.63 lakhs to be met by Government equity share Capital contribution of Rs. 55.00 lakhs and Rs. 37.26 lakhs as loans from the financial institutions. The URF Development programme of the Company has gone exactly as per schedule and as the technical specifications are to be as per international standards, a consistent demand for our system is fast developing. The first batch of equipments are already offered for trial and also approved without any modifications in it and hence the company has already taken up the production and eleven communication equipments have been sold to Railways before 31st March, 1980 and order is also received for 25 terminals of 090-000 MH send equipment.

4.5.5.32. This year the company aims at manufacturing 50 equipments and 100 equipments next year to meet growing demand from P & T and Railways for the 380-470 MH equipments. Development for the 7.5 GH equipment for Railways is now on hand. During the year 1980-81 it is expected to receive the order amounting to about one crore and for the year 1981-82 about more than 3 crores on these equipments. Company has also received orders for supply of communication equipment for Narmada Project.

(D) TV Broadcast and Studio Equipment-

4.5.5.33. The Company has been exempted from the procedure of the licensing by the Department of Science and Technology. The Company is intending to establish production facilities for 10 systems per annum. The total project cost is Rs. 27.00 lakhs to be met by Government equity share capital of Rs. 11.00 lakhs and Rs. 16.00 lakhs from loans from financial institutions. The Company has delivered one system to the Indian space Research Organisation, during the year 1978-79.

4.5.5.34. A total requirement of 20 systems has been forecasted for Doordarshan and of these, the company will be supplying part of the requirement this year (8 systems) In addition, the Department of Electronics has indicated large requirements which are likely during the year for meeting the needs of NCERT. There is a good market for the system which still require certain modules, which are under development and the production will be started by the end of 1980-81.

4.5.5.35. (E) Against a requirement of Extended Range URP equipment for the Civil Aviation Department; a global enquiry was instituted to GCEL and on the basis of the global enquiry the selected equipment has been accepted by DGCL as meeting their specifications and the Company has already received order amounting to Rs. 2 crores. The project cost is approximately Rs. 48.22 lakhs.

(F) Data Processing System

4.5.5.36 Data processing systems are being developed by the Company on the basis of customers requirements using communication channels for telemetry and tele control or locally available computer systems for electronic data processing.

4.5.5.37 For all these on-going projects, the existing factory complex is inadequate and Board has approved additional factory building for which a plot of land in Makarpura Industrial estate has already been acquired and on which factory construction work has already started. The total estimated cost of the factory is Rs. 190 lakhs. The company works on the basis of sub-constructing production to the maximum extent possible and retaining only limited facilities for handling tooling requirements for emergency jobs, or special production where the limited quantity and high provision makes sub-contract impossible. In this way Company has curtailed considerable capital requirement in the form of plant and machinery and other investments.

(G) Research and Development

4.5.5.38 The future of the Company is in its Research and Development activities, where the Company has been able to demonstrate its strength by winning prestigious contracts against global competition and competition from well established Indian Companies. The Company has certain ongoing research programmes, and in addition, with an eye on the future the Company is planning to take up fresh research projects for meeting the production needs of the future. This is necessary in view of very quick rate of obsolescence which is inherent in the field of electronic equipment manufacture due to the rapid advances in the State of the art in the field of material-component and devices. Since the loan financing will not be available for Research and Development Projects, entire project costs are to be fully financed from the equity share capital contribution from the Government of Gujarat.

On Going Research Projects

Communication Equipment

4.5.5.39. The Wireless Adviser to the Government of India has now informed that the policy for grant of fresh line licences for establishing communication notes will be based on licensing of 800

MHS frequency bands for fresh entrants and the existing 360-480 MHz will be reserved for those to whom this frequency has already been allotted. Accordingly in order to expand the production base, the Company has launched a development programme for communication equipment in the 800 MHz Board. For this project capital expenditure amounting to Rs. 10.50 lakhs and revenue expenditure of Rs. 9.91 lakhs totalling Rs. 20.41 lakhs will be required.

FLM MUX

4.5.5.40. At present for every communication equipment sold by the Company the multiplex equipment is being produced either from ITI or by import. The cost of a new equipment even for a very modest number of channels is almost double the cost of one equipment and hence in order to make our operations more profitable, it is essential that the Company should manufacture Mux systems. This production will be captive production for meeting its own requirements. As the equipment functions at low frequencies, the R. & D. facilities of equipment of the Company are adequate to meet the needs. With the completion of this project the Company's communication projects will become exceedingly attractive from both the customers point of view of a total capacity, and from the profit angle of the Company as the investment in proportion to the turnover is very low.

Marker Beacon

4.5.5.41. This is a navigation aid which enables an aircraft to determine its light during the descent at a well defined point on the approach path. Most of the customers asking for the system require the Company to provide this additional facility and presently the Company is importing this item for supply. Feasibility study has indicated that the equipment is within the Company's competence and hence a development has been launched. The cost of revenue and capital expenditure is estimated at Rs. 13.00 lakhs which stands as a total project cost.

Distance Measuring equipment

4.5.5.42. At the request of the Research Wing of the Survey of India and on the advice of the Department of Electronics, a programme for the development of a Distance Measuring Equipment has been taken up. This equipment is capable of measuring distance upto a maximum of 1 Km. with an accuracy of 2 mms. and can replace the present obsolete methods used for surveying which are inaccurate and the basis for considerable litigation in-land surveys. The capital expenditure is Rs. 1.97 lakhs and the revenue expenditure is Rs. 2.18 lakhs totalling to the project cost of Rs. 4.15 lakhs.

Direct Reception Satellite

4.5.5.43 The Government of India is considering a scheme for direct reception of T. V. programmes from Satellite and for this purpose the SAC had developed know-how which it has agreed to transfer to G. C. E. L. The project envisages a very large market and possibly more than one manufacturing unit will be required in order to provide the requirements on national basis. The project is still under consideration and hence provision of Rs. 1 lakh has been made to enable starting of preliminary work for converting the laboratory prototype of SAC into a production worthy equipment in anticipation of the project being approved so as to ensure GOEL to be the first in the field at the opportune time.

NEW PROJECTS

(1) Inset DCP Data Conversion Storage and Transmission sub-system : (DCSTS)

4.5.5.44. Against a global tender from the MET Department, the Company has given a quotation for manufacture of a prototype DCSTS for evaluation followed by serial production of 100 complete system at a cost of approximately Rs. 2.50 crores. The Development will be based on technical know-how to be obtained from the SAC, with whom we have completed a Collaboration agreement. Thus know-how will be engineered into a production prototype and given to the MET Department for evaluation. The proposal is being evaluated by the MET Department and it may be stated that only two companies are in the final list, one of which is GOEL and the other Bharat Electronics Ltd.

(2) Microwave Communication Equipment

4.5.5.45. There is an immediate requirement for microwave communication equipment in the 7 GHz frequency band. The P & T also have a very large requirement of such equipments. The total requirements now projected by the Railway alone are 89 Terminals till 1983 and 100 to 120 terminals or more thereafter. P & T requirements run into an additional 300 terminals. It is intended to meet this market by in house development of this equipment so as to establish production amounting to Rs. 2.50 crores per annum. This equipment is not presently available to meet users' specifications and hence large imports are contemplated. In order to cut down development time, arrangements have been concluded with the Defence Research Laboratories and TIFR Bombay for transfer of know-how in critical areas. Accordingly, production after development should be possible in 20 months. The capital expenditure is estimated at Rs. 6.35 lakhs and revenue expenditure including cost of materials and components estimated at Rs. 13.95 lakhs totalling the project cost of Rs. 20.30 lakhs.

(3) Digital Switching System :

4.5.5.46. Negotiations have been concluded with an American Company for the licenced production of digital switching system covering a wide range of requirements from 100 to 10,000 lines using microprocessor based control units for message-handling. There is a very large requirement of such system for use in PBX and PABX units and GCEL will be the first Company in India with such equipments working on digital concepts and thus providing a very comprehensive and reliable service at a very low cost due to the elimination of electro magnetic switching alignments and replacing these by solid state integrated circuits having a very high reliability. The P & T requirement for this equipment alone exceed Rs. 20 crores and hence a very large market will be available once production is established. The know-how will have to be engineered for Indian needs and equipment Taylor made to Indian specifications. The development effort including purchase of the requirement, basic know-how etc will involve capital expenditure of Rs. 25 lakhs.

(4) Microprocessor based Systems

4.5.5.47. The Company has been receiving several requests from customers for quotes on micro processor based systems and a development programme will be launched for competence building at a cost of Rs. 1.87 lakhs in revenue expenditure which stands as a total project cost.

Gujarat State Textile Corporation

4.5.5.48. The Gujarat State Textile Corporation Limited was formed by the Gujarat Government 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 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 blended 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 from the Corporation is to be generally met with from internal resources. However, to provide for escalation as well as additional requirements of capital, it is proposed that a nominal provision of Rs. 25 lakhs may be kept for the Sixth Five Year Plan period and a token provision of 1 lakh for the Annual Plan 1980-81 and 1981-82.

Narmada Cement Co. Ltd.

4.5.5.49. Gujarat Government is one of the promoters by 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 proposed in the form of share capital contribution to assist during the year 1990-81.

Gujarat Industrial Investment Corporation.

4.5.5.50. 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, Technicians' 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 and provide employment opportunities both direct and indirect to 1.20 lakh persons giving assistance to employment ratio of Rs. 16000 per person. As regards other major activity of the Corporation for project promotion, so far GIIC have promoted 6 projects for caustic soda and chlorine (GACL) Carbon Black, (GOL), Methyl Methacrylate (POGL), Machine Tools (GMTC), Leather Project (GLIL) and Cresols (GAL). The Corporation has planned additional 55 projects in the next 5 years. The criteria for selection of the projects are as follows :—

(a) As are critical but capital intensive with long gestation, e.g. Sponge Iron.

(b) Local resources based projects; e.g. Cement, Soda Ash.

(c) Projects to fill in gaps in the industrial structure of State, to ensure self-reliance and balanced development e. g. Foundry.

(d) Project which, in terms of national policy, should be with public ownership, eg. Transreceiver.

(e) Projects for goods which are in chronic short supply; e.g. Caustic Soda, Soda Ash, etc.

4.5.5.51. The Corporation along with 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 which in turn would be in consonance with the basic objectives set out earlier for such projects promotion. Though these projects are of basic and capital intensive nature, they would provide gainful employment to around 50,000 persons.

Backward Area Development.

4.5.5.52. Our efforts in the direction of sanctioning more and more loans in Backward Areas have been kept up as will be evident from the following table, where, as a percentage to the total sanctions of the concerned year, the percentage works out to 60 as compared to 71 in the previous year *i. e.* 1978-79. However, in terms of absolute amounts, the figure is considerably higher at about Rs. 1062.51 lakhs.

Sanction in Backward Districts :

Year.	Amount (Rs. in lacs)	% to total sanction
1976-77	197.40	38
1977-78	381.51	55
1978-79	692.63	71
1979-80	1062.51	60
Cumulative as on 31-3-80.	3176.45	43

4.5.5.53. However, we have made up for low percentage of sanctions by speeding up disbursement in Backward Areas, where the percentage has gone up to 54% as compared to 42% for the year 1978-79 as will be seen from the following table :—

Disbursement in Backward Districts :

Year	Amount (Rs. in lakhs).	% to total disburse- ment.
1976-77	37.62	17
1977-78	52.29	29
1978-79	168.79	42
1979-80	460.18	54
Commulative as on 31-3-80.	978.30	51

4.5.5.54. In addition, the Corporation follows a conscious policy of locating its various projects in the backward areas. Out of the 6 projects which have already been commissioned, as mentioned earlier, 4 projects are in the backward areas with a total investment of Rs. 24.00 crores. The other two projects GACL and PGCL are located in the petrochemicals areas in Vadodara because of techno-economical considerations. The new projects planned by GIIC, will also have same plant for taking them in the Backward Areas.

4.5.5.55. The Corporation would need funds at the order of Rs. 19.21 crores for project activity in the year 1980-81. However due to resources constraint, the original provision of Rs. 5.89 crores made by the Government has been further reduced to 2.89 crores. In view of the total requirements of funds, the Corporation would be provided Rs. 8.00 crores for project activities during 1980-81. During 1981-82 the Corporation would need funds of the order of Rs. 21 crores for project activity. However, due to resources constraint, the Corporation would be provided with funds of the order of Rs. 12 crores for project activity. The overall requirement of funds during the Sixth Plan for project division would come to Rs. 80 crores as GIIC's promoters contribution at 26% equity. However, due to resources constraint, it is proposed to make only a provision of Rs. 31 crores in the Sixth plan period. The Corporation would also be provided with market borrowings at the rate of Rs. 110.00 lacs per annum making a net provision of such open market borrowing for the entire five year plan of the order of Rs. 5.5 crores (net of repayment liability).

4.5.5.56. The Corporation at the behest of the Government has been rendering financial assistance for the scheme of captive power generation by way of setting up Diesel generating sets and back pressure turbines to overcome temporary shortages of power experienced in the State. To the extent of refinancing

by the IDBI, the Corporation would be able to meet partially with requirements of funds. However, most of the cases will be beyond the refinanciable limits as the net-worth (share capital plus reserves) will be higher than Rs. 2.5 crores, the Corporation will not get refinance for such cases. Therefore, the State will have to provide funds to that extent. The anticipated requirements of funds for such non-refinance cases, would come to Rs. 5 crores during the current year (1980-81) and Rs. 6 crores during the next year (1981-82) against which it is proposed to provide Rs. 3 crores and Rs. 4 crores next year 1982-83. Since the scheme is to run for two years ending by January, 1983, no further provision is proposed beyond such a period. Since the financial assistance is not for any industrial project, but for captive generation of power, it is proposed to provide such funds out of the allocation made in the power sector.

Girnar Scooter Project.

4.5.5.57. 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.

4.5.5.58. The Corporation obtained 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 IBI 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/-lacs has already been made till 31-12-1979 of which Government of Gujarat has sanctioned loan of Rs. 186 lacs till the end of 31-12-1979.

4.5.5.59. Procurement of body panels 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 a per month. The rate of production will go to 780 scooters per month from December 1980. It is proposed to expand the production capacity from 9000 to 30,000 scooters per annum by 1985 in a phased manner. It is proposed to approach financial institutions for obtaining requisite funds. The Merchant Banking division of the State Bank of India has been entrusted with the job of preparing revised project report and to negotiate with the financial institutions for grant of long term loan for the scooter project.

4.5.5.60. The additional cost is expected to be about of Rs. 1260 lacs during 1980-85 for reaching the production level of 30,000 scooters per annum by 1985 in a phased manner. The Corporation Proposes to obtain project loan of Rs. 180 lacs from the State Government during 1980-85 and the remaining amount will come in the form of equity and loan from IDBI.

4.5.5.61. 744 scooters were produced in 1979. Till end of June 1980, 1409 scooters have been produced during current year. It is proposed to produce about 6000 Scooters during 1980-81 which will reach 10000 Scooters in 1981-82 and 30000 in 1984-85.

4.5.5.62. The present waiting list with deposit of Rs. 500/- per scooter is 20000 scooters. This list is limited to only five dealers at Ahmedabad, Vadodara, Rajkot, Chandigarh and New Delhi. With the appointment of more dealers in various territories of the country, in future, Corporation hopes to build up waiting list of more than 50,000 Scooters. We do not anticipate any problem of marketing Ginnar Scooter when it reaches its maximum production capacity of 30,000 scooters per annum as Ginnar Scooter has many advantages over several types of scooters as it is shaft driven and gives an average of 40 Kilometres per litre of petrol. It is economical in fuel consumption. For this project a provision of Rs. 180 lakhs is proposed in Five Year Plan 1980-85. In the year 1981-82, an expenditure of Rs. 250 lacs is expected to be incurred for achieving the projected programme of 10,000 scooters, Out of Rs. 250 lacs an amount of Rs. 50 lacs is proposed to be provided as project loan from the Government during the year 1981-82.

4.5.5.63. With the full implementation of the project it is expected to generate direct employment of 1253 at the end of 1984-85 as under.

Unskilled	..	..	196
Semi-skilled	..	..	245
Skilled	..	..	282
Educated (Technical)	..	..	303
Educated (Non-Technical)	..	..	227
			Total :-
			1253

Grant of Loan to Industries for the amount of Sales Tax paid on sale of finished products.

4.5.5.64. 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 under the scheme 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 Vadodaras 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 year 1980-81 a provision of Rs. 100 lakhs in form of loan is made. For the Sixth Plan, Rs. 500 lakhs are proposed and for the Annual Plan 81-82 Rs. 100 lakhs are proposed.

Woolen Carpet Cell, in Gujarat State Export Corporation.

4.5.5.65. With a view to explore export marketing possibilities of woolen carpets produced or to be produced in Gujarat State and to advise weaving centres/producing centres to develop and adopt new design and techniques for manufacturing carpets and also on quality control measures, it is proposed to set up a Woolen Carpet export cell in Gujarat State Export Corporation, and provide financial assistance to the Corporation in the form of loan. Total estimated expenditure on the scheme for the first three years will be about Rs. 46 lakhs. A provision of Rs. 46 lakhs for the Sixth Five Year Plan and Rs. 24 lakhs for the Annual Plan 1981-82 is therefore proposed for this purpose.

VILLAGE AND SMALL INDUSTRIES.

4.5.6. Small Scale Industries:

4.5.6.1. The programme covered in this group are shown below along with their outlays proposed for the Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

(Rs. in lakhs)

Sr. No.	Programme.	Outlays proposed for the	
		Sixth Plan 1980-85.	Annual Plan. 1981-82.
1	2	3	4

Small Industries::

1. Share capital contribution loan to GSFC.	250.00	..	
2. Gujarat Industrial Development Corporation (Market borrowing)	3600.00	700.00	
3. G. I. D. C. Margin Money.			
4. Sub-sidy to G. I. D. C. for Industrial areas and townships.	1.40	0.20	
5. Pilot Plant for testing facilities (GIDC).	25.00	6.00	
6. Critical infrastructure facilities for backward areas (GIDC).	95.00	25.00	
7. Workshop in Rural and Backward Areas (GIDC).	35.00	6.00	
8. Common Industrial Facility Centres (GIDC).	25.00	6.00	
9. Grant-in-aid for providing integrated training skills to Industries in GIDC areas Captive Training Centre).	110.00	20.00	
10. Loan to Gujarat Small Scale Industries Corporation for Hire Purchase Scheme.	125.00	25.00	
11. Contribution for marketing funds for G. S. I. C. to provide marketing assistance to SSI Units.	60.00	12.00	
12. Trade Centres.	67.60	20.00	
3. Diamand Industries Complex.	32.00	7.00	
4. Capital Subsidy and Growth Centres.	3000.00	500.00	

1	2	3	4
15. District Industries Centres.	140.00	35.00	
16. Rural Industries Project.	170.00	34.00	
17. Apprentice Training in Govt. Printing Presses.	22.00	3.50	
18. Package Assistance to small Scale Industries.	142.00	18.10	
Total:-	7900.00	1417.80	

Gujarat State Financial Corporation :-

4.5.6.2. GSFC 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 Cooperative 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 cost 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.

4.5.6.3. The Corporation also proposes to provide assistance to SC/ST entrepreneurs by granting term loan on concessional rates. As against the assistance of Rs. 0.5 crores granted during the last 3 years the Corporation proposes to set up the landing operation to these categories of borrowers to the extent of Rs. 1.40 crores during the Sixth Five Year Plan periods. Under the Mini Loan Schemes, the Corporation provides assistance upto Rs. 25,000/- to artisans, craftman and small borrowers. The Corporation has extended term loan assistance of Rs. 1.89 crores to 2458 units till 31-3-1980 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.

4.5.6.4. The assistance indicated above, is likely to generate employment opportunities to the extent of 1,53,333 persons. To fulfill the targets indicated above, during the Sixth Five Year Plan, the Corporation will have to mobilise resource either by borrowing from the open market or by availing refinance facilities available from IDBI. We

have projected that the Corporation will get by way of bond 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 31-3-1981. 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 of Rs. 6 crores during the Sixth Five Year Plan period. This sum of Rs. 6-crores will be contributed on matching basis by IDBI and the State Government. Contribution of State Government during the Sixth Five Year Plan period would be Rs. 3 crores at the rate of Rs. 1 crores per annum in the next 3 years of the Sixth Five Year Plan. However a provision of Rs.2.50 crores is therefore proposed 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.

4.5.6.5 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.

4.5.6.6. 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.

4.5.6.7. Industrial estates help develop small and intermediate and rural locations i.e. Vapi, Ankleshwar, Surnedrnagar, Kalol (Mahesana), Kalol (PM) etc. These industrial estates provide means of employment through units being set up there. It, therefore, prevents migration of workers from rural hinterland to metropolitan towns. Industrial estates also help develop small inter-mediate towns.

Multiplier economic impact of investment, production, employment in secondary sectors and trade, transport commerce in Tertiary sectors.

4.5.6.8 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

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.

4.5.6.9. 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 1980-81, 1981-82 and 1980-85 period.

4.5.6.10. The demand for GIDC's goods and services is constantly expanding. Following picture reveal position as on June 1980 of the pending demand.

Indicator	No. of applications.	Area/No.
Plots	3452	156.86 lakh sq.mts.
Sheds	2857	2857
Housing tenements	900 (approx).	3000

This demand represent 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. mt.
Sheds	4285	4285
Housing tenements.	1500	5000

4.5.6. 1 Demand for 1981-82 could be considered to be atleast same as in 1980-81 if not more. Over period of 1981-82 to 1982-85 the demand would increase particularly in view of favourable industrial climate. Govt. 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 DGTD 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 on demand of GIDC goods and services.

Indicator	1981-82	1982-83	1983-84	1984-85
Plots				
Area in (acres)	3100	3410	3800	4200
Buildings	4200	4620	5080	5500
Investment in (Rs. lakhs)	5000	5500	6050	6600

Impact on Gujarat economy.

4.5.6.12. If the GIDC can satisfy 1980-81 present demand and expected demand by March, 1981, following multiplier impact on Gujarat economy would be felt in next 2 to 3 years when these units will go into production.

Indicator	Impact	Remarks
Units being set up	6309	
Investment likely to be generated	Rs. 283 crores	Per firm investment according to GIDC economic survey is 4.50 lakhs.
Production	Rs. 650 ,,	Average per firm production is 11 lakhs according to GIDC economic survey
Employment	95000	Average per firm employment according to GIDC economic survey is 15.

4.5.6.13 At March, 1981 demand level the following impact will be generated:

Indicator	Impact	Remarks
Units being set up	9087	NIL
Investment	409	Average per firm investment is 4.5 lakhs according to GIDC economic survey.

1	2	3
Production	1000 Crores	Average per firm is 11 lakhs.
Employment	1,36,000	Average per firm employment according to GIDC economic survey is 15.

Decentralisation of industrial development.

4.5.6.14. The thrust towards development of backward areas began only in the year 1972 particularly after the Pande Committee Report and fiscal incentives declared by the Government of India. In line with this policy GIDC has been increasing its thrust in the backward areas. Thus in the past 3 years, the development expenditure in backward areas has been raised to about 35%. This is planned to be raised to 50% by 1983-84 and proportionate increase in the remaining years of the Sixth Plan. This is therefore, expected to reach a level of 55 to 60% by the last year of the Sixth Plan. Government policy is oriented towards the dispersal of industries to hinterland. However, the decentralisation of industries is a cascading process, which follows step by step process of de-urbanisation. It is felt that the first phase of de-urbanisation is now over and this is the time industries should move deeper into the rural areas away from cities and high-ways. As part of this exercise, GIDC has already completed a Growth Centre Study and has formulated its plans for selectively promoting rural locations for both small and large estates. Thus in 1979-80, the Corporation developed 16 mini-estates in small Taluka locations and this is being continued by developing a similar number of estates. In addition, most of the large estates are being planned for expansion of the existing estates. Even in the non-backward districts, the GIDC has stopped acquisition in the metropolitan cities of Ahmedabad, Vadodara and Surat. Instead, to cater to the growth needs of these towns it is developing small town locations like Sanand, Dholka, Dehgam near Ahmedabad, Sachin near Surat, Kashipura near Vadodara. Thus no future acquisition will take place in these 3 cities. The GIDC is also conscious of the necessity of development of infrastructure facilities in an integrated fashion in such a manner that the development plans in the other sectors are dovetailed effectively. Thus, as a part of this thrust of inter-sectional linkages, the GIDC has already taken steps to integrate the Damanganga command area development with its estate development plans. A similar exercise is planned to be undertaken in regard to the Narmada Project.

GIDC's plan outlay for 80-81, 81-82 and 80-85.

4.5.6.15 The GIDC's total Sixth Five Year Plan outlay for Development programmes is expected to be of the order of Rs. 480 crores. Against the GIDC's demand of Rs. 96 crores for the year 1980-81 only

Rs. 52 crores could be budgetted. The expected expenditure is likely to be of the order of Rs. 70.75 crores. The GIDC will try to generate funds from other sources. The demand for 1981-82, on account of partial spillover of the demands and the fresh demands likely to be generated, a higher allocation would be required. The demands for 1981-82, 1982-83, 1983-84 and 1984-85 would be of the order of about Rs. 80 crores, Rs. 90 crores, Rs. 95 crores and Rs. 116 crores. However an amount of Rs. 700 lakhs is proposed for the year 1981-82 and for the entire Sixth Five Year Plan period 1980-85 and amount of Rs. 3600 lakhs are proposed as State budgetary support.

4.5.6.16 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 the reform 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. Similarly, employment for about 4 to 4.5 lakh of people will be generated through the units which will be set up. Out of these expected 30,000 units, approximately 50% of the units will be in backward areas.

Other plan schemes.

4.5.6.17 In addition to regular development programmes being undertaken by the corporation, various schemes sponsored by Central and State Government which are complementary to the industrial development are also undertaken by the Corporation. Following plan schemes have already been undertaken:-

2. Critical infrastructure in rural and backward areas;
3. Pilot plant and testing laboratory,
4. Common Industrial Facility Centres,
5. Captive Training Centre (New).

Workshop in rural and backward areas :

4.5.6.18. Unemployment and shortage of skilled and semi skilled workers co-exists. Such shortages are particularly acute in backward areas and small town locations. Facilities available in the different technical training institutions are either not adequate or are not relevant to small scale industries. At the same time need for skilled and semi skilled workers do exist. To overcome such need and to provide a complementary facility of semi skilled and skilled labour in rural and backward location, workshops are set up. One such workshop at has already been set up as a part of the 1979-80 plan. The other workshop at Lunawada in Panchmahals District is in the process of being set up. It is proposed to provide a provision of Rs. 6 lakhs (inclusive of Rs. 1 lakh for

recurrent expenditure) for one workshop during 1981-82 and Rs. 35 lakh for 5 such workshops during the Sixth Plan period.

Instructure in rural and backward areas :

4.5.6.19. Certain infrastructure particularly 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 Bamanbor 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 which will be utilised for such critical infrastructure at Halol in backward district of Panchmahals and at Veraval. A provision of Rs. 25 lakhs is proposed for 1981-82. A total provision of Rs. 95 lakhs is proposed for under taking similar other schemes in different backward areas over the entire Sixth Plan period.

Pilot plant and testing facility :

4.5.6.20. 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. Waste pollution Control Act has also been enacted and the pollution Board has also been set up. The small scale unit before they can treat their effluents require facilities of testing characteristics of their effluent to identify effluent parameters. Therefore, pilot plants and testing facilities are required. One such facility is being set up in Ankleshwar which is a very large chemical complex. A provision of Rs. 6 lakhs is proposed for 1981-82 out of which 4.5 lakhs will be for capital expenses and Rs. 1.5 lakhs will be for recurring expenses. Over the Sixth Plan period, a provision of Rs. 25 lakhs is proposed inclusive of recurring expenditure.

Common Industrial Facilities

4.5.6.21. Often entrepreneurs particularly belonging to SSI sector cannot afford certain equipments and facilities which are costly but critical for the 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. For the year 1980-81, a provision of Rs. 4 lakhs has been made. A provision of 6 lakhs is proposed for the year 1981-82 and total provision of Rs. 2 lakhs, is proposed for the year 1980-85.

Captive Training Centre :

4.5.6.22. On account of the growing industrial needs, constant shortage of particular type of skilled labour relevant to particular groups of industries a

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 estate alone will be of the order of 5,000 to 8,000 for the next five years. It is, therefore, proposed that captive training centres to provide specific need based training be set up in the GIDC estate. A provision of Rs. 10 lakhs has been made in the year 1980-81. A provision of 20 lakhs is proposed for the year 1981-82 and a total provision of Rs. 110 lakhs is proposed for the entire Sixth Plan period of 1980-85 to enable the GIDC to set up 12 such centres inclusive of recurring expenditure.

Scheme for Hire purchase of Machinery.

4.5.6.23. 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. Not only does the scheme ensure availability of crucial machine tools, lathes and other machinery to the SSI sector, but also extends credit facilities on easy terms at concessional rates of interest. Consequently this scheme has proved to be one of the most popular activities of the Corporation and has been registering a steady growth over the past few years. 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. As a result, value of machinery supplied under the scheme has risen from Rs. 19.51 lakhs in 1978 to Rs. 37.49 lakhs in 1979. As against 33 units assisted in 1978, the number of units benefited by the Scheme increased to 47 in 1979. In 1979 an amount of Rs. 10 lakhs was disbursed in backward/tribal areas, entrepreneurs belonging to SC/ST and other backward classes. It may be mentioned here that the turn over for 1979 is the highest the Corporation has ever made in the history of its existence. During the current year, between January, 1980 to August, 1980, machinery worth Rs. 33.95 lakhs have already been delivered to 35 entrepreneurs of which machinery worth Rs. 10 lakhs were in the backward areas and to entrepreneurs belonging to SC/ST categories. The Hire purchase Scheme of the GSIC is an important promotional activity designed to assist the small entrepreneurs to acquire much needed machinery for their industrial units. Concessional facilities both in interest rates and earnest money deposits extended by the Corporation in the backward Districts/tribal areas of the State as well as SC/ST /Backward classes make this scheme an extremely important element in the conditions of the downtrodden masses of the State and ameliorating and ensuring that the benefit of industrialisation will reach the common man. The main features of this Schemes are as follows :—

4.5.6.24. There is a nominal service charge of 2% and earnest money deposit of 10% of the value if machinery does not exceed Rs. 25,000/- in each individual case and 20% if the value of the machinery exceeds Rs. 25,000/- in each individual case. The maximum limit for supplying machinery under this scheme has been increased from Rs. 2.5 lakhs to Rs. 5 lakhs. The balance amount is required to be repaid in 7 years in 13 equal half yearly instalments after a moratorium period of one year. Interest at the rate of per 4 percent per annum over the normal rate of interest is collected in case of default by the party. Third party guarantee is obtained if the value of the machinery exceeds Rs. 25,000/- in each individual case. The Corporation also gives facilities on special concessional terms for supply of machinery on hire purchase to small scale units situated in the backward areas. Under this scheme the earnest money deposit is restricted to 5% if the value of the machinery is upto Rs. 25,000/- and to 10% if the value of the machinery is more than 25,000 in each individual case upto a maximum of Rs. 5,00,000 in place of normal 10% and 20% respectively. The benefits under the Corporation's backward area development Hire purchase Scheme have also been extended to - (a) The State Tribal Areas for the development of tribal concentration ; and (b) the scheme in favour of scheduled caste communities.

4.5.6.25. With effect from 1st January, 1979 interest in developed areas is charged at 12% instead of 14% if the value of the machinery is more than Rs. 2 lakhs and 12 1/2% if the value of the machinery is more than Rs. 2 lakhs and 9 1/2% in backward areas against original rate of 13%. Reduction in interest become possible due to availability of funds from Government at a cheaper rate of interest. It is proposed to continue the scheme of giving machinery on hire purchase basis during the Sixth Five Year Plan 1980-85 with the terms and conditions in existence at present. It is proposed to provide machinery on hire purchase worth at least Rs. 300 lakhs during 1980-85 which means that turn over on the average will be Rs. 60 lakhs per annum during the Sixth Plan period. As it is proposed to provide this facility at prevailing concessional rate of interest, it would be possible for the Corporation to do so only if Government provides Rs. 125 lakhs by way of loan at an easy rate of interest out of the total outlay of Rs. 300 lakhs during the Sixth Plan. The remaining amount of Rs. 175 lakhs will be obtained by the Corporation from its own resources. In the year 1981-1982, it is tentatively proposed to fix a target between Rs. 60 lakhs to Rs. 75 lakhs for the Hire Purchase scheme as against Rs. 50 lakhs in 1980-81. A sum of Rs. 25 lakhs is therefore, proposed to be provided by way of long term loan for the Hire Purchased scheme for 1981-82 the balance amount of expenditure will be met from the internal resources of the Corporation.

Marketing Scheme.

4.5.6.26. 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 SST 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 marketing much of our efforts to promote industrial activity in the SSI sector would come to naught.

4.5.6.27. GSIC has taken up the marketing activity since the year 1965 with a small skeleton staff. The marketing activity was restricted to participation in tender purchases by various Government Departments. The general marketing activity of marketing the products of SSI units commenced in 1972. This activity was reorganised and revived during the latter half of 1977 and is in operation at present. The brief details of the two activities under which marketing assistance is rendered to SSI units of Gujarat State are as under :—

Tender marketing activity :

4.5.6.28. Identification of products being purchased by various Government Departments by inviting tenders is carried out. The Government Departments include GSRO Gujarat and Maharashtra States, DGS&D, Road Transport Corporation of Gujarat Maharashtra and Rajasthan, Western Railways, ONGC, GEB etc. The SSI units manufacturing quality products as identified above are registered with GSIC for participation in tender purchase programme. They are given assistance such as immediate payment of 90% of the value of the order non payment of tender fees, assistance in paying EMD and SD, technical guidance for manufacturing products as per specifications, assistance in inspection and testing of products with established and well equipped laboratory and test houses.

General Marketing Activity :

4.5.6.29 The SSI units manufacturing quality products for which orders can be procured through established distributors all over India are identified and orders for their products are procured from them. The SSI units are directly responsible for executing the orders thus received. Corporation assists the SSI units in procuring orders, assisting in collection of payments, publicising their products by participation in trade fairs etc. and gives technical guidance in improving their products and adopting manufacture of similar products for which there is good demand in the market. Till 1978, the above activities were being carried out with a small skeleton, staff but it was decided to expand this activity to meet effectively with the policy decisions of the State and Central Govern-

ments for rendering assistance to SSI units in marketing their products. Necessary arrangements for recruiting properly trained and qualified staff for boosting up the marketing activity were made during 1978-79 and the staff strength of the marketing Department was increased from 14 persons in 1978-79 to 24 persons in 1979-80.

4.5.6.30. The turn-over achieved under the tender marketing activity for the year 1978 was Rs. 5.9 lakhs and this had increased to Rs. 15.87 lakhs in 1979. These figures however, represent, a very small percentage of the tender purchases made by various Government departments, and there is a vast scope for further improvement of this activity. It has, therefore, been decided to reorganise tender purchase section by splitting it into different groups and each group would concentrate on dealing with the tender purchases from limited number of Government Departments. This will necessitate additional staff and it is expected that the staff strength will be increased.

4.5.6.31. Under the General marketing activity the achievement in the year 1978 was a turn over of Rs. 7 lakhs for marketing the products of 34 units which had increased to Rs. 12.03 lakhs in the year 1979 for marketing the products of 33 units. Under this activity also, the Corporation would like to achieve better results by identifying more units after carrying out market survey on products which have better demands in various parts of the country by awarding dealerships and authorisation of selling agencies. At present, the Department has only 4 field assistants for undertaking the sales tours all over the country, and therefore it is proposed to increase the staff strength to have a better distribution of products and also to handle specialised products by individual field representatives. The additional direct employment will be generated for meeting with the proposed scheme of the Sixth Five Year Plan including the total requirement of the marketing department both for tender marketing as well as general marketing activities.

4.5.6.32. As against an expenditure of Rs. 4.85 lakhs incurred by the Marketing Department for undertaking marketing activity in the SSI sector during the year 1979-80, the estimated expenditure for the year 1980-81 would be Rs. 12 lakhs. This is because GSIC is proposing to undertake a complete reorganisation of the Marketing Department with a view to strengthening it with adequate technical personnel. A new strategy for achieving a break through in the field of marketing is also on the anvil. This scheme involves setting up of Small Cells to deal with major purchasers, opening liaison with DG&SD, Government of India and the setting up of an office at New Delhi to ensure the marketing of SSI products from Gujarat. A substantial increase in experience would therefore be necessary to implement the new strategy to promote marketing. The additional ex-

penditure would no doubt generate a far higher turnover. It is believed that this expenditure would have direct impact on the ability of SSI units in the State to penetrate markets all over the country as well as to compete successfully in tenders floated by major Government and public sector undertakings. The Corporation is charging a very low service charge of approximately 3% on the value of goods. Thus the income generated from this predominantly promotional activity would not be sufficient to undertake a major scheme for increasing marketing. It is, therefore, proposed to provide an outlay of Rs. 60 lakhs for Sixth Five Year Plan and Rs. 12 lakhs for the year 1981-82.

Setting up of Trade Centre.

4.5.6.33. This is an important scheme originally sponsored by the Government of India. In the year 1972 the Government of India had proposed the setting up of 16 Trade Centres in the country for popularising and building up markets for the products manufactured by the SSI units. Gujarat had taken full advantage of the Scheme and had initiated action to set up the Trade Centre at Ahmedabad. On 12th January 1979 Government of India, Ministry of Industries, accorded its approval for the Trade Centre in Gujarat. GISC Ltd., was nominated as the executing agency and a new scheme was introduced in the year 1979-80 and continued in the year 1980-81. The expenditure relating to the Scheme was borne by the Government of India and the State Government in the ratio of 50:50 of the recurring and non-recurring expenditure during the year 1979-80 subject to a maximum limit of Rs. 2 lakhs from the Government of India. It was, however, stipulated that the expenditure on purchase of land, construction of building and expenditure on administrative and financial wings, were to be borne by the State Government entirely. In March 1979, the Government of India, released its share of Rs. 1.2 lakhs and the State Government sanctioned Rs. 0.40 lakhs as initial grant. Subsequently, the State Government sanctioned a sum of Rs. 5.19 lakhs for the Trade Centre for the year 1979-80 out of which the share of the Government of India was of the order of Rs. 2 lakhs. The Scheme now stands transferred to the State Government and therefore it is for the State Government to release adequate funds for this continuing scheme.

4.5.6.34. The Trade Centre is an important forum to bring together the various SSI units in the State and the major purchasers. It thus serves the parties by providing an important link between small producers and the big buyers. The objectives of the Trade Centre are enumerated below:—

1. Market development for the sale of the products of small units.

2. Exhibition of the products of the SSI Units.
3. Activities conducive to the promotion of market and sale of the products of SSI Units,
4. Creation of information and business cells.
5. Raising of sub-contracting agencies,
6. Assistance to be rendered for quality products and its standardisation,
7. Creation of library of technical magazines, periodicals guide books, giving details of trade regulations etc, and.
8. Products of SSI units are to compete with the products of large industries.

5.5.6.35. The trade Centres have already done excellent work in the field of marketing. It has already made an impact among the SSI units wishing to enlarge their markets. Within a short period of a little over one year, it has already registered 46 units. 35 units have put their products on display. The products of 73 units have been taken up for publicity by slides. Installation of Telex and a photo copying machine has ensured that the tender enquiries are promptly communicated to the interested parties to enable them to quote on competitive basis.

4.5.6.36. The infrastructure work of the scheme has been completed during the first year. The Trade Centre will undertake all the activities in a phased manner during the Sixth Five Year Plan period 1980-85. The total proposed outlay for the Sixth Five Year Plan 1980-85 is Rs. 67.60 lakhs, and a provision of Rs. 10 lakhs is proposed to meet recurring and non-recurring expenditure during the year 1980-81. Out of which an amount of Rs. 8 lakhs has been provided for construction of the building for the Trade Centre.

4.5.6.37. The Trade Centre is playing an important role in the industrial sector and making substantial progress in providing a link between the buyer and the small seller, having regard to further prospects of development of industries in the small scale sector. It is necessary to take a long term view of the development of Trade Centres. It is imperative to make improvement in providing various types of Supplementary services in the Trade Centres to give a boost to the products manufactured by SSI units in the State. The major thrust of the Trade Centre would be to display selected quality products, encourage products adaptation, to provide ancillaries to medium and large industries, maintain and disseminate information, organise buyer/seller meet on various products and large scale registration of SSI units to encourage participation in major Government purchase programme. During the very first year of operation, Trade Centre has accelerated the activity considerably.

Diamond Industries Complex.

4.5.3.38. The Diamond Cutting and Polishing Industry which has developed in Gujarat is highly labour intensive industry. 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 developed certain unhealthy features such as the unhygienic surroundings in which the workers have to operate, lack of adequate facilities for the welfare of the labour etc. The Diamond Industry is also basically an export oriented industry. The formation of the Hind Diamond Trading 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. To achieve this, it is decided to set up a Diamond Complex with the following facilities :—

a. A Diamond Training School where the training in the latest techniques of diamond cutting and polishing is imparted to selected 100 trainees from 1978. From 1st June, 1978 to 31st March 1979 263 trainees are trained.

b. Setting up a series of standard design sheds at minimum cost where the diamond polishing units can be set up. The design of the shed will be such that the workers can operate in a healthy atmosphere.

c. A Diamond Training Centre with close liaison with the Hind Diamond Trading Corporation and the Gujarat Export Corporation as well as the site holders of Diamond to take full advantage of the Air Cargo Complex set up at the proposed diamond complex will have to be located in the backward district adjoining Ahmedabad so that the employment opportunities are created in a backward and a rural area and at the same time the export potential of the air cargo complex at Ahmedabad is fully utilised.

4.5.6.39. The Government have already initiated various measures for encouragement of the diamond cutting and polishing industry in the State and the proposed Diamond Complex will be part of the multi-pronged approach of the Government to develop this industry covering the aspects of training of workers, creating infrastructure for the industry and providing the necessary incentive for the commercial activities to flourish. For the year 1980-81 it is likely to incur an expenditure to the tune of Rs. 10 lakhs. For the Sixth Plan Rs. 32 lakhs and for the year 1981-82 Rs. 7 lakhs are proposed for this scheme.

District Industries Centre.

4.5.6.40. 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 State. 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 districts 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.

4.5.6.41. The Central Government has given Rs. 5.00 lakhs per DIC as non recurring expenditure for the building, vehicles etc. As per the revised pattern, the Central Government contributes 50 percent of the recurring expenditure.

4.5.6.42. The Scheme 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.

4.5.6.43. A Monitoring Cell has been established at State Level to centralise and supervise the progress of the district industries centre and to help in smooth implementation of the programme.

4.5.6.44. For the year 1980-81, it is expected to incur an expenditure to the tune of Rs. 90 lakhs. The State has to bear 50% of this expenditure. For the Sixth Five Year Plan, Rs. 140 lakhs and for the year 1981-82, Rs. 35 lakhs are proposed for this scheme as State Share.

Capital Subsidy and Growth Centres

4.5.6.45. Hitherto, Industrial Development of Gujarat was mainly confined in 6 industrially forward cities of Ahmedabad, Vadodara, Rajkot, Surat, Bhavnagar and Jamnagar. Though the industrial development in the State has taken place significantly since formation of the State there was a tendency to locate new units in and around these 6 cities in spite of various encouragements offered by the Government for disposal of industries. It has been generally agreed that establishment of industries whether in public or private sector would be primarily guided by Techno-Economic considerations. Unless some concessions or additional incentives are offered to entrepreneurs, there will be a lack of enthusiasm on the part of entrepreneurs to locate industries in industrially backward regions. As a result of various

deliberations at different levels, Government of India decided to offer a package of incentives in the form of cash subsidy, transport, subsidy, income tax rebate and soft loans etc. Sometime in 1968 Government of India set up a Committee known as Pande Committee for indentifying backward areas in the Country. This committee after careful consideration identified backward areas in various States based upon certain economic indicators of the development. Accordingly, 10 districts of Gujarat were identified as industrially backward for the purpose of liberal incentive to be offered to the entrepreneurs for setting up a new industry. Subsequently Government of India set up Wanchhoo Committee for going through various incentives which can be considered for development of industrially backward areas. One of the recommendations of the Wanchhoo Committee was to offer capital subsidy to entrepreneurs for setting up their units in identified backward areas. Accordingly, Government of India introduced a scheme of Central Cash Subsidy with effect from 1st October, 1970. The benefit of the scheme was available only in 3 districts of Gujarat viz., Panchmahals (from 1st October, 1970) Bharuch (from 26th August, 1971) and Surendranagar (from 26th August, 1971).

4.5.6.46. The question of extending such benefit to the remaining industrially backward areas of the State was under consideration with the State Government. After detailed deliberations the State Government introduced a scheme of State Cash Subsidy Scheme. This scheme was introduced with effect from 1st November, 1977. The State Government also introduced a concept of growth centre alongwith the new scheme since the Government felt that the infrastructure facilities available at a particular location are of primary importance for the industrialist to take decision, for setting up an industrial venture. Concept of growth centre has been based upon various indicators covering factors like availability of railways, road water etc. There are 16 criteria on the basis of which the decision is taken to decide whether a particular place is to be recognised as a growth centre. The idea behind such concept is to achieve industrialisation of various areas at comparatively rapid pace since otherwise it would not take place if incentives are offered on general basis in all areas in the State. This will also regulate the development of industries in the planned manner and restrict mushroom and haphazard growth of industries in the State. Since inception of the scheme, 5527 units were registered up to 31st March 1980. Out of these units 2647 units were sanctioned subsidy of Rs. 1040.42 lakhs and were disbursed an amount of Rs. 681.03 lakhs. The total investment in fixed assets is of the order of Rs. 81.49 crores. These units together have created employment for 1,00,000.

4.5.6.47 The response received from entrepreneurs to set up industrial units in locations of growth centres can be seen from the fact that out of 5527 industrial units registered under the scheme as large as 4056 i. e. nearly 73 per cent are regis-

tered in the various centres. The distribution of units registered in the growth centres under the State Cash Subsidy Scheme is as under.

District	No. of Growth Centres.	No. of units registered.
Bharuch	9	99
Panchmahals	8	222
Surendranagar	6	705
Centrally Backward Districts	23	1026
Kachchh-Bhuj	6	108
Amreli	5	40
Junagadh	12	347
Banaskantha	3	80
Bhavnagar	11	122
Sabarkantha	5	83
Mehsana	8	195
State Backward Districts.	50	975
Rajkot	7	818*Units affected in Morvi floods are considered as new Units
Jamnagar	2	3
Ahmedabad	5	103
Gandhinagar	1	—
Kheda	9	100
Vadodara	6	8
Surat	5	40
Valsad	8	983** Registration is high in Vapi and Umargaon.
Other areas	43	2055
State Total	116	4056

4.5.6.48 An outlay of Rs. 3000 lakhs for the Sixth Five Year Plan 1980-85 and Rs. 500 lakhs for Annual Plan 1981-82 is proposed towards Subsidy under the Scheme.

Intensive Development of Small Industries in Rural Areas.

4.5.6.49 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 Centre in the entire state except the towns and villages having population of 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 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 scheme including publicity exhibition research and departmentally run pilot technological experimental scheme and subsidy on power.

4.5.6.50 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 year 1980-81 a provision of Rs. 31.50 lakhs is made in plan as a state share. The Central Government will give assistance on the matching basis.

4.5.6.51 For the Sixth Five Year Plan 1980-85 the total outlay of Rs. 340 lakhs is proposed of which State share will consist of Rs. 170 lakhs for the programme and 21000 entrepreneurs will be assisted.

Apprentice Training in Government Printing Presses

4.5.6.52 Under the Apprentice Act, 1961, the Government presses have to train apprentices in the ratio of 1.7 worker. The above apprentice scheme has been introduced from 1st September, 1967. The duration of training is three years and the apprentices are paid stipend of Rs. 130, Rs. 140 and Rs. 150 for the first, second and third year respectively. The object of the scheme is to overcome the acute shortage of trained craftsman in printing trade.

The number of apprentices trained is shown below :—

Year	No. of posts sanctioned	No. of apprentices trained
1976-77	234	217
1977-78	234	211
1978-79	212	211
1979-80	212	193
1980-81	212	192 (under training)

4.5.6.53 A provision of Rs. 4.5 lakhs for the year 1980-81 is made and about 192 apprentices are likely to be trained. For the Sixth Five Year Plan 1980-81 to 1984-85, an outlay of Rs. 22.00 lakhs is proposed under which it is targeted to impart training to about 1000 apprentices.

Package Assistance to SSI Units

4.5.6.54 Up till now subsidy was granted under the provision of Gujarat State Subsidy to Electric Power Consumption (Cottage and Small Industries) Rules, 1965 to industrial units which have total connected Electrical load not exceeding 30 H.P. only for electromotive power and not on lighting. Government has further liberalised the policy and new power subsidy can be given to units having any number of H.P. connected load excluding some big cities. The idea behind giving this subsidy is to enable the small scale industrial units to stand in competition in the market. The quantum of subsidy given per unit depends upon the place of establishment of the unit and the period between 5 to 10 years graded on population basis.

4.5.6.55 The absence of quality consciousness has adversely affected the sales of SSI Units. A scheme of quality marking of products of selected SSI has been introduced and recently products are covered under the scheme which is implemented through the Industrial Chemical Laboratory, Vadodara and in respect of diesel engines by the photo type-cum-training centre, Rajkot. The sale of quality marking products has increased to Rs. 130.32 lakhs in 1978-79 and more than Rs. 1.25 crores in 1979-80.

4.5.6.56 In order to make industrialists quality conscious a scheme of subsidy for purchase of testing equipment as well as subsidy on cost of testing charges is in vogue. The grant of such subsidy is regulated under the provisions of Gujarat State Aid to Industries (Purchase of Testing equipment for establishment of Testing House or hut laboratories) Rules, 1971 and Gujarat State Aid to

industries (Testing of Products of small scale Industries) Rules 1971. Establishment of Testing House is also encouraged by giving financial assistance. Under the said rules the quantum of assistance in case of testing of product is at the rates of 50 per cent of charges subject to a maximum of Rs. 100 per annum per unit. The quantum of assistance for establishing a Test House is 12 1/2 per cent of capital cost subject to a ceiling of Rs. 25,000. In 1977-78 Rs. 0.95 lakhs were paid as subsidy to 75 units and in 1978-79, Rs. 4.23 lakhs were paid to 211 units. The scheme is administered through the G.E.'s of DIC's.

4.5.6.57 During the year 1979-80 an expenditure of Rs. 29.04 lakhs was incurred and during the year 1980-81 an expenditure of Rs. 21 lakhs is likely to be incurred.

4.5.6.58 In Sixth Five Year Plan a provision of Rs. 142 lakhs and Rs. 18 lakhs for Annual Plan 1981-82 is proposed to give subsidy in various form under package scheme of SSI Units.

4.5.7. Village and cottage Industries

4.5.7.1. The programmes covered under this group are shown below along with the details of the outlays proposed for the Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

		(Rs. in lakhs)	
Sr. No.	Programme	Outlays proposed for the	
		Sixth Plan 1980-85	Annual Plan 1981-82
1	2	3	4
	Direction and Supervision	25.00	5.00
	Handloom Industry		
	(a) Handloom Industry ..	325.00	55.00
	(b) Intensive Development of Handloom Industry	160.00	50.00
	(c) Gujarat Handloom Development Corporation ..	20.00	5.00
	Handicraft Industry		
	(a) Handicraft Industry ..	39.00	7.00
	(b) Gujarat Handicraft Development Corporation ..	20.00	1.00
	(c) Carpet Weaving Centre	50.00	6.00

1	2	3	4
4.	Cooperative Industry		
	(a) Cooperative Spinning Mills ..	40.00	10.00
	(b) Financial assistance to Industrial Cooperatives	100.00	20.00
	(c) Powerloom cooperative Industry ..	10.00	2.00
5.	Gujarat State Khadi and Village Industries Board	1700.00	260.00
6.	Other Programmes		
	(a) Training of Industrial artisans ..	350.00	60.00
	(b) Financial assistance to individual artisans ..	240.00	50.00
	(c) Gujarat Marketing corporation for village and cottage industries (GRIMCO) ..	40.00	10.00
	(d) Establishment of village flying centres and village tanneries ..	125.00	20.00
	(e) Rural Production Centres	60.00	15.00
	(f) Rural Technology Institute ..	40.00	10.00
	(g) Tribal Development Corporation ..	6.00	..
	(h) Mini Industrial Estate in Rural Areas ..	50.00	10.00
	Total	3400.00	596.00

4.5.7.2. Cottage Industry is an industry having fixed capital investment upto Rs. 25,000 and not covered by Factory Act. Cottage Industries could be classified either as traditional and modern or as production based or service oriented. Traditionally, in rural economy 25 to 30% population depend on non-agricultural activities. Rural Artisans constitute integral part of the rural society and fulfill basic needs of goods and services to rural society. Most of the activities are low-cost oriented and hereditary. Our country is having a very large pool of skills, and the emphasis of the Sixth Plan is going to be put on development and optimum utilisation of human resources. It is natural that rural artisans be given due importance. The Cottage Industries

are also eminently suitable to achieve major objectives of the Sixth Plan viz. generation of productive employment in non-agricultural sector and dispersal of industrial activities in rural and backward areas. Since the Cottage Industries create more opportunities with the limited capital investments, it could be considered as appropriate sector for development under the Sixth Plan. However, there are certain difficulties in rapid growth of cottage industries which are as under :—

(i) The sector is unorganised and without proper linkages

(ii) Though the State have a large number of skilled persons they have to extend proper organisational support to optimise the use of such skill.

(iii) The tools, equipments and technic adopted are outdated and artisan by himself is unable to replace and/or modify them.

(iv) The Sector is heavily dependent mostly on middleman for raw materials, credit and market. There has been only negligible flow of the institutional finance in this sector.

4.5.7.3. It was estimated that 3.6 lakh families in Gujarat are engaged in house-hold industries as per 1971 census. At present about 5 lakh families are engaged in house-hold industrial activities. The estimated number of families of artisans engaged in major categories are shown below :—

Sr. No.	Activity	Approximate No. of Artisans
1	2	3
1.	Khadi Production	40,000
2.	Handloom Weavers	16,000
3.	Tailors	18,000
4.	Leather Workers, Flyers, Tanners, Cobblers	15,000
5.	Carpenters and Wood Carvers	10,000
6.	Black Smith Traditional	6,000
7.	Pooterns and Brick Workers	15,000
8.	Bamboo Workers	40,000
9.	Masonary	12,000
10.	Bidi Patar, etc.	10,000
11.	Other traditional occupations including Handicrafts	35,000

1	2	3
12.	Diamond	1,80,000
13.	Engineering Trades (self Employed) wireman, turner, fitter, welder, repairs	23,000
14.	Soap, Cosmetic, Chemical, Plastic, Brass etc.	6,000
15.	Trnscrip vehicle repairs	8,000
16.	Bakery, pickles, papad and Masala	9,000
17.	Watch Radio and Equipment repairs	4,500
18.	Printing Composition, Binding Commercial Painting etc.	5,500
19.	Neera, Khandasari Gur and Processing of Agricultural products	33,000
20.	Miscellaneous	14,000
Total..		5,02,000

4.5.7.4. It is proposed to provide total outlay of Rs. 34000 lakhs during the Sixth Five Year Plan 1980-85 for the development of Cottage Industries and Khadi and village industries. A large number of rural poor families derive their livelihood from traditional Cottage Industries. The occupational groups in scheduled castes and scheduled tribes are also engaged in various cottage industries such as Handloom, Leather, Bamboo work and Ceramics, including brick making. Development of Cottage Industries will ensure additional employment opportunities and income to the rural artisans, bulk of whom belong to weaker sections of society.

Direction and Administration

4.5.7.5. The Directorate of Cottage Industries has been formed as Head of Department in 1973. Gujarat has provided separate agency for looking after different activities such as Khadi and Village Industries, Handloom and Handicrafts, Training and Financial Assistance to rural artisans and technic and marketing guidance to the rural artisans. Director of Cottage Industries is also ex-officio additional Registrar for Cooperatives and he is looking after all the Industrial Cooperatives in the State. The Directorate of Cottage Industries will have to execute many new plan schemes, as well as supervise the work of various organisations set up specifically for rendering services to the rural artisans. The Directorate of Cottage Industries needs technically qualified

persons whose services could be utilised for solving various problems of this sector. Director of Cottage Industries needs specialists in Handloom, Leather Ceramics and Coir, Institutional finance, marketing and cooperatives, to ensure proper implementation of of the programmes proposed under the Sixth Plan.

The outlay of Rs. 25.00 lakhs for the Sixth Plan and Rs. 5 lakhs for the Annual Plan 1981-82 has been proposed for Directorate for strengthening the organisation.

Handloom Sector

4.5.7.6. Once upon a time 80,000 handlooms were active in Gujarat State but on account of proximity of modern textile industry organised in the State the handlooms have suffered heavily. There has been steady decline in the number of handlooms as shown below :—

Year	No. of looms in State
1950	80,000
1963	40,000
1973	36,000
1976	25,000 out of which 21,000 are active.

4.5.7.7. 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 earnings are made available. The Development of Handlooms will be in cooperative sector through primary, central and apex, cooperative societies of weavers and through Gujarat State Handloom Development Corporation. It is planned to train non-hereditary group of persons and to provide unemployed youths with skilled and to introduce manmade fibre of handlooms.

4.5.7.8. It would be necessary to strengthen the training facilities both for basic training as well as specialised in train in design training of new fabrics. The Handlooms will also be required to be modernised by adding new accessories and replacing out-dated parts. It would also be necessary to provide supporting services for pre-weaving and post-weaving process. Financial assistance in form of share capital, interest and managerial subsidy and margin money would be required for both the Handloom Development Corporation and Co-operatives. Government

has to make special provision for marketing incentives in the form of subsidy for development of net work and rebate on sales. It is expected that an outlay of Rs. 505 lakhs proposed for the Sixth Plan would cover 4800 looms under New Intensive Programme and 500 looms in Cooperative Sector. Total cloth to be produced in the sector would be 800 lakhs sq. metres, valued at Rs. 4,000 lakhs during Sixth Five Year Plan.

Housing and Work-shed Programme

4.5.7.9. Large number of weavers who live in old congested huts/houses will need better housing not only as social infrastructure but as a necessary condition conducive to better production. This need will be sought to be satisfied through the programme of Mini Industrial Estates Scheme.

Handicraft Industry

4.5.7.10. Gujarat has a rich heritage in arts and crafts, an 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 Gujarat 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. 39 lakhs for the Sixth Plan and Rs. 7 lakhs for the Annual Plan 1981-82 is proposed to benefit the artisans engaged in various crafts.

4.5.7.11. The details of the major handicraft products and centres are given below :—

List of crafts and centres.

1. Embroidary

Banni
Dhaneti
Khavda
Lilpur
Pathal
Adipur
Anjar
Radhanpur
Phabbar
Surendranagar

2. Bead Work

Rajkot
Jamnagar
Morvi
Surendranagar

3. *Weaving*

Bhujlodi
Adchi
Chaya Porbandar
Surendranagar
Cambay
Rudral
Patan
Mandvi

4. *Printing*

Ahmedabad
Deesa
Prantij
Anjar
Mandvi
Bhuj
Khavda
Khamadka

5. *Bandhani*

Bhuj
Jamnagar
Mandvi
Porbandar

6. *Leather Work*

Radhanpur
Bhabhar
Anjar
Ahmedabad

7. *Inlay Work*

Surat

8. *Wood carving*

Patan
Barejadi
Ahmedabad

9. *papier Machie*

Rajkot

10. *Namda*

Gagodar
Adchi

11 *Clay Work*

Poshina
Bhuj
Godhra
Dediapada
Sagbara
Mandvi

12. *Sankheda*

Sankheda

13. *Jewellery*

Bhuj
Ahmedabad
Patan
Rajkot

14. *Agate*

Cambay

15. *Sujani*

Bharuch

Gujarat Handicrafts Development Corporation

4.5.7.12. Gujarat State Handicrafts 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 network 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, Shahmalaji and Saputara to exhibit rare collections of handicrafts. It has also to popularise improved specimen of various handicrafts. It also sets up production Centres, introduces 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 Handicraft Development Corporation, to enable it to undertake its activities.

4.5.7.13. The Corporation would be able to market handicraft goods worth Rs. 200 lakhs during the Sixth Plan and hence, share capital of Rs. 15 lakhs and loans of Rs. 5 lakhs has been proposed for Gujarat State Handicrafts and Handloom Development Corporation Limited. In Annual Plan 1981-82 a provision of Rs. 1.00 lakh is proposed in the form of Share Capital.

Carpet Weaving Centres

4.5.7.14. During the last Five Year Plan it was a centrally sponsored scheme which is now transferred to the State Sector. Carpet weaving is a new activity which requires the skill formation at a comparatively young age. Gujarat Handicraft Development Corporation with the help of voluntary agencies has trained 200 new artisans in this art. A few private firms have also set up their production units in Gujarat. The crucial need for development of Carpet Industry in Gujarat is the need for skill formation. The scheme envisages to train 50 carpet weavers per centre per year at an estimated cost of Rs. 200 lakhs which will include the initial cost of looms and accessories, training cost and stipends. 25 such centres are planned during the Sixth Five Year Plan. This programme will encourage setting up of new Carpet production units in the State as well as provide opportunities to the members of Scheduled Castes, Scheduled Tribes and other weaker sections to acquire skill, which can lead them to earn better wages. Development of Carpet Industry would also encourage consumption of local wool and its processing. In order to take up the programme, a provision of Rs. 50 lakhs for Sixth Five Year Plan 1980-85 and Rs. 6 lakhs for the Annual Plan 1981-82 has been proposed.

Cooperative Spinning Mills

4.5.7.15. Government of Gujarat has earlier participated in share capital of 5 cooperative spinning mills. After their teething troubles, these units have now become profitable giving benefit to cotton-growers and weavers. The Cooperative Spinning Mill at Limbdi on account of poor equity base and heavy debt burden and mismanagement had become a sick unit. The State Government have taken over the unit which employs 800 persons mainly from Scheduled castes. The State Government is to contribute equity to correct debt-equity ratio. It is proposed to contribute 20.00 lakhs to the Limbdi Mill's equity and ensure that unit becomes normal and runs at profit at the end of the Sixth Plan. It has already reduced the loss by earning a net profit of Rs. 70 lakhs during last 2 years.

4.5.7.16. In addition to the above, State Government desires to encourage establishment of new Cooperative Spinning Mills for wool. Out of 20 lakh-kg. of wool only 10% is spun in Gujarat. This has encouraged traders to exploit wool producers. Two Cooperative units have already prepared project-reports and placed orders for machineries, obtained land etc. to process wool into yarn.

4.5.7.17. In order to carry out these activities a provision of Rs. 40.00 lakhs is proposed in the Sixth Five Year Plan 1980-81. The outlay proposed for Annual Plan 1981-82 is Rs. 10 lakhs.

Financial Assistance to other Industrial Cooperative Societies.

4.5.7.18. There are 1418 Cooperative Societies in the State and 365 societies are under liquidation on account of non-viability. The Industrial Cooperatives cover 90,000 members. The societies for Handloom (191) Khadi (12) Gramodhyog (49) Handicraft (155) would be covered under sectoral schemes but the remaining societies are to be covered under the Package Assistance scheme. It will provide for the following assistance :—

- (1) Share-Capital Participation to Societies.
- (2) Share capital loan to weak members,
- (3) Managerial subsidy,
- (4) Infra-structure subsidy on acquisition of new capital, tools, equipments,
- (5) Interest subsidy on working capital,
- (6) Work-shed cum-storage godown subsidy against bank-loan, and
- (7) Reserve fund loan/subsidy for revival of available dormant society.

4.5.7.19. The package scheme emphasises project finance in a package to ensure that poor performance on account of high debt-ratio, mis-management, sub-optimal finance, heavy interest debt, shortage of raw-materials or difficulty in storage or marketing do not occur. A project report is a pre-condition and it is examined by a term of D.I.C. official before recommending the same to the bank. The amount of assistance per society is limited to Rs. 1.00 lakh and it is estimated that 400 societies will be covered under the scheme benefitting 20,000 members out of which 5,000 will be from S.T. and 4,000 from S.C. categories. The total outlay proposed for 1980-85 period for the scheme is Rs. 100 lakhs of which Rs. 25.00 lakhs are earmarked for S.T. and Rs. 20 lakhs for S.C. beneficiaries. Similarly an outlay of Rs. 20 lakhs is proposed for 1981-82.

Powerloom Industry :

4.5.7.20. 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 powerlooms are active. Eight powerloom society are defunct having 253 idle power-looms. It is proposed to activate the power-loom by revitalising the existing societies or by transfer of looms to new societies.

4.5.7.21. The Capital invested in these powerloom has become idle investment and needs to be activated for productive purpose. The idle powerlooms when activated will provide employment to 253 persons and produce 60,72,000 meters of cloth per year.

Details of the Schemes :

4.5.7.22. The members of the powerloom societies are given Rs. 3,000/- as loan per powerloom. Government share contribution of Rs. 1000/- per powerloom is given to the society to raise working capital. Financial assistance of Rs. 1500 per powerloom is given to the society to construct shed. It is proposed to raise the limit of loan per powerloom to meet increased cost and financial assistance towards construction of sheds. It is also proposed to give management subsidy to the new or revitalised society to the extent of Rs. 7200/- for 3 years to engage one good technician and one efficient Secretary/Manager to run the society.

4.5.7.23. Physical targets and outlays under the scheme during Sixth Five Year Plan are as under:—

Year	No. of Powerlooms to be activated.	Outlays of the scheme (Rs. in lakhs)
1980-81	50	2.00
1981-82	50	2.00
1982-83	50	3.00
1983-84	50	4.00
1984-85	53	4.00

4.5.7.24. The scheme will benefit the people belonging to scheduled Castes and other backward communities as 50% of powerlooms are reserved for such categories only.

4.5.7.25. If the ban on new powerloom is removed, there is a great scope to enlist more cooperative in this field and provide means of livelihood to unemployed and poor persons in this industry. Under this programme, it is targeted to spend Rs. 15.00 lakhs during the Sixth Five Year Plan 1980-8.5. However, a provision of Rs. 10.00 lakhs is proposed and for the Annual Plan 1981-82, a provision of Rs. 2.00 lakhs is proposed.

Training of Artisans :

4.5.7.26. Gujarat is now second in Industrial Development in the country. The demand for skilled workers is rising very rapidly. The following facilities for skill formation are given:—

1	Apprentice scheme.	12,000	persons.
2	I. T. I. and Mini I. T. I.	11,000	„

3	Non I. T. I. level course under Directorate Cottage Industries.	3,500	„
4	Vocational and technical of educational stream.	6,000	„
Total		32,500	

4.5.7.27. The private training facilities and TRYSEM will impart skills to 15,000 persons. However, with establishment of untrained big and medium scale industries and 4,000 SSI units in the State the demand for skilled and semi-skilled workers would not be less than 50,000 per year. Since the training institutions have spill over recurring liability it will not be possible to obtain funds from IRD and TRYSEM. The capacity for institutional training which is now limited to 3500 is to be increased to 7155 trainees per year for the institutions under this Directorate.

7.5.7.28. An outlay of Rs. 350 lakhs has been provided during the Sixth Five Year Plan period to continue the expansion of existing institutions. For tribal sub-plan areas. Rs. 245 lakhs have been provided under this programme.

4.5.7.29. The 85% of trainees from these institutions have found placement. It also helps many of them to start small ventures with the help of scheme for financial assistance to artisans from Banks. (Bankable Scheme). They are also encouraged to join various industrial cooperatives in the talukas. The outlay proposed here is in addition to other training schemes. Government has also considered to consolidate all training work under one functionary to make best use of existing facilities.

Financial Assistance to Industrial Artisans :

4.5.7.30. 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 Co-operative Banks and recognised financial institutions to the extent of Rs. 25,000/- at a rate of interest not exceeding 12 per cent. 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 Corporation 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.	6%
2	Loans to artisans from Scheduled Castes and other backward classes.	5%
3	Loans to other artisans.	4%

4.5.7.31. The benefit of the differential rate of interest (*i. e.* rate of W.P.G.) 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 others.	Loans to others.
1. Upto Rs. 5000	50PC	40PC	30PC
2. 5000 to 10000	50PC	35PC	25PC
3. 10000 to 25000	40PC	30PC	20PC

4.5.7.32 During the year 1979-80 an expenditure of Rs. 53 lakhs was incurred benefitting 9453 artisan loanees. An outlay of Rs. 240 lakhs has been proposed for the Sixth Plan 1980-85 to benefit 70,000 artisans and self employed persons. For the Annual Plan 1981-82 an outlay of Rs. 50 lakhs has been proposed. 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 20,000 each and efforts will be made to cover as many persons of weaker section as possible under the scheme.

Khadi and Village Industries.

4.5.7.33. 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.

Development of Khadi.

4.5.7.34. New Model Ambar Charkhas with 6 spindles can provide full employment. Till 1979-80 33,000 Ambar Charkhas are made available. Providing of Ambar Charkhas need be coupled with supply of quality slyvers (poooni). 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 gives Charkhas only on loan and the beneficiaries being too poor are not able to afford it. State Board's scheme of 'Hight 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 25NM 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 1200 lakhs at the end of the Sixth Plan period.

Village Industries.

4.5.7.35. Village pottery, tanning, oil ghani, rice milling etc. are village industries. KVIC generally, provides loan and subsidy. KVIC scheme have 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. State Khadi Board has also to make provision for some welfare schemes for their employees who are in service on the same terms and conditions generally obtained in Government. Out of total provision of Rs. 1700 lakhs, the amount provided for tribal area sub plan is Rs. 568 lakhs while the Special Component amount would be Rs. 260.00 lakhs. In Annual Plan 1981-82, a provision of Rs. 260.00 lakhs is proposed under these programmes.

Reestablishment of Village Flaying Centres And Village Tanneries.

4.5.7.36. An outlay of Rs. 125 lakhs is separately proposed for Leather sector in the State Plan because 100% of beneficiaries in the sector belong to scheduled castes and the State Governments are called upon to develop occupational groups among S.C. population.

4.5.7.37. The Cattle population of the State is 1.45 crore as per 1971 figures and now it will be around 1.80 crores. There are 3 lakh leather workers in the state mainly in flaying (0.50 lakh), Tanning (1.00 lakh) and cobblers (1.5 lakh.) The strategy to develop this sector envisages provision of training of flayers and Tanners to up-grade techniques and tools: 10,000 leather workers are to be trained in flaying and processing. The outlay on training is Rs. 25 lakhs during the new plan.

4.5.7.38. Gujarat Leather Co. promoted by GIIC had carried out survey and indicated 200 potential location for intensive development of decentralised leather industry. It has estimated that in addition to training, it will have to provide all infrastructure facilities like construction of tanneries, flaying centre, 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 section which has not derived direct or indirect benefit of the development.

4.5.7.39. It is therefore, proposed to implement the scheme of development in an integrated way through Director of Cottage Industries and Gujarat Leather Co. 5 centres are under integrated development since 1979-80. The leather workers are also encouraged to form viable cooperatives whenever common production work and marketing would call for joint efforts. The plan intends to provide benefits of added value and productivity to 20,000 leather workers. To carry out these various activities, a total provision of Rs. 125 lakhs is proposed in Sixth Five Year Plan 1980-85. In the Annual Plan 1981-82, a provision of Rs. 20.00 lakhs is proposed.

Gujarat Rural Industries Marketing Corporation.

4.5.7.40. Cottage Industries by their very nature are dispersed over a large number of centres and cover a variety of activities. The coverage of artisans by Khadi and Village Industries Institutions, Corporations for Handlooms and Handicrafts and Industrial Co-operatives would be around 2 lakhs, out of 5.60 lakh artisans in Gujarat. 1.80 lakh artisans engaged in Diamond Industry are in high wage employment. However, 1.80 lakh artisans are not provided with services and linkages. They need to be covered by State Level Organisations which could provide a package of services for raw material, marketing network and definite production programme to the artisans. Gujarat Rural Industries Marketing Corporation has been set-up with a view to filling up the existing lacuna

in solving problems of the un-organised and scattered units of Cottage Industries.

4.5.7.41. During the Sixth Plan GRIMCO intends to cover about 4500 artisans and provide them full-time or supplementary employment as they may require. GRIMCO will establish 50 rural Industrial Production-cum-Service Centres and bring about a total production of goods worth Rs. 200 lakhs per annum. GRIMCO will therefore, need share-capital contribution from the Government in order to raise working capital finance from the commercial banks. The outlay proposed for GRIMCO towards share capital plan is Rs. 40.00 lakhs. for the Five Year Plan 1980-85.

Rural Production-cum-Service Centres.

4.5.7.42. GRIMCO is entrusted with a task to identify groups of artisans and provide them with full time or supplementary employment and also offer them all the necessary services. It proposes to work on the same model as Rural Marketing Centres proposed by Government of India for each Block through all India Handicraft Board. The State Government in order to intensify the programme of employment oriented nature has decided to establish 50 such centres and to cover 4500 artisans. GRIMCO will be subsidised at the rate of Rs. 600/- per artisan per annum. It will guarantee employment and reasonable level of income. GRIMCO will use this centre as a linkage between a rural artisan on one hand and raw material procurement and market outlet on the other. It will be able to have optimum utilisation of the capacity and skills.

4.5.7.43. The outlay proposed for Sixth Five Year Plan 1980-85 (after which GRIMCO will ensure self-efficiency and viability of each and every centre) is Rs. 60 lakhs. GRIMCO has already established 19 such centres and extended service to artisans. GRIMCO will cover artisans engaged in footward tanning bamboo garments and ceramic industries including brick-making. It will provide assured supply of bricks, leather goods, bamboo articles, and garments, to the market at reasonable price and also ensure full benefit of added value for the artisans. In Annual Plan 1981-82, a provision of Rs. 15.00 lakhs is proposed.

Rural Technology Institute Gandhinagar.

4.5.7.44. 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.

4.5.7.45. Government of Gujarat therefore, has set-up a Rural Technology Institute, Intermediate Technology Development Group London. It has been engaged as consultant. The Institute

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 artisan'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, black-smiths, leather workers and bamboo workers. The institute therefore, proposes to motivate and induce artisans to adopt scientific technology and provide improved tools and equipment of their operations.

4.5.7.46 Categories of artisans proposed to be covered during the Sixth Plan period and yearwise break-up of which is as under :—

Class of artisans	1980-81	1981-82	1982-83	1983-84	1984-85	Total
1 Potters of Brick layers	300	400	500	600	600	2400
2 Carpenters	300	400	450	500	600	2250
3 Blacksmiths	200	250	300	350	400	1500
4 Leather workers	200	300	350	400	500	1750
5 Bamboo workers and others	300	300	300	300	300	1500
Total	1300	1650	1900	2150	2400	9400

4.5.7.47. A total provision for the plan period 1980-85 is Rs. 40.00 lakhs as grant in aid to the institute which may also be aided by other organisations especially the small houses and their foundations for rural development. In Annual Plan 1981-82 a provision of Rs. 10.00 lakhs is proposed.

Gujarat Tribal Development Corporation :

4.5.7.47. Industrial Cooperative Societies in tribal areas are assisted through Gujarat Tribal Development Corporation. The societies are assisted in the form of share capital contribution, reserve fund, management grant etc. The Corporation has organised 35 taluka level service cooperative societies to help the artisans to develop in the cooperative field. It is proposed to provide an outlay of Rs. 6.00 lakhs for the Sixth Five Year Plan. It is proposed to organise 15 societies in the pocket areas of tribal blocks during the year 1980-81. The new pattern of package scheme for industrial Co-operatives is proposed to be introduced during the Sixth Plan and financial assistance of working capital, infrastructure subsidy etc. is proposed to be granted through Government, so that investment made by the Corporation is properly utilised for achieving the objective of service to artisans.

Mini Industrial Estates :

4.5.7.49. 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 Cooperatives. But artisans who are generally individualistic prefer to have direct support and to have independent space for his 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 provision 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 site. They may also be organised in service cooperatives or as Rural Marketing Centres. Voluntary agencies and Industrial Houses have also shown their willing ness to undertake the workshed 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.

4.5.7.50. During Sixth Five Year Plan 850 worksheds are planned, and the subsidy required is estimated at Rs. 50.00 lakhs. 3 such Mini Industrial Estates have already been sanctioned and construction work is in progress. In view of this, a provision of Rs. 50.00 lakhs is proposed in the form of subsidy for the Sixth Five Year Plan. For the Annual Plan 1981-82 a provision of Rs. 10.00 lakhs is proposed for the purpose.

4.5.8. Mining and Metallurgical Industries.

4.5.8.1. An outlay of Rs. 1850 lakhs for the Sixth Five Year Plan 1980-85 and Rs. 340 lakhs for the Annual Plan 1981-82 has been proposed for the programmes of Mineral Development. The broad break up is as under :—

Sr. No.	Programme	(Rs. in lakhs)	
		Sixth Five Year Plan 1980-85	Annual Plan 1981-82
1	2	3	4
1.	Expansion and reorganisation of Directorate of Geology and Mining.	450.00	90.00
2.	Loans to Gujarat Mineral Development Corporation	1400.00	250.00
Total		1850.00	340.00

4.5.8.2. The activities under Mining Sector can be broadly indentified in four divisions viz. (1) Mineral exploration, their development and mining, (2) Commercialisation, (3) Growth of mineral based industries, and (4) Mineral Administration.

4.5.8.3. Mineral exploration and mineral administration of Geology and Mining carried out by the State is supplemented by the work of the Geological Survey of India. Mineral Administration consists of grant of lease licences for mining, Collection of royalty, rents, conservation of minerals and regulation of mining activity.

4.5.8.4. The mineral exploration carried out provides the platform for developing the Mining industries based on them and this results in creation of employment, for the people of these backward areas of the State. The Directorate also provides technical guidance to the private entrepreneurs, the Corporation and the Government in establishing mining industries.

4.5.8.5. Mineral exploration only is not enough. After exploring minerals, they have to be exploited meaning/fully for the commercial purposes. The Gujarat Mineral Development Corporation limited and other private bodies play a role in this area. This provides vast scope for establishing mineral based industries in the State.

4.5.8.6. Mining activity results also in creation of facilities like roads, water supply and power supply in remote areas of the State.

Twenty three years of Planning 1951-52 to 1973-74

4.5.8.7. The Gujarat Mineral Development Corporation was established in 1963. As a result of policies, it may be stated that by the end of the fourth Plan the Department became most active.

4.5.8.8. As a result of the Mineral Surveys made since last seventeen years, Gujarat has now acquired an important place on the mineral map of India. Gujarat has got a wide range of minerals such as agate, bauxite, bentonite, clacareous and chalk, calcite, china clay, dolomite, fluorite, fireclay, Gypsum, Graphite, limeston, moulding sand, quartz, silica, sand, base metals, oil and gas etc.

4.5.8.9. The State has a total area of about 190.00 sq. kms. out of which about 149.00 sq. kms. are of mineral interest. By the end of the Fourth Plan period, 39 field parties were created to undertake survey work. 16,856 sq. kms. were covered by Geological Survey and 31,432 meterage drilling was completed, 11945 samples were analysed. As a result of this work, the following minerals were assessed.

Sr. No.	Name of mineral	Reserves in Million ton
1	2	3
1.	Bauxite	40.00
2.	Bentonites	42.25
3.	Limestone	10,000.00
4.	Chalk	20.00
5.	China clay	63.45
6.	Coal	2.71
7.	Dolomite	720.00
8.	Fire clay	9.7
9.	Marble	47.00
10.	Lignite	227.00
11.	Nepheline syenite	14.00
12.	Siderite	14.65

4.5.8.10. So far 9.00 Kms. of link roads were constructed in Ambaji area of Banaskantha and Chhotaudepur taluka of Vadodara districts.

4.5.8.11. The highlights of these achievement are the possibilities of establishing a Thermal Power Station based on the lignite deposits of Kachch, alumina plant based on the bauxite deposits of Kachch and Jamnagar, Cement and chemical plants based on the limestone deposits of Saurashtra and North Gujarat. At present, five cement plants are working in the State based on these limestone deposits. Further based on the assessment work conducted by the Geological Survey of India and the Mineral Exploration corporation in Amba mata area of Banaskantha district, the GMDC is planning to set up multi-metal project plant to produce lead, zinc and copper concentrates which will reduce the foreign exchange outgo on import of these metals. Similarly, the production of fluorite at Amladunga area has considerably reduced the imports of this mineral into the country.

Progress during Fifth Plan 1974-75 to 1979-80

4.5.8.12. During the Fifth Five year plan period, it was planned to create in all 15 survey parties to enhance the tempo of mineral survey in the State. But due to short of funds, this expansion of capacity could not be created and thus a large part of the State is left to be covered still. After the reorganisation of the exploration wing in 197 the maximum number of survey parties that can be developed is only 18 as against the sanctioned strength of 39.

4.5.8.13. During the Sixth Plan period, an additional 9413 sq. kms. area have been covered by preliminary and detailed survey. Also about 1918 mts. of drilling was completed. This has resulted in establishing sizeable reserves of important minerals such as china clay, bauxite, bentonite etc.

The details of physical target and achievement are as under :—

Year	Drilling (Mts)		Surveys/Mapping (Sq.Mts.)		Analysis of samples (Nos)	
	Target	Achievement	Target	Achievement	Target	Achievement
1	2	3	4	5	6	7
1974-75	8000	3180	3500	2323	2800	1702
1975-76	8000	2752	3500	1497	2800	2122
1976-77	2200	2378	1350	2368	1984	1584
1977-78	3000	3335	1350	1567	1975	1974
1978-79	3500	4333	1350	879	1975	3310
1979-80	3500	3210	1350	779	2000	4218

Programme of Development for Sixth Plan

4.5.8.11. Directorate of Geology and Mining. Most of the mineral potential in the State is found in the economically backward districts such as Panchmahal, Sabarkantha, Banaskantha and Kachhh. There is need for quick assessment of mineral potentialities in these areas.

4.5.8.15. It is planned to strengthen the position of mineral survey parties by utilising fully the capacity already created. Consequent upon the increase in the number of survey parties, provision for necessary extra tents, survey instruments, drilling equipments etc. will have to be made.

4.5.8.16. Modern techniques of Geological survey will have to be adopted for quick and efficient work. This will entail the use of photography method for survey, geochemical and geophysical surveys. Thus specialised units for photo-interpretation and geochemical work will have to be created. A geophysical cell has already been created.

4.5.8.17. Keeping in view more survey parties, the laboratory of the Department will have to be equipped with sophisticated instruments such as atomic absorption unit, X-ray diffraction etc. and necessary staff to undertake analysis of a large number of samples which will need to be tested, will be required.

4.5.8.18.. To help entrepreneurs to acquire, leases, the technical reports with cadastral maps of the area surveyed will be made available to private parties so that they can directly apply for mineral concessions. This will be a major undertaking. The present technical staff therefore will have to be strengthened. In this regard cement cell has been created to transfer all the geological maps of limestone

on cadastral maps. This is the beginning and it has to be strengthened so as to prepare maps on cadastral scale for all economic minerals of the State.

4.5.8.19. A well equipped library and museum are essential for study and preparation of reports of geological surveys.

4.5.8.19. Training in modern techniques such as photo-interpretation geochemical survey, geophysical prospecting etc. in addition to other aspects such as project planning/management etc. will have to be given to officers/staff.

4.5.8.20. Mineral administration covers the administrative set up and improvement necessary to streamline the work of grants and regulation of lease, collection of royalty and other rents. etc. It is necessary to have a full time cell having technical and research staff for this purpose.

4.5.8.21. Further it is planned to enhance the tempo of survey of economic mineral during the coming years. So all the vacant posts and the posts which are kept, in abeyance are planned to be filled up. As a result, in all 65 posts of technical officials and 165 posts of non-technical nature will be filled up during the period 1980-85.

4.5.8.22. With a view to rendering help to the small mine owners it is proposed to purchase some mining equipments and to help the same on reasonable charges to these small mine owners.

4.5.8.23. The scheme of providing link road facilities to the mines of the interior areas has been started from the Sixth Plan period but the progress has not been adequate so far due to the requirement of part contribution by the mine owners towards constructions.

4.5.8.24. An are of 167.50 sq. kms. is expected to be covered by geological surveys. Drilling to the extent of 25000 mts. is expected to be done to assess the mineral potentialities. 17500 samples will be analysed and several items of ore dressing and beneficiation examined in the ore dressing laboratory to be put in to commission.

4.5.8.25. To carry out the above activities during the Sixth Five Year Plan period, it is proposed to provide Rs. 450 lakhs and for the year 1981-82, it is proposed to provide Rs. 90 lakhs to carry out the Mining activity further. It is planned to cover about 1350 sq. kms. by Geological Surveys, 4500 meters drilling and analysis of samples to the extent of 3000 number.

Gujarat Mineral Development Corporation Limited

4.5.8.26. GMDC was established on 15th May, 1953 with a view to develop and exploit on commercial scale and where necessary beneficiate mineral wealth available in backward and forest areas of Gujarat State. The Corporation's present activities are mainly centred in and around most backward districts like Kachchh, Surendranagar, Banaskantha and Bharuch as well as in the Adivasi inhabited backward region of Ambadunagar in Chhotaudepur taluka of Vadodara District. The Corporation has put up 5 projects viz. Flourspar Project, Kadipani (Dist. Vadodara, Bauxite Mining Project, Mandvi (Dist. Kachchh), Bauxite mining project, Mev sa Jamnagar Dist.) Glass-sand Project, Surajdeval (Dist. Surendranagar) and Lignite Mining Project, Panandhro (Dist. Kachchh) with an investment of about Rs. 700 lakhs. Implementation of these five projects has helped to create and provide direct employment to about 2500 employees out of whom 80% comprises of Adivasis and tribal people. Employees at projects are provided free housing, water, medical treatment, education for children, entertainment and other facilities in addition to subsidised electricity and food from the canteen. While certain facilities like medical, educational, water supply and electricity have been made available free of cost to the entire population of the surrounding villages, consequent upon the implementation of various projects, public roads, electric power, educational institutions, medical centres, family planning centres and such other socio-infrastructure facilities have reached such backward areas of the State. In addition to the direct employment given to local Adivasis and tribal people, indirect employment for several thousands have been created, trade and small scale industries have increased and general level of prosperity has gone up in the areas where projects are situated.

4.5.8.27. Considering the socio-economic impact of the development of the projects, it has been decided to take up ten new projects of mining as well as beneficiation in the backward regions of the State during Sixth and Seventh Plan period with an estimated capital outlay of about Rs. 330 crores.

4.5.8.28. Brief details about current projects and the projects to be implemented during the Sixth Plan period are given hereunder.

Flourspar Project Kadipani (Dist. Vadodara)

4.5.8.29. The activities of mining and running beneficiation plant based on the world largest bulk deposit of acid grade flourspar available in Ambadunagar inhabited backward area of Ambadunagar in Vadodara Dist. are being carried on satisfactorily. 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 Indian Engineers. The project has successfully helped in saving crores of rupees of foreign exchange and providing employment to large number of Adivasi workers besides earning appreciable return on capital investment.

4.5.8.30. With a view to meet with the increasing demand of acid grade and metallurgical grade flourspar powder/briquette, it is proposed to put up a duplicate beneficiation plant with a capacity of about 14,000 MT per year at an estimated capital outlay of Rs. 600 lakhs.

Glass-sand Project Surajdeval (Dist. Surendranagar)

4.5.8.31. 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. This will need further investment of about Rs. 200 lakhs covering mining equipments, plant other utilities and auxiliaries.

Lignite Project Panandhro (Dist. Kachchh)

4.5.8.32. Lignite mines in Kachchh Dist. 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. This has created direct and indirect employment for several hundreds of people.

4.5.8.33. Based on the test work done at CFRI and at Neyvelli Lignite Corporation as well as at laboratories in West Germany, it is now planned to go ahead with phase-wise increased mining of lignite from 800 MT to 5000 MT per day with a view to cater to the needs of the proposed 120 M. W. Power Station of GEB, Carbonisation and briquetting plant with a capacity of 500 MT of domestic fuel and volatiles and various consuming industries in the State. During the plan period it is proposed to implement the lignite mining on large scale with mechanised

mining equipments based on technology available from foreign countries. The total capital outlay on lignite mining project including infrastructure, civil construction etc. is estimated at Rs. 2400 lakhs. The project will provide direct employment opportunities for 8000 persons.

Lignite project Jhagadia (Dist. Bharuch)

4.5.8.34. It is proposed to develop and exploit lignite deposit estimated at 19 million tonnes covered under the mining lease in Jhagadia (Dist. Vadodara). Although, overburden ratio of earth to lignite is of high order and consequently cost of mining is expected to be around Rs. 200 per M. T., the Corporation has commenced operations to exploit this deposit with a view to mitigate the acute shortage of solid fuel being experienced particularly by the industries of central and south Gujarat region. The estimated capital outlay on this project will be Rs. 300 lakhs. The project will provide direct employment to about 600 persons and will create indirect employment opportunities for 4000 persons.

Multi Metal Project Ambaji (Dist. Banaskantha)

4.5.8.35. Detailed exploration work on multi-metal deposit consisting of lead, zinc and copper at Ambaji reveals total multimetal deposit of 7.5 million tonnes averaging 5.3 % zinc, 3.3% lead and 1.5% copper which is considered to be a rich deposit. After extensive test work having been done by the technical consultants M/s. Golder, Moffitt and Associates Ltd. in their London laboratory, a techno-economic feasibility report has now been submitted by them. With a view to confirm the test results obtained by GMA at London, further tests were carried out in the laboratory set-up for the purpose at site. To achieve the optimisation of all the three separate concentrates to the desired level of purity 50 Mt capacity pilot plant has also been commissioned recently. The pilot plant results to obtain the bulk concentrates have been found quite satisfactory. However, further optimisation tests work are yet to be proved to be satisfactory for obtaining separate concentrates. In the circumstances the Corporation has decided to go to the level of bulk concentrates i. e. mixed concentrates of lead, zinc and copper and send abroad for toll smelting which also gives reasonable economics of the project. Detailed economics of toll smelting of such bulk concentrates abroad have been worked out in consultation with the technical consultants and have been submitted to Indian Bureau of Mines who have been asked to report on the same by IDBI who has in turn agreed to finance the project. The Government of India has given their concurrence to send the bulk concentrates abroad for toll smelting and bring back the metals contained therein. It is considered that the project will save Rs. 15 to Rs. 20 crores of foreign exchange consequent upon

producing the bulk concentrates and bringing back the metals contained therein. The Corporation has so far invested Rs. 390 lakhs towards this project. The estimated total project cost is expected to be around Rs. 3647 lakhs out of which Rs. 2460 lakhs will be spent in the Sixth Plan period and the balance Rs. 1187 lakhs in the Seventh Plan period. The project will provide direct employment to about 2000 persons and will create indirect employment opportunity for 17000 persons.

6. Bauxite Mining and Alumina Project (Dist. Kachchh)

4.5.8.36. The Corpn. has been mining bauxite in Saurashtra and Kachchh regions with a view to supply to consuming industries.

4.5.8.37. The Corporation has been endeavouring since years for putting up an Export Oriented Alumina Plant on rich bauxite deposit of about 30 million tonnes available in the Kachchh Dist. In the year 1978, the Corpn. entrusted the work of study and preparation of techno-economic feasibility of Alumina Project of 3,00,000 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 Aluminium Company for their study and comments. As per the recommendations, the Corporation will have to find out a foreign smelter 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.

4.5.8.38. It is estimated that out of total capital outlay of Rs. 20,170 lakhs. an amount of Rs. 7500 lakhs will be spent in the 6th Plan period and balance in the 7th Plan period. The project will provide direct employment to 4000 and indirect employment opportunities to about 43000 people.

7. Bauxite Calcination project, KFTZ (District Kachchh).

4.5.8.39. Based on the available high quality bauxite in Kachchh 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 lakhs M.T. 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 lacs.

8. Brown fused alumina-Kachchh.

4.5.8.40. Based on the quality of bauxite containing high AL 203 available from the bauxite deposits in the region of Saurashtra and Kachchh, it is considered to put up a plant to manufacture brown fused alumina which is mainly being used in the manufacture of bonded abrasives. It is ascertained that there is substantial market for the product both in India as well as in the foreign countries like Japan, Taiwan, South Korea etc. There are about 25 to 30 small/medium scale manufacturing units producing different types of bonded abrasives in the country who are mainly dependent for the requirement of brown fused alumina on two major manufacturers viz., Orient Abrasive and M/s. Carbonrundum Universals. The market of the brown fused alumina therefore is almost monopolistic leading to high pricing and indefinite supply position of good quality alumina need in the country. The Corporation proposes to put up a brown fused alumina with the capacity of 3600 MT per year in joint sector with private party with an estimated capital outlay of Rs. 200 lacs.

9. Granite Cutting and polishing project-District-Banaskantha.

4.5.8.41. Granite is a natural building and decorative facing material "par-excellence". It has high mechanical strength, high resistance to all types of weathering variety of colours and capacity to retain very high ever lasting polish. Granite is most suitable stone for decorative use in all monumental buildings for architectural uses. There are well-known deposits of granite in several areas of northern Gujarat. With a view to obtain better utilisation of granite deposits available in North Gujarat, it is considered to put up a granite mining, cutting and polishing project in Banaskantha District. The total imports of granite by the leading importers (U. S. A., U. K. Italy, Japan and West Germany) is approximately 1 million tonnes. Of this import quantity, India's present share in the world market is less than 7%. There is significant potential demand for finished granite product in fast developing oil rich countries of the middle-east. Small quantity of finished granites can also be supplied to other

Central countries, Exports of finished granites could easily be increased to over Rs. 10 crores per year considering a rise in demand for this high quality product from the development countries as well as middle-east oil rich areas. The estimated capital outlay on this project is Rs. 135 lakhs.

10. Bentonite-(District Kachchh).

4.5.8.42 The Corporation had obtained two pockets of quarry leases of bentonite besides bentonite available in the reserved areas of bauxite deposits. However, not much headway has been made towards mining of bentonite as more than 100 private parties are already engaged in mining of this deposit. There has been constant demand from NMDC, ONGC and other public sector Organisation for good quality sodium based bentonite which is not available to them from the private sector. In view of this the Corporation is now planning to go for mining of bentonite on a large scale. The estimated capital outlay on this project is Rs. 15 lacs.

11. Coal Mining--Project-Khakhara (District Surendranagar)

4.5.8.43 Thin seams of coal are found to occur in Saurashtra region. Of all the areas explored so far, coal seams occurring in Than and Khakharata are found to be occurring at a shallow depth. Out of these two areas Khakharata is proved to contain nearly 1.9 million tonnes of coal and as the coal field is centrally located to various ceramic industries of the State, the Corporation thought it fit to exploit the deposit. The mining lease application for mining the coal in Khakharata area has been submitted to Government of India and we are awaiting for its clearance. A tentative estimated provision of Rs. 200 lacs has therefore been made in the Sixth Plan period.

Sixth Plan and Annual Plans 81-82 Allocation

4.5.8.44 The details of the projectwise total estimated capital outlay along with the sources of finance to meet the same for the Sixth Plan period as estimated by the Corporation have been given below.

STATEMENT SHOWING THE SCHEMEWISE OUTLAY AS ENVISAGED BY THE CORPORATION

(Rs. in lakhs).

Name of the Scheme				Project Cost	Plan Outlay for Sixth Plan.	1980-81	1981-82	1982-83	1983-84	1984-85
1	2	3	4	5	6	7	7	8	9	10
(A) 1. Flourspar Project :-										
	Flourspar Plant (Expansion).			600	600	43	200	100	150	107
2.	Multi Metal Project	..		3647	2460	100	158	358	662	1182
2. Lignite Project (Panandhrao)										
	(a) Mining (B. W. E. Technology)			2400	2400	100	240	960	960	140
	(b) Briquetting & Carbonisation			3200	1000	..	..	..	500	500
4.	Lignite Project (Jagadia)		1	300	300	200	100	..	..	..
5.	Bauxite mining	..	..	50	50	5	10	15	20	..
6.	Alumina	..	..	20170	7500	30	593	1221	2175	3481
7.	Bauxite Calcination	..	..	1000	1000	..	200	600	200	..
8.	Brown Fused Alumina	..	..	200	200	..	100	100	..	..
9. Glass Sand Project:-										
	(a) Mining Development	..	..	40	40	20	20	..	..	..
	(b) Washed Sillica Plant.			160	160	125	35	..	..	..
10.	Granite Cutting & Polishing			135	135	5	27	67	36	..
11.	Bentonite	..	..	15	15	5	5	5	..	..
12.	Coal Mining	..	..	200	200	..	20	80	80	20
(A) Estimated Capital Outlay:-				32117	16060	633	1708	3506	4783	5430
B. Sources & Finance										
(1) Equity Share Capital										
	(i) From Government			..	3500	75	400	900	1000	1125
	(ii) From Joint Sector			..	4359	18	532	889	1305	1625
(2)	Internal Resources			..	1200	150	200	250	300	300
(3)	Loans from Financial Institutions/Banks.			..	7001	390	576	1467	2178	2390
				..	16060	633	1708	3506	4783	5430

4.5.8.45. However, as against the estimated requirement from Government as indicated by the Corporation in the form of share capital to the extent of Rs. 35 crores for Sixth Plan and Rs. 4.00

crores for Annual Plan 81-82 Rs. 14.00 crores for Sixth Plan and Rs. 2.50 crore for Annual Plan 81-82 are proposed.

DRAFT SIXTH FIVE YEAR PLAN-1980-85 AND ANNUAL PLAN-1981-82

Industries and Minerals

Minor Head-wise Outlays and Expenditure.

(Rs. in lakhs)

Sr. No.	Minor Heads	1979-80 Actuals	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
(A) General Industries.								
	(a) Direction & Administration.	4.05	16.00	16.00	48.00	..	12.05	..
	(b) Standardisation and Quality control.	6.55	10.00	10.00	100.00	20.00	14.00	..
	(c) Industrial Education, Research and Training.	65.81	41.50	221.00	725.00	..	100.00	..
	(d) Other expenditure.	30.89	20.80	20.80	106.00	..	22.90	11.00
	Total..(A).	107.30	88.30	267.80	979.00	20.00	143.95	11.00
(B) Large & Medium Industries								
	(a) Petroleum Chemicals and Fertilisers Industries.	1040.00	400.00	400.00	4095.00	4095.00	500.00	500.00
	(b) Ship Building and Aeronautical Industries.	..	1.00	1.00	22.00	22.00	1.00	1.00
	(c) Tele-communication and Electronics Industries.	150.00	100.00	100.00	250.00	250.00	105.00	105.00
	(d) Consumers Industries.	50.00	59.00	59.00	258.00	258.00	51.00	51.00
	(e) Industrial Financial Institutions.	785.00	399.00	910.00	3650.00	3650.00	710.00	710.00
	(f) Other Expenditure.	64.37	105.00	110.70	596.00	543.00	130.25	124.00
	Total..(B)	2089.37	1064.00	1580.70	8871.00	8821.00	1497.25	1491.00
(C) Village and Small Industries.								
	(a) Small Scale Industries.	1261.28	952.70	1594.70	7900.90	4015.00	1417.80	733.00
	(b) Village & Cottage Industries.							
	(1) Direction Administration.	2.00	5.00	5.00	25.00	..	5.00	..
	(2) Handloom Industry.	58.64	95.62	95.62	505.00	83.00	110.00	25.00
	(3) Handicrafts Industries.	57.77	20.00	20.00	109.00	20.00	14.00	1.00
	(4) Cooperation Industry.	31.41	37.00	37.00	150.00	58.00	32.00	14.00
	(5) Khadi Industries.	250.90	277.00	277.00	1700.00	800.00	260.00	140.00
	(6) Other Expenditure.	112.37	142.38	142.38	911.00	40.00	175.00	6.00
	Total..(C)	1774.37	1529.70	2171.70	11300.00	5016.00	2013.80	919.00
(D) Mining and Metallurgical Industries.								
	Mineral Exploration and Development.	179.96	161.00	161.00	1850.00	1400.00	340.00	250.00
	Total..(D)..	179.96	161.00	161.00	1850.00	1400.00	340.00	250.00
GRAND TOTAL..(A+B+C+D)		4151.00	2843.00	4181.20	23000.00	15257.00	4000.00	2671.00

DRAFT SIXTH FIVE YEAR PLAN—1980-85 AND ANNUAL PLAN—1981-82.

Industries and Minerals

Scheme-wise outlays and expenditure.

(Rs. in lakhs)

Sr. No.	No. and Name of the scheme.	1979-80 Actuals.	1980-81		1980-85		1981-82	
			Outlay.	Anticipated expenditure.	Proposed outlay.	Capital content.	Proposed outlay.	Capital content.
1.	2.	3.	4.	5.	6.	7.	8.	9.
(A) GENERAL.								
(a) Direction and Administration.								
1.	IND-1. Monitoring and Planning Cell in IMPD.	1.00	1.00	1.00	5.00	..	1.25	..
2.	IND-2. Strengthening of Technical and Statistical Wing in the office of I. C.	3.05	15.00	15.00	43.00	..	10.80	..
Sub-Total....(a).		4.05	16.00	16.00	48.00	..	12.05	..
(b) Standardisation of Quality Control.								
3.	IND-3. Weights and Measures.	6.55	10.00	10.00	100.00	20.00	14.00	..
Sub-total....(b).		6.55	10.00	10.00	100.00	20.00	14.00	..
(c) Industrial Education, Research and Training.								
4.	IND-4. Research and Development Scheme.	50.81	30.50	70.00	200.00	..	35.00	..
5.	IND-5. Hosiery Training and Research Centre CED.....	5.00	1.00	1.00	25.00	..	1.00	..
6.	IND-6. Industrial Research Laboratory, Vadodara.	..	..	140.00	400.00	..	50.00	..
7.	IND-7. Grant-in-aid to C. E. D. Industrial Self Employment in Rural and Backward Areas.	10.00	10.00	10.00	100.00	..	14.00	..
Sub-total....(c)....		65.81	41.50	221.00	725.00	..	100.00	..
(d) Other Expenditure.								
8.	IND-8. Export Award.	0.30	0.30	0.30	2.00	..	0.40	..
9.	IND-9. Pollution Control Scheme.	12.75	7.50	7.50	47.00	..	7.50	..
10.	IND-10. Financial Incentive to Film Studios set-up in the State.	6.00	3.00	3.00	35.0	..	4.00	..
11.	IND-11. Construction of residential quarters for employees of Government Press.	11.84	10.00	10.00	22.00	..	11.00	11.00
Sub-total....(d)....		30.89	20.80	20.80	106.00	..	22.90	11.00
TOTAL....(A) General.		107.30	88.30	267.80	979.00	20.00	148.95	11.00

(B) LARGE AND MEDIUM INDUSTRIES.

(a) Petroleum Chemicals and Fertilisers Industries.

12.	IND-12. Gujarat Petrochemical Corporation.	25.00	300.00	300.00	3300.00	3300.00	400.00	400.00
13.	IND-13. Gujarat Narmada Valley Fertiliser Co., Ltd.	1010.00	..	..	..	..	..	..
14.	IND-14. G. N. P. C. Water Supply Plant.	5.00	100.00	100.00	495.00	495.00	100.00	100.00
15.	IND-15. New Fertiliser Project based on Bombay High Gas.	..	..	..	300.00	300.00	..	..
Sub-Total....(a)		1040.00	400.00	400.00	4095.00	4095.00	500.00	500.00

1.	2.	4.	5.	7.	8.	9		
(b) Ship Building and Aeronautical Industries.								
16.	IND--16. M/s. Alcock Ashdown Co.	..	1.00	1.00	22.00	22.00	1.00	1.00
Sub-Total (b)		..	1.00	1.00	22.00	22.00	1.00	1.00
(c) Tele-Communication and Electronics Industry.								
17.	IND--17. Gujarat Communication and Electronics Ltd.	150.00	100.00	100.00	250.00	250.00	105.00	105.00
Total....(c)....		150.00	100.00	100.00	250.00	250.00	105.00	105.00
(d) Consumers Industries.								
18.	IND--18. Gujarat State Textile Corporation.	..	1.00	1.00	25.00	25.00	1.00	1.00
19.	IND--19. Government Contribution to Narmada Cement Company.	..	53.00	53.00	53.00	53.00	..	..
20.	IND--20. Girnar Scooter Project.	50.00	5.00	5.00	180.00	180.00	50.00	50.00
Sub-Total....(d).		50.00	59.00	59.00	258.00	258.00	51.00	51.00
(e) Industrial Financial Institutions.								
21.	IND--21. Gujarat Industrial Investment Corporation. (MB)	110.00	110.00	110.00	550.00	550.00	110.00	110.00
22.	IND--22. G. I. I. C. (Project).	675.00	289.00	800.00	3100.00	3100.00	600.00	600.00
Sub-total....(e).		785.00	399.00	910.00	3650.00	3650.00	710.00	710.00
(f) Other expenditure.								
23.	IND--23. Grant for promotional activities.	4.25	5.00	5.00	50.00	..	6.25	..
24.	IND--24. Grant of loan to industries for the amount of sales tax paid on sale of finished products.	60.12	100.00	100.00	500.00	500.00	100.00	100.00
25.	IND--25. Woolen Carpet Cell in Gujarat State Export Corporation.	..	..	5.70	46.00	46.00	24.00	24.00
Sub-total....(f).		64.37	105.00	110.70	596.00	546.00	130.25	124.00
TOTAL....(B)....		2089.37	1064.00	1580.70	8871.00	8321.00	1497.25	1491.00

(C) VILLAGE AND SMALL INDUSTRIES.

(a) Small Industries.

26.	IND--26. Share capital contribution loan to G. S. F. C.	100.00	..	..	250.00	250.00	..	..
27.	IND--27. Gujarat Industrial Development Corporation (MB).	537.00	110.00	800.00	3600.00	3600.00	700.00	700.00
28.	IND--28. G. I. D. C. Margin Money.	..	100.00	..	..	..	..	..
29.	IND--29. Subsidy to G. I. D. C. for industrial areas and townships. (G. I. D. C.)	0.07	0.20	0.20	1.40	..	0.20	..
30.	IND--30. Pilot Plant for testing facilities (G. I. D. C.)	2.00	0.50	0.50	25.00	..	6.00	..
31.	IND--31. Critical Infrastructure facilities for backward areas. (G. I. D. C.)	19.80	15.00	15.00	95.00	..	25.00	..
32.	IND--32. Workshop in Rural and Backward Areas. (GIDC).	9.00	6.00	6.00	35.00	..	6.00	..
33.	IND--33. Common Industrial facilities Centres. (G. I. D. C.)	6.00	4.00	4.00	25.00	..	6.00	..

1.	2.	3.	4.	5.	6.	7.	8.	9.
34.	IND-34. Grant-in-aid for providing integrated training skills to industries in G. I. D. C. Areas. (Captive Training Centre).	..	10.00	10.00	110.00	..	20.00	..
35.	IND-35. Loan to Gujarat Small Scale Industries Corporation for Higher Purchase Scheme.	15.00	25.00	25.00	125.00	126.00	25.00	25.00
36.	IND-36. Contribution for Marketing fund for G. S. I. C. to provide marketing assistance to S. S. I. Units.	4.85	10.00	12.00	60.00	..	12.00	..
37.	IND-37. Trade Centres.	5.11	10.00	10.00	67.60	40.00	20.00	8.00
38.	IND-38. Diamond Industries Complex.	..	10.00	10.00	32.00	..	7.00	..
39.	IND-39. Capital Subsidy and Growth Centres.	406.06	550.00	600.00	3000.00	..	500.00	..
40.	IND-40. District Industries Centres	123.89	45.00	45.00	140.00	..	35.00	..
41.	IND-41. Rural Industries Project	..	31.50	31.50	170.00	..	34.00	..
42.	IND-42. Apprentice Training in Government Printing Presses	3.46	4.50	4.50	22.00	..	3.50	..
43.	IND-43—Package Assistance to Small Scale Industries	29.04	21.00	21.00	142.00	..	18.10	..
Sub-Total (a) Small Industries		1261.28	952.70	1594.70	7900.90	4015.00	1417.80	733.00
(b) Village and Cottage Industries								
44.	IND-44. Administration and Supervisory staff	2.00	5.00	5.00	25.00	..	5.00	..
Sub-total (b)		2.00	5.00	5.00	25.00	..	5.00	..
Handloom Industry								
45.	IND-45. Handloom Industry	58.64	47.12	47.12	325.00	35.00	55.00	5.00
46.	IND-46—Intensive Development of Handloom Industry	..	47.50	47.50	160.00	40.00	50.00	15.00
47.	IND-47. Gujarat Handloom Development Corpn.	..	1.00	1.00	20.00	8.00	5.00	5.00
Total		58.64	95.62	95.62	505.00	83.00	110.00	25.00
Handicraft Industry								
48.	IND-48. Handicraft Industry	6.32	9.00	9.00	39.00	..	7.00	..
49.	IND-49. Gujarat Handicraft Development Corporation	51.45	1.00	1.00	20.00	20.00	1.00	1.00
50.	IND-50. Carpet Weaving Centre	..	10.00	10.00	50.00	..	6.00	..
Total		57.77	20.00	20.00	109.00	20.00	14.00	1.00
Co-operative Industry								
51.	IND-51. Co-operative Spinning Mills	15.00	5.00	5.00	40.00	40.00	10.00	10.00
52.	IND-52. Financial Assistance to Industrial Co-operatives	12.81	30.00	30.00	100.00	10.00	20.00	3.00
53.	IND-53. Power Loom Cooperative Industry	3.60	2.00	2.00	10.00	8.00	2.00	1.00
Total		31.41	37.00	37.00	150.00	58.00	32.00	14.00
Khadi Industries								
54.	IND-54. Gujarat State Khadi and Village Industries, Board	250.90	277.00	277.00	1700.00	800.00	260.00	140.00
Sub-Total		250.90	277.00	277.00	1700.00	800.00	260.00	140.00
Other Expenditure								
55.	IND-55. Training of Industrial artisans	39.86	13.00	13.00	350.00	..	60.00	..
56.	IND-56. Financial assistance to individual artisans	41.07	55.00	55.00	240.00	..	50.00	..
57.	IND-57. Gujarat Marketing Corporation for Village and Cottage Industries (GRIMCO)	20.00	10.00	10.00	40.00	40.00	10.00	6.00

1	2	3	4	5	6	7	8	9
58	IND-58 Establishment of Village flaying centres and village Training	..	5.00	5.00	125.00	..	20.00	..
59	IND-59 Rural Production centres	0.64	30.00	30.00	60.00	..	15.00	..
60	IND-60 Rural Technology Institute	..	15.00	15.00	40.00	..	10.00	..
61	IND-61 Tribal Development Corporation	6.55	5.00	5.00	6.00	..	..	..
62	IND-62 Mini Industrial Estate in Rural Areas	4.25	9.38	9.38	50.00	..	10.00	..
Total		112.37	142.38	142.38	911.00	40.00	175.00	6.00
Sub-Total : Village & Cottage Industries		513.09	577.00	577.00	3400.00	1001.00	596.00	186.00
Total (C) : Village and Small Industries		1774.37	1529.70	2171.70	11300.90	5016.00	2013.80	919.00

(D) MINING AND METALLURGICAL INDUSTRIES

(a) Mineral Exploration Development

63	IND-63 Expansion and Reorganisation of Directorate of Geology and Mining	65.96	86.00	86.00	450.00	..	90.00	..
64	IND-64 Link Road in Mining Areas	..	..	..	..	..	..	..

(b) Loans for Mining and Metallurgical Industries

65	IND-65 Loans to Gujarat Mineral Development Corporation	114.00	75.00	75.00	1400.00	1400.00	250.00	250.00
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Total	(D) Mining and Metallurgical Industries	179.96	161.00	161.00	1850.00	1400.00	340.00	250.00
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Total	Industries & Minerals (A + B + C + D) ...	4151.00	2843.00	4181.20	23000.00	15257.00	4000.00	2671.00
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DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Industries and Minerals

Targets of production and physical achievement

Sr. No.	Item	Unit	Level of achievement at the end of—						
			1978-79	1979-80 Base year level	1984-85 Terminal year level	1980-81		1981-82 proposed target level	
1	2	3	4	5	6	7 Target level	8 Likely achievement	9	
1	Handloom Industry								
	(a) Production	In lakh meters	36	105	225	150	150	170	
	(b) Employment	No. '000	11	18	55	25	25	30	
2	Powerloom Industry								
	(a) Production	In lakh metres	140	145	175	150	150	155	
	(b) Employment	No. '000	1	1	2	1	1	1	
3	Handicraft Industry								
	(a) Production	Rs. in lakhs	65	71.50	93.40	78.65	78.65	86.50	
	(b) Employment	No. '000	11	11	15	13	13	14	
4	Village Industries								
	Within the purview of KVCI.								
	(i) Production	Rs. in lakhs	486	500	700	525	525	600	
	(ii) Employment	No. '000	68	70	84	74	74	75	

DRAFT SIXTH FIVE YEAR PLAN-1980-85 AND ANNUAL PLAN 1981-82

Industries and Minerals

Centrally Sponsored Schemes—Outlays

(Rs. in lakhs)

Sr. No.	Name of the scheme	1979-80			1980-85 Outlay proposed			1980-81 Outlay			1981-82 outlay proposed		
		State	Central	Total	State	Central	Total	State	Centra	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Payment of 10% Centrally Outright central subsidy	..	257.33	257.33	..	1500.00	1500.00	..	200.00	200.00	..	300.00	300.00
2.	Promotion of Electronics	..	..	..	..	7.00	7.00	..	3.00	3.00	..	3.00	3.00
3.	Interest subsidy to engineers enterprerus	..	0.51	0.51	..	7.00	7.00	..	3.00	3.00	..	1.50	1.50
4.	District Industries Centres	123.89	123.89	247.78	140.00	140.00	280.00	45.00	45.00	90.00	35.00	35.00	70.000
5.	Rural Industrial Project and Rural Artisans Project	17.00	17.00	34.00	170.00	170.00	340.00	31.50	31.50	63.00	34.00	34.00	68.00
Total :		140.89	398.73	539.62	310.00	1824.00	2134.00	76.50	282.50	359.00	69.00	373.50	442.5

3. TRANSPORT AND COMMUNICATION

5.1. Ports and Harbours

5.1.1. Introduction

5.1.1.1. Gujarat is a principal maritime State of the country. The total coastline of Gujarat represents over 30% of the coastline of the Country. Gujarat can serve a very large hinterland, extending over central and northern India. Because of those natural advantages Gujarat has been very prominent in the development of maritime economy of the country.

5.1.1.2. The 11 Intermediate, 28 Minor and one major Ports are dotted over 1600 kms. of coastline from Koteswar in the North to Umbargaon 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, Mahuva, 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. 1.00 crore 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.

5.1.2. Review of Progress

5.1.2.1. 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 equipments like cranes, etc. were installed and the lighterage fleet was strengthened. This was continued during the three Annual Plans and also during the Fourth Plan. During the Fifth Plan additional facilities for improving efficiency of the working of the ports and establishment of direct berthing facilities at the ports where new ports facilities where necessary were provided. The targets in respect of important programmes were mostly achieved. This also helped

in economic development of the hinterland and in providing more efficient facilities at ports. Rates of cargo handling have since improved.

Growth of Traffic

5.1.2.2. The ports of Gujarat are traditionally net export oriented ports. The traditional commodities of imports are food-grains, fertilizers, mineral oils, ports has been made for increase in traffic. The cakes groundnut seeds, cement lime and lime stone etc. The pattern of growth of traffic since the turn of the seventies and the projections for the two years. 1980-81 and 1981-82 are as follows :—

(Rs. in lakhs tonnes)			
Year	Import	Export	Total
1	2	3	4
1970-71	7.05	19.81	26.86
1973-74	10.43	17.75	28.18
1974-75	12.47	17.80	30.27
1975-76	12.19	18.83	31.03
1976-77	6.25	22.03	28.28
1977-78	5.80	14.65	20.45
1978-79	7.63	13.14	20.77
1979-80	10.40	14.20	24.60
1980-81 (Projected)	14.35	15.65	30.00
1981-82	14.35	25.65	40.00

5.1.2.3. 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 import of food-grains and fertilizers. Restrictions placed by the Government of India on export of cement, salt and groundnut seeds and oil-cakes which are the traditional bulk export items of Gujarat affected the growth of traffic. The traffic of mineral oil at Okha has also come down considerable due to its diversion to Kandla which is comparatively nearer to the consuming centres in North India. In order to compensate for this loss attempts are made to start imports fertilizers at suitable ports and it is likely that a sizeable quantity of imported fertilizers will be handled at Ports Bhavnagar, Veraval, Jamnagar and Navlakhi.

5.1.3. Approach and Strategy

5.1.3.1. Ports constitute one of the important infrastructural facilities necessary for economic advancement of a region. The development expansion and improvement 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 dredging and provide additional navigational facilities and introduce mechanisation of cargo handling.

5.1.3.2. 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

5.1.3.3. M/s. Narmada Cement Co. are putting up one million tonnes capacity cement plants at Port Jafrabad. The plant will produce clinker at Jafrabad which will be shipped in self propelled

barges to Magdalla Port (about 6.67 lakhs tonnes) and to Ratnagiri (about 3.33 lakh tonnes). The self propelled barges on their return voyage from 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 a cost of Rs. 815.60 lakhs. Various works, connected with this project, such as, construction of jetty, break-water, approach bund, dredging etc. have been already started.

5.1.3.4. It has been decided to provide modern ferrys 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 Service 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 on providing the terminal facilities has been started.

5.1.4. Outlay 1980-85 and 1981-82

5.1.4.1. An outlay of Rs. 2600 lakhs for Sixth Five Year Plan 1980-85 and an outlay of Rs. 600 lakhs for the Annual Plan 1981-82 are proposed for ports development under the State Sector. The Broad break up of the outlays are as follows :—

Sr. No.	Minor Heads of Development	1979-80 Actuals	1980-81 Approved outlay	Anticipated Expenditure	1980-85 Proposed outlay	1981-82 Proposed outlay
1	2	3	4	5	6	7
1.	Development of Minor Ports.	111.97	517.00	517.00	976.00	459.00
2.	Investigation.	1.06	1.00	1.00	2.00	1.00
3.	Dredging and Surveying	56.26	18.00	18.00	36.00	18.00
4.	Ferry Services.	3.16	60.00	60.00	180.00	120.00
	Total:- (a)	172.45	596.00	596.00	1194.00	598.00
(b)	Light Houses, and construction. Development of other Navigational Aids.	2.75	4.00	4.00	6.00	2.00
	Total :- (b)	2.75	4.00	4.00	6.00	2.00
	Loan to be raised by Maritime Board for undertaking port Development activities.	..	..	..	1400.00	..
	Grand Total :-	175.20	600.00	600.00	2600.00	600.00

A major part of the proposed outlay is for (1) Development of Jafrabad and Magdalla port (2) Porbandar all weather port and (3) Ferry Service Dahej Ghogha.

5.1.4.2. However against the above minimum requirement of Rs. 2600.00 lakhs, outlay in the State Plan 1980-85 is proposed at Rs. 1200 lakhs and the remaining amount of Rs. 1400 lakhs is contemplated to be obtained by loans/institutional financing by the proposed Gujarat State Maritime Board. Such Loan amount can be used for Port projects like Jafarabad Magdalla and or for Dahej Ghogha ferry service. The Government of Gujarat 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 introduced very soon. Once the maritime Board comes into existence, that authority can raise finance by way of loan for development of important ports in the state. Accordingly, on this assumption, the outlay in state sector for Sixth Five Year Plan 1980-85 has been proposed at Rs. 200.00 lakhs which will meet the requirement of funds in the initial period i. e. 1980-81 and 1981-82.

5.1.5. Development of Intermediate and Minor Ports

5.1.5.1. Jafrabad Magdalla Port Project- Infrastructure port facilities are required to be provided at Jafrabad and Magdalla Ports, as M/s. Narmada Cement Co. had decided to set up cement plant at Jafrabad and clinker grinding plant and packing at Magdalla port. Port facilities are required to be provided for transport of cement clinker, coal etc.

5.1.5.2. Government has accorded administrative approval to the plans and estimates, the latter amounting to Rs. 12.09 crores on 10th December, 1979. These works include infrastructure port facilities at Jafrabad port at an estimated cost of Rs. 3.94 crores and those at Magdalla port an estimated cost of Rs. 8.15 crores. The works include approach bund, break water, RCC Jetty, dredging in dredging in Tapi river etc. Which are already started. Other Works such as road, office buildings, water supply etc. will be taken up soon.

5.1.5.3. As per programme finalised, the Narmada Cement Company will start its production by the middle of 1981 and hence, it is quite necessary to make adequate provision for completion of port facilities by that time.

5.1.5.4. The programme include Jetties at both ports, Break water and Bund at Jafrabad Navigational aids and miscellaneous items. The work has been started during the year 1980-81. An outlay of Rs. 310 lakhs may be provided for the year 1980-81. However, a provision of Rs. 320 lakhs is proposed for 1981-82.

5.1.5.5. Other Schemes such as security arrangements at important ports, sea protection works and reclamation, water supply, construction of a shed at Khadakwasla will also be carried out.

5.1.5.6. Development of Porbandar port :- An outlay of Rs. 50 lakhs is provided for the year 1980-81. A provision of Rs. 10 lakhs is proposed for the year 1981-82 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 transit godowns etc. and these works are expected to be completed during 1981-82.

5.1.5.7. Construction of Docks, Berths and Jetties:- 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 Navlakhi etc. In addition other smaller works for improving the landing facilities at various ports are proposed to be carried out.

5.1.6. Port Equipment and Machinery.

5.1.6.1. It is proposed to purchase equipments like wharf cranes, mobile cranes, dumpers, loaders, fire fighters, trucks etc. for various ports. In addition walki-tali set for lighterage working port is also proposed to be provided.

5.1.7. Transport Facilities and Fleet

5.1.7.1. It is Proposed to provide concrete platforms for bulk cargo and other facilities at important ports.

5.1.8.1. 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 for one water barge for Navlakhi.

5.1.9. Gujarat Maritime Board

5.1.9.1. 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 draft bill is likely to be enacted in 1980-81. It would therefore, be necessary to provide for contribution to the new Autonomous Board. A Provision of Rs. 50 lakhs is proposed for 1980-85 for this purpose.

5.1.10. Warehousing Facilities

5.1.10.1. 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 in 1981-82. It is also proposed to construct storage godowns and open transit shed at Valsad, Pipavav, Okha and Bedi.

5.1.11. Construction of Staff quarters and Amenities at Ports

5.1.11.1. It is proposed to provide Class-I, Class-II and Class-III staff quarters at the ports of Bhavnagar, Bedi, Veraval, Mandvi and Mahuva.

5.1.12. Dredger and Dredging

5.1.12.1. A provision of Rs. 36.00 lakhs is proposed for carrying out dredging at various important Ports in 1980-85 and Rs. 18.00 lakhs for 1981-82.

5.1.13. 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. Acquisition of Ferry Board and operation of Ferry service 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. 60.00 lakhs is provided for the year 1980-81 and a provision of Rs. 120.00 lakhs is proposed for the Annual Plan 1981-82.

5.1.14. Landing Facilities for Inland Water Transport at Matwad, Chandod, Mandar and Mangleshwar.

5.1.14.1. Till 1978-79 these schemes were fully financed out of assistance from the Central Government. However, according to the reclassification centrally sponsored schemes, these schemes are continued as centrally sponsored on sharing basis, accordingly, a provision of Rs. 0.50 lakhs is proposed for 1981-82 as State share for completing the works of land facilities for LWT at the above ports. As equal provision is expected from the Government of India.

5.1.15. Construction and Development of other Navigational Aids at various Ports

5.1.15.1. 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. 2.00 lakhs is proposed for this purpose for 1981-82.

5.1.5. Central Sector Schemes

5.1.5.1. The following port development works are very important and we have been requesting the Government of India to approve these works as Centrally Sponsored projects. The Government of India has not so far agreed to the same but considering the importance of these projects they should be taken up under central Sector Scheme.

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	600.00
3.	Development scheme for Inland water Transport in River Narmada and Tapi	275.00	275.00
		<u>2675.00</u>	<u>2525.00</u>

Brief details of the above schemes are given below :—

1. Development of Hazira Port :

5.1.5.2. The Central and South Gujarat specially 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 those industries are 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 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 Central India coal fields to the Saurashtra region through this Port and traffic projection 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 very complementary 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. shipyard which function on a country wide basis so that the port will be useful not mere 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 economic development of this fast growing region and this project should be taken up as a Centrally Sponsored Scheme.

(2) Development of Salaya as a direct bething port

5.1.15.3. The region around Salaya is very rich in production of saultground nut and other agricultural commodities. Presently, export of these

commodities are handled at near by ports like Navlakhi, and Bedi and some extent from Salaya. A large phosphetic fertilizer plant is likely to be set up near Salaya. Several other industries are coming up in that region. Further the Maritime features at Salaya are excellant as it provides very sheltered and deep waters very close to the shores and through out the year. Accordingly, it is proposed to develop Salaya as the direct berthing port for meeting the requirements of these industries and the project is proposed to be taken up as a Centrally Sponsored Scheme.

(3) Development of Schemes for Inland water Transport in River Narmada and Tapti.

In Gujarat State, rivers Narmada and Tapti 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 or provision of locks, etc. Similarly in Tapti also, there is considerable scope for IWT development. A provision of Rs. 275 lakhs, is therefore proposed for development of IWT facilities in these two important water-ways.

STATEMENT—I

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Minor Head-wise Outlay and Expenditure.

(Rs. in lakhs)

Ports and Lighthouses and Shipping

Sr. a No.a a	Name of the Scheme/ Minor Head of Development.	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Antici- pated Expendi- ture.	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content.
1.	2.	3.	4.	5.	6.	7.	8.	9.
A Port and Pilotage								
1.	Development of Minor Ports.	111.97	517.00	517.00	976.00	976.00	459.00	451.00
2.	Investigations.	1.05	1.00	1.00	2.00	2.00	1.00	1.00
3.	Dredging and Surveying.	56.26	18.00	18.00	36.00	36.00	18.00	18.00
4.	Ferry Service.	3.16	60.00	60.00	180.00	180.00	120.00	120.00
5.	Light Houses and construction and Development Development of others.	172.45	596.00	596.00	1194.00	1194.00	598.00	590.00
6.	Navigational Aids.	2.75	4.00	4.00	6.00	6.00	2.00	2.00
Total :-		175.20	600.00	600.00	1200.00	1200.00	600.00	592.00
Loans to be raised from Maritime Board (For Jafrabad Magdalla Projects). Dahej, Gogha Ferry		..	..	..	1400.00	1400.00	..	..
GRAND TOTAL :		175.20	600.00	600.00	2600.00	2600.00	600.00	592.00

STATEMENT II.

Draft Six th Five Year Plan 1980-82 and Annual Plan 1981-82 Scheme-wise Outlay and Expenditure.

(Rs. in lakhs).

Ports, Light Houses and Shipping :—

Sr. No.	Number and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82		
			Outlay	Anticipated Expenditure.	Proposed Outlay	Capital Content.	Proposed Outlay	Capital Content.	
1	2	3	4	5	6	7	8	9	
A. I. Ports and Pilotage.									
PRT-1.	Development of intermediate and minor ports								
a.	Construction of docks berths and jetties.	50.50	67.10	67.10	92.10	92.10	25.00	25.00	
b.	Ports, equipment and machineries.	6.55	21.25	21.25	31.25	31.25	10.00	10.00	
c.	Transport facilities & fleet.	1.81	4.75	4.75	6.75	6.75	2.00	2.00	
d.	Floating Crafts.	15.54	28.50	28.50	48.50	48.50	20.00	20.00	
1.	Maritime Board.	..	5.00	5.00	50.00	50.00	45.00	45.00	
e.	Ware housing facilities.	5.37	6.00	6.00	14.00	14.00	8.00	8.00	
f.	Other expenditure including project.	20.93	370.40	370.40	705.40	705.40	335.00	335.00	
g.	Creation of mechanical circle.	6.25	8.00	8.00	16.00	16.00	8.00	..	
Total: I ..		106.95	511.00	511.00	964.00	964.00	453.00	445.00	
II. Construction of Repairs.									
PRT.2.	Construction of office building, Staff quarters and other amenities at various ports.	..	5.02	6.00	6.00	12.00	12.00	6.00	6.00
Total : II. ..		5.02	6.00	6.00	12.00	12.00	6.00	6.00	
III. Dredger and Dredging :									
PRT.3	Survey and investigation of Gujarat coast.	1.06	1.00	1.00	2.00	2.00	1.00	1.00	
PRT.4	Dredger and dredging.	56.26	18.00	18.00	36.00	36.00	18.00	18.00	
Total : III.		57.32	19.00	19.00	38.00	38.00	19.00	19.00	
IV. Ferry Service :									
PRT.5	Inland water transport and Dabe-Ghogha ferry Services.	3.16	60.00	60.00	180.00	180.00	120.00	120.00	
Total : IV. ..		3.16	60.00	60.00	180.00	180.00	120.00	120.00	
Sub-Total: I to IV. ..		172.45	596.00	596.00	1194.00	1194.00	598.00	599.00	

1	2	3	4	5	6	7	8	9
B. Light houses and Lightships								
Construction of and Development of other navigational aids.								
PRT.6	Development and construction of other navigational aids at inter-midiate and minor ports	2.75	4.00	4.00	6.00	6.00	2.00	2.00
	Total:	.. 2.75	4.00	4.00	6.00	6.00	2.00	2.00
	Total: Ports Light houses and Shipping. (A-B)	.. 175.20	600.00	600.00	1200.00	1200.00	600.00	592.00
	Loan to be raised from proposed Maritime Board (For Jafrabad, Magdalla Project and Dahej-Ghogha Ferry Services).	..	..	..	1400.00	1400.00	..	..
	GRAND TOTAL :	.. 175.20	600.00	600.00	2600.00	2600.00	600.00	592.00

STATEMENT—III

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Target and Production nad Physical Achievemen!

Sr. No.	Item	Unit	Level of Achievement at the end of					1981-82 Proposed target (level)
			(base year level)		terminal year target 1984-85	1980-81		
			1978-79	1979-80		Target (Level)	Likely Achievement	
1	2	3	4	5	6	7	8	9
1.	Traffic handled at Intermediate and Minor Ports	In Lakh tonnes	20.77	24.60	60.00	30.00	30.00	40.00

5.2. Road Development

(Length Kms.)

5.2.1. Introduction

5.2.1.1. 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.

5.2.1.2. 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 foregoing 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.

5.2.2. Basic Infrastructure of economy :

5.2.2.1. 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 their 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.

5.2.3. In Retrospect :

5.2.3.1. The road length including the National Highways constructed in various plans is indicated below :—

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	1962-69	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

5.2.3.2. After formation of Gujarat State in 1960-61 the road length which was 22,629 Km. has increased to 45,108 Km. in 1979-80. Category wise details are shown in Appendix-I.

5.2.4. Backlog in road development.

5.2.4.1. 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 State in the country with 23 kms. of road length per 100 sq. kms. against the India average of 39 kms. In terms of road length per one lakh of population Gujarat State occupies 20th place among the other States.

5.2.5. Achievement against the Twenty Year Road Plan.

5.2.5.1. The second integrated Road Development Plan lays down a comprehensive formula arriving at the Kilometerage required for National Highways, State Highways, Major District Roads, Other District Roads, and classified Village Road any given unit area by giving weightage to following basic factors :

- (i) Developed and agricultural areas.
- (ii) Semi developed area.
- (iii) Undeveloped and uncultivable 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 with population between 10,000 and 5,000.

(ix) No. of towns with population between 5,000 and 2,000.

(x) No. of towns with population between 2,000 and 1,000.

(xi) No. of towns with population between 1,000 and 500.

(xii) No. of towns with population below 500.

(xiii) Allowance assumed as 5% for future development and other unforeseen factors.

5.2.5.2. In addition to the above, the following other important factors have also been considered in formulation of the Twenty Year 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 plans is to provide a network of highways as under :—

(1) to provide 32 kms. of road per 100 sq.kms. of area on 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 uncultivable areas within 18 kms. of metalled road and 7.5 kms. of any road.

5.2.5.3. The achievement with reference to the Twenty Year Road Plan are as under :—

Category	Twenty Year Plan Target	Road K.M. 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%

The Twenty Year Road Plan will be over next year. The target will be attained at the present rate not earlier than 1988. At present the deficit is 22% as per the Twenty Year Road Plan.

PROPOSALS FOR SIXTH PLAN 1980-85 AND ANNUAL PLAN 1981-82.

5.2.6. Strategy and basic considerations

5.2.6.1. 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 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, and 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.

5.2.7. Spill-over liabilities in Sixth Plan

5.2.7.1. 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 31st March, 1980

(Rs. in lakhs)

Sr. No.	Item	No. of works	Estimated Cost	Expenditure upto March, 1980	Spillover liabilities as on 31st March, 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
Total—I and II		2376	16746	5981	10765*

*Say 108 crores.

5.2.8. Programme for Sixth Plan 1980-85 and Annual Plan 1981-82

5.2.8.1. An outlay of Rs. 26412.00 lakhs has been proposed for road development sector in the Sixth Plan. The requisite details are indicated below :

5.2.8.2. Outlay proposed for Sixth Five Year Plan 1980-85

(Rs. in lakhs)

Sr. No.	Programme	Provision for 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	500	1000
3.	Improvement of existing roads for bringing to required standard ..	..	1000	1000
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 to be made for the road works taken up in 1979-80</i>			
	(a) For missing C. D. bridge works .. .. .	..	583	583
	(b) Bringing to standard surface	100	2034	2134
	(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 .. .. .	..	4067	4067
	(c) Command Area works between 1000 to 500 .. .. .	..	514	514
8.	<i>Miscellaneous items</i>			
	(a) Industrial roads	50	..	50
	(b) Roads 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	[21071	26412

5.2.8.3. The above provision includes the provision for the roads in irrigation command areas connecting the villages having population more than 1000 and also the provision for joining the villages having population between 500 to 1000.

5.2.8.4. Out of the total allocation of Rs. 26412 lakhs, a provision of Rs. 21071 lakhs has been made for the Minimum Needs Programme. It is envisaged to connect all the villages having population of 1000 and above and villages having population between 500 to 1000 in command area under World Bank Programme. All the on-going works will be completed during the course of Sixth Plan. It may however be mentioned that there will be no scope for any new work either under the State programme or under the Minimum Needs Programme to join new villages having population less than 1000.

5.2.8.5. There are certain districts such as Panchmahals, Banaskantha, Sabarkantha, Surendranagar, Kachchh, Dangs, etc. where the number of villages having population of 1000 and above are less as compared to other districts in the State. In order to maintain the progress with other districts, a programme of joining the villages having population below 1000 will have to be thought of.

5.2.9. Physical Target in Sixth Plan

5.2.9.1. It is proposed to construct the additional new road length as under :--

	(In Kms.)
State Highways	300
Major District Roads	1500
Other District Roads	1550
Village roads	5785
Total ..	9135

5.2.9.2. In addition to the above length, it is proposed to improve about 12500 kms. of roads during Sixth Plan, which includes conversion of about 6000 Kms. of unsurfaced roads into surfaced roads. At the end of Sixth Plan Gujarat State will have 52808 Kms. of different categories of roads (excluding National Highways).

REVISED MINIMUM NEEDS PROGRAMME- RURAL ROADS

5.2.10. Rural Roads

5.2.10.1. Rural roads need greater attention now specially to sustain green revolution. Roads are required to feed villages with fertilisers, hybrid seeds, finished goods, etc. and to take out marketable surplus quickly to the urban areas.

5.2.10.2. With impact of the present day life of speed and technology 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 allweather road to suit the modern means of transport such as motor-cars, trucks, and passenger buses etc.

5.2.11. High proportion of Kachchha Roads

5.2.11.1. 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 roads length of 43673 Kms. (excluding National Highways) 55% are rural roads. Further 50% of the rural roads are nearly earthen roads. This calls for serious attention to improve the position.

No. of villages joined

5.2.11.2. The position in respect of number of villages joined by pucca allweather roads at the end of 1979-80 is detailed below :—

Villages having Population of	Total No. of villages	Villages joined by pucca roads at the end of 1979-80	Percent- age
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%

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

Now according to the Revised Minimum Needs Programme, 1223 villages having population of 1500 and above will have to be joined during the course of Sixth Plan. Further, it is envisaged to join all the villages having population between 1000-1500. Thus, the State Government has embarked upon an ambitious programme of joining villages having population of 1000 and above in Sixth Plan. The National Programme contemplates to join only 50% of villages between 1000-1500.

5.2.12. Spillover liabilities of rural roads in Sixth Plan

5.2.12.1. The spillover liabilities of rural roads at the end of the 1979-80 are of the order of Rs. 7509 lakhs as indicated below :—

Spillover liabilities of rural roads as on 31st March, 1980

Item	No. of works	Estimated cost	Expenditure upto 31-3-80	Spillover as on 31-3-80
<i>Normal</i>				
Panchayats				
Roads	1659	7743	2392	5351
Bridges	90	1058	221	837
Total ..	1749	8801	2613	6188
<i>Tribal</i>				
Panchayat				
Roads	314	1701	814	887
Bridges	52	629	195	434
Total ..	366	2330	1009	1321
GRAND TOTAL	2115	11131	2622	7509

5.2.12.2. 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 programme to complete all the on going works during the Sixth Plan.

5.2.13. Targets in Sixth Plan for R. M. N. P.

5.2.13.1. As against the available allocation of Rs. 21071 lakhs for Revised Minimum Programme, the following number of village only will be joined in the Sixth Plan.

Population	Target in Sixth plan.
1500 and above	1223
1000-1500	1562
500-1000	1040
Below 500	1037
	4862

The new road length that will be added during the Sixth plan is as under :

MDR	1500
ODR	1550
VR	5785
	8835

In addition to above new road length it is proposed to improve some 9800 Kms. of roads under this programme.

5.2.13. Proposals for 1981-82

5.2.13.1. For the year i. e 1981-82 an allocation for Rs. 3600 lakhs has been proposed for Rural Roads. It is proposed to join 250 villages having population 1500 and above and 350 villages having population of 1000-1500 and 300 having population less than 1000. It is further decided to construct additional new road length of 1500 KM. during the period.

5.2.13.2. During 1981-82, an outlay of Rs. 4500 lakhs have been proposed for the Road Development Sector with Physical Target of additional road length of 1800 KM. and joining 900 villages of different categories.

Special Programme:-

5.2.14. Tribal Areas Sub-Plan.

5.2.14.1. 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 the period of 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.

5.2.14.2. A total outlay of Rs. 5111 lakhs is proposed to be provided for the T. A. S.P. within the total outlay of Rs. 26412 lakhs for road development in the State plan 1980-85. It is proposed to construct roads of 2500 Kms. in T.A.S.P. 1980-85. During 1980-81 and 1981-82 an allocation of Rs. 976 and Rs. 984 lakhs has been proposed respectively.

Length in Gujarat

Ahmedabad Bhopal Road Via Indor	180 KM
Kandla Bamanbore Bombay coastal highway via Malia Jamnagar--Porbandar Bhavnagar, Khambhat, Vadodara.	861 KM
Surat Calcutta Road Via Dhulia Nagpur.	86 KM
	1127 KM

5.2.15. Roads in command areas :

5.2.15.1. The large investment 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. It may also be pointed out that Narmada Project get momentum command areas in many various districts will have to be taken on hand. Villages under the command areas will be jointed as per the R.M.N.P. All villages having population 1000 and above will be joined accordingly to the policy decided by the Government.

5.2.17. Centrally sponsored programme for 1980-85

5.2.17.1. The State has a common boundary with Rajasthan, Madhya Pradesh, Maharashtra, Daman, Dadranagar Haveli and therefore it is essential to have interstate roads similarly within the state there are some roads which are of considerable importance.

During the Fifth Plan 1974-78 seven works were taken up under the programme of interstate and economic importance. According the decision taken by the N. D. C. roads of inter state importance will continue as centrally sponsored or on sharing basis i. e. 50% shared by Central Government and 50% shared by State Government. It is proposed to provide the following amounts for sixth plan and annual plan.

5.2.16. Roads in Dairy Development :

5.2.16.1. 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 of 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 Corp. Better means of communications to district dairies/Town dairies or chilling center until attract more people milk even from the interior. The minimum needs programme will take care of connecting the milk centres.

(Rs in lakhs)

	Sixth Plan.	
	1980-85	1981-82
(i) Roads of Inter State 100% Central share.	598.00	150.00
(ii) Roads of Economic Importance (50% State share)	778.00	80.00
	(389.00)	(40.00)

5.2.16. National Highway Central Sector.

5.2.16.1. At the end of 1979-80 the length of national Highway in Gujarat State was 1435 Kms. In the 20 year road plan the target for national highways in Gujarat is 3602 kms. In view of the high deficit the State Government has proposed to Government of India to declare 10 important state highways of 2283 kms. as national highways. Among the roads proposed for upgradation above, the following three roads required priority to be given.

5.2.17.2. Coastal Highways

Gujarat State has a coastal line of about 1650 Kms. length. There are ten intermediate and thirty six minor ports situated on the coast line of this State in addition to one major port at Kandla.

This coastline is very poor in road communications. This acts as a major handicap in developing the hinterland and booking up of export trade. In this region, Railway communication is existing in some stretches, but the Railway are not in a position

to handle the ever growing traffic since the Railway alignments have not been planned with his viewpoint. Moreover there is no continuous railway along the coast line and 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 interests of State but of the country as whole, the coastal highway connecting all the ports on the coastal line is properly established. With a view therefore to remove this handicap due to lack of proper communications for increasing the port trade coastal highway connecting the ports of Jakhau, Mundra, Mandvi, Kandla, Navlakhi; Okha, Dwarka, Porbandar, Veraval, Pipavav, Mahuva, Bhavnagar, Khambhat, Dahej, Magadalla, Bulsar, Daman, Umargaon etc. is planned. The total length of this coastal highway is about 1628 Kms. (excluding length of N. H.).

5.2.17.3. The coastal region between Lakhpat and Kandla has attained the significance from the security point of view after the last conflict with Pakistan. The proposed coastal highway from Lakhpat to Kandla will therefore help to protect and provide effective vigilance on the coast line to arrest the illegal activities of smuggling and infiltration. This region is not served by the railway and a good road is necessary for economic development.

5.2.17.4. Kandla is a major port of India. Between Kandla and Okha, Navlakhi, Bedi, Sikka and Okha are other ports. Jamnagar is an important industrial centre with well established Engineering industries. The coast highway between Kandla and Jamnagar will boost up development of above ports.

5.2.17.5. 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 pilgrimages and hence coastal highway between Jamnagar and Porbandar is very useful to this area.

5.2.17.6. 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 Kodinar and Una. Fishing is also development along this coast the work of development of Veraval as fishery harbour is also taken up as Veraval Somnath Temple is for pilgrimage.

5.2.17.7. Bhavnagar Baroda, Section connects important ports such as Bhavnagar, Dholera, Gogha, Khambhat, 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.

5.2.17.8. Vadodara, Umergaon, to Border section, Ports like Kavi, Dahej, Magdalla, Daman, Umergaon 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 through ports in this region is increasing fast.

5.2.17.9. Thus the proposed coastal highway will open upto a vast coastal region to the outside countries and will economic development. This will arrest antismuggling activities, fishing industries will be developed. The industries will accumulate near coastline and will reduce atmospheric pollution. The backward area like Kachehh, Jamnagar, Bhal, Umergaon, etc. will be developed. The small harbour will be connected with a road. The salt producing industries will also be benefitted. The present position of coastal highway is as below:-

Road Length completed with two lanes	200.00	Kms.
Road Length completed with one lane.	1125.00	Kms.
Road Length completed with below standard with one lane	154.00	Kms.
Road length missing.	123.00	Kms.
Total	1628.00	Kms.
		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	
Estimated cost of improvement or strengthening or repairing	181.00	

Estimated cost of missing bridges.	337.00
Total	518.00

5.2.18.. Details of Works in progress.
(Rs. in lakhs)

Sr. No.	Item.	Estimated cost	Expenditure incurred up to 31.3.80	Spillover liabilities
Component Plan :				
1	Roads	440	214.00	226.00
2	Bridges	850	169.00	681.00

5.2.18.1. In a component plan, it is proposed to connect villages which have remained unconnected by alwhether roads on the following basis. These are 484 villages on the basis of population of Scheduled Castes. The details are as under:-

Sr.No.	Population Group	No. of villages.
1	25 to 40	396
2	40 to 50	46
3	50% and above.	42
Total		484

5.2.18.2. 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 budgeted works.	72
3. Villages remained to be joined.	225
	484

The minimum Needs Programme takes care itself of all such villages to be joined by Pucca roads.

APPENDIX—1

Categorywise road kilometerage in Gujarat State.

(Length in Kms.)

Sr. No.	Year	N.H.	S.H.	M.D.R.	O.D.R.	V.R.	Total
1.	1950—51	597	1507	2710	4680	3660	13,154
2.	1955—56	716	1956	3112	6951	5052	17,787
3.	1960—61	1005	4025	6086	7008	4505	22,629
4.	1965—66	1033	5125	7132	7065	5674	26,029
5.	1968—69	1056	6983	7127	8417	8628	32,211
6.	1973—74	1352	8605	8480	10183	10361	38,981
7.	1977—78	1383	9027	9830	9639	12480	42,359
8.	1978—79	1425	9058	10043	9834	12896	43,256
9.	1979—80	1435	9097	10542	10571	13463	45,108

STATEMENT

Draft Sixth Five Year Plan 1980-85.

Development Schemes/Projects (Minor Heads) Outlays and Expenditure

(Rs. in lakhs)

Sr. No.	Name of the Scheme/Project	1979-80 actuals	1980-81		1980-85		1981-82	
			Approved outlays	Anticipa- ted Expd.	Proposed outlay	Capital content	Proposed outlay	capital content
1	2	3	4	5	6	7	8	9
Road Development								
Roads and Bridges								
1.	R.M.N.P.(Rural Roads. Panchayat Dn.)	2383.92	1814.00	2763.00	21071.00	21071.00	3600.00	3600.00
2.	Other than M.N.P.(State Division)	741.89	1036.00	1087.00	5341.00	5341.00	900.00	900.00
Total:		3125.81	2850.00 + 1000.00	3850.00	26412.00	26412.00	4500.00	4500.00
			3850.00					

STATEMENT

Draft Sixth Five Year Plan 1980-85.

Targets of Production and Physical Achievements.

Sr.No.	Item	Unit	Level of achievement at the end of					
			1978-79	1979-80	1980-85	1980-81		1981-82
						Target (Level)	Likely Achievement.		Proposed Target (Level)
1	2	3	4	5	6	7	8	9
1. State Highways								
	a. Surfaced	Kms.	8517	8654	9154	8589	8589	8629
	b. Unsurfaced		541	443	243	469	469	429
	Total:--		9058	9097	9397	9058	9058	9058
2. Major District Road.								
	(a) Surfaced		7673	8316	10816	8794	8889	9389
	(b) Unsurfaced		2370	2226	1226	2149	2149	1949
	Total:--		10043	10542	12042	10943	11038	11338
3. Other District Roads								
	(a) Surfaced		5022	5922	8972	6162	6362	6962
	(b) Unsurfaced		4812	4649	3149	4522	4522	4222
	Total:--		9834	10571	12121	10684	10884	11184
4. Village roads								
	(a) Surfaced		4885	5568	14353	6740	6940	8740
	(b) Unsurfaced		8011	7895	4895	7581	7581	6981
	Total:--		12896	13463	19248	14321	14521	15721
Grand Total								
	(a) Surfaced		26097	28460	43295	30285	30780	33720
	(b) Unsurfaced		15734	15213	9513	14721	14721	13581
	TOTAL:--		41831	43673	52808	45006	45501	47301

STATEMENT

Draft Sixth Five Year Plan 1980-85.

Outlays and Expenditure of
Minimum Needs Programme.

(Rs. in lakhs)

Sr.No.	Name of the Programme	1979-80	1980-81		1980-85		1981-82	
			Approved outlay	Anticipa- ted expdr.	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
Road and Bridges								
1.	R.M.N.P.(Rural Roads) (Panchayat Dn.)	2383.92	1814.00 949.00	2763	21071.00	21071.00	3600.00	3600.00
			2763.00					

STATEMENT

Draft Sixth Five Year Plan 1980-85

Targets and Physical Achievements-Physical programmes
Revised Minimum Needs Programmes.

Sr.No.	Programme	Items	Unit	Level of achievement at the end of					
				1978-79	1979-80 (Base Year Level)	1984-85 (Terminal year target	1980-81		1981-82
1	2	3	4	5	6	7	+ Target (Level)	Likely achieve- ment	Proposed target (Level)
							8	9	10
1.	R.M.N.P. (Rural Roads)		Kms.	22730	24034	32869	25005	25500	27000
					1304	8835			1500

STATEMENT

Draft Sixth Five Year Plan 1980-85.

Centrally Sponsored Schemes-outlays.

Sr.No.	Name of the Scheme	1979-80 actuals			1980-85 outlays proposed			1980-81 outlay			1981-82 outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
(i)	Roads of Inter State Importance.	..	40.00	40.00	..	598.00	598.00	..	132.95	132.95	..	150.00	150.00
(ii)	Roads of Economic Importance.	21.71	21.71	43.42	389.00	389.00	778.00	37.35	37.35	74.70	40.00	40.00	80.00

5.3. ROAD TRANSPORT

5.3.1. Nationalisation :

5.3.1.1. The nationalisation of passenger road-transport services has been completed 100 % in Gujarat State since 1969-70. It is, therefore, necessary for the Corporation 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 economic social and cultural development of the rural areas. The Corporation after its formation has, therefore, been taking active measures to meet the above needs of the travelling public in the State.

5.3.2. Growth of traffic in Gujarat State ;

5.3.2.1. The passenger traffic on roads in Gujarat State has been increasing at a compound rate of 13 % per year as against 10 % in the Country as a whole, and the growth of railway traffic at about 5.2 % per year. To cope up with this rise in traffic, it is necessary to increase the number of schedules operated atleast 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 of 2 % to extend bus services in uncovered areas.

5.3.2.2. It is the policy of the Corporation to extend direct services to all the villages in State in stages subject to the availability of a motorable road connecting the villages and funds for expansion. On account of rapid expansion of services made by the Corporation, as on 31st, March, 1980, the Corporation provides direct services to 80.7 % of the towns and villages, covering 94.8 % of the State population. All villages with population above 1000, excluding those not connected by a motorable road, have been provided with direct services. Steps are being taken to extend direct services to the villages with population between 500 to 1000 in the State. At present there are 3578 villages in the State which have not yet been directly served. For extension 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.

5.3.3. Review

5.3.3.1. On account of marked increase in cost of operations, the Corporation had been heavy losses of the order of Rs. 2 to 5 crores per year, beginning from 1973-74. To cope up this rise in cost operation, the Corporation had increased its fares in October, 1974, January, 1976 and in April, 1979. However, as the increase in fares was lower than the increase in cost, the Corporation continued to incur heavy deficits despite steady and continuous improvement in its operational efficiency. As a result of these losses the internal resources of the Corporation were greatly depleted and the expansion programmes of the Corporation during the four years of Fifth Plan had to be severely restricted to only about 3 % per year. However, during the year 1978-79 and 1979-80 on account of increase in capital contribution from the State Government its internal resources and net borrowings, the expansion of schedules was stepped upto 7.4% in S. T. T. 1979 and 6.6% in S. T. T. 1980. However, the Corporation was required to run 317 overaged vehicles for operation of schedules in S. T. T. 1980.

5.3.4. Development Plan 1980-85 :

5.3.4.1. The size of the State Plan for the year 1981-82 has been placed at Rs. 20 crs. and for the Sixth Plan 1980-85 at Rs. 100 crs. Under this plan it is proposed to purchase 6336 vehicles of which 4096 will be for replacement of vehicles completing their life and 2240 for expansion in schedules by 6.5 % during the sixth plan. The no. of schedules operated are likely to increase from 5237 in S.T.T. 1980 to 7168 in S. T. T. 1985.

5.3.5. Annual Plan 1980-81 :

5.3.5.1. As a result of increase in price of vehicles the latest estimates of the annual plan 1980-81 envisages increase in the total outlay from Rs. 2216.00 lacs to Rs. 2250 lacs. It is proposed to increase the no. of schedules operated by 3 % from 5237 in S. T. T. 80 to 5551 in S. T. T. 81. The no. of overaged vehicles for operation of schedules will increase from 317 in S. T. T. '80 to 409 in S. T. T. '81 on account of increase in the rate of expansion to 6 % against plan provision of 4.7%. This expansion will generate additional employment of 2983 persons in 1981-82 and linking of about 220 additional villages by direct bus services, at the rate of 1 % expansion for taking over new routes.

5.3.6. Annual Plan 1981-82 :

5.3.6.1. The programme envisages to purchase of 1221 vehicles and build bodies thereon--7.8 for replacement of vehicles completing life during the

year and 503 for expansion in schedules by 7.8%. At this rate of expansion the no. of schedules to be operated will increase from 5551 in S. T. T. '81 to 5985 in S. T. T. 1982. This will generate employment for 4120 additional persons in 1982-83 and linking of about 450 additional villages by direct bus services.

5.3.7. Employment potential.

5.3.7.1. 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. In G. S. R. T. Corporation as a result of investment in a given year, the number of schedules operated in the Summer Time Table implemented from next April are increase. Thus 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 7168 in S. T. T. 1985, will result in generating additional employmen of 18345 persons during the five years 1981-82 to 1985-86 of the Plan.

STATEMENT
DRAFT SIXTH FIVE YEAR PLAN 1980-85

Heads of Development
Outlays and expenditure

ROAD TRANSPORT

(Rs. in lakhs)

Sr. No.	Heads/Sub-Head of Development	1979-80 Actuals	1980-81		1980-85		1981-82	
			outlay	Antici- pated expendi- ture.	Proposed outlay	Capital content	Proposed Outlay	Capital content
	2	3	4	5	6	7	8	9
1.	State Plan	1990.55	1450.00	1450.00	10000.00	..	2000.00	..

STATEMENT

DRAFT SIXTH FIVE YEAR PLAN 1980-85

Targets of production and physical achievements

Transport and Communication : Road Transport.

Sr. No.	Item (As per the items shown in statement GN-3 appended to P. C., S. letter dated 12-10-79 sent to the departments under GAD(P1) letter No. 1379--J, dated 25-10-1979.)	Unit	Level of achievement at the end of			1980-81		1981-82 proposed Target (Level)
			1978-79	1979-80 (Base Year level)	1984-85 Terminal Year target	Target (Level)	Likely Achieve- ment	
1	2	3	4	5	6	7	8	9
1.	Schedules in next S. T. T.	No.	4915	5237	7168	5480	5551	5985
2.	Fleet at the end of the year	No.	5944	6404	8644	6686	6768	7271
3.	% age expansion in schedules	% age	7.4 %	6.6. %	6.5 %	4.7 %	6.0 %	7.8 %

5.4 TOURISM

5.4.1. Gujarat has a number of places which, if properly developed can attract tourists from other States in India as well as from abroad. There are several places associated with national leaders, archaeology and ancient history. The only surviving habitat of the Asiatic Lion at Sasan Gir is a rare attraction and so is the bird sanctuary at Nal Sarovar. A number of places such as Dwarka, Somnath, Ambaji, Mira Datar, Udwarda and Gadhada could be further developed for pilgrims as well as tourists. In addition to all these there are the dam sites and the reservoirs the long sea-coast having beautiful beaches and other places which can serve as hill station, holiday homes, picnic spots or health resorts. There is a good deal of scope for the development of all these and other places, some of which can be of international importance with enough potential to earn foreign exchange.

5.4.2. Review of Progress:—

5.4.2.1. There were practically no tourist or schemes at the commencement of the Third Five Year Plan. A few schemes were included in the Third Plan which forward a base for development of tourist activities in the State.

The programme for tourism started receiving significant attention from the period of Fourth Plan. By the end of 1977-78 the construction works of several tourist buildings were completed at various places in the State. Works regarding construction of Tourist Bungalow to Veraval in Junagadh District was completed, with the financial assistance from the Government of India, construction of modern forest lodge was started at Sasan Gir Dormitory and staff quarters were constructed at Sasan Gir by the State Government. Work for construction of holiday Home at Hajira was completed. Staff Quarters at Hajira and Shukalathirth Holiday Homes and construction work of Dwarka Holiday Home were also completed. Works for construction of Tourist Reception Centre at Palitana. Staff quarters and Tourist bungalows at Veraval and Porbandar, Lothal, Ubharat Holiday Home, Dormitory at Nal Sarovar and Cafeteria at Sun Temple near Modhera were taken on hand.

5.4.3. Programme for Sixth Plan 1980-85 and

Annual Plan 1981-82:—

5.4.3.1. The Scheme-wise outlays are as under:—

(Rs. in lakhs).

Sr. No.	Scheme.	1979-80 Actual.	1980-81		1980-85 Proposed Outlay	1981-82 Proposed Outlay
			Approved Outlay	Anticipated exp.		
1	2	3	4	5	6	7
1.	Development of Sasan-Veraval Porbandar Complex.	..	..	..	40.00	..
2.	Development of Ahmedabad Complex.	0.40	1.63	1.63	31.63	..
3.	Development of hot Springs, picnic spots, Holidays Homes, tourist bungalows, hotels and motels, opening of tourist offices training of personnel etc.	1.73	9.20	9.20	97.60	27.00
4.	Costal tour and inter State tours, improvement of dharmshalas transport facilities etc.	0.78	3.17	3.17	49.77	22.00
5.	Publicity abroad.	0.39	1.00	1.00	11.00	1.00
6.	Gujarat Tourism Corporation and Development of hill Stations.	25.00	25.00	25.00	70.00	25.00
GRAND TOTAL ..		28.30	40.00	40.00	300.00	75.00

5.4.4. The Tourism Corporation of Gujarat Ltd.

5.4.4.1 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 ;

(iii) to carry on business and tourist and travel agent and provide amenities and other recreational facilities to tourists ;

5.4.4.2 In addition, Corporation has been given the assets i. e. all Holiday Homes, Tourist

Bungalows, Hill Station etc. from the Directorate of Tourism with effect from 1st September 1978 with a view to develop them and run the same efficiently and economically. A provision of Rs. 25.00 lakhs has been made in the current Annual plan. This amount will be utilised towards Capital expenditure for development of tourism

5.4.5 Proposal For 1981-82 :

5.4.5.1. An amount of Rs. 75.00 lakhs is proposed for the financial year 1981-82 for the Tourism Plan Schemes. Out of this, an amount of Rs. 25.00 lakhs is provided towards equity contribution to Tourism Corporation of Gujarat Limited. The Corporation would take new projects like providing transport units for its conducted tours and additional accommodation and facilities at important places over and above development of some of the existing centres. The remaining provision of Rs. 50.00 lakhs is provided for the various containing schemes of the Directorate of Tourism, which include providing living accommodation and other facilities at Mandvi (Kuchchh), Pavagadh Holiday Home, Junagadh Chorwad, Holiday Homes etc. Further tourist facilities will also be provided for development of picnic spots in the State.

5.4.6. Proposed Tourism Schemes in Sixth Five Year Plan:—

5.4.6.1. The importance of tourism in Gujarat and its latent tourism potential that exists with its variety and diversity is now fully recognised. However, mere existence of the tourism potential NEED NOT lead to development of the industry unless there is an integrated approach covering:—

- (1) Product indification ;
- (2) Infrastructure needs ;
- (3) Requirements of goods and services and
- (4) Methods of implementation of such Schemes and projects.

5.4. 7. Development of Sasan:Veraval:Complex :

(a) Sasan.

- (1) Additional Dormitory Accommodation and suites ;
- (2). Open-air theatre;
3. Cafeteria;
4. Recreational and audio-visual facilities covering folk dances, cultural songs, slide and film shows, T.V. indoor and outdoor games etc.

5. Opening of handicrafts and curio shop at at Sasan.

(b). Veravai Somnath :

1. 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.
2. Beach facilities having beach umbrellas, rest chairs, bath rooms, public toilets, safety guards etc.

(c) Junagadh.

1. Tourist accommodation having 25 rooms and dormitory accommodation for about 50 persons including dining facilities ;
2. Opening of Transport Unit with garage and workshop facilities having 4 luxury coaches 2 mini buses, 2 jeeps and 2 Ambassador cars ;

(d) Rajkot.

1. Opening of Tourist Information Bureau and Reception Centre.

(e) Dwarka :

1. Construction of Staff quarters ;
2. Construction of 25 living rooms with canteen facilities for about 100 persons at present dormitory site.

5. 4. 7. 1. Development of Ahmedabad Complex :

1. Tourist Bungalows at Shamlaji and Ahmedabad City.
2. Tourist Information Bureau and Reception Centre at Baroda.
3. Development of sites for picnic spots at Adalaj, Sarkhej Roza, Sola, Bhamario Kuva (well) near Mehamadabad, orientation centre and camping site at Nalsarovar.
4. To establish Transport Unit at Ahmedabad
5. To establish Guide Service at Ahmedabad
6. Construction of a dormitory and living room at Modhera and public toilet facilities a Modhera.

5.4.7.2. Motel Projects :

1. Construction of a motel on National Highway No. 8 near Ankleshwar of Fajeipur near Baroda or near Navsari.
2. Construction of a motel at Limbdi.
3. Campers hut at Shamlaji.

5.4.7.3. Development of Picnic Spots :

It is proposed to develop a few picnic spots near big cities like Baroda, Bhavnagar, Mehsana, Surat, Palanpur, Jamnagar, Rajkot, Bhuj etc.

1. Hathab in Bhavnagar district;
2. Wilson Hill in Bulsar district;
3. Ajwa lake and Chandod Karnali in Baroda district ;
4. Galteshwar in Sabarkantha district;
5. Ghola Somnath in Rajkot district and other spots will be identified for development of picnic spots in the State.

5.4.7.4. In addition to this, Kayavarohan near Baroda is also proposed to be developed as Yoga Kendra.

5.4.7.5. Development of Hot Springs.—It is proposed to construct Bath rooms, living accommodation and dining facilities at Lasundra hot springs in Kaira district and Tuva hot springs in Panchmahals district.

5.4.7.6. 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 like Kovalam in South will be planned for development of a beach in Gujarat. It is also proposed to survey Flamingo City, near Khavada in Kachehh district.

5.4.7.7. Development of Holiday Homes/Tourist Bungalows.—At present we have 17 Holiday Homes which have become very popular and we propose to add a few more at Umbergaon, Ambaji, Mandvi

in Kachehh district 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.

5.4.7.8. Improvement of Dharmashalas. In—order to provide additional accommodation to low budget tourists, Central Government has directed to procure abundant B. & C. Department bungalows and select a few bungalows wherein facilities for tourists can be added to convert the same for the use of tourists. In Gujarat States we have not abundant B. & C. Department bungalows but has dharmashalas located in pilgrim centres like Ambaji, Dwarka Bet Dwarka--Junagadh, Palitana, Dakor, Pavagadh etc. which could be improve and modernised. It is proposed to select Dharmashalas at Dakor, Ambaji and Pavagadh to start with and provide facilities at these places.

5.4.7.9. Ropeways Projects at Pavagadhs.—It is proposed to examine the feasibility of putting up a ropeway at Pavagadh and if acceptable will be implemented by the private entrepreneurs.

5.4.7.10. Youth Tourism.—At present we have a Youth Hostel at Gandhinagar which has become very popular. This Youth Hostel is put up with the financial assistance from the Central Government. In view of the experience gained, it is felt that State Government may also put up similar Youth Hostel, one in Saurashtra region and one in South Gujarat region. It is proposed to put up such a hostel at Rajkot in Saurashtra and Surat in South Gujarat.

5.4.7.11. Conducted Tours.—At present the Tourism Corporation of Gujarat Limited 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, Baroda, Junagadh etc. Gujarat having a longest sea-coast and having so many tourist spots on the coastline, it is proposed to organise coastal conducted tours in the Sixth Five Year Plan. It is also proposed to organise Intra-State Conducted tours of the Youths so that Youths of other State can take advantage of seeing other States and vice-verses.

5.4.7.12. Opening of New Tourist Offices.—At present 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 we lot of pilgrims not only of other States but also of Gujarati settled in those regions. It is therefore proposed to open tourist informations the above places and also at London where there are a large number of Gujaratis and those interested in Gujarat.

5.4.7.13. Training of Personal.—The Government of India is planning to start regular course for training in tourism at Delhi for training personnel 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 Corporations for training at such an institute.

5.4.7.14. 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 car operators excursion agents etc. It is proposed to strengthen the department for efficient working as well as planning and promotion of tourism in the State. Modern equipment and trained staff will be appointed in the department. A project cell for planning and implementation of Projects should also be created in the department.

5.4.7.15. Beautification and Recreational Facilities At All Tourist places In the Gujarat States.—It is proposed to beautify and provide recreational facilities for which assistance of cultural organisations and cultural troupes will be taken. The department would also encourage folk art and folk music which can well be used for recreation of tourists.

5.4.8. Schemes in the Central Sector :-

5.4.8.1. The State Government has already submitted the following schemes to Government of India for finance by the Central Sector:-

(1) **Development of Ukai reservoir for water sports and tourist complex:-** The Central Government has informed the State Government that they have selected the scheme at Ukai and hotel project for development. The detailed scheme on Ukai has already been forwarded to Government of India for providing funds, in the current financial year.

(2) **Hotel Project at Ahmedabad.**—The land for the proposed hotel project at Ahmedabad is being procured with the assistance of Ahmedabad Municipal Corporation and detailed proposal will be submitted to Government of India as soon as the land is procured. Central Government has a provision of Rs. 75 lakhs to put up 2 to 3 star hotel at Ahmedabad.

3. Development of Ahmedpur-Mandvi beach in Junagadh district;

STATEMENT

**Draft Sixth Five Year Plan-1980-85
Scheme Wise Outlay and Expenditure.**

(Rs. in lakhs)

Transport and Communication Tourism

Sr. No.	Number and name of the Schemes	1979-80 Actuals	1980-81		1980-85		1981-83	
			Approved outlay	Anteipa- ted exp- diture	Proposed outlay	Capital content	Proposed outlay	Capital unprunt
0	2	3	4	5	6	7	8	9
I. T-Tourist Accommodation :-								
TRS-1	Development of Bacaur Veravai Porbandar Complex.	..	..	..	40.00	40.00	..	..
TRS-2	Development of Ahmedabad Complex.	0.40	1.63	1.63	31.63	31.63	..	..
TRS-3	Development of Hot Springs Picnic Spots.	..	..	..	15.00	15.00	..	..
TRS-4	Development of Holiday Homes, Tourist Bungalows, Hotel's & Motel Ropeways opening of tourist offices training of Persennel etc.	1.73	9.20	9.20	32.60	32.60	27.00	27.00
TOTAL : I		2.13	10.83	10.83	169.23	169.23	27.00	27.00
II. TOURIST INFORMATION AND PUBLICITY								
TRS-5	Publicity Abarad.	0.39	1.00	1.00	11.00	..	1.00	..
TOTAL-II		0.39	1.00	1.00	11.00	..	1.00	..
III. Other Expenditure.								
TRS-6	Coastal conducted tours and inter state tours and development of tourist bungalows transport facilities. improvement of Dharamshalas development of picnic Sports etc.	0.78	3.17	3.17	49.77	..	22.00	..
TRS-7	Establishment of Tourism Corporation of Gujarat Ltd.	25.00	25.00	25.00	70.00	..	25.00	..
TOTAL-III		25.78	28.17	28.17	119.77	..	47.00	..
GRAND TOTAL-I+II+III		28.30	40.00	40.00	300.00	169.00	75.00	27.00

6. SOCIAL AND COMMUNITY SERVICES

6.1. General Education

6.1.1.1. An outlay of Rs. 9000.00 lakhs is proposed for General Education for the Sixth Five

Year Plan 1980-85 and an outlay of Rs. 1200.00 lakhs is proposed for Annual Plan 1981-82. The break up of these outlays are as under :-

(Rs. in lakhs)

Sr. No.	Minor Heads	1979-80 Actuals	1980-81		1980-85 Proposed outlay	1981-82 Proposed outlay
			Outlay	Anticipated expenditure		
1	2	3	4	5	6	7
1.	Elementary Education	353.66	365.60	367.49	5195.04	622.84
2.	Teacher's Training	8.96	4.40	5.60	56.96	13.51
3.	Special Education	66.31	85.00	85.00	400.00	63.65
4.	Secondary Education	77.76	185.02	180.18	1982.29	299.55
5.	University Education	153.85	87.83	75.33	507.90	73.35
6.	Games, Sports and Youth Welfare	16.32	28.92	28.92	290.70	44.10
7.	Arts and culture	18.87	63.23	64.23	467.11	63.00
8.	Languages	5.88	12.00	12.00	100.00	20.00
9.	Nucleus Budget	..	13.00	13.00	..	..
Total		701.61	835.00	831.75	9000.00	1200.00

The details are given in Subsequent paragraphs.

6.1.2. Elementary Education

6.1.2.1. The Elementary education being the item of the minimum needs programmes, it has been given highest priority during the Sixth Plan. An outlay of Rs. 5252.00 lakhs for the Sixth plan and an outlay of Rs. 636.35 lakhs for the Annual Plan 1981-82. The main programmes are given in the following paragraphs.

6.1.2.2. Appointment of Additional Primary Teachers:—The position of enrolment in the age group 6-14 at the end of 1979-80 is as under.

(Figures in lakhs)

Age group	Boys	Girls	Total
6-11	24.80 (119%)	16.58 (85%)	41.38 (102%)
11-14	6.59 (58%)	4.03 (35%)	11.02 (47%)
6-14	31.79 (96%)	20.61 (66%)	52.40 (82%)

6.1.2.3. 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 group. Overall coverage will be 95% in the entire age group 6-14 by 1980-85. It is expected that 11.23 lakhs additional children will be enrolled during the Sixth Plan 1980-85. To man the additional children at the ratio of 40:1, about 28000 teachers will be required. However the requirement of additional teachers during the Sixth Plan 1980-85 will be 11000 as reckoned below :—

Fig. in lakhs

11.23 Additional enrolment

less 2.80 25% Targetted to be covered under the scheme of non-formal education.

8.43

less 2.40 Adjustment by raising present teacher pupil ration from 1:38 to 1.40 (1,20,000 x 2=2,40,000).

6.03

To meet the above enrolment of 6.03 lakh pupils, 15,000 teachers will be required according to the norms. 4,000 teachers appointed during 1979-80 will be considered against the total demand of 15,000 teachers of the Sixth plan. Thus only, 11,000 teachers will be appointed from 1980-81 to 1980-85 of these 31,00 teachers will be appointed in Tribal area and 770 teachers will be earmarked for special component plan. An amount of Rs. 2999.80 lakhs is proposed for the Sixth Plan 1980-85 for purpose, which includes an amount of Rs. 752.44 lakhs for tribal area and Rs. 209.98 lakhs for special component plan.

6.1.2.4. In 1979-80, an expenditure of Rs. 100.46 lakhs was incurred for 4,000 teachers, while an amount of Rs. 256.30 lakhs has been provided for 1,900 teachers during 1980-81 and an amount of Rs. 395.00 lakhs has been proposed for 3100 teachers for the year 1981-82.

6.1.2.5. Construction of Class Rooms:—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 Sixth Plan the total requirement of rooms will be 43000 including 11000 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 three teachers in one room should be provided with one more room and (5) all schools having major repairs will be got repaired.

6.1.2.6. Under category (1) above 600 rooms are targetted to be constructed at the cost of Rs. 63.0 lakhs considering Rs. 10,500 per room (70% Government share of the revised ceiling of Rs. 15,000) as these are the villages which were taken into account for construction during international child year but could not be accommodated within the sanctioned amount due to revision of ceiling. Since 1960-61 about 16000 works have been sanctioned from time to time and District Panchayats have been given assistance for the same, but mainly due to rise in cost from time to time about 3000 works are pending at various stages of construction for want of fund. All these works fall under category (ii) above and they are proposed to be completed at an average cost of Rs. 4000 per work. To get these work completed an amount of Rs. 1.20 crore is required. Out of 16000 works, 2000 works fall under category (iii) above and for that an amount of Rs. 80.00 lakhs at the rate of Rs. 4000 per work are required. Under category (IV) and (V) above, 2900 works are proposed and

for that an amount of Rs. 215.70 lakhs is required. Thus in all an amount of Rs. 502.70 lakhs proposed for the Sixth Plan 1980-85 for construction of 8800 rooms. In 1980-81 an amount Rs. 24.00 lakhs has been provided for 300 class rooms, and an amount of Rs. 63.00 lakhs has been proposed for 600 class rooms for the year 1981-82.

6.1.2.7. Opening of New Primary Schools—There are 414 villages having population of 200 or more according to 1971 census do not have schooling facilities within a radius of 1.5 kms. All these will have been covered by the end of 1980-81. State Government intends to extend these facilities to villages having population of less than 200 but more than 100. There are 1066 villages falling under this category. All such villages are targetted to be covered during the Sixth Plan at the cost of Rs. 10.66 lakhs. Out of this, an amount of Rs. 4.48 lakhs is proposed for tribal area sub-plan. 100 New Primary schools are proposed to be opened during 1981-82 and for that an amount of Rs. 1.00 lakh is proposed to be provided. Out of these, an amount of Rs. 0.40 lakh is proposed for 40 new primary schools in tribal area.

6.1.2.8. An amount of Rs. 1.98 lakhs is proposed for opening of 10 new primary schools during Sixth Plan at Gandhinagar the Capital of Gujarat as the population has been growing very fast due to shifting of department etc. from Ahmedabad to Gandhinagar. Two new primary schools at the cost of about 0.40 lakh have been opened in 1980-81 and two more schools are targetted for 1981-82 and for that an amount of Rs. 0.40 lakh is proposed.

6.1.2.9. Conversion of Single Teacher Schools into Two Teachers Schools:—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 school. At present there are about 7000 single teacher schools in the state including 2400 schools in tribal area. All these schools are proposed to be covered during the Sixth Plan. It is proposed to appoint additional 7000 teachers at an estimated cost of Rs. 744.45 lakhs in the Sixth Plan 1980-85. An amount of Rs. 10.75 lakhs has been provided for 100 schools of tribal area during 1980-81 while an amount of Rs. 22.00 lakhs is proposed for 500 schools including 100 schools in tribal area for the year 1981-82.

6.1.2.10. Physical facilities.—Many primary schools which are lacking in physical facilities such as water supply, sanitation, compound wall, electrification etc. are proposed to be provided with such facilities at a cost of Rs. 1,000 per school. 4000 Such schools including 1200 schools in tribal area are proposed to be covered and for that an amount of Rs. 40.00 lakhs is proposed to be provided during Sixth Plan. It is targetted that 850 schools

including 300 schools in tribal area will be covered during 1981-82 at the cost of Rs. 8.50 lakhs.

6.1.2.11. Science Kit Boxes:—Schools having Std 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. Each school will be supplied a kit box costing of Rs. 500 each. An amount of Rs. 52.25 lakhs is proposed for the Sixth Plan 1980-85 to all the 10500 schools including 1450 schools in tribal area. It is targetted to cover 2500 schools including 350 schools from tribal area during 1981-82 and for which an amount of Rs. 11.00 lakhs is proposed.

6.1.2.12. Incentive for Tribal Pupils Literacy rate in the tribal areas as compared to that in non-tribal area is very low. Due to poverty, tribal people are reluctant to send their children to school. 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 area. About 6 lakh sets of text-books at a cost of Rs. 20.00 lakhs are targetted to be supplied free of cost and also supplies of 1,15,000 pairs of uniforms costing Rs. 23.00 lakhs to the children of lower standards, are targetted for 1981-82. It is proposed to supply 5,70,000 pairs of uniforms and 25,00,000 sets of books free of cost during the Sixth Plan 1980-85 and for that an amount of Rs. 200.00 lakhs is provided. An outlay of Rs. 43.00 lakhs is provided for the Annual Plan 1981-82.

6.1.2.13. Families of primitive groups viz. Kalgha, Kotwalia, Kathodias, Padhar, Sidi, 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. 10.00 lakhs has been provided during 1980-81. This scheme will be continued during Sixth Plan and every year Rs. 10.00 lakhs will be provided for it.

6.1.2.14. Financial assistance to scheduled caste, scheduled tribes and other backward classes (Baxi Panch) girl pupils. 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 in each taluka, and this award will be continued till they finish their education upto Std. VII. An amount of Rs. 2.79 lakhs has been provided for 2775 girl pupils during 1980-81. The figure of beneficiaries will be doubled in 1981-82 and Rs. 5.50 lakhs will be required. During Sixth Plan an amount of Rs. 33.48 lakhs will be required for 33,300 girls.

6.1.2.15. Nirikshaks:—Persuasion is found more effective than litigation for smooth implementation of the scheme of compulsory primary education. Hence it was decided to appoint 200 nirikshaks for the above work. They look after enrolment campaign also and guide teachers in their day-to-day school work. Out of these 200 nirikshaks, 139 nirikshaks have been appointed during 1979-80. These Nirikshaks are required to be continued during the Sixth Plan 1980-85 and it is also proposed to appoint remaining 61 nirikshaks. During 1980-81 an amount of Rs. 14.18 lakhs has been provided for 139 nirikshaks. In 1981-82 an amount of Rs. 16.05 lakhs including Rs. 3.34 lakhs for tribal area and Rs. 0.11 lakhs for special component plan will be required to be provided to continue the scheme as well as for the appointment of the remaining 61 nirikshaks. Out of 61 nirikshaks, 2 nirikshaks in each district will be under direct control of the Government, to keep a close eye on proper implementation of plan schemes in its right direction as well as to have grass root level monitoring of each scheme. During the entire period of Sixth Plan an amount of Rs. 99.72 lakhs is proposed and out of this an amount of Rs. 17.30 lakhs provided for tribal area and Rs. 6.98 lakhs for special component plan.

6.1.2.16. Coaching classes for Weaker Students: One of the main objective is of reduction in the number of drop-outs towards achieving the goal of universal primary education. To avoid considerable stagnation, it has been decided not to hold annual examination at the end of std. I and Std. 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 class having strength not less than 30 pupils will be paid Rs. 150/- as remuneration. It is targetted to cover 48000 pupils during 1981-82 by conducting 1600 classes. An amount of Rs. 2.40 lakhs is proposed for 1980-81. During the entire period of Sixth Plan an amount of Rs. 15.00 lakhs will have to be provided to cover 3,00,000 pupils.

6.1.2.17 Non Formal Education:—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 should be given on non-formal education centres and to identify the learned teachers or the unemployed educated youths will be mobilised to take-up this programme. It is targetted that 2.80 lakh pupils which comes to 25% 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. 280.00 lakhs is proposed at the rate of Rs. 100/- per pupil for the Sixth Plan 1980-85. An amount of Rs. 10.00 lakhs to cover 10,000 pupils has been provided during 1980-81 and it is targetted to cover 25,000 pupils during 1981-82 at cost of Rs. 25.00 lakhs.

Medical Check-up of Primary School Children :

6.1.2.18 It is estimated that 59.00 lakh children are there in the age group- 6--14 years. 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. An amount of Rs. 11.00 lakhs has been estimated for printing of pamphlet of "Arogya Pustika" and therefore a provision of Rs. 11.00 lakhs is proposed for the Sixth Plan 1980-85. An amount of Rs. 5.50 lakhs has been provided during 1980-81 and the same provision is proposed to be repeated for 1981-82.

6.1.2.19. **Pre-Primary Schools.**—At present the total no. of pre-primary schools working in the State in rural areas is 1172. More and more pre-primary schools are expected to be started and they will have to be given grant-in-aid as per Government rules. For this an amount of Rs. 89.00 lakhs is proposed for the Sixth Five Year Plan 1980-85. As per the present rates pre-primary schools are paid 90% grant on the expenditure of the salary of teachers and contingency equipment grant at 20% of 90% grant on salaries of teachers. It is likely that 108 pre-primary schools will be increased during Sixth Plan period. An amount of Rs. 22.00 lakhs has been proposed to be provided for 1981-82.

6.1.2.20 For strengthening the existing machinery at the state level as well as district level an amount of Rs. 15.00 lakhs is proposed for the Sixth Plan 1980-85 and an amount of Rs. 2.44 lakhs for 1981-82.

6.1.3. Teacher's Training.

6.1.3.1. 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 Teacher's Education. The teachers undergoing the in-service training will be paid a stipend of Rs. 150/- for one month. It is proposed to provide in-service training to 7000 primary teachers in the State during the Plan period 1980-85. An amount of Rs. 2.84 lakhs for the year 1981-82 and Rs. 14.65 lakhs for the Sixth Plan period 1980-85 is proposed.

6.1.3.2. It is proposed to provide science kit boxes 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. It is proposed to give training to 15000 teachers. An amount of Rs. 0.25 lakh for entire period of Sixth Plan and an amount of Rs. 0.05 lakh is proposed to be provided for 1981-82.

6.1.3.3. It is proposed to pay grant to the training institutions for 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. 50,000 and at Rs. 30,000 for non-government institutions. The non-Government Institution will have to provide for a matching share of Rs. 20,000. The total amount required for the scheme will be Rs. 10.00 lakhs for the Sixth Plan while Rs. 3.20 lakhs will be required to be provided for 1981-82. In all 24 institutions including 6 in tribal areas will be covered during plan period while 8 institutions including 2 in tribal area will be covered during 1981-82.

6.1.3.4. The syllabi of Mathematics and Science have already been upgraded and there is no standard agency which will guide the students for proper study. Many talented students are eager to know the latest development in mathematics and Science. It is proposed to bring out a Magazine which will serve this purpose. It will also discuss difficulties faced by teachers in their day-to-day teaching of these subjects. 4000 copies will be printed to begin with. It would be a bi-monthly (6 issues a year). An amount of Rs. 2.50 lakhs for the entire period of Sixth Plan and Rs. 0.50 lakhs for 1981-82 is proposed to be provided.

6.1.3.5 To develop the Science activities and to inspire teachers and students to take up research activity 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 for entire period of sixth plan and Rs. 0.50 lakhs for 1981-82 is proposed to be provided.

6.1.3.6 To make the process of teaching learning science interesting and effective, students should be encouraged to do things by themselves. For this purpose a scheme has been evolved. About 40 students of Std. V-VII interested in Science will attend a hobby corner once a week. Students enjoy the different activities in Science. The hobby corners will be run by 67 primary teachers training colleges in the State. The training colleges will be paid Rs. 450 per year as contingency charges. For Hobby corners and innovation, experimentation in Science education and amount of Rs. 1.60 lakhs for the period of Sixth Plan and Rs. 0.40 lakhs for 1981-82 is proposed to be provided.

6.1.3.7 The State Institute of Education is located in 110 years old building of the P. B. 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 building for S.I.E. at an estimated cost of Rs. 21.00 lakhs. An amount of Rs. 5.00 lakhs is proposed to be provided during 1981-82.

6.1.3.8. The State Institute of Education has expanded considerably since its establishment in 1964. At present Director, S.I.E. has to supervise administer, guide and co-ordinate the activities of the various branches. It is therefore proposed to upgrade the post of Director and Deputy Director of S.I.E. and to create a post of Accounts Officer and a Stenographer Gr. II. An amount of Rs. 3.36 lakhs for entire period of sixth plan and an amount of Rs. 0.44 lakhs is proposed to be provided for 1981-82.

6.1.3.9 The State Institute of Education publishes a monthly Jeevan Shikshan with a view of dissemination of educational information to the teachers and field workers. Its yearly subscription is Rs. 5/- at present. About 6500 copies per issue are published and circulated throughout the State. The subscribers are mostly teachers and District School Education Committess. This monthly journal is to be strengthened by enriching its contents. The number of subscribers is also likely to go up. It is proposed to strengthen the editing and publishing of "Jeevan Shikshan". One post of Sr. Clerk, one post of Junior Clerk and one post of packer are required to be created. An amount of Rs. 1.60 lakhs for entire of sixth plan and an amount of Rs. 0.36 lakhs is proposed to be provided for 1981-82.

6.1.4. Special (Adult) Education :

6.1.4.1 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 in the Adult Education Programme during the Sixth Five Year Plan through implementation of the following schemes:—

1. Rural Functional Literacy Programme (Sponsored by G.O.I.).

2. National Adult Education Programme (Sponsored by G.O.I.).

3. State Adult Education Programme (Similar to NAEP) (Sponsored by State Government).

4. Adult Education Projects by Universities Colleges.

5. Adult Education Projects through Nehru Yuvak Kendras.

6.1.4.2. 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 this Programme. 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.

6.1.4.3. During the Sixth Plan period 1980-85 nearly 4 98 600 illiterate adults are proposed to be covered under the State Schemes and out of the 1.68 lakh adults are proposed to be covered in tribal areas. Provisions of Rs. 400.00 lakhs in the Sixth Plan 1980-85 and Rs. 63.65 lakhs for the Annual Plan 1981-82 are proposed.

6.1.4.4. For planning and implementation of the adult education programme and to make propaganda of the same district level administrative set up is required to be created. A State Level Officer of the rank of Joint Director with his 3 assistants and ministerial staff for the office and also 20 District Adult Education Officers with audit and supervisory staff for each district will be required to be created.

6.1.5. Secondary and Higher Education

6.1.5.1. An outlay of Rs. 2 000.00 lakhs for the Sixth Plan 1980-85 and Rs. 391.00 lakhs for the Annual Plan 1981-82 are proposed for the programmes under Secondary and Higher Education is as under :—

(Rs. in lakhs).			
Sr. No.	Name of the Programme	Outlay proposed 1980-85	Outlay proposed for 1981-82
1	2	2	4
1.	Secondary and Higher Secondary Education including programmes for Vocationalisation	1982.29	299.55
2.	University and Higher Education including and Scholarship (loan)	507.90	73.35
3.	Games and Sports	15.70	3.10
4.	Arts & Culture (Library Development)	94.11	15.00
Total		2600.00	391.00

6.1.6. Secondary Education :

6.1.6.1. 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.

6.1.6.2. By the end of May 1979 there were 2938 secondary schools in the State. It is envisaged that about 1,75,000 additional pupils would be enrolled in the secondary schools during the period of the Sixth Five Year Plan.

6.1.6.3. Every year on an average 35,000 pupils seek admission in the secondary schools. These students are accommodated in the existing secondary schools, by opening of additional divisions and by opening of new secondary schools. 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 will be necessary to open 500 new secondary schools 100 in Tribal area and 400 in non-Tribal area and 3000 additional divisions to meet with the enrolment of additional students in the secondary schools. During the Sixth Five Year Plan 1980-85. The estimate on account of this would work out to Rs. 2011.30 lakhs. However, due to resource constraints, it is proposed to provide only an outlay of Rs. 523.00 lakhs on account of opening of 500 new secondary schools during the sixth plan period.

6.1.6.4. The scheme also envisages a provision to the tune of Rs. 225.00 lakhs on account of facilities created so far in Government high schools and provision for the opening of additional 5 Government secondary schools in the tribal area. Thus, it is proposed to provide an outlay of Rs. 748.00 lakhs (Rs. 523 lakhs + 225 lakhs) for this purpose during the Sixth Plan period 1980-85. For the year 1981-82, it is proposed to provide Rs. 114.20 lakhs to continue the existing facilities in the tribal areas and opening of 100 new secondary schools.

6.1.6.5. With a view to avoid drop outs at the Secondary school stage it is proposed to provide a remedial teaching for the weak students who lag behind in their study. Accordingly a class of 20 such students will be conducted with the help of 2 teachers (per class) for 8 months (July to March) for this extra work the teacher will be paid Rs. 125 p.m. per class which will amount to Rs. 2000 per class. It is proposed to conduct such 500 classes covering 10,000 students out of which 100 classes covering 2000 student will be conducted in Tribal Area. A provision of Rs. 10.00 lakhs is proposed for the sixth plan period. During the year 1981-82 a provision of Rs. 2.50 lakhs is proposed and 250 classes covering 2500 weaker students will be conducted.

6.1.6.6. As a part of qualitative improvement programme, stress is laid on teachers training. During recent years the syllabus of the Secondary as well as higher secondary schools have undergone a radical change. It is therefore, proposed to provide an inservice training to about 4800 teachers during

the period of Sixth Plan for which a provision of Rs. 11.35 lakhs is proposed. During the year 1981-82 it is proposed to impart inservice training to about 1000 teachers for which a provision of Rs. 2.15 lakhs is proposed.

6.1.6.7 **Book Banks:-** Students coming from the weaker section of the society are not able to purchase text-books for their studies 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 1,40,000 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. During the year 1981-82 a provision of Rs. 6.00 lakhs is proposed for supply of 24,000 sets of text-books.

6.1.6.8 The qualitative improvement of secondary schools/ higher secondary schools require strengthening of library facilities. The scheme envisages payment of grant in aid to secondary schools higher secondary schools for improving library facilities and purchasing standard books, steel cupboards and providing physical facilities in the libraries. The pattern of grant in-aid will be Rs. 10,000/- per schools. It is proposed to cover 2500 secondary and higher secondary schools during the Sixth Plan 1980-85 for which a provision of Rs. 25.00 lakhs is proposed. A provision of Rs. 5.00 lakhs is proposed for 500/- secondary and higher secondary schools for the Annual Plan 1981-82.

6.1.6.9 With the introduction of new pattern of Higher secondary school education in the 72 Government secondary schools in the State, it has become necessary to strengthen the existing laboratories and to carry out extension of additional rooms to accommodate increasing number of pupils admitted in the schools. With the normal increase of students in schools it has also become necessary to provide additional health and sanitary facilities in the existing school buildings. A provision of Rs. 80.40 lakhs is proposed for the Sixth Five Year Plan 1980-85. For the Year 1981-82 a provision of Rs. 15.43 lakhs is proposed for the works in progress.

6.1.7. Higher Secondary Education.

6.1.7.1. 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 Std. XI during the First year of conversion and Std. XII during the second year of conversion. The cost of opening one additional class of Std. XI works out to Rs. 36.000. During the year 1979-80, some 209 (85+124) higher secondary schools and classes were opened having one class in Standard XI. It

will therefore be necessary to permit such schools to open Std. XII during the year 1980-81.

6.1.7.2. It is proposed to convert more 525 secondary schools into Higher Secondary schools during the Sixth Plan period. This will necessitate opening of 525 New classes of Std. XI and 63+ New classes of Std. XII in the Higher Secondary schools during the Sixth Plan period.

6.1.7.3. This under the spectrum of Higher Secondary Education 4805 classes, with 14515 teachers will be working and as per calculation pattern mentioned above the cost will be worked out to Rs. 1729.92 lakhs as detailed below.

(Rs. in lakhs)			
	Classes	Teachers	Cost
1980-81	538	1614	193.80
1981-82	763	2289	274.68
1982-83	968	2094	348.48
1983-84	1168	3504	420.48
1984-85	1368	4104	492.48
	4805	14515	1729.92
	i.e. 1730.00		

Thus total amount of Rs. 1730.00 lakhs will be required during the Sixth Plan 1980-85. In view of severe resource restraint a provision of Rs. 856.00 lakhs is proposed for the Sixth Plan 1980-85. During the year 1981-82, a provision of Rs. 112.00 lakhs is proposed.

6.1.7.47 Although science at higher secondary stage has three district disciplines viz. physics, chemistry and biology, there is only one science laboratory per school. The effective teaching of these subjects necessitates the division of the laboratory into three separate laboratories one for each discipline. It is proposed to cover 350 higher secondary schools during the period of the Sixth Five Year Plan. As special grant of Rs. 10,000 will be given to each school for conversion and improvement purpose. A provision of Rs. 35,00 lakhs is proposed for the Sixth Five Year Plan, 1980-85. During the year 1981-82, a provision of Rs. 6.00 lakhs is proposed to cover 60 higher secondary schools.

6.1.8. Vocationalisation:

6.1.8.1. 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 29, and the enrolment of student is about 3000. Now during the Sixth plan period this Directorate plans to raise the number of institutions to 100, and the enrolment of students; under vocational courses to 10,000. A provision of Rs. 103.00 lakhs is proposed for Sixth Plan 1980-85 and Rs. 150.50 lakhs for the Annual Plan 1981-82.

6.1.8.2. Commission appointed for the review of higher secondary education has recommended a Special Unit to plan, organise and coordinate vocational education at + 2 stage. During the year 1979-80, 29 Institutions offered Commerce based Diploma and Certificate Course, covering about 3000 pupils. For the effective coverage of increased number of students a special unit shall be forwarded to coordinate the vocational courses offered by various departments like Agriculture, Animal Husbandry, Public Health, Forest etc. A provision of Rs. 15.43 lakhs for the Sixth Plan 1980-85 and Rs. 3.23 lakhs for the Annual Plan 1981-82 is proposed.

6.1.8.3. The Directorate of Education and other departments viz., Agriculture, Forests, Animal Husbandry, Technical run the certificate and diploma course in the field. Voluntary agencies like productivity council etc. also give graduate Diploma Courses. In view of the Survey Reports, it is essential to plan, coordinate direct and supervise the vocational courses. It is proposed to set up a powerful body like vocational education board needs to be set up with Directorate of Education. The Chairman of the Board may 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 at + 2 stage in all fields. The total provision of Rs. 5.00 lakhs is proposed for the Sixth Plan 1980-85 and Rs. 1.00 lakhs for the Annual Plan 1981-82.

6.1.8.4. Besides supervision and control of the institutions implementing vocational education it is necessary to provide direction and make arrangement of placement of students, who complete their vocational courses. With a view to fulfil the desired objective it is proposed to strengthen the office of the District Vocational Education Officer. A provision of Rs. 15.20 lakhs is proposed for the Sixth Plan 1980-85 and Rs. 1.52 lakhs 1981-82.

6.1.9. State Board of Examination :

6.1.9.1. The State Board of Examination conducts various types of examinations. At present 42 examinations relating to teachers training, award of different scholarships, commerce and art are conducted. With the introduction of Higher Secondary pattern of education the Board will have to be entrusted with the conduct of various types of vocational career courses examinations. The duration of vocational courses range from six months to three years, and during the next five years; such courses will be introduced in most of the higher secondary schools or similar institutions. Looking to the population of vocational courses, the number of candidates appearing at such examination will be quite large and will continue to increase. As the total number of examinations to be conducted by the Board

will go on increasing, it is quite essential to strengthen the staff of the Board and to moderate the various examination operations through mechanisation and use of electronic calculators, xerographic through equipment and such other aids. A provision of Rs. 12.96 lakhs is proposed for the Sixth Plan 1980-85. For the year 1981-82 a provision of Rs. 3.00 lakhs is proposed.

6.1.10. Higher Education ;

6.1.10.1. 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 U.G.C. towards their developments scheme. It is also proposed to provide assistance to the universities towards their development schemes which are not assisted by the University Grants Commission. An outlay of Rs. 250.00 lakhs is proposed for the Sixth Plan. For the Annual Plans 1981-82, a provision of Rs. 38.00 lakhs is proposed.

6.1.10. 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 and Rs. 12.50 lakhs for Annual Plan for its development programmes.

6.1.10. 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. For the Annual plan 1981-82 a provision of Rs. 5.00 lakhs is proposed.

6.1.10.4. In pursuance of the recommendation of the Paul Committee, a provision Rs. 10.00 lakhs is proposed towards 'performance award' the colleges proposed for the Sixth Plan. This will initiate healthy competition among the colleges to improve the quality and standards of education and maintain their rank in the education world. A provision of Rs. 5.00 lakhs is proposed for the year 1981-82.

6.1.10. 5. There has been a good response to the scheme of special coaching class for weaker students studying in colleges. An outlay of Rs. 10.00 lakhs is proposed for this activity during the Sixth plan 1980-85. For the Annual Plans 1981-82 a provision of Rs. 2.00 lakhs is proposed.

6.1.10. 6. For improvement of physical facilities of the Government colleges a provision of Rs. 40.00 lakhs is proposed for the Sixth Plan 1980-85. For the year 1981-82 a provision of Rs. 5.00 lakhs is proposed for this purpose.

6.1.10.7. An outlay of Rs. 3.00 lakhs is proposed for the Sixth Plan 1980-85 conducting the courses in higher administrative and management development courses by the Universities. A provision of Rs. 0.80 lakhs is made for giving assistance to the associations of an academic nature. For the Annual Plan 1981-82 a provision of Rs. 0.20 lakhs is proposed.

6.1.10.8. A provision of Rs. 48.00 lakhs is proposed for giving interest free loan scholarships on the lines of Government of India scheme. Every year, about 625 such loan scholarships will be awarded to the students coming from lower income group and students and scheduled tribes and scheduled castes. For the Annual Plan 1981-82 a provision of Rs. 8.00 lakhs is proposed.

6.1.11. Games and Sports :

6.1.11.1. Under this head of development provision is made for continuance of N.S.S. Programme and for providing physical education equipments to the secondary schools in the tribal areas. An outlay of Rs. 15.70 lakhs is proposed for these schemes in the Sixth Plan 1980-85. For the Annual Plan 1981-82 a provision of Rs. 3.10 lakhs is proposed.

6.1.12. Arts and Culture (Development of Public Libraries,

6.1.12.1. Under this head of development a total provision of Rs. 94.11 lakhs is proposed for various improvement programmes under Library development for the Sixth Plan 1980-85. The main schemes are viz. the opening of new village libraries Rs. 74.75 lakhs and provision for construction of buildings of Government libraries Rs. 20.00 lakhs. For the Annual Plan 1981-82, a total provision of Rs. 15.00 lakhs is proposed.

6.1.13. Other Programme.

6.1.13.1. State Youth Boards.—The existing programmes of Youth Welfare includes around youth development, Grishma Shibir, Music Camp, Reading Camps, Know Your Border, Gram Gazetters, Cottage Industries Camps, Deep Sea Swimming Coaching Camps, Financial assistance for tours and excursions. New activities viz. workshop for young writers, Regional Camps for Yogic Activities, District Youth Board Office-Establishment, Establishment of Water Sports Training institute at Chorward and Grant-in-aid to Skying and gliding Associations are proposed during the Sixth Plan 1980-85. A provision of Rs. 50.00 lakhs is proposed for the Sixth Plan and Rs. 9.99 lakhs for the Annual Plan 1981-82.

6.1.13.2 Side Sports Course:—Programmes proposed during the plan period, namely Children Sport. Opening of Aryindo Sports Centre, Scholarships, Children Sports Competition at Notional level, Stadium facilities in 4 Municipal Corporation areas, Grants for Stadium, Swimming Pool, Play-grounds, Strengthening of District Organisation and State Sports Council. Strengthening of Sub-Coaching Centres, Opening of New Sub-Coaching Centres, Grants for purchase of equipments to schools. Office and Residential charges of Sub-Coaching Centres are proposed during the Sixth Plan period. A provision of Rs. 225.00 lakhs for the Sixth Plan and Rs. 32.00 lakhs for the Annual Plan 1981-82 are proposed.

6.1.13.3. Akademi Programme under the Sangeet Nritya Akademi are establishment of Art and Culture Centre cum Museum, Studio, Documentation Centre, etc. Establishment of performing art centre, Production Assistance, provision of retiring rooms and addition of facilities at Jaishankar Sunderi Natya Griha. Establishment of Bhavai Training Centre at Visnagar, Financial assistance to artists, Children Drama Training workshop and Festival, Scholarship for Lok Sangeet Vidhyalaya, Jamnagar and National School of Drama Delhi. Establishment and maintenance of theatres at Visnagar and Bhavnagar. The programme for construction of theatres in the remaining three cities under corporation areas on the lines of Jaishankar Sunderi Natya Griha at Ahmedabad, Grant-in-aid for construction of theatres and construction of Open air-Theatres at taluka levels in the State. A provision of Rs. 200.00 lakhs is proposed for the Sixth Plan 1980-85 and Rs. 24.80 lakhs for the Annual Plan 1981-82.

6.1.13.4. Lalitkala Akademi.—The programmes under the Lalit Kala Akademi the construction of Art Gallery and its establishment and maintenance, financial assistance for publication of art books, providing guru-shishyt scholarship, mobile exhibition, library services at art gallery, etc. A provision of Rs. 25.00 lakhs is proposed for the Sixth Plan 1980-85 and Rs. 4.20 lakhs for the Annual Plan 1981-82.

Archaeology :

6.1.13.5. It is proposed to expand exploration, excavation and conservation activities. It is proposed to under take chemical presevation of monuments, publication construction of quarters and stengthening of administration machinery. A provision of Rs. 40.50 lakhs is proposed for the Sixth Plan 1980-85 and an outlay of Rs. 3.00 lakhs is proposed for 1981-82.

Archives:

6.1.13.6. A separate Department of Achieves was set up in 1971. It is being developed gradually. It serves as an instrument of public administration and also as a source of historic material and seeks to preserve the cultural heritage for postrity. The peapartment also looks after preservation and maintenance of old non-current records of a permanent nature. A scientifically designed building for housing archieves is under construction at Gandhinagar. A provision of Rs. 35.50 lakhs is proposed for the Sixth Plan 1980-85 and Rs. 6.80 lakhs for the Annual Plan 1981-82.

Museums

6.1.13.7. The Department of Museums is mainly concerned with the preservation of our cultural heritage and enrichment of museums by additions of new collections, re-organisation of museums on modern lines for the educational benefit, research students and scholars and the people. At present three are nine Government Museums. A museum has been started at saputara in Dangs District and the work of construction of its building expected is to be completed during the Sixth Plan period. A provision of Rs. 72.00 lakhs is proposed for the Sixth Plan 1980-85. An outlay of Rs. 10.00 lakhs is proposed for 1981-82.

6.1.14. Development of Gujarati Language and its Literature

6.1.14.1. Gujarati Language.

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. The main activities under this programme are:—

(1) The compilation and publication of a series of Political and Cultural of Gujarat in 9 vols and the remaining 3 volumes will be published during the course of the Sixth Five Year Plan.

(2) The compilation and publication of a comprehensive History of Gujarati Literature in four Volumes:—Three volumes of the series have already been published and the Fourth Volume is likely to be published during the year 1980-81. It is also proposed to publish two additional volumes during the Sixth Plan 1980-85.

(3) The compilation and publication of Vdrvam Vignan Kosh in 10 volumes. Vol. I & II have been

published and Vol. III and IV are under compilation. It is proposed to complete the ten volume series during the sixth plan.

(4) The translation and publication of Philosophical-works in Gujarati in a series of four Vol. The first volume of the series has been sent to the press and translation work of other volumes is in progress. The project will be completed during the sixth plan.

(5) Publishing the Poetical and prose works of the Medieval Poet Dayaram in six volumes:—It is proposed to bring out two volumes of the poetical works and four volumes of Prose Works of the Poet Dayaram during the Sixth Plan period.

(6) Granting cash assistance to Gujarati authors for publication of their classical works. About a hundred titles in different subjects have so far been published. The scheme is proposed to be accelerated during the sixth period.

(7) Granting assistance to voluntary agencies for publication of reprints of important literary works out of print:—Under this scheme 12 volumes have so far been published and 5 others are under print at present. Various literary and Research Institutions of Gujarat readily avail of the scheme.

(8) Granting ad-hoc assistance to literary agencies and institutions for bringing out important publication. Under this scheme 4 publications have been issued so far and the fifth one viz. Van-Aushadhi Kesha (a glossary of Mericinal herbs) will be published very shortly.

(9) Financial assistance to New writers for publication of their first literary work under this scheme prospective writers of Gujarat are eligible to receive financial assistance for publication of their first literary work such as Noval, Collection of short stories, one act plays, etc. The scheme has been initiated since 1980-81 and has received good response.

(10) Reprint of Standard english-Gujarati and Gujarat-English Dictionaries, gone out of print for languages. Under this scheme, it is proposed to take up the work of reprint of the well-known Gujarati English Dictionary of Late Shri Bhanusukhram Mehta and Bharatram Mehta, in the first instance. Other important glossaries will also be taken up during the course of the plan.

(11) It is proposed to establish a Sahitya Akademi for Gujarati Language and literature.

6.1.14.2. It is also proposed to implement the following new schemes during the Sixth Plan 1980-85.

(1) Children's encyclopedias in Gujarati in 10 volumes. The Scheme envisages publication of standard articles imbing scientific knowledge with special reference to children.

(2) Publishing critical editions of complete works of the Premier poet of Gujarat Shri Narsinh Mehta.

(3) Publishing standard works of International importance in Gujarati in the field of humanities and science. It is proposed to select 2 or 3 most outstanding works from english or other languages such as Sanskrit, Persian, Arabic etc get the same translated through qualified authors. It is proposed to publish cheap editions of such translation as Government publication and make them available to general public a subsidised price.

(4) It is proposed to provide financial assistance for publication of a History of Gujarati Language.

(5) It is proposed to provide financial assistance to the educational institutions located in no notified backward areas, scheduled areas, tribal areas, etc. for purchase of original works of Gujarati Literature.

(6) Translation from Arabia--Persian-Sanskrit and Other Modern Eurapans Languages into Gujarati.

(6) Institution of a cash award every year for the best author/writer of the Gujarati Literature.

(7) It is proposed to provide financial assistance for encouraging original research in Gujarati Literature to individuals as well as institutions.

(8) It is proposed to publish and popular addition of enanent mediaval poets of Gujarat.

(9) A provision of Rs. 50 lakhs is proposed for the five year plan 1980-85. and a provision of Rs. 10.00 lakhs for the Annual Plan 1981-82.

6.1.14.3. Other Languages :

The scheme for the development of Sindhi, Urdu and other Modern Indian Languages schemes activities are proposed to be continued under them during the Sixth Plan 1980-85.

(1) Financial assistance to authors of Gujarat in Sindhi, Urdu and other Modern Indian Languages (excepting Gujarati and Hindi) for publication of their original works.

(2) Cash awards to literary writers of Gujarati in Sindhi and Urdu for their published literary works of outstanding merits.

(3) Assistance to public libraries voluntary agencies and educational institutions for purchase of books in Sindhi, Urdu and other Modern Indian Languages.

(4) Translation and publication of Standard works of literature and other subjects of humanities from Sindhi-Urdu etc. into Gujarati and from Gujarati into these languages.

(5) Reprints of important literary works of Sindhi, Urdu etc which have gone out of print.

(6) Publication of History of Sindhi and Urdu languages and their literature.

(7) To establish a Sindhi/Urdu Akademy.

(8) Encouragement of Urdu poetry by giving financial assistance for the publication of works of needy poets.

(9) Financial assistance for establishment of Street corner Reading Rooms and circulating libraries for the benefit of weaker sections of the society.

(10) Financial assistance for the establishment of Urdu Printing Press.

6.1.12.3. A provision of Rs. 50 lakhs has been proposed for the Sixth Plan 1980-85 and Rs. 10.00 lakhs for the Annual Plan 1981-82.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

General Education

Minor Headwise outlays and Expenditure

(Rs. in lakhs)

Sr.	Minor Heads)	1979-80	1980-81		1980-85		1981-82	
		Actuals	Outlay	Anticipated Expenditure	proposed Outlay	Capital content	Proposed outlay	Capital Content
	I	2	3	4	5	6	7	8
I	Elementary Education.	353.66	355.60	367.50	5195.04	502.70	622.84	63.00
II	Teachers Training.	8.96	4.40	5.60	56.97	21.00	13.51	5.00
III	Special Education	66.31	85.00	85.00	400.00	..	63.65	..
IV	Secondary Education	77.76	185.02	180.18	1982.29	172.00	299.55	36.53
V	University Education	153.85	87.83	75.33	507.90	..	73.35	..
VI	Games, Sports & Youth welfare	16.42	28.92	28.92	290.70	110.05	44.10	4.05
VII	Arts & Culture	18.87	63.23	64.23	467.11	216.11	63.00	31.03
VIII	Languages.	5.88	12.00	12.00	100.00	..	20.00	..
	Nucleus Budget	..	13.00	13.00	..	..	..	..
Total : General Education		701.71	835.00	831.76	9000.00	1022.18	1200.00	139.61

Draft Sixth Five Year Plan 1980-85 S and Annual Plan 1981-82
Schemewise outlay and Expenditure.

(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme	1979-80 Actuals.	1980-81		1980-85		1981-82		
			Outlays	Anticipated Expenditure.	Proposed Outlay	Capital content	Proposed outlay	Capital content	
1	2	3	4	5	6	7	8	9	
General Education									
(1) Elementary Education.									
1.	EDN-1 Additional teachers for primary schools for enrolling additional pupils.	100.46	256.30	256.30	2999.80	..	395.00	..	
2.	EDN-2 Construction of Class Rooms	148.39	24.00	24.00	502.70	502.70	63.00	63.00	
3.	EDN-3 Construction of Quarters for teachers in tribal areas.	7.00	..	..	..	..	..	..
4.	EDN-4 Opening of New Primary schools.	2.08	1.84	1.84	10.66	..	1.00	..	
5.	EDN-5. Opening of New Primary schools at capital town	1.04	0.38	0.40	1.98	..	0.40	..	
6.	EDN-6 Conversion of Single teachers schools into two teachers schools.	6.00	10.75	10.75	844.45	..	22.50	..	
7.	EDN-7 G.I.A. to schools for improvement of physical facilities.	10.50	..	..	40.00	..	8.50	..
8.	EDN-8 Science kit Boxes	4.00	..	..	52.25	..	11.00	..
9.	EDN-9 Incentives to parents of tribal pupils.	20.00	12.00	22.00	200.00	..	43.00	..	
10.	EDN-10 Financial Assistance to talented SC/ST OBC (Baxi Punch) girls pupils.	..	2.79	2.78	33.48	..	5.55	..	
11.	EDN-11 Strengthening of supervisory machinery	6.62	14.18	14.18	99.72	..	16.05	..	
12.	EDN-12 Coaching classes for weak students in summer vacation.	..	..	..	15.00	..	2.40	..
13.	EDN-13: Introduction of Non-formal education for the age group 9-14.	20.78	9.25	9.25	280.00	..	5.50	..	
14.	EDN-14 Medical check-up for Primary School children of the age group 6.14.	6.00	5.50	5.50	11.00	..	5.50	..	
15.	EDN-15: G.I.A. to Pre-Primary Schools.	20.79	19.61	20.50	89.00	..	22.00	..	
16.	EDN-16 AStrengthening of Planning Machinery and setting up of monitoring cell in D. E's office.	..	..	..	15.00	..	2.44	..
I: Total Elementary Education		..	353.66	355.60	367.50	5195.04	502.70	622.84	63.00
II. Teachers Training:									
17.	EDN-17. Teachers Training Programmes.	2.26	0.45	0.45	14.65	..	2.84	..	
18.	EDN-18 Training of Primary teachers for Std. V to VII Science kit Boxes.	0.09	..	..	0.25	..	0.05	..
19.	EDN-19 Strengthenig of improving existing primary teachers training institutions.	5.60	2.00	3.20	10.00	..	3.20	..	
20.	EDN-20. Magazine for school Boys.	0-31	0.45	0.45	2.50	..	0.50	..	
21.	EDN-21. Science fair at Dist. and State level.	0.52	..	0.50	2.00	..	0.50	..	

1	2	3	4	5	6	7	8	9		
22.	EDN-22.	A.Science Hobby Corner and innovation and experimentation in science Education.	..	..	..	1.60,	..	0.40	..
23.	EDN-23.	Workshop for Science Teachers of primary schools.	..	0.50	..	..	..	..	..
24.	EDN-24	A Construction of Building of State Institute of Education.	..	1.00	1.00	21.00	21.00	5.00	5.00	
25.	EDN-25	Strengthening the administrative wing of State Institute of Education, Ahmedabad.	..	..	..	3.36	..	0.68	..
26.	EDN-26.	Strengthening of publication unit (Jeevan Shikhs) of State Institute of Education, Ahmedabad.	..	..	..	1.60	..	0.36	..
II Total Teachers Training.			..	8.96	4.40	5.60	56.96	21.00	13.51	5.00
Grand Total I Elementary Education and II Teacher Training.			..	362.62	360.00	373.09	5252.00	523.70	636.35	68.00
III. Special Education.										
27.	EDN-27	Rural Functional Literacy Programme.	15.66	15.60	15.60	15.60	..	..	..
28.	EDN-28	State Adult Education Programme.	45.83	54.28	54.28	278.95	..	45.95	..	
29.	EDN-29	Adj. Post Literacy Project.	..	2.08	2.08	63.64	..	10.22	..	
30.	EDN-30.	Incentive grants to voluntary agencies.	1.28	6.54	6.54	21.63	..	3.63	..	
31.	EDN-31	Publicity (Adults)	1.02	1.38	1.38	6.23	..	1.20	..	
32.	EDN-32	Administrative set up.	2.52	5.12	5.12	13.95	..	2.65	..	
III. Total Special Education.			..	66.31	85.00	85.00	400.00	..	63.65	..
Total Primary & Adult			..	428.93	420.00	458.09	5652.00	523.70	700.00	68.00
IV Secondary Education.										
33.	EDN-33	Regulated growth o Secondary Schools.	28.93	62.39	62.39	748.87	88.50	114.20	20.00	
34.	EDN-34.	Remedial teaching for weak students.	1.58	..	..	10.00	..	2.50	..
35.	EDN-35	Improvement of science Education.	4.00	4.00	4.00	35.00	..	6.00	..	
36.	EDN-36.	Programme of Social useful productive works.	..	0.50	..	..	..	..	..
37.	EDN-37.	Inservice training of teachers.	1.73	2.15	2.15	11.35	..	2.15	..	
38.	EDN-38	Improvement of supervision and guidance.	..	..	..	8.00	..	..	..
39.	EDN-39	Opening of New Higher Secondary schools.	12.30	84.21	84.31	856.00	..	112.00	..	
40.	EDN-40	Introduction of artificial sources in technical resources.	1.05	1.95	..	..	..	..	..
41.	EDN-41	Setting up of a special cell—42 stage vocation education.	..	0.76	0.76	15.43	..	3.23	..	
42.	EDN-42.	Introduction of Vocational centres	..	2.00	..	..	..	..	..

1	2	3	4	5	6	7	8	9	
43.	EDN-43	Formulation of vocational Education Board.	..	1.89	1.89	5.00	..	1.00	..
44.	EDN-44.	Vocationalisation of Education GIA to Voluntary Agencies.	..	4.26	4.26	103.00	..	22.00	..
45.	EDN-45.	Vocationalisation of Education Supervision, Control and direction & placement of.	2.79	..	..	15.20	..	1.52	..
46.	EDN-46.	Setting up of Book Banks.	7.00	5.00	5.00	35.00	..	6.00	..
47.	EDN-47	Strengthening of Library facilities Higher secondary schools.	..	..	..	25.00	..	5.00	..
48.	EDN-48.	Strengthening of the Directorate of Education and Dist. Education offices.	..	..	..	10.00	..	3.60	..
49.	EDN-49.	Construction/Repairs in Govt. secondary schools.	17.82	13.64	13.64	80.40	80.40	15.43	15.43
50.	EDN-50	Strengthening of Gujarat Secondary education Board.	..	..	..	3.00	..	..	..
51.	EDN-51.	Strengthening of the State Board of Examination.	0.56	1.16	1.16	12.06	8.10	3.00	1.10
52.	EDN-52.	Strengthening of institution of vocational guidance.	..	0.22	0.22	1.08	..	0.50	..
53.	EDN-53.	Development of Sanskrit Language.	..	0.28	0.28	1.40	..	0.30	..
		(A) Pathashals. & Awards.	..	..	..	..	..	..	..
		(B) Scholarships.	..	0.12	0.12	0.60	..	0.12	..
54.	EDN-54.	Appointment of Hindi Teachers in Non-Hindi speaking States.	..	3.00	..	5.00	..	1.00	..
IV : Total : Secondary Education :			77.72	185.02	130.18	1982.29	172.00	299.55	36.53

V University Education.

55.	EDN-55.	The Gujarat Council of Studies for the social cultural and scientific advancement	..	0.05	0.05	11.00	..	0.05	..
56.	EDN-56.	Grant to Universities for Higher Administration and Managerial courses.	4.00	0.50	0.50	3.00	..	0.60	..
57.	EDN-57.	Performance award to colleges.	..	2.00	..	10.00	..	2.00	..
58.	EDN-58.	A Development grant to Sardar Patel Insti. of Economic and Research, Ahmedabad.	..	3.00	3.00	..	..	..	..
59.	EDN-59.	Development of Government Colleges.	10.55	5.18	5.18	40.00	..	5.00	..
60.	EDN-60	Faculty Development Programme.	..	..	..	..	..	..	..
61.	EDN-61.	Asstt. to professional association of an academic nature.	..	0.20	0.20	0.80	..	0.20	..
62.	EDN-62.	Asstt. to colleges for inviting experts for lecture and seminars.	..	..	..	..	..	..	..
63.	EDN-62.	Spl. Coaching classes for weak students	1.00	1.50	1.80	10.00	..	2.00	..
64.	EDN-64	Provision of Matching share against UGC grant to Colleges.	4.76	5.00	5.00	35.00	..	5.00	..
65.	EDN-65.	Hostel environment programme.	..	..	..	..	..	..	..

1	2	3	4	5	6	7	8	9
66.	EDN-66. Opening of Education and vocational guidance department in colleges.	..	..	..	..	..	..	..
67.	EDN-67. Grants to University	95.54	37.00	37.00	250.00	..	38.00	..
68.	EDN-68. GIA to Residentail Uni. at Bhavnagar	27.00	25.00	12.50	100.00	..	12.50	..
69.	EDN-69. Scholarships & Freeship (including for secondary educations)	11.00	8.00	8.00	48.00	..	8.00	..
V Total University Education		153.85	87.88	75.33	507.90	..	73.35	..
VI Sports and Youth Welfare:-								
70.	EDN-70. Games and Sports.	0.29	0.30	0.30	0.70	..	0.10	..
71.	EDN-71. Introductions of National service scheme.	2.00	3.00	3.00	15.00	..	3.00	..
72.	EDN-72. Integrated schemes of Y. W.	2.49	2.90	2.90	50.00	15.00	9.00	2.00
73.	EDN-73. Expansion of activities of State Sport council.	11.64	22.72	22.72	225.00	95.05	32.00	2.05
VI Total Sports & Y. W.		16.42	28.92	28.92	290.70	110.06	44.10	4.05
VII Arts and Culture.								
74.	EDN-74. Library Development	1.58	2.40	2.40	1.60	..	2.45	..
75.	EDN-75. Construction of building for new Govt libraries.	0.60	4.00	4.00	24.00	20.00	7.00	7.00
76.	EDN-76. Furniture for Governmot Libraries.	0.13	0.40	0.40	1.38	..	0.40	..
77.	EDN-77. Reading materials for Government libraries.	2.59	1.00	1.00	6.50	..	1.33	..
78.	EDN-78. State construction towards R. R. Mohan Ray Library foundations	..	1.08	1.08	..	..	0.75	..
79.	EDN-79. Opening of Villages Library	4.50	2.00	2.00	14.75	..	2.00	..
80.	END-80. Refresher courses for employees etc.	1.11	0.15	0.15	..	..	0.15	..
81.	EDN-81. Strengthening of office of the Curator of Libraries.	..	..	..	0.78	..	..	..
82.	EDN-82. Strengthening of Offices of the Asstt. Crator of Libraries.	..	0.36	0.36	2.10	..	0.40	..
83.	EDN-83. Strengthening of Central Libraries-Vadodara.	..	3.10	3.10	0.60	..	0.11	..
84.	EDN-84. Strengthening of of Government district Libraries.	..	0.31	0.31	4.65	..	0.35	..
85.	EDN-85. Strengthening of other Government Libraries.	..	0.05	0.05	0.35	..	0.06	..
86.	EDN-86. Strengthening of Non-Government Libraries.	..	..	..	1.20	..	0.30	..

1	2	3	4	5	6	7	8	9
87.	EDN-87. Cultural Schemes.							
	(A) Sangest Academy.	0.86	22.90	22.90	200.00	139.65	24.80	16.00
	(B) Lalitakala Academy.	0.11	11.48	11.48	25.00	1.00	4.20	1.00
88.	EDN-88. Development of Archacology	1.73	3.00	3.00	40.50	3.00	3.00	0.80
89.	EDN-89. Development of Arechives.	1.56	5.00	6.00	35.50	3.28	6.00	1.20
90.	EDN-90. Development of Museums.	5.10	6.00	6.00	72.00	49.50	10.00	5.03
VII—TOTAL ARTS & CULTURE		18.87	63.23	64.23	467.11	216.43	63.00	31.03
VIII—Development of Languages								
91.	EDN-91. Development of Languages.	5.88	12.00	12.00	100.00	..	20.00	..
	Mucleus Budget.	..	13.00	13.00	..	..	..	..
GRAND TOTAL:- GENERAL EDUCATION		701.71	835.00	831.76	9000.00	1022.18	1200.00	139.61

Draft Sixth Five Year Plan-1980-85 and Annual Plan 1981-82

General Education

Centrally Sponsored Schemes -Outlays.

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 Outlay proposed			1980-81 Outlays.			1981-82 Outlay proposed.		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Introduction of National Service Schemes.	..	2.75	2.75	15.00	21.00	36.00	3.00	4.20	7.20	3.00	4.20	7.20
					Shareable Centrally Sponsored Schemes.								
1.	National Fitness Corporations.	..	50.63	50.63	..	160.00	160.00	..	34.80	34.80	..	35.00	35.00
					Fully Centrally Sponsored Schemes.								
2.	Production of Text-Books and other literatures in Gujarati at university Stage.	..	14.46	14.46	..	30.00	30.00	..	6.00	6.00	..	6.00	6.00
3.	National Loan/scholarship to meritorious students.	..	15.51	15.51	..	80.00	80.00	..	19.00	19.00	..	19.00	19.00
4.	National Merit Scholarships.	..	..	..	..	15.00	15.00	..	3.00	3.00	..	3.00	3.00
5.	Talented students Scholarship for rural areas.	..	..	..	..	20.00	20.00	..	4.00	4.00	..	4.00	4.00
6.	Teachers on scholarships.	..	..	..	..	1.00	1.00	..	0.20	0.20	..	0.20	0.20
7.	Scholarships to non-hindi speaking student in non-hindi states of post matric studies in Hindi.	..	..	..	..	16.00	16.00	..	3.20	3.20	..	3.20	3.20
8.	Education Technology Cell.	..	1.72	1.72	..	12.50	12.50	..	3.50	3.50	..	2.50	2.50
9.	Rural functional literacy programme.	..	7.70	7.70	..	483.00	483.00	..	86.00	86.00	..	100.90	100.90
10.	Strengthening of Administrative structure (Adult Education)	..	..	..	..	75.00	75.00	..	15.81	15.81	..	15.81	15.81
11.	Implementation of antiquities and Art treasury Act.	..	1.94	1.94	..	13.30	13.30	..	2.66	2.66	..	2.66	2.66
Total:-		..	94.71	94.71	15.00	926.80	941.80	3.00	182.37	185.37	3.00	195.47	198.47

STATEMENT III

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Targets of production and physical achievements.

Sr.No.	Item	Unit	Level of achievement at the end					
			1978-79	1979-80 Base year level(P)	1984-85 Terminal year target	1980-81 Target (level)	Likely achieve- ment	1981-82 Proposed target (level)
1	2	3	4	5	6	7	8	9
A. Elementary Education.								
1. Class I-V(Age group 6-11)								
(i) Enrolment.								
	(a) Boys	'000	2399	2480	2497	2356	2570	2552
	(b) Girls	"	1615	1658	2153	1960	1724	1831
	(c) Total	"	4014	4138	4650	4316	4294	4383
(ii) Percentage to the age Group 6-11.								
	(a) Boys	Percentage	115.78	118.77	114.33	113	122.14	120.37
	(b) Girls	"	82.82	84.86	105.33	99	84.24	92.47
	(c) Total	"	99.80	102.14	110.00	105	105.24	106.90
2. Class VI-VIII(Age group 11-14).								
(i) Enrolment								
	(a) Boys	'000	689	699	1050	861	720	802
	(b) Girls	"	398	403	663	646	421	482
	(c) Total	"	1087	1102	1713	1507	1141	1284
(ii) Percentage to the age group 11-14								
	(a) Boys	percentage	57.46	58.01	83.33	76.40	59.50	66.00
	(b) Girls	"	35.16	35.44	56.32	59.21	36.86	42.05
	(c) Total	"	46.63	47.05	70.29	67.97	48.51	54.38
BIJ. Classes IX-X-Enrolment.								
	(a) Boys	'000	282	291	341	301	301	311
	(b) Girls	"	149	155	185	161	161	167
	(c) Total	"	431	446	526	462	462	478
II. Classes-XI-XII(General)-Enrolment.								
	(a) Boys	'000	121	148	283	175	175	202
	(b) Girls	"	44	47	62	50	50	53
	(c) Total	"	165	195	345	225	225	255
C. Enrolment in non-formal								
(Part-time/continuation classes)								
(ii) Age group 9-14								
	(a) Total	Nos.	15383	23107	280000	10000	10000	25000
	(b) Girls	"	5519	6309	75890	1500	1500	9000

1	2	3	4	5	6	7	8	9
D. Adult Education.								
(a)	Number of participants (Age group 15--35).	'000	516	869	3550	355	355	535
(b)	No. of centres opened under.							
(i)	Centre's programme.	Nos.	5935	6202	30850	5450	5450	6350
(ii)	State's programmes.	„	6270	8820	16620	4170	4170	2600
(iii)	Voluntary agencies.	„	5020	11318	70187	2233	2233	8883
E. Teachers.								
(1)	Primary classes.	Nos.	1,17,861	1,22,011	1,33,000	1,24,011	1,24,01	1,27,111
(2)	Secondary classes. IX--X.	„	36,420	37,180	38,420	37,395	37,395	37,620
(3)	Higher secondary classes (XI--XII) (Add--New).	„	160	64	2,925	150	330	915

STATEMENT IV.

Draft Sixth Five Year Plan 1980-85.

Revised Minimum Needs Programme-Outlays and Expenditure.

(Rs. in lakhs)

S.No.	Name of the Programme	1979-80 Actuals	1980-81		1980-85		1981-82	
			outlay	Anticipa- ted expen- diture	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
1.	Elementary Education.	262.62	360.00	373.09	5252.00	523.70	626.35	68.00

STATEMENT V.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Revised Minimum Needs Payments

Sr.No.	Programme	Item	Unit	Level of achievement at the end of					
				1978-79	1979-80 Based year level	1984-85 Terminal year target	1980-81 Target level	1981-82	
1	2	3	4	5	6	7	8	Likely achieev- ment	Proposed (level)
								9	10
3. Elementary Education									
(a)	Classes-I-V. enrolment.	(Age group 6-11 years)	'000	4014	4138	4650	4316	4294	4333
(b)	Classes VI-VIII Enrolment.	(Age group 11-14 years)	'000	1087	1102	1713	1507	1141	1284
4. Adult Education.									
(a)	Number of participants.	(Age group 15-135 years)	'000	516	869	3530	355	355	535
(b)	Number of centres.								
(i)	Central		Nos.	10955	17520	101047	7683	7683	15233
(ii)	State		Nos.	6270	8820	16620	4170	4170	2600

6.2. TECHNICAL EDUCATION

6.2.1 Introduction

The existing facilities for Technical Education Gujarat State have been provided with a view to satisfying the increasing needs for Technical and specialised manpower required 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 Plan and has made continuous efforts to ensure a steady supply Engineers/Technologists and Technicians, at appropriate level.

6.2.1.2 Gujarat State has established seven Engineering Colleges and nineteen Poly-technics with an intake of 1885 and 3375 seats for degree and diploma courses respectively. There are 44 Technical High Schools which give technical back-ground to secondary school students.

6.2.2. Level of Achievement

(a) Academic

6.2.2.1 During the fifth five year plan, the State has introduced two undergraduate courses in Chemical Engineering with 30 seats and Textile Technology with 20 sets raising the seats from 1790 to 1840. A part-time degree course in Electronics with 10 intake was started from June, 1976.

6.2.2.2 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 Secretarial Practice, garments Making, Costume, Design and Dress Making etc. New diversified diploma courses a Automobile Engineering, (30 seats) and Plastic Engineering (30) have been introduced by adjustment of seats, since 1974 and 1975 respectively.

6.2.2.3 It was considered important to direct major position of the students from the Universities and channelise them through the need based vocational education for courses, with the introduction of 10+2+3 pattern, the State has started several jobs oriented vocational certificate courses. 734 additional seats have been introduced at the certificate level.

Thus, the certificate courses have been developed but largely allocated by the trade courses run in Industrial Training Institutes.

(b) Faculty:

6.2.2.4 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.

6.2.2.5 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 on yearly basis.

6.2.3 Perspective of development

6.2.3.1 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.

Major Projects and Industrial Development:—

6.2.3.2 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.

6.2.2.3 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 lak.)	
	1972	1987
(i) Estimated Supply	727.2	870.1
(ii) Estimated Requirements low (4.5%)	612.6	875.0
Estimated requirements Medium (5.5%)	698.1	1004.8
Estimated requirements High (7.0%)	789.5	1224.3

Of course, the steps have been taken to improve the efficiency of the institution thereby minimising the wastage; the supply of technical man-power has been tried to be uplifted, at degree and diploma level.

6.2.3.4. It may, therefore, be necessary to introduce now courses where it may be absolutely essential in the interest of development of specific sectors of the State. The emerging areas attributing 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) Rio-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

6.2.3.5 It is necessary to continue the existing faculty improvement programmes in respect of practical training of teaches in industry, deputation of teachers for post-graduate and doctoral programmes, short term courses and deputations to Technical Teachers' Training Institute, for Polytechnic teachers.

6.2.3.6 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 :

6.2.3.7. 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:—

6.2.3.8 The State of Gujarat provides facility of post-S.S.C. diploma and trade courses in technical field extending over 3 years and two 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 tenth standard pass outs.

Students Amenities and other Programmes:—

6.2.3.9 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:—

6.2.3.10. The State being the implementing agency for most education programme the State Directorate have a variety of academic, professional and managerial roles to play. The directorate should have organs dealing with man-power assesment, planning, co-ordination, controlling, monitoring and evaluation of education programmes. The directorate should therefore be strengthened with professional academic and techno-administrative staff.

6.2.3.11. 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.

6.2.4 Review of Progress

6.2.4.1. The position of the institutions together with the intake and other details from time to time is detailed below.

Plan Period	Engineering College Degree		Polytechnics Diploma	
	No. of Institutions	Intake	No. of Institutions	Intake
1	2	3	4	5
1. Ist Plan (1951-55)	4	475	8	760
2. IInd Plan (1956-60)	4	950	11	1475
3. IIIrd Plan (1961-65)	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. (a) Annual Plans 1973-79	7	1885	19	3315
(b) 1979-80	7	1885	19	3375
8. 1980-81	7	2036	19	3744

6.2.5. Programmes

6.2.5.1. The programmes of Technical Education Development during the Sixth Plan 1980-85, and Annual Plan 1981-82 are as under:—

Head of Development	Rs. in lakhs				
	1979-80 Actuals	1980-81 Approved outlays	1980-81 Anticipated expenditure	1980-81 Proposed outlay	1981-82 Proposed outlay
1	2	3	4	5	6
Technical Education	91.93	95.00	95.00	995.00	200.00

6.2.5.2. It is proposed to increase the level of 1979-80 by 441 seats at degree level during the Sixth Plan and by 150 seats during 1981-82, by 1782 seats at diploma level during the Sixth Plan and by 392 seats during 1981-82 as per the details shown in Annexure.

1. Introduction of 2½ 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 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 to be considered for a two year pattern after XII th Std. (Science Stream).

2. Introduction of one year specialised courses 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, increasing the level of 1979-80 by 206 seats at degree level and 500 seats at diploma level.

(a) Degree Course :—In the year 1980-81, the degree seats have been increased by 151 seats, of which 86 are for Civil Engineering. It is proposed to be increased by 120 seats during 1980-85 bringing the total increased to 206 seats.

(b) Diploma Course :—At diploma level, the increase in 1980-81 is of 279 seats. It is proposed to be increased by 221 seats bringing the total increase to 500 seats by the end of the Sixth Plan.

Mechanical Engineering :—

4. (a) Degree Course :—In the year 1980-81, the degree seats have been increased by 65 seats.

(b) Diploma Course :—To take care of industrial development, in intake for Mechanical diploma it is proposed in to be increased by 300 seats, during the Sixth Plan 1980-85. In the year 1980-81, 230 seats are increased and it is proposed to increase 70 seats during 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 220

seats during the Sixth Plan are proposed to suit the demand of specialised technicians : -

Name	Seats	Centres
(a) Electronics	40	Vadodara/Bharuch
(b) Chemical	20	Bharuch
(c) Man-made fibre (fibries)	20	Ahmadabad
(d) Man-made fibre (wet processing)	20	Ahmadabad
(e) Ship Building Engineering	40	Bhavnagar/Surat
(f) Surface coating Technology	15	Vallabh Vidyanagar
(g) Structural Fabrication and Erecting Engineering (2 years after XII th Std.)	15	Bhavnagar
(h) Architectural Assistanceship	30	Ahmadabad
(i) Micro Engineering Technology/Micro Instrumentation Technology	20	Morbi
	<u>220</u>	

Post-Diploma Course :

6. In order to meet the specialised manpower needs in various fields, the following post-diploma courses of one and a half year are proposed to be introduced in the Sixth Plan :—

Subject	Seats	Centre
1. Foundry Technology	15	Vadodara/Bharuch
2. Plastic Technology	15	Valsad
3. Energy Systems	30	Vallabh Vidyanagar/ Bhavnagar
4. Machine Tools Maintenance (Mechanical, Electrical/Electronics Control)	10	Bharuch/ Rajkot
5. Industrial Safety	20	Ahmadabad
6. Interior Decoration	15	Ahmadabad
7. Dairy Engineering	15	Vallabh Vidyanagar
8. Industrial Electronics	20	Rajkot
9. Bio-Medical Instrumentation	10	Ahmadabad
10. Industrial Engineering	10	Bharuch
11. Materials Management	15	Surat
	<u>185</u>	

7. Learn while you earn scheme :—

7. Part-time courses are designed and conducted in such a way that the participants get benefits 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 :—

A. Degree course in Blade	Existing Level	Proposed Level
Ahmadabad	115	165
Vadodra	70	120
	<u>185</u>	<u>285</u>
Part-time courses in Chemical, Textile Tech. at Vadodra	..	40
		<u>325</u>
B. Diploma Courses in Blade		
(i) Bharuch	30	60
Surat	45	90
Rajkot	45	60
Vadodra	70	170
	<u>190</u>	<u>380</u>

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.

8. 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, Ahmadabad.

8. (b) It is proposed to introduce new electives at the final year of the under-graduate courses :

(i) Micro processor	Ahmadabad
(ii) Alternative Energy System	Ahmadabad/ Vidyanagar
(iii) Industrial Design	Ahmadabad
(iv) Marine Engineering	Surat

8. (c) It is proposed to increase the existing intake of electronics 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.

10. New Institutions :—

10. (a) It is proposed to establish are Polytechnic to cater the technical educational training for girls with 120 seats at Vadodara.

10 (b) It is proposed to establish one additional Polytechnic with intake of 120 seats in either Jamnagar, Amreli or Modasa.

Technical High School Level :—

11 (a) Technical High Schools imparts 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 :—

- (a) girls division at Surat,
- (b) One division at Kapadwanj,
- (c) One division at Junagadh,
- (d) other places where the demand may come-up.

11 (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., Ahmadabad.
(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, Ahmadabad.
(v) Fitter	16	-do-
(vi) Hand Compositor (Part-time)	20	R. C. Technical Institute, Ahmadabad.
(vii) Mechanic (Part-time)	10	R. G. Technical Institute, Ahmadabad.
(viii) Draughtsman Mech.	16	Govt. Tech. High School, Palanpur.
(ix) -do-	16	-do- Patan
(x) Electrician	16	-do- Surat
(xi) Other Courses like Yranganthman (Civil), wiremen, Electrician, Turner, Fitter, etc. where the demand may come up		

Total 160.

12. *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 school 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.

13. 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.

14. Consolidation and Improvement :—

14. It is proposed to consolidated 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, Ahmadabad.
- (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.

15. It is proposed to develop two more Polytechnics as Community Polytechnics.

Students' amenities :—

16. It is proposed to provide for play grounds, canteen buildings, water coolers, fans furniture for canteens/hostels, Medical facilities (at some selected centres).

Constructions :—

17. The existing works under construction will have to be provided with funds. Amongst the other programmes the following to be taken up on priority :—

Hostels	A. V. Parekh Tech. Inst., Rajkot.	Girls Hostel	30 capacity
	Sir, B. P. T. I Bhavnagar	-do-	60 capacity
Quarters	G.G.P., Ahmadabad	Principal, Quarter	One
	Dr. Gandhi College, Surat	Rector Quarter	Two
	G.G.P., Ahmadabad	-do-	Two
	L. D. C. E. Ahmadabad	Warden quarter	Two
	L. E. College, Morbi	Staff quarter	Twenty

6.2.6. Programmes, 1981-82.

6.2.6.1. The details of the programmes for the Annual Plan 1981-82 are as under :—

(a) Degree Level :

(1) to introduce 30 seats (10 seats for each) for Plastic Technology, Rubber Technology and Silicate Technology.

(2) to introduce new elective such as Industrial Design and Micro Processor.

(b) Diploma Level :—

(1) to introduce 60 seats at Post-diploma level for Interior Decoration (15) Dairy Engineering (15) Industrial Electronics (20) and Industrial Engineering (10) making total seats 240.

(2) to increase the existing seats of part-time diploma courses in the selected institutions, as under :

Centre	Existing	Proposed to be revised
Bharuch	30	60
Surat	45	90
Vadodara	70	170

(3) to increase the existing intake of diploma courses from 100 seats to 115 seats at A. V. Parikh Technical Institute, Rajkot.

(4) 30 seats in Artitechtural Assistantship at Govt. Polytechnic, Ahmadabad.

(c) Technical High School Level :—

I. Secondary Education.

(i) to start one division of 45 seats especially for girls students of F. S. Parekh Technical High School, Surat.

(ii) to start one more vision of 45 seats at P. N. Technical High School and Smt. K. S. Dani vocational Centre, Kapadwanj.

(iii) to start one more division of 45 seats at Government Technical High School, Junagadh.

II. Certificate Level :—

(i) Following certificate courses are proposed to be introduced.

(1) Textile Design	10 Seats	Govt. Girls Poly Ahmedabad.
(2) Part-time Higher Certificate course in spinning-Weaving	20 Seats	R.C. T. I. Ahmedabad
(3) Hand compositor part-time	20 Seats	"
(4) Machine Man Part-time	10 Seats	R.C.T.I., Ahmedabad

(ii) I.T.I. Trade Courses :—

(1) Radio and T. V. Mechanic	16 Seats	Govt. Tech. High School, Ahmedabad
(2) Fitter	16 Seats	"
(3) Draughtsman (Mech.)	16 Seats	G.T.H.S., Palanpur
(4) Draughtsman (Mech)	16 Seats	G.T.H.S., Patan.
(5) Electrician	16 Seats	F.S.P.T.H.S., Surat.
Total ..	160 Seats	

(d) It is proposed to introduce the ad-hoc short-duration courses to cater the varied needs of the society. The centre is proposed to be at Government Polytechnic Ahmadabad.

(e) The staff structure in Engineering Colleges and Polytechnics is proposed to be revised as per A.I.C.T.E. Norms.

6.2.6.2. Existing Book Service Centres are proposed to be strengthened. It is proposed to continue the process of replacement of obsolete equipment and to provide for purchase of new modernised equipment.

6.2.6.3. It is proposed to develop the libraries in Engineering Colleges and Polytechnics in the following aspects :

- (1) adequate space.
- (2) adequate number of books.
- (3) adequate number of staff for library and open access system.

6.2.6.4. It is proposed to provide the adequate number of staff for accounts divisions of Government Engineering Colleges and Polytechnics and strengthen the management of accounts. It is also proposed to

provide adequate personnel for management of hostels. Computer facility established at the L.D.C.E., Ahmadabad is proposed to be strengthened.

6.2.6.5. Students amenities

(a) It is proposed to provide medical facilities at L. E. College, Morbi.

(b) It is proposed to provide—

—Canteen furniture at Porbandar and Patan.

—Water-Coolers for canteen at K.J.P., Bharuch.

G.P., Rajkot, A.V.P.T.I., Rajkot and G. P. Dohad.

—Water-coolers for hostel at all engineering colleges and polytechnics.

6.2.6.6. (a) HOSTEL

It is proposed to construct girls hostels at A. V. Parekh Technical Institute, Rajkot with 30 capacity and at B.P.T.I., Bhavanagar with 60 capacity.

(b) Quarters : It is proposed to construct one Principal quarter at G.G.P., Ahmadabad, one Warden quarter, at L. D. College of Engineering, Ahmadabad and twelve staff quarters at L. E. College, Morbi.

6.2.6.7. Strengthening of Directorate and Technical Examination Board.

It is proposed to establish an inspection unit and strengthen the same with adequate man-power. It is also proposed to strengthen the accounting systems providing adequate man-power and the administrative set up of T. E. B.

Statement I

Sixth Five Year Plan 1980-85 and Annual Plan 1981--82 Schemewise outlays and Expenditure

Technical Educational.

(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme.	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1. Direction and Administration.								
	TED-1: Strengthening of Administrative set up of Technical Education Department and Technical Examinations Board.	0.89	1.85	1.85	15.00	..	2.00	..
2. Technical Schools.								
	TED-2: (Technical High schools Vocation-lisation)	18.99	20.95	20.95	250.00	50.00	50.00	15.00
3. Polytechnics.								
	TED-3: Development of Government Polytechnics and Girls Polytechnics including quality improvement programme Industrial Training for students diversified and sandwich course at Diploma level.	24.62	30.05	30.05	300.00	60.00	50.00	15.00
	TED-4: Grant-in-aid for Pvt. Polytechnics.	1.45	1.00	1.00	20.00	..	3.00	..
5. Engineering Colleges & Institutions.								
	TED-5: Development of Government Engineering Colleges including quality improvement programmes and development of other special training programme for specific requirement in Gujarat.	18.41	20.68	20.68	200.00	80.00	45.00	18.00
6. Non-Govt. Tech. Colleges & Instts.								
	TED-6: Grant-in-aid to Pvt. Engg. Colleges including S. V. Regional college of Engineering Surat.	1.15	1.25	1.25	30.00	3.00	5.00	..
7. Scholarships								
	TED-7: Increase in number of Scholarships in Engg. colleges & Institutions.	0.02	0.30	0.30	1.00	..	0.10	..
8. Training & Research :								
	TED-8: Training of Teachers and Instructor for Technical Institutes.	1.28	2.00	2.00	10.00	..	2.00	..
9. TED-9. Other Expenditure.								
	Provision of students amenities in technical institutions.	7.70	4.50	4.50	30.00	10.00	5.00	3.00
	TED-10: Revision of staff structure.	..	..	..	5.00	..	0.90	..
	TED-11: Continuing Education programme.	..	..	..	4.00	..	..	..
	TED-12: Construction of staff qutrs. for staff of Engg. Colleges & Polytechnics.	12.62	6.25	6.25	50.00	50.00	17.00	17.00
	TED-13: Construction of Hostel for Students & Tech. Institutes.	4.80	6.17	6.17	80.00	80.00	20.00	10.00
Total :		91.93	95.00	95.00	995.00	333.00	200.00	78.00

STATEMENT II

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Targets of Production and Physical achievements

Technical Education :

Sr. No.	Item	Unit	Level of Achievement at the end of 1980-81				1981-82	
			1978-79	1979-80 (Base Year level)	1984-85 Terminal year Target	Target	Likely (Level) Achievement	Proposed Target (Level)
1	2	3	4	5	6	7	8	9
TECHNICAL EDUCATION								
1. DEGREE COURSE								
	1. No. of Institutions	Nos.	7	7	7	7	7	7
	2. Seats (intake)	Nos.	1885	1885	2326	1885	2035	2186
2. DIPLOMA COURSE								
	1. No. of institutions	Nos.	19	19	21	19	19	19
	2. Seats (intake)	Nos.	3315	3375	5157	3375	3744	4136

Statement III

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Fully Centrally Sponsored Schemes Outlays

Technical Education

Sr. No.	Name of the scheme	1979-80 Actuals			1980-85 Outlay proposed			1980-81 Outlay			1981-82 Outlay proposed.		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Development of post graduate and Research work at L. D. College of Engineering, Ahmedabad.	..	4.89	4.89	..	23.00	23.00	..	3.60	3.60	..	4.30	4.30

6.3. MEDICAL AND PUBLIC HEALTH.

6.3.1 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 the rural and urban areas also persists.

6.3.1.1. 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, Indigenous systems of medicines, Ayurved and Homeopathy, Employees' State Insurance and Drugs Control Administration.

6.3.2. Review of Progress :

6.3.2.1 57 Civil and other hospitals with 9086 beds and 11 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 Programmes 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 bedded 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 Public Health Centres. There is a full fledged Vaccine Institute at Vadodara producing antirabic vaccine.

6.3.2.2. 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. The State Government has also started a diagnostic laboratory for small pox in Vaccine Institute, Vadodara, which is receiving samples for confirmation of

diagnosis not only from the State, but also from Madhya Pradesh, Diu and Daman. 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 incidence districts are Valsad, Surat, Dangs, Vadodara, Panchmahals Junagadh and certain parts of Jamnagar, Rajkot and Sabarkantha Districts. There are 19 district T.B. Centres with about 3551 beds. Besides, there is one T.B. Demonstration Training and Research Centre at Ahmedabad.

6.3.2.3. Under the multi-purpose workers scheme aiming at delivering of package of health services in an integrated manner in the rural areas, 7,254 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 also working in rural areas.

6.3.2.4. 29 Hospitals with 1,366 beds are providing medical hospitals under the ESI Scheme. Besides, 83 dispensaries and 21 Diagnostic Centres are functioning under the Scheme.

6.3.2.5 There are two full fledged Public Health Laboratories one each at Vadodara and other at 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.

6.3.2.6 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 four 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 also a school for training of physiotherapist and S.S.G. Hospital, Vadodara with intake capacity of 12.

6.3.2.7 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.

6.3.3. Approach :

6.3.3.1 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.

6.3.3.2 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 thereby to ensure that the concentrated efforts launched against the control of communicable diseases prove successful.

6.3.3.3 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 while planning for the Health Programmes.

6.3.3.4 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.

6.3.4. Programme : 1980-85 and 1981-82 :

6.3.4.1 An outlay of 5000.00 lakhs is provided in the plan 1980-85 and an outlay of Rs. 700.00 lakhs is proposed for the year 1981-82.

A broad programme wise break up of the outlays is given in the following tables:—

(Rs. in lakhs)

Sr. No.	Programme	1980-81	1980-85	1981-82
1	2	3	4	5
A.1	Direction and Administration	14.15	40.00	17.72
	(i) Medical Relief M & H	77.13	600.00	91.55
	(ii) Training M & H	9.39	42.00	12.67
	(iii) Medical Education & Research	160.14	1000.00	196.60
	(iv) Indigenous system of medicines Ayurved and Homeopathy	27.50	182.76	34.84
	(v) Employees' State Insurance Scheme (State Plan)	5.15	33.95	5.60
B	Public Health			
	Minimum Needs Programme	127.00	2000.00	167.96
C.	Drugs Control Administration	6.85	260.00	17.93
D.	Other Programmes			
	(a) Health Education, Health Statistics, Sera & Vaccine etc.	7.77	5.74	3.92
	(b) Health Services to school children		149.60	3.00
E.	State scheme for payment of additional incentive under the Family Welfare Programme	55.00	235.95	62.30
F	Control of Communicable Diseases and provision for C.S.P. Schemes on sharing basis	629.92	400.00	85.91
	Grand Total A+B+C D+E+F	1120.00	5000.00	700.00

£ Excluding outlays for Malaria and Community Health Workers Programme.

6.3.4.2. It may be mentioned that it has not been possible to accommodate provision for schemes of Malaria Eradication and Community Health Volunteers' due to severe constraint. The requirements of funds for these schemes would be 8414.88 lakhs for plan period 1980-85 and Rs. 1026.75 lakhs for the year 1981-82. The State Government expects that Government of India would agree to continuing these schemes as fully centrally sponsored scheme particularly because these programmes are of national importance.

6.3.5. Medical Relief :

6.3.5.1 The norms for the provision of medical services have been laid down by the Mudaliyar 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 tempering 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.

6.3.5.2. 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 schemes under this sub-head viz. (1) to provide one bed per 1000 population with advanced 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 a referral link in the district and (3) arrange all the remaining hospitals, dispensaries, P. H. Cs. and sub-centres to be covered under the Revised Minimum Needs Programme.

6.3.5.3 The district headquarter town develop into fulcrum of infrastructural development towards which the peripheral population naturally gravitates. Keeping this in view, it is proposed to develop medical facilities at the district towns 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.

6.3.5.4. 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 also proposed to be rationalised to conform to a uniform pattern so that this structure can provide minimum essential requirements on the uniform basis.

6.3.5.5. At present, there are 16 referral hospitals and one cottage hospital under Public Health Sub-Sector while there are 15 cottage hospitals under Public Health Sub-Sector. On an average, there is one referral hospital in the district except 4 district which 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.

6.3.5.6 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.C.s. and District has been envisaged. Priorities will be attached to remove the gap of the 50 beds pattern and equipment etc. in the existing referral hospitals.

6.3.5.7 It is proposed to provide X-Ray machines as well as mobile X-Ray services in 10 hospitals in phased manner during the plan period 1980-85. It is proposed to provide 5 Ambulances services. It is proposed to construct 8 Ambulance Garages with Driver's quarters. It is also proposed to increase 363 beds at 8 district headquarters and hospitals in phased manner and 178 beds in 10 Taluka hospitals. At present there are 864 staff quarters in District and taluka Hospitals. It is proposed to construct 131 quarters in District Headquarters Hospitals and 49 quarters in taluka hospitals. It is proposed to create in all 50 posts of Medical Officers in Hospitals. It also proposed to have casualty section in two hospitals each at Rajkot and Bhavnagar. It is proposed to establish 2 Paediatric Units, 2 Orthopaedic units, 1 Ophthalmic unit, 3 blood transfusion service centres, 1 mobile

surgical unit, 5 mental health care clinics, 1 Rehabilitation unit and 4 dental clinics. An outlay of Rs. 600.00 lakhs has been proposed for the period 1980-85 and an outlay of Rs. 91.55 lakhs has been proposed for 1981-82 for carrying out all the above referred activities under "Medical Relief".

6.3.6. Training :

6.3.6.1 There is acute shortage of Anesthetist 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 Officers 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 4 general Nursing Schools at Bhavnagar, Rajkot, Junagadh and Mehsana and 22 A. N. Ms. schools at various hospitals. It is also proposed to expand the existing hospitals at Rajkot and Bhavanagar.

6.3.6.2 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 take up training programme of 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 programmes for the personnel working under the Health Directorate. An outlay of Rs. 42.00 lakhs has been proposed for the period 1980-85 and an outlay of Rs. 12.67 lakhs has been proposed for 1981-82 for the above referred activities.

6.3.7. Medical Education and Research :

6.3.7.1 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 evolved in the field of medical research. Emphasis placed on (i) Major Communicable disease (2) fertility control research (3) Research on nutrition and (4) research on delivery of health services and carrier structure for all para-medical personnel as part of the health team 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.

6.3.7.2. 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 requirement 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.

6.3.7.3. 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.

6.3.7.4. A programme for training of teachers for medical faculty is envisaged. The programme will give 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 practioners of medicens.

6.3.7.5. In order to provide proper training to the under graduate students, interness *i.e.* resident doctors and junior staff members about the specific problems and challanges 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.

6.3.7.6. It is envisaged to provide essential services in all teaching hospitals such as laundry plant, generator set, instensive care units, incinerator and cardiacathator laboratory in Civil Hospital, Ahmedabad.

6.3.7.7. 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 reflected 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. 1000.00 lakhs has been proposed for the period 1980-85 and an outlay of Rs. 196.60 lakhs has been proposed for 1981-82 for undertaking the activities referred to above.

3.8. Indigenous system of Medicine :

6.3.8.1. 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 district 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. One Botanical garden in Kachchh District and three in tribal areas have already been started. Besides, three herbs collection centres have been started. It is also proposed to strengthen an ayurvedic Pharmacy 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 Centres is likely to be extended throughout the State, it is necessary to provide necessary guidance etc. to the doctors from the Ayurvedic system. It is proposed to start District Ayurvedic Offices in all District Panchayats in the State. An outlay of Rs. 182.76 lakhs has been proposed for 1980-85 and an outlay of Rs. 34.84 lakhs has been proposed for 1981-82 for undertaking the above mentioned activities.

3.9. Employees' State Insurance Scheme :

6.3.9.1. 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 I.M. 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. 33.95 lakhs has been proposed for 1980-85 and outlay of Rs. 5.60 lakhs has been proposed for 1981-82 for the purpose.

Public Health

6.3.10. Minimum Needs Programme :

6.3.10.1 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 revised 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.

6.3.10.2. The Revised Minimum Needs Programme now in general envisages to establish one P.H.C. for every 50,000 population and one sub-centre for every 5,000 population and in particular one P.H.C. for every 20,000 population and one sub-centre for every 3,000 population in Tribal Areas. The target implied by the revised norms are to be achieved over the ten year's period 1980-90.

6.3.10.3. The earlier norms to establish one primary Health Centre for each C.D. Block has already been achieved in Gujarat State by the end of the Fifth Plan. Accordingly 251 Primary Health Centres were established in 251 C.D. Blocks with 2020 sub-centres at the end of the plan period. 480 more sub-centres have been established bringing total number of sub-centres operating in the State to 2500 by the end of 1979-80.

6.3.10.4. It is proposed to establish 85 additional P.H.Cs. during the plan period 1980-85 bringing the total number of P.H.Cs. to 336. It is also proposed to establish 900 sub-centres during the plan period 1980-85 bringing the total number of sub-centres at the end of the plan to 3400.

6.3.10.5. The Minimum Needs Programme also envisaged upgradation of 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 4 Primary Health Centres into 30 bedded hospitals. More centres will be upgraded during the subsequent plan period so as to fulfil the set norms.

6.3.10.6. Backlog of Construction :

It is one of the primary requirements to have institutional buildings and staff quarters to generate efficient health services. 9 mobile dispensaries have been established in tribal areas with a view to render Health Services at the door steps of tribals. At present most of the P.H.Cs. have Government buildings. There is a total backlog of construction of 2324 staff quarters of P.H.Cs. and sub-centres. It is proposed to construct 250 sub-centres building and 75 staff quarters of P.H.Cs.

6.3.10.7. Provision of Drugs of PHCs. :

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. As all Health Programmes are integrated at P.H.Cs. level and also taking into account of price escalation of drugs, it is proposed to increase this amount by Rs. 3,000 to each P.H.C..

6.3.10.8. The multipurpose workers scheme is being implemented in all the districts. A centrally sponsored scheme for community health workers has been introduced in 1977-78 in 103 primary Health Centres. As all the districts are now covered under the multipurpose workers scheme, it is also proposed to extend community health workers scheme to all the villages in the State. An outlay of Rs. 2000.00 lakhs has been proposed for the period 1980-85 and an outlay of Rs. 167.96 lakhs has been proposed for 1981-82 for the different programmes referred to above under the "Minimum Needs Programme".

6.3.11. Drugs Control :

6.3.11.1. The provision of safe and effective drugs is an important component of the Health care programme. As per the recent amendment in the Educational Regulation under pharmacy Act, out of 5000 unregistered pharmacy, 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.

6.3.11.2. The existing facilities for drawing of samples and their analysis is inadequate from the stand point of speedy deterrent action. It is therefore proposed to set up 5 mobile laboratories which would be suitably equipped and staffed for the expeditious drawing of samples and their analysis. An outlay of Rs. 260.00 lakhs has been proposed for the period 1980-85 and an outlay of Rs. 17.93 lakhs has been proposed for 1981-82 for the Drugs Control activities.

6.3.12. Other Programmes :

6.3.12.1. School Health Services.

According to estimate, 41 lakhs children are there 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. is taken as unit for peripheral target. There are 50 Urban Centres where Municipal Corporation and Local Bodies are expected to provide Health Services. The Corporation have opened Dispensaries and hospital in Corporation areas. In a long range programme, one school Health Unit for each Urban Area will be required. It is proposed to cover up all the 41 lakhs children during the period of Sixth Plan. An outlay of Rs. 149.60 lakhs is for 1980-85 and an outlay of Rs. 3.00 lakhs is proposed for 1981-82.

6.3.12.2. The Vaccine Institute of Vadodara is the only institute manufacturing sera and vaccine in the State. It is proposed to take up the programme for the production of Diphtheria, Tetanus and Toxoid. It is also proposed to provide a moderately size workshop and augment the supply of laboratory equipments.

6.3.12.3. It is also proposed to provide one regional health education unit in the State.

6.3.12.4. It is also proposed to strengthen the staff entrusted with the work pertaining to vital statistics at the Head Quarters and the district level. An Outlay of Rs. 5.74 lakhs is proposed for the period 1980-85 and an outlay of Rs. 3.92 lakhs is proposed for 1981-82 for the purpose.

6.3.13. Family Welfare Programme :

6.3.13.1. The Family Welfare Programme is to continue as fully centrally sponsored Scheme. However, provision of Rs. 285.95 lakhs is provided for payments of state additional incentives to the Family Welfare Programme during the period 1980-85 and Rs. 62.30 lakhs for 1981-82.

6.3.14. Control of Communication diseases.

6.3.14.1. National Filaria Control Programme :

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 as 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 antilarval measures and to reduce reservoir on infection, clinical manifestations by Anti-parasitic measures and to delimit problem of filarisis in the State.

The requirement of outlay for 1980-85 is as under:—

Total Plan (1980-85)	Central share (Rs. in lakhs)	State share (Rs. lakhs)
(Rupees (Rs. in Lakhs))		

36.30	18.15	18.15
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6.3.14.2. National Leprosy Control Programme.

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 diseases 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 then the prevalence of the diseases 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 functioned well. 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, 1 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 hyperendemic 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.

6.3.14.3. 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 outlay to achieve the above referred physical targets under the plan are to be met from the central allocations according to the pattern of assistance for National Control Programme and the total requirements of outlay for the plan period 1980-85 is as under:—

Total Plan Outlay (Rs. lakhs)	Centre share Rs. lakhs.	State's Share Rs. lakhs.
147.74	73.87	73.87

National T. B. Control Programme :

6.3.14.4. 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 also been included in the plan and 50 percent central assistance is available for TB programme. The requirement of funds in respect of the above said schemes for Sixth Plan 1980-85 is as under:—

Total Plan Outlay. (Rs. in lakhs)	Central share	State's shares.
152.00	76.00	76.00

6.3.14.5. Prevention of Visual Impairment and control of Blindness : (Health).

National programme of prevention of visual impairment and control of blindness has commenced from 1978-79 in Gujarat. The programme envisages the ophthal-

mic services in rural areas by establishing the 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 schemes till 1979-80 while 50 PHCs have been proposed in 1980-81. The requirement of outlay for the period 1980-85 is as under:—

Outlay Rs. lakh.	Total	Central share.	State's share
Health	114.28	57.14	57.14

Medical.

Under National programme for prevention and control of Visual impairment and blindness, District Headquarters Hospitals are required to be upgraded for providing ophthalmic care. Nine hospitals at Godhra, Himatnagar, Ahwa, Bharuch and Navsari, Mehsana, Palanpur, Amreli and Limbdi have been upgraded till 1979-80 and 3 more are likely to be upgraded during 1980-81 at Bhuj, Junagadh and Nadiad. Thus in all 12 hospitals are upgraded and will be maintained during the plan. The proposed outlay for 1980-85 is as under:—

Total outlay Rs. lakh.	Central share.	State's share.
50.00	25.00	25.00

With a view that eye treatment relief can be given to the community in the shortest possible time, a 20 years National Programme for prevention of Visual impairment and control of blindness is evolved. Central assistance in the form of equipments will be 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 for 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 blindness.

(5) To upgrade the ophthalmic department of medical colleges at Surat and Jamnagar.

The programme outlay for 1980-85 is as under:—

Total Outlay Rs. in lakhs.	Central share.	State's share.
66.00	33.00	33.00

6.3.14.6. Multipurpose Health Worker's programme :

A total of 7254 health workers have been trained as Multipurpose Health Workers in the entire state by the end of the year 1979-80.

1091 multipurpose male health supervisors and female health supervisors were also trained during this period. Thus a total of 1553 multipurpose health supervisors have been trained during the period. Government of India has sanctioned 1 multipurpose male health worker for 5000 population and 1 multipurpose female worker for 8000 population based on 1971 census population. Now in the plan a projection has been made on the estimated population of 1981, the number of multipurpose male workers have been calculated and accordingly 2000 male multipurpose health workers and 12 female multipurpose health workers will be required in the State. Similarly 500 male multipurpose health supervisors and 300 female MPW supervisors would be required to be trained.

With a view to ensure surveillance on various communicable diseases and provide health education and Basic Health services at doorstep of the people, it is envisaged to distribute block population among the existing peripheral health workers belonging to different programme like National Malaria Eradication Programme, Family Welfare, N.S.E.P. etc. As a result of such distribution each worker will have a population of about 8000. The experience has shown that in rural areas MPW (Basic Health Worker) can effectively cover population of about 5000 only. For this purpose 1768 posts of female and 2211 of male MPWS are required to be created. The proposed outlay for 1980-85 is as under:—

	Total	Central's Share	State's share
Rs. in lakhs.	173.68	86.84	86.84

Re-orientation of Medical Education :—

6.3.14.7. 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 interness and to provide comprehensive Health care to the rural population. The proposed outlay for the period 1980-85 is as under:—

(Rs. in lakhs)

Total Outlay	1980-85	Central share	State share.
	60.00	30.00	30.00

STATEMENT—I

Draft Sixth Five Year Plan 1980-85 and 1981-82 Outlays and Expenditure

Head of Development, Medical and public Health

(Rs. in lakhs)

Sr. No.	Minor Head Development	1979-80 Actuals.	1980-81		1980-85		1981-82	
			Outlay	Anticipated expenditure.	Proposed Outlay	Capital content	Proposed outlay	Capital content.
1	2	3	4	5	6	7	8	9
1.	Direction and Administration	3.53	14.15	14.15	40.00	..	17.72	..
2.	Medical Relief	43.19	71.83	69.20	600.00	246.96	91.55	30.12
3.	Training	2.37	9.39	7.64	42.00	4.00	12.67	..
4.	Medical Education and Research	56.98	154.00	154.00	1060.00	504.57	196.60	97.58
5.	Indigenous system of Medicine Ayurved and Homeopathy.	22.00	27.50	36.60	182.76	25.00	34.84	2.80
6.	Employees State Insurance Scheme	..	5.15	5.15	33.95	..	5.60	..
7.	Minimum Needs Programme	125.34	127.00	127.00	2000.00	712.00	167.96	96.15
8.	Other Programme (Health)	1.48	3.62	3.62	5.74	1.23	3.92	1.10
9.	Health Services to the School going Children.	..	..	..	149.60	..	3.00	..
10.	Drugs Control Administration.	7.56	11.00	11.00	260.00	15.00	17.93	2.00
11.	State Scheme for payment for Additional incentive under Family Welfare Programme.	..	55.00	55.00	285.95	..	62.30	..
12.	Control of Communicable diseases and provision of Centrally Sponsored Scheme on sharing basis	84.52	74.57	74.57	400.00	..	85.91	..
		348.97	553.21	557.93	5000.00	1508.76	700.00	229.75
13.	Provision for National Malaria eradication Programme and Community Health Volunteers scheme on sharing basis.	..	566.79+	566.79	..	..	..	..
			1120.00	1124.72				

+ For Sixth Five Year Plan and for Annual Development Programme 1981-82 these schemes are proposed fully Centrally sponsored Schemes.

STATEMENT—II

Draft Sixth Five Year Plan 1980-85 and 1981-82.

Head of Development .. Medical and public Health

(Rs. in lakhs)

Sr. No.	Name of the Scheme/Project (Minor Heads)	1979-80	1980-81		1980-85		1981-82	
		Actuals.	Approved Outlay	Anticipated expenditure.	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content.
1	2	3	4	5	6	7	8	9
I. Direction and Administration								
1.	HLT-1 Direction and Administration--(Medical).	00.17	1.65	1.65	12.50	..	4.72	..
2.	HLT-2 Strengthening of Health Directorate (Health)	00.70	6.80	6.80	14.30	..	7.20	..
3.	HLT-3 Strengthening of District Health Organisation (Health).	2.66	5.10	5.10	13.20	..	5.80	..
4.	Scheme for procurement of services of Indian Institute of Management for recognising set-up (Including those of Directorates)	..	0.60	0.60	..	..	..	..
	Sub-Total (I)	3.53	14.15	14.15	40.00	..	17.72	..
II. Medical Relief								
4.	HLT-4 X-Ray Services to Hospitals	0.78	0.09	0.04	6.00	..	0.07	..
5.	HLT-5 Ambulance Services	1.75	0.11	0.06	6.00	..	0.10	..
6.	HLT-6 Amulance Garages Drivers Quarters.	..	0.30	0.30	6.00	6.00	0.15	0.15
7.	HLT-7 Increase of beds in District Headquarters hospitals.	30.64	23.10	23.10	175.00	60.00	32.53	5.10
8.	HLT-8 Increase of beds in Taluka Hospitals.	..	8.45	6.90	75.00	30.00	10.70	3.91
9.	HLT-9 Staff quarters in District Headquarters hospitals.	9.20	3.00	3.00	45.00	45.00	5.00	5.10
10.	HLT-10 Staff quarters in taluka Hospitals.	..	5.25	5.25	35.40	35.40	5.90	5.90
11.	HLT-11 Padiatric Services	0.78	3.48	2.75	15.00	..	2.75	..
12.	HLT-12 Orthopaedic Unit.	..	..	..	8.00	2.00	..	..
13.	HLT-13 Ophthalmic Unit and Eye Camp.	2.50	1.00	1.00	8.00	..	1.00	..
14.	HLT-14 Improvement of Laboratory services.	..	..	..	..	..	..	..
14.A.	B. T. S. Centres.	0.21	0.30	0.30	6.00	..	0.30	..
15.	HLT-15 Emergency Medical-Aid (Casualty Department)	..	..	..	6.00	..	..	..
16.	HLT-16 Mobile Surgical Units at District Hospitals.	..	..	..	6.00	..	..	..
17.	HLT-17 Mental Health at District Hospital.	..	1.00	0.75	10.00	..	1.00	..
18.	HLT-18 Expansion of Mental Hospital at Jamnagar.	..	0.50	0.50	35.00	35.00	0.50	0.50
19.	HLT-19 G. I. A. to Cancer Hospital	..	..	..	2.00	..	..	..
20.	HLT-20 Internoes quarters.	..	..	..	8.00	8.00	..	..
21.	HLT-21 Rehabilitation Unit (Physio-therapy and occupational therapy)	..	..	..	8.00	..	..	..
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.	..	4.61	4.61	30.00	..	6.25	..

1	2	3	4	5	6	7	8	9
25.	HLT-25 Additional staff classes III, IV and Technical	..	2.12	2.12	40.00	..	3.40	..
26.	HLT-26 Specialists services at all taluka Hospitals/ (Ancillary requirement)	..	..	..	6.00	..	..	..
27.	HLT-27 Grant-in-aid to Panchayat for upgrading medical institutions	..	..	..	..	..	..	..
27A.	Dental Clinics.	0.24	0.40	0.40	6.00	..	0.35	..
28.	HLT-28 Central Medical Stores.	..	..	..	..	..	..	..
29.	HLT-29 Consultant home	..	..	..	..	..	..	..
HEALTH								
30.	HLT-30 Estt. of New Referral Hospital	..	..	..	..	..	..	..
31.	HLT 31 Strengthening existing referral Hospitals.	7.09	16.87	16.87	37.74	18.40	19.30	7.91
32.	HLT 32 Conversion of cottage hospital into referral hospital.	..	1.25	1.25	9.86	6.16	2.26	1.65
Sub-Total (II)		43.19	71.83	69.20	600.00	246.96	91.55	30.12
III. TRAINING								
Medical								
33.	HLT 33 Training to M. O. S. in Paediatric etc.	..	0.40	0.20	1.00	..	0.20	..
34.	HLT 34 Construction of hostel for nurses.	..	..	..	4.00	4.00	..	..
35.	HLT 35 Expansion of A.N.M. and Central Nursing School.	2.37	7.80	6.25	34.85	..	10.55	..
Health								
36.	HLT 36 Certificate course in H.V. School.	..	1.19	1.19	2.15	..	1.92	..
Sub-Total (III)		2.37	9.39	7.64	42.00	4.00	12.67	..
IV. Medical Education and Research:								
37.	HLT 37 Expansion of Medical College and Hospital at Ahmedabad.	4.79	37.14	37.14	194.15	60.35	43.16	16.38
38.	HLT 38 Expansion of Medical College and Hospital at Vadodara.	16.31	31.34	31.34	160.03	73.53	36.89	20.37
39.	HLT 39 Expansion of Medical College and Hospital, at Jamnagar.	8.13	18.16	18.16	183.18	103.49	32.39	15.50
40.	HLT 40 Expansion of Medical College and Hospital, Surat.	20.01	38.64	38.64	273.01	217.12	50.79	38.33
41.	HLT 41 Expansion of Medical Education facilities.	2.41	14.84	14.84	62.28	..	11.86	..
42.	HLT-42 Strengthening of Medical records organisation	0.50	1.40	1.40	7.40	..	1.50	..
43.	HLT-43 Strengthening of libraries in medical colleges	3.12	4.00	4.00	20.00	..	4.00	..
44.	HLT-44 Specialists Unit	0.79	4.34	4.34	25.00	0.41	3.45	..
45.	HLT-45 Expansion of Dental College and hospital, Ahmedabad	0.05	0.65	0.65	10.46	7.96	2.50	2.00
46.	HLT-46 Expansion of General Nursing School	..	..	..	10.00	..	2.70	..
47.	HLT-47 Expansion of Nursing college at Ahmedabad	0.87	3.49	3.49	53.49	41.71	7.36	5.00
48.	HLT-48 Training of Dental hygienists in Government Dental Colleges and Hospitals	..	..	..	0.50	..	..	..

1	2	3	4	5	6	7	8	9
49.	HLT-49 Training of Dental Mechanic at Government Dental College and Hospital, Ahmedabad	..	..	..	0.50	..	..	..
Sub-Total (IV)		56.98	154.00	154.00	1000.00	504.57	196.60	97.58
V. Indigenous system of Medicine Ayurved and Homeopathy								
51.	HLT-51 Taking over of Ayurvedic College and expansion of existing ayurved Collogo	8.96	10.40	16.26	55.00	5.00	9.50	0.50
52.	HLT-52 G.I.A. to Ayurvedic Teaching institutions	..	..	..	..	..	..	..
53.	HLT-53 Construction of Hostel building	2.39	0.20	1.00	4.00	4.00	0.25	0.25
54.	HLT-54 Development of Ayurvedic University Jamnagar	..	0.29	0.75	9.00	5.00	0.50	0.25
55.	HLT-55 G.I.A. to Homeopathic Institutions	..	..	..	5.00	..	0.50	..
56.	HLT-56 Trainees training	0.05	..	..	2.00	..	0.24	..
57.	HLT-57 Expansion of Ayurvedic Hospitals attached with teaching colleges	..	2.20	2.20	5.00	..	3.70	..
58.	HLT-58 Opening of New Ayurvedic dispensaries in rural areas	3.08	4.20	5.00	40.00	..	6.20	..
59.	HLT-59 Construction of Dispensary building with staff quarters	0.05	0.05	0.20	5.00	5.00	0.25	0.25
60.	HLT-60 Strengthening the directorate of ayurved and starting of district ayurvedic offices	1.47	2.16	2.25	10.00	..	3.00	..
61.	HLT-61 Opening of new ayurvedic hospitals and expansion of existing ayurvedic hospitals	3.62	3.75	4.30	20.00	5.00	6.30	1.50
62.	HLT-62 Potanical surveys and Herb gardens	1.35	1.50	1.65	10.25	..	1.35	..
63.	HLT-63 Upgrading and expansion of Pharmacy	0.01	0.40	0.30	3.00	1.00	0.20	0.05
64.	HLT-64 Establishment of Collection centre	0.62	1.70	1.70	4.51	..	1.60	..
65.	HLT-65 Opening of Ayurvedic Wing in District headquarter hospitals (Allopathy)	0.22	0.30	0.50	5.00	..	0.65	..
66.	HLT-66 Provision of Panch Karma Section in Government Ayurvedic Hospital.	0.18	0.35	0.50	5.00	..	0.60	..
Sub-Total (V)		22.00	27.50	36.60	182.76	25.00	34.84	2.80
VI. Employees State Insurance Schemes								
67.	HLT-67 Employees State Insurance Scheme	..	5.15	5.15	33.95	..	5.60	..
Sub-Total (VI)		..	5.15	5.15	33.95	..	5.60	..
VII. Minimum Needs Programmes								
68.	HLT-71 A Upgrading of PHCs into 30 bedded hospitals	7.10	18.62	18.62	101.40	40.00	18.00	2.50
	B Construction of Taluka hospital for Referral Services and Strengthening of taluka hospital	..	25.00	25.00	648.00	264.00	46.70	46.70
69.	HLT-72 Construction works of sub-centres building	14.82	13.51	13.51	55.50	55.50	14.95	14.95
70.	HLT-73 Drugs and Medicines to PHCs (Estt. of new P. H. Cs.)	30.36	26.18	26.18	739.50	272.00	45.31	7.60
71.	HLT-74 Upgrading sub-centres of PHC into dispensaries with maternity facilities	16.08	33.59	33.59	394.00	18.90	33.50	15.00

1	2	3	4	5	6	7	8	9		
72.	HLT-75	Strengthening of PHC.	..	10.75	10.10	10.10	61.60	61.60	9.50	9.50
		Intensive Immunisation Medical aid to 14 years Children	..	46.23	..	..	..	..	..	..
		Sub-Total—VII	..	125.34	127.00	127.00	2000.00	712.00	167.96	96.15
VIII. Other Programme										
73.	HLT-76	Expansion of Vaccino Institution, Vadodara	..	1.48	2.93	2.93	3.24	1.23	3.16	1.10
74.	HLT-77	Creation of Regional Health Education Unit	..	..	0.23	0.23	1.25	..	0.26	..
75.	HLT-78	Strengthening of Health Statistics	..	..	0.46	0.46	1.25	..	0.50	..
		Sub-Total—VIII	..	1.48	3.62	3.62	5.74	1.23	3.92	1.10
76.	IX	Health Services to the School going children	..	..	..	..	149.60	..	3.00	..
		Sub-Total IX	..	..	..	..	149.60	..	3.00	..
X Drugs Control										
77.	HLT-79	Training of Pharmacist	..	8.75	4.15	1.40	64.40	..	1.00	..
78.	HLT-80	Expansion of administrative section of Drugs Control Administration for enforcement of Drugs and Cosmestic Act, 1980 and Drugs and Magic remedies (Objectionable advertisement) Act, 1954	..	0.54	3.98	1.57	96.97	..	7.70	..
80.	HLT-81	Expansion of Intelligency branch	..	..	0.22	0.09	1.29	..	0.28	..
81.	HLT-82	Expansion of Drugs Laboratory, Vadodara	..	0.16	2.37	7.66	75.79	10.00	3.60	1.00
	B	Mobile Laboratory	..	..	..	..	10.00	..	4.00	..
82.	HLT-83	Estt. of Regional Laboratory	..	..	..	..	11.87	5.00	1.00	1.00
83.	HLT-84	Estt. of Planning and Statistical Cell	..	0.11	0.28	0.28	2.68	..	0.35	..
84.	HLT-	Health Transport	..	..	..	..	..	..	..	..
85.	HLT-	Central Medical Store	..	..	..	..	..	..	..	..
		Sub-Total—XI	..	7.56	11.00	11.00	260.00	15.00	17.93	2.00
86.	I.	State of Scheme for payment of Additional intensive, under Family Welfare Programme	..	..	55.00	55.00	285.95	..	62.30	..
	II.	Control of Communicable Diseases and provision for Centrally Sponsored Scheme on sharing basis	..	..	..	..	..	..	..	..
87.	HLT-88	National T. B. Control Programme	..	6.80	17.31	17.31	76.00	..	17.83	..
88.	HLT-89	National Filariasis Control Programme	..	10.93	3.00	3.00	18.15	..	3.79	..
89.	HLT-70	Prevention of Visual Impairment and control of Blindness	..	..	..	..	..	..	..	..
	HLT-70	(Health) — do —	..	0.26	9.08	9.08	57.14	..	9.83	..
	HLT-79	(Medical) — do —	..	3.38	5.30	5.30	25.00	..	5.70	..
	HLT-50	(Medical Education) — do —	..	5.06	6.14	6.14	33.00	..	6.13	..
		National Leprosy Control Programme	..	40.76	8.00	8.00	73.87	..	15.00	..
		Multipurpose Workers scheme	..	17.21	15.74	15.74	86.84	..	17.63	..
		Re-Orientation of Medical Education	..	0.12	10.00	10.00	30.00	..	10.00	..
		Sub-Total—(II-CED)	..	84.52	74.57	74.57	400.00	..	85.91	..
GRAND TOTAL										
		Provision for National Malaria Eradication Programme and Community Health Volunteers Scheme on sharing basis	..	348.97	553.21	557.93	5000.00	1508.76	700.00	229.25
			..	*566.79	*566.79	..	..	..	..	..
			..	1120.00	1124.72	..	..	..	..	..

*For Sixth Five Year Plan and for Annual Development Programme 1981-82. These Schemes are proposed as Fully Centrally Sponsored Schemes.

STATEMENT—III

Draft Sixth Five Year Plan 1980—85 and Annual Plan 1981—82

Target of Production and Physical Achievement.

Sr. No.	Items	Unit	Level of achievement at the end of					
			1978—79	1979—80 (Base year Level)	1984—85 (Terminal year target)	1980—81		1981—82 Proposed target (Level)
1	2	3	4	5	6	7	8	9
Health and Family Welfare								
1.	Hospitals and Dispensaries	-						
	(a) Urban	No.	297	298	300	297	299	299
	(b) Rural	No.	395	399	435	425	399	404
2.	Beds							
	(a) Urban Hospitals and Dispensaries	No.	11025	11217	11414	11267	11267	11317
	(b) Rural Hospitals and Dispensaries.	No.	4479	4569	7099	4569	4569	4569
	(c) Bed population Ratio	Per 1000	0.51	1.1000	0.52	..	0.52	0.52
3.	Primary Health Centres							
	(a) Main Centres	No.	251	251	336	251	251	256
	(b) Sub-Centres	No.	2400	2500	3400	2600	2600	2700
	(c) Upgraded Sub-Centres	No.	30	30	30	30	30	30
4.	Training of Nurses							
	Institutions	No.	4	4	5	4	4	4
	Annual Intake	No.	266	266	415	276	276	296
	Annual outturn	No.	206	206	400	227	227	252
5.	Training of A. N. M. Institutions	No.	19	19	22	19	19	19
	Annual Intake	No.	228	353	574	353	353	358
	Annual outturn	No.	246	376	496	376	376	386
6.	National Programme of Visual Impairment and Control of Blindness							
	(i) Mobile Unit Set-up	No.	..	..	4	1	1	2
	(ii) P. H. C. Assisted	No.	45	45	251	120	120	170
	(iii) Ophthalmic Deptt. assisted	No.	..	5	12	9	9	12
7.	Community Health Volunteers Scheme							
	(a) C. H. V. Selected	No.	8067	19048	25800	19048	19048	23800
	(b) C. H. V. Trained	No.	8067	19048	25800	19048	19048	23800
	(c) C. H. V. Working in the field	No.	8067	19048	25800	19048	19048	23800
8.	Family Welfare Programme..							
	(a) Tubectomy	(In lakhs)	1.43	1.67	..	0.36	0.36	Not fixed
	(b) Vasectomy	-do-	0.54	0.53	8.12	0.07	0.07	-do-
	(c) No. of IUD Insertions	-do-	0.35	0.38	2.36	0.16	0.16	-do-
	(d) Conventional Contraceptive	-do-	2.05	1.87	13.76	1.51	1.51	-do-
	(i) Free supply	..	..	..	..	1.51	1.51	-do-

STATEMENT—IV

Draft Sixth Five Year Plan 1980—85 and Annual Plan 1981—82

Revised Minimum Needs Programme--Outlays and expenditure

(Rs. in lakhs)

Sr. No.	Name of the Programme	1979—80 Actuals	1980—81		1980—85		1981—82	
			Approved outlay	Anticipated Expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
5.	Rural Health	125.34	127.00	127.00	2000.00	712.00	167.96	95.15

Draft Sixth Five Year Plan 1980--85 and Annual Plan 1981--82

Revised Minimum Needs Programme.

TARGET AND PHYSICAL ACHIEVEMENT :

Sr. No.	Programme	Item	Unit	Level of achievement at the end of					
				1978-79	1979-80 (Base Year level)	1980-85 Terminal Year Target	1980-81 Target Likely achievement (Level)		1981-82 Proposed target (Level)
1	2	3	4	5	6	7	8	9	10
1	A. Upgrading of PHC in to 30 bedded Hospital	30 Bedded Hospital	No.	4	4	9	7	..	..
	B Estt. of Taluka Hospital for Referral services	Taluka Hospital for Referral Services	No.	16	16	46	29	..	5 Construction only
2	Backlog of const. work of sub-centres Building.	Sub-Centre Building	No.	125	175	397	225	225	275
3	Estt. of New P.H.Cs.	P. H. C.	No.	251	251	336	..	..	5 Const. only.
4	Upgrading of sub-centres of P. H. Cs. with maternity facilities.	A. A. Dispensary	No.	..	..	63	28	..	20 Const. only.
	.do.	B. Opening New Sub-centres.	No.	2400	2500	3400	2600	2600	2700
5	Strengthening of PHCs.	A. Backlog of Staff quarters of PHCs.	No.	62	72	248	102	30	132

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Centrally Sponsored Schemes on Sharing basis Outlays

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 Outlay proposed			1980-81 Outlay			1981-82 Outlay proposed.		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	HLT-68-National T. B. Control Programme	6.80	6.80	13.60	76.00	76.00	152.00	17.31	17.31	34.62	17.83	17.83	35.66
2	HLT-69 National Filariasis Control Programme	10.93	10.92	21.85	18.15	18.15	36.30	3.00	3.00	6.00	3.79	3.79	7.58
3	HLT-70 Prevention of Visual and Impairment and Control of Blindness (Health)	0.26	0.27	0.53	57.14	57.14	114.28	9.08	9.08	18.16	9.83	9.83	19.66
	HLT-29 Prevention of Visual and Impairment and Control of Blindness (Medical)	3.38	..	3.38	25.00	25.00	50.00	5.30	5.30	10.60	5.70	5.70	11.40
	HLT-70 Prevention of Visual and Impairment and Control of Blindness (Medical Education)	5.06	5.06	10.12	33.00	33.00	66.00	6.14	6.14	12.28	6.13	6.13	12.26
4	National Leprosy Control Programme.	40.76	40.77	81.53	73.87	73.87	147.74	8.00	8.00	16.00	15.00	15.00	30.00
5	Multipurpose Workers Scheme	17.21	17.21	34.42	86.84	86.84	173.68	15.74	15.74	31.48	17.63	17.63	35.26
6	Re-orientation of Medical Education	0.12	Assistance in kind (Vehical)	0.12	30.00	30.00	60.00	10.00	10.00	20.00	10.00	10.00	20.00
	Total	84.52	81.03	165.55	400.00	400.00	800.00	74.57	74.57	149.14	85.91	85.91	171.82

Draft Sixth Five Year Plan 1980--85 and Annual Plan 1981--82

Fully Centrally Sponsored Schemes-Outlays

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 Outlay proposed			1980-81 Outlay			1981-82 Outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Upgrading the department post-graduate training and reserved in Kayohikista.	..	..	..	..	10.00	10.00	..	1.00	1.00	..	2.00	2.00
2	Development of I. S. M. Pharmacy and Drugs testing laboratory.	..	..	..	..	10.00	10.00	..	2.00	2.00	..	2.00	2.00
3	National Malaria Eradication Programme and Community Health Workers' Scheme.	406.18	406.17	812.35	..	8414.88	8414.88	566.79	566.79	1133.58	..	1026.75	1026.75
	Total	406.18	406.17	812.35	..	8434.88	8434.88	566.79	569.79	1136.58	..	1030.75	1030.75

6.4. Social Inputs in Area Development Plan

6.4.1.1. The UNICEF has expanded the scope and range of programmes and projects being supported by it in the country over the period of last three decades. 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.

6.4.1.2. 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 purpose and have retained nine State based institutions to help formulate the area plans for these nine districts (Appendix-I).

6.4.1.3. 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 District the Collectors and Officers from the State Level Department 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.

6.4.1.4. In order to enable presentation of some projects for availing of UNICEF assistance during the current year itself, it has been proposed 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 will do situation analysis and feasibility studies while formulating the plan and projects.

6.4.1.5. A State Level Steering Committee is constituted to oversee the progress of preparation of plan and monitor entire project work. The institute retained for preparation of plan are to receive financial support from the UNICEF. These institutions have initiated

their and they are expected to submit interim plan within two-three months, there after they will be submitted to the Government of India for their scrutiny and clearance for being posed for assistance from UNICEF.

6.4.1.6. The sectors and programmes which UNICEF is likely to assist are.

1. Health care : primary health care for mothers, infants and children, health education and disease control;
2. Clean water for drinking;
3. Nutrition education and provision of nutrition food;
4. Education : pre-primary and primary;
5. Training for health workers, school teachers, social workers;
6. Welfare services; balwadis, daycare centres, youth and women's groups and self-help projects to improve family and community life.

6.4.1.7. UNICEF assistance is expected to have particular reference to the needs of children and women belonging to weaker section 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 programmes 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 technology and programmes 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 'Antodaya' taken up recently by some of the State Governments;
- (xi) income generating programmes for women.

6.4.1.8. Preference may be given to integrated child development projects in the frame-work of Community Projects.

6.4.1.9. 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 project areas. Besides, the actual extent of participation by UNICEF will be difficult to be assumed at the stage. However, the programmes for Area Development expected to be comprehensive so as to take care all the relevant sectors of development. It will therefore call for a provision to be made by the State Government in its development Plan. As during the current year, two talukas in each of the selected districts have been taken up and other talukas will be taken up subsequently during the plan period, the total requirements in the State Plan are roughly put up about Rs. 18 crores. Keeping in view the annual requirement of about Rs. 10 lakhs per talukas was adopted for the Block Level Planning for fuller employment. Thus, an outlay of Rs. 18 crores is proposed to be provided in the State Annual Plan.

APPENDIX—X

Institutions selected for preparing the Social Inputs Plan and the districts allocated among them

<i>Institution</i>	<i>District</i>		
1. Faculty of Home Science, Mahara- ja Sayajirao University of Baroda, University Office, Vadodara-2.	Vadodara	6. Centre for Social Studies, Dangore Street, Nanpura, Post Box No. 38, Surat-395001.	Sabarkantha.
2. Indian Institute of Management, Vastrapur, Ahmedabad-380015	Valsad	7. Operation Research Group, Dr. Vikram Sarabhai Road, Vadodara-380007.	Bharuch.
3. Sardar Patel Institute of Eco- nomic and Social Research, Post Box No. 4062, Navrang- pura, Ahmedabad-380009.	Surendranagar	8. Centre for Environmental Planning and Technology, Naxosnigpura, University Road, Ahmedabad-380009.	Panchmahals.
4. Gujarat Institute of Area Planning, Near Brahmak- shatriya Society, Pritamrai Road, Ahmedabad-380006.	Junagadh	9. Gujarat State Rural Development Corporation, Patnagar Yojana Bhavan, Sector No. 16, Gandhinagar.	Kachchh.
5. Mahatma Gandhi Department of Rural Studies, South Gujarat University, University Campus, Udhana Magdalla Road, Surat-395007.	Surat		

6.5. FAMILY WELFARE PROGRAMME.

6.5.1. Introduction:—

6.5.1.1. The Family Welfare Programme will continue to be centrally sponsored during the plan period. The strategy will be to integrate the Health, Family welfare, Maternity and Child Health and Nutrition Services at all levels and to secure general integration of the Family welfare Programme with other Welfare Programme.

Family welfare Programme :

6.5.2 Demographic Profile :

6.5.2.1 In terms of population Gujarat ranks 9th among the States in India. During the decade 1961/71, the rate of growth of population in Gujarat has risen from 26.98 per cent to 29.39 per cent as against the corresponding rise from 21.64 percent to 24.80 per cent for the country as a whole. Gujarat has thus recorded an Annual growth rate of 2.9 per cent as against the national growth rate of 2.5 percent. 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. These demographic indicators point to the need

for a massive effort to scale down the birth rate to 25 per thousand population by 1984-85. It is expected that the birth rate would be around 33 per 1000 population by 1980/81.

6.5.3. Review.

6.5.3.1. Performance during the year 1977/78 and onwards in respect of birth control measures is indicated by the following table.

Method.	Achievement (nos. in '000)			
	77-78	78-79	79-80	80-81 (Target)
1	2	3	4	5
Sterilisations	112	197	220	162
I.U.D. insertions	30	35	38	47
Conventional contraceptive	155	205	152	254

6.5.3.2. The number of protected couples in the productive age group is given in the table below:—
(Fig. in "000).

Year	Estimated couples in productive age group ('000).	No. of couples protected.					
		sterilisation		I.U.D. Insertions		Conventional contraceptives.	
		No.	% age	No.	% age	No.	% age
1977-78	5264	1309	24.9	78	1.5	155	2.9
1978-79	5883	1436	26.7	39	1.6	205	3.8
1979-80 (Anticipated).	5487	1679	30.6	102	1.7	195	3.6

6.5.3.3. Since the inception of the programme, 21.3 lakhs sterilisation operations have been performed in Gujarat till March, 1980 giving a cumulative rate of 66.7 sterilisation per thousand population. A total of 3.9 lakhs of I.U.D. insertions have been carried out till March/1980 giving a cumulative rate of 12.2 I.U.D. insertions per thousand population. Taking all the methods of family welfare into account, 19.7 lakh couples are thus currently protected in Gujarat. The birth rate in the State has dropped from 45.7 during the decade 1951-61 to 34.96 (provisional) per thousand during the year 1978 according to sample registration surveys, thus recording almost an eleven point decline.

6.5.3.4. Maintenance of Beds and State Sterilisation units : In all 444 reserve beds including 60

in UKAID have been sanctioned under the sterilisation maintenance scheme upto 31st March 1980.

Post Partum Programme.

6.5.3.5. The main objective of the post partum programme is to maximise contraception amongst the target population in the community catered to by institutions which attract large numbers of confinement cases. There were 27 post partum units functioning in the State during the 1977-78. The Government of India sanctioned 7 additional post partum Units during 1978-79. There are thus 34 post-partum units in the state, During the year 1978-79, the State had a total of 38640 acceptors achieving 73.7 per cent of the target of those, direct acceptors numbered 17,227 (44.6%).

6.5.3.6. Medical Termination of pregnancy.

The Medical Termination of Pregnancy Act, 1971, is in force in the State. There were 424 Medical Termination of Pregnancy centres recognised by the Government at the end of 1979-80. 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	18650 (Provisional)

6.5.3.7 To cope with the rise in tubectomy acceptance a new dimension has been added to the programme from 1980-81; that is the laproscopic tubal ligation camp approach. In Gujarat, Laproscopic Tubal ligation are conducted at recognised hospitals where trained surgeons and instruments are available. Under the camp approach 1980-81, surgeons competent in the technique have been sent to district or sub-district hospitals together with other doctors to perform laproscopic tubal ligation.

6. 5. 3. 8 Oral Pill Programme :

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. During the year 1978-79, 2.6 lakhs oral pills cycles and during the year 1979-80, 2.2 lakhs oral pills cycles have been distributed.

6.5.3.9. Mass Media Efforts :

Mass Media activities are being undertaken towards stepping up programme under the Family Welfare Programme.

6.5.3.10. Provision of Sterilisation Facilities under British aid Scheme in Rural and Semi Rural Areas :

In order to provide adequate sterilisation facilities at PHCs and selected sub-divisional Hospitals, the Government of India sanctioned during 1978-79 the extension of such facilities to 18 PHCs; by now 48 PHCs and 10 Sub-divisional hospitals have been covered under the scheme.

6. 5. 3. 11 Training of ANMS, LHVS and Dais :

There are 28 ANM training Schools 2 LHV schools, and 1 PHN school in the State. A total number of 13,266 dais have been trained upto June, 1980.

6. 5. 3. 12. Regional Family Welfare Training Centres:—

There are two Health and Family Welfare Training Centres in the State: one at Rajkot the other at Ahmedabad. In addition, there are four rural Health and Family welfare Training Centres at Bavla, Aliabada, Padra and Sachin.

6.5.3.13. Training of Public Health Nurses and Health Visitors :—

The State is experiencing shortage of public Health Nurses. The Government of India has recommended to start an eighteen month course for female and male Health Workers. The course for female Health Worker is proposed to be taken up in consultation with the Gujarat Nursing Council. A certificate Public Health Nursing Course has been introduced at Surat during 1980-81,

Immunisation Programme :

6.5.3.14 The Progress of immunisation service 1977-78 is as under :—

Category	Achievement(in lakhs)		
	1977-78	1978-79	1979-80
1. Tetanus Toxoid	3.07	4.1	5.6
2. Diptharia pertussis Tatarus	5.21	6.7	11.6
3. Diptharia and Tatarus	5.75	9.5	15.73

6.5.3.15 Family Welfare Centres.

At present, there are 158 Urban Family Welfare centres in the State covering 57 lakhs of the total urban population of 75 lakhs. During 1980-81, additional Urban Family Welfare Centres are being established with a coverage of 3.91 lakhs.

Population of City Family Welfare Bureau

6.5.3.16. Family welfare Bureau in three of the four Municipal Corporations in the State : Ahmedabad, Vadodara, and Surat have been sanctioned.

6.5.4. Objective and Strategy :

The objective of the Programme is to reduce the birth rate to a level of 30 per thousand population by the end of 1982-83 and to a level of 25 per thousand population by the end of 1984-85. This entails both the delivery of services under the programme down to the remotest habitation and the creation of conditions conducive to widespread acceptance of the small family norms. This would require the use not only of the machinery now available under both the State Government and the District Panchayats but also of community leaders, voluntary agencies, and other non-Government organisations. An increasing number of voluntary/Non-Government Organisations are therefore proposed to be encouraged to provide manpower and financial support for the Programme.

6.5.5. Programme for 1980-85/1981-82.

6.5.5.1. The Family Welfare Programme is wholly Centrally sponsored. (The component of additional incentives to acceptors, which is funded under the State Plan, is reflected as Part of the Medical and Public Health Programme). An outlay of Rs. 6675.25 lakhs is proposed for the programme for the sixth Five Year Plan, 1980-85, and of Rs. 1704.80 lakhs for the Annual plan, 1981-82. The additional facilities proposed to be created during the two plan periods are as under:—

Additional facility	Number	
	1980-85	1981-82
Rural Family Welfare Centres	160	..
Urban Family welfare Centres Mobile sterilization and	103	16
IUD Units	64	16
Post partum Units	80	5
Conversion of labour rooms in PHCs to operation theatres.	221	Nil.

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 in Government teaching hospitals and elsewhere, the construction of buildings for all Rural Family Welfare Centres, and the expansion of mass media activities.

6.5.5.2. The Government of India has recently sanctioned a special project for the speedy develop-

ment of infrastructure for Health and Family Welfare in Panch Mahals and Bharuch district. 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 Sixth Five Year Plan, 1980-85 and Rs. 238.02 lakhs for the Annual Plan, 1981-82, have been approved for the project by the Government of India. These outlays will be in addition to the provisions made for the centrally sponsored Family Welfare Programme.

ANNEXURE

Proposed outlays under the Family Welfare Programme.

		(Rs. in lakhs).	
Sr. No.	Programme Component	Outlay 1980-85	Outlay 1981-82.
1	2	3	4
(a)	(1) State F. W. Bureau.	64.00	10.96
	(2) City F. W. Bureau.	30.00	5.00
	(3) Dist. F. W. Bureau.	302.52	58.89
(b)	(1) Rural F. W. (Main) Centres	1231.95	226.32
	(2) Rural F. W. (Sub) Centres.	835.60	146.21
(c)	(1) Urban F. W. P. Centres.	448.48	83.84
(d)	Immunisation scheme.	125.00	25.00
(e)	(1) Maintenance and supply of vehicles at R. F. W. Centres.	103.00	20.00
	(2) State Health Transport (F. W.) Organisation.	10.53	1.76
(f)	(1) Vasectomy	629.00	240.00
	(2) Tubeectomy	749.00	280.00
	(3) IUCD	26.79	6.26
	(4) Ex-gratia Financial Assistance	36.00	9.00
(g)	(1) Maintenance of beds.	66.00	13.20
	(2) Post Partum Centres.	150.00	44.00
	(3) Conventional Contraceptives.	150.00	44.00
	(4) Intensive Dist. F. W. Pro- gramme.	27.50	5.50
	(5) Awards	207.81	192.50
(h)	(1) Mass Education Programme.	67.15	12.10
(i)	(1) Regional F. W. Training Centres.	44.40	7.08
	(2) Training of AHMS, Dais and HVs.	183.70	34.94
	(3) Demographic Reserch Centres	1.48	0.22
	Total:—	5489.91	1466.78
	Area Project (USAID) in Panch Mahals and Bharuch Districts.	1185.34	238.02
	GRAND TOTAL:	6675.25	1704.80

STATEMENT

Selected target and achievements

Family Welfare Programm.

(Nos. in lakhs)

Sr. No.	Item	Fifth Plan 1974-78 Achievement	1978-79 Achievement	1979-80 Achievement	1980-81 Achievement (Likely)	1980-85 Target
1	2	3	4	5	6	7
1.	Sterilisation					
	(a) Vasectomy	4.00	0.54	0.53	0.07	} 3.12
	(b) Tubectomy	3.37	1.43	1.67	0.36	
2.	I. U. D.	1.06	0.35	0.38	0.16	2.36
3.	Conventional contraceptive	6.72	2.05	1.87	1.51	13.26

STATEMENT GN—6

Draft Sixth Five Year Plan 1980-85

Centrally Sponsored Schemes—Outlays

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 Outlay proposed			1980-81 Outlay			1981-82 Outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Family Welfare Programme				..	6875.25	6875.25	..	1080.12	1080.12	..	1704.80	1704.80

6.6 Nutrition

6.6.1.1. 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 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 with premature births. There is some evidence to show, further, 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 post-natal life. These facts constitute the context of the inclusion of 'Nutrition' in the Minimum Needs Programme.

6.6.1.2. Of the three schemes that the programme in the State comprises, two (the Special Nutrition Programme and the Mid-days Meals Programme) are primarily schemes of supplementary feeding. The features of these schemes are summarised in the following table.

	Special Nutrition Programme	Mid-day Meals 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 areas; urban slums	Rural areas
c. Supplementary calories/protein supplied	300 calories and 12-14 gm. of protein to children; 500 calories and 20 gm. of protein to others	300 calories 12-14 gm. of protein
d. Annual duration of supplementary feeding	240 days (CARE food materials); 300 days (WFP food materials)	180 days
e. Coverage :		
—at the end of the Fifth Plan (1974-78)	5.90 lakhs	2-40 lakhs
—additional during 1978-79	1.05 lakhs	1.40 lakhs
—additional during 1979-80	0.75 lakh	0.48 lakh
—total coverage at the end 1979-80	7.70 lakhs	4.28 lakhs
f. Implementing agency	Local bodies	Primary schools

The Special Nutrition Programme envisages, further, the integration of medical care, immunisation, 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.

6.6.1.3. The Applied Nutrition Programme is directed to the creation of awareness of nutritional standards in the rural areas and to the raising of nutrition levels through the consumption of locally produced foods. The unit for implementation of the scheme is a block comprising 15-25 villages; there are at present 63 post-operational and 26 operational ANP blocks in the State. An Intensive Development Project has been initiated in the existing ANP block in Sidhpur, District Mahesana; the project has the objective of consolidation of activities undertaken in the ANP block with a view to reaching weaker sections. Apart from assistance from UNICEF and the Government of India for the project, the State Government is required to bear the outlay on supportive activities such as horticulture, poultry development, mahila/yuvak mandals, etc.

6.6.2. Programme : 1980-85/1981-82

6.6.2.1. The outlays proposed for the three schemes included in the programme areas under:—

	(Rs. in lakhs)	
	1980-85	1981-82
Special Nutrition Programme	1,442.00	214.20
Mid-day Meals Programme	528.00	78.30
Applied Nutrition Programme	30.00	7.50
	<u>2,000.00</u>	<u>300.00</u>
The outlay proposed for the Applied Nutrition Programme is for maintenance of the existing blocks, and for such expenditure in respect of the Intensive Development Project, Sidhpur, as would not be covered by assistance from the UNICEF or from the Government of India. The physical achievements envisaged under the remaining schemes may be summarised thus.		
	1980-85	1981-82
Special Nutrition Programme		
(a) number of additional beneficiaries	4.00 lakhs	0.50 lakh
(b) number of additional feeding centres to be upgraded	1200	200
Mid-day Meals Programme		
Number of additional beneficiaries	4.25 lakhs	0.75 lakh

6.6.3. Integrated Child Development Services Scheme (Centrally Sponsored Programme)

6.6.3.1. The Integrated Child Development Schemes is calculated to provide the following package of services in an integrated manner to children in the age Group of 0-6 years and expectant and nursing mothers.

1. Supplementary nutrition.
2. Immunisation.
3. Health check-up.

4. Referral services.
5. Nutrition Health education.
6. Non-formal education.

Initially a project was started in Chhota-udepur, tribal block on an experimental basis in the Fifth Plan. 11 more blocks namely Chikhali, Chotila, Ahmedabad, Dehgam, Valia, Talala, Danta, Valod, Dohad, Vadodara have been taken up during 1979-80. The UNICEF assists this project through the provision of vehicles refrigerator equipment etc.

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Minor Headwise outlays and Expenditure

Nutrition

(Rs. in lakhs)

Sr. No.	Name of the scheme/Project Minor Heads.	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved Outlay	Anticipated Expenditure	Proposed Outlay	Capital content	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
1	NTR-1. Special Nutrition Programme	91.57	84.85	84.85	1442.00	88.00	214.20	18.00
2	NTR-2 Mid-day Meals Programme	23.11	14.04	14.04	528.00	..	78.30	..
3	NTR-3 Applied Nutrition Programme	30.29	16.11	16.11	30.00	..	7.50	..
	Total	144.97	115.00	115.00	2000.00	88.00	300.00	18.00

STATEMENT III

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Nutrition Targets and Production and Physical Achievements—MNP

Sr. No.	Item	Unit	Level of achievement at the end of				Likely achievement	1981-82 Proposed (Target) (Level)
			1978-79	1979-80 (Base Year Level)	1984-85 Terminal year target	1980-81 Target (Level)		
1	2	3	4	5	6	7	8	9
A. Special Nutrition Programme								
1	Beneficiaries	No. lakhs	6.93	7.70	11.70	8.20	8.20	8.70
2	Nutrition component in ICDS	No.	..	7	31	11	11	16
3	Balwadis	No.	..	510	1000	530	530	630
4	Godowns	No.	..	24	52	28	28	34
5	Upgrading of feeding centres	No.	200	550	1750	950	950	1150
6	ICDS Project in State sector	No.	..	..	9	1	1	2
B. Mid-day Meals Programme								
1	Beneficiaries	No. lakhs	3.80	4.28	8.53	4.78	4.78	5.53

STATEMENT

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82 Centrally Sponsored Schemes—Outlays

Nutrition

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 Outlay proposed			1980-81 outlay			1981-82 Outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
I.	I. C. D. S. ..	21.44	32.27	53.71	235.25	350.00	585.25	23.54	40.57	64.11	62.42	78.01	140.43

6.7. Sewerage and Water Supply:—

6.7.1. Introduction:

6.7.1.1. The programme 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 quantities 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 programme 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.

6.7.1.2. 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" problem villages upto 6/77. The State Government have given the highest priority to the programme of providing drinking water supply facilities to these villages.

6.7.2. Review of Progress.

6.7.2.1. About 1000 "No source" villages under the rural water supply programme, 141 Towns out of 216 towns including Corporation towns under urban water supply programme and 17 towns under the urban drainage programme were covered upto the end of the Fourth Plan. Further progress was achieved during the Fifth Plan. The following table shows the level of development reached at the end of 1979-80 in respect of selected programmes :

Programme	Total	No. covered upto the end of 1979-80	No. remaining to be covered.
1	2	3	4
1. Urban Water Supply (Towns)	216	167	49
2. Rural Water Supply ("No. source" villages).	9600	4514	5086
3. Urban Drainage (Towns)	216	22	194
4. Conversion of dry latrines.	106383	76383	30000

6.7.2.2. 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 constituted for purchase of pipes, specials 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.

6.7.3. Objectives and Strategy :

6.7.3. 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 pipes water supply; and

(iii) to cover predominantly industrial cities with sewerage facilities.

6.7.3.2. Providing adequate water supply to the remaining problem and difficult villages requires huge investment. Low cost solutions are therefore, essential to spread the investment to as many villages as possible within a given time perspective. The approach should be on one well for one village so that the villages are assured of a definite source of water supply. Piped water supply is very costly and would be adopted only when less expensive measures, such as tube wells and sanitary dugwells, are impracticable on account of geographical and terrain condition. It is proposed to provide sources of water supply to all "No source" (Problem) villages. Adequate provision has also been made to meet the requirements of water supply and sanitation programmes in the medium and small towns. It is proposed to cover all the remaining 5086 (No source) villages under the rural water supply

Programme which is a Minimum Needs Programme. It is also proposed to cover about 25 towns under water supply programme. The programmes of augmentation and renovation of existing water supply and sewerage facilities in 4 Corporation towns and augmentation of existing water supply systems of 30 towns have been provided in the Plan 1980-85. The problem of collection and disposal of solid wastes has been growing in magnitude in urban areas, particularly in cities with large population concerted effort required to be made towards solution of this problem. Suitable measures to regulate domestic and industrial effluents require immediate attention to prevent pollution of streams and rivers.

6.7.4. Development Programme 1980-85 and 1981-82.

6.7.4.1. An outlay of Rs. 15,000.00 lakhs is proposed in the Sixth Five Year Plan 1980-85 and Rs. 2300 lakhs for 1981-82 the broad programme wise break-up is as under.

(Rs. in lakhs.)

Sr.	Programme	Proposed Outlay 1980-85	Proposed Outlay 1981-82
1	Survey and Investigation	135.00	50.00
2	Research	5.00	1.00
3	Urban sanitation	119.00	13.00
4	Rural Sanitation	5.00	0.50
5	Urban Water Supply	189.00	38.00
6	Rural Water Supply (GLA)	8.00	0.50
7	Rural Water Supply (MNP)	2935.00*	550.00**
	Total	3396	653.00

*(Plus Rs. 3000.00 lakhs under world Bank Project).

** (Plus Rs. 450.00 lakhs under World Bank project)

Market Borrowing Loan 2500.00 437.00

LIC Loan 3400.00 590.00

World Bank assisted project 5704.00 620.00

Grand Total 15000.00 2300.00

6.7.5. Programmes :

6.7.5.1. The main programmes in the Sixth Plan 1980-85 and Annual Plan 1981-82 are discussed in the following paragraphs.

6.7.6. Rural Water Supply (MNP)

6.7.6.1. 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 zones and they do not get adequate rainfall. Only a few rivers are perennial. A part from this, in some areas bordering the run of Kachchh there is high salinity in Sub-soil water. The coastal areas also have the problem of salinity in water. The sub-soil waters are going deeper every year and in some area are turning saline. Around 9600 villages have been identified as 'No source' villages as per 1977 survey.

6.7.6.2. By the end of March 1980, 4514 villages have been covered under water supply programme leaving about 5086 villages to be tackled from the beginning of 1980-81. Additional 1300 villages are targetted to be covered during 1980-81. However, looking to the past progress about 900 villages are likely to be covered.

6.7.6.3. 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 as per present rates that Rs. 9100 lakhs will be required to provide water supply facilities to remain 5086 villages. It is targetted to cover all the remaining No source villages during 1980-85 and therefore full provisions of Rs. 9100 lakhs is required to be made in Five Year Plan 1980-85.

6.7.6.4. Since 1977-78, Government of India has reintroduced a Central Sector Programme namely "Accelerated Rural Water Supply Programme" fully aided by the Central. It is proposed to obtain central assistance atleast of Rs. 3165 lakhs under Accelerated Rural W.S. Programme during 1980-85. Thus a provision of Rs. 5935.00 lakhs (9100-3165) proposed under state plan provision during 1980-85.

6.7.6.5. Of these remaining villages, some regional as well as individual Rural Water Supply Scheme are posed for World Bank assistance estimated to cost of Rs. 3000 lakhs to be completed during 1980-85. Thus the provision is proposed as under :—

	(Rs. in lakhs)
Normal (MNP)	2935
World Bank (MNP)	3000
Accelerated Rural Water Supply (C.S.P.)	3165
	9100

6.7.6.6. Piped water supply schemes for 975 villages are on hand during 1980-81. Estimated cost of these schemes is Rs. 3720 lakhs. Out of this, an amount of Rs. 1560 lakhs has already been spent by the end of the March 1980. An amount of Rs. 2160 lakhs is required for completing the schemes. During 1980-81, it is proposed to spend an amount of Rs. 1000 lakhs and to complete the water supply schemes of 400 villages. Thus, at the end of 1980-81, there will be spill over schemes in respect of 575 villages. The completion of these schemes will require an amount of Rs. 1160 lakhs.	1981-82
MNP	550.00
Accelerated Rural Water Supply Programme (C.S.P.)	500.00
W.S. Projects	450.00
Total..	1500.00

6.7.8.2. The break up of the funds will be as under :—

(A) MNP (State Plan)	
(1) Works (Non-tribal area)	58.00
(2) Simple well	20.00
(3) Tribal area Sub-plan	322.00
(4) Establishment	150.00
	550.00
(B) Accelerated Rural W.S.	500.00
(C) World Bank Assistance projects	450.00
Total A+B+C	1500.00

Physical target of 900 villages is proposed during 1981-82 as under :—

	Villages
(i) Piped water supply scheme	400
(ii) Tube well with hand pump	200
(iii) Simple wells	300
Total..	900

6.7.9. Water Supply and Sewerage Projects under World Bank assistance.

6.7.9.1. The Gujarat Water and Sewerage Board has submitted a project package consisting of Rural Water Supply and sanitation schemes 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 corporations.

6.7.9.2. These would include sewerage of Ahmedabad Corporation and Rajkot Municipal Corporation, the water supply schemes for six cities (Jamnagar,

6.7.6.7. Apart from the 575 villages in which there will be spill over schemes, it is proposed to start new schemes for about 600 villages at the cost Rs. 1200 lakhs during 1981-82. Thus, the program to be taken on hand during the year 1981-82 will be for 1175 villages. This will need Rs. 2360 lakhs of these 1175 villages, 400 villages are targetted during 1981-82.

6.7.6.8. Simple Well Programme

The programme which is part of the MNP is being implemented through the Development Commissioner. The funds are placed at the disposal of the Development Commissioner who identifies the villages for this programme and execute the schemes. The simple wells are provided in villages having the population upto 500 souls.

6.7.6.9. During the year 1980-81, a programme of simple wells in 868 villages is on hand for which an amount of Rs. 20.00 lakhs has been provided for this programme and 450 villages are proposed to be covered under this scheme. However actually only 300 villages may be covered for year 1981-82. It is proposed to cover additional 300 villages for which an outlay of Rs. 20.00 lakhs is proposed.

6.7.6.10. Tubewell with handpump programme

In addition to the piped water supply scheme and simple well programme, the villages upto 500 souls are also being supplied water through tube wells with hand pumps in rocky regions wherever possible. This is also a part of MNP. It is proposed to cover 200 villages under this programme during 1981-82.

6.7.7. Other Programmes

6.7.7.1. Water supply programme of No source villages is being financed under state MNP as well as under Centrally sponsored Accelerated Rural W.S. programme. In addition to these programme, it is also proposed to take up some individual and regional Rural W.S. Projects aided by IDA.

6.7.8. Financial Outlay

6.7.8.1. It is proposed to provide funds as under during the year 1981-82.

Bhavnagar, Nadiad, Surendranagar, Godhra and Anand) and Sewerage Schemes of Nadiad, Anand and Savarkundla towns. Further ten Regional Rural Water Supply Schemes covering 285 villages and water Supply Schemes of 111 villages (individual village water supply scheme).

6.7.9.3. The project package consist of a provi- sion for training also. This project package is estimated to cost of Rs. 106 crores out of which expenditure to the extent of Rs. 103.95 crores is planned to be incurred during the sixth plan period. Expenditure to be incurred by Ahmedabad Municipal Corporation and Rajkot Municipal Corporation from their own resources and expenditure to be incurred by other local bodies for their W.S. and sewerage projects from their resources are not included in the proposals.

6.7.9.4. The detailed break-up of financing pattern consisting of GIA, Government Loan, Market borrowing and the World Bank loan component is given viz. annexure No. I.

6.7.9.5. These projects are undertaken in a span of 4 to 5 years starting from 1981-82. During 1981-82 a provision of Rs. 620.00 lakhs is proposed for schemes to be executed by Gujarat W. S. and Sewerage Board and to obtain the World Bank assistance in the next year *i.e.* 1982-83 as per the following break up.

Programme	Provision proposed during 1981-82 (Rs. in lakhs)
1. Urban W. S. S. GIA	60.00
2. Urban Sewerage GIA	60.00
3. Rural W. S. (MNP)	450.00
4. Research	50.00
	620.00

In addition Rs. 630 lakhs are provided under market borrowing to AMC and RMC for their IDA projects and through their own resources. Similarly Rs. 360.00 lakhs will have to be provided by other local bodies through their own resources. The total expenditure under IDA project both for Board and Corporations for the year 1981-82 will be Rs. 1610 lakhs.

6.7.10 Water and Air Pollution

6.7.10.1. Gujarat is one of the highly urbanised and industrialised States in the country. The problem of treatment and disposal of industrial waste water and air pollution created serious health hazards to human beings and cattle. In the last 5 years space

work has been completed and several industries have been advised effluent treatment. Several municipalities have been also advised to take up corrective measures.

6.7.10.2. The Water (Prevention and Control of Pollution) Act 1974 has come into force. The Gujarat Water Pollution Board has been constituted during 1974. An outlay of Rs. 85.00 lakhs is provided in the Plan 1980-85. The board is expected to take up the work of air pollution during 1981-82. or provision of Rs. 25 lakhs is proposed for 1981-82.

6.8.11. Water Supply and Sewerage Board

6.7.11.1. Gujarat Legislative Assembly had enacted for establishing a separate statutory Board for water supply and sewerage projects in March, 1979. This board has come into existence since August, 1979. The activities of this Board are gradually increasing.

6.7.11.2. 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 100 lakhs. An outlay of Rs. 25 lakhs is proposed for 1981-82.

6.7.12. Research

6.7.12.1. An outlay of Rs. 5.00 lakhs is proposed for the period 1980-85 towards construction of building of P. H.E. Laboratory at Baroda and equipments etc. for the same. A provision of Rs. 1 lakh is proposed for 1981-82.

6.7.13. Urban Sanitation

6.7.13.1. Sewerage Schemes.—Out of 216 towns in the State, 22 towns including 3 Corporation cities have been covered under sewerage facilities by the end of 3/80. It is absolutely necessary to have underground drainage facilities for the towns other than Corporation towns where adequate water supply facilities are available. But the local body find it difficult to provide funds due to their weak financial position. Efforts would be made to get loans for such needy local body from institutional bodies like LIC. It is proposed to cover additional 10 towns with under ground sewerage facilities during 1980-85 and an outlay of Rs. 35.00 lakhs is proposed which comprises of Rs. 24.00 lakhs GIA and Rs. 11.00 lakhs Government loan. During 1980-81, schemes of 38 towns are in progress and drainage schemes of 2 towns are expected to be completed by the end of March 1981. It is targetted to cover 3 more towns during 1981-82 for which a provision of Rs. 1.00 lakh as grant in aid is proposed. Drainage projects are also implemented on "As and when basis" and as such the local bodies have to depend on outside finance like LIC where LIC loan is not available

due to the cost of project is less than Rs. 15 lakhs, it is necessary to give Government Loan. It is, therefore, proposed to give loan to needy local bodies. An outlay of Rs. 1.00 lakh is, therefore, proposed for grant of loans in the year 1981-82.

6.7.14. Conversion of dry latrine programme (Bhangi Kashta Mukti)

6.7.14.1. 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 3/80, 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 provided. A target of 5000 latrines is fixed for 1980-81. It is proposed to cover additional 6000 latrines in 1981-82.

6.7.15. Low Cost Sanitation Project (UNDP)

6.7.15.1. It is proposed to undertake a programme of Low cost sanitation under UNDP Global project in 15 towns of Gujarat State. The programme is at present at research stage. However, a token provision of Rs. 4.00 lakhs is proposed to begin with the programme. For the year 1981-82, a provision of Rs. 1 lakh is proposed.

6.7.16. Rural Sanitation

6.7.16.1. The programme of rural sanitation is implemented on "as and when" basis upto the end of 1979-80 only. 5 villages have been covered with drainage facilities. It is envisaged to cover 2 villages during the Five year Plan 1980-85. An outlay of Rs. 5.00 lakhs is proposed for five Year Plan period 1980-85 for this programme.

6.7.17. Urban Water Supply

6.7.17.1. Out of 216 towns, 167 towns are having protected pipes water supply facilities by the end of March, 1980, leaving 49 towns to be tackled as on 1st April, 1980.

6.7.17.2. Urban water Supply Schemes for non-Corporation Towns :

It is envisaged to cover additional 25 towns with water supply schemes during 1980-85. It is also

proposed to augment water supply projects of 30 towns during this period. A provision of Rs. 29.00 lakhs towards GIA is proposed for 1980-85 period. A provision of Rs. 1 lakh is proposed during 1981-82.

6.7.17.3. 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 loans 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 projects 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. 14.00 lakhs is proposed for Government loan.

6.7.17.4. A permanent water supply scheme costing Rs. 5 to 6 crores for Bharuch town and GNFC is to be constructed through GNFC to solve its water supply problem. Funds will have 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.

6.7.17.5. **Government Schemes.**—A provision of Rs. 6.00 lakhs is proposed during 1980-85 to take up emergent capital works as and when necessity will arise in four Government urban water supply schemes of Porbandar, Kandla, Dwarka and Godhra of which Head works are maintained and operated by Government.

6.7.17.6. **Corporation Towns.**—For water supply project of Ahmedabad Municipal Corporation, it is proposed to provide Rs. 40.00 lakhs towards Government loan during 1980-85.

STATEMENT

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Schemewise outlays and expenditure

Sewerage and Water Supply

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	WSS-1 Survey and investigation	82.20	35.00	35.00	135.00	..	50.00	..
2.	WSS-2 Research	0.50	1.00	1.00	5.00	5.00	1.00	1.00
3.	WSS-3 Sewerage scheme (Urban)	72.62	40.00	40.00	119.00	55.00	13.00	7.00
4.	WSS-4 Drainage schemes (Rural)	0.03	3.00	3.00	5.00	..	0.50	..
5.	WSS-5 Urban W.S.S.	330.58	72.00	72.00	189.00	160.00	38.00	37.00
6.	WSS-6 Rural W.S. (GIA)	34.37	6.00	6.00	8.00	..	0.50	..
7.	WSS-7 Rural W.S. (MNP)	909.38	900.00	900.00	2935.00	2185.00	550.00	400.00
Total..		1429.68	1057.00	1057.00	3396.00	24.05	653.00	445.00
M. B. Loan		309.00	415.00	415.00	2500.00	2500.00	437.00	437.00
LIC Loan		575.00	565.00	565.00	3400.00	3400.00	590.00	590.00
World Bank Projects		..	3.00	..	5704.00	5704.00	620.00	620.00
Grand Total		2313.68	2040.00	2037.00	15000.00	14009.00	2300.00	2092.00

STATEMENT

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82
Targets of production and physical achievements

Severage and Water Supply

Sr. No.	Item	Unit	Level of achievement at the end of					
			1978-79	1979-80 (Base year level)	1984-85 Terminal year target	1980-81		1981-82 proposed target (Level)
1	2	3	4	5	6	7 Target (level)	8 Likely achievement	9
(A)	Urban Water Supply other towns							
	(i) Towns covered	No.	158	167	192	173	173	179
	(ii) Population covered	Lakhs	69.05	71.17	73.00	71.63	71.63	72.10
(B)	Urban Sanitation other towns							
	(i) Towns covered	No.	20	22	32	24	24	27
	(ii) Population covered	Lakhs	32.82	34.13	39.13	34.43	34.43	36.43
	Latrin conversion programme							
	(i) Latrines converted	No.	72010	76383	106383	81383	81383	87383
	(ii) Population converted	Lakhs	4.41	4.67	6.50	4.97	4.97	5.33
(C)	Rural Water Supply							
	Other Rural W.S. Programme							
	(a) Pipes water supply							
	(i) Villages covered	No.	2006	2442	4940	3042	2842	3242
	(ii) Population	Lakhs	25.12	30.59	77.74	37.59	34.59	38.60
	(b) Hands pumps/Tube wells							
	(i) Villages covered	No.	1159	1293	2378	1543	1493	1693
	(ii) Population covered	Lakhs	4.61	4.60	9.48	6.00	6.00	7.00
	(c) Open dug (Simple) wells							
	(i) Villages covered	No.	533	779	2282	1229	1079	1379
	(ii) Population covered	Lakhs	1.49	2.10	8.78	4.10	3.60	5.10
	Total Villages covered		3698	4514	9600	5814	5414	6314

STATEMENT

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Revised Minimum Needs Programme :—Outlays and expenditure

Sewerage and Water Supply

(Rs. in lakhs)

Sr. No.	Name of the Programme	1979—80 Actuals	1980—81		1980—85		1981—82	
			Approved outlay	Antici- pated expen- diture	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Rural Water Supply	909.38	900.00	900.00	2935.00 +3000.00*	2185.00	550.00 +450.00*	400.00
					5935.00		1000.00	

*Under World Bank assisted project.

STATEMENT

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Targets and physical achievements—physical programmes Revised Minimum Needs Programme

Sewerage and Water Supply

Sr. No.	Programme	Item	Unit	Level of achievement at the end of					
				1978-79	1979-80 (Base year level)	1984-85 Terminal year target	1980-81 Target (Level)	Likely achieve- ment 9	1981-82 proposed target (Level) 10
1	2	3	4	5	6	7	8	9	10
1.	Rural Water Supply (MNP)	Village	No.	3698	4514	9600	5814	5414	6314

STATEMENT

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Centrally sponsored scheme--outlays

Sewerage and Water Supply

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 outlay Proposed			1980-81 outlay			1981-82 outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Accelerated rural Water Supply Scheme	..	172.27	172.27	..	3165.00	3165.00	..	600.00	600.00	..	500.00	500.00

6.8. HOUSING

6.8.1.1. Housing is one of the basic necessities of life. House construction is also an economic activity. Besides, generating direct and indirect employment on a massive and decentralised scale, it also generates demands for goods and materials produced and manufactured by Village-Cottage and small scale industries and organised industries.

6.8.1.2. Growth of population, rapid pace of industrialisation and urbanisation has added to the urgency of the problem of housing. Migration of population from village to towns and cities has created the problem of slums. In village 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.

6.8.1.3. 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 32.10 lakh in rural areas. The number of household were 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 household 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 household 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 household living in one room was 54.9% and that living in two rooms was 28.5%.

6.8.1.4. 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, roads, bamboo, mud, etc.

6.8.2. Review of Progress :

6.8.2.1. Various housing schemes are being implemented as part of the State Plan. The Gujarat

Housing Board, the Gujarat Slum Clearance and the Rural Housing Board are undertaking the housing activities from the cap plan resources of State as well as from the resources outside the State Plan.

6.8.2.2. Till the end of 1979-80, the programmes under housing compared of integrated subsidised housing scheme, low income group housing scheme and slum clearance scheme. In addition to this, contribution to the share capital of the Gujarat State Co-operative Housing Finance Society limited was also given to encourage housing activities by private initiative through Co-operatives. The 'Economic Weaker Sections Housing Scheme' was also introduced during the Fifth Plan to cater to the housing needs of the vulnerable sections. Till the end of the Fourth Plan, housing activities undertaken through the plan were mainly in the urban areas.

6.8.2.3. As regards housing, a plan scheme viz., 'Village Housing Project' was in operation since the Second Plan to cater to the needs of rural areas till the fourth year of the Fourth Plan. The scheme of providing house sites free of cost, to the rural landless labourers/artisans was introduced during the fourth year of the Fourth Plan as a central sector scheme. Thus, very little had been done in the sphere of rural housing till the end of the Fourth Plan.

During the Fifth Plan, the Central sector scheme of providing free of cost house-sites to rural landless labourers was taken up as a State Plan Scheme under the 'Minimum Needs Programme'. In addition, a low income group housing scheme for rural areas was also introduced during the Fifth Plan. A scheme to provide financial assistance to allottees of plots housesites was introduced with effect from 2nd October, 1976 to enable them to construct modest dwellings on the housesites allotted to them.

6.8.2.4. Till the end of the 1979-80, "Gujarat Slum Clearance Board" has constructed 2712 houses.

6.8.2.5. Under the low income group housing (rural,) 5352 houses were constructed during the Fifth Plan period and 3992 houses were constructed during the years 1978-79 and 1979-80.

6.8.2.6. About 1.74 lakh plots were allotted to the landless labourers under the Minimum Needs Programme during the Fifth Plan period 1974-78 bringing the total number of plots allotted since the beginning of the scheme till the end of 1979-80 to around 4.07 lakhs. Of these about 0.88 lakh plots were allotted to the scheduled castes and about 0.93 lakh plots were allotted to the scheduled tribes. Under the scheme for providing financial assistance to the landless labourers which has been introduced since October, 1976, about 1.12 lakh dwellings have been constructed

by the end of 1979-80. Of these 0.28 lakh houses were allotted to Scheduled Castes and 0.29 lakh houses were allotted to scheduled tribes.

6.8.3. Approach and Strategy :

6.8.3.1. 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 thrust on the 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 problem, the State alone would not be in a position to undertake a massive housing programme.

6.8.3.2. Public housing schemes are being allotted higher outlays and will be restricted 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. Cooperative housing societies 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.

6.8.3.4. The employers too will be expected to play a more effective role. It will be necessary to secure as much institutional finance as possible. The local bodies, financial institutions, banks, co-operatives and employers will be expected to make their utmost contribution by providing their own resources towards reducing the magnitude of the housing problem. It is also necessary to promote research in building technology and development cheap and local housing materials.

6.8.4. Programme for 1980-85 and 1981-82 :

6.8.4.1. An outlay of Rs. 9026.00 lakhs is proposed for various Housing schemes during the Sixth Five Year Plan 1980-85, with an outlay of Rs. 1616.00 lakhs proposed for the year 1981-82. The broad break-up of the proposed outlay is as under :—

(Rs. in lakhs)

Sr. No.	Programme	1979-80 Actuals	1980-81		1980-85	1981-82
			Approved Outlay	Anticipated expenditure	Proposed Outlay	Proposed Outlay
1	2	3	4	5	6	7
1.	Urban Housing	301.73	473.00	488.00	1465	277
2.	Rural Housing	280.90	512.00	734.50	4035	730
3.	Government Residential Quarters and Administrative Buildings	365.44	235.00	235.00	1726	245
4.	Police and Jail Housing	92.22	85.00	160.00	1000	109
5.	House Building advances to Government employees	885.00	255.00	2047.00	800	255
Total		1925.29	1560.00	3664.50	9026	1616

6.8.5. Urban Housing

6.8.5.1. The Urban Housing programme is mainly comprised of Integrated Subsidised Housing Scheme, Economically Weaker Section Housing Scheme, Low Income Group Housing Scheme and

Slum Clearance Scheme.

6.8.5.2. 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. 1465.00 lakhs is proposed for the Sixth Five Year Plan 1980-85, and an outlay

of Rs. 277 lakhs is proposed for the year 1981-82. The details is as under:—

(Rs. in lakhs)

Sr. No.	Scheme	Outlay proposed for 1980-85	Outlay proposed for 1981-82
1	2	3	4
1.	Integrated Subsidised Housing Scheme	5.00	2.00
2.	Economically Weaker Sections Housing Scheme	700.00	110.00
3.	Low Income Group Housing Scheme	400.00	90.00
4.	Slum Clearance Scheme	100.00	30.00
5.	Site and Services Scheme	250.00	40.00
6.	Constitution of Action Group for Settlement of Slum Dwellers	10.00	5.00
Total :—		1465.00	277.00

6.8.5.3. The physical achievements under various urban housing schemes during 1974-78, 1978-79 and 1979-80 are as under:—

Name of the Scheme	Achievements (No. of houses)		
	1974-78	1978-79	1979-80
1	2	3	4
1. Integrated Subsidised Housing Scheme	1288	312	24
2. Economically Weaker Sections Housing Scheme	10790	6457	3404
3. Low Income Group Housing Scheme	5352	1818	2174
4. Slum Clearance Scheme	2520	..	192
Total:—	19950	8587	5794

6.8.5.4. The Gujarat Housing Board undertakes programme of above mentioned planed scheme 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 1974-78 and 718 tenements during 1978-79.

weaker sections of the society, whose monthly income does not exceed Rs. 350 can avail of the benefit under the scheme. The approved ceiling cost per tenement is Rs. 6,050. The pattern of assistance is as below :—

6.8.5.5. The Gujarat Slum Clearance Board undertakes programme with Hudco assistance. The Board has completed 220 tenements during 1974-78 and 1181 tenements during 1978-79. In addition to this, the Board has completed 320 tenements for cyclone affected slum people in Jamnagar.

Agency	Pattern of assistance (% of approved cost)		
	Loan	Subsidy	Agency's share
1. Co-operative Housing Society of industrial workers	65	25	10
2. Employees (Rental)	50	25	25
3. Gujarat Housing Board (Rental)	50	50	..

Integrated Subsidised Housing Scheme

6.8.5.6. Industrial Workers within the meaning of the Factory Act, or members of economically

6.8.5.7. As the prescribed ceiling cost is very low and the number of industrial workers whose income is not more than Rs. 350 per month are limited, the progress under the scheme is not possible. It has, therefore, been decided to emphasis on the hire purchase scheme rather than subsidised rental scheme. A scheme for Economically Weaker Section 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 proposed for on-going projects of co-operative housing societies of industrial workers and employers for the Plan period of 1980-85. An allocation of Rs. 3.10 lakhs is made for 1980-81 and an outlay of Rs. 2.00 lakhs is proposed for 1981-82.

Economically Weaker Sections Housing Scheme.

6.8.5.8. 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 blinds and 5 % tenements for the communities declared socially and educationally backward by Baxi Panch. The ceiling cost of the tenement is Rs. 10,000. Government gives 100 % loan assistance.

6.8.5.9. The Housing and Urban Development Corporation (HUDCO) also grants loans for execution of Housing programmes for this section 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. Government has also decided to exempt these institutions/agencies from payment of Government guarantee fee in respect of the projects for economically weaker sections category. In addition to HUDCO, LIC., Nationalised Banks, etc., extend loan assistance for executing this scheme.

6.8.5.10. 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. 700 lakhs is proposed for the Sixth Plan period of 1980-85. An allocation of Rs. 225 lakhs is made for 1980-81 and an outlay of Rs. 110 lakhs is proposed for 1981-82.

Low Income Group Housing Scheme.

6.8.5.11. 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 tenements houses constructed are given on hire purchase basis. The State Government gives 100 % loan assistance to the Board under the scheme. The Board reserve 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 held 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.

6.8.5.12. 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 matching the balance requirement, acquisition of land, etc. This will help in boosting the programme.

6.6.5.13. An outlay of Rs. 400.00 lakhs is proposed for Sixth Plan period of 1980-85 and an outlay of Rs. 90.00 lakhs is proposed for 1981-82.

Slum Clearance Scheme.

6.8.5.14. 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 approval ceiling cost per tenement is Rs. 6050. The tenements so constructed are to be 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

6.8.5.15. As the tenements programme 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 1980-85 in the Urban Development Sector. In view of this, no new projects are to be considered under this scheme.

6.8.5.16. However, in order to improve the living conditions of the slum dwellers, it is necessary to improve their huts. At present, there is 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.

6.8.5.17. In view of above, an outlay of Rs. 100 lakhs is proposed for the Sixth Plan period of 1980-85 and an outlay of Rs. 30.00 lakhs is proposed for 1981-82.

Site and Services Scheme

6.8.5.18. 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 the creation of new slum areas by influx of the migratory population from the areas to the urban areas for livelihood, a new scheme for providing cheaper and skeleton houses within the reach of such population has been introduced in the State Plan from 1979-80. The Site and services scheme introduced by State is as per the guidelines prescribed by HUDCO. The various agencies engaged in housing activities obtain funds from HUDCO, under this scheme. The HUDCO gives loan on sliding scale. For meeting the matching contribution, remaining balance of the cost of land acquisition, initiating preliminaries, etc., these agencies require funds. For accelerating programme with the loan assistance of HUDCO, the loan under the scheme is given as "Seed Capital" to various implementing agencies i. e., Gujarat Housing Board, Gujarat Slum Clearance Board, Urban Development Authorities, Municipal Corporations, Municipalities, etc.

6.8.5.19. The Site and Services scheme introduced by HUDCO envisages to provide housing facilities to economically weaker sections within their paying limits. 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., is 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 :-

6.8.5.20. Government is considering in principle to establish 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 particularly to people who belong to the Economically Weaker Sections and the Low Income Group at reasonable rates. The concept, is therefore, a result of the hardship being faced by such people due to acute shortage of the 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 Sixth Plan for 1980-85 and an outlay of Rs. 40.00 lakhs is proposed for 1981-82 under the scheme of Site and Services Scheme.

Constitution of Action Group for Settlement of Slum Dwellers.

6.8.5.21. A lasting solution to the problem of slum dwellers can be found only in giving more attention to slum improvement, than in 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 be 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 expenditure of Group and to start with the activities, an allocation of Rs. 10 lakhs is proposed in the Sixth Plan period of 1980-85 and an allocation of Rs. 5 lakhs is proposed for 1981-82.

6. 8. 6. Rural Housing

6.8.6.1, The Rural Housing Programme is comprised of revised minimum needs programme for (a) housesites for landless labourers and (b) assistance for construction of houses on the housesites allotted, low Income Group Housing scheme, Economically Weaker Sections Housing Scheme with HUDCO participation, and assi-

stance for improvement of rural houses. A new scheme for loan to farmers for construction of houses has also been proposed to be taken up with effect from 1980-81. An outlay of Rs. 4035-00 lakhs is proposed for the Sixth Five Year Plan 1980-85 and an outlay of Rs. 730.00 lakhs is proposed for the year 1981-82. The details are as under:—

(Rs. in lakhs)			
Sr. No.	Name of the Scheme	Outlay proposed for the Sixth plan 1980-85	Outlay proposed for 1981-82
1	2	3	
1.	R. M. N. P.		
	(i) Housesites for landless labourers.	100.00	10.00
	(ii) Assistance for construction of houses.	2985.00	597.00
2.	Assistance for improvement of rural houses.	100.00	12.00
3.	Low Income Group housing scheme	450.00	35.00
4.	Economically weaker sections Housing scheme with HUDCO participation.	300.00	45.00
5.	Loans to farmers for construction of houses.	100.00	31.00
	Total :	4035.00	730.00

6.8.6.2. Revised Minimum Needs Programme. Under the scheme of allotment of free house-sites to landless labourers, the following number of plots have been allotted in the State upto 31st May, 1980.

Total No. of housesites allotted.	4.09 lakhs
Out of which-	
(a) Plots allotted to SC.	0.88 lakh.
(b) Plots allotted to ST.	0.93 lakh.
(c) Others.	2.28 lakh.
Total:—	4.09 lakh.

6.8.6.3. It is proposed to construct 75000 houses under this scheme during the year 1980-81 and the remaining 3 lakhs houses during the Sixth Five Year Plan period of 1980-85. The present State Government has given top priority to the programme of allotment of house sites plots to the landless labourers and constructing of houses thereupon. In fact this is one of the important programme covered under the 20-Point programme as also under the minimum needs Programme. At the end of 1977-78, construction of 56,013 houses were completed and the total expenditure of houses was Rs. 336.98 lakhs. During the year 1978-79, an amount of Rs. 151.45 lakhs has been spent against the provision of Rs. 300.00 lakhs. During the year 1979-80, 32,977 houses have been constructed against the target of 75,000 houses. In order to achieve the aforesaid objective, the following steps have been taken or/and proposed to be taken:

(1) The last date for receiving applications for house sites plots is extended upto 31st Dec., 1981 to enable many landless labourers to take benefits of this scheme who are so far left out for some reason or the other.

(2) It is being considered to enable the beneficiaries to construct a small but durable pucca house at the estimated cost of Rs. 3000/- which would be met with as under:—

Rs. 1000/-	Government subsidy in place of present subsidy of Rs. 750/-per house.
Rs. 250/-	District Panchayat contribution.
Rs. 250/-	Beneficiaries contribution in terms of labour.
Rs. 1500/-	Loan from Nationalised Bank of HUDCO.

Rs. 3000/- Total :

It is also decided to provide essential amenities like drinking water, Street Light, roads on a priority basis to the housing colonies of these beneficiaries. It may be pointed out that through the instrumentality of the State Component plan and Tribal Sub-Plan, the Government has ensured that the benefits under this scheme meant for SC and ST people might not be diverted to other sections of the communities.

6.8.6.4. It is decided to raise the present level of Government subsidy from Rs. 750/- to Rs. 1000/- for 3.75 lakh houses to be constructed during 1980-85. An outlay of Rs. 3750 lakhs will be required for the programme of housing assistance in the State Plan during 1980-85. It will be also necessary to obtain loan component to the tune of Rs. 5625 lakhs from the nationalised banks, HUDCO, etc. The implementation of the programme will depend on the availability of institutional finance. It is proposed to provide Rs. 2985 lakhs in the State Plan for providing

assistance to 3 lakh allottees of plots for the construction of houses during Sixth Plan of 1980-85. The programme for 1981-82 envisages to cover around 60,000 beneficiaries.

6. 8. 7. Assistance for improvement of Rural Houses.

6.8.7.1. There are many houses/huts in rural areas which need improvement in respect of ventilation, smoke nuisance, etc., keeping in view of health, sanitation and good habitation. There is ample scope for improvement in such matters especially in respect of the weaker sections of the society. Under the scheme, in rural areas, the beneficiaries belonging to Scheduled Castes, Scheduled Tribes and people belonging to a group of socially and economically backward persons whose income does not exceed Rs. 2400/- per annum, assistance for providing Ventilator, is being given at the rate of actual cost of the ventilator limited to Rs. 50/-. The assistance is also given to the extent of Rs. 100/- for erection of smokeless chulas to them. The beneficiaries other than prescribed above such assistance under these two schemes is at the rate of Rs. 50/- for the total cost and limited to Rs. 25/- for Ventilator and Rs. 50/- for smokeless chulas, if they are installed or erected by them.

6.8.7.2. 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 33,380 Cement or wooden Ventilators have been installed or constructed. During 1980-85, Rs. 100.00 lakhs have been proposed for this scheme and an outlay of Rs. 12 lakhs is proposed for 1981-82.

6.8.8. Low Income Groups Housing Scheme:-

6.8.8.1. 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 ranking from 100% to 76% of the ceiling cost which is Rs. 18,000/- per unit. The houses constructed under the scheme are given on hire purchase basis. An outlay of Rs. 450-00 lakhs is proposed for Sixth Five Year Plan of 1980-85. An allocation of Rs. 35 lakhs is proposed for 1981-82.

6.8.9. Economically Weaker Sections Housing schemes with HUDCO participation.

6.8.9.1. 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 section family, whose monthly income does not exceed Rs. 350/-. HUDCO provides loan not exceed of 50% of the cost of house at the rate of 51/4% interest and the period of repayment is ten (10) years in equal instalment. 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.

6.8.9.2. An outlay of Rs. 300 lakhs is proposed for Sixth Five Year Plan of 1980-85 towards State's contribution. An allocation of Rs. 45 lakhs is made during 1981-82.

Loans to farmer for construction of houses:-

6.8.9.10. The scheme envisages to assist financially 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 Sixth Five Year Plan of 1980-85. An allocation of Rs. 31. is proposed for 1981-82.

6. 8. 10. Government Residential and Administrative Buildings.

6.8.10.1. According to information gathered in 1971, the requirement of residential quarters for Government employees sanctioned at District Head Quarters in the State was about 29,000 and that of Talukas Head Quarters was about 12684. Beginning from 1971-72, Government has upto March, 1980 sanctioned construction of 5220 of 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 of Taluka) from the Gujarat Housing Board at various places in the State. Thus, provision of 8669 of new quarters could be made so far since 1971-72. A big head way is still to be made to meet with the demand of 33015 quarters for the Government employees needing Govt. accommodation. It is, therefore, necessary to accelerate the programme of construction of quarters. Details of various categories of quarters sanctioned, new quarters required as on 1-4-1980 in the State, are given below:-

District Head Quarters.

Category.	requirement as 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. Class (IV)	7606	1212	6394
II.	19442	4205	15,237
III.	1451	530	921
IV & V.	500	145	355
Total:-	28999	6092	22907

6.8.10.2. Thus, this programme required to be perused so that the employees residing in the private rented premises may not have continued to face the hardship of paying abnormally high rent for inferior accommodation. An outlay of Rs. 900 lakhs is proposed for this programme during the Plan period 1980-85. An amount of Rs. 125 lakhs is provided for the year 1980-81, and Rs. 130 lakhs is proposed for the year 1981-82. Works on about 2300 units are in progress of which 800 units are expected to be completed by March, 1981. Works of 681 units are being 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 within 3 years. Construction of 270 Units at Taluka Head Quarter under Tribal Sub-Plan is also to be taken during the 1980-81. The Spillover liabilities as on 1-4-1981 is expected to be Rs. 900 lakhs. A provision of Rs. 130 lakhs is proposed for the year 1981-82 of which an amount of Rs. 105 lakhs is for spillover works and Rs. 25 lakhs is for the new works.

6.8.11. Administrative Buildings.

6.8.11.1. The problem of accommodation for Government Officers at District and Talukas Head Quarters is of great magnitudes. Several Government Offices are housed in hired rent building 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 Govt. Offices and that context it becomes necessary to undertake the construction of suitable buildings for Housing of these Offices. So far, multistoried Office building have been constructed at Ahmedabad and Surat. Works on construction of office buildings at Vadodara and Rajkot are in progress and Office buildings at Palanpur and Navsari are being 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 the estimated cost of Rs. 150 lakhs. Building at the following places are yet to be taken up.

Place	Amount of Rent paid per month	Approximate estimated cost (Rs. in lakhs).
1	2	3
1. Bhavnagar	41,572	150
2. Mahesana	35,500	95

1	2	3
3. Jamnagar	25,842	120
4. Nadiad	21,218	110
5. Godhra.	21,138	95
6. Bharuch	19,063	90
7. Bhuj.	18,014	70
8. Himatnagar	15,950	65
9. Amreli.	7,573	50

6.8.11.2. The demand of the Office Buildings at district head quarters 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.	Regional Transport Office Building.	16.00
2.	Regional Transport Office Building at Rajkot.	20.00
3.	Regional Transport Office Building at Surat.	10.00
		46.00

6.8.11.3. In addition to above, the following new works have also been authorised to be taken up during 1979-80.

(Rs. in lakhs)

Sr. No.	Name of the Work	Estimated Cost for which A.A. accorded
1	2	3
1.	Oriental Building at Navsari.	61.13
2.	Rest House at Navsari.	7.49
3.	Rest House at Ahwa.	7.99
4.	„ „ Nadiad.	7.61
5.	„ „ Godhra.	9.69
6.	„ „ Gondal.	8.31

1	2	3
7.	Rest House at Kandala.	9.29
8.	„ „ Bardoli.	10.48
9.	Expansion of Government Offices at Palanpur.	24.78
10.	Expansion of Villa Bunglow at Porbandar.	8.12
11.	Rest House at Una.	8.06
12.	Circuit House Annex at Ahmedabad.	25.09
		188.04

Category	Strength	No. of Qrs. allotted	No. of Qrs. yet to be allotted	No. of Qrs. under construction	No. of Qrs. 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	44743	(28954 — 829 condemned = 28125)	16618	3192	13426	
		47415	29391	18024	3269	14755

6.8.11.4. During the year 1980-81 an amount of Rs. 110 lakhs is provided. New works of Office Buildings estimated to cost about Rs. 90 lakhs are being taken up for execution during current year. The work of construction of buildings for Labour, Employment and Training at Ahmedabad (Shram Bhavan) estimated to cost of Rs. 150 lakhs is also proposed to be taken up during the year 1980-81. The ppilover liabilities as on 1-4-80 is expected to be Rs. 900 lakhs.

6.8.11.5. As outlay of Rs. 826 lakhs is estimated during the plan period 1980-85. An outlay of Rs. 110 lakhs is provided for the 1980-81 and an amount of Rs. 115 lakhs is proposed for the year 1981-82.

8.12.6. Police Housing Scheme :

6.8.12.1. The housing needs for the police personnel are to be viewed in a context different from the needs of the other Government employees. This is because the Police personnel up to the rank of Inspectors are entitled to rent free quarters as per conditions of their service. The Police housing scheme is being implemented as Plan scheme, since the beginning of the Fifth Five Year Plan. The Police housing scheme has been transferred to State Sector from 1979-80 and hence no central loan assistance has been received from 1979-80.

6.8.12.2. During the year 1980-81, a provision of Rs. 75 lakhs has been made for construction of 15 P.Is., 62 Sub-Inspectors and 2202 Constabulary Staff quarters. Total sanctioned strength of Police personnel, entitled to rent-free accommodation, the number of quarters available etc., as on 1-7-80 is as under:—

The total financial outlay required for 14,755 quarters will be Rs. 3909 lakhs. The financial requirements do not take into account the likely increase of Police strength every year. The outlay proposed for the Sixth Five Year Plan period 1980-85 is Rs. 950 lakhs and Rs. 99 lakhs for Annual Plan 1981-82 for Police Housing.

6.8.12.3. A provision of Rs. 99 lakhs is fixed for Police Housing for the year 1981-82 out of which an amount of Rs. 50 lakhs has been proposed for new works, while an amount of Rs. 49 lakhs has been proposed for works in progress.

6.8.13. Jail Housing Scheme :

6.8.13.1. The Jail employees are required to reside in the Jail premises and as such they are provided with rent free quarters in 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 in the Jail premises. 142 new staff quarters are required to be constructed. The total financial outlay required for 142 quarters will be Rs. 50 lakhs (approx). The outlay proposed is Rs. 50 lakhs for the Sixth Five Year Plan period 1980-85 and Rs. 10 lakhs for the year 1981-82.

STATEMENT
DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Minor Heads-wise Outlays and Expenditure

Sector/Sub-Sector: *Housing.*

(Rs. in lakhs)

Sr. No.	Minor Heads of Development	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	Integrated subsidised housing scheme for industrial workers and economically weaker sections of the community	130.83	228.10	228.10	705.00	703.00	112.00	111.00
2.	Low income group Housing scheme	115.00	185.00	185.00	400.00	400.00	90.00	90.00
3.	Provision of house-sites to rural labourer	22.85	10.00	10.00	100.00	..	10.00	..
4.	Rental Housing Scheme (Government Residential Quarters)	158.45	125.00	125.00	900.00	900.00	130.00	130.00
5.	Slum clearance and Rehousing scheme	25.90	5.00	15.00	100.00	60.00	30.00	20.00
6.	Village Housing Projects	20.00	40.00	40.00	450.00	435.00	35.00	32.00
7.	Assistance for construction of houses on the house-sites allotted to landless labourers (MNP)	173.56	400.00	597.50	2985.00	..	597.00	..
8.	Police Housing Scheme and Jail Buildings	92.22	85.00	160.00	1000.00	..	109.00	..
9.	Others	1186.48	481.90	2303.90	2386.00	2251.00	503.00	483.00
Grand total :—		1923.29	1560.00	3664.50	9026.00	4749.00	1616.00	866.00

STATEMENT

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL DEVELOPMENT PROGRAMME 1981-89

Schemewise outlays and expenditure

Housing

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
I. Integrated subsidised housing scheme for industrial workers and economically weaker Sections of the Community-								
1.	HSG-1 Integrated subsidised housing scheme	0.83	3.10	3.10	5.00	3.00	2.00	1.00
2.	HSG-2 Economically Weaker Sections Housing Scheme	130.00	225.00	225.00	700.00	700.00	110.00	110.00
Sub-Total : I		130.83	228.10	228.10	705.00	703.00	112.00	111.00
II. Low Income Group Housing Scheme—								
3.	HSG-3 Low income group housing scheme	115.00	185.00	185.00	400.00	400.00	90.00	90.00
III. Rental Housing Scheme (Govt. Residential Quarters)								
4.	HSG-4 Government residential quarters for Govt. employees.	158.45	125.00	125.00	900.00	900.00	130.00	130.00
IV. Slum Clearance and Rehousing Scheme--								
5.	HSG-5 Slum Clearance Scheme	25.90	5.00	15.00	100.00	30.00	30.00	20.00
V. Village Housing Projects Assistance for construction of houses on the house sites allotted to landless labourers								
6.	HSG-6 Minimum Needs Programme-Assistance for construction of houses on the house-sites allotted to landless labourers	173.56	—400.00	597.50	2985.00	..	597.00	..
7.	HSG-7 Housesites for landless rural labourers	22.85	—10.00	10.00	100.00	..	10.00	..
8.	HSG-8 Low income group Housing Scheme	20.00	—40.00	40.00	450.00	435.00	35.00	32.00
Sub-Total : V		216.41	450.00	647.50	3535.00	435.00	642.00	32.00
VI. Others								
9.	HSG-9 Site and Services Scheme	30.00	54.90	54.90	250.00	225.00	40.00	37.00
10.	HSG-Adj. Construction of Action Group for Settlement of slum Dwellers	..	..	5.00	10.00	..	5.00	..
11.	HSG-12 Assistance for improvement of rural houses	14.49	12.00	12.00	100.00	..	12.00	..
12.	HSG-13 Economically Weaker Sections Housing Scheme with HUDCO participation	50.00	50.00	50.00	300.00	300.00	45.00	45.00
13.	HSG-Adj. Loans to farmers for construction of houses	..	..	25.00	100.00	100.00	31.00	31.00
14.	HSG-14 Administrative buildings	206.99	110.00	100.00	826.00	826.00	115.00	115.00
15.	HSG-15 Loans to Government Employees for House Building Advances	885.00	255.00	2047.00	800.00	800.00	255.00	255.00
16.	HSG-16 Police Housing	86.28	75.00	150.00	950.00	..	99.00	..
17.	HSG-17 Jail Buildings	5.94	10.00	10.00	50.00	..	10.00	..
Sub-Total : VI		1278.70	536.90	2463.90	3386.00	-2251.00	612.00	483.00
Grand Total :—		1925.29	1560.00	3664.50	9026.00	4749.00	1616.00	866.00

Statement

Draft Sixth Five Year Plan 1980--85 and Annual Plan 1981--82

Targets of Productions and Physical Achievements.

(Rs. in lakhs)

Sr.No.	Item.	Unit	Level of Achievement at the end of.						Remarks	
			1.878-79	1979-80 Base Year Level	1984-85 Terminal year target	1980 Target Level	81 Likely Achievo- ment.	1981-82 proposed target level		
1	2	3	4	5	6	7	8	9	10	
	HSG-6 Assistance for construction of housesaw the housesites allotted to landless laboures.	Construction houses (Nos)	78889	3297	375000	75000	75000	75000	75000	..

Statement

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Sector/Sub-Sector:—

Revised Minimum Needs Programme—Outlay and Expenditure.

HOUSING

(Rs. In lakhs).

Sr. No.	Name of the Programme.	1979-80	1980-81		1980-85		1981-82	
		Actuals	Approved Outlay	Anticipated Expenditure.	Proposed Outlay	Capital Content	Proposed Outlay	Capital Content
1	2	3	4	5	6	7	8	9
RURAL HOUSING								
1.	HSG-6. Assistance for construction of houses on the housesites allotted to landless labourers.	173.56	400.00	597.50	2985.00	..	597.00	..
2.	HSG-7. Housesites for landless labourers.	22.85	10.00	10.00	142.00	..	10.00	..
TOTAL:		196.41	410.00	607.50	3127.00	..	607.00	..

Statement

Draft Fifth Five Year Plan 1930--85 and Annual Plan 1981--82.

Targets and Physical Achievements Physical Programmes—Revised Minimum Needs Programme.

Sector:--Sub Sector : Housing.

(Rs. in lakhs)

Sr.No.	Programme.	Item.	Unit	Level of Achievement at end of					
				1978-79	1979-80 Base Year level	1984-85 Terminal Year target	1980-81		1981-82 Proposed Target (level)
1	2	3	4	5	6	7	8	9	10
1.	HSG-6. Assistance for construction of houses on the housesites allotted to landless labourers.	Construction of houses.	No.	78889	32977	3,00,000	75000	75000	60,000
2.	HSG-7. Housesites for landless rural labourers.	No of plots allotted.	No.	4,00,570	6565	Not fixed	Not fixed	..	Not fixed

6.9. URBAN DEVELOPMENT

6.9.1. Trends in Urbanisation :

6.9.1.1. 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.

6.9.1.2. 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. This is a pointer as to how rapid is the process of urbanisation in Gujarat. The pattern of urbanisation is heavily weighted towards the larger cities. 7 cities account for 45% (33.80 lakhs people) of the total urban population, whereas as 18 medium size towns (with population range 50,000 to 99,999) accounted for 16% of the total urban population. The remaining 39% of the total urban population is distributed in 191 towns.

6.9.1.3. 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. 1,00,000 and above	7	33.80	45.1
II. 50,000 to 99,999	18	11.74	15.7
III. 20,000 to 49,999	42	13.28	17.7
IV. 10,000 to 19,999	73	10.53	14.0
V. 5,000 to 9,999	71	5.40	7.2
VI. Below 5,000	5	0.21	0.3
Total..	216	74.96	100.0

6.9.1.4. 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.

6.9.2. Review of Programme 1974-80 :

6.9.2.1. During the Fifth Plan the activities and programme under Urban Development sub-Sector comprised of:

(i) Preparation of Development Plans and Town Planning Schemes;

(ii) Preparation of Regional Plans, Metropolitan Plans, Traffic and Transportation Plan for Metropolitan Areas;

(iii) Urban Community Development Projects;

(iv) Assisting the urban local bodies for miscellaneous development activities through loans and market borrowings;

(v) City survey of towns and cities; and

(vi) A Minimum Needs Programme of providing environmental improvement in Slum areas. Besides, there was a centrally sponsored scheme for the Integrated Development of Metropolitan cities.

6.9.2.2. The various programmes in the sub-sector were continued in the Fifth Plan. Two new schemes one for giving grant-in-aid to local bodies for implementation of the proposals of the development plans and another for advancing loans to local authorities of the larger cities for similar purpose were introduced. The implementation of these schemes was taken-up towards the end of the Fifth Plan. In addition, loans

were given to serve as seed capital to the Urban Area Development Authorities, which were established with effect from February, 1978 under the town planning and Urban Development Act, 1976. Rs. 73.0 lakhs and Rs. 178.0 lakhs was given to the Urban/Area Development Authorities in the year 1978-79 and 1979-80 respectively. In order to encourage the urban local bodies and social and voluntary organisations to come up with more local projects bringing social and cultural benefit to the people in the local area, a new scheme of urban local development projects was introduced in 1979-80. An outlay of Rs. 20 lakhs was provided to augment their resources. Municipal Finance Board has been established and in 1979-80 and financial assistance of Rs. 5 lakhs was provided to meet the administrative expenditure in the initial period.

6.9.2.3. An expenditure of Rs. 860.00 lakhs was incurred on the various programmes during the Fifth Plan. In order to benefit to the people in the local area, a new scheme of Rs. 77.00 lakhs by Municipal Corporations for miscellaneous development activities of a capital nature other than sewerage and water supply.

6.9.3. POLICY APPROACH AND STRATEGY

6.9.3.1. The Urban population of the State has increased by 41% during the decade 1961-71 as against 10% during the decade 1951-61. 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 crime. 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 postering the development of smaller towns would be the twin strategies governing the approach to urban development during the Sixth Five Year Plan 1980-85.

6.9.3.2. 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.

6.9.3.3. 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 giving greater emphasis on the provisions of infrastruc-

ture 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.

6.9.3.4. 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 disincentive to move industries away from metropolitan centres, requires to be pursued. The encouragement to house hold and cottage industries and small industries in the rural and semi urban areas would help and arrest the influx of population to large 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 a hierarchical pattern in service centres and growth centres. This throws up the urban function 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.

6.9.3.5. 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 Centre 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 programmes. In this context the regional aspects of the developments taking place in Surat region and the Narmada command area require early preparation.

6.9.3.6. The strategy of attempting a massive reallocation of slums will be discouraged and instead increased investments would be made in slum improvement in the larger cities. The proposed environmental improvement programme (EIP) is to include water supply, sewerage, the paving of streets and the provision of community latrines. Areas inhabited by scheduled caste, particularly scavengers etc., are to be given due priority.

6.9.3.7 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 an around larger cities, the Government has constituted four Urban Development Authorities (Ahmedabad, Vadodara, Surat and Rajkot) and two Area Development Authorities (Bhavnagar and Jamnagar) on the smaller towns have been designated 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.

6.9.3.8. 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, financing and execution of development projects in urban growth centres, particularly small and medium towns.

6.9.3.9. The Government with a view to improving the financial position of the Municipalities by affecting efficiency, economy, necessary discipline in their fiscal administration and to top 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 city area 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.

6.9.3.10. The project, programmes and activities for integrated urban development will require large investments. The Municipal Corporations, 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 Borrowings, assistance from HUDCO and International Agencies will also have to be availed of by all agencies.

6.9.4. Programme for Sixth Five Year Plan 1980-85:

6.9.4.1. An outlay of Rs. 2810 lakhs is proposed for 1980-85 and Rs. 500 lakhs for Annual Plan 1981-82 for various Urban Development Programmes. The break up of the proposed outlays are given as under:—

(Rs. in lakhs)

Sr. No.	Name of the Scheme/ Project (Minor Heads)	1979-80 Actuals	1980-81		1980-85	1981-82
			Approved outlay	Anticipated expenditure	Proposed outlay	Proposed outlay
1	2	3	4	5	6	7
1.	(i) Town and Regional Planning	37.24	41.00	41.00	220.00	46.00
	(ii) Introduction of City Survey all round Ahmedabad Municipal Corporation Areas. ..	9.60	10.00	10.00	100.00	30.00
2.	Urban Development Programme	203.49	108.00	128.00	1130.00	163.00
3.	Loans to Local Bodies ..	519.40	151.00	151.00	760.00	151.00
4.	MNP Environmental improvement in slums ..	8.26	40.00	40.00	400.00	60.00
5.	Integrated Urban Development of Small and Medium Towns. ..	50.00	50.00	50.00	200.00	50.00
	Total..	832.99	400.00	420.00	2810.00	500.00

6.9.5. Town Planning and Regional Planning

6.9.5.1. 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.

6.9.5.2. 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 proposed for regional planning for 1980-85. A provision of Rs. 3.50 lakhs is proposed for 1981-82.

6.9.5.3. 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 provide for declaration of Development areas (which may extend beyond the limits of local Authorities) 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 10 revised plans) were prepared and at the end of 1979-80 the work of 5 Development Plans (including 3 revised plans) was in progress. Moreover, 5 Deve-

lopment Plans are 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 Town Planning Schemes during 1980-85 on behalf of various Area Development Authorities. In addition to these, it is expected, that Urban/Area Development Authorities will also prepare some schemes. For preparing these Development Plans and Town Planning Schemes an outlay of Rs. 25.00 lakhs is proposed for 1980-85 and of Rs. 7.50 lakhs for 1981-82.

6.9.5.4. 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 all around. 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 outlay of Rs. 100.50 lakhs was provided against which an expenditure of about Rs. 9.93 lakhs was made. Grant-in-aid was given to 16 local authorities during Fifth Plan for preparation of 24 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. At present 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 recently to Government and are pending for sanction. For these purposes a total provision of Rs. 140.00 lakhs would be required for this scheme during the Sixth Five Year Plan 1980-85 and Rs. 30.00 lakhs for 1981-82.

6.9.5.5. 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 a rational basis and also for providing for rehabilitation and settlement. The Department 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 proposed for this purpose for the Five Year Plan 1980-85 and Rs. 5.00 lakhs for the Annual Plan 1981-82.

Introduction of city survey of 23 villages, Ahmedabad municipal Agglomeration Area

6.9.5.6. 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 specific 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.

6.9.5.7. 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 developmental schemes. The cost is fully recoverable from property holder on completion of the work.

6.9.5.8. 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 Regulation Act, 1976 covers the Ahmedabad Municipal Corporation area, and some adjoining peripheral area. These 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 uses, 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.

6.9.5.9. In the Fifth Plan, the theodolite work of 11 T.P. Scheme area was completed. P. T. Work of 3 T.P. Scheme 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 is completed at a cost of Rs. 16.70 lakhs.

6.9.5.10. In the Sixth Five Year Plan 1980-85, a 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 3½ 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 Rs. 15 lakhs. Thus, the entire remaining work of agglomeration city survey can be completed within a period of 3 to 3½ years. An outlay of Rs. 30 lakhs is also proposed for the Annual proposals 1981-82.

6.9.6. Urban Development Programme

6.9.6.1. 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 undertaking various projects. The authorities were established towards the end of the Fifth Plan and a modest loan of Rs. 10 lakhs was given as seed capital. A loan amounting to Rs. 251 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 1979-1980). An outlay of Rs. 980.00 lakhs is proposed for 1980-85 for this purpose. In due course the benefits of open market borrowing will have to be extended to these Authorities. An outlay of Rs. 130.00 lakhs is proposed for 1981-82 for this purpose. In due course the benefits of open market borrowings will have to be extended to three Authorities.

6.9.7 Urban Community Development Projects :

6.9.7.1 Urban Community Development Projects 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 condition 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 the 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.

6.9.7.2 In Gujarat, there are 17 projects sanctioned since starting of the scheme, out of which, 3 projects (Porbandar, Godhra and Bhavnagar-II) are discontinued. Thus 14 projects are at present located at Vadodara, Surat, Rajkot, Municipal Corporations and Bhavnagar, Jamnagar, Mahesana, Dabhoi, Khambat, Kalol, Nadiad, Surendranagar and Palanpur municipalities are functioning.

6.9.7.3 During 1980-81, Rs. 8.00 lakhs are provided under Plan item of this scheme. 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 auspices 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 begun. 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 proposed for U.C.D. programme for 1980-85. An outlay of Rs. 8.00 lakhs is proposed for the Annual Plan 1981-82.

6.9.8 Urban Local Development Programme :

6.9.8.1 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, playgrounds, gardens, auditorium, reading room, recreation centres, 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 funds to provide for such facilities to the extent it is 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. 75 lakhs is proposed for the scheme for 1980-85. The outlay for 1980-81 is Rs. 10 lakhs. An outlay of Rs. 13.00 lakhs is proposed for 1981-82.

6.9.9 Loan assistance to Gujarat Housing Board, Urban Development/Area Development Authorities, Local self Government bodies to take up Urban Development Authorities.

6.9.9.1 The need to have State Level Board for 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 neces-

sary, 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 proposed for the Sixth Five Year Plan 1980-85 and an outlay of Rs. 5.00 lakhs is proposed for the Annual Plan 1981-82.

6.9.10 Assistance to Municipal Finance Board :

6.9.10.1 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 proposed as grant for the Sixth Five Year Plan 1980-85. An outlay of Rs. 7.00 lakhs is proposed for the Annual Plan 1981-82.

6.9.11 Loans to Municipal Bodies :

6.9.11.1 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 1980-85 plan and an outlay of Rs. 100.00 lakhs is proposed for this scheme during Sixth Five Year Plan 1980-85. An outlay of Rs. 21.00 lakhs is proposed for the Annual Plan 1981-82.

6.9.12 Marketing Borrowing by Municipal Corporations :

6.9.12.1 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 Plan 1980-85. Urban/Area Development Authorities will also need assistance by way of Market Borrowing for developmental activities. An outlay of Rs. 660.00 lakhs is proposed for the Sixth Plan 1980-85. An outlay of Rs. 130.00 lakhs is proposed for 1981-82.

6.9.13 Environmental Improvement in Slum Areas (RMNP) :

6.9.13.1. The Government of India had introduced the Environmental Improvement in slum areas scheme 1972-73 under central sector covering cities with a population of 8 lakhs and more, and accordingly, only Ahmedabad city was covered. 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 schemes has been extended to all urban areas with municipal corporations and municipalities.

6.9.13.2. 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, drainage, 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 land and/or inhabited by scheduled castes and scheduled tribes particularly scavengers.

6.9.13.3 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 if 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 addition/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.

6.9.13.4 An outlay of Rs. 400 lakhs is proposed for Sixth Five Year Plan of 1980-85. An allocation of Rs. 60 lakhs is made for 1980-81. An outlay of Rs. 60.00 lakhs is proposed for the Annual Plan 1981-82.

6.9.14 Integrated Urban Development of Small and Medium Towns :

6.9.14.1 According to the strategy for Urban Development in the Sixth Plan, the growth of small and medium towns is required to be fostered by positive State intervention for enabling the infrastructural and 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.

6.9.14.2 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 thereof 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.

6.9.14.3 It is proposed that at least 20 towns and growth centres could be developed under this scheme during the Sixth Plan. As a part of matching contribution an outlay of Rs. 200 lakhs and Rs. 50 lakhs is proposed in the Sixth Five Year Plan and Annual Plan proposals 1981-82 respectively, 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.

6.9.14.4 The concept of Urban Development is a fast growing one and in coming years new approaches to this are bound to come up. For example, Government of India is considering a scheme for the development of towns in 1 lakh to 3 lakhs population bracket. The bigger cities do not get the benefit of any central sector/centrally sponsored schemes now. The possibility of other national and international agencies involvement in the Urban Development of the State also cannot be ruled out. It will be the endeavour of the State to avail of maximum benefits out of such possibilities in future.

STATEMENT

Draft Sixth Five Year Plan 1970-72 and Annual Plan 1970-72 (Minor Heads) outlays and expenditure

Sector/Sub-Sector : Urban Development

(Rs. in lakhs)

Sr. No.	Minor Heads	1979-80 Actual	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capita content
1	2	3	4	5	6	8	8	9
(i)	Town and Regional Planning	46.84	51.00	51.00	320.00	..	76.00	..
(ii)	Urban Development Programme	208.49	108.00	128.00	1130.00	1015.00	163.00	8.00
(iii)	Loans to Local Bodies	519.40	151.00	151.00	760.00	760.00	151.00	151.00
(iv)	RMNP Environmental improvement of slums	8.26	40.00	40.00	400.00	..	60.00	..
(v)	Integrated Urban Development of Small and Medium Towns	50.00	50.00	50.00	200.00	200.00	50.00	50.00
	Total	..	832.99	400.00	2810.00	1975.00	500.00	209.00

STATEMENT—II

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82 Schemewise outlays and expenditure

Major Head of Development :—Urban Development

(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital contents
1	2	3	4	5	6	7	8	9
I. Urban Development Programme								
(i) UDP—1	Seed Capital to Urban/Area Development Authorities ..	178.00	80.00	80.00	980.00	980.00	130.00	..
(ii) UDP—2	Urban Community Services. Urban Community Development Project ..	3.09	8.00	8.00	40.00	..	8.00	..
(iii) UDP—3	Urban Local development Programme ..	23.40	10.00	30.00	75.00	..	13.00	..
(iv) UDP—4	Loan Assistance to Gujarat Housing Board, Urban/Area Development Authorities, Local Self Government Bodies to take up urban Development activities ..	..	5.00	5.00	10.00	10.00	5.00	5.00
(v) UDP—5	Assistance to Municipal Finance Board ..	4.00	5.00	5.00	25.00	25.00	7.00	3.00
	Sub-Total—I	208.49	108.00	128.00	1130.00	1015.00	163.00	8.00
II. Loans to Local Bodies								
(i) UDP—6	Loans to Municipalities for miscellaneous development activities ..	216.40	21.00	21.00	100.00	100.00	21.00	21.00
(ii) UDP—7	Marketing Borrowing for miscellaneous development activities ..	303.00	130.00	130.00	660.00	660.00	130.00	130.00
	Sub-Total-III	519.40	151.00	151.00	760.00	760.00	151.00	151.00
III. Town and Regional Planning								
(i) UDP—9	Preparation of Regional Plan ..	..	3.50	3.50	35.00	..	3.50	..
(ii) UDP—10	Preparation of Development Plan and Town Planning Scheme ..	2.04	7.50	7.50	25.00	..	7.50	..
(iii) UDP—11	Grant-in-aid or implementation of Development plan and Town Planning Scheme ..	35.20	30.00	30.00	160.00	..	35.00	..
(iv) UDP—12	Introduction of City Survey all-round Ahmedabad Municipal Corporation Areas ..	9.60	10.00	10.00	100.00	..	30.00	..
	Sub-Total—III	46.84	51.00	51.00	320.00	..	76.00	..
IV. Revised Minimum Needs Programme								
(i) UDP—13	Environmental improvement of slums ..	8.26	40.00	40.00	400.00	..	60.00	..
V. Integrated^d Urban Development of Small and Medium Towns								
	..	50.00	50.00	50.00	200.00	200.00	50.00	50.00
	Grand Total ..	832.99	400.00	420.00	2810.00	1975.00	500.00	209.00

STATEMENT III

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Target of Production and physical achievements

Sector/Sub-Sector : Urban Development

Sr. No.	Item	Unit	Level of achievement at the end of					Remarks	
			1978-79	1979-80 (Base year level)	1984-85 Terminal year Target	1980-81			1981-82 proposed Target (level)
1	2	3	4	5	6	7 Target (level)	8 Likely Achieve-	9 Target (level)	10
I. Town and Regional Planning									
(i)	UDP-9 Preparation of Regional Plan	(a) Town No.	1	11	16	16	16	21	
		(b) Scheme No.	1	5	10	10	10	15	
II. Urban Development Programme									
(i)	UDP-2 Urban Community Service Urban community Development Project	No. of projects	6	8	24	16	16	26	
III. Revised Minimum Needs programme									
	UDP-13 Environmental improvement of slums	No. of persons covered	132043	149338 (17290)	400000 (250662)	159338 (10000)	159338 (10000)	174388 (15000)	

STATEMENT IV

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Revised Minimum Needs Programme Outlays and expenditure

Sector/Sub-Sector : Urban Development

(Rs. in lakhs)

Sr. No.	Name of the programme	1979-80 Actual	1980-81		1980-85		1980-81	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
UDE-13	Environmental Improvement of slums	8.26	40.00	40.00	400.00	..	60.00	..

STATEMENT V

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Target and Physical Achievements-Uphysical Program- mes Revised Minimum Needs Programme.

Urban Development

Sr. No.	Programme	Item	Unit	Level of achievement at the end of					
				1978-79	1979-80	1984-85	1980-81		1981-82
1	2	3	4	5	6	7	8	9	10
					(Base year level)	Terminal year Target	Target (level)	Likely Achievement	Proposed Target (level)
UDP-13	Environmental Improvement of slums		Person covered	1,32,048	149338 (17290)	400000 (250662)	159338 (10000)	159338 (10000)	174383 (15000)

STATEMENT VI

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Centrally sponsored schemes—Outlays

Sector/Sub-Sector : Urban Development

(Rs. in lakhs)

Sr. No.	Name of the scheme	1979-80 Actuals			1980-85 Outlay proposed			1980-81 outlay			1981-82 outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
UDP-8	Integrated Urban Development of Small and Medium Towns.	50.00	39.48	89.48	200.00	800.00	1000.00	50.00	145.00	195.00	50.00	40.00	90.00

6.10 CAPITAL PROJECT

6.10.1.1. Gandhinagar, the new capital of Gujarat, is situated on the bank of the river Sabarmati about 24 K.Ms. north of Ahmedabad City. The population of the capital township has risen to approximately 55,000 by the end of March, 1980.

6.10.1.2. 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 an as 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.

6.10.2. Review of Progress

6.10.2.1. Though the preliminary survey works, 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. 5,367 lakhs.

6.10.2.2. The main items of work completed by the end of March, 1980 are : The acquisition of 4,234 hectares of land; the construction of 9,658 residential quarters 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 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 1979-70, 1436 residential plots in various sectors had been sold. Land was also been sold to religious, educational and other institutions.

Government has allotted land to the Gujarat Housing Board, the Gujarat Electricity Board for the construction of a thermal Power Station, and to the Railways for railway lines and the construction of Gandhinagar Railway Station.

6.10.2.3. The achievement recorded upto the end of 1979-80 is summarised in the following table :—

Works	Expenditure (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 building, including Interim Sachivalaya, Sachivalaya Blocks 10, 11, 12, 13 Assembly Building, School Colleges, Hospitals. Office building for the Bureau of Economics and Statistics, Circuit House, Shops and Office Blocks in Sector No. 16, Swing Pool and Club Building in Sector 19, Shopping Centre of A & B type in Sector No. 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 lighting.	..
6. Land Acquisition, Parks and Gardens Machinery and Equipment Suspense, Direction and Administration	1748
Total ..	<u>5367</u>

The spillover liability on account of the various works which were in progress on 1-4-1980 is estimated at Rs. 3103.37 lakhs.

(Rs. in lakhs).

Sr. No.	Works.	Actual Estimated cost.	Expenditure incurred up to 31-3-80	Spill over liability of 1-4-1980
1	2	3	4	5
1. Residential Quarters :				
a.	1500-Nos : Residential Quarte s.	302.57	277.77	24.80
b.	Additional 4328 Residential quarters.	878.70	111.73	766.97
2. a.	Sachivalaya, including six blocks.	239.44	497.05	442.39
b.	Electrical installation Lifet, Water Cooler and Compound light in Sachivalaya Complex.	234.06	23.23	210.83

1	2	3	4	5
c.	Providing Air-condition in Sachivalaya, and Assembly building.	127.00	..	127.00
3. a.	Assembly Buildings.	300.00	215.42	84.58
b.	Electrical installation Lift, Water Cooler, compound light in Ass umbly building.	94.68	11.88	92.80
4.	Town Hall.	51.28	32.45	18.83
5.	Police Headquarters	165.24	48.75	114.51
6.	Water Supply and drainage.	615.22	164.49	450.73
7.	Miscellaneous items such as Minister's Bungalow Secretaries Bungalow Staff Training College, High School Building, etc.,	1852.11	1072.68	779.43
Total		5553.30	1072.93	3103.37

6.10.3. Disposal of land.

6.10.3.1. Of the land liable for construction in the township, the greater part is not apart for Government and public buildings. The total area of land available for disposal by Government for various purposes is estimated at Ha. 840, of this, about Ha. 400 have already been disposed of, yielding a cumulative resource of over Rs. 423 lakhs by the end of March, 1980. Of the nearing land (Ha. 440), about Ha. 200 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.

6.10.3.2. During the period 1980-85, approximately 80 Ha. of land in the township is expected to be disposed of 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.

6.10.4. Development Programme : 1980-85/1981-82:

6.10.4.1. The programme during both the Five Year Plan, 1980-85 (outlay : Rs. 3,000 lakhs), and the Annual Plan, 1981-82 (outlay Rs. 600 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 quarter.

- (2) Sachivalaya Building including Head of Department Building.
(3) Assembly Building.
(4) Town Hall.
(5) Olympic Size Swimming Pool.
(6) Building for Police H.Q. (876 Nos. of Residential and Administrative Building).

6.10.4.2 The major new works proposed are those for the provision of community and infrastructural facilities (School building, shopping centres, water supply, drainage, etc.) in six sectors and in the industrial area allotted to the Gujarat Industrial Development Corporation. These new works are to be taken up in 1981-82. The outlays proposed for the major components of the programme are as under :—

	Outlay (Rs. in lakhs).	
	1980-85	1981-82
Works in progress	2,487.84	400.90
New Works.	170.64	40.00
Direction and Administration.	341.52	70.00
	3,000.00	600.00

Of the major works in progress, the works relating to the Sachivalaya, building and to 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

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82

Schemewise outlay and expenditure

Capited Project			(Rs. in lakhs)					
Sr. No.	Number and Name of the Scheme	1979-80 Actual	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	SCP-1 Direction and Administration	60.93	84.50	64.50	341.52	341.52	70.00	70.00
2.	SCP-2 Construction of State Capital Project	702.38	485.50	866.99	2658.48	2658.48	530.00	530.00
	Total	763.31	560.00	931.49	3000.00	3000.00	600.00	600.00

6.11. Labour welfare, employment service, and Training.

6.11.1.1. Increased productivity, which is major facet of any development plan, correlates with the welfare of labour and the nature of labour-employment relations. The availability of fair wages, security in employment, safe and hygienic working conditions, training opportunities, and social security measures for workers is thus of considerable importance. Of the total number of workers in the State (1971 Census 83.95 lakhs), over 22 percent (18.87 lakhs) are agricultural labourers. Since a substantial proportion of agricultural labourers belong to the Scheduled Castes and Scheduled Tribes, and since rural labour is largely unprotected, there is urgent need for suitable measures for the uplift and welfare of labour in the rural sector.

6.11.1.2. 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 provisions 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.

6.11.2. Review of Progress

Industrial Relations

6.11.2.1. The existing programme includes :—

- (a) enforcement of the provisions of—
 - (i) the Payment of Bonus Act, 1965;
 - (ii) the Beedi and Cigar Workers (Conditions of Employment) Act, 1966;
 - (iii) the Contract Labour (Regulation and Abolition) Act, 1970;
 - (iv) the Payment of Gratuity Act, 1972;
 - (v) the Minimum Wages Act, 1948, in relation to both non-agricultural and agricultural employment;
- (b) implementation of schemes of workers' participation in management under the Bombay Industrial Relations Act, 1946, and the Industrial Disputes Act, 1947 ;

(c) training of trade union workers ;

(d) promotion of safety measures towards the prevention of accidents ;

(e) payment of grants-in-aid to registered trade unions and social institutions for such welfare measures for rural labour as the provision of social security, maternity benefits and health care.

Pursuant to an examination of the working conditions of workers outside the organised sector, legislation has been enacted for the protection of such workers; the implementation of the Gujarat Unprotected Manual Workers (Regulation of Employment and Welfare) Act 1979,, forms part of the programme for 1980-85. An institute for research training and development in the fields of labour and employment has been established in 1979-80 (the Mahatma Gandhi Institute of Labour Studies at Ahmedabad).

Employment Service and Training.

6.11.2.2. 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 Bureaux at five University towns ;

(c) a Special Employment Exchange for the physically handicapped at Ahmedabad;

(d) fourteen Employment Information and Assistance Bureaux at taluka towns (to overcome difficulties experienced in registration/difficulties experienced in registration/renewal by rural candidates);

(e) two Special Vocational Guidance Units in the tribal area.

These facilities were augmented during the period of the Annual Plans, 1978/80, by : seven Special Employment Exchanges in tribal areas ; 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.

6.11.2.3. 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 In-

stitute (ITIs). At the end of 1979-80, there were 22 ITIs in the State with a total intake capacity of 8,040. Girl's wings with an intake capacity of 64 each were opened during 1979-80 in the ITIs at Gandhinagar and Vadodara. In addition to courses of the ITI pattern, three State-level diversified courses (intake capacity : 152) have been run at the ITS 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 ITI, Vadodara, with UNDP assistance, for advanced training to candidates sponsored by industries.

6.11.2.4. 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, 1963 from 626 seats to 12,000 by the end of 1979-80.

6.11.2.5. Short-term course 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, ITSs, Polytechnics, etc., have reference to such disciplines as office management, secretarship and taxation, compute programming, sailmanship, industrial engineering and materials management, and such occupations as Stenographer, Receptionist, PBX operator, Driver-cum-mechanic of trucks/autorickshaws. 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.

6.11.2.6. Two multi-purpose workshop were established in the tribal area of the State during the Fifth plan period; these workshop, which are intended to provide practical job training, have a total intake capacity of 224 seats (Dohad 128; Mandvi 96). In 1979-80, the establishment of 19 mini-ITIs (intake capacity 2,024) was sanctioned towards augmenting the availability of training facilities for tribal youths; of these, 16 had commenced functioning by the end of 1979-80.

6.11.3. Programmes 1980-85/1981-82.

6.11.3.1. Outlays of Rs. 5,000.00 lakhs and Rs. 1,010. lakhs are proposed for the programme during the Five Year Plan, 1980-85, and the Annual Plan, 1981-82.

	Outlay (Rs. in lakhs).	
	1980-85	1981-82

I. Labour Welfare

(a) Industrial Relations	2,626.00	605.18
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(b) Working Conditions, Safety and Social Security.	4.00	1.10
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Total I	2,630.00	606.28
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II. Employment Service and Training.

(a) Direction and Administration,	112.75	20.32
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(b) Education and Training	1,417.10	233.30
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(c) Research and Statistics	11.40	2.32
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(d) Scheme for the educated unemployed.	818.00	145.28
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(e) Other expenditure	10.75	2.50
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Total II	2370.00	403.72
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Total I+II	5,000.00	1,010.00
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Industrial Relations :

6.11.3.2. In the outlay proposed, provision is made not only for such components of the ongoing programme as the implementations of labour legislation (including substantial strengthening of the machinery for administration and enforcement, particularly for the rural unorganised sector for which a post of Rural Labour Commission is proposed to be created), the payment of grant-in-aid to trade unions and social institutions undertaking measures for the welfare of rural labour and the development of the Mahatma Gandhi Institute of Labour Studies at Ahmedabad, but also for four new schemes ;

(a) payment of pensions to agricultural labourers who, owing to age, physically handicap, or other infirmity, are no longer capable of work (1980-85/1981-82; Rs. 2155.00/537.00 lakhs);

(b) establishment of a Rural Labour Welfare Board for the promotion of educational, cultural, and other activities directed to the uplift and welfare of workers in the rural sector (1980-85 1981-82 : Rs. 60.00/10.00 lakhs);

(c) disbursement of loans to the statutory Board to be constituted under the Gujarat Unprotected Manual Workers (Regulation of Em-

ployment and Welfare) Act, 1979, to enable it to commence its activities (1980-85/1981-82: Rs. 5.00/2.00 lakhs);

(d) establishment at Ahmedabad of a Workers' Stadium that, through serving as a venue not only for sports but also for recreational and cultural activities for workers, would subserve the objective of improvement of the quality of life of the working class (1980-85/1981-82 : Rs. 30.00 2.28 lakhs).

(e) Worker's participation in industry-as a Strategy for reducing the incidents of industrial unrest, constitution of joint Management Council is thought of. A cell-in the office of the Commissioner of Labour to evaluate the working of the Statutory Schemes of such Councils is proposed (1980-85 Rs. 5.00/-)

(f) Welfare of the migrant agricultural Labour grant-in-aid to such institutions which can undertake to impart pre-primary and primary education and provide nutrition of the children of migrant Labourers of operation where fairly long stay is imperative is envisaged (1980-85 Rs. 5.00/ lakhs).

Brief contents of the above new Schemes are given in the following paras :-

A scheme for the financial help for the maintenance of old age Agricultural Labourers.

6.11.3.3. Agricultural Labourers constitute about 1/5th of the rural work force and 50% of the Agricultural Labourers household are landless. The landless Labourers are the most under-privileged and malnourished sections of the population for them it is compounded problems of employment, law and certain income and nutritional deficiencies. The Agricultural Labourers work hard throughout the life and as there is no certainty of getting work and as he gets work during the season only for a few days, he may not have any saving but on the contrary, he may be in debt. As Agricultural Labourer reaches the age of sixty, he will not be capable to do any gainful manual work.

6.11.3.4. In the context of the above it is proposed to provide financial help for the maintenance of such agricultural labourers.

6.11.3.5. According to the 1971 Census, there were about 18.87 lakhs Agricultural Labourers in the State. Out of these, about 1.43 lakhs agricultural Labourers were in the age-group of the sixty and above. These figures are likely to have gone up in numbers during the past nine years. However, even if this figures are relied upon, and all the agricultural Labourers who have reached the age of sixty year are considered for old age pension at the rate of Rs. 30/- per month, the total amount per

annum will be about Rs. 537.00 lakhs for the Sixth Plan period, therefore, the total amount would be required to tune of Rs. 2155.00 lakhs. The State Government will make detailed exercise to gather reliable information about the likely member of beneficiaries and also to determine eligibility criteria after taking into consideration the schemes of old-age pension for Agricultural Labourers framed by other States. It is also proposed to conduct a quick sample survey for this purpose.

To constitute a Rural Labour welfare Board for Agricultural and Rural Workers.

6.11.3.6. Agricultural and rural workers are the parts of poor and weaker section of the Society. There is no concrete Scheme in existence for the upliftment of such workers. Therefore, it is proposed to establish a Rural Labour Welfare Board. The purpose of Establishment of this Board is to start various welfare activities such as education, recreational, cultural etc. through welfare centre for the upliftment of agriculture and rural workers.

6.11.3.7. Under the Scheme, it is intended to establish Rural Labour Welfare Board as an apex body at Ahmedabad and District Labour Welfare Boards at district level. During this year, it is proposed to open a few welfare centres in the rural areas having concentration of agricultural workers to begin with. The main activities of the Rural Labour Welfare Centres will be as under:-

(1) To organise sports and undertake Educational, recreational, cultural, other activities.

(2) To exhibit the provisions of various labour laws in the centre so as to acquaint agricultural labourers of the provisions and to make them aware of the benefits which are available to them.

(3) To exhibit details of various ongoing programmes for them so as to enable rural workers to take benefit of the Scheme.

Implementation of Gujarat Unprotected Manual Workers (Regulation of Employment and welfare Act, 1970.

6.11.3.8. Gujarat Unprotected Manual Workers (Regulation and Employment and Welfare) Act, 1979. has been brought in force. There is a provision in this Act for constitution of Statutory Board for implementation of the Scheme.

6.11.3.9. There are, however, already verying number of unorganised labour looking for daily employment in many towns and cities. Such workers are usually engaged in loading and unloading operations in various markets such as cloth market, iron market, grainmarket and railway yards. They are not only unorganised but they are unprotected also.

6.11.3.10. It is, therefore, proposed to constitute statutory Board during the year 1980, for the regulation of employment and welfare of workers engaged in Maskati Cloth market. It is also proposed to constitute such Boards for workers employed in different markets during the subsequent five year plan period.

6.11.3.11. So far the Statutory Board does not raise its sources of income, it is proposed to advance loan for the administration of the Board and its Scheme.

Workers' Stadium at Ahmedabad.

6.11.3.12. 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 the biggest and 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 Worker's Stadium. It would also provide for open-air theatre which can be utilised as a pavilion as well as the stage for open-air cultural programmes. It is intended to provide the indoor games facilities as well as outdoor games facilities.

6.11.3.13. 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 workers' Stadium is not constructed.

Workers' Participation in Industry-Constitution of Joint Management Councils Creation of a Cell in the office of the Commission of Labour.

6.11.3.14. In recent years strained industrial relations have also contributed to inadequate capacity utilisation in several key centres. It is necessary to devise an effective strategy for reducing the incidence of industrial unrest which causes hardships to the community and also leads to less of output. As part of this strategy, workers' participation in industry should be encouraged. Early consultations with representatives of workers and employees will be necessary to work out an acceptable strategy. This is only possible if Joint Management Councils are constituted in undertakings of different industries.

6.11.3.15. Constitution of Joint Management Councils is made statutory in undertaking of certain industries covered under the Bombay Industrial Relation Act, 1946, and the Industrial Disputes Act, 1947, in Gujarat State.

6.11.3.16. Accordingly, first Joint Management Councils in Cotton Textile and other industries were formed during the year 1976 and thereafter it was reconstituted in the year 1979.

6.11.3.17. Under the Scheme it is proposed to create a Cell in the Office of the Commissioner of Labour to undertake the quantitative and qualitative evaluation of the working of the Statutory Scheme in the undertakings where such councils are formed. It is, therefore, proposed to provide Rs. 5.00 lakhs scheme during the Sixth Five Year Plan period and Rs. 1.00 lakh during the year 1981-82.

Welfare of the migrant labourers.

6.11.3.18. There are number of seasonal and frequent migrations of labourers in search of jobs from one place to another. Under the circumstances, the education and nutrition problems of the children of such labourers draw attention. In this connection, though it will be difficult to evolve a scheme for the welfare of the children of such labourers staying at a work place for a short durations a scheme can be evolved in respect of the operation in which there will be a fairly long stay of migrant labourers. Accordingly, it is proposed to give grant-in-aid to such institution which can undertake to impart primary education to the children of such labourers and take nutrition care of the children in the age-group of 6 to 8 years. For this, rupees 5.00 lakhs for the six plan period and Rs. 1.00 lakh for the year 1981-82 are proposed.

Direction and Administration (Employment Service and Training).

6.11.3.19. The outlay proposed has reference both to maintenance expenditure and to expenditure for the strengthening of the Directorate of Employment and Training; for the establishment of a job-development unit at Rajkot; for the establishment of a project Employment Exchange at Kevadiya Colony to meet manpower needs arising from the Narmada Project; for the introduction of mobile employment exchange to serve rural candidates in areas with poor communication facilities; for the bifurcation of the bigger employment exchanges towards more effective enforcement of the provisions of the Compulsory Notification of Vacancies Act, 1959; and for the construction of a building to house the Gandhinagar Employment Exchange.

Employment Service.

6.11.3.20. The process of development set in motion by the plan investments in the primary, secondary and tertiary sectors leads to employment general. But merely creation of jobs does not lead 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 representative on the district employment generation council. This will result in a new role of advising the registered candidates about new avenue of wage or self-employment instead of merely concentrating on its traditional role of obtaining more placements 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 employments. It is proposed to cover the rural areas of a few districts more intensively by providing suitable staff equipped mobile vans to the district employment exchanges. 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 the physically handicapped through these regional centre. The employment data would be improved by more vigorous implementation of the C.N.V. 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 a few district, which are showing an accelerated industrial growth. The bigger employment exchanges would be bifurcated to lead to more effective services of the employment seekers. The construction of buildings for employment exchanges will be undertaken for those which do not have proper buildings.

District Employment Council :

6.11.3.21. 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 Vice-Chairman. Other members will include the following :—

- (a) Two Mla's of the District.
- (b) Chairman, District Co-operative Bank.
- (c) A representative of the lead bank.
- (d) District Development Officer.
- (e) General Manager, D. I. C.,
- (f) Project Officer, Special Programmes.
- (g) District Employment Officer.

6.11.3.22. 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 plan and the District Credit plan are mutually supportive of each other. The constitution of the Council will also provide a source for shaping the ideas and concept of programmes for employment generation set forth by the State level employment body.

Physically and mentally handicapped.

6.11.3.32. So far as programme for physically and mentally handicapped with regard to their training, rehabilitation and employment is concerned a Special Employment Exchange for physically handicapped is functioning in the State at Ahmedabad. It is proposed to start three special Employment Exchange in the three other regions of the State. Funds for this scheme will be provided by Social Defence Department of the State. The administrative control of this schemes will rest with the Directorate of Employment and Training.

6.11.3.24. It has also been decided to reserve 5% of the seats in various trades-suitable to them for admission to ITIs. This training will help them to ensure gainful employment or wage/self-employment

Education and Training

6.11.3.25. The components of the outlay proposed are as under :—

	(Rs. in lakhs)	
	Outlays proposed	
	1980-85	1981-82
(a) Craftsmen Training Scheme	1,197.10	183.43
(b) National Apprenticeship Training Scheme	200.00	42.85
(c) Government Industrial Training Workshops	20.00	7.02
	<u>1,417.10</u>	<u>233.30</u>

6.11.3.26. The features of the programme under the Craftsmen Training Scheme during 1980-85/1981-82 excluding the completion of spillover construction works, may be summed up thus.

	Unit	Physical target's	
		1980-85	1981-82
(a) Establishment of new ITIs (including 1 ITI for women)	ITIs established/addl. seats. (nos.)	5/1,000	2/156

(b) Increase in the intake capacity of selected ITIs	Adl. seats (nos.)	3836	250
(c) Expansion of buildings housing ITIs.	ITIs covered (nos.)	11	2
(d) Construction of ITIs of —	ITIs covered (nos.)		
(i) buildings		5	Nil
(ii) Staff-quarters		16	6
(iii) Hostels		10	2

The programme thus envisages, in addition to the provision of physical facilities, an increase in intake capacity from 8,040 seats at the end of 1979-80 to 11,876 seats at the end of 1984-85.

6.11.3.28. A special provision for admission to the dependents of small and marginal farmers, rural artisans landless labourers and the families living below poverty line has been made at rural I. T. I., Sarkhej.

6.11.3.29. These families who have no earning members and whose income is below Rs. 4,800/- 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.

6.11.3.30. To upgrade the skill of industrial workers, an advance Vocational Training Scheme is in operation at I. T. I. Vadodara. It is proposed to extend these facilities to three other I. T. Ts. located in towns where there is a large no. of industries. The total estimated cost for the scheme is Rs. 15 lakhs.

Career Development Courses

6.11.3.31. 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 matriculate and non-matriculate categories.

6.11.3.32. 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, the number of sanctioned seats under the Scheme is proposed to be increased to 17,000 during 1980-85; 5,000 additional seats are to be sanctioned end of 1984-85; 500 of these during 1981-82. 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.

Research and Statistics

6.11.3.33. The outlay proposed has reference to surveys for the compilation of employment market data, to manpower forecasting studies, and to the maintenance/expansion of establishment for these purposes.

Schemes for the Educated Unemployed

6.11.3.34. 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 larger number of youth in rural areas and the physically handicapped; further, in order the better to match the needs of indentified target groups, a measure of restructuring of the courses is proposed (1980-85/1981-82 ; - Rs. 100.00 lakhs/20.74 lakhs).

6.11.3.35. In view of the magnitude of unemployment amongst educated youth, the programme for 1980-85 envisages the maintenance of the following facilities/services create 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-ITIs 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 for three mini-ITIs) ;

(c) short-term training courses for candidates for recruitment to the Defence Services (and increase in the number of training centres from three to ten is proposed during 1980-85) ;

(d) pre-service examination training for S 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 dropouts (this scheme is implemented through the Education Department) ;

(f) informal apprenticeship-type training in skilled trade such masonry, carpentry, plumbing, blacksmithy etc. ;

(g) margin money to skilled workers and small entrepreneurs to enable them to take up self-employment (this scheme is implemented through the Industries Department) ;

(h) financial assistance to enable persons-trained at recognised vocational training institutions (for such vocations as electrician, refrigeration mechanic ; carpenter, and mason) to take up self-employment (this scheme is implemented through DICs) ;

(i) monetary relief, through the payment of a retention allowance against part-time vocational training to persons who —

(i) do not belong to the Scheduled Caste Tribes and have remained unemployed for 5 years or more ;

(ii) belong to the Scheduled Castes/Tribes and have remained unemployed for 3 years or more ;

(iii) are physically handicapped and have remained unemployed for 6 months or more ;

(j) employment information, through the supply, free of cost, of the publication, *Rojgar Samachar*, to hard core applicants on the live registers of employment exchanges.

These facilities/services will be supplemented by a scheme of pre-services training to enable Schedule Castes/Tribes candidates to compete successfully at competitive examinations; eight training centres with an annual outturn of 1,600 candidates are envisaged. A total outlay of Rs. 718.00 lakhs/Rs. 124.54 lakhs is proposed for these schemes in the Sixth Five Year Plan, 1980-85/Annual Plan, 1981-82.

Other Expenditure

6.11.3.36. An outlay of Rs. 10.75 lakhs/Rs. 2.50 lakhs is proposed in the programme for 1980-85/1981-82 for the maintenance and development (including construction, works) of the two multi-purpose workshops for tribal pourth at Dohad and Mandvi.

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1981-82.

(Minor Headwise) Outlay and Expenditure.

Labour and Labour Welfare

(Rs. in lakhs)

Sr. No.	Name of the Scheme /	1979-80 Actuals.	1980-81		1980-85		1981-82	
			Outlay	Anticipated Expenditure.	Proposed Outlay	Capital Content	Proposed outlay	Capital content.
1	2	3	4	5	6	7	8	9
1.	Direction and Administration.	7.45	11.37	13.98	112.75	12.00	20.32	2.00
2.	Industrial Relations	25.99	73.60	×60.60	2626.00	160.00	605.18	17.00
3.	Working Conditions and Safety.	0.77	1.10	1.10	4.00	..	1.10	..
4.	Education and Training	81.66	139.35	207.33	1417.10	600.48	233.30	91.02
5.	Research and Statistics	0.31	1.09	1.80	11.40	..	2.32	..
6.	Incentive scheme for Educated Unemployed.	117.50	177.40	177.40	818.00	15.00	145.28	1.00
7.	Other expenditure.	4.12	3.79	3.79	10.75	3.65	2.50	1.50
Total		237.80	392.00	476.00	5000.00	791.13	1010.00	112.52

× Including anticipated expenditure of Rs. 5 lakhs on Shram Bhavan.

STATEMENT II.

Draft Sixth Five Year Plan 1980-85, and Annual Plan 1981-82.
Scheme-wise outlay and expenditure.

(Rs. in lakhs).

Number and Name of the scheme.	1979-80	1980-81		1980-85		1981-82	
	Actuals	Approved Outlay	Antici- pated expendi- ture.	Proposed outlay	Capital Content	Proposed outlay	Capital content.
2	3	4	5	6	7	8	9
Direction and Administration :							
LBR-1. Strengthening of Directorate of Emp. & Trg.	1.04	1.54	1.54	23.00	..	5.17	..
LBR-2. Expansion of Emp. Service.	3.99	8.83	11.44	79.50	12.00	12.90	2.00
LBR-3. Youth Emp. Service Occupational Inf. & Research Analysis.	2.42	..	..	1.25	..	0.25	..
LBR-4. Studies & Survey for Emp. Promotion Board.	..	1.00	1.00	9.00	..	2.00	..
Total : 1 to 5 ..	7.45	11.37	13.98	112.75	12.00	20.32	2.00
Industrial Relations :							
LBR-5. Unit for Collection of Labour Statistics.	0.65	0.50	0.50	4.00	..	0.50	..
LBR-6. Protection & Welfare of Unorganised & Unprotected Labour including Satem Commission.	8.80	14.00	22.70	140.00	..	27.00	..
LBR-7. Modernising Library in Headquarter office.	0.35	0.50	0.50	2.00	..	0.50	..
LBR-8. Training to Trade Union workers & others.	0.20	0.50	0.50	2.00	..	0.50	..
LBR-9. Enforcement of payment of Gratuity Act, 1972.	0.33	0.40	0.40	3.00	..	0.40	..
LBR-10. Grant-in-aid to Trade Union Social Institutions for socially desirable objectives.	0.81	3.00	3.00	15.00	..	3.00	..
LBR-11. Establishment of Institute for Research, Training & Development	15.00	20.00	20.00	200.00	140.00	22.00	17.0
LBR-12. Workers Stadium at A'bad.	..	2.00	2.00	30.00	20.00	2.00	..
LBR-13. Establishment of Rural Labour welfare Board.	..	10.00	60.00	60.00	..	10.00	..
LBR-14. Oldage Pension for Agricultural Labourers.	..	7.00	7.00	2155.00	..	537.00	..
LBR-15. Implementation of Gujarat Unprotected Manual Workers (Regulation of Employment & Welfare) Act, 1979 Constitute Statutory Board.	..	..	2.00	5.00	..	2.00	..
LBR-16. Workers Participation Joint Management council.	..	..	..	5.00	..	..	..
LBR-17. Welfare of migrant Labour.	..	..	..	5.00	..	..	..
Total 6 to 17 ..	25.99	57.90	68.60	2626.00	160.00	605.18	17.00

1	2	3	4	5	6	7	8	9	
Working Condition & Safety :									
18.	LBR-18.	Safety Cell for prevention of Accidents.	0.77	1.10	1.10	4.00	..	1.10	..
- - - Total (-6 to 17- & 18)			-26.76	59.00	74.70	2770.00	310.00	626.00	37.00
Education & Training :									
19.	LBR-15.	Craftsman Trg. Scheme	78.67	113.21	181.19	1182.10	514.48	183.43	78.00
20.	LBR-16	National App. Training.	2.76	18.51	18.51	200.00	66.00	42.85	6.00
21.	LBR-17	Expansion of existing Govt. Ind. Trg. Institute w/s.	20.24	17.63	17.63	220.00	20.00	27.02	7.02
Total (19 to 21)			.. 81.66	139.35	207.33	1417.10	600.48	233.30	91.02
Research & Statistics :									
22.	LBR-18.	Collection of Emp. market Information.	-0.31-	-1.09-	1.80	11.40	..	2.32	..
Total : 22			.. 0.31	1.09	1.80	11.40	..	2.32	..
Incentive Scheme for Education Unemployed :									
23.	LBR-19.	Career Development Courses.	9.03	13.26	13.26	100.00	..	20.74	..
24.	LBR-20.	Incentive Scheme for Educated unemployed.	.. 108.47	164.14	164.14	713.00	15.00	124.54	1.00
Total : (23 & 24)			.. 117.50	177.40	177.40	818.00	15.00	145.28	1.00
Other Expenditure :									
25.	LBR-21.	Multipurpose workshop for rural areas.	4.12	3.79	3.79	10.75	3.65	2.50	1.50
Grand Total (Labour & Labourwelfare)			237.80	392.00	479.00	5000.00	941.13	1010.00	1312.52

Draft Sixth Five Year Plan 1980-85 And Annual Plan 1981-82

Targets of Production and Physical achievements.

Sr. No.	Item	Unit	Level of achievement at the end of 1980-81.					1981-82	
			1978-79	1979-80	1984-85 terminal year target.	Target (Level)	Likely achievement.	1981-82 Proposed-target (Level)	
1	2	3	4	5	6	7	8	9	
1. Training of Craftsman :									
1.	Institution	Nos.	20	22	27	23	23	25	
2.	Intake	Nos.	6904	8040	11876	9982	9876	10388	

6.12. WELFARE OF BACKWARD CLASSES

6.12.1. Introduction :

6.12.1.1. It has been directed in our constitution that "The State shall promote, with special care, the educational and economic interest of the weaker sections 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.

6.12.1.2. 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 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.

6.12.1.3. The problem of raising substantially the socioeconomic 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.

6.12.1.4. 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 made for expanding adult literacy.

6.12.1.5. Among Scheduled Tribes the most backward tribes are Kotwalia, Kolcha, Kolgha,

Kathodi, Padhar and Sidis. The literacy percentage amongst these Communities is hardly 2%. Amongst Scheduled Castes, the most backward Communities are Hadi, Senva, Nadia etc.

6.12.1.6. 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. The Sixth Plan follow this approach.

i 6.12.1.7. 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 vigilat 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.

6.12.2. Review of Progress

6.12.2.1. 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 fields of education, economic well being and other amenities such as health and housing facilities have been under taken. The implementation of the Tribal Area Sub-Plan for the areas where tribal population is concentrated has also been initiated in the 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 has been formulated from the year 1979-80. Specific amount is earmarked proportionate to their population under Special Component Plans 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 has been provided for

the year 1979-80 which has been revised 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.

6.12.2.2. The category-wise and group-wise break up of the Fifth Plan outlay and expenditure for the period 1974-75 to 1978-79 is shown below:—

(Rs. in lakhs)

Sr. No.	Category	(1974-79)			
		Education	Economic uplift	Health Housing and other Schemes.	Total
1	2	3	4	5	6
A. Outlays.					
(1) State Plan.					
	1. Scheduled Castes.	245.12	141.52	195.09	586.73
	2. Scheduled Tribes.	326.09	149.87	122.55	583.51
	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	326.39	330.88	1600.00
(b) Centrally Sponsored Programme:					
	1. Scheduled Castes.	878.85	..	15.33	894.18
	2. Scheduled Tribes	473.17	231.18	8.82	713.17
	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	121.36	86.16	655.55
	3. Nomadic Tribes.	51.85	3.13	15.31	70.29
	4. Denotified Tribes.	45.14	3.22	21.17	70.07
		(included in figures shown against Sr. No. 3)			
	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	5.97	509.83
	Total (b)	881.31	188.56	13.51	1083.33
	Total (a+b)	1726.27	378.27	278.21	2382.32

6.12.2.3. 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 programme for welfare of Scheduled Tribes and Rs. 504.03 lakhs for the programme of welfare of Scheduled Castes. Comparatively more expenditure has been incurred on the programme 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.

6.12.2.4. 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 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 limit from Rs. 500/- to Rs. 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 to 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.S.C. Scholarships in Class 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.

6.12.2.5. 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 here under :—

297542 Students were given tuition fees, examination Fees, and scholarships.

1145775 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 sets for irrigation and aid for development of Agricultural land.

36 Scheduled Castes and Scheduled Tribes law graduates assisted for legal professions.

10 New 'Trailoring Classes' started.

56 Medical doctors given financial assistance for starting their dispensaries.

6212 Youths were trained as approved artisans at workshops.

45 Inter-caste marriages.

100 New Balwadis started.

7403 Persons were given financial assistance for housing among them were 4518 Halpatis, and 663 sweepers. Rs. 141,40 lakhs were given as loans and subsidies to co-operative housing societies of "Backward Classes".

6.12.2.6. Over the years the facilities and concessions granted to backward classes for education economic uplift, health, housing and have increased progressively. A broad list indicating the present features and concessions is given hereunder :—

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 a per rules standard V and VI for professional courses in I.T.Is. also .

(5) Scholarships to all Backward Class student in Colleges, as per Government of India scholarship rules.

(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 host for college going backward class girls students.

(8) Book Banks are started at Ahmedabad Vadodara, Surat and Rajkot for Backward students reading in Medical and Engineering courses.

(9) Free Coaching classes are conducted in English Science, and Mathematics subjects in Std. VIII to XI.

Economic Uplift -

- (1) Grant of loan-cum-subsidy for starting cottage industries and professions, 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 given training in carpentry, smithy, tailoring, motor mechanics, welding, turning and fitting, masonry etc.
- (4) Backward Class Youths are also given training at approved artisans or 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 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 co-operative Housing Societies of Scheduled Castes and Scheduled Tribes registered 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 of 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 constructions 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 re sanctioned to voluntary agencies. These agencies are paid grant-in-aid on their pay and allowances. Each propaganda workers paid Rs. 250/- as 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, gumbootsetc. 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 research on important subjects and to train officials working, the Government of India gives 100% grant for the Research Institute to 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. Cell have been created also at the headquarters of the the Government and the office of the Inspector General of Police to attend to the work regarding the removal of untouchability and cases of harrasement.

6.12.2.7. 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.

6.12.3. Programme for 1980-85

6.12.3.1. The Government of India have classified the Backward Classes into four main categories.

- (1) Selected Castes who are considered as untouchable and Harijans.
- (2) Scheduled Tribes who live in rural, hilly and forest area and whose main problem is 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 were formerly having tendencies which resulted into social contempt towards them.

6.12.3.2. The State Government has appointed a Commission to study the social and economic conditions of the backward classes other than S.C., S.T., N.T. and D.N.T. This Commission is popularly known as Bakshi Commission. The Government as directed to consider 82 Castes, Classes Groups identified by the Bakshi Commission, as Socially and Educationally and Economically Backward.

6.12.3.3. The above castes, classes and groups have remained backward as compared to the rest of the society, Education is the very back one of all welfare measures 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 under taken so far as programme for welfare of socially educationally and economically backward classes is proposed to be accelerated in the State Plan for 1980-85 and 1981-82 are given in the following table :—

Sr. No.	Category.	1980-85				1981-82			
		Education	Economic Uplift.	Health Housing and Others.	Total	Education	Economic uplift.	Health Housing and others.	Total.
1	2	3	4	5	6	7	8	9	10
(Rs. in lakhs).									
1.	Scheduled Castes.	1106.68	592.14	701.18	2400.00	210.00	170.00	142.27	522.27
2.	Scheduled Tribes.	1085.15	590.65	724.20	2400.00	159.00	140.00	126.00	425.00
3.	Nomadic Tribes.	27.02	12.48	10.50	50.00	8.25	4.50	2.25	15.00
4.	Denotified Tribes.	25.57	13.20	11.23	50.00	7.50	4.50	3.00	15.00
5.	S. E. B. C.	1063.75	618.02	718.23	2400.00	202.65	150.75	159.60	513.00
6.	E. B. C.	152.61	94.93	52.46	300.00	14.00	11.65	9.68	34.73
7.	Minority	228.00	75.60	96.40	400.00	28.00	20.00	27.00	75.00
TOTAL :		3688.78	1997.02	2314.20	8000.00	629.40	501.40	469.20	1600.00

6.12.4. The Gujarat Tribal Development Corporation

6.12.4.1. 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.

6.12.4.2. 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 Organisation, any programme of 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, loan to be routed through the Corporation, Out of the loan sanctioned so far, on the differential interest rates scheme, about 32,000 families have been benefitted

during current plan period. Additional loan of Rs. 441.00 lakhs has been extended 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 plan period (1980-85) Rs. 384.00 lakhs and during 1981-82 an outlay of Rs. 100.00 lakhs are proposed to be provided for the Tribal Development Corporation.

6.12.5. The Scheduled Castes Economic Development Corporation

6.12.5.1. The Scheduled Castes Economic-Development Corporation has been established in 1975. It is registered under the Company's Act. The objectives 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 Panchayat Co-operative banks, Government Departments or Social Organisations. The State Government provides grants to the Scheduled Castes Development Corporation for implementing various schemes and programmes in benefit of the Scheduled Castes. During the Plan period 1980-85 and 1981-82 it is proposed to expand the activities of the Corporation. It is 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 year 1980-81 about 40,000 families are expected to be benefitted. During the period 1980-85, an outlay of Rs. 281.00 lakhs and during the year 1981-82, an outlay of Rs. 112.00 lakhs have been proposed.

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

6.12.6.1. 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 auto rickshaws (Not owners of autorikshaws) 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. 2700.00 lakhs is provided for the welfare programmes of socially and educationally backwards classes and economically backward classes in the Plan for 1980-85 and Rs. 547.73 lakhs have been proposed for 1981-82.

6.12.6.2. 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. 2700.00 lakhs for this programme for 1980-85 and Rs. 547.37 lakhs. for 1981-82 is as under

1980-85.

(Rs. in lakhs).

Sr. No.	Category.	Education	Economic uplift.	Health Housing other schemes.	Total.
1	2	3	4	5	6
1.	Socially and Educationally Backward Classes.	1063.75	618.02	718.23	2400.00
2.	Economically backward classes.	152.61	94.93	52.46	300.00
	Total	1216.36	712.95	770.69	2700.00
1981-82					
1.	Socially and Educationally backward classes.	202.65	150.75	159.60	513.00
2.	Economically backward classes.	14.00	11.65	9.08	34.73
	Total :	216.65	162.40	168.68	547.73

6.12.6.3. 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. 25.38 lakhs and Rs. 5.00 lakhs have been proposed for the Five Year Plan 1980-85 and 1981-82 respectively.

6.12.7. Programmes for Minorities

6.12.7.1. Government has also constituted a Board for the welfare of Minorities. For the welfare of these classes, special schemes have been introduced during the year 1980-81. 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 these 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 these programmes, an outlay of Rs. Rs. 400.00 lakhs for 1980-85 and an outlay of Rs. 75.00 lakhs for 1981-82 have been proposed for the purpose.

6.12.8. Component Plan for Scheduled Castes

6.12.8.1. 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" 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 Castes in each occupational category, attempts have been made to identify available opportunities suitable for them and appropriate development programmes have been formulated for the Five Year Plan 1980-85 and Annual Plan 1981-82. An outlay of Rs. 296.00 crores for 1980-85 and an outlay of Rs. 46.15 crores for 1981-82 have been proposed. The details of different programmes are given separately.

6.12.9. Community halls for Scheduled Castes

6.12.9. 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 1980-85 for which an outlay of Rs. 100.00 lakhs is proposed. For the Annual Plan 1981-82 and outlay of Rs. 25.00 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.

6.12.10. Centrally Sponsored Schemes

6.12.10.1. An outlay of Rs. 386.30 lakhs for 1980-85 and an outlay of Rs. 132.25 lakhs for 1981-82 have been proposed for partly centrally sponsored schemes on matching basis. The details of which have been given in Statement-4.

6.12.11. The Physical targets proposed for the period 1980-85 and 1981-82 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.	S. E. B. C
				D. N. T.	E. B. C
1		2	3	4	5
1. Examinations fees (students).	1980-85	3533	19866	3333	127142
	1980-85	3514	3412	571	20000
2. Pra. S. S. C. scholarships (Students)	1980-85.	1,50,000	1,72,000	55,000	4,50,000
	1981-82.	30,000	14,000	3,000	90,000
3. Post S. S. C. scholarships to girl students.	1980-85.	3600	1930	2416	..
	1981-82.	70	100	100	..

1		2	3	4	5	
4.	Post S. S. C. scholarships (Students)	1980-85.	..	..	2060	..
		1981-82.	..	..	500	..
6.	Free Books & Clothes (Students)	1980-85.	202067	208667	1668	1,16,667
		1981-82.	36000	23333	1668	20000
6.	Ashram schools and post Basic Ashram Schools.	1980-85.	37	57	4	23
		1981-82.	10	10	1	5
7.	Coaching Centres.	1980-85	150	214	..	50
		1981-82.	50	40	..	15
8.	Balwadi/Anganwadi	1980-85.	450	330	10	750
		1981-82	50	40	5	100
9.	Small Trades and Cottage Industries (Persons to be assisted)	1980-85.	22600	11760	700	36690
		1981-82	4000	2240	200	5700
10.	Law Graduates (Persons).	1980-85	31	30	16	23
		1981-82	7	6	3	6
11.	Medical Graduates (Persons).	1980-85.	160	93	8	92
		1981-82	10	10	1	12
12.	Training to B. C. artisans at approved workshops (Trainees)	1980-85	4801	1412	1051	9000
		1981-82	100	300	20	1400
13.	Inter Caste Marriages (couples)	1980-85	124	..	..	..
		1981-82	20	..	..	..
15.	Halpati Housing (Houses)	1980-85.	12652	..	..	..
		1981-82.	2395	..	..	..
16.	Housing on Individual Basis (Houses)	1980-85	5000	3285	190	7103
		1981-82	1004	500	50	1940
17.	Housing For Sweepers and Scavengers, (Houses).	1980-85.	2236	..	..	..
		1981-82	500	..	..	..
18.	Co-op. Housing Societies (Societies.)	1980-85	40	7	12	5,000
					(Tenaments)	
		1981-82	10	2	3	1200
					(Tenaments)	

STATEMENT—I

Draft Sixth Five Year Plan--1980--85 and Annual Plan 1981--82

Head of Development : Welfare of Backward classes

(Rs. in lakhs)

Sr. No.	Name of the Scheme/Project (Minor Head.)	1979-80 Actual	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated.	Proposed outlay	Capital Contents	Proposed outlay	Capital contents
1.	2.	3.	4.	5.	6.	7.	8.	9.
A.	Scheduled Castes	262.61	598.94	598.94	2400.00	270.07	522.27	120.20
B.	Scheduled Tribes.	191.94	284.48	284.48	2400.00	192.59	425.00	51.26
C.	Nomadic Tribes.	13.09	12.16	12.16	50.00	3.71	15.00	1.10
D.	Denotified Tribes.	5.48	11.52	11.52	50.00	4.81	15.00	1.51
E.	S. E. B. C.	195.20	347.91	347.91	2400.00	124.63	513.00	19.04
F.	E. B. C.	93.21	161.09	161.09	300.00	6.50	34.73	0.50
G.	Minority	0.23	40.00	400.00	400.00	10.50	75.00	1.50
TOTAL		761.76	1456.00	1456.00	8000.00	612.81	1600.00	195.11

STATEMENT—II

DRAFT SIXTH FIVE YEAR PLAN 1980-85 AND ANNUAL PLAN 1980-82

(Rs. in lakhs)

Sr. No.	No. and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
I. EDUCATION								
1. BCK-1. Examination Fees								
	A. S. C.	0.93	1.23	1.23	6.76	..	1.23	..
	B. S. T.	0.75	0.51	0.51	5.96	..	1.10	..
	C. N. T.	0.13	0.04	0.04	0.52	..	0.10	..
	D. D. N. T.	0.06	0.03	0.03	0.48	..	0.10	..
	E. S. E. B. C.	0.94	6.00	6.00	41.50	..	6.00	..
	F. E. B. C.	0.99	5.00	5.00	9.00	..	1.00	..
	G. Minority	..	2.00	2.00	2.00	..	3.00	..
	Total	3.80	14.81	14.81	91.22	..	12.53	..
2. BCK-2. State Scholarships for pre-S.S.C. Students								
	A. S. C.	11.61	12.00	12.00	59.80	..	12.00	..
	B. S. T.	9.93	5.55	5.55	60.00	..	7.00	..
	C. N. T.	1.77	0.60	0.60	2.29	..	0.75	..
	D. D. N. T.	1.16	0.60	0.60	2.25	..	0.75	..
	E. S. E. B. C.	22.84	50.00	50.00	244.18	..	40.00	..
	F. E. B. C.	17.33	48.25	48.25	68.46	..	5.00	..
	G. Minority	..	9.00	9.00	79.00	..	10.00	..
	Total	64.44	126.00	126.00	516.00	..	75.50	..
3. BCK-1. State Scholarships for Pre-S.S.C. children of those engaged in unclean occupation								
	A. S. C.	6.03	1.00	1.00	25.05	..	3.00	..
4. BCK-3. State Scholarships for Post S.S.C. Girl students								
	A. S. C.	6.08	7.00	7.00	26.00	..	7.00	..
	B. S. T.	1.19	1.80	1.80	25.00	..	1.00	..
	C. N. T.	0.98	0.65	0.65	2.12	..	0.65	..
	D. D. N. T.	0.12	0.35	0.35	1.44	..	0.35	..
	G. Minority	..	..	..	16.04	..	1.00	..
	Total	8.37	9.80	9.80	80.56	..	10.00	..
5. BCK-3I. State Scholarships for post S.S.C. Boy students								
	C. N. T.	5.33	3.45	3.45	10.70	..	2.75	..
	D. D. N. T.	..	3.15	3.15	9.90	..	2.25	..
	Total	5.33	6.60	6.60	20.60	..	5.00	..

1	2	3	4	5	6	7	8	9
6.	BCK-3 II. State Scholarships for Higher Secondary students							
	E. S. E. B. C.	10.84	30.00	30.00	126.50	..	20.00	..
	F. E. B. C.	12.03	20.00	20.00	36.00	..	4.00	..
..	G. Minority	..	8.00	8.00	35.00	..	5.00	..
	Total	22.87	58.00	58.00	197.50	..	29.00	..
7.	BCK-4. State Scholarships for Technical Diploma professional and industrial courses							
	A. S. C.	1.69	1.77	1.77	9.79	..	1.77	..
	B. S. T.	0.23	0.30	0.30	6.60	..	0.30	..
	E. S. E. B. C.	4.41	3.15	5.00	73.00	..	15.00	..
	F. E. B. C.	3.61	5.00	3.15	11.15	..	2.00	..
	G. Minority	..	1.00	1.00	28.00	..	4.00	..
	Total	6.94	11.22	11.22	128.54	..	19.07	..
8.	BCK-5. Free Books and Clothes to very needy students studying in Primary Upto I to VII							
..	A. S. C.	5.54	5.82	5.82	28.62	..	5.80	..
..	B. S. T.	3.84	7.60	7.60	46.60	..	5.00	..
..	C. N. T.	..	..	..	0.25	..	0.25	..
..	D. D. N. T.	..	..	..	0.25	..	0.25	..
..	E. S. E. B. C.	2.10	6.00	6.00	35.00	..	6.00	..
..	Total	11.48	19.42	19.42	110.72	..	17.30	..
9.	BCK-5I. F. A. to very needy children studying in primary schools							
	A. S. C.	90.88	103.24	103.24	440.24	..	100.00	..
	B. S. T.	..	..	..	33.00	..	5.00	..
	C. N. T.	..	..	..	0.58	..	0.25	..
	D. D. N. T.	..	..	..	0.57	..	0.25	..
	E. S. E. B. C.	..	..	..	17.00	..	3.00	..
	Total	90.88	103.21	103.24	491.39	..	108.50	..
10.	BCK-5II. Opportunity costs of Education for very needy children studying in primary schools							
	A. S. C.	..	..	..	7.00	..	1.00	..
	B. S. T.	..	..	..	12.30	..	1.00	..
	C. N. T.	..	..	..	0.58	..	0.25	..
	D. D. N. T.	..	..	..	0.57	..	0.25	..
	E. S. E. B. C.	5.32	3.00	3.00	21.50	..	3.00	..
	Total	5.32	3.00	3.00	41.95	..	5.50	..

1	2	3	4	5	6	7	8	9
11.	BCK-6. Free Books and clothes to very needy students studying in VIII to X Standard							
	A. S. C.	2.95	9.00	9.00	32.00	..	5.00	..
	B. S. T.	..	..	..	20.00	..	2.00	..
	Total	2.95	9.00	9.00	52.00	..	7.00	..
12.	BCK-6I. F. A. to very needy students studying in VIII to X students							
	A. S. C.	..	..	..	8.50	..	2.00	..
	B. S. T.	..	..	..	9.50	..	1.00	..
	Total	..	..	..	18.00	..	3.00	..
13.	BCK-7. Development and Maintenance of Book-Bank for Medical and Engineering students							
	A. S. C.	1.09	1.00	1.00	5.50	..	1.00	..
	B. S. T.	2.79	0.13	0.13	6.38	..	1.00	..
	Total	3.88	1.13	1.13	11.88	..	2.00	..
14.	BCK-8. Grant-in-aid to Backward Class Hostels							
	A. S. C.	4.02	11.08	11.08	59.58	..	9.50	..
	B. S. T.	20.38	17.49	17.49	90.29	..	11.80	..
	C. N. T.	..	0.76	0.76	2.80	..	0.75	..
	D. D. N. T.	0.01	0.77	0.77	2.87	..	0.77	..
	E. S. E. B. C.	18.55	26.75	26.75	171.75	..	35.00	..
	F. E. B. C.	..	..	..	..	..	..	..
	G. Minority	..	2.00	2.00	13.25	..	1.25	..
	Total	43.26	58.85	58.85	340.54	..	59.07	..
15.	BCK-9. G.I.A. to B.C. Boys Hostels for Building Construction							
	A. S. C.	1.61	1.00	1.00	16.70	..	3.00	..
	B. S. T.	1.15	3.00	3.00	20.00	..	3.00	..
	C. N. T.	0.16	0.37	0.37	1.62	..	0.50	..
	D. D. N. T.	..	0.37	0.37	1.62	..	0.50	..
	E. S. E. B. C.	0.21	6.00	6.00	36.00	..	12.00	..
	Total	3.13	10.74	10.74	75.94	..	19.00	..
16.	BCK-9I. G. I. A. to B. C. Girls Hostels for Building Construction							
	A. S. C.	..	3.00	3.00	16.00	..	3.00	..
	B. S. T.	..	2.00	2.00	13.00	..	2.00	..
	E. S. E. B. C.	..	..	..	12.00	..	3.00	..
	Total	..	5.00	5.00	41.00	..	8.00	..

1	2	3	4	5	6	7	8	9
17.	BCK-10. G. I. A. to B. C. Hostels for Electrification							
	A. S. C.	..	10.00	10.00	11.30	..	0.10	..
	B. S. T.	..	..	..	7.00	..	1.00	..
	E. S. E. B. C.	..	..	..	9.00	..	1.00	..
	Total	..	10.00	10.00	27.30	..	2.10	..
18.	BCK-11. G. I. A. to Cosmopolitan Hostels							
	A. S. C.	0.60	1.25	1.25	5.90	..	1.15	..
	B. S. T.	0.84	2.11	2.11	14.36	..	2.25	..
	C. N. T.	..	..	..	0.55	..	0.25	..
	D. D. N. T.	..	..	..	0.57	..	0.25	..
	E. S. E. B. C.	..	..	..	11.25	..	2.25	..
	G. Minority	..	..	..	0.75	..	0.75	..
	Total	1.44	3.36	3.36	33.38	..	6.90	..
19.	BCK-11L G.I.A. to Higher Secondary and College Hostels							
	A. S. C.	..	0.25	0.25	0.25	..	..	..
	B. S. T.	..	0.84	0.84	0.84	..	..	..
	Total	..	1.09	1.09	1.09	..	..	..
20.	BCK-12. G. I. A. for additional coaching and study centre							
	A. S. C.	0.29	0.50	0.50	5.25	..	1.00	..
	B. S. T.	0.64	1.00	1.00	7.50	..	1.00	..
	E. S. E. B. C.	1.56	2.25	2.25	13.75	..	2.50	..
	F. C. B. C.	0.86	..	..	..	..	..	..
	Total	3.35	3.75	3.75	26.50	..	4.50	..
21.	BCK-12L. G. I. A. to B. C. Hostels for Ambar Charkhas, sewing and knitting machines							
	A. S. C.	0.40	0.22	0.22	0.22	..	..	..
	B. S. T.	0.64	0.22	0.22	0.22	..	..	..
	Total	1.04	0.44	0.44	0.44	..	..	..
22.	BCK-13. Establishing of new and Development and Maintenance of Government Hostel for Boys							
	A. S. C.	0.77	9.95	19.85	83.85	..	10.00	..
	B. S. T.	1.01	20.05	20.05	72.55	..	10.00	..
	C. N. T.	..	..	..	0.80	..	0.50	..
	D. D. N. T.	..	..	..	0.81	..	0.50	..
	E. S. E. B. C.	..	..	..	26.00	..	5.00	..
	F. E. B. C.	..	..	..	14.00	..	1.00	..
	G. Minority	..	..	..	10.50	..	1.00	..
	Total	1.78	39.90	39.90	228.51	..	28.00	..

1	2	3	4	5	6	7	8	9
23. BCK-13I	Establishing of new and Development and Maintenance of Govt. Hostels for girls							
	A. S. C.	..	4.00	4.00	52.00	..	5.00	..
	B. S. T.	..	..	..	58.00	..	7.00	..
	C. N. T.	..	..	..	0.80	..	0.50	..
	D. D. N. T.	..	..	..	0.81	..	0.50	..
	E. S. E. B. C.	..	....	..	28.50	..	6.00	..
	F. E. B. C.	..	..	..	7.50	..	0.50	..
	G. Minority	..	..	..	12.00	..	1.50	..
	Total	..	4.00	4.00	159.61	..	21.00	..
24. BCK-14.	Construction of Govt. Hostels for Boys							
	A. S. C.	0.16	9.68	9.68	31.00	31.00	8.00	8.00
	B. S. T.	7.59	12.00	12.00	34.00	34.00	8.00	8.00
	E. S. E. B. C.	..	..	..	26.92	26.92	10.00	10.00
	Total	7.75	21.68	21.68	91.92	91.92	26.00	26.00
25. BCK-14I.	Construction of Govt. Hostels for girls							
	A. S. C.	..	3.50	3.50	12.00	12.00	2.00	2.00
	B. S. T.	..	4.00	4.00	17.00	17.00	2.00	2.00
	C. N. T.	..	..	..	1.35	1.35	0.75	0.75
	D. D. N. T.	..	..	..	1.37	1.37	0.75	0.75
	E. E. S. G. C.	..	..	..	16.00	16.00	2.00	2.00
	F. E. B. C.	..	..	..	6.50	6.50	0.50	0.50
	G. Minority	..	..	..	6.50	6.50	0.50	0.50
	Total	..	7.50	7.50	67.22	67.22	8.50	8.50
26. BCK-15.	Additional coaching centre in Govt. Hostels for Medical Engineering college going students							
	A. S. C.	..	1.50	1.50	3.95	..	0.50	..
	B. S. T.	..	0.75	0.75	4.30	..	0.75	..
	Total	..	2.25	2.25	8.25	..	1.25	..
27. BCK-15I.	Lok Sahitya Vidyalaya							
	E. S. E. B. C.	0.22	2.30	2.30	35.10	..	7.30	..
28. BCK-16.	Ashram Schools							
	A. S. C.	1.57	30.42	30.42	149.00	37.00	26.00	5.00
	B. S. T.	24.93	56.64	56.64	396.64	57.00	70.00	10.00
	C. N. T.	2.42	2.06	2.06	2.06	..	..	..
	D. D. N. T.	2.43	2.06	2.06	2.26	..	..	..
	E. S. E. B. C.	2.96	23.60	23.60	118.00	..	23.60	..
	Total	34.30	114.78	114.78	688.18	94.00	119.60	15.00

1	2	3	4	5	6	7	8	9
29. BCK-16I. Post Basic Ashram Schools								
	B. S. T'	11.95	17.11	17.11	104.11	..	15.00	..
TOTAL : EDUCATION								
	A. S. C.	130.19	238.31	238.31	1106.68	43.00	210.00	15.00
	B. S. T.	87.86	152.10	152.10	1085.15	51.00	159.00	20.00
	C. N. T.	10.79	7.93	7.93	27.02	1.35	8.25	0.75
	D. D. N. T.	3.78	7.34	7.34	25.57	1.37	7.50	0.75
	E. S. E. B. C.	70.04	160.90	160.90	1063.75	60.50	202.65	7.00
	F. E. B. C.	34.82	76.40	76.40	152.61	6.50	14.00	0.50
	G. Minority	..	22.00	22.00	228.00	6.50	28.00	0.50
	Total	337.48	664.98	664.98	3688.78	170.22	629.40	44.50
Economic Uplift								
30. BCK I7 F. A. to Agri. for Development of Agri. land.								
	A. S. C.	1.87	1.97	1.97	21.97	..	5.00	..
	B. S. T.	1.18	0.75	0.75	12.75	..	2.00	..
	Total.	2.05	2.72	2.72	34.92	..	7.00	..
31. BCK-I7I F. A. for Electrification of Agri. Malls.								
	A. S. C.	..	..	0.50	4.50	..	1.00	..
	B. S. T.	..	0.50	..	..	..	..	..
	Total.	..	0.50	0.50	4.50	..	1.00	..
32. BCK-I7II F. A. for Milch Cattle and Poultry								
	C. N. T.	0.02	0.50	0.50	1.75	..	0.50	..
	D. D. N. T.	..	0.50	0.50	1.75	..	0.50	..
	E. S. E. B. C.	12.00	19.00	19.00	73.50	..	15.00	..
	F. E. B. C.	12.00	13.00	13.00	17.00	..	1.00	..
	G. Minority	..	..	..	6.50	..	1.50	..
	Total.	24.02	33.00	33.00	100.50	..	18.50	..
33. BCK-I7 III Training Centre for Farmer.								
	A. S. C.	..	0.50	0.50	2.50	..	0.50	..
	B. S. T.	..	..	..	2.50	..	0.50	..
	Total	..	0.50	0.50	5.00	..	1.00	..
34. BCK-I7IV Veternity aid to Socio Economic Counseling Centre.								
	E. S. E. B. C.	..	..	..	5.00	..	1.00	..

1	2	3	4	5	6	7	8	9
35. BCK-18 F. A. to small trades/Cottage industries & other Profession.								
A S. C.		9.00	33.00	33.00	125.00	..	20.00	..
B S. T.		3.37	2.00	2.00	61.80	..	11.20	..
C N. T.		0.77	0.50	0.50	1.85	..	0.50	..
D D. N. T.		0.47	0.50	0.50	1.84	..	0.50	..
E S. E. B. C.		8.29	10.00	10.00	108.34	..	26.50	..
F E. B. C.		2.91	9.45	9.45	17.45	..	2.00	..
G Minority		24.50	..	7.50	..
Total		<u>24.81</u>	<u>55.45</u>	<u>55.45</u>	<u>340.78</u>	..	<u>68.20</u>	..
36. BCK-18I Subsidy for purchase of Bomboo.								
A S. C.		0.75	1.50	1.50	7.50	..	1.50	..
B S. T.		7.00	..	1.50	..
E S. E. B. C.		7.00	..	1.50	..
Total		<u>0.75</u>	<u>1.50</u>	<u>1.50</u>	<u>21.50</u>	..	<u>4.50</u>	..
37. BCK-18II F. A. purchase of inherited Profession.								
A S. C.		2.00	..	0.50	..
B S. T.		4.00	..	1.50	..
E S. E. B. C.		1.60	1.50	1.50	9.50	..	2.50	..
G Minority		..	1.00	1.00	3.50	..	0.50	..
Total		<u>1.60</u>	<u>2.50</u>	<u>2.50</u>	<u>19.00</u>	..	<u>5.00</u>	..
38. BCK-18III F. A. for self employed Persons.								
A S. C.		..	1.00	1.00	5.00	..	1.00	..
B S. T.		8.50	..	2.00	..
C N. T.		1.75	..	1.00	..
D D. N. T.		1.90	..	1.00	..
E S. E. B. C.		36.75	..	10.75	..
F E. B. C.		9.60	..	2.00	..
G Minority		7.00	..	2.00	..
Total		..	<u>1.00</u>	<u>1.00</u>	<u>70.50</u>	..	<u>19.75</u>	..
39. BCK-18IV F.A. for Ambar Charkha Units.								
A S. C.		..	1.98	1.98	9.98	..	2.00	..
B S. T.		..	1.32	1.32	7.52	..	1.30	..
C N. T.		1.10	..	0.65	..
D D. N. T.		1.25	..	0.65	..
E S. E. B. C.		10.65	10.70	10.70	44.70	..	10.00	..
F E. B. C.		10.65	4.40	4.40	8.50	..	0.65	..
Total		<u>21.30</u>	<u>18.40</u>	<u>18.40</u>	<u>73.05</u>	..	<u>15.25</u>	..

1	2	3	4	5	6	7	8	9
40 BCK-19 F. A. to Law Graduates								
	A S. C.	0.24	0.14	0.14	1.54	0.85	0.35	0.20
	B S. T.	0.04	0.10	0.10	1.50	0.85	0.35	0.20
	C N. T.	0.08	0.02	0.02	0.42	0.22	0.10	0.05
	D D. N. T.	..	0.02	0.02	0.42	0.22	0.10	0.05
	E S. E. B. C.	..	..	..	1.40	0.77	0.35	0.20
	Total	<u>0.36</u>	<u>0.28</u>	<u>0.28</u>	<u>5.28</u>	<u>2.89</u>	<u>1.25</u>	<u>0.70</u>
41. BCK--19I F.A.toMedicalGraduates								
	A S. C.	1.50	3.00	3.00	15.00	8.00	3.00	1.60
	B S. T.	0.80	2.00	2.00	14.00	7.44	3.00	1.60
	C N. T.	0.20	0.10	0.10	0.70	0.40	0.15	0.08
	D D. N. T.	..	0.10	0.10	0.70	0.40	0.15	0.08
	E S. E. B. C.	..	..	..	13.80	7.36	3.45	1.84
	Total	<u>2.50</u>	<u>5.20</u>	<u>5.20</u>	<u>44.20</u>	<u>23.60</u>	<u>9.75</u>	<u>5.20</u>
42. BCK-20 Training for women tailoring								
	A S. C.	0.99	4.41	4.41	16.41	..	3.00	..
	B S. T.	0.25	3.11	3.11	17.11	..	3.00	..
	C N. T.	..	0.63	0.63	1.88	..	0.50	..
	D D. N. T.	..	0.62	0.62	2.02	..	0.50	..
	E S. E. B. C.	0.19	4.35	4.35	29.55	..	6.30	..
	G Minority	0.03	0.70	0.70	4.70	..	1.00	..
	Total	<u>1.46</u>	<u>13.82</u>	<u>13.82</u>	<u>71.67</u>	<u>..</u>	<u>14.30</u>	<u>..</u>
43. BCK-20I Training Centre for repairing of Radio & T.V. for women.								
	A S. C.	..	1.55	1.55	7.55	..	1.50	..
	B S. T.	..	2.25	2.25	11.25	..	2.25	..
	Total	<u>..</u>	<u>3.80</u>	<u>3.80</u>	<u>18.80</u>	<u>..</u>	<u>3.75</u>	<u>..</u>
44. BCK-20II Choaching Centre for women for field jobs such as teachers in Balwadi Aganwadi, Health & Paramedical Service.								
	A S. C.	..	..	..	2.00	..	0.50	..
	B S. T.	..	..	..	2.00	..	0.50	..
	E S. E. B. C.	..	..	..	4.00	..	0.50	..
	F E. B. C.	..	..	..	4.00	..	0.50	..
	Total	<u>..</u>	<u>..</u>	<u>..</u>	<u>12.00</u>	<u>..</u>	<u>2.00</u>	<u>..</u>

1	2	3	4	5	6	7	8	9
45.	BCK-21 Training to Backward Class artisan at approved workshops							
	A S. C.	0.85	0.80	0.80	4.80	..	1.00	..
	B S. T.	2.53	2.12	2.12	14.12	..	3.00	..
	C N. T.	0.30	0.13	0.13	0.53	..	0.10	..
	D D. N. T.	0.23	0.12	0.12	0.52	..	0.10	..
	E S. E. B. C.	8.66	15.00	15.00	51.00	..	12.00	..
	F E. B. C.	4.56	10.00	10.00	18.00	..	2.00	..
	G Minorities	0.20	2.00	2.00	11.00	..	3.00	..
	Total	17.33	30.17	30.17	99.97	..	21.20	..
46.	BCK-22 Rehabilitation Scavanges in other trades and occupat on							
	A S. C.	0.35	10.50	10.50	52.50	..	10.50	..
47.	BCK-23 Si pend to Trainess in T. C. P. C.							
	E S. E. B. C.	0.15	1.50	1.50	7.10	..	1.40	..
	G Minorities	..	2.90	2.90	7.40	..	1.50	..
	Total	0.15	4.40	4.50	14.50	..	2.90	..
48.	BCK-23I Building for T. C. P. C.							
	A S. C.	..	..	..	8.00	8.00	2.00	2.00
	B S. T.	2.32	2.00	2.00	10.00	10.00	2.00	2.00
	E S. E. B. C.	5.55	16.00	16.00	56.00	56.00	10.00	10.00
	G Minorities	..	..	..	4.00	4.00	1.00	1.00
	Total	7.87	18.00	18.00	78.00	78.00	15.00	15.00
49.	BCK-23II Opening of New T. C. P. C.							
	E S. E. B. C.	..	..	..	42.00	..	13.00	..
50.	BCK-23IIIMaintanance & Develop- ment of. T. C. P. C.							
	A S. C.	1.27	2.47	2.47	..	..	..	..
	B S. T.	0.73	4.56	4.56	..	..	..	..
	C N. T.	..	0.10	0.10	..	..	..	..
	D D. N. T.	..	0.09	0.90	..	..	..	..
	E S. E. B. C.	..	16.00	16.00	65.00	..	16.25	..
	Total	2.00	23.22	23.22	65.00	..	16.25	..

1	2	3	4	5	6	7	8	9
51. BCK-24 Pre examination Training coaching Centre for Competitive Examination								
	A S. C.	1.03	0.75	0.75	3.75	..	0.75	..
	B S. E. B. C.	0.12	3.30	3.30	15.30	..	3.00	..
	Total	1.15	4.05	4.05	19.05	..	3.75	..
52. BCK-24I Professional & Industrial Training & Coaching Centre.								
	A S. C.	1.69	..	..	6.75	..	1.50	..
	B S. T.	0.23	..	..	7.00	..	1.50	..
	C N. T.	..	..	..	1.25	..	0.50	..
	D D. N T.	..	..	..	1.40	..	0.50	..
	E S. E. B. C.	..	..	..	11.30	..	2.00	..
	Total	1.92	..	..	27.70	..	6.00	..
53. BCK-24II Coaching Centre or Administrative fed Jobs such as constables Teachers Health & Paramedical Services								
	B S. T.	..	..	..	8.00	..	2.00	..
54. BCK-25 F.A. for coaching in Central Services (I.A.S. I.P.S. etc) Examination.								
	A S. C.	..	0.50	0.50	1.50	..	0.25	..
	B S. T.	..	..	..	1.00	..	0.25	..
	Total	..	0.50	0.50	2.50	..	0.50	..
55. BCK 25I Special Facilities for Girls Students for the central Ser- Services (IAS IPS) Examination.								
	A S. C.	..	0.29	0.29	0.89	..	0.15	..
	B S. T.	..	..	..	0.60	..	0.15	..
	Total	..	0.29	0.29	1.49	..	0.30	..
56. BCK- 26 Apprentice Hostels.								
	A S. C.	..	..	..	2.00	..	0.50	..
	B S. T.	..	..	..	4.00	..	0.50	..
	E S. E. B. C.	..	..	..	4.00	..	1.00	..
	Total	..	..	..	10.00	..	2.00	..

1	2	3	4	5	6	7	8	9
57. BCK 26 I Migrating working men's Sheds.								
A	S. C.	..	1.00	1.00	5.00	..	1.00	..
B	S. T.	..	..	..	4.00	..	1.00	..
C	N. T.	..	..	..	1.25	..	0.50	..
D	D. N. T.	..	..	..	1.40	..	0.50	..
E	S. E. B. C.	..	..	..	8.00	..	2.00	..
G	Minorities.	..	..	..	4.00	..	1.00	..
Total		..	1.00	1.00	23.65	..	6.00	..
58. BCK 26II Working Men Hostel								
A	S. C.	..	1.00	1.00	5.00	..	1.00	..
B	S. T.	..	..	..	8.00	..	2.00	..
Total		..	1.00	1.00	13.00	..	3.00	..
59. BCK 27 Economic Development Corporation & Board.								
A	S. C.	75.32	112.00	112.00	281.00	200.00	112.00	100.00
B	S. T.	34.88	23.00	23.00	384.00	..	100.00	..
E	S. E. B. C.	..	4.38	4.38	20.38	..	4.00	..
F	E. B. C.	..	4.37	4.37	20.7	..	4.00	..
G	Minorities	..	1.00	1.00	5.00	..	1.00	..
Total		110.20	144.75	144.75	710.53	200.00	221.00	100.00
Total Economic Uplift								
A	S. C.	91.24	180.86	180.86	592.14	216.85	170.00	103.80
B	S. T.	45.10	43.21	43.21	590.65	18.27	140.00	3.80
C	N. T.	1.17	1.98	1.98	12.48	0.62	4.50	0.13
D	D. N. T.	0.90	1.95	1.95	13.20	0.62	4.50	0.13
E	S. E. B. C.	49.75	85.73	85.73	618.02	64.13	150.75	12.04
F	E. B. C.	30.43	41.22	41.22	94.93	..	11.65	..
G	Minority	0.23	7.60	7.60	75.60	4.00	20.00	1.00
Total		218.82	362.55	362.55	1997.02	304.49	501.40	120.90

1	2	3	4	5	6	7	8	9	
III. HEALTH HOUSING & OTHER SCHEMES.									
60	BCK-28	Free Medical Aid.							
	A	S.C.	2.22	6.00	6.00	30.00	..	10.09	..
	B	S.T.	3.36	3.20	3.20	84.40	..	10.20	..
	C	N.T.	0.32	..	..	1.85	..	0.50	..
	D	D.N.T.	0.28	..	..	1.55	..	0.50	..
	E	S.E.B.C.	..	..	..	49.00	..	10.00	..
	F	E.B.C.	..	..	..	8.00	..	2.00	..
	G	Minority	..	..	..	8.00	..	4.60	..
		Total	6.18	9.20	9.20	182.80	..	37.29	..
61	BCK-29	Balwadi, Anganwadi and Primary education Centres.							
	A	S.C.	1.26	9.12	9.12	30.28	..	5.00	..
	B	S.T.	1.04	2.47	2.47	16.57	..	2.50	..
	C	N.T.	..	..	..	0.45	..	0.15	..
	D	D.N.T.	..	..	..	0.45	..	0.15	..
	E	S.E.B.C.	0.55	8.10	8.10	54.10	..	16.00	..
	F	Minority	..	0.70	0.70	4.70	..	1.00	..
		Total f	1.85	20.39	20.39	106.95	..	24.80	..
62	BCK-29	I Special facilities to Children studying in private Balmandir.							
	A	S.C.	0.53	0.55	0.55	2.25	..	0.50	..
	B	S.T.	0.13	0.55	0.55	4.10	..	0.55	..
		Total	0.66	1.10	1.10	6.35	..	1.05	..
63	BCK-30	F.A. to youth Mandals and Mahila for supply of sport articles and cultural activities.							
	A	S.C.	0.09	0.40	0.40	1.80	..	0.50	..
	B	S.T.	0.01	0.06	0.56	3.61	..	0.55	..
	E	S.E.B.C.	0.28	1.00	1.00	5.00	..	1.00	..
	F	E.B.C.	0.07	1.00	1.00	5.00	..	1.00	..
	G	Minority	..	..	..	2.00	..	0.50	..
		Total	0.45	2.46	2.46	17.41	..	3.55	..
64.	BCK-30I.	Community Centres							
	A.	S. C.	..	..	..	40.00	..	12.00	..
	B.	S. T.	..	..	..	30.00	..	6.50	..
	E.	S. E. B. C.	..	..	..	30.00	..	6.50	..
		Total	..	..	..	100.00	..	25.00	..
65.	BCK-31.	F. A. for housing on individual basis							
	A.	S. C.	13.85	34.00	34.00	100.00	..	20.09	..
	B.	S. T.	6.72	6.70	6.70	65.70	..	10.00	..

1	2	3	4	5	6	7	8	9
	C. N. T.	0.81	0.35	0.35	2.05	..	0.50	--
	D. D. N. T.	0.01	0.35	0.35	1.75	..	0.50	--
	E. S. E. B. C.	26.29	12.00	12.00	158.70	..	36.80	--
	F. E. B. C.	6.63	7.00	7.00	15.00	..	2.00	--
	G. Minority	..	6.70	6.70	32.20	..	7.75	--
	Total	54.31	67.10	67.10	375.40	..	77.64	--
66.	BCK-31I. F. A. for Housing on Urban area							
	A. S. C.	..	..	..	75.00	..	14.09	--
	B. S. T.	..	..	..	29.00	..	5.00	--
	E. S. E. B. C.	11.00	7.32	7.32	53.32	..	10.00	--
	F. E. B. C.	11.00	7.32	7.32	15.32	..	2.00	--
	G. Minority	..	..	..	40.50	..	10.00	--
	Total	22.00	14.64	14.64	207.14	..	41.09	--
67.	BCK-31II. F. A. to Halpatis for Housing and housesites							
	B. S. T.	45.36	41.70	41.70	265.68	112.97	50.30	26.34
68.	BCK-31III. Subsidy for Housing and provision for Sweepers and seavangers							
	A. S. C.	4.17	11.25	11.25	43.75	..	10.00	--
69.	BCK-31IV. Special Housing schemes for Bhangi on Individual Basis							
	A. S. C.	1.49	36.00	36.00	75.00	..	5.00	--
70.	BCK-31X. F. A. to Co-operative Housing Societies P.W.R. 219							
	A. S. C.	13.77	8.10	8.10	14.60	10.22	2.00	1.40
	B. S. T.	1.85	7.82	7.82	18.82	10.35	2.00	1.10
	C. N. T.	..	1.90	1.90	3.35	1.74	0.40	0.22
	D. D. N. T.	0.51	1.88	1.88	5.13	2.82	1.15	0.63
	Total	16.13	19.70	19.70	41.90	25.13	5.55	3.35
71.	BCK-31 (VI) F.A.toCo-op.Housing societies (Through Rural H. B.)							
	A S. C.	..	..	..	7.06	..	..	--
	B S. T.	..	..	..	6.31	..	..	--
	E S. E. B. C.	10.00	27.35	..	115.00	..	23.00	--
	F E. B. C.	10.00	27.35	..	4.00	..	1.00	--
	Total	20.00	54.70	..	132.37	..	24.00	--
72.	BCK-32 Freelegal Assistancefor Civil and Criminal proceedings.							
	A S. C.	0.06	0.10	0.10	0.50	..	0.10	--
	B S. T.	..	0.10	0.10	0.80	..	0.10	--
	E S. E. B. C.	..	1.50	1.50	7.50	..	1.50	--
	Total	0.06	1.70	1.70	8.80	..	1.70	--

1	2	3	4	5	6	7	8	9	
73.	BOK-32	(i) F.A.Sch. Caste for Social Escott & other calamity.							
	A	S. C.	0.14	3.00	3.00	8.00	..	2.00	..
74.	BOK-32	(ii) F.A. to victim of Atrocities.							
	A	S. C.	1.39	3.00	3.00	5.50	..	1.00	..
	B	S. T.	0.01	0.30	0.30	3.80	..	0.50	..
	C	N. T.	..	..	..	0.40	..	0.10	..
	D	D. N. T.	..	..	..	0.40	..	0.10	..
		Total	1.40	3.30	3.30	10.10	..	1.70	..
75.	BOK-32	(iii) F. A. to encourages intercast marriages Harijans and CastHindu.							
	A	S. C.	0.63	0.80	0.80	6.20	..	1.00	..
76.	BOK-33	Additional F.A. to local bodies for purchasing of wheelbarrousshibirs etc removal of untouchability							
	A	S. C.	0.33	0.36	0.36	1.36	..	0.25	..
77.	BOK-33	(i) Grant in aid to District panchayat for upliftmen							
	A	S. C.	..	10.00	10.00	42.00	..	8.00	..
	D	S. T.	..	10.00	10.00	48.00	..	8.00	..
	E	S. E. B. C.	..	5.00	5.00	41.00	..	9.00	..
		Total	..	25.00	25.00	131.00	..	25.00	..
78.	BOK-34	Shibirs for Bhangi Kasta Mukti and Seminar of untouchability and Training classes for intensive drive for eradication of untouchability.							
	A	S. C.	0.92	1.00	1.00	7.50	..	2.00	..
79.	BOK-34	(i) Social Education Camps.							
	A	S. C.	0.11	0.50	0.50	1.50	..	0.25	..
	B	S. T.	0.22	0.50	0.50	2.67	..	0.25	..
	E	S. E. B. C.	0.42	0.80	0.80	7.20	..	1.00	..
	F	E. B. C.	0.24	0.80	0.80	0.80	..	..	..
	G	Minority	..	..	..	1.00	..	0.25	..
		Total	0.99	2.60	2.60	13.17	..	1.75	..
80.	BOK-35	Special Coll and Vehicled for intensive drive for eradication of untouchability.							
	A	S. C.	..	2.00	2.00	43.00	..	10.50	..
81.	BOK-35	(i) Civil protection Right Act.							
	A	S. C.	..	8.21	8.21	8.21	..	..	..
82.	BOK-36	Special Pracharak for Bhangi Welfare.							
	A	S. C.	0.16	5.00	5.00	2.00	..	5.00	..

1	2	3	4	5	6	7	8	9	
83.	BCK-36	(i) F. A. voluntary Agencies for propoganda field workers.							
	A	S. C.	..	..	..	2.00	..	0.50	..
	B	S. T.	..	..	..	3.50	..	0.50	..
	C	N. T.	..	..	..	2.00	..	0.50	..
	D	D. N. T.	..	..	..	1.55	..	0.50	..
	E	S. E. B. C.	0.94	5.60	5.60	27.00	..	5.35	..
	F	E. B. C.	0.02	..	..	0.02	..	..	..
		Total	0.96	5.60	5.60	36.07	..	7.35	..
84.	BCK-37	Quantification Cell.							
	E	S. E. B. C.	..	..	..	0.40	..	0.10	..
	F	E. B. C.	..	..	..	2.00	..	0.50	..
	G	Minority	..	..	..	2.00	..	0.60	..
		Total	..	..	..	4.40	..	1.10	..
85.	BCK-37	(i) Administrative machinery for post SSC Scholarships.							
	A	S. C.	..	2.00	2.00	9.00	..	1.00	..
	B	S. T.	..	2.00	2.00	13.00	..	2.00	..
	E	S. E. B. C.	..	..	..	4.00	..	1.00	..
		Total	..	4.00	4.00	26.00	..	4.00	..
86.	BCK-37	(ii) Strengthening of Administrative machinery at all levels.							
	A	S. C.	0.06	1.78	1.78	9.78	..	2.00*	..
	B	S. T.	0.03	1.77	1.77	56.77	..	10.00	..
	E	S. E. B. C.	12.70	28.31	28.31	131.31	..	25.00	..
	F	E. B. C.	..	..	..	1.92	..	0.48	..
	G	Minority	..	3.00	3.00	6.00	..	3.00	..
		Total	12.79	34.86	34.36	205.78	..	40.48	..
87.	BCK-37	(iii) Strengthening of staff for special component plan.							
	A	S. C.	..	24.00	24.00	62.00	..	10.00	..
	B	S. T.	..	..	..	12.32	..	2.00	..
	C	N. T.	..	..	..	..	..	..	..
	D	D. N. T.	..	..	..	..	..	..	..
	E	S. E. B. C.	..	..	..	10.00	..	10.00	..
	F	E. B. C.	..	..	..	..	..	..	..
	G	Minority	..	..	..	..	..	..	..
		Total	..	24.00	24.00	84.32	..	22.00	..
88.	BCK-37	(iv) Technical Units							
	A	S. C.	..	1.50	1.50	3.10	..	0.40	..
	B	S. T.	..	..	..	3.40	..	0.40	..

	2	3	4	5	6	7	8	9
	C N. T.	..	..	..	0.40	..	0.10	..
	D D. N. T.	..	..	..	0.40	..	0.10	..
	E S. E. B. C.	..	..	..	1.20	..	0.30	..
	F E. B. C.	..	..	..	0.40	..	0.10	..
	Total	..	1.50	1.50	8.90	..	1.40	..
89.	BCK-38 Survey of Individual family oriented programme for 282 village under component plan.							
	A S. C.	..	1.00	1.00	5.00	..	1.25	..
90.	BCK-38 (i) Research study and evaluation.							
	A S. E. B. C.	0.82	0.30	0.30	1.50	..	0.30	..
91.	BCK-38 (ii) T. R. T. I. B S. T.	0.25	1.00	1.00	4.35	..	0.35	..
92.	BCK-38 (iii) Training programme for improving quality of personnel to seat in university for formulation assessment of Schemes.							
	E S. E. B. C.	..	..	..	5.00	..	1.23	..
93.	BCK-39 Mucluse Budget							
	A S. C.	..	0.00	10.00	50.00	..	10.00	..
	B S. T.	..	11.00	11.00	51.00	..	10.00	..
	E S. E. B. C.	..	..	..	5.00	..	5.00	..
	Total	..	21.00	21.00	106.00	..	25.00	..
94.	BCK-40 Purchase and maintenance of vehicle.							
	E S. E. B. C.	12.51	4.00	4.00	12.00	..	2.00	..
Total—Health Housing and Other Schemes.								
	A S. C.	41.18	179.67	179.67	701.18	10.22	142.27	1.40
	B S. T.	58.98	89.17	89.17	724.20	123.32	126.00	27.46
	C N. T.	1.13	2.25	2.25	10.50	1.74	2.25	0.22
	D D. N. T.	0.80	2.23	2.23	11.23	2.82	3.00	0.63
	E S. E. B. C.	75.41	101.28	101.28	718.23	..	159.60	..
	F E. B. C.	27.96	43.47	43.47	52.46	..	9.08	..
	G Minority	..	10.40	10.40	96.40	..	27.00	..
	Total	205.46	428.47	428.47	2314.20	138.10	469.20	29.71
GRAND TOTAL :								
	A S. C.	262.61	598.84	598.84	2400.00	270.07	522.27	120.20
	B S. T.	191.94	284.48	284.48	2400.00	192.59	425.00	51.26
	C N. T.	13.09	12.15	12.16	50.00	3.71	15.00	1.10
	D D. N. T.	5.48	11.52	11.52	50.00	4.81	15.00	1.51
	E S. E. B. C.	195.20	347.91	347.91	2400.00	124.63	513.00	19.04
	F E. B. C.	93.21	161.09	161.09	300.00	6.50	34.73	0.50
	G Minority	0.23	40.00	40.00	400.00	10.50	75.00	1.50
	Total	761.76	1456.00	1456.00	8000.00	612.81	1600.00	195.11

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82.

Welfare of Backward Classes.

Physical Targets and Achievements

Sr. No.	Item	Unit	Achievement at the end of				1980-81		1981-82 Proposed Target
			1978-79	1979-80	1984-85	1980-81			
						Target	Likely Achievement		
1	2	3	4	5	6	7	8	9	
A. Pre--Matric Education intensive.									
(i)	Scholarships stipends	No. of Student Net.	199000	205000	333814	228000	228000	250800	
(ii)	Other Intensive like board- ing grants/Books/Students stationery and uniforms etc.,	-do-	52000	66000	102487	70000	70000	77000	
(iii)	Ashram schools	No.	190	204	315	258	258	298	
Economic Aid									
(i)	For Agriculture	No. of Family	1068	1668	6944	544	544	1400	
(ii)	Animal Husbandry	-do-	4129	2600	10050	3300	3300	18500	
(iii)	Cottage Industries	-do-	20128	21100	68156	11090	11090	13640	

Draft Sixth Five Year Plan 1980—85 and Annual Plan 1981—82

Outlay of Centrally Sponsored Schemes

HEAD OF DEVELOPMENT : Welfare of Backward Classes.

(Rs. in lakhs)

Sr. No.	Name of the Scheme	1979-80 Actuals			1980-85 outlay proposed			1980-81 Outlay			1981-82 outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Pre-S.S.C. Children of the se who are engaged in clean occupation												
	S. C.	3.02	3.01	6.03	25.05	25.05	50.10	1.00	1.00	2.00	3.00	3.00	6.00
2	Development and Maintenance of Book Bank for Medical and Eng. Students.												
	S. C.	0.55	0.54	1.09	5.50	5.50	11.00	1.00	1.00	2.00	1.00	1.00	2.00
	S. T.	1.40	1.39	2.79	6.38	6.38	12.76	0.13	0.13	0.26	1.00	1.00	2.00
	Total	1.95	1.83	3.88	11.88	11.88	23.76	1.13	1.13	2.26	2.00	2.00	4.00
3	Grant-in-aid Voluntary agencies B. C. girls Hostels for Building constructions												
	S. C.	3.50	3.50	7.00	16.00	16.00	32.00	3.00	3.00	6.00	3.00	3.00	6.00
	S. T.	3.73	3.73	7.46	13.00	13.00	26.00	2.00	2.00	4.00	2.00	2.00	4.00
	Total	7.23	7.23	14.46	29.00	29.00	58.00	5.00	5.00	10.00	5.00	5.00	10.00
4	Construction of Govt. Hostel for Girls studying in colleges.												
	S. C.	5.69	5.68	11.37	12.00	12.00	24.00	3.50	3.50	7.00	2.00	2.00	4.00
	S. T.	6.50	6.50	13.00	17.00	17.00	34.00	4.00	4.00	8.00	2.00	2.00	4.00
	Total	12.19	12.18	24.37	29.00	29.00	58.00	7.50	7.50	15.00	4.00	4.00	8.00
5	Coaching guidance and pre-Examination training Centre for Competitive Examination												
	S. C.	0.36	0.35	0.71	3.75	3.75	7.50	0.75	0.75	1.50	0.75	0.75	1.50
6	Scheduled castes Economic Development Corporation												
	S. C.	44.00	44.00	88.00	281.00	281.00	562.00	112.00	112.00	224.00	112.00	112.00	224.00
7	Intensive drive for eradication of untouchability.												
	S. C.	7.45	7.45	14.90	43.00	43.00	86.00	5.00	5.00	10.00	10.00	10.00	20.00
8	Tribal Research and Training Institutes												
	S. T.	0.83	0.82	1.65	4.35	4.35	8.70	1.00	1.00	2.00	0.35	0.35	0.70
	Total S. C.	58.87	58.86	117.73	386.30	386.30	772.60	126.25	126.25	252.50	132.25	132.25	264.50
	S. T.	5.95	5.95	11.90	40.73	40.73	81.46	7.13	7.13	14.26	5.35	5.35	10.70
	Total	64.82	64.81	129.63	427.03	427.03	854.06	133.38	133.38	266.76	137.60	137.60	275.20

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Fully Centrally Sponsore Scheme:													
1	Post Matric Scholarship												
	S. C.	..	120.52	120.52	..	150.00	150.00	..	30.00	30.00	..	35.00	35.00
	S. T.	..	79.44	79.44	..	100.00	100.00	..	20.00	20.00	..	25.00	25.00
	Total	..	199.96	199.96	..	250.00	250.00	..	50.00	50.00	..	60.00	60.00

6.13. SOCIAL WELFARE

6.13.1. Introduction.

6.13.1.1. 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 within the frame in which plans have to be worked out and operated to identify special problems of women, children, delinquent, handicapped, destitute and beggars.

6.13.1.2. Total population of Gujarat (1971) is 267 lakhs, of these women are 129 lakhs, 10.26 women are retained as workers participating in various economic activities. Women employed as agricultural labourers, mining and quarrying, forestry, construction and other hazardous and arduous activities which 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 unorganised sector of industries, casual labour and petty self-employment also face various hardships.

6.13.1.3. Over the years, participation of women in economic activities has declined due to steady enrolment of girls in primary and secondary education, as well as improvement of economic sectors of the upper state of society whose members stand to withdraw their active manpower from economic activities.

6.13.1.4. The programmes under the 'Social Welfare' mainly cover the destitutes and delinquent children, afflicted young girls and women, beggars, physically handicapped and young offenders. Measures are directed to provide relief and succour to these 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. Although the Government runs a few important and specialised services requiring delicate techniques and involving substantial outlays, much of the field work is done by the voluntary sector under the Government's guidance and financial assistance. The activities under this sub-sector cover educational and propaganda work on prohibition also.

6.13.3. Review.

Child Welfare

6.13.2.1. Under the Child Welfare Programmes there are 22 Remand Homes/Observation Homes, 6 Certified Schools, 3 Founding Homes, 15 Juvenile Guidance Centres, one Mental Hygiene Clinic and 21 person Institutions in the State. Under the non-institutional programme a pilot project for the eradication of juvenile beggary and prevention of delinquency has been set up in Ahmedabad. The state is running 21 Family and Child welfare projects, through the State Social Welfare Advisory Board. Also 7 Border Area Projects are run on grant-in-aid basis. In addition to 57 Balwadies on grant-in-aid basis during IYC year and 215 more balwadies have been started. 16 Voluntary Organisations have accepted the programme for the care and protection of destitute Children. 1 Day care Centre (Creche) has been started in Multi-storeyed building on grant in aid basis.

Women Welfare

6.13.2.2. Under the programme of Women Welfare, there are 3 State Homes for women, 6 Reception Centres and 14 family counselling Centres, 9 Preventive and Rescue Institutions and 1 more Reception Centre has been started in the tribal area at Vandsa, District Valsad. 58 Mahila Mandals are run on grant-in-aid basis through State Social Welfare Advisory Board. Under the Centrally Sponsored Scheme for the training Centre for Rehabilitation of women in distress 2 institutions have accepted the training programme for women in printing press, tailoring and ready-made Garments. Similar training-cum-production centre for paper making, Carpet preparing, printing press and tailoring have been started for women and children at Morbi from the assistance of Central Government.

6.13.2.3. 7 working women's hostels have been started with the assistance of Central Government through Voluntary Organisations. The buildings for 3 more Hospitals are in progress. The scheme of financial assistance to destitute women for their Rehabilitation has been introduced in the year 1979-80.

Welfare of the Handicapped

6.13.2.4. Under the programme of welfare of the Physically Handicapped, 59 Institutions are run in the State. Out of which 22 are for Blind, 19 for Deaf-Dumb, 11 for Mentally Retarded and 7 for Crippled Children. 1 special Employment Exchange for physically handicapped at Ahmedabad in helping the handicapped persons to find out suitable employment.

6.13.2.5. Physically Handicapped students are awarded scholarships. During the last two years, i.e. 1978-79 and 1979-80 the State has sanctioned scholarships to 2488 students studying upto the eight standard and for higher studies scholarships from the Central Government funds have been distributed to 1889 students.

6.13.2.6. Prosthetic aid is given to the physically handicapped persons. During the last two years 380 physically handicapped persons have been granted financial assistance for purpose of artificial limbs, crutches, tricycles, etc.

Youthful and Adult Offenders.

6.13.2.7. Under this programme 17 Chief Probation Officers and 41 District Probation Officers are working under the Probation of Offenders Act. 3 Welfare Officers and 1 liaison Officer are working for the welfare of prisoners.

Beggars Homes

6.13.2.8. Under the rehabilitation programme for Beggars there are 5 Receiving Centres and 2 Detention Homes, one for Males and other for Females; 4 specialised Institutions for the Mentally sick and leprosy patients are functioning in the State.

Welfare of Poor and Destitutes

6.13.2.9. Under the programme of welfare of poor and destitute scholarships are given to destitute Children to continue higher studies, and the released prisoners or their dependent are given financial aid for starting small trades.

Under the new scheme of Financial Assistance to old and physically handicapped destitutes about 18,000 old destitutes have been sanctioned financial assistance for maintenance at the rate of Rs. 30/- p.m. Popularly

known as Old Age Pension. Grant-in-aid is also paid for the expansion and for starting new services to the registered Voluntary Organisations.

6.13.2.10. The construction programme for 11 buildings of Government Institutions for children, and women have been undertaken through B&CD.

International Year for the Child Programme

6.13.2.11. Under the I.Y.C. Programme the activities of Children Welfare Centres, Bal-Bhavans have been initiated on grant-in-aid basis. The services in the Government Institutions have been strengthened and the Voluntary Institutions have been given suitable assistance for the better services in the Institutions.

Approach

6.12.3.

6.12.3.1. The programme for the period 1980-85 have 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 programmes for women and children. In order to assist women to become self-reliant through self-employment it is proposed to establish a Women's Economic Development Organisation in the State. Provision is made for the care and rehabilitation of the orphans and for the effective implementation of the Children Act as well as the probation of Offenders Act. In view of the strategy new adopted in the field of Social Welfare for the betterment of the weaker sections, suitable new schemes are also proposed to be taken up.

6.12.4. Programme for 1980-85 and 1981-82

6.13.4.1. An amount of Rs. 600.00 lakhs has been proposed for the Sixth Five Year Plan, 1980-85 and an amount of Rs. 180.00 lakhs has been proposed for 1981-82, for implementing the different programmes under this sub-sector as under :—

(Rs. in lakhs)

Sr. No.	Programme	1980-81		1980-85		1981-82	
		Outlay	Anticipated Expenditure	Outlay	Outlay	Outlay	Outlay
1	2	3	4	5	6	7	8
1.	Direction and Administration	1.74	1.74	10.00		3.50	
2.	Family and Child Welfare	35.50	36.05	226.00		81.45	
3.	Education and Welfare of Physically Handicapped	4.61	8.56	101.00		33.55	
4.	Correctional Services	4.55	5.55	51.00		15.50	
5.	Welfare of Poor and Destitutes	0.90	0.90	8.00		2.00	
6.	Grant-in-aid to Voluntary Organisations	0.50	5.00	50.00		13.00	
7.	Other schemes of Social Defence	12.20	12.20	84.00		18.00	
8.	Prohibition	10.00	10.00	70.00		13.00	
	Total	70.00	80.00	600.00		180.00	

Direction and Administration

6.13.4.2. The various programmes are implemented through Directorate of Social Defence. During the last 10 years the activities have been expanded. It is therefore proposed to strengthen the administrative machinery at State level. In order to co-ordinate the women welfare programmes and to implement news services, a women's Bureau has been suggested at head-quarters. The department is disbursing scholarships to physically handicapped children. State scholarship is for students upto VIII std. and the Government of India scholarship is from the IX std. upto higher education. A scholarship cell at head-quarter is proposed. Similarly, it is proposed to establish a Monitoring Unit for effective feed back of the programme. Provision is also suggested to organise seminars for the IYC and IYDP programmes. An outlay of Rs. 10.00 lakhs is proposed for the year 1980-85 for this programme. A provision of Rs. 3.50 lakhs is also due proposed for 1981-82.

Family and Child Welfare.

Child Welfare

6.13.4.3. Under the sub-sector, the provision for 50% State share has been made for the centrally sponsored Schemes viz. Services for children in need of care and protection. The programme of holiday homes for children of Government Institution, Balwadies in Urban Slum, rural and tribal area, setting up of a day-care centre (Creche) for working women in Government building-office, complex one new Mental Hygiene Clinic and Children's Centre will be continued, during the Plan period. It is also proposed to create more posts of Child Marriage Prevention Officers in addition to six existing posts and to redesignate them as District Social Defence Officers to cover up all the districts and to strengthen the implementation of child Marriage Prevention Act and other Social legislative districts and to strengthen the implementation of child viz. children Act P.O. Act, Prevention and Begging Act etc. It is also proposed to provide vehicle at Mental Hygienic clinic, Ahmedabad for mentally retarded children attending clinic or special agencies for day school training.

Women Welfare.

6.13.4.4 In 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 earn a new trade of their area. It is proposed to organise about 20 Mahila Mandals every year and through these Mahila Mandals the

economic programme will be organised. Through the training centres, destitute widows will be assisted to become self reliant by sanctioning them the financial assistance for maintenance of themselves and 2 dependent children and will be given a stipend during the training period. To co-ordinate and to implement new programmes for the economic developments, it is proposed to establish a Women's Development Organisation. In order to make an impact of the problems 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 pregnant mothers will be covered from landless labourers and hard workers etc. living below the poverty line. It is also proposed for the formation of women association at taluka level and assistance in the area development programme with the help of social inputs. Provision is also suggested towards 25% State establishment share for working women hostels with attached day care centre.

International Year for the Child.

6.13.4.5. For implementing the I.Y.C. programme Rs. 100.00 lakhs has been proposed for 1980-85 with the proposal of an outlay of Rs. 30.00 lakhs for 1981-82. In the year 1979-80, an amount of Rs. 23.50 lakhs has been spent for the various child welfare programme. The remaining amount will be spent in a phased manner during the Plan period. The Balwadies programmes will be continued. It is proposed to implement welfare programme for children in an unorganised sector by establishing hotel boys welfare centres. It is also proposed to improve the facilities for children in Government and Voluntary institutions. The non-institutional services for Children's education, health and nutrition will be encouraged on grant-in-aid basis. An outlay Rs. 226.00 lakhs has been proposed for the above programme for 1980-85 and Rs. 81.45 lakhs for 1981-82.

Education and Welfare of Physically Handicapped

6.13.4.6. The Welfare activities which are being carried out for physically Handicapped are education, training and rehabilitation for blind, deafdumb, the orthopaedically handicapped etc. The normal activities under these programmes will be continued. It was proposed to grant unemployment allowance to educated physically handicapped but this has been taken up with the retention allowance scheme run by

Directorate of Employment and Training. It is proposed to establish one school for blind, deaf and dumb in the Tribal area and recognise new institutions serving the physically handicapped Children. The application for State scholarships to physically handicapped students and prosthetic aid to physically handicapped persons are increasing. It is proposed to revise the rate of prosthetic aid from Rs. 600/- to Rs. 1000/- per case. Provision has been made to develop training programme in the existing schools and institutions for physically handicapped. Programmes for building construction of girls unit has also been suggested. Similarly the number of Voluntary institutions serving the physically handicapped children have been increased and a provision has been made with a high allocation in the institutional and non-institutional grant-in-aid programme to cover up all the needy children during I.Y.D.P. It is proposed for setting up an organisation for implementing I.Y.D.P. Programme. Provisions for two centrally sponsored schemes namely integrated education for physically Handicapped children and special employment exchange for Physically handicapped persons at Surat, Vadodara and Rajkot has been made to meet the 50% share of the State Govt. An outlay of Rs. 101.00 lakhs has been proposed for the programme of welfare of handicapped during the 1980-85 Plan period with an outlay of Rs. 33.55 lakhs proposed for 1981-82.

Correctional Services

6.13.4.7. The programmes which have been undertaken from 1978-79 onwards namely expansion of services for children under the children Act, one Reception Centre in Tribal area, Rehabilitation programme for beggars and implementation of the National Policy for children and children's Board will be continued during the plan period. It is proposed to provide vehicles at R.C. for beggars for effective implementation of Beggars Act. An outlay of Rs. 51-00 lakhs has been proposed for the programme during the plan period. It is proposed to provide training programme for children working as child labour.

Welfare of Poor and Destitutes

6.13.4.8. Under this programme, the orphan children are given scholarships for higher studies, the released prisoners of their dependents are given financial aid for their rehabilitation. This programme will be continued. The provision for granting Financial assistance to old and physically handicapped the destitutes (Old Age pension) and Antyodaya pension will be made from Antyodaya programme (Non Plan)

and so no provision has been suggested in this programme. It is proposed to support the destitute girls for the rehabilitation in marriage by giving aid of Rs. 1000 instead of Rs. 600 for household equipments and Rs. 3000 $\frac{3}{4}$ - in the form of National saving certificates. The provision of Rs. 8.00 lakhs has been suggested.

Grant-in-aid to Voluntary Organisations

6.13.4.9. The programme has been suggested for the expansion of existing services and starting new services through voluntary organisation. The rate of grant towards diet charges of the inmates in voluntary Institutions has been raised from Rs. 55/- p.m. to Rs. 75/- p.m. per inmate. It is also proposed to sanction grant to voluntary Organisations for the construction and repairs and renovation of Buildings for better amenities to children.

Other Schemes of Social Defence

6.13.4.10. The probation services provided to the courts for the work under the Probation of offenders Act, needs expansion at Taluka places. It is proposed to provide services of probation officers at the Taluka level courts and social defence services through co-ordinators at hospital or at special service agencies with supervisory posts at the State level. Under the building programme the construction of 11 buildings which are in progress will be continued so that the living conditions of the inmates in the existing homes will be improved. It is also proposed to take important new works of the women's institutions and providing essential services in the institutions during the Plan period. An outlay of Rs. 84-00 lakhs has been proposed for the programme.

Prohibition.

6.13.4.11. Under the programme of prohibition, it is proposed to undertake intensive prohibition drive in the Industrial cities of Ahmedabad, Vadodara and Surat and in the round about periphery of 25 kms. there of and the coastal area of Amreli and Junagadh Districts. Moreover subsidies has been provided to Bhajan Mandlies, Yuvak Mandals and Mahila Mandals, who carry out prohibition propaganda. It is also proposed to start new Sanskar Kendras in the State. A special squad for vigilance and intelligence in the Directorate is also established. An amount of Rs. 70-00 lakhs has been proposed in the Five Year Plan 1980-85 for this purpose. It is proposed to link this programme with other on going programme and others for improvement for more impact where incidence of offences is materially high.

STATEMENT—I

Draft Sixth Five Year Plan 1980-85 and Annual plan 1981-82

Development Schemes/Projects (Minor Heads) Outlays and Expenditure

Social Welfare :

(Rs. in lakhs)

Sr. No.	Name of the Schemes/ Projects (Minor Heads)	1979-80 Actuals	1980-81		1980-85		1981-82		
			Approved Outlay	Antici- pated expenditure	Proposed Outlay	Capital content	Proposed Outlay	Capital content	
1	2	3	4	5	6	7	8	9	
1.	Direction and Administration	0.65	1.74	1.74	10.00	..	3.50	..	
2.	Family and Child Welfare	1.49	35.50	36.05	226.00	..	81.45	..	
3.	Education and Welfare of Handicapped	9.11	4.61	8.56	101.00	15.00	33.55	5.00	
4.	Correctional Services	3.65	4.55	5.55	51.00	..	15.50	..	
5.	Welfare of Poor and Destitute	0.55	0.90	0.90	8.00	..	2.00	..	
6.	Grant to Voluntary Organisations	0.11	0.50	5.00	50.00	..	13.00	..	
7.	Other Schemes of Social Defence	4.35	12.20	12.20	84.00	80.00	18.00	16.00	
8.	Prohibition	19.94	10.00	10.00	70.00	..	13.00	..	
	Grand Total	..	39.85 74.80**	70.00	80.00	600.00	95.00	180.00	21.00
			114.65						

**Financial Assistance to old and physically handicapped destitutes transferred to non-plan.

STATEMENT—III

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Schemewise outlays and Expenditure

(Rs. In lakhs)

Social Welfare

Sr. No.	Name and Number of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82		
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content	
1	2	3	4	5	6	7	8	9	
I. Direction and Administration									
1.	SCW-1	Strengthening of administrative machinery at State level	0.31	0.43	0.43	4.05	..	0.77	..
2.	SCW-2	Training, Research and Seminar in the field of Social Welfare	0.43	0.42	0.42	2.05	..	1.43	..
3.	SCW-2A	Establishment of Women's Bureau (Cell)	..	0.35	0.35	1.55	..	0.50	..
4.	SCW-4	Establishment of Scholarship Cell Head Quarters	..	0.29	0.29	1.10	..	0.50	..
5.	SCW-5	Monitoring Unit for Development Programme	..	0.25	0.25	1.25	..	0.30	..
Total—I ..			0.65	1.74	1.74	10.00	..	3.50	..
Family and Child Welfare									
(i) Child Welfare									
6.	SCW-6	Services for children in need of care and protection (CSP)	..	1.50	1.50	3.00	..	2.00	..
7.	SCW-7	Juvenile Guidance Centre	..	..	..	..	..	..	..
8.	SCW-8	Holiday Homes for Children	..	0.20	0.20	3.00	..	1.20	..
9.	SCW-9	Development programme for child Welfare Balwadise etc.	1.35	0.50	1.05	5.50	..	4.00	..
10.	SCW-10	Setting up of day care Centres & Creches for working women	..	0.10	0.10	7.00	..	1.00	..
11.	SCW-11	Setting up of Machinery for Implementation of Social Legislation & Social Reforms	..	0.30	0.30	4.00	..	2.00	..
12.	SCW-12	Setting up of Mental Hygiene Clinic for Problematic children and mentally retarded children	..	0.20	0.20	3.00	..	1.00	..
13.	SCW-13	Organising Children Centres	0.05	0.30	0.30	1.50	..	1.00	..
Total (i) ..			1.40	3.10	3.65	32.00	..	12.20	..
(ii) Women Welfare									
14.	SCW-14	Setting up of Socio economic Units	..	0.20	0.20	3.00	..	1.00	..
15.	SCW-15	Study of Health Problem women engaged in economic activities	..	..	..	1.00	..	0.20	..
16.	SCW-16	Grant to Mahila Mandals	..	0.10	0.10	1.50	..	0.80	..
17.	SCW-17	Establishment of Women's Development organisation	..	11.00	1.00	30.00	..	10.00	..
18.	SCW-18	Social inputs in area development programme	..	..	..	28.00	..	20.00	..

1	2	3	4	5	6	7	8	9	
19.	SCW—19	Establishment of Working Women's Hostel ..	..	..	..	5.00	..	2.00	..
20.	SCW—20	Grant of financial assistance to destitute widows for their rehabilitation ..	0.09	0.50	0.50	11.50	..	3.00	..
21.	SCW—21	Training Centre for Rehabilitation of the women in distress and working women hostel (CSP) ..	..	0.60	0.60	3.00	..	2.00	..
22.	SCW—22	Grant to taluka Panchayat for formation of women association ..	..	..	..	1.00	..	0.25	..
Total..			0.09	2.40	2.40	84.00	..	39.25	..
23.	SCW—23	International year of the Child ..	..	30.00	30.00	110.00	..	30.00	..
Total—II, (i) (ii) and (iii) ..			1.49	35.50	36.50	226.00	..	81.45	..
III. Education and Welfare of Handicapped									
24.	SCW—24	Establishment of one School for Blind, Deaf & Mute. children ..	0.02	0.50	0.50	3.00	..	0.50	..
25.	SCW—25	Scholarship to Physically Handicapped students ..	2.34	0.50	1.50	20.00	..	3.00	..
26.	SCW—26	Prosthetic aid and other relief to Physically Handicapped ..	0.40	0.50	0.50	8.00	..	2.00	..
27.	SCW—27	Expansion and improvement of facilities in existing Institutions and Schools for Physically Handicapped. State level committee for IYDP ..	0.55	0.45	0.45	6.00	..	2.00	..
28.	SCW—28	Setting up of organisation for celebrating IYDP Programme ..	..	..	..	4.00	..	1.00	..
29.	SCW—29	Grant in aid under the scheme of Welfare of Physically Handicapped ..	5.33	0.76	3.71	40.00	..	18.75	..
30.	SCW—30	Integrated education for Physically Handicapped Children (C.S.P.) ..	..	0.10	0.10	1.00	..	0.50	..
31.	SCW—31	Provision for Building for new and existing institution, Services ..	0.47	1.30	1.30	15.00	15.00	5.00	5.00
32.	SCW—32	Special Employment Exchange for Physically Handicapped persons (CSP) ..	..	0.50	0.50	4.00	..	0.80	..
Total—III			9.11	4.61	8.56	101.00	15.00	33.55	5.00
(iv) Correctional Services									
33.	SCW—33	Establishment of an Institution under children Act and expansion of Institution Services ..	..	0.10	0.10	8.00	..	3.00	..
34.	SCW—34	Programme for Children Working as child labourer ..	..	..	..	7.00	..	5.50	..
35.	SCW—35	Establishment and expansion of Institution and new services under S.I.T.Act. ..	0.25	0.45	0.45	5.70	..	1.00	..
36.	SCW—36	Rehabilitation Programme for leper beggars ..	3.40	3.00	4.00	21.50	..	5.00	..
37.	SCW—37	Implementation of National Policy for Children and establishment of Children's Board ..	..	1.00	1.00	8.80	..	1.00	..
Total—IV			3.65	4.55	5.55	51.00	..	15.50	..

STATEMENT—III—(contd.)

1	2	3	4	5	6	7	8	9	
(v) Welfare of Poor and Destitute.—									
38.	SCW—38	After care and rehabilitation programme for orphans and persons released from Correctional and Non-Correctional Institutions ..	0.55	0.60	0.60	6.00	..	1.50	..
39.	SCW—39	Aid to victims and their dependents, in murder cases ..	..	0.30	0.30	2.00	..	0.50	..
		Total—V	0.55	0.90	0.90	8.00	..	1.00	..
(vi) Grant to voluntary Organisations									
40.	SCW—40	Grant to Voluntary Organisation for expansion of existing services and for starting new services ..	0.11	0.50	5.00	40.00	..	10.00	..
41.	SCW—41	Grant to Voluntary Organisations towards construction repairs and renovation of buildings ..	..	..	..	10.00	..	3.00	..
		Total—VI	0.11	0.50	5.00	50.00	..	13.00	..
(vii) Other schemes of Social Defence									
42.	SCW—42	Expansion of Probation and Other Social Services under P. O. Act. ..	..	1.00	1.00	4.00	..	2.00	..
43.	SCW—43	Provision for Building Programmes of new and existing homes ..	4.35	11.20	11.20	80.00	80.00	16.00	16.00
		Total—VII	4.35	12.20	12.20	84.00	80.00	18.00	16.00
(viii) Prohibition									
44.	SCW—44	Intensive Prohibition drive in the Selected areas of the State.	0.21	..	..	20.81	..	..	..
45.	SCW—45	Starting of new Nashabandhi Sanskar Kendras ..	2.79	3.15	3.15	10.32	..	3.60	..
46.	SCW—46	Subsidies to Bhajan Mandlies ..	2.06	11.83	1.83	..	..	2.02	..
47.	SCW—47	Vigilance and Prohibition intelligence squad ..	0.79	1.67	1.67	11.28	..	2.33	..
48.	SCW—48	Appointment of 184 Taluka Nashabandhi Niyojaks ..	8.68	..	..	..	..	..	..
49.	SCW—49	Celebration of Children year ..	0.42	..	..	..	..	..	..
50.	SCW—50	Arrangement for State Level Shibir and Sammelans ..	2.19	..	..	..	..	..	..
51.	SCW—51	Creation of additional posts for planschemes ..	0.15	0.20	0.20	..	..	..	..
52.	SCW—52	Subsidies to Yuvak Mandals and Mahila Mandals ..	2.65	3.15	3.15	15.88	..	3.01	..
53.	SCW—53	Intensive prohibition drive in the coastal area and the periphery of 25 Kms. in and around Industrial towns like Ahmedabad Vadodara, Surat and Junagadh etc. ..	..	..	..	11.64	..	2.04	..
		Total—VIII	19.84	10.00	10.00	70.00	..	13.00	..
		GRAND TOTAL	39.85	74.80*					
			114.65	70.00	80.00	600.00	95.00	180.00	21.00

*Financial Assistance to old and physically handicapped destitutes transferred to Non-Plan.

STATEMENT—III

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82

Centrally Sponsored Schemes—Outlays

Social Welfare

Sr. No.	Name of the scheme	1979-80 Actuals			1980-85 outlay proposed			1980-81 outlay			1981-82 outlay proposed		
		State	Central	Total	State	Central	Total	State	Central	Total	State	Central	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Services for Children in need of care and protection. (Welfare of Destitute Children) ..	1.64	1.64	3.28	8.00	8.00	16.00	1.50	1.50	3.00	2.00	2.00	4.00
2	Scheme for the Welfare of Destitute Women in distress (Training Centre for Rehabilitation of women in distress) ..	..	..	..	8.00	8.00	16.00	0.60	0.60	1.20	2.00	2.00	4.00
3	Establishment of working women hostel ..	..	..	..	5.00	5.00	10.00	..	..	..	2.00	2.00	4.00
4	Integrated education of handicapped children ..	..	..	..	1.00	1.00	2.00	0.10	0.10	0.20	0.50	0.50	1.00
5	Special employment exchange for Physically handicapped persons ..	..	..	..	4.00	4.00	8.00	0.50	0.50	1.00	0.80	0.80	1.60
	Total..	1.64	1.64	3.28	26.00	26.00	52.00	2.70	2.70	5.40	7.30	7.30	14.60

6.14. Information and publicity.

6.14.1. Nature and Scope of Development activities

6.14.1.1. Communication in the context of development programmes has to function in relation to actual events, policies and programmes before itself. It is an extremely live subject. The press, for example, not merely informs and educates, but it is also the inspector of public affairs and the custodian of people's rights. The electronics as well as the audiovisual, traditional and print media affect the minds of people so intimately that through them the people almost sense, as it were a feeling of actual participation in national affairs.

6.14.1.2. The activities of the mass media follow closely the developments in various fields, informing people, reacting to policies and creating a social climate, in which development and nation-building programmes take place. They can not operate in a social and political vacuum, nor they deal with philosophies. Mass media are every day dealing with problems that affect the destiny of the nation and in the wider contexts of humanity as whole.

6.14.1.3. In a process of social change, information has to play a very vital role in bringing about

intelligible participation in the decision making. It is, therefore, imperative that in the formulation of communication schemes and programmes, the basic approach should necessarily aim at providing the minimum facilities to the areas which are backward and the areas which need special treatment in the provision of information services.

6.14.1.4. There is sufficient potential to implement publicity schemes in such areas of the State during the period 1980 to 1985 over and above continuing the existing schemes and expanding them.

6.14.1.5. The broad objectives of the publicity schemes is to cover larger sections of the population such as factory workers, students, agriculturists, residents in rural areas and such other sections for whom a special treatment will be provided. Thus, it is proposed: (i) to select the most suitable areas for different regions and programmes and (ii) formulation of the schemes for the preparation of publicity material for the general resume of the development programmes.

6.14.1.6. Programme for Sixth Plan 1980-85 and Annual Plan 1981-82:—

The scheme-wise outlays are as under:—

Sr. No.	Name of Scheme	1979-80 actuals	Approved outlay 1980-81	Anti. Expendr. 1980-81	Proposed outlay 1981-82	Proposed outlay 1980-85
1	2	3	4	5	6	7
1	Rural Broad casting					
(i)	Establishment of T. V. Centres	3.23	4.47	4.47	24.00	46.00
(ii)	Exhibitions	0.28	1.00	1.00	1.50	9.00
(iii)	Development of Film section and Film Libraries	0.52	1.00	1.00	1.00	5.00
(iv)	Field publicity and coverage of tribal areas	0.72	1.50	1.50	1.80	9.50
2.	Strengthening of Information Offices	0.21	0.53	0.53	2.19	16.50
3.	Building of Publicity Officers	3.70	1.50	1.50	4.51	14.00
	Total	8.66	10.00	10.00	35.00	100.00

6.14.2. Rural Broad-casting and T.V. Centres.

policies and progress of Government on different subjects like rural development, family welfare, agriculture, animal husbandry, sanitation, etc.

6.14.2.1. 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 regarding the

6.14.2.2. There are 18275 village in our State and out of the above only 7864 villages are covered under community T.V. viewing scheme upto 31-3-1980.

During 1979-80 278 Radio sets and 25 T.V. sets were installed against the target 250 radio and 25 T.V. sets. During the year 1980-81 it is proposed to instal about 600 community radio sets and 25 TV sets. The radio sets and TV sets are installed and maintained on contributory basis in the villages. In 1981-82 it is proposed to install 300 Radio and 25 TV sets.

6.14.2.3. During the Sixth Plan it is proposed to install 1200 community Radio sets and 300 T.V. sets. Out of the above it is proposed to install about 800 radio sets in tribal area, economically backward areas and in villages where population is more than 25% of scheduled caste and the remaining 400 radio sets in the villages of the other part of the State.

6.14.2.4. During the Plan period a High Power T.V. Transmitter is to be installed by the end of year 1982-83. 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 for this purpose. An outlay of Rs. 46,00 lakhs and Rs. 24.00 lakhs has been proposed for the Plan 1980-85 and 1981-82 respectively.

6.14.3. Exhibition.

6.14.3.1. Among the visual media exhibition 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 of 1980-85.

6.14.3.2. These units will move even in the remote the 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's levels. Exhibitions will be so equipped that the schemes and programmes formulated and being implemented for the uplift of the volunerable groups are effectively and properly depicted. Provisions of Rs. 9.00 lakhs and Rs. 1.50 lakhs is proposed for the Plan 1980-85 and 1981-82.

6.14.4. Development of Film section and Film libraries.

6.14.4. A scheme of expansion of film unit by providing films and opening of film libraries is continued during 1980-81 and an amount of Rs. 1.00 lakhs is provided. It is proposed to expand the existing equipment film unit by providing additional least cameras and technical services, scripts writers

seanarist, etc., so that documentaries on plan progress as well as feature sequences for the news-reels could be produced effectively. Latest machinery, equipment, raw-stock, etc., will be required for improving the standard of film. In order to make film distribution more effective n the districts it is proposed to provide prints of Films on loans to other departments, private agencies, schools, colleges, etc. It is proposed to open five film libraries in the State and one such central film library at the capital. This will meet the demand of films at district level as most of the educational institutions have audio-visual equipments. Provision of Rs. 5.00 lakhs and Rs. 1.00 lakh is proposed for the Plan 1980-85 and 1981-82 respectively.

6.14.5. Field Publicity and Coverage of tribal areas.

6.14.5.1. News reels, documentries as well as educative and tranjng films play a vital role in field publicity and public relations and therefore fuller utilisation of this media is a matter of prime importance perticularly in the tribal areas.

6.14.5.2. To achieve the objective a publicity van equipped with one projector, generator, films, allied equipment and publicity litedature, will tour in tribal areas of the respective districts of the State. Two information Centres are also proposed to be established in tribal areas.

6.14.5.3. In order to implement various schemes proposed in the plan, it would be necessary to strengthen infodmation offices at the Head quarters 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.

6.14.5.4. It is also proposed to equip the information offices with the following facilities:—

1. Uptodate and mordern press-room
2. Film Auditorium
3. Reading Room
4. Enquiry desk
5. Educational Bureau
6. Reference Library
7. Research gallery
8. Exhibition Units

6.14.6.5. In this regard, a provision of Rs. 16.50 lakhs and Rs. 2.19 lakhs is proposed for the plan 1980-85 and 1981-82 respectively.

6.14.5.6. The work of construction of two office building at Amreli and Himatnagar is in progress. For completion of these work an amount of Rs. 1.50 lakhs has been provided during 1980-81. During the Plan 1980-85 it is proposed to construct three more office buildings for District Offices with such facilities.

STATEMENT

Draft Sixth Five Year Plan 1980-85 and Annual Plan 1981-82 ,

Schemewise outlay and expenditure

Information and Publicity :

(Rs. in lakhs)

Sr. No.	Number and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed outlay	Capital content	Proposed outlay	Capital content
1	2	3	4	5	6	7	8	9
1.	PUB-1.							
	(i) Rural Broadcasting ..	3.23	4.47	4.47	46.00	..	24.00	..
	(ii) Exhibitions ..	0.28	1.00	1.00	9.00	..	1.50	..
	(iii) Development of film section and film libraries ..	0.52	1.00	1.00	5.00	..	1.00	..
	(iv) Field Publicity and coverage of tribal area ..	0.72	1.50	1.50	9.50	..	1.80	..
2.	PUB-2 Strengthening of Information Offices	0.20	0.53	0.53	16.50	..	2.19	..
3.	PUB-3 Building of Information Offices ..	3.70	1.50	1.50	14.00	14.00	4.51	4.51
		8.66	10.00	10.00	100.00	14.00	35.00	4.51

6.15. STATISTICS

6.15.1 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 detail 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.

6.15.2. Review

6.15.2.1. 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 level, 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.

6.15.2.2. In 1977-78, an economic census was conducted throughout the State of establishments in the non-agricultural sector under the Central plan scheme of Economic Census and Surveys; this was followed in 1978-79, 1979-80, by sample surveys of different segments of the unorganised non-agricultural sector to provide information on investment, employment, incomes, input, output, etc.

6.15.2.3. A project is taken up in 1979-80 for the preparation of a Planning Atlas for the compendious and graphic presentation of socio-economic indicators in respect of homogeneous sub-regions of the State.

6.15.2.4. A Training Division is established in the Bureau of Economics and Statistics in 1979-80 to cope 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.

6.15.3. Programme : 1980-85/1981-82

6.15.3.1. The major objectives of the programme for 1980-85 are:—

- (a) to enhance capability for the collection and processing of data at the level both of the State and of the district;
- (b) to make available in respect of sub-regions of the State reliable disaggregated information on socio-economic indicators;
- (c) to increase the availability of specialist studies on various aspects of socio-economic development in the State.

The following table presents an activity-wise break-up of the outlays for the programme (1980-85: Rs. 300.00 lakhs; 1981-82 : Rs. 30.00 lakhs).

	(Rs. in lakhs)	
	Plan 1980-85	Plan 1981-82
1. Strengthening of EDP Capability	107.00	2.70
2. Conduct of surveys, analyses research and evaluation studies (including compilation of Regional Accounts)	33.40	6.15
3. Strengthening of machinery at district level for data collection, project planning and evaluation	54.06	9.44
4. Training	9.54	1.78
5. Other expenditure	96.00	9.93
Total	300.00	30.00

Strengthening of EDP Capability

6.15.3.2. 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.

Surveys, Analysis, Research and Evaluation Studies

6.15.3.3. 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 (10) posts, including one junior Duty Class-I post) for the initiation of the necessary studies and analysis; an outlay of Rs. 2.15 Lakhs is proposed for the purpose in the programme for 1980-85.

6.15.3.4. 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 (1980-85/1981-82 outlay : Rs. 4.00 lakhs/Rs. 1.00 lakh).

6.15.3.5. Additional establishment was created in 1979-80 for the development of improved social statistics from data collected through various census, surveys, etc. This establishment is proposed to be continued and strengthened during the Plan period (1980-85/1981-82 outlay : Rs. 6.00 lakhs/Rs. 1.00 lakh); and may be entrusted, in addition, with analyses for the purpose of comparisons between Gujarat and other States in the country) of data made available by such agencies as the Reserve Bank of India, the National Sample Survey Organisation, etc.

6.15.3.6. The continuance is proposed also:—

(a) of 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 successive plan periods (1980-85/1981-82 outlay : Rs. 5.50 lakhs/Rs. 1.05 lakh);

(b) of the task force created in the Directorate for field inquiries forming part of evaluation studies (1980-85//1981-82 outlay : Rs. 5.75 lakhs/Rs. 1.10 lakh);

(c) of the scheme of financial assistance to professional/academic institutions for undertaking socio-economic surveys and special studies of use in the planning process (1980-85/1981-82 outlay : Rs. 10.00 lakhs/Rs. 2.00 lakhs).

Strengthening of Machinery at district level

6.15.3.7. The increased devolution 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 (in, for instance, special programme for rural development and the Tribal Area Sub-Plan) require a much higher level of capability than 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.

6.15.3.8. Under a Central sector programme, a district Project Planning Cell was established during the Fifth Plan period in District Panchmahals. The establishment of the Cell (Which works under the technical guidance of the Sardar Patel Institute of Social and Economic Research, Ahmedabad) has made for Project formulation that is realistic, effective, and consonant with local needs and resources. In view of the encouraging results of the Panchmahals experiment, a similar cell is proposed to be established in one other district under the State Plan (1980-85/1981-82 outlay : Rs. 12.43 lakhs/Rs. 2.30 lakhs).

6.15.3.9. 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 would be. Accordingly, it is 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 (1980-85 outlay : Rs. 5.88 lakhs). A post of Evaluation Officer is proposed to be created in four districts during 1981-82 to start with (outlay Rs. 0-84 lakh).

6.15.3.10. In view of the increased emphasis on district and block level planning, a scheme for the strengthening of statistical of 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 (7 posts in 1979-80 : Rs. 5 each in 1980-81, 1981-82). An outlay of Rs. 35.75 lakhs is proposed for the purpose in the 1980-85 programmes and of Rs. 6.30 lakhs in the programme for 1981-82.

6.15.3.11. 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 (12 courses annually, with an average of 40 participants/course) with modern equipment and teaching aids, and, as a supportive measure, to improve library and research facilities in the Directorate of Evaluation (1980-85/1981-82 outlay : Rs. 2.36 lakhs Rs. 0.58 lakh).

6.15.3.12. The Training Division established in the Bureau of Economics and Statistics in 1979-80 for the training of statistical personnel and for the running of courses having reference to electronic data processing has since been transferred to the Directorate of Evaluation. The Division is proposed

to be strengthened during the plan period (1980-85/1981-82 outlay : Rs. 7.18 lakhs Rs. 1.20 lakh).

Centre for Monitoring Gujarat Economy

6.15.3.13. 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 (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 number of districts towards improving the availability of district-level data. A provision of Rs. 70.00 lakhs is made for these purposes in the 1980-85 programme; and of Rs. 6.53 lakhs in the programme for 1981-82.

Planning Atlas.

6.15.3.14. The continuance is proposed of the scheme for the strengthening of the establishment unit of the Bureau of Economics and Statistics (1980-85/1981-82 outlay : Rs. 6.00 lakhs Rs. 0.90 lakh) and of the project, initiated, in 1979-80 for the preparation of a Planning Atlas of Gujarat (1980-85/1981-82 outlay : Rs. 20.00 lakhs Rs. 2.50 lakhs).

STATEMENT—

Draft Five Year Plan 1980-85 and Annual Plan 1981-82 Schemewise Outlays and Expenditure

Statistics

(Rs in lakhs)

Sr. No.	Number and Name of the Scheme	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure	Proposed Outlay	Capital content	Proposed Outlay	Capital content
1	2	3	4	5	6	7	8	9
1. Strengthening of E.D.P. capability								
STT-1	Development of Computer centre	7.98	—	8.15	107.00	80.00	2.70	—
2. Conduct of Surveys, analysis research and evaluation studies including compilation of Regional Accounts)								
STT-2	Financial Assistance to research institutions	4.79	2.10	2.10	10.00	—	2.00	—
STT-3	Socio-Economic Research Studies and Economic Analysis of Statistical Data	0.07	1.40	1.10	6.00	—	1.00	—
STT-4	Studies for the compilation of Regional Accounts	—	—	—	2.15	—	—	—
STT-5	Strengthening of Directorate of Evaluation	0.76	1.00	1.00	9.50	—	2.05	—
STT-6	Creation of Field Task Fora in the Directorate of Evaluation	1.54	0.85	0.85	5.75	—	1.10	—
		7.16	5.35	5.05	38.40	—	6.15	—
3. Strengthening of machinery at district level for data collection project planning and evaluation								
STT-7	Strengthening of Statistical machinery at district level at District Panchayata	0.80	5.80	4.40	35.75	—	6.30	—
STT-8	Creation of District Project Planning Cell	—	2.50	1.93	12.43	—	2.30	—
STT-9	Creation of evaluation machinery at district level	—	—	—	5.88	—	0.84	—
		0.80	8.30	6.33	54.06	—	9.44	—
4. Training								
STT-10	Training Division	—	0.03	1.75	0.75	7.18	—	1.20
STT-11	Training for Planning Personnel	—	—	—	2.36	—	0.58	—
		0.03	1.75	0.75	9.54	—	1.78	—
5. Other Expenditure								
STT-12	Strengthening of administration in Bureau of Economics and Statistics	0.69	1.10	0.80	6.00	—	0.90	—
STT-13	Setting up of a Centre for Monitoring Gujarat Economy	—	5.00	5.00	70.00	20.00	6.53	—
STT-14	Preparation of Planning Atlas of Gujarat	—	0.94	2.50	2.50	20.00	—	2.50
		1.63	8.60	8.30	96.00	20.00	9.93	—
GRAND TOTAL		17.60	24.00	28.58	300.00	100.00	30.00	—

6.16. Planning Machinery

6.16.1.1. There is no separate Planning Department in the State. The Planning Division in the General Administration Department headed erst while by the Chief Secretary has been placed in charge of the Special Secretary (Planning) from 1978. This division provides general directions, looks after co-ordination of plan programme 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 Analysts Unit.
3. Perspective Planning Unit.
4. Multi-level Planning Unit.
5. Monitoring and Evaluation Unit.
6. State Planning Board Unit. (including the Office of the Vice-Chairman, State Planning Board).
7. 20-Point Economic Programme Unit.

6.16.1.2. 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. At the time of its reconstitution in June, 1977 the Minister, Planning and Finance was made its Chairman. The functions of the Board include those relating to Plan formulation, monitoring and evaluation. A few Panels and Groups were also set up to assist and advise the Board in selected fields.

6.16.1.3. The State Planning Board has now been recently 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.

6.16.1.4. Plan programme 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. 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 are implemented by the

district executive heads departments of under the direction and supervision of the Government Departments directly while the transferred schemes are implemented by the District Panchayats.

6.16.1.5. In the Draft Plan Frame prepared by the Planning Commission for the Sixth Five Year Plan (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. 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 that meaningful popular participation as also participations 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.

6.16.1.6. 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 recently i.e. on 11th September, 1980, reconstituted 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.A's, in the district, President/Mayor of one Municipality/ Corporation, President of One Nagar Panchayat, expert from a Research Institutions, 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 formulations, 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.

6.16.1.7. 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 sanctioned by Government. Each

such unit has a small technical staff and is headed by a District Planning Officer. The District Planning Officer also functions as the Member-Secretary of the District Planning Board. Steps are also being taken to bring about close co-ordination between the work of the District Statistical Office and of the District Panchayat and the District Planning Cell under the Collector.

6.16.1.8. In addition to the work relating to the formulation of long term and annual district plans of the District and monitoring of implementation of district level schemes in the district and the operationalisation of 20 percent discretionary outlay including 5% incentive outlay, for District Plans, the work of operationalising the Block Level Plans for full employment generation prepared by academic institutions and experienced voluntary agencies has been entrusted to the District Planning Units. 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.

6.16.1.9. An outlay of Rs. 25 lakhs is proposed in the Sixth Five Year Plan 1980-85 as State's share towards machinery in the Planning Division at apex level to be supplemented by the Central share of Rs. 50 lakhs, thus resulting in the total outlay of Rs. 75 lakhs for the five year period 1980-85.

6.16.1.10. An outlay of Rs. 1 lakh is proposed for the Annual Plan 1981-82 resulting total outlay of Rs. 3 lakhs in the above ratio.

6.16.2. Training of Development Personnel

6.16.2.1. 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 development 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 personal. 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.

6.16.2.2. The Sardar Patel Institute of Public Administration imparts pre-service and in-service training 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 will be 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 skill.

6.16.2.3. The institute does not have its own buildings at present. It is now proposed to construct a suitable building for the institute. Land for the building has already been acquired. The institute will also conduct research in the behavioral agencies, management techniques and district administration. It is therefore 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.

6.16.2.4. An outlay of Rs. 115.00 lakhs and Rs. 40.00 lakhs is provided in the Five Year Plan 1980-85 and Annual Plan 1981-82 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)	
	Proposed Outlay 1980-85	Proposed Outlay 1981-82
1. Training Programmes for development personnel	14.50	4.50
2. Research Cell	8.50	3.50
3. Building, Training equipments aid etc.	90.00	31.00
4. Modernisation of Library	2.50	1.00
	<hr/> 115.00	<hr/> 40.00

6.17 GUJARAT STATE CIVIL SUPPLIES CORPORATION AND CONSUMERS PROTECTION

6.17.1. Gujarat State Civil Supplies Corporation:

6.17.1.1. 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 purchases. Moreover, in the absence of such 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.

6.17.2. Approach and Strategy

6.17.2.1. The Gujarat State Civil Supplies Corporation is set up (October, 1980) primarily with a view to achieve objectives viz., Streamlining of procurement, storage and distribution of food grains and other essential commodities; strengthening public distribution system by widening products-mix of essential commodities sold through the fair price shops; 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 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.

6.17.2.2. A wide range of activities is visualised for the Civil Supplies Corporation. In the initial stages it will supplement procurement operation of the Government of India's agencies 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 prepared 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 as additional outlets will be opened. It is also expected to undertake agency for distribution of cooking gas in the first instance.

6.17.2.3. An outlay of Rs. 395 lakhs is proposed for the plan 1980-85 and Rs. 67 lakhs for 1981-82.

6.17.3. Creation of Additional Storage Capacity :

6.17.3.1. Adequate warehousing /storage facility is an important element in the strategy for building up requisite quantum of buffer stock of foodgrains and other essential commodities.

6.17.3.2. At present there is net work off nearly 412 godowns with 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 from 1.92 lakh to 2.12 lakh tonnes. The godowns will be put up in the 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. 60 lakhs is proposed for 1980-85 and Rs. 10 lakhs for 1981-82.

6.17.4 Consumers Protection.

6.17.4.1. 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 foodgrains 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.

6.17.5 Programme of Consumer Education.

6.17.5.1 A systematic programme is visualised under which a 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 & 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

6.17.6 Assistance to Consumer Protection Societies.

6.17.6.1 The third aspect of the consumer movement is encouraging formation of active consumer guidance protection societies. The grant-in-aid for these institutions would be for activities like formation of consumer libraries, organising campaigns for consumers education and the scientific study of selected products with a view to improve their quality and

Sub. National Systems

National Institute of Educational
Planning and Administration

17-B, SriAurbindo Marg, New Delhi-110016

DOC. No.....

Statement

Draft Sixth Five Year Plan 1980-85
Outlay and Expenditure :

Heads of Development

(Rs.inlakhs).

Sr. No.	Head/Sub-Head of Development.	1979-80 Actuals	1980-81		1980-85		1981-82	
			Approved outlay	Anticipated expenditure.	Proposed outlay	Capital content	Propose outlay	Capital content
1	2	3	4	5	6	7	8	9
1.1.	Public Distribution and Consumer Protection.							
	(a) Gujarat State Civil Supplies Corporation.	..	10	50	300	..	50	..
	(b) Creation of Additional Storage capacity.	..	..	10	60	..	10	..
	(c) Consumer's Protection.	..	2	25	35	..	7	..
	Total:	..	12	85	395	..	67	..

6.18. DECENTEALISED DISTRICT PLANNING

6.18.1.1. In pursuance of the accepted policy of the Government in regard to the decentralisation of the planning process and with a view to making planning at district level more effective, the District Planning Boards have been associated actively and intimately with the formulation of the District Annual Plans also from the year 1980-81. To begin with, a tentative outlay for District Plans was adopted and its distribution amongst various districts was determined with reference to objective criteria such as rural population, population of weaker sections like S.T., S.C. etc., level of development in selected sectors like agriculture, irrigation, industry, selected programmes covered under minimum needs programme. It has been decided that on an average, 35 percent of the State Plan outlay will be provided for the district plans during the period of the Five Year Plan. Of this 35 percent of outlay for district level schemes, 80 percent will be on schemes that are to be formulated in accordance with the National and State guidelines and 20 percent will be available to the District Planning Boards as discretionary outlay (including 5% incentive outlay) for schemes to be formulated with complete freedom of choice in keeping with local needs and local situation. It is this discretionary outlay that has aroused good deal of optimism among the District Planning Boards. In several districts efforts have been initiated to formulate meaningful programmes providing missing links in the existing infrastructure at the taluka level. Schemes representing urgent and local needs 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 are expected to be suggested against the discretionary and incentive outlays. It is intended that larger number of small works such as the missing culverts which can open up road communications for the villages, pipe lines for providing drinking water to the village, repairs to

pipe lines which are broken, electric connection to the colony of pucca buildings built for landless labourers on the house sites already allotted, adequate water facilities for the Primary Health Centres, etc. are expected to be taken up in a big way from the discretionary and incentive outlays. The District Planning Boards are thus expected to formulate meaningful programmes which will provide a main window to the rural poor.

6.18.1.2. An outlay of about Rs. 178 crores for district level schemes of normal plan has been provided for by the respective departments in their development sectors. In addition to this, an outlay of Rs. 28 crores has been provided for discretionary and incentive outlays for being placed at the disposal of District Planning Board during 1980-81.

6.18.1.3. 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 based on the same criteria as were adopted for the year 1980-81 have been suggested to the districts for formulating their proposals for the Five Year Plans 1980-85 and Annual Plan 1981-82.

6.18.1.4. The size of the outlays of District Plans tentatively adopted for the purpose is of the order of Rs. 1155 crores for the Five Year Plan 1980-85 and Rs. 210 crores for the Annual Plan 1981-82. These outlays are inclusive of the discretionary and incentive outlays as shown below:—

	(Rs. in crores)	
	Discretionary Outlay	Incentive Outlay
Five Year Plan 1980-85	173.00	57.00
Annual Plan 1981-82	31.50	10.50