



FOR REFERENCE ONLY

**TOWARDS  
THE EIGHTH PLAN  
1990-95  
AN APPROACH PAPER**

NIEPA DC



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**PLANNING DIVISION  
GENERAL ADMINISTRATION DEPARTMENT  
GOVERNMENT OF GUJARAT  
SACHIVALAYA, GANDHINAGAR  
MARCH, 1989**



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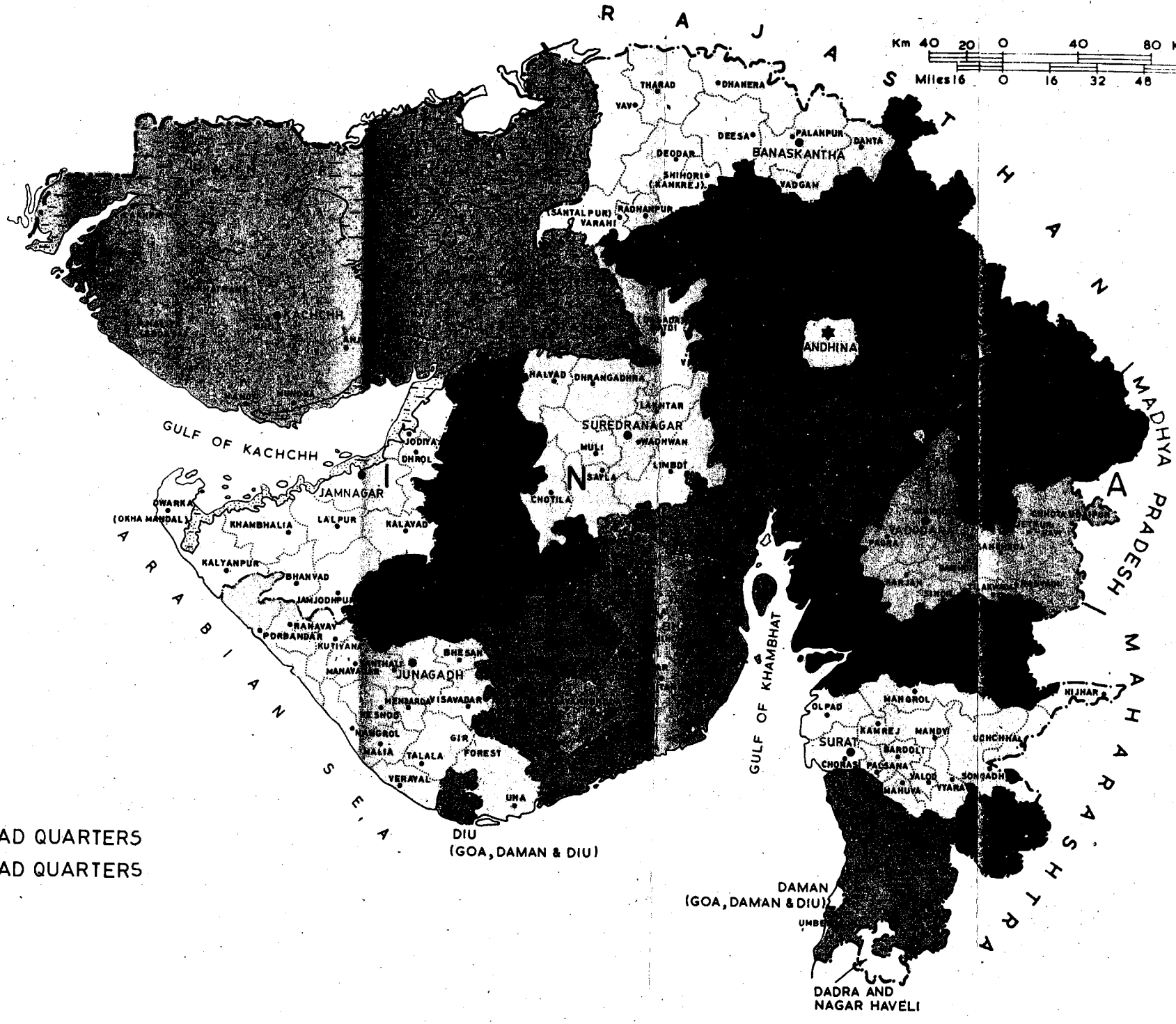
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*Note:*—The term 'lakh' (1,00,000) and 'crore' (1,00,00,000) signify 'One hundred thousand' and 'ten million' respectively. 'Abja' denotes, 1,00,00,00,000.

# GUJARAT

## ADMINISTRATIVE DIVISIONS

BOUNDARIES:  
INTERNATIONAL .....  
STATE / UNION TERRITORY .....  
DISTRICT .....  
TALUKA .....



- ★ CAPITAL
- DISTRICT HEAD QUARTERS
- TALUKA HEAD QUARTERS



## I. GENERAL APPROACH

### Introduction :

1.1. The guiding principles of Indian Planning are provided by the basic objectives of growth, modernisation, self-reliance and social justice. These basic objectives can be realised through full mobilisation of human and material resources. In the four decades of Independence a great deal has been achieved in fulfilling these objectives, and within the frame-work of these objectives each Five Year Plan involves some directional changes to take into account new constraints and new possibilities incidental to the process of planning.

1.2. The Seventh Plan emphasised policies and programmes, aiming at acceleration of growth in foodgrains production, increase in productivity and increase in employment opportunities and rise in productivity. These three immediate objectives are central to the achievement of the long term goals put forward in the development perspective for the Seventh Five Year Plan of the Country.

1.3. The approach to the Eighth Five Year Plan, 1990-95 of the State would need to synchronise with the longterm goals included in the development perspective of the National Plan. The focus of the Eighth Plan would be on acceleration of the rate of growth and the achievement of greater inter-regional and inter-personal equity. It is also of the utmost importance that basic social and community services like elementary education and primary health and family welfare become more accessible and also improved qualitatively. Overriding priority has to be given to the achievements of the targets of universalisation of elementary education and eradication of illiteracy of the adult working age population by 1995 as envisaged in the National Policy on Education. Decentralisation of educational planning and mobilisation of private and community resources will need to be seriously explored. Also, a close look needs to be had at the delivery mechanism in the area of health and family welfare with a view to achieving significant qualitative improvement in this area.

1.4. At the National level, more specifically, the Eighth Plan will have to pay particular attention to the following.

- Meeting a defined basket of essential needs in an acceptable time frame;
- Reducing the rate of population growth;
- Generating productive employment on a much larger scale;
- Using human resource development more effectively for these purposes;
- Using decentralised planning for ensuring relevance and involving people in the process of development;
- Giving priority to productive efficiency and application of science and technology in all sectors;
- Reaching a position of inter-national leadership and inter-national competitiveness in selected sectors, and
- Conserving and enhancing the resource base for development with a special emphasis on afforestation and optimum land and water use.

1.5. While the above issues are central elements in the development strategy of the Eighth Plan, specific objectives which should be kept in the forefront while formulating the Eighth Plan of Gujarat State are set on the basis of the levels of development attained, lags and the critical issues facing various sectors of the Gujarat economy. A macro review of the State economy dealing with the strength and weaknesses of the economy, level of achievements and potential created is given below. This is followed by a broad outline of the strategies and policies to be adopted for formulation of development programme under various sectors of the plan.

## 2. Population and Demographic Change :

2.1. The last population census 1981 registered a population of 3.41 crores for Gujarat with a decadal growth rate of 27.7% (compared to 25.0% for the Country). (Statement 3) Gujarat has consistently recorded a higher rate of growth rate of growth than that of all India during each of the decades from 1901-1981. The annual rate of increase in State population declined from 2.6% during 1961-71 to 2.4% during 1971-81, indicating some impact of family planning programmes in arresting the expanding population. Indication of further decline in the growth rate is available from the estimates of birth and death rates from the sample registration scheme. The average annual natural increase in the population during the last five years (1982-86) estimated from the results of the sample registration scheme places the rate at 2.2%.

2.2 The Expert Committee on Population projection has placed the estimates of population of Gujarat at 4.10 crores in 1991, 4.38 crores in 1996 and 4.65 crores in 2001. In the Eighth Plan period, Gujarat will have to manage a net addition of 5.6 lakh persons every year. The net additions to the population in the age groups 15 to 59 (labour force) will be 27 lakh persons during the Eighth Plan

2.3. The sharp rise in the number of persons in the working age groups will be a dominating feature of demographic development and as such, it would be absolutely necessary that the rate of productive employment generation is accelerated substantially. While doing so, it would need to be seen that 'Stake work' practices and superfluous employment is not encouraged, in particular, in public administration, organised services, infrastructure etc., which constitute organised sector.

2.4. The growth of population has important implications for planners in social security, family welfare, maternal and child care, primary and secondary education, and those concerned with provisions of basic social amenities, employment and incomes in rural and urban areas. With 31% of its population living in urban areas, Gujarat is one of the highly urbanised State of the Country. Urban population of the State is concentrated in large sized towns. About 50% of the urban population residing in 11 cities with a population of one lakh and above. Another 17% lives in 27 towns having population between half lakh to one lakh. The rest of the urban population is spread over 217 towns. This high concentration of population in large towns has led to stress on infrastructure, civic amenities, transportation and housing.

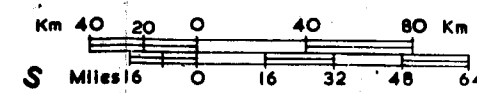
2.5. Measures for controlling high rate of growth of population of the State are growing concentration of urban populations in large cities will have to be reviewed and appropriate policy instruments and programmes initiated in the Eighth Plan. The efficiency of present range of incentives for family welfare, the effectiveness of personnel deployed exclusively for family welfare programmes, accelerating pace of literacy programmes for women may be the key elements in the new strategy. Development of small and medium towns, a deliberate policy of location of industries and Government offices away from metropolitan cities may have to be thought of. More intensive use of building plant and equipment may also have to be planned to cope with increased pressure on social services.



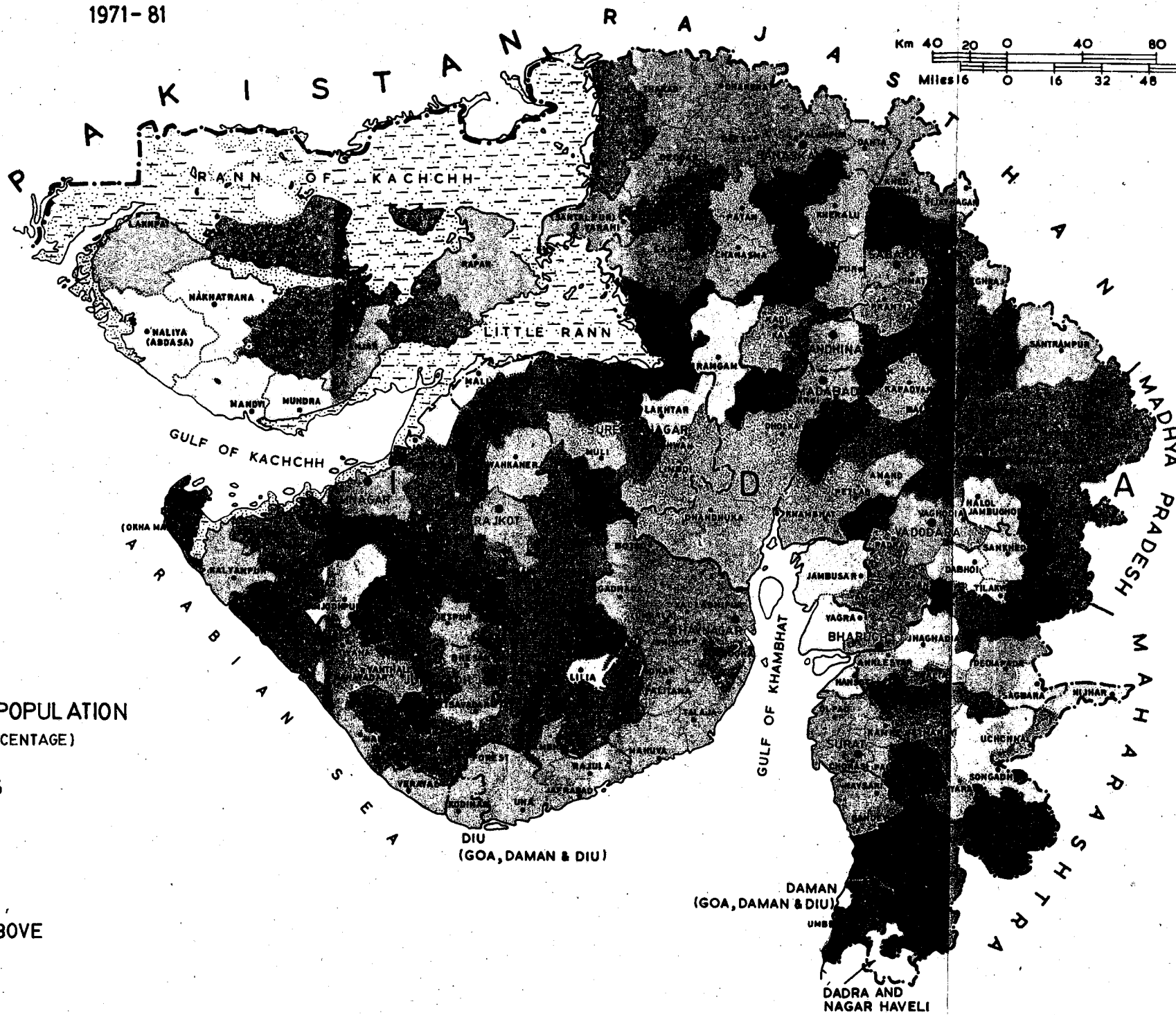
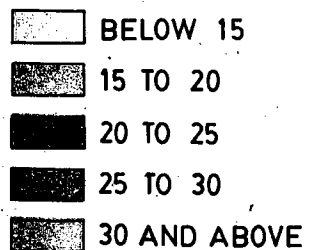
# GUJARAT

## DECENNIAL POPULATION GROWTH RATE 1971-81

BOUNDARIES:  
 INTERNATIONAL .....  
 STATE / UNION TERRITORY .....  
 DISTRICT .....  
 TALUKA .....



### TALUKAWISE POPULATION GROWTH (IN PERCENTAGE)



BASED UPON SURVEY OF INDIA MAP WITH THE PERMISSION OF THE  
 COMMISSIONER GENERAL OF INDIA.  
 TERRITORIAL WATERS OF INDIA EXTEND INTO THE SEA TO A DISTANCE OF TWELVE NAUTICAL MILES  
 FROM THE APPROPRIATE BASE LINE.  
 RESPONSIBILITY FOR THE CORRECTNESS OF INTERNAL DETAILS RESTS WITH THE PUBLISHER.



2.6. At the same time, productive work opportunities will have to be generated on a very large scale in agriculture and related activities and in village and small industries. This will require a massive effort of skill formation and technological upgradation in rural areas and small towns, in farms, artisan households and small manufacturing units. Hence, it is now an economic necessity to promote quality improvements in education, vocationalisation, training and retraining programme for workers and the reorientation of the scientific and technological infrastructure to serve the needs of rural/semi-urban areas and the unorganised sector. It will need to be assured that no person is held back from improving his lot because of the lack of education or appropriate technical skill. This aim will have to be translated into specific programmes for education, training, technology development and scientific research.

### **3. Growth and Structure of the Economy. :**

3.1. The economy of Gujarat has yet been moving through trough and peaks in recent years. The year 1984-85 was normal; it was followed by three successive drought years. The impact of drought has been severe on income and employment of a large section of rural population, in particular, the population below the poverty line. At the same time, the fact that the three successive droughts have been managed satisfactorily is an indication of the capacity achieved to neutralise, to a large extent, the impact of natural calamities, on the living standards of the people.

3.2. The State Domestic Product (SDP) of Gujarat during 1970-81 grew at an annual average rate of 4.7%, (higher than 3.6% for the Country). (Statement 7) Excluding the abnormal drought period, the trend growth rate for the recent period 1974-85 has been 5.0%, corresponding rate for the Indian Economy being 4.2%, and it is expected that with normal rainy seasons in the last two years of the Seventh Plan, an annual growth rate of about 5% should be maintained.

3.3. During the period of the Eighth Five Year Plan, it is envisaged to achieve growth rate of 6% / 6.5% in Gujarat, as it is also thought at National Level. The investment in the Eighth Plan in Gujarat shall have therefore, to be made keeping this rate of growth in view.

3.4. The structural changes are also taking place in the economy of the State. (statement 8). Agriculture and registered manufacturing sectors are the two major sectors of the State economy with percentage shares of 30 and 16 (trium ending 1984-85) respectively in the SDP. The dependence of the economy on the agriculture sector is decreasing. Yet, agriculture continues to be the key sector the performance of which, contributes significantly to fluctuations in the overall economy of the State.

3.5. The performance of the agriculture sector depends on the monsoons, and only 24% of the net area sown receives irrigation. A large proportion of area irrigated, about 77% depends on unreliable rains during drought, when irrigation is critical.

3.6. A more rapid rate of employment generation, the fulfillment of basic needs and greater emphasis on social development will require a substantial increase in the overall rate of growth of the economy. It need not be said that the rate of economic growth will depend on investment and the efficiency of new and old investment. Given the existing status of the State economy, it is felt that the rate of growth cannot be pushed in the medium term. The potential for rapid growth will depend *inter alia*, upon supplies of wage goods and infrastructure like power, in the case of which, gestation lags are such that early decisions and timely implementation are necessary.

### **4. Poverty and Employment :**

4.1. Poverty is one of the most critical of all the economic problems and what is more is that it is a continuing problem. Poverty is a barrier between

access and entitlement of the basic necessities of life of the free citizens of democratic Independent India. The first step to remove the barrier to provide gainful work to atleast one member of the poverty stricken families. The efforts in this direction in the recent years, have resulted in achievements to an extent and as yet there remains a difference between the labour force and employment, the former tending to increase significantly and the poverty profile continues to remain skewed. It will therefore be necessary to fine-tune the poverty alleviation programme, its implementation, its delivery, its reporting and its monitoring.

4.2. Removal of poverty and unemployment are the crucial components of the strategy for growth with equity. In the National perspective of development poverty is planned to be eradicated and it is aimed to achieve near full employment by the turn of the century. The Planning Commission has constituted an advisory group of poverty studies. This group is to conduct independent studies in certain specific areas especially on analysis of distribution of land and non-land assets, incidence of unemployment and levels of education and literacy. The recommendations of the group, when received, may form the basis for modifying programmes for eradication of poverty in the Eighth Five Year Plan.

4.3. Comparable estimates of incidence of poverty for the Country and State are prepared by the Planning Commission on the basis of information on household consumer expenditure collected in the quinquennial surveys conducted by the National Sample Survey Organisation (NSSO). According to the estimates of Planning Commission (*vide* statement-9) the percentage of population below the poverty line in Gujarat State in 1983-84 was 24.3. Incidence of poverty in urban areas was found relatively less (17.3%) as compared to that in rural areas (27.6%).

4.4. Precise estimates of reduction in incidence of poverty are not available. Evidence from concurrent evaluation survey conducted by independent agencies suggests that the anti-poverty programmes in Gujarat have been successful in raising the income levels of poor people in Gujarat.

4.5. Global estimates of levels of poverty do not help in identifying the specific groups in population in need of assistance in various forms for augmenting their skills and income. It is necessary to have more precise estimates of people living below the poverty line, their social and economic characteristics and to have better knowledge of the factors in their social and economic environment impeding their efforts towards increased incomes. In the context of implementation of variety of family oriented programmes, the target groups, that is, the groups wherein the poor are concentrated, have to be located. A cross sectional analysis of consumer expenditure surveys has revealed that in Gujarat the incidence of rural poverty is relatively high in Eastern hilly and Southern plains regions. Amongst occupational categories, the incidence is more severe on agricultural labourers. Poor households headed by women may be in need of special forms of assistance. Incidence of poverty is severe at lower end of the land distribution. The focus on anti-poverty programme in the Eighth Plan shall have to be sharpened for this group of people. This is especially necessary when there are many agencies at work on various facts of poverty, often leading to duplication and overlapping.

4.6. In the urban areas, anti-poverty programmes will have to be directed towards the slums where the hard-core of poor people live. Capacity of municipal areas for implementation of different schemes under the anti-poverty programmes will have to be assessed and appropriate programmes and policies will have to be decided. Special emphasis to women headed households in the slum areas need to be placed. Work sites for women workers in slum areas may have to be demarcated from the available sites.

## 5. Unemployment :

5.1. Unemployment and poverty are positively related. Measurement of unemployment and employment becomes difficult in an economy where a large percentage

of work force is engaged in agricultural activities which provide seasonal employment. Only 18% of the total labour force in Gujarat has regular wage/salaried employment according to the results of the National Sample Survey (NSS), 38th Round conducted in 1983.

5.2. The self-employed and casual wage labourers have to face intermittent spells of unemployment. These two categories of the employed (above 80% of the total labour) are not necessarily employed full time. The NSSO has published Statewise results of incidence of unemployment for the year 1983. Incidence of unemployment (measured as percentages of unemployed to total labour force) based on current week status in Gujarat has been lower than the incidence at the all India level as seen from below :

	Rural		Urban	
	Male	Female	Male	Female
Gujarat	1.06	0.96	5.78	2.33
All India	3.72	4.26	8.68	7.46

5.3. New entrants in labour force are expected to be comparatively higher as the population of Gujarat has increased at a higher rate than the Country level during the last two decades. Capacity for expanding widespread industrial sickness particularly in the textile sector has led to stagnation in job opportunities. The Employment Exchanges have about 8 lakh people seeking jobs on their live registers. Studies of demand and supply for specific skills will have to be instituted on a far wider scale to enable fine tuning of output of skill building institutions. This will help to avoid shortages of skilled persons as well as unemployment among the skilled personnel. The strategy of expanding job opportunities in the non-agricultural sectors will have to be increased rapidly. Migration of unemployed from rural areas will have to be contained by providing them jobs or opportunities for self employment in and around villages and small towns.

5.4 The proposed Jawahar Rojgar Yojana, which is expected to be taken up during the financial year 1989-90 is expected to play an important role not only in mitigating the twin problems of poverty and unemployment but also it will offer fresh opportunity for greater vitalisation of panchayats.

## 6. Minimum Needs Programmes. :

6.1. Employment and poverty alleviation programme contribute directly to generation of income, which increases the household consumption of the poor. Besides the household consumption, social consumption helps in upgradation of the living standard of the poor and weaker sections of the society. The minimum needs programme aimed to increase the living standard of weaker sections, launched during the Fifth Plan has been continued in the subsequent plans. In the Seventh Plan rural fuelwood and public distribution system have been brought under the fold of minimum needs programmes; it now includes rural roads, elementary education, adult education rural health, rural water supply, rural house sites, environment of improved slums and nutrition. Gujarat has achieved hundred per cent rural electrification before the close of the Seventh Plan. At the end of the Seventh Plan, it is expected that the State would have a length of 39917 kms. of rural roads. 5.8 lakh children would have been enrolled in Classes I to VI. There would be about 6100 rural health sub-centres and 1000 PHCs. Water supply arrangement would have been made at the end of the Seventh Plan for all villages in the State. The status of provision of other minimum amenities varies. High priority will have to be accorded to (1) achieving full cove-

rage of all the villages (ii) maintaining adequately the amenities created and (iii) utilising fully the assets so created.

## 7. Backward Area Development :

7.1. Reduction of disparities in development among different areas of the State requires accelerated development of the backward areas. This includes investment in physical and social infrastructure, development of human resources through nutrition, education and skill building programmes. So far backward areas of Gujarat are concerned, upto now the following areas have been identified by the State Government as comparatively more backward:--

1. Drought prone areas	..	43 talukas
2. Desert areas	..	9 talukas
3. Tribal areas	..	32 talukas & .. 19 pockets
4. Industrially backward areas	..	10 districts
5. Economically backward talukas	..	56 talukas
6. Geographically backward Areas	..	10 Areas
7. Coastal areas	..	1600 kms.

7.2. Attempts are being made to develop these backward areas through the implementation of appropriate programmes either sponsored by the Central Government or by the State Government. All these areas require to be developed during the period of Eighth Five Year Plan, if necessary, through the application of appropriate Science and Technology. The sectoral departments shall have to formulate appropriate plan programmes during the period of Eighth Five Year Plan for the overall development of such backward areas of the State. In the case of geographically backward areas, it will, perhaps, be necessary to involve the National Expert Institutes and International Institutes functioning in the respective fields. Sectoral departments shall have, therefore, to consider this vital aspect so that geographically backward areas which spread in more than one talukas or in certain cases more than one districts are developed in an integrated manner so as to attain the goal of balanced development of the State in respect of such areas.

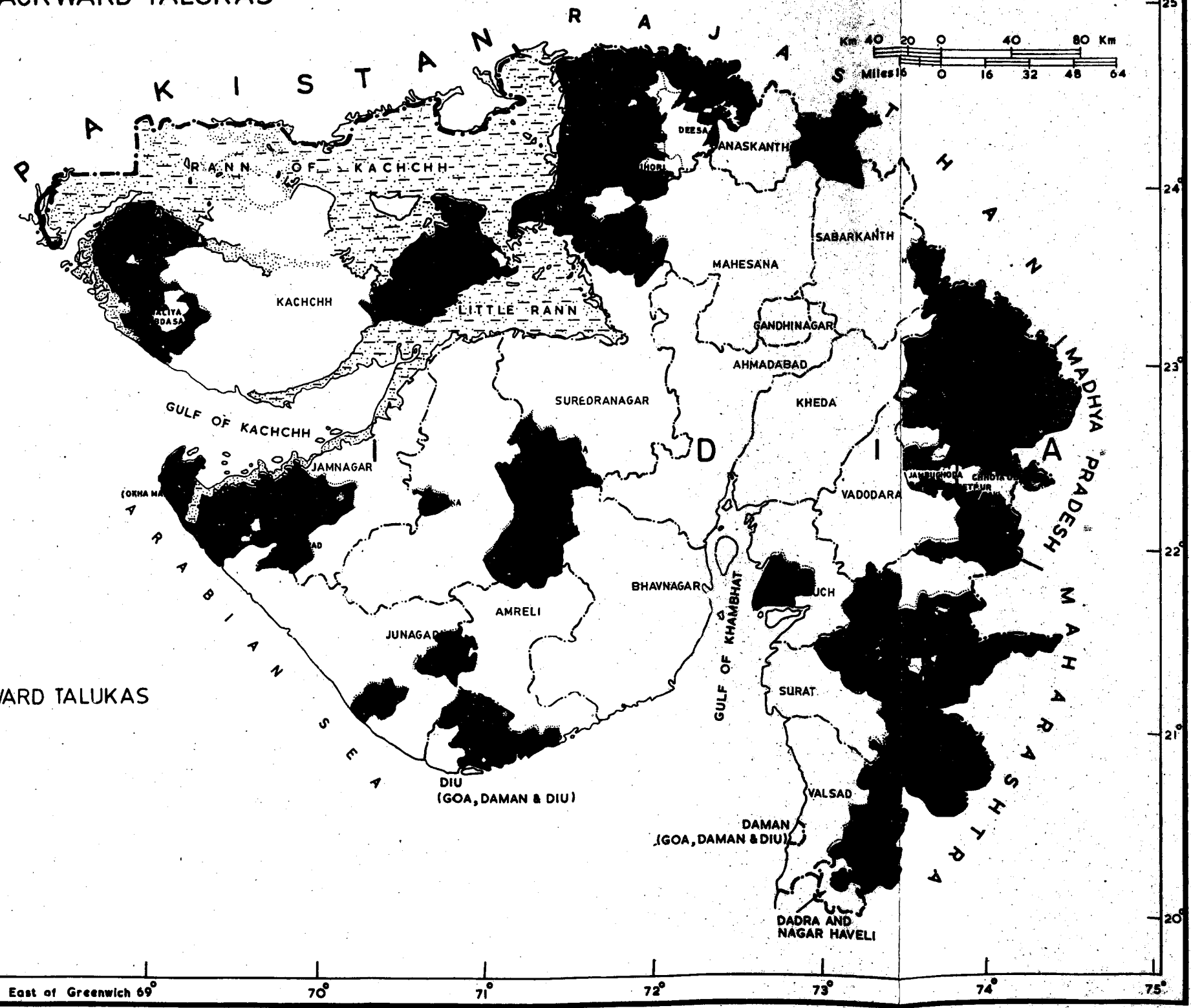
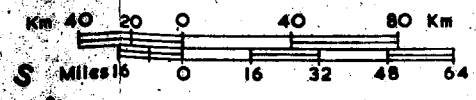
7.3. The Tribal Area Sub-Plan, drought prone area programmes and desert development programmes are among the programmes in operation in the field. Special incentives are being given for attracting industries to backward areas. The areas identified as backward tracks have been provided additional funds. It is necessary to avoid overlapping of funds and programmes in such areas. The I. G. Patel Committee has identified the levels of backwardness of all talukas in different sectors of development. Based on these findings, suitably updated, suitable sectoral programmes and location-specific investments would have to be undertaken by sectoral planners in different sectors. This will be necessary in the interest of balanced development of the State.

7.4. The I. G. Patel Committee also identified 56 most backward talukas in the State. These talukas are now provided 20% more funds, in addition to those available from the District Planning Boards under the discretionary grants. Comprehensive taluka level plans indicating inflow of funds from all sources of development and arrangements for monitoring time bound action plans and also appropriate personnel policies and incentives are specially needed. The large number of special backward areas require to be developed under the respective sectoral programmes with the appropriate application of science and technology and also in the light of measures for provision of basic minimum needs to all villages. Only special geographical or ecological features contributing to backwardness (such as soil conditions, drainage) will have to be dealt with under this programme.

# GUJARAT

## 56 BACKWARD TALUKAS

BOUNDARIES:  
 INTERNATIONAL .....  
 STATE / UNION TERRITORY .....  
 DISTRICT .....  
 TALUKA .....



■ BACKWARD TALUKAS

UPON SURVEY OF INDIA MAP WITH THE PERMISSION OF THE  
 SURVEYOR GENERAL OF INDIA.  
 TERRITORIAL WATERS OF INDIA EXTEND INTO THE SEA TO A DISTANCE OF TWELVE NAUTICAL MILES  
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### 8. Regional Development

8.1 In the Eighth Plan period, it will be very necessary to adopt the approach of regional planning. As is well known, Gujarat has the following geographical regions :

- (i) Eastern Region (Hilly Tribal Areas),
- (ii) North Gujarat,
- (iii) Central Gujarat
- (iv) South Gujarat and
- (v) Saurashtra-Kachchha.

8.2 Each region has its peculiar problems and constraints of natural resources which hamper the progress of this region. Besides, the implementation of plan programme in only one district or two districts will perhaps not serve the purpose of the development of the concerned region. The programmes of irrigation, power, technical education, research institutes, transport and communication etc. will have to be framed looking to the needs of the respective region. It is also envisaged to formulate the plan programmes keeping in view the natural resources available in such regions. Concrete efforts have been made for the development of the above referred regions in the era of planning in Gujarat. Still however, because of the adverse geographical and climatic conditions, few of the above referred regions still lag behind in the key sectors of economy as well as in the infra-structural sectors. It will be, therefore, necessary to formulate specific programmes for the development of all the above referred regions as such keeping not simple jurisdiction of the district in view, but the entire region which may comprise of group of districts. Adequate literature is available for the development of the above referred regions in specific sectors. The departments concerned will have to utilise the available literature containing the recommendations and suggestions for the development of each region of the State mentioned above.

### 9. Lags and Constraints in Growth :

9.1. Rapid increase in population is not the only constraint impeding the growth of the economy in real terms. There are other constraints as well.

- (i) The State lags behind many other States even in respect of some of the basic amenities. A large proportion of the area of the State is backward, with 58 out of 184 talukas being prone to drought. Drought Prone Areas include 35% of the area of the State and 24% of the Population. Erratic and unevenly distributed rainfall has been causing recurrent droughts and floods, with shattering impact on agriculture, fodder and drinking water situation in the State.
- (ii) Gujarat is also deficient in the matter of forest cover over land; only a little above 10% of the area of the State is covered by forests as compared to 22% for the rest of the Country. Around 50% of the State forests are concentrated in the Southern districts of the State. The inadequacy of the forest cover continues to cause serious problems of soil erosion and silting of water reservoirs in the State.
- (iii) Only 26 % of the culturable areas of the State is under irrigation. Two thirds of the area under irrigation in the State is irrigated by surface wells, which are themselves dependent on rainfall. Canals irrigate only 31 % of the total irrigated area. The ultimate irrigation potential in the State, even with the Sardar Sarovar Project is not likely to exceed 52 % of the culturable areas. The effective percentage is likely to be lower if the depletion of ground water resources at the present rate of drawals in deficient areas is taken into account.

- (iv) Irrigated agriculture in the State faces many problems. Water logging has begun to assume importance in some of the irrigated areas. Silting up of reservoir with the resultant loss of effective capacity of reservoirs is an area of concern. Ground water extraction in several areas has been so heavy that the draft has far exceeded recharge and consequently, the water table has been going down steadily at several places. Along the coastal areas of Saurashtra and Kachchh, this has caused ingress of salinity, now assuming serious dimensions.
- (v) In matter of power generation, Gujarat has to depend overwhelmingly on thermal power on account of limited hydro-electric potential. Being situated far away from the coal fields, Gujarat faces many uncertainties and additional cost of transportation in respect of power generation. The concentration of generation centres in Southern and Eastern parts of the State entails heavy line-losses in carrying power over long distances to Saurashtra and Kachchh regions.
- (vi) In road development also, the State with only 32 kms. of road length per 100 sq. kms. at the end of March, 1988, lags behind the rest of the Country. At the end of March, 1988 nearly 4,473 villages in the State were yet to be provided with all weather road connections.
- (vii) Despite covering nearly 1000 villages every year through the programme of drinking water supply, the difficulties have arisen on account of salinity ingress, changing water table occasioned by heavy draws of ground water in certain areas, the impact of industrial pollution and as a consequence of recurrent natural calamities in the form of drought and floods. The problem of protected water supply in towns and the augmentation of supply to the larger urban complexes also pose problems of enormous magnitude.
- (viii) With 31% of the total population of the State living in urban areas, Gujarat has a high rate of urbanisation. The State has 255 towns with the population of nearly 106 lakhs. This rapid rate of urbanisation has resulted in serious pressure on urban land resources and has strained civic amenities such as water supply and drainage, transportation, social and recreational services.

## 10. Target Groups :

10.1 Global estimates of levels of poverty do not help in identifying the specific groups in population in need of assistance in various forms for improving their skills and income. It is in this context, and in the light of a variety of family oriented programmes initiated during the Sixth Plan that an enumeration of different target groups in the population become relevant.

10.2 The main target groups for inclusion in the programmes of poverty are :

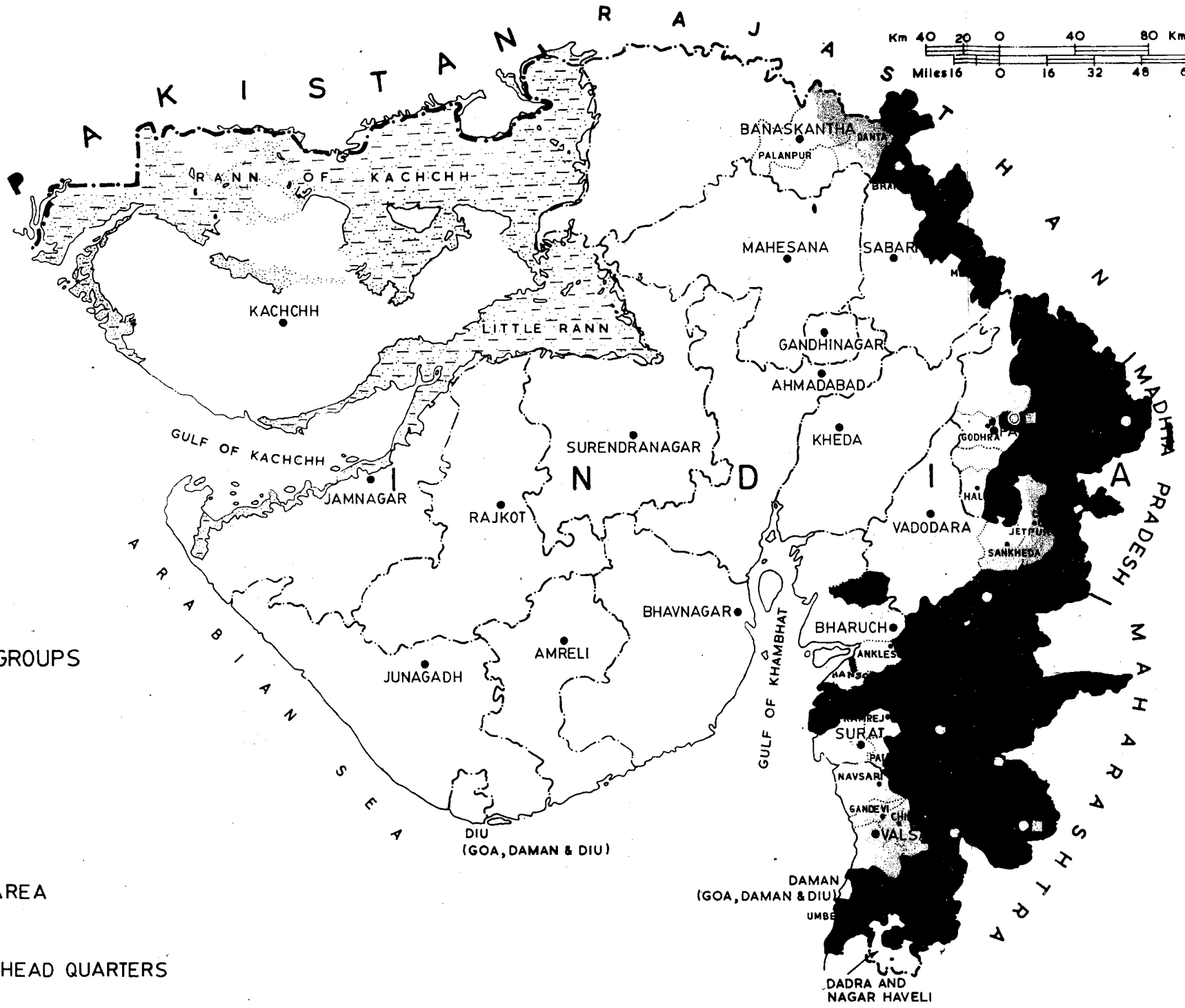
	<i>In lakhs.</i>
Scheduled Tribes.	48.5
Scheduled Castes.	24.4
Socially & Economically Backward Class (Baxi Commission).	50.0
Rural Artisans	5.0
Agricultural Labourers (excluding 50% from Scheduled Castes & Scheduled Tribes).	7.5
Small & Marginal Farmers (excluding one-third of the number estimated as belonging to Scheduled Castes & Tribes).	8.0
	143.4

10.3 The total of 143.4 lakhs constitutes 43% of the population.

# GUJARAT

## TRIBAL REGION

BOUNDARIES:  
 INTERNATIONAL .....  
 STATE / UNION TERRITORY .....  
 DISTRICT .....  
 TALUKA .....



### TRIBAL GROUPS

- BHILS
- DUBLAS
- ▲ DHODIAS
- ▣ GAMITS
- ◎ NAIKDAS

- TRIBAL AREA
- POCKETS
- PROJECT HEAD QUARTERS

68° East of Greenwich 69° 70° 71° 72° 73° 74° 75°



10.4 Over one lakh families belonging to rural artisans are being helped through provision of training and productive assets. These programmes would have to be accelerated during the Eighth Plan.

10.5 Nearly 48 lakh persons belonging to the Scheduled Tribes live in the eastern hilly region of the State concentrated in 32 talukas and 19 pockets in 10 districts of the State. The population of Scheduled Castes is somewhat more widely dispersed; even so, 55% of the Scheduled Castes population is concentrated in the six districts of Ahmadabad, Banaskantha, Mahesana Kheda, Vadodara and Junagadh. 50% of the Scheduled Castes population is concentrated in 1411 villages in the State.

10.6 Though other target groups are spread over throughout the State, separate machinery in the form of Corporations and full time officers at the district level are in place to cater to the needs of these populations. The survey of poor households undertaken under the Integrated Rural Development Programme, should help to identify the majority of such families in rural areas. In respect of urban areas, similar surveys of the urban poor may have to be undertaken to identify the location and other characteristics of such urban families living below the poverty line in urban areas of the State.

## 11. Decentralised District Planning ;

11.1 To achieve the twin objectives of effective implementation of anti-poverty programmes and ensuring balanced regional development, atleast in the minimum need programme, it is essential that the planning process is decentralised. The philosophy of decentralised district planning has gained wide acceptance as evident from active people's participation in the planning process. What is more important in the decentralised planning process is the involvement of people and their elected representatives in the process of formulation and implementation of comprehensive district plans, of which going far beyond the 'present experience with planning investments with united funds only.

11.2 The guidelines for preparation of the Eighth Plan issued by the Planning Commission also lay stress on the process of decentralisation of plan formulation. District plans formulated from below should form the basis of State Plans. Special attention would need to be given to a shift in the process of plan formulation as much as possible from a departmental and sectoral orientation to area orientation. The Commission has emphasised to promote the need for enhancing people's participation in the planning exercise in order to increase the stake of community in the development process and strengthen Panchayati Raj institutions with this end in view.

11.3 More expertise would have to be built into planning bodies such as State/District Planning Boards; their powers and procedures would need to be reviewed to ensure, within given parameters, much further decentralisation/delegation in administrative, financial and technical matters. This is necessary to enable the district level plans to be prepared in an integrated manner avoiding multiplicity of agencies and unnecessary proliferation of staff.

11.4 United funds will continue to be directed at the provisions of basic minimum needs. Lags in particular amenities in each Taluka would have to be identified and funds provided to location specific projects to ensure that basic minimum needs are available in all the villages of the State by the end of the Eighth Plan. The scope of incentive grants would require to be examined to include within its ambit provisions of capital assets for skill building for employment generation, women's development and similar areas.

## 12. Agriculture :

12.1 Efficient growth in the agricultural sector means essentially the optimisation of land and water use at the local level. The Eighth Plan must aim at a more

diversified agriculture in terms of both activities and regions. Scientific research should aim at crossing the humps in crops where significant productivity gains have already been achieved. A more diversified crop mix and land use pattern should be aimed at and improved land and water management strategies implemented. The promotion of agro-processing as an integral part of regional agricultural plans is essential. Agricultural credit should reach a majority of the producers, who are small and are highly inefficient. The emphasis on agro-climatic regional planning will require very detailed consideration of policies to non-crop based agriculture, horticulture, poultry, fishing and forestry.

12.2 The growth of agricultural production in Gujarat is mainly as a result of increase in productivity, which has been a factor, of irrigation expansion, adoption of improved seeds, higher inputs of fertiliser and pest management. In spite of many favourable factors of growth the factor, which will impose constraint to the growth, is the limited water resources available for future expansion of irrigation facilities. Even after exploitation of all available water resources, Gujarat will have more than 50% of its area dependent on rain for agriculture. Erratic and unreliable and also scanty rain fall in the State imposes a severe constraint on the future growth. Considering this, dry farming will need added emphasis for increasing the agricultural production in the State. Soil conservation and water conservation assume particular importance in the context of dry farming.

12.3 Comprehensive micro-watershed plans incorporating soil and moisture conservation afforestation and fodder development, initiated in the closing stages of the Seventh Five Year Plan, will have to be adopted on a far wider scale. Building inter-disciplinary teams of experts to formulate and implement the plan and to evaluate the programme also need attention.

12.4 Suitable cropping patterns have to be adopted for exploitation of maximum potential from the available resources of land and water. Suitable cropping pattern for agroclimatic regions in the State will have to be devised, to ensure optimal benefits from the limited resources of land and water.

12.5 Agro-processing activities need to be interlinked with the envisaged crop pattern for increasing the income generation in rural areas. Gujarat's rapidly expanding urban areas provide market for flowers, fodder, fruits vegetables, condiments and spices, etc. Diversification of crops in this direction will need to be encouraged. Simultaneously, facilities for storage including cold storage, marketing, transport etc., will invite due emphasis.

12.6 The three consecutive droughts have shown that Gujarat can illafford the luxury of maintaining a large number of low productive cattle for milk production. It is time to restrict the livestock population of the State to high productive heads within a manageable limit which the land resources permit. Simultaneously, intensive efforts to augment fodder production by farmer, milk cooperatives and the Forest Department would also have to be taken up.

12.7 Appropriate programmes for improving the breed and productivity of sheep, goats, camels, donkeys and horses may also have to be undertaken as these animals often provide the mainstay of the poor.

### 13. Water Resources :

13.1 Water is limited natural resource with many competitive uses. The National water policy has given guidelines for priority of allocation of water. It is now time to introduce a water allocation and water budgeting system as water has become a costly resource. Considering the problems faced on water supply front in the last three scarcity years and the monetary

resources spent by the State measures for conservation and augmentation of water resources should receive high priority in the Eighth Plan.

13.2 The ultimate irrigation potential in the State is assessed at 64.88 lakh hectares of which 17.92 lakh hectares are estimated to be available from Narmada. The ground water potential is 25.48 lakh hectares which is little more than the surface water potential of 21.48 lakh hectares excluding Narmada.

13.3 The ground water potential has been almost, fully exploited; in many parts of the State, the ground water has been over exploited to the point of ecological degradation. There is urgent need to curb the over exploitation of water through strict enforcement of regulations. So, the only alternative for augmentation of water resources significantly is through surface water. Under this alternative (i) the scheduled completion of Sardar Sarovar Project (ii) measures for full exploitation of potential already created and (iii) expeditious completion of ongoing projects where sizeable investments have been made—appear as the key elements.

#### 14. Energy :

14.1 Non-commercial sources of energy provide nearly as much energy as the commercial sources. Firewood is the major source of non-commercial energy in Gujarat. More than four million tonnes of firewood is consumed annually for cooking and heating needs.

14.2 Fuel wood will remain the main source for meeting rural energy needs for cooking and heating. Unless the rate of depletion is matched by effective fuel wood-cum-fodder production programmes, a serious crisis might crop up in the years to come. As such, substantial progress will be warranted in the programmes of social forestry and wasteland development programme.

14.3 Electricity has come up in the recent past as the chief source of supply of industrial and commercial energy and the major development programmes of investment in the energy sector are for electricity generation and distribution. Since there are no major alternative sources of commercial energy which can be tapped during the Eighth Plan; electricity generation and distribution will continue to be the major area of investment. The Programmes of coal gasification, generation of electricity from tidal waves, renewable sources of energy and maximum exploration of gas fields like Gandhar and others shall have to be made in Gujarat as industrial development in the periods of Eighth and Ninth Plans will mostly depend upon the availability of electricity—energy—of all sources etc.—each significant in its own right—can best be considered in a longer perspective.

14.4 The present capacity of power projects leaves a gap of about 3 to 4 percent between the requirement and supply. The power generation capacity is predominantly thermal based as the hydro power capacity is less than 10%. The thermal power is coal fired which is dependent on coal transported from long distances. The energy cost is therefore, high in the State. The natural gas found in the Cambay basin offers opportunities for getting up stations which can generate electricity at a less cost compared to the coal based stations. As compared to the coal based power generation, the gestation period of the gas based thermal stations is also short. The gas based station is the cheaper alternative source of energy at present.

#### 15 Objectives of the Eighth Plan :

15.1 The objectives for the Eighth Five Year Plan of the State, consistent with the objectives of the National Plan, set out in the context of the developments in various sectors of the State economy are as follows:—

- (i) To step up the rate of growth of economy from 5% to 6.0/6.5% in the Eighth Plan;

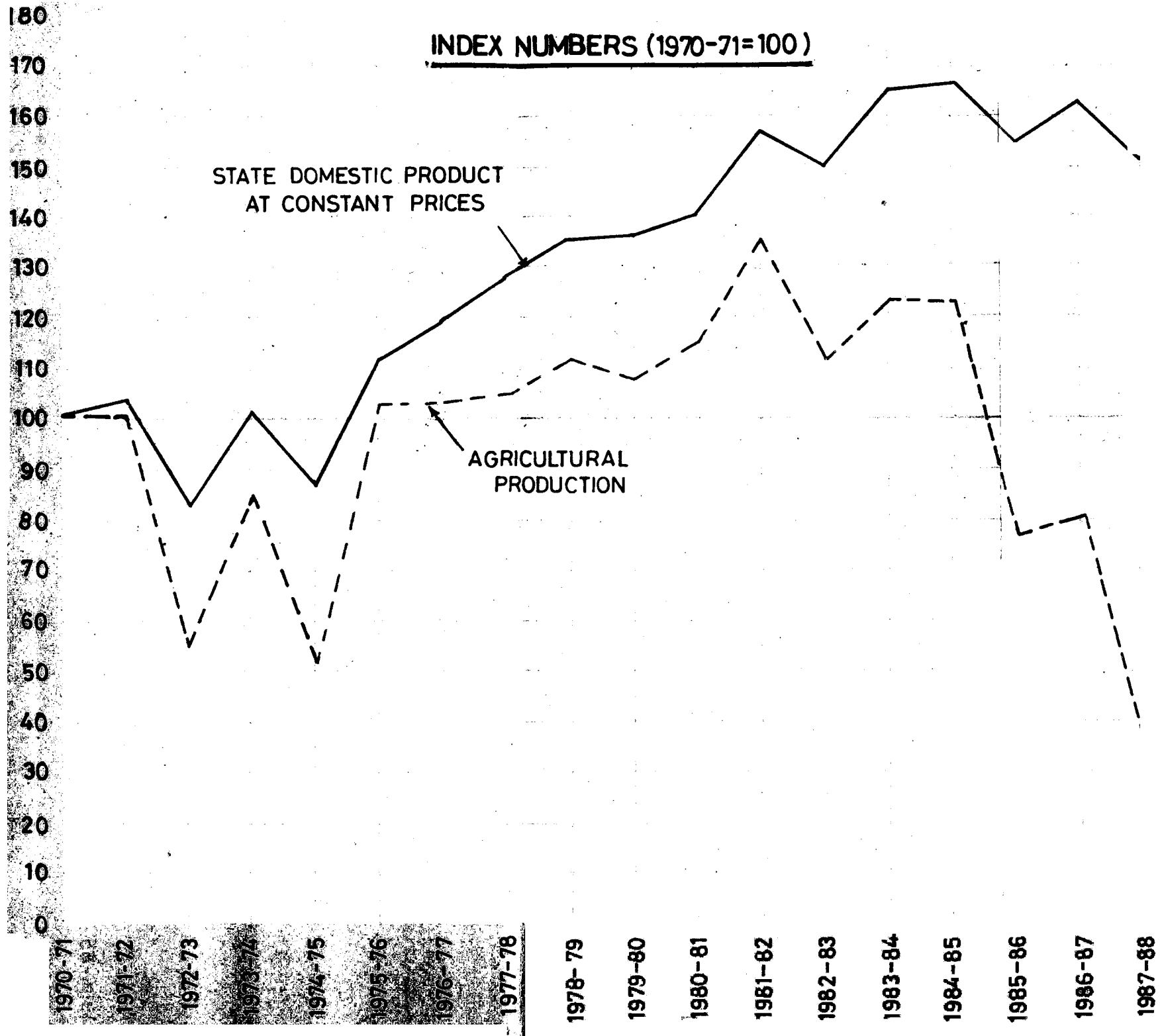
- (ii) To ensure minimum desirable levels of incomes for the large majority of the population below the poverty line through provision of productive assets and skills;
- (iii) To provide in a a phased manner, the basic minimum needs to the entire population of the State;
- (iv) To ensure the balanced development of all regions of the State;
- (v) To bring about harmony between the short and long term goals of development through attention to the ecological and environmental aspects;
- (vi) To promote policies for controlling the growth of population through voluntary acceptance of the small family norm;
- (vii) To emphasise dry farming, conservation and augmentation of water resources and use of gas for energy generation and;
- (viii) To promote the active involvement of people in the process of development through a process of Decentralised District Planning.

15.2 The detailed implications of adopting the postulated growth rate will have to be worked out for different sectors of the economy. The leading sector being agriculture, it will be necessary to prepare a detailed agricultural plan with targets of crop production, consistent with the growth rate laid down in the plan. Irrigation and energy would be the major input for the development of agricultural sector. Optimisation of irrigation benefits will be essential consideration for the planning of irrigation development. Supply potential of energy sector is a crucial constraint of the growth process, and development of the power sector, will have to be kept in view of this consideration. In the case of industries, the output expansion depends largely the major policy framework at the National level, but the State will have to provide for infrastructural development, energy input and various incentives for achieving consistent rate in the industries sector. Industrial peace is a soft input in the sphere of raising industrial output and the State has a major role to play in this area.

15.3 Strategies and policies for sectoral development keeping in view the growth target and other goals are presented in Part-II.



# STATE DOMESTIC PRODUCT AND AGRICULTURAL PRODUCTION



## II. STRATEGIES AND POLICIES FOR SECTORAL DEVELOPMENT

### 1. AGRICULTURE AND ALLIED SERVICES

#### Agriculture :

1.1. A programme of agricultural development for any State has to take into account the agro-climatic variations in different areas. Rainfall, soil condition and climatic factors in Kachchh and Saurashtra area are much different from those in South Gujarat. Even within a district, there are different agro-climatic zones. The importance of agricultural planning on the basis of agro-climatic zones has been realised since many years. Recently, a Centre for Planning Agro-climatic Zones has also been set up at Ahmadabad. During the Eighth Five Year Plan more detailed exercise will be taken up to identify various agro-climatic zones in the State to prepare agricultural development plans taking these aspects into account. A drought management plan could be prepared by taking the advantage of the Centre for Planning for Agro-climatic Zones.

1.2. More than 75% of the cultivated area in Gujarat depends on the monsoon. Even with the maximum utilisation of irrigation potential, major portion of cropped area will continue to remain rainfed. This fact, alongwith the experience of severe drought situation for three consecutive years recently, has brought into focus the importance of propagating dry farming techniques more vigorously. Activities like water harvesting method, sowing of crops across the slope, inter-cropping etc. would need to be adopted on a far larger scale. Soil and Water conservation measures were taken up on the basis of watersheds during the Seventh Five Year Plan. What is more necessary in the changed situation is that alongwith soil and water conservation measures, crop management programmes with due emphasis on dry farming techniques are to be integrated with soil and water conservation activities within the framework of micro watersheds. The object would be not only to maintain fertility level of soil and conserve moisture, but also to adopt an appropriate technology of farming and crop management. The National Watershed Development Project will have to be undertaken on the basis of projectisation in which emphasis will have to be placed on integrated development covering both arable and non-arable lands with the required on farm and off-farm treatments and implemented more effectively during the Eighth Plan. Steps would be needed on promoting dry land agriculture which is the key for improvement in yields of various crops in general and solving the pattern of food and fodder shortage in particular.

1.3. Oilseeds constitute one of the most important areas in agricultural development programme of the State. Under the Technology Mission on oilseeds effective steps are being taken to increase oilseed production. The importance of oilseed development programme will continue during the Eight Plan also. Steps will have to be taken to stabilise the production of oilseeds by developing new varieties of groundnut seed, which would be less susceptible to moisture stress and also will give higher yield. At the same time non-traditional oilseeds crops like sunflower and soyabean will have to be encouraged, both as sole crop and intercrop so as to stabilise the oilseeds production. It will be necessary to popularise on a far greater measure techniques such as pre-monsoon sowing, supplementary irrigation, closer spacing, summer cropping, interfurrow method of sowing for moisture conservation in our efforts to increase production of groundnut.

1.4. Cotton is not only a fibre crop but also it is recognised now as a multi use crop as edible oil is now produced from cotton seed. Significant benefits of irrigation and HYV fertiliser based technology have been secured. However, it is found that HYV seed is sensitive to pests and diseases. Hence, during the Eighth Plan, efforts will be made to evolve more appropriate variety of cotton and to realise even growth in production.

1.5. Development programme for pulses like tur and gram will also need greater emphasis. Production of pulses crop may be increased by taking them as mixed crop with other crops like cotton and castor, expanding area under short duration variety of green gram during summer season after harvesting of each crop and by implementing integrated pest management programme. National Pulse Development Programme will have to be implemented with greater vigour. Increasing the production of other foodgrains will also need emphasis.

1.6. Increased developmental activity for horticultural crop will also be required.

1.7. The average consumption of fertilisers in the State has been lower than the all India average. There is a need for more use of phosphatic and potassic fertilisers to rectify the imbalance in the use of chemical fertilisers.

1.8. Another area which will need greater emphasis would be the biological control of insects and pests and use of bio-fertilisers. It has been brought out that excessive use of chemicals for plant protection is likely to lead to environmental and ecological problems and may become counter productive in the long run. Consequently, the use of biological control and use of bio-fertilisers will have to be consistent with the new approach to development alongwith the ecological balance.

1.9. Since a large area of the State is affected by salinity, it would be necessary to prepare a detailed desalination research project.

1.10. Increased agricultural production, would require the following—

- (i) to increase area under hybrid/HYV seeds;
- (ii) to ensure adequate and timely availability of optimum use of inputs like seed, fertilisers, insecticides and irrigation water ;
- (iii) to enhance the use of fertilisers in low consumption areas ;
- (iv) to optimise the use of available moisture through effective water management ;
- (v) to improve the skill of farmers and farm women by strengthening the farmers training centres and making the T & V system more effective ;
- (vi) Extension machinery to be geared up to the specific need of packages of technology needed for different agro-climatic zones.

1.11. During the Seventh Plan, activities to strengthen research infrastructure in oilseeds, pulses and cotton were taken up. During the Eighth Plan, greater attention will have to be paid to research in oil seeds particularly edible oilseeds, viz., groundnut, sesamum and mustard, with view to improving their productivity, especially under rainfed conditions. A major breakthrough in augmenting productivity in growing also pulses is necessary. Efforts to develop drought resistant crop varieties will have to be continued. Agroforestry and agro-horticulture system for drought prone areas will have to be tried.

#### **Soil and Water Conservation :**

1.12 Soil and Water are the two basic factors primarily important for crop production. The fertility of soil and moisture directly effect production. The programme for soil and moisture conservation alongwith appropriate technology for dry farming and its extension to dry land farming will need to be implemented on high priority basis especially in the dry farming areas of the State. Watershed and micro watershed planning are the principal instruments for the purpose the soil conservation works viz., counter bueding,

terracing, nala-plugging et. had been undertaken in the past but the approach was scattered and limited to small catchments only. In order to reap the benefits of soil and water conservation measures harvesting of rainfall water and making it fit for maximum use to increase fit agricultural production the programme will be planned on an integrated watershed work plan.

#### **Agricultural Research and Education:**

1.13. Research on drip and sprinkler irrigation techniques initiated in the Seventh Plan will have to be continued so as to generate adequate data to determine economically viable irrigation systems for different agro-climatic zones. Research will be initiated to develop viable technology for conserving entire quantity of main water precipitating over the area of land with different configuration (slope) varying depth of soil profile and type of soil profile, different textures and structure of soil and at varying intensity of rainfall per unit of time. Such technology will find very good application in rainfed (dry) farming areas for increasing and stabilising the productivity.

1.14. For the purpose of extension education, existing programmes like establishment of KVK, Tribal Upliftment projects, strengthening of women's training programmes in Home Science, etc., will have to be continued. Emphasis will also have to be placed on training in other areas like fisheries, sericulture, cultivation and agricultural engineering.

1.15. In the light of the above, the Agricultural University in the State would have to undertake special responsibilities so that it becomes more instrumental in modernisation and development of Gujarat's agriculture.

#### **Animal Husbandry and Dairying :**

1.16. The production of milk, eggs, wool and meat are recognised as subsidiary occupations to supplement incomes from agriculture.

1.17. The programmes like cross breeding embryo trans-plantation technology, maintenance of good and renowned indigenous breeds, acceleration of poultry farms and programmes for the development of sheep will be implemented. Fodder seed production farms and village fodder farms will have to be encouraged to support livestock production. Stall feeding of animals through development of wider varieties of cattle feed will also be encouraged. The experience of three years of successive droughts indicates that measures to restrict the unproductive cattle have to be initiated. Veterinary services and health care facilities for livestock will require to be strengthened. Measures for improvement of the breed and productivity of camels, donkeys and horses would also be accelerated. Dairying provides gainful employment to large numbers of milk producers in rural areas. Technical inputs like artificial insemination with exotic bull semen, supply of animals with high milk potential feeds and fodder, veterinary aid etc. in OFP and non-OFP areas will be provided. All dairy plants will be covered under comprehensive District Planning and they will be encouraged to increase their output and plant utilisation.

#### **Fisheries :**

1.18. Substantial investments in the past for the development of the fisheries has led to production of fish at an average of 3.40 tonnes during the first three years of the Seventh Plan.

1.19. It would be necessary to continue the mechanisation and modernisation efforts in the Eight Plan period. From now onwards, the major thrust for higher fish production has to be in the area of deep sea fishing beyond 45 fathoms through the introduction of larger resource specific or combination vessels. For this purpose, it is absolutely essential to develop all weather deep sea fishing harbours during the Eight Plan with dry docking and repair

facilities, since such facilities are not available at present. Facilities in existing fishing harbours and landing centres will have to be augmented. On shore facilities for fish processing under hygienic conditions would have to be provided on a larger scale and great priority to meet fishing. Marketing arrangements have been to be strengthened to include the non-conventional fish and fish products.

1.20. A break through has to be achieved in the hitherto neglected area of brackish water pisciculture. Special efforts have to be made to attract investment in the development of brackish water area and various inputs required for it. Emphasis has to be laid on imparting skill and upgrading technology in this sector.

1.21. In the inland sector emphasis will continue to be on utilisation of all possible inland water sheets for pisciculture, increasing the productivity of water bodies already under exploitation and large scale expansion in fish seed production.

1.22. Research and development efforts in brackish water fisheries, pisciculture and fish processing as well as resource development would deserve special attention. There will be an enhanced need for training and development of manpower to operate large fishing vessels in marine sector. Imparting of new skills to inland fishermen specially the tribals, is also important.

1.23. Schemes for improving the living and working conditions of fishermen deserve special attention. Attempts to improve the traditional and artisanal fishery and to bring them under organised sector, by strengthening the cooperative institutions, is required to be undertaken.

#### **Forestry :**

1.24. The earlier National Forest Policy of 1952 as well as the revised National Forest Policy of 1988 stipulate that the Country should have a coverage of at least 33% of its geographical area under forests. The revised National Forest Policy of 1988 identifies maintenance of environmental stability through preservation and where necessary restoration of ecological balance that has been adversely disturbed by serious depletion of the forests in the Country as one of its basic objectives.

1.25. As against the ideal of 33% of forest coverage, Gujarat has less than 10% of its geographical area under forest cover. Of the 19387 sq. kms. of area classified as forests, only 13179 sq. kms. has got green vegetal cover. The remaining areas are either sparsely wooded or open waste lands.

1.26. The present production capacity of the existing forests is less than 5% of the timber and fuelwood consumed in the State. Afforestation of degraded forests as well as other waste lands would therefore, receive priority during the Eight plan.

1.27. Whenever any forest area is diverted for non-forestry use, such as irrigation projects, roads, etc. an area equal to the area so disforested would be acquired and planted up with trees at the respective project cost. This would help to maintain the forest cover in the State.

1.28. The State has imposed a moratorium on working of forest coups since 1987-88. As a result annually, about 12 lakh trees, which otherwise would have been harvested are being conserved. Moratorium of working of forest coups has an impact on employment of the tribals in forestry activities. Alternative avenues for employment have to be worked out for mitigating the adverse impact on employment.

1.29. Ongoing efforts in social forestry programmes including the development of village wood lots, roadside and canalside plantations will be continued in the Eighth Plan so that the forest cover is maintained and if possible extended.

#### Co-operation :

1.30. The cooperative movement in Gujarat is both well grounded and well spread. It has played a useful role in channelising the credit for agricultural operations and in the processing of agricultural products such as sugarcane, milk, oil seeds etc.

1.31. Despite the growth of the three tiers of credit cooperatives only 11.11 lakh farmers out of 28.36 lakh farmers are borrowing members. The scheduled caste and scheduled tribe farmers, who avail of credit facilities are only 0.54 lakh and 1.63 lakh respectively. At present, the average borrowing per borrowing member is about Rs. 2500 and the loan per hectare is about Rs. 500/-. Taking into account the need to cover more farmers, the approach will be to increase membership of the primary agricultural credit societies and also to ensure that SCs and STs and Small and Marginal Farmers are enabled to avail of cooperative credit to an increasing measure.

1.32. Marketing cooperatives are vital links in the supply of inputs particularly fertilisers and seeds in Gujarat. Strengthening this structure is necessary for expanding availability of inputs. A master plan of development of agricultural market in Gujarat has been prepared by Gujarat State Agriculture Marketing Board; this will be taken up for implementation. This will include development of 'hats' to enable tribal producers to get the benefit of regulated markets.

### RURAL DEVELOPMENT

2.1 Elimination of poverty by the turn of the century has been inducted as a National goal. The number of families living below the poverty line in Gujarat was estimated at 11.45 lakhs in a survey for IRDP purpose through a household survey conducted by DRDA in 1986-87. Of these, 10.73 lakhs are under IRDP target group and of these the number provided with economic assets in the first three years of the Seventh Plan is 2.75 lakh families, the number that would be covered in the last two years of the Seventh Plan (1988-1990) would be 2.00 lakh families leaving an uncovered gap of 5.98 lakh families at the beginning of the Eighth Five Year Plan.

2.2 To this may have to be added those persons who have been given the first dose of assistance either in the Sixth Plan or during the Seventh Plan but who have not crossed the poverty line. Considering that the average per family investment in productive assets in Gujarat has been around Rs. 3500, it is possible that at least 25% of the families provided with economic assistance in the Seventh Plan period may be eligible for a second dose during the Eighth Plan.

2.3 Yet another factor to be kept in view in the assessment of targetted families would be the new entrants to the number of families living below the poverty line. Such new entrants may come from the families of those whose lands have been totally acquired in irrigation and other projects; migrant families who were not available at the time of previous survey, families impoverished on account of loss of assets during repeated periods of scarcity and families falling below the poverty line on account of other circumstances beyond their control. It would, therefore, be necessary to conduct a detailed survey to have a more accurate assessment of the number of people living below the poverty line in the State.

2.4 The present financial limits for determining the level of poverty may also require revision on account of inflation.

2.5 In terms of the direction of the assistance, it has been recognised that we may have to shift away from primary sector towards secondary and tertiary sectors. Only this would ensure that the supplementary occupations being taken by the beneficiary would continue to yield incomes despite poor monsoons and failure of crops. This would involve the identification of more profitable economic activities such as diamond cutting, carpet weaving, improved handlooms, manufacture of polivastra etc. Measures to provide appropriate training under TRYSEM and other State's training institutes would have to be accelerated; the managerial, technical and financial capabilities of Apex Level Institutions concerned with these activities will also have to be augmented.

2.6 Rural industrialisation-in terms of taking modern industries to rural areas on a small scale and cottage scale-would be a major priority area. This has been facilitated by announcing of excise concessions to products manufactured in rural areas by cooperatives and women groups. A decision has been taken to vastly enlarge the scope of village and khadi industries to include all activities up to a certain level of investment. The full potential of these measures of liberalisations has not been realised on account of various factors. This would have to be looked into and a massive campaign for rural industrialisation not only of traditional village and cottage industries but more modern segments such as plastic processing, electronics and garment making would be taken to rural areas.

2.7. Marketing of products made by village artisans and beneficiaries of IRDP is on traditional lines at present. Similarly, the number of poor people augmenting their incomes through trading activities is also very low. At the same time, there are many products such as improved seeds, inputs for various rural industries which can be marketed through these persons, with suitable training. The full scope of trading and services would have to be explored during the Eighth Plan with induction of appropriate expertise in marketing and technology in the rural development administration in the State.

2.8 Considerable difficulties have been faced in getting adequate finance from commercial banks. The efforts of the Cooperative banks, Land Development Bank, Regional Rural Banks and Apex Level financing institutions such as Tribal Development Corporation, S. C. Economic Development Corporation and Women Economic Development Corporation should be focused on these sections of population so as to supplement and in some cases supplant the flow of sources from banks.

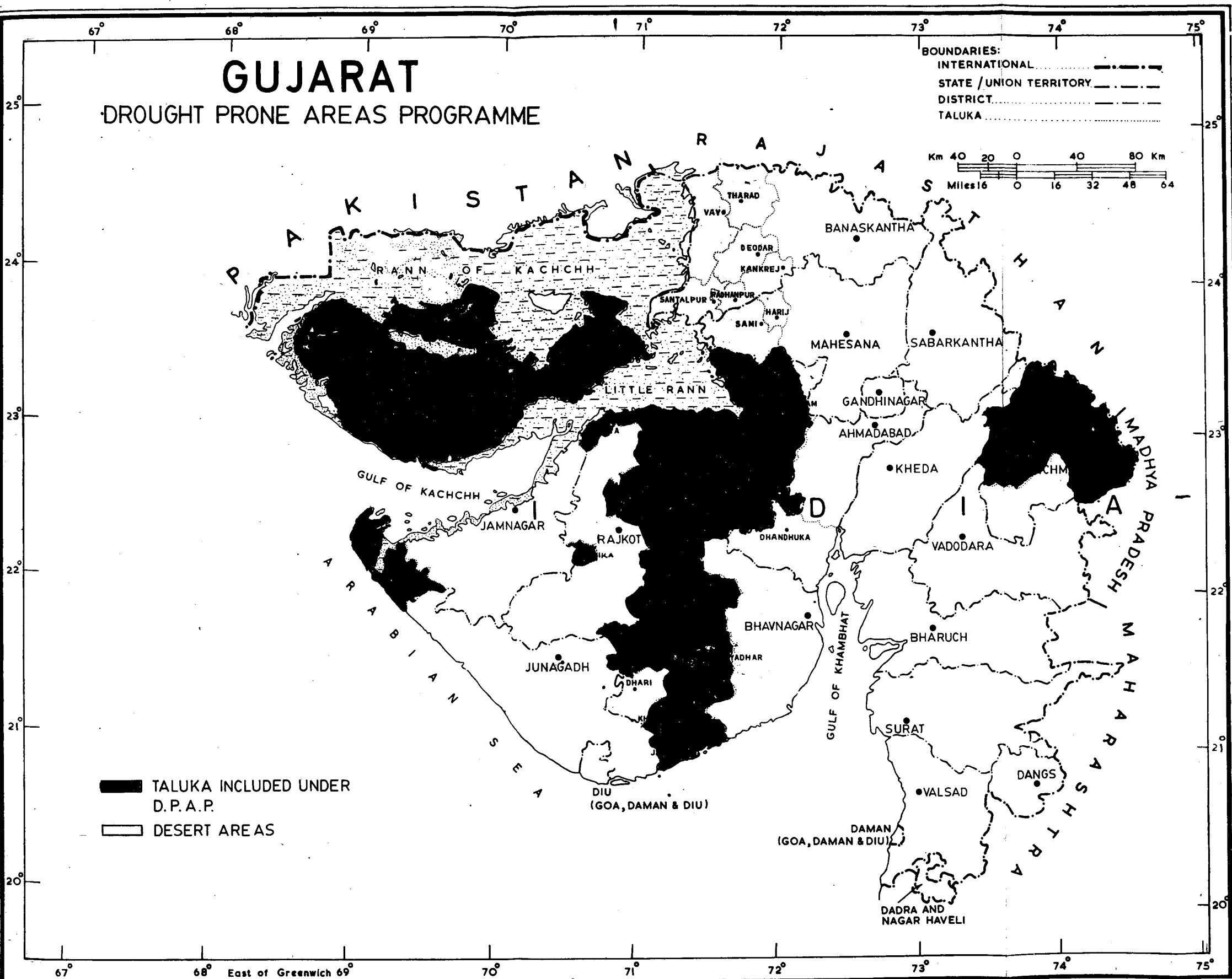
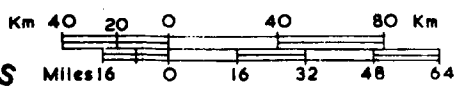
2.9 The Rural Employment Programmes have created a significant number of mandays of employment, but it has been seen that the benefit of these programmes have not gone to all villages in the State in equitable measure. An attempt would be made to identify villages with large population of landless labourers which have not received the benefit of NREP/RLEGP. Within these villages also, villages with less endowment of amenities for immediate needs would be given a priority so that landless labourers in these villages could atleast get 100 days of employment during the lean season. An attempt would also be made to explore the possibility of offering assured employment for atleast 100 days in a year in drought prone areas of the State with suitable assistance from Central Government. The proposed Nehru Rojgar Yojana is expected to add to the efforts for greater employment.

1.10 While full employment by 2000 A.D. is the concern of several sectors of economic activities, it may be stated that a significant augmentation of training facilities under TRYSEM and through other technical institutions would help in producing a category of skilled workers who may be more suitable to the needs of the State than unskilled labourers who can do nothing but earth work. This would involve assessment of demand for various schemes on a scientific basis at the district and taluka level; doubling or trepling their capacity of existing training institutions and setting up of atleast one multi-purpose skill building institution in each taluka with suitable residential faci-

# GUJARAT

## DROUGHT PRONE AREAS PROGRAMME

BOUNDARIES:  
INTERNATIONAL .....  
STATE / UNION TERRITORY .....  
DISTRICT .....  
TALUKA .....



■ TALUKA INCLUDED UNDER D.P.A.P.  
▨ DESERT AREAS

BASED UPON SURVEY OF INDIA MAP WITH THE PERMISSION OF THE SURVEYER GENERAL OF INDIA  
THE TERRITORIAL WATERS OF INDIA EXTEND INTO THE SEA TO A DISTANCE OF TWELVE NAUTICAL MILES MEASURED FROM THE APPROPRIATE BASE LINE.  
RESPONSIBILITY FOR THE CORRECTNESS OF INTERNAL DETAILS RESTS WITH THE PUBLISHER.





lities so as to match the demand for skills in same areas of the State and the availability of large number of youth and men and women to take up such skills. This strategy would also help to mitigate the effects of drought by permitting people to earn income, irrespective of the extent of rain fall for the reason that they would be capable of utilising their skills in respect of industries which are not dependent on rains.

2.11 In the drive towards identifying the more vulnerable sections of population, an attempt would be made to cover the physically handicapped, households by women, houseless persons, persons released from jail etc., as these categories of persons require more urgent attention than other able bodied normal persons. However, this kind of sociological approach towards categorising the rural poor has not been attempted in the past and so would require careful consideration of the experts both with regard to the diagnosis as well as remedial actions.

2.12 Greater efforts to involve to organise industries in rural development, in the development of waste lands, in providing infrastructure in rural areas from tax concessions available for contribution under the National Fund for Rural Development, etc. should also be undertaken.

2.13 More efforts would have to be undertaken to encourage Voluntary Agencies in various tasks of rural development. The number of such agencies is growing but as yet is too small to make a big dent on the problem. Government policies to facilitate emergence of more Voluntary Agencies through fiscal incentive through training and through motivation would have to be undertaken to take full advantage of various forms of assistance being offered by share of Central Government and some foreign countries. Our approach to encouraging Voluntary Agencies should be on par with our approach in encouraging industries.

2.14 Appropriate organisational changes would also be needed to put into effect many of these priorities in action. We would need more engineers, more experts in marketing and more experts in management as compared to the circuit of clerical and administrative personnel at present. Similarly, at the taluka level, the cadres of gramsevak and extension officers would require a thorough review as many of these categories of personnel might not be adequate to fulfil the demands placed on them. The induction of Voluntary Agencies, Volunteers (such as lay insemination Animal Husbandry women organisers for female headed house-hold) may also have to be thought of.

2.15 Rural development in the Eighth Plan should not be envisaged as only a programme for giving milch cattle or sewing machines. Rural Development should include provisions of modern skills, participation in manufacturing activities in modern industries and introduction of sophisticated marketing of products produced in rural areas and making available the raw materials required of the right quantity, quality and prices.

### 3. WATER DEVELOPMENT (IRRIGATION)

3.1. It is increasingly realised that water is getting scarce day by day. Though this is replenishable resource, it is in great short supply. Considerable volume of water flows to the seas. Similarly, large volumes are evaporating during the course of the year. Water use efficiencies are also low. Recognising all these factors, it is necessary that coordinated planning of water resources is done on a basinwise approach and as much as possible rain water is blocked and prevented from going to the sea and turning saline. This can be achieved by a series of measures like land levelling, gully plugging, construction of village tank, percolation tanks, check dams, minor irrigation tanks, underground check dams and medium and major storage structures. These activities fall under jurisdiction of more than one departments and, therefore, coordinated effort in planning and development of water resources is called for.

3.2. The National Water Policy has been finalised by the National Water Resource Council set up under the Chairmanship of the Prime Minister. The National Water policy envisages that in planning Water Resource Development Projects, the drought prone areas be given high priority. According to the National Water Policy, water should be made available to the water short areas by transfer of water from surplus areas including transfers from one river basin to another. Gujarat has carried out studies to assess the availability of surplus water from the west flowing rivers south of the Tapi for transfer across the Tapi river to the water deficit areas in the northern parts of the State. Such imaginative development will have to be considered in the future in view of the limited irrigation potential assessed, simultaneously with shortages of drinking water at present.

3.3 The ultimate irrigation potential through surface water as per latest estimate is assessed at 39.40 lakh hectares including 17.92 lakhs hectares through Sardar Sarovar (Narmada) Project. As regards ground water resources, also they are relatively limited without augmentation by the Sardar Sarovar (Narmada) Project. In fact, some of the ground water resources have been depleted specially in Mehsana district (where control on the sources tapping ground water is called for) and the coastal parts of Saurashtra where the advancing ingress of salinity into the ground water has reduced potentially fertile soil into marginally productive or unproductive soils. The precise assessment of ultimate irrigation potential by ground water in alluvial and rocky tracts depends upon several factors and studies covering the whole of Gujarat are yet to be made. Development of ground water potential through private sector is an important factor. This will govern the pattern of ground water potential creation and utilisation. However, it is estimated that about 25.48 lakh hectares can be irrigated by ground water. Thus, the total ultimate irrigation potential of the State as reassessed (April, 1984) works out to 64.88 lakh hectares.

3.4 During the period of the Eighth Plan top-most priority will be accorded to the completion of all the on going schemes, which will spill over at the end of the Seventh Plan. This will enable the State to have benefits of the schemes completed. Moreover there are 278 new medium irrigation projects which are under various stages of survey and investigation. The State Government may take up some of the schemes which are mainly in the drought affected areas, backward areas or in the tribal areas. These schemes can be taken up on merits keeping in view, the availability of funds during the next Five Year Plan.

3.5 In the coming years Sardar Sarovar Project would be the main focal project in perception, in the Water Development Sector. The project will provide irrigation facilities to about 18 lakh hectares of land spread over twelve districts, 62 talukas, 3340 villages of the State. About 72% of its command area is drought prone area.

3.6 Moreover, this project will provide about 10 lakh acrefeet of water for domestic, municipal and industrial use of about 131 urban centres and 4720 villages, in and around its command. The State will also receive 16% share of the electricity produced by its two power houses with a total installed capacity of 1450 M. W.

3.7 As per presently accepted implementation programme of 17/22 years, its main components like dam, powerhouses and canal system are planned to be completed by 17 years and work of drainage, conjunctive use and Command Area Development by further 5 years, considering 1987-88 as base year. However, the flow of irrigation benefit in about 5 lakh hectares lands in initial reach is planned to commence by 1994-95 i.e. at the end of the Eighth Five Year Plan when main dam will reach to RL 300 ft. so as to divert the Narmada Waters into canal system.

3.8 The Planning Commission has accorded the investment clearance on 5th October, 1988 to this project at an estimated cost of Rs. 6406.04 crores

updated recently at 1986-87 price level. The States share would be Rs. Rs. 4655.52 crores under Water Development Sector and Rs. 248.30 crores under power sector, while the residue would be from beneficiaries share.

3.9 While according investment clearance, the Planning Commission has laid a condition for giving sufficient priority in Eighth Five Year Plan as under :—

“Looking to the size and importance of this project, the State Government will give sufficient priority to this project in the Eighth Plan by ensuring adequate funding to match with the construction schedule as indicated in the concurrence of State Planning and Finance Departments. The State will also complete other on going projects at advance stage in time to ensure that there is no difficulty in funding the peak requirements by Sardar Sarovar Project.”

3.10 In view of the large investments required for the project, critical review of inter-sectoral priorities of investment would be required as also it would become necessary to ensure that the implementation of the project takes place according to the scheduled programme so that benefits accrue in time to the maximum and there are no cost over-runs.

3.11 Sardar Sarovar Narmada Hydro-Electric Projects part of inter-State and multi purpose Sardar Sarovar (Narmada) Project, comprises of two hydro power houses viz. (1) River Bed Power House with an installed capacity of 1200 MW and (2) Canal Head Power House with an installed capacity of 250 MW electricity so produced will be distributed to Gujarat, Madhya Pradesh and Maharashtra in the ratio of 16 : 57 : 27.

3.12 Efforts will be made to increase utilisation of the potential already created at the end of the Seventh Plan. Thus, lag between potential created and the utilisation will be reduced to the extent possible. Construction of field channels and introduction of Warabandhi, extension of channels from 40 to 8 Hectares and modernisation of completed projects, will also be given due weightage during the Eighth Plan. Flood control measures and drainage programme will also be undertaken in the State. Works and remedial measures to prevent salinity in the coastal areas of Saurashtra and Kachchh will be taken up as recommended by the High Level Committee. Moreover, intensive training will be given to officers and also to the farmers in the command areas of the schemes to educate them for water management systems.

#### **Minor Irrigation :**

3.13 It has been decided to complete all the on going schemes during the Seventh Plan. The schemes which require safe staging will also be given due priority. In addition to this, about 3,000 new minor irrigation works, which include percolation tanks, check dams and lift irrigation schemes, will be considered for inclusion during the Eighth Plan. This will create an additional irrigation potential of about one lakh hectares at an estimated cost of Rs. 1.37 crores.

#### **Tubewells :**

3.14 In view of the increasing demand for public tubewells for irrigation purposes, in the whole State, even in rocky areas, it is required to complete all ongoing tubewells during Seventh Plan in the first instance. In addition to this, about 800 new tubewells and 200 redrilling of tubewells will be considered for inclusion during the Eighth Plan. This will create an additional potential of about 40,000 hectares at an estimated cost of Rs. 50 crores.

#### **Command Area Development :**

3.15 For command area development, authorities have been set up to achieve increasing the rate of utilisation of the irrigation potential already created.

Such authorities will ensure more efficient operation of irrigation system by equitable, timely and assured distribution of water like Rotational Water Distribution System, Construction of Field Channels, Field drains, In d shaping and land levelling, conjunctive use of surface and ground water, formation of water cooperative societies, education and training to farmers, adoptive trials in the former's field etc.

3.16 The works on all the above activities have been initiated during the Seventh Plan. This will continue during the Eighth Plan period. More emphasis will be laid on formation of farmers' groups to ensure farmers participation and involve them in the water distribution system during the Eighth Plan.

3.17 To increase the awareness of the above concept a State level Water and Land Management Institute has been set up to impart training to CADA officers and field staff in a phased programme. To accelerate farmers' participation in irrigation management a massive programme to train in least sub-chak leaders for all the irrigation projects have been launched. This activity will continue in the Eighth Plan also.

3.18 Thus, during the Eighth Plan coordinated efforts will be made to achieve maximum utilisation of the potential created with the help of other programmes, Command Area Development works and intensive training to the farmers.

#### 4. ENERGY

4.1 Energy is an essential input for economic development in all sectors of the economy. Growth in demand for electricity in Gujarat since Independence has been at a high rate. Per capita consumption of electricity has gone up from 52 units in 1960-61 to 333 units today, well above the All India average of 191 units.

4.2 The following table illustrates the trend in increase in the consumption of electricity in the State :—

Year	Electricity sold million units*	Villages electrified No.	Pumps energised No.	No. of consumers	H..T industrial consumers	L.T. industrial consumers
1960-61	441	823	5401	148781	56	188
1979-80	6244	10867	202853	2300851	1072	85340
1984-85	8578	16042	292387	3343864	1486	120346
1987-88	12555	18049	371253	4561089	1886	188915

\* During the year.

4.3 The demand for power is growing rapidly in the State. The capacity needed to meet this demand and the addition of new generating capacity required is as below :—

**Installed Capacity, peak availability, peak load, energy availability and energy requirement**

	1989-90	1994-95
Installed capacity—MW	4371	5085
Peak Availability—MW	2572	3501

	1989-90	1994-95
Peak Load—MW (Maximum Demand)	3515	5018
Surplus (Deficit)—MW	—943	—1517
Energy Availability—MKWH	18635	25462
Energy Requirement—MKWH	19023	27159
Surplus (Deficit)—MKWH	—388	—1697

\**Restricted source.*—13th Electric Power Survey Committee's Report.

#### Region-wise Demand for Power :

4.4 It would be useful to analyse the demand for power in different regions of the State for the purpose of determining suitable locations for new power plants in future (Eighth Plan) taking into account the locations of existing/ongoing power projects and also likely availability of gas on various locations.

4.5 Gujarat may be broadly divided into four regions and the demand for power in each region is as follows :—

Name of the region	Name of the District	Unrestricted demand (MW)	% to total
South Gujarat	Dangs, Valsad, Surat & Bharuch	399	14
Central Gujarat	Vadodara, Panchmahal Kheda & Ahmadabad	595	21
North Gujarat	Mahešana, Banaskantha, Sabarkantha & Gandhinagar	1032	36
Saurashtra Coast & Kachchh	Surendranagar, Rajkot, Amreli, Bhavnagar, Junagadh, Jamnagar & Kachchh	861	29
	Total ..	2887	100

4.6 Most of the power plants are located in South and Central Gujarat. North Gujarat and Saurashtra have only 2 Thermal Power Stations, *i.e.* Gandhinagar and Sikka which are quite inadequate to meet the power needs of these regions. So there is need to plan new major power plants in these regions so that power does not have to be transmitted over long distances to meet the power needs of these regions and the resultant transmission losses are avoided.

4.7 In order to meet the growing demand during the Eighth Plan, the following schemes have been sanctioned and are at various stages of implementation and on completion will add to the existing installed capacity of 4133.5 MW.

The schemes likely to be completed by the end of Seventh Five Year Plan are as follows :—

Name of the project	Capacity	Schedule of commissioning
<b>PROJECTS UNDER EXECUTION</b>		
1 Lignite based TPS in Kachchh Unit-I	70 MW	Dec. 89
2 Gandhinagar TPS Extn. Unit-III	210 MW	Dec. 89
3 Kadana Hydro Project Unit-I	60 MW	Aug. 89
4 Kadana Hydro Project Unit-II	60 MW	Dec. 89
5 Korba STPS Stage-I Incremental share	100MW	1988-89
6 Korba STPS Extn. Share	170 MW	1989-90
7 A. E. Co. 'F' Unit	110 MW	Dec. 88
Total ..	780 MW	

4.8 The following schemes have been given approval by the Planning Commission and the schemes will be commissioned during Eighth Plan.

1 Lignite based TPS in Kachchha Unit-II	70 MW	
2 Kadana Hydro Project Extn. Unit-III	60 MW	
3 Kadana Hydro Project Extn. Unit-IV	60 MW	
4 Gandhinagar TPS Extn. Unit-IV	210 MW	
5 Micro Hydrel Scheme—		
(i) Damanganga	1.0 MW	
(ii) Dharoi Canal	0.6 MW	
(iii) Dharoi River bed	2.0 MW	
(iv) Panam	2.0 MW	5.6 MW
6 Sikka TPS Extn. Unit-II 1 x 120 MW		120 MW
		525.6 MW

4.9 The following schemes have been given techno-economic approval by C.E.A. and are awaiting approval from Planning Commission.

1 Lignite based TPS Extn. Unit-III (1 x 70 MW)	70 MW
2 Small D.S. sets at various location 6 x 3.5 MW approval from CPG is received	21 MW

4.10 The following schemes under scrutiny of CEA and the Government of India are likely to be taken up during the Eighth Plan.

	In MW
1 Narmada TPS at Sinor (2x500 MW)	1000
2 Gas based power station at Utran (123 MW)	123
3 Sikka TPS Extn. Stage-III (2X210 MW)	420
4 Micro Hydrel Schemes—Karjan Hydrel (3 MW)	3
5 Installation of D.G. sets at various places (22X3.5 MW out of this 6X3.5 MW; 21 MW approval is received	56
6 Small gas based power station at Ankleshwar 30 MW	30
7 Gandhar gas based power station near Bharuch	600
8 Gas based power station near Pipavav, District Amreli	750
9 GIPCL near Vadodara (45+90)	135
Total ..	3117

4.11 Apart from the above, Kakrapar Atomic Power Project is likely to be at critical Stage by the beginning of the Eighth Plan. Similarly, Kawas gasbased power project is likely to be completed during the Eighth Plan. The share of the State from KAPP is likely to be 235 MW, from Kawas 150 MW and from Vindychal 230 MW.

4.12 As per the 13th Annual Power Survey Committee Report, peak load at the end of Eighth Plan would be 5018 MW. The installed capacity required to meet this demand would be 7840 MW at 60% utilisation factor (as per CEA norms). The net addition to annual capacity at the end of Seventh Plan is estimated at 6847.6 MW leaving a gap of 992.4 MW in the installed capacity required to meet the demand of electricity.

4.13 As such to meet the demand for power during the Eighth Plan period apart from increasing the generating capacity it would be necessary to undertake steps like better utilisation of existing assets, reduction in transmission and distribution losses, energy conservation, timely completion of projects, streamlining the states lights and mechanising etc. The peak load factor in Gujarat is 60.4% but States like Punjab Andhra, Pradesh etc. have been maintaining a PLF more than 65%. The State should therefore aim at a target of 65% PLM during the Eighth Plan. Transmission and distribution losses are around 22% at present, which will have to be reduced to 20%. There is a good potential of conservation of energy in the agriculture sector and industries like chemicals and textiles. There is possibility of generating about 110 MW in the private sector through cogeneration.

#### **Rural Electrification :**

4.14 Gujarat has made steady progress in the sphere of rural electrification. All the villages, which can be electrified have been electrified. We have to take up a drive now to electrify the hamlets and Harijan bastis and electrification of rural households. Although about 4 lakh wells have been energised, there are still 1,20,000 applications pending for energisation. Transmission and distribution system has to be suitably augmented to meet this growing-demand for energisation of rural wells in far flung rural areas.

#### **Diverification of Fuel and Use of Surplus Gas for Power Generation ;**

4.15 Fuel cost per unit of generation in Gujarat is highest in the Country i.e- 47.9 paise per unit of generation as compared to the National average of 34.1 paise per unit. Coal has to be hauled from long distances for our power plants. The cost of freight is much more than the cost of coal. We are likely to face more and more difficulties for getting railway clearances for transportation of coal to the future power stations. It, is therefore, necessary to consider alternatives like coal slurry pipeline and import of coal. GEB had commissioned Engineers India Ltd. to prepare a preliminary techno-economic feasibility report on pipeline transportation of coal from Singroli to Thermal Power Station in Gujarat which was submitted to the Planning Commission. Government of India has taken up a short distance experimental project for new Majri Mine to Chandrapur TPS to MPSEB. The work on this project is in progress. The result of the scheme, when received may be examined to determine future power policy. Similarly, good new deposits of lignite have been found in the State. Efforts should be made for its early commercial exploitation. Projects based on gas like Utran, Dhuvaran, Ahmadabad Electricity Company Project, GIPCO for which have already been committed by Government of India need to be taken up immediately. Similarly Gandhar Project which has been cleared by CEA has to be taken up with Government of India for allocation of gas.



### **Mini and Micro Hydel Schemes :**

4.16 Gujarat has very limited resources of hydel power compared to vast resources of hydel power concentrated in North India. Limited potential available from mini and micro hydel schemes needs to be exploited without any loss of time.

### **Environment Aspects :**

4.17 Care should be taken to keep the emission and effluents from Thermal Power Plan within permissible limits.

### **Strengthening of Electricity Boards including restructuring of Organisation :**

4.18 The management of the Gujarat Electricity Board may be streamlined and adequate attention should be paid to R & D facilities.

### **Non-conventional Energy Sources :**

4.19 The impulse given to research and development activities in the field of Non-conventional energy sources and their exploitation is one of the major events in science and technology in the past decade. National energy policies are being elaborated in many countries where they often did not exist. Drastic reorientation has occurred to include alternate sources such as solar, wind, biological, geothermal and aquatic energy programme. Gujarat has also been promoting research and development in popularising in the fields of new and renewable energy sources and energy conservation and help the State in augmenting the energy resources.

4.20 By the end of the Eighth Plan it is proposed to achieve an annual energy generation/saving of energy through non-conventional energy source/energy conservation to the extent of 5 million tonnes of coal replacement. The programme will also include establishment of 300 MW of electrical power, which will include installation of wind pumps by mass energy plantation, solar thermal power plants, etc.

4.21 Programmes of building community night soil based biogas plants, community type gobargas plants, establishment of urjagrams etc. would also be undertaken during the Eighth Plan.

## **5. INDUSTRIES AND MINERALS**

### **Industries :**

5.1 The industrial activity in Gujarat was dominated by Textile and its auxiliary industries till 1960. The discovery of oil and natural gas, setting up of refinery, fertiliser complex and the petrochemical complex during 60's ushered in possibilities of diversifying the industrial base. The exploitation of mineral resources and setting up of dairy and agro-based industry also added impetus to the industrial growth. As a result, Gujarat today has become a major producer of petrochemicals, fertilisers, dyes and intermediates common salt, milk and baby food products in the Country.

5.2 The State has been successful in achieving industrial dispersal to some extent, though there exists concentration of industries around major centres like Ahmadabad, Vadodara, Surat, Rajkot etc. New Industrial centres like Vapi, Ankleshwar, Halol-Kalol, Waghodia, Bamanbor, etc. have emerged and have become major attraction for new industries.

5.3 The development of industrial activity in Gujarat has been aided by the advantages like availability of Bombay-Hapa and Bombay-Delhi Railway link, National Highway running almost parallel to this rail link, availability of water supply to the industries especially those located in South Gujarat,

nearness to sea facilitating effluent disposal, reasonable availability and dependable power supply, peaceful and productive labour, and proximity to Bombay. With various favourable factors, entrepreneurs from all over the Country have been attracted and Gujarat today has become one of the fastest growing State in the Country.

5.4 The central element in the development strategy of the Seventh Plan has been the generation of productive employment. The Seventh Plan approach for industry was, therefore, in reducing the intensity of unemployment by creating new employment opportunities through promotion of industries in all sectors viz., medium, large and small scale including Cottage and Handloom units. The thrust during the Eighth Plan will be to carry out this objective further using industry as a major tool of employment and area development achieving accelerated growth of industrial activity in the State. A series of new initiatives to modernise the structure of industrial scenario is expected during the Eighth Plan.

5.5. Gujarat is one of the States, which has been affected frequently by drought conditions and many parts of the State are facing problems even for drinking water. The districts of Kachchh-Saurashtra region and North Gujarat have been repeatedly hit by drought. Considering the fact that the total drought proofing is a near impossibility, the Eighth Plan approach should seek the extent to which industrial development can be devotiated with drought mitigation strategies.

5.6. The Union Government has recently liberalised the Licencing Policy and has decided to focus on the development of growth centres for promoting industrialisation of backward areas in an effective manner. The growth centres would be endowed with infrastructure facilities on par with the best available in the Country in respect of power, water, telecommunications, banking etc. and would act as the magnet for attracting industries.

5.7. The development of industries in the State has concentrated in the centres/industrial townships where such infrastructure facilities along with abundant water and easy effluent disposal facility were readily available. The infrastructure facilities will, however, be reviewed in the context of requirement for promotion of hi-tech, export oriented and competitive industries. These industries will call for not only the road, power and water availability but modern communication facilities linking with national and international centres, technical skill and amenities. The approach for the Eighth Plan will be therefore, to identify suitable growth centres/industrial townships and to provide adequate package of infrastructure facilities with a view to attracting new industries.

5.8. The infrastructural facilities at various places in the State are provided by different State and Central level departments as also Government enterprises. The Plan Approach will be to focus in Project Linkage Programme interlinking the development programme of all these departments at identified growth centres in the State.

5.9. The chemical and allied sector is likely to continue as dominant industry in the overall industrial development in the State and this will have an impact on ecological balance. The approach for the Eighth Plan will be towards taking measures for maintaining the ecological balance through stringent measures towards pollution control in industry and also to develop the system to prevent hazards and accidents on account of the industry.

5.10. The Public Sector industries have become an important segment in total industrial economy. The approach for the Eighth Plan, therefore, will be to attract the public sector projects in diversified fields such as Hi-tech areas, electronic components sector, defence production, ship building/ship repair sector and such other areas. It will be necessary to identify the products which have potential power ancillarisation and to promote such units at growth centres to give impetus for industrial development through State sector/joint sector/private sector participation.

5.11. The small scale, village and cottage sector industry plays a crucial role in providing employment opportunities particularly to the rural poor and to correct regional imbalances. The State Government has set up the District Industries Centres in all the districts to act as a catalyst by way of identifying the investment opportunities and assisting the implementation of the projects as a 'Single Point Contact'. The DICs also play an important role in promotion of Cottage Sector industries through operation of bankable and other schemes.

5.12. The broad strategy for the Eighth Plan will be towards gainful utilisation of facilities created for small and cottage sector, upgradation of production technology and quality of products as also standardisation of products to avail of marketing benefit for small and village industries. Efforts will also be made towards strengthening the handloom and handicrafts sector.

5.13. Improvement in training methods and change of 'course modules, looking to the needs of industries will be a major thrust in the Eighth Five Year Plan. A centre for training the trainers is also proposed to be established.

5.14. In the Eighth Plan the approach would be towards identifying certain areas/growth centres at village level having potential for self-sustained small scale cottage sector industries and to provide adequate infrastructure facilities at such centres including power.

5.15. A new department for agro-based food processing industry has been set up at the Centre. The approach for the Eighth Plan will be to consolidate the efforts for promotion and development of agro-based and food processing industry in Gujarat. The industries which will be developed by giving special attention are (1) lignite mining (2) electronics, (3) diamond processing and jewellery, (4) plastic processing etc.

5.16. Planned area development is an essential element in the industrial strategy for reducing the regional disparities. The State has selected Taluka as a unit for deciding level of industrial development and has declared new package incentives in graded scale for promotion of industries in these areas. The approach for the Eighth Plan will be to continue efforts towards promotion of industries, through operation of incentive packages.

5.17. Gujarat took initiative to attract non-resident Indians for setting up industrial units in the State. The non-resident Indians have been provided all assistance for effective and timely implementation of projects and this experiment has been a great success in the State. The Plan Approach for the Eighth Plan will be to strengthen these efforts in the tune with the National priority.

5.18. Data collection system and its computerisation and processing helps in decision making. The present system of data collection and processing would be strengthened in the Eighth Plan.

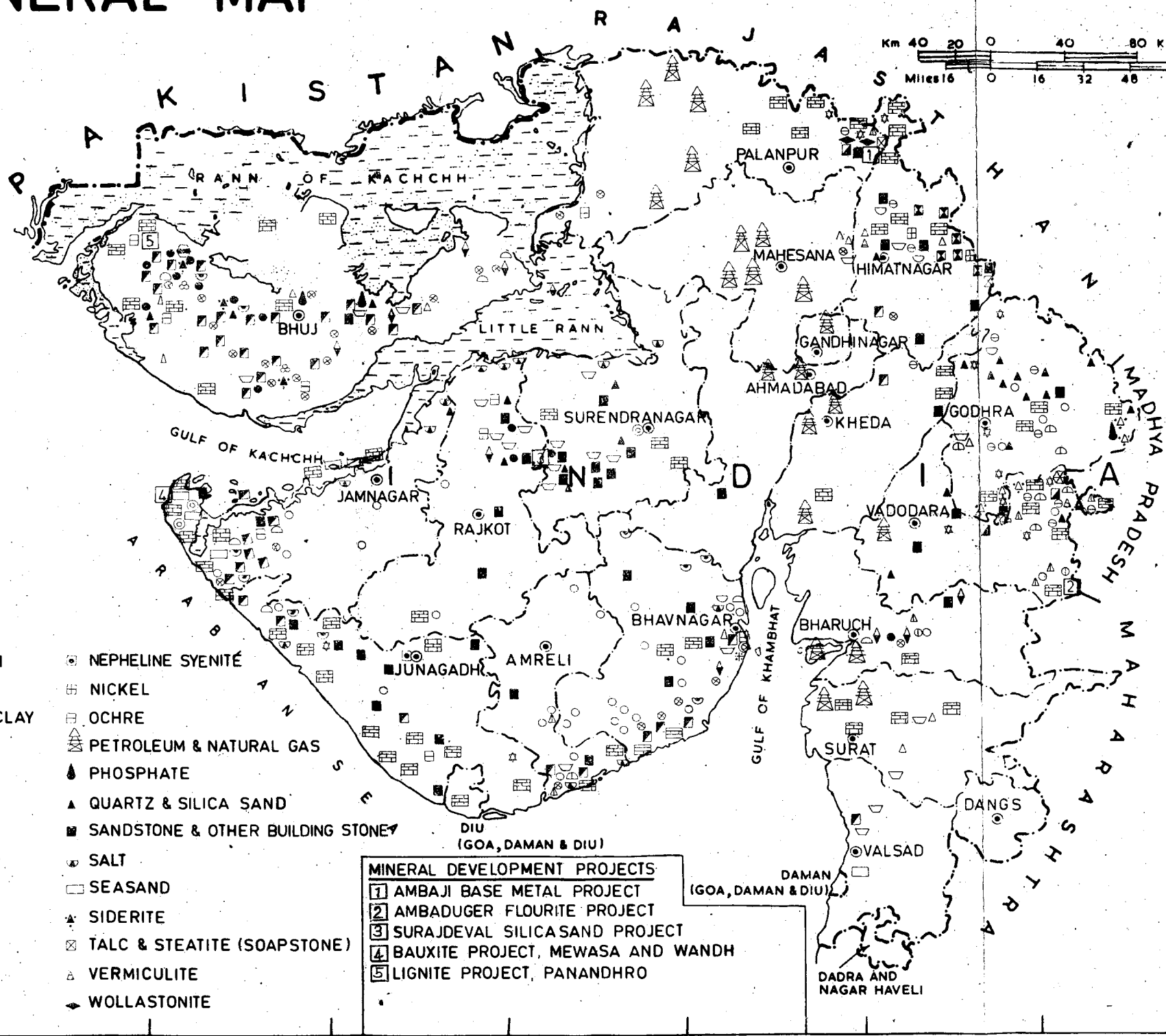
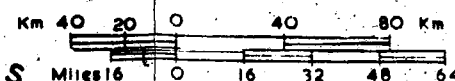
### **Mining and Minerals :**

5.19. The Directorate of Geology and Mining is engaged in exploring and prospecting mineral wealth of Gujarat. On the basis of this exploration, Gujarat Mineral Development Corporation as well as other mineral based projects set up in joint sector and private sector are engaged in exploiting and developing mineral wealth of the State with a view to contribute to the production and employment in the State.

5.20. Since the last 25 years, lignite, coal, bauxite, base metal, limestone, industrial clays, bentonite, phosphorite, fluorite are the main minerals found in Gujarat. The search for these and other minerals will be continued. Mainly three types of surveys are undertaken viz., (a) Pre-detailed mineral survey (b) Detailed mineral survey which normally follows predetailed minerals survey, wherein quality and quantity of economic mineral deposits are asse-

# GUJARAT MINERAL MAP

BOUNDARIES:  
 INTERNATIONAL ————  
 STATE / UNION TERRITORY - - - -  
 DISTRICT ————



- ACTINOLITE
- AGATE
- ALUM
- ASBESTOS
- BAUXITE
- BARYTES
- BENTONITE
- CALCITE
- CHINA CLAY
- CHALK
- COAL / LIGNITE
- DOLOMITE
- DIATOMACIOUS EARTH
- FELSPAR
- FIRECLAY / PLASTIC CLAY
- FLUORSPAR
- FULLER'S EARTH
- GRAPHITE
- GYPSUM
- LEAD / ZINC / COPPER
- LIMESTONE
- MANGANESE ORE
- MARBLE
- MICA
- MOULDING SAND

- NEPHELINE SYENITE
- NICKEL
- OCHRE
- PETROLEUM & NATURAL GAS
- PHOSPHATE
- QUARTZ & SILICA SAND
- SANDSTONE & OTHER BUILDING STONE
- SALT
- SEASAND
- SIDERITE
- TALC & STEATITE (SOAPSTONE)
- VERMICULITE
- WOLLASTONITE

- MINERAL DEVELOPMENT PROJECTS**
- 1 AMBAJI BASE METAL PROJECT
  - 2 AMBADUGER FLOURITE PROJECT
  - 3 SURAJDEVAL SILICA SAND PROJECT
  - 4 BAUXITE PROJECT, MEWASA AND WANDH
  - 5 LIGNITE PROJECT, PANANDHRO

68° East of Greenwich 69° 70° 71° 72° 73° 74° 75°

SURVEY OF INDIA MAP WITH THE PERMISSION OF THE GENERAL OF INDIA  
 TERRITORIAL WATERS OF INDIA EXTEND INTO THE SEA TO A DISTANCE OF TWELVE NAUTICAL MILES FROM THE APPROPRIATE BASE LINE.  
 RESPONSIBILITY FOR THE CORRECTNESS OF INTERNAL DETAILS RESTS WITH THE PUBLISHER.



ssed with the help of detailed mapping, pitting and trenching, and (c) Drilling Scheme. This is taken up to prove extension of mineral deposits at depth and to assess its shape, size, quality and quantity. At the end of Seventh Plan, there would still be large areas in the State where even pre-detailed survey of mineral wealth would not have been carried out.

5.21. The strategy for the Eighth Plan would be a part of Twenty Years Perspective Plan for predetailed or photo based survey of the whole State. This would enable to locate the existence of important mineral wealth in the State. The Eighth Plan should be treated as First of the four phases of 5 years each for the implementing this Twenty Year Perspective Plan. The objective would be to establish preliminary availability of important minerals so that further survey work and prospecting work can be concentrated in those pockets, which are relatively more promising.

5.22. Lignite would be the Mineral of the Eighth Plan. For a State like Gujarat which is far away from coal fields and which is suffering from shortage of power, lignite fields should form the basis for meeting our future fuel requirement and accelerating development of industries which can use lignite instead of coal.

5.23 To expedite predetailed survey and exploration of mineral wealth training facilities as well as laboratory facilities for testing will have to be suitably augmented. Modernisation of Chemical and Petrological Laboratory shall be taken up and remote sensing technique will be utilised for different steps of mineral exploration.

## 6. TRANSPORT

### Ports:

6.1. Gujarat is an important maritime State of the Country. It possesses a coastline of about 1600 kms, which is nearly 30% of the total coastline of the Country. Of the 161 minor and intermediate ports in the Country, Gujarat accounts for 39 ports. Those thirty nine ports of Gujarat handle around 50 lakh tonnes of traffic per annum. More than 80 per cent of total traffic is being handled at main ports namely—Navlakhi, Bedi, Sikka, Jafrabad, Okha, Porbandar, Veraval, Bhavnagar and Magadalla. Improvement of facilities at Gujarat ports will go a longway in promoting traffic and better turn round of ships at these ports.

6.2. During the Seventh Plan significant achievements, were made in developing captive traffic at some of the ports like Sikka, Jafrabad, Magdalla, Navlakhi, Koteshwar, Mundra, etc. Development of Pipavav is a major scheme on hand with potential to handle dry and other general cargo on a direct berthing pattern. The scheme would be completed during the Eighth Plan. Hajira at the mouth of Tapi river is attracting large water front industries. About 6.00 million tonnes of traffic per annum of various commodities is likely to be generated at Hajira by the end of Eighth Plan. Therefore, integrated development of port at Hajira and developing the navigational water way would be of prime importance for establishing further captive traffic, as mentioned above, during the Eighth Plan. During the Eighth Plan further port facilities are required to be provided at existing ports of Sikka, Veraval, Porbandar, Rozi (Jamnagar) and Navlakhi, which will augment the traffic at these ports.

6.3 Besides, with a view to utilise the existing port facilities at various ports to their optimum use, where a substantial traffic is being handled and captive traffic is likely to increase further, at such ports navigation facilities shall have to be improved by undertaking, dredging to provide required draft and providing facilities for the night navigation. For this, suitable type of dredging equipments and naval aids shall have to be procured.

6.4 The traffic handled at our various ports in Gujarat is mainly by lighters. Almost all lighterage ports are provided with necessary flotilla units,

such as tugs, launches, barges, etc. Some of the existing such flotilla units need replacement. Besides, this replacement programme, new such units are also required to be procured for catering progressively increasing traffic demand at various lighterage ports during Eighth Five Year Plan.

6.5 The scheme for Poll-on Poll-off ferry service between Saurashtra and South Gujarat and Bombay for economical movement of cargo by sea, needs to be reviewed. In view of the recent industrial development of mineral based industries in Saurashtra's Coastal area, necessity has arisen to provide a sure and economical mode of transport of the raw-material for these industries as well as finished products from these industries. From the industries established so far only cargo of about 2.5 to 3.00 million tonnes is required to be handled between Saurashtra and West Coast i.e. South Gujarat and Bombay. If the terminal facilities for the Ro-Ro ferries is provided at the various points on the two Coasts viz. Porbandar, Pipavav, Gogha and Dahej, Hajira and Bombay, these cargo can be very economically transported between the two Coasts. It is worked out that each ton of cargo transported by Ro-Ro ferry between the two Coasts, saves Rs. 70/- per tonne in consumption of Petroleum products only which means saving of Rs. 20 crores per year in foreign exchange. These facilities are proposed to be provided in the Eighth Five Year Plan.

6.6 In addition to the above developmental aspects, national land use planning in port areas, creation of facilities for fishermen by developing fishing harbours; scientific research on coastal characteristics in the back-ground of hinterland development are some of the aspects to be considered in evolving an integrated programme for coastal zone management in Gujarat.

#### **Road Development:**

6.7 Road Development in Gujarat has been based on the 20-Year Road Development Plans 1961-81 and 1981-2001. Continuing the ideals of Nagpur Plan and the Bombay Plan, the road development plan for the Country as a whole for the period 1981-2001 has been framed. This 20 years road development plan for India takes into account the need for shift in the planning design and construction techniques due to the technological changes that has taken place.

6.8 The main goal while formulating the plan is to preserve the rural oriented economy of the Country. Facilitating the pattern of development of villages and small towns which will ensure mobility of population as may be necessitated to cities and large towns which will ultimately contribute to the general upliftment of living conditions of the villages. In order to achieve this objective it is contemplated that all villages of having population of 500 or above, will be connected by all weather roads by the year 2001. For small villages of less than 500 population the road net work has been so planned as to result in all weather road being available as the distance of 3 kms. in main area and 5 kms. in hilly area and to have fair weather road upto village boundry.

6.9 In view of the above particular policy which goes to set for the Nation, the 20-year Road Development Plan for Gujarat has been prepared by the Road and Building Department. The State had a road length of 62142 kms. as on 31-3-1988. This length will have to be increased significantly in the remaining 13 years. In addition to improving and upgrading at present 7280 kms. of un-surfaced road to the level of all weather roads. In addition to the new construction of roads and bridges and widening of existing carriage way to intermediary lanes, improving of surface, improvement of bridges including reconstruction wherever necessary will also have to be undertaken in the Plan.

6.10 The rural road project has been launched with the World Bank aid with an estimated cost of Rs. 222 crores for which IDA credit of Rs. 155 crores

would be available. The project envisages to build improved 4042 kms. of roads to the level of asphalt surface including C. D. works in 7 districts of Ahmadabad, Sabarkantha, Mahesana, Banaskantha, Rajkot, Junagadh and Bhavnagar. The project is expected to be completed during the Eighth Plan. On completion of this project, 2600 villages covering a population of 35 lakhs will be directly benefited.

6.11 Work on Ahmadabad-Vadodara express way has been taken up as part of National Highway network during the Seventh Plan with the World Bank assistance. The project is expected to be completed in 1991-92.

6.12 Construction of new roads mainly village roads under various other plan schemes like RLEGP and NREP, District Planning Schemes and Scarcity Relief Works will act to the target for the Eighth Plan.

### **Road Transport**

6.13 Nationalisation of passenger road transport service has been completed 100 per cent in the State since 1969-70, while in the Country as a whole nationalisation has reached a level of about 58%.

6.14 The Gujarat State Road Transport Corporation has taken rapid steps to increase passenger road transport service in the rural areas of the State. For this purpose the corporation has extended its services on a large number of katcha roads and cart tracks and to remote backward areas. By the end of the Seventh Plan about 900 villages will be left out to be covered directly by bus services.

6.15 The growth of passenger traffic on roads in the State is about 10%. In order to cover the growth of traffic, it is necessary to increase the number of schedules at the rate of 5 to 6%. The remaining growth will be achieved by increasing the seating capacity and vehicle utilisation.

6.16 To cover the 900 villages with direct services, the schedules are required to be expanded at the rate of 5%. Out of this 5%, 2% will be utilised to cover the remaining 900 villages and 3% will be used for increasing the frequency in existing routes i.e. the schedules will be expanded at the rate of 5%. Thus, by the end of Eighth Plan it is targetted to cover all the villages with direct services.

### **Communication**

6.17. Gujarat is a flood and cyclone prone area. The normal communication system may fail particularly during floods/cyclones or due to heavy rains, when it is needed most. Remote places like irrigation dams, forests etc. are also required to be connected for monitoring and controlling flood and natural calamities. The flood warning, rescue, and relief operations demand quicker modes of communications. So also, the modern communication equipments like wireless etc. are necessary for State Reserve Police and other police personnel for the purpose of achieving efficiency in the matter of law and order. The Departments concerned would, therefore, be needed to augment their programme in respect of modernisation of Communication equipment.

## **7. SCIENCE, TECHNOLOGY AND ENVIRONMENT**

### **7. Science and Technology :**

7.1 Rapid developments are taking place in science and technology in the world, resulting in major transformation of societies, economies and ways of life. Recognising this, the Country has also placed emphasis in the plan programmes for development of science and technology capabilities and its application. Atomic energy, space technology, ocean technology,



biotechnology etc. have been the fields in which fruitful work has been done in the Country. At the State level two important areas of application which have been developed are (1) natural resources data management systems and (2) processing of administrative, economic and resources related information through the network of computer systems established at the district level under the NICNET Project.

7.2 A centre at Kheda under the NRDMS project is already established and the data generated in this centre would be available for preparing district level plans. Implementation of the NICNET Project of the NIC, Government of India has already initiated the work in the State. Under the project a separate Super AT computer with micro earth stations at some districts of the State has already been started.

7.3 The development of science and technology, especially the research aspects are undertaken by the Central Government. At the State level, the approach would be for popularisation of the science and its applications. The Eighth Plan approach would be to continue the Seventh Plan Programmes and strengthen them further.

#### **Environment :**

7.4 The pressure of cumulative human action on the natural support system are now beginning to cause serious environmental changes. The detriment of land resources and their mis-management is often a major cause for poverty and deprivation which in turn relates to a host of socio-economic problems. In Gujarat perhaps one of the most serious consequence of environmental degradation is the impact on available water resources. Apart from the mismanagement of land and water resources, industrialisation of water and air pollution have also been posing a major hazard on human health.

7.5 Government of India has enacted an Environmental Protection Act in 1986. The rules and regulations for implementing, it have been framed by Government of India and is implemented by the Central Government.

7.6 In Gujarat about 160 lakh hectares of land is affected by the soil and wind erosion. This requires soil and water conservation treatment. Only a little more than 18 lakh hectares so far have been covered by various measures of soil conservation. There are also problems of reclamation of saline lands and khar lands, areas of which have been estimated at about 4 lakh Hectares and 3 lakh hectares respectively. The total saline affected areas in Gujarat is about 12 lakh hectares. Of these, coastal lands are estimated to be 3 lakh hectares needing special attention. Programmes for protecting the marine-eco system of the State would require emphasis. Monitoring and control of chemical and thermal pollution of ocean is also likely to emerge as an important area of preservation in coming years.

7.7 Major contributors to air pollution are thermal power stations, cement plants, refineries and automobile emissions. Expertise and equipment available for monitoring and controlling air pollution will require to be augmented. The Gujarat Pollution Control Board enforces the Water and Air (Prevention and Control of Pollution) Acts as well as Water Seas Acts. The number of monitoring stations as well as number of samples collected by the Board for the purpose of assessment of water and air pollution will require to be extended in the Eighth Plan, so that all important rivers and cities are covered for prevention of water and air pollution.

## **8. GENERAL ECONOMIC SERVICES**

### **Planning Machinery :**

8.1. At present, the apex planning machinery at the State level is the Planning Division in the General Administration Department. The Division

is supported in its activities by the State Computer Centre, Evaluation Directorate, the Directorate of Economics and Statistics and District Planning machinery in the District Collectorate. The growing emphasis on 'grass-root' planning combined with increasing programmes has led to considerable increase, in the work both in quality and quantity of the Planning Machinery. In view of this, the planning machinery in the State, Apex and District levels will be strengthened adequately in a suitable manner that could meet the growing needs of plan formulation, implementation, monitoring and evaluation of plan schemes. Keeping in view the importance being attached to the concept of "grass-root" planning during the period of the Eighth Five Year Plan, the Planning Commission has earlier issued guidelines for strengthening the planning machinery at the District level with the Experts in the concerned disciplines like Agronomist, Geographer, Area Planner, Rural Engineering etc. The District Planning machinery shall have to integrate the efforts of the funds from the institutional finance, voluntary organisations, and flow of funds from the Centrally Sponsored Schemes and Central Sector Schemes being implemented in the State. during the Eighth Plan. At the National level presently it is being envisaged to strengthen the Panchayati Raj Institutions and to associate them actively in the process of planning and therefore it will also be necessary to strengthen the planning machinery in the Panchayat Institutions during the period of Eighth Five Year Plan.

### **Tourism :**

8.2. Tourism has been recognised as a thrust area of development on account of its proved potential for generating income and employment in the Country. It is described as the fastest growing industry in the world today. Besides tourism is also an important sector for earning foreign exchange which could be utilised for development in other sectors. Gujarat has a rich heritage in terms of archeological monuments, handicrafts, arts, and unique way of life based on values cherished over centuries. Keeping this importance of tourism the State Government. has recognised tourism as an industry and decided to develop infrastructural facilities at beaches, places of pilgrimage, commercial centres and on hills through joint sector participation with the private sector. The State Government has extended concessions and incentives to the investors to promote tourist facilities in the State. It is now envisaged that tourism should be developed by creation of infrastructural facilities and projection of the State at the national and international level. The approach to the development through the Eight Plan would be marked by fair return on the investment in this sector. The Gujarat Tourism Corporation Ltd. should be a catalyst for attracting investment from entrepreneurs including non-resident Indians. The hotels and amusement parks should provide facilities for high income tourists and help to generate employment. Besides, middle class and lower strata of society should also get the possible facilities and amenities at the tourists places. A common-man of the State performs pilgrimage facing many odds and putting up considerable amount of hardship. During the Eight Plan, the Tourism Development Corporation of Gujarat Ltd. should cater way side amenities, camp-facilities, etc. by developing infrastructural network at the places of pilgrimage, fairs as well as at picnic spots where normally the common-man of the State visits such places. It will be worth while to introduce a scheme in which such camp facilities and infrastructural development should be provided by the grant of Government supported by popular contribution. Such projects should be managed by local agencies. Keeping these aspects in view, the sector of Tourism deserves due importance during the period of the Eighth Five Year Plan.

### **Statistics :**

8.3. With the development of different sectors of the economy and the expansion of Government activities, the demand for numerous statistical data

has been continuously increasing. For the purpose of planning, not only the demand for chronological data on various items of development but also data on macro-economic aggregates, data based on surveys/studies etc. has grown continuously. In view of this, the statistical machinery at the State and District levels as also in the local bodies will be strengthened so that detailed information required for planning becomes available in time. The maximum use of computers at the field level should be strengthened and support actively the statistical machinery in generating constant flow of accurate and timely statistics for the use of planners at all levels and help in quick decision making. These aspects will be taken due care of in the period of Eighth Five Year Plan.

#### **Civil Supplies :**

8.4 Extension of public distribution system for covering additional areas is necessary because consumers can purchase essential commodities near to their residences with less time in commuting. Schemes like "food for all" will also be covered through the network of the system. Consumers protection by strict enforcement of Consumers Protection Act, 1986 and redressal forums at various levels will need to be continued under the programmes of the Eighth Plan.

#### **Weights and Measures :**

8.5 The Central Govt. has passed the new act *i.e.* Stamping of Weights and Measures Act, 1985 and rules have been made there under. The new Act has very wide coverage. Over and above routine type of activity of verification and stamping of Weights and Measures, used by trading community, it will cover calibration of temperature measuring instruments, clinical thermometer, taxi/auto rickshaw meter, electricity meter etc., The new act will be implemented as soon as the same is notified by the State Government. For implementation of the said new act and also for implementation of packaged commodity rules, vehicles will be required to be provided for tribal areas as well as district offices.

### **9. SOCIAL SERVICES**

#### **EDUCATION :**

9.1. Gujarat with 44 percent literacy rate has comparatively high rate along the States in India. The situation in rural areas and in respect of literacy in women still requires attention.

9.2. The female literacy rate is 32 per cent as per 1981 census against the corresponding 54% for male. The literacy rate for rural areas is only 36 per cent against 60 per cent for the urban areas. There is considerable inter-district variation in literacy with Banaskantha (22%), Panchmahal (28%) and Dang (30%) lagging far behind the State average of 44%.

9.3. There is need for augmenting facilities for girls' education especially in rural areas. The education of women is specially important from the point of reduction in infant mortality rate and adoption of family planning practices.

9.4. Non-formal methods, including more imaginative work, instructional television and more efficient use of night schools and summer schools are some of the areas that require attention.

#### **Primary Education :**

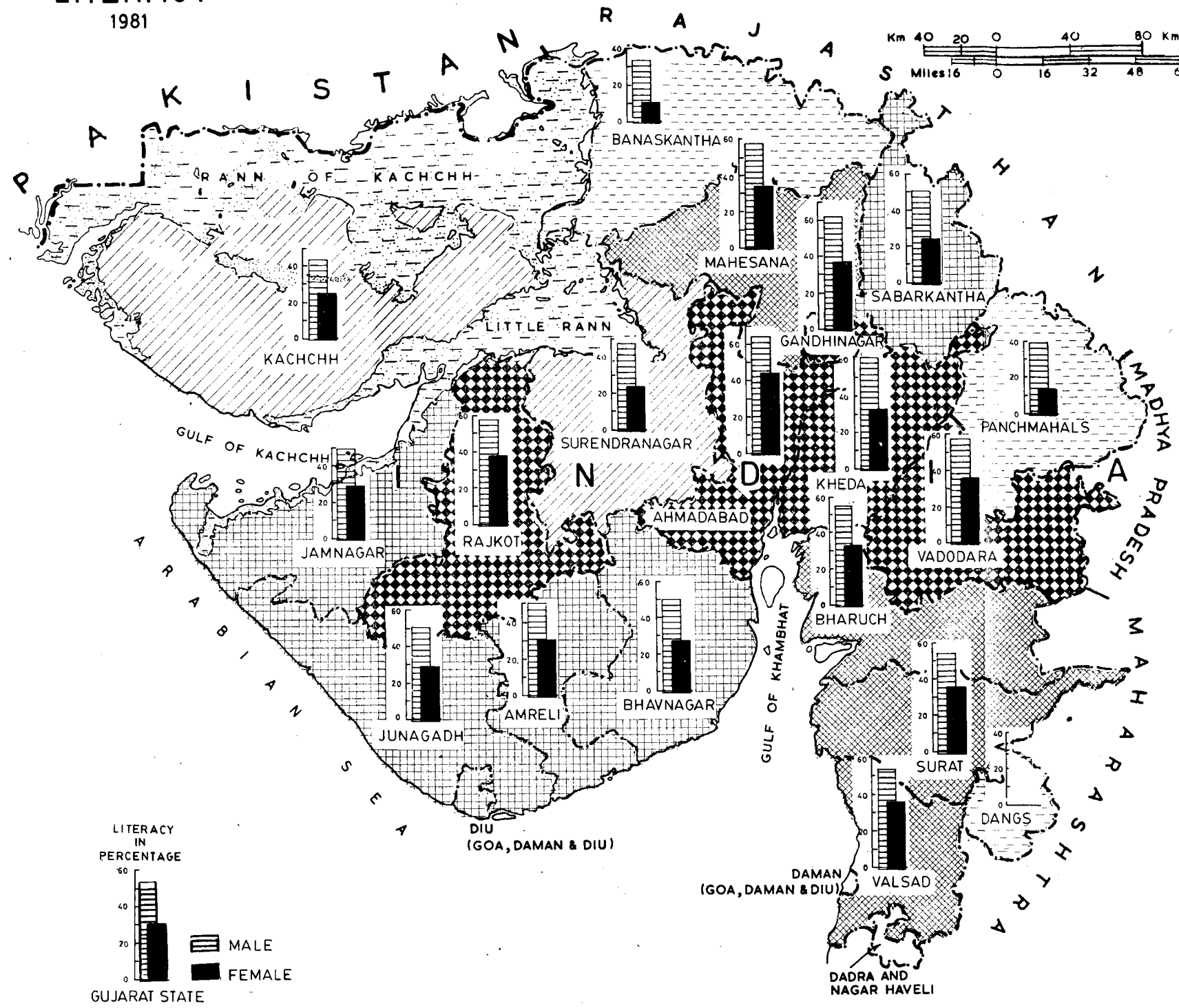
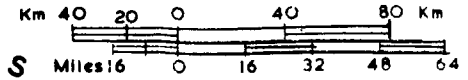
9.5. The National Norm at present is 100% coverage of children in the age group 6-14 years, by 1990. As against this it is targetted to achieve 98% in the age group 6-11 years and 73% in the age group 11-14 at the end of Seventh Plan. The overall target is 94% for the entire age group 6-14 years by 1989-90. It is expected to reach 99% at the end of Seventh Plan. As suggested in the programme of action by the task force under National Policy on Education, 1986, 100% enrolment is targetted by 1995. The State envisaged to achieve 100% coverage at the end of Eighth Plan.

# GUJARAT

## LITERACY

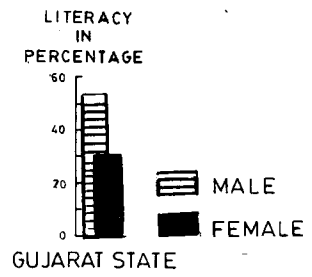
1981

BOUNDARIES:  
 INTERNATIONAL .....  
 STATE / UNION TERRITORY .....  
 DISTRICT .....



LITERACY IN PERCENTAGE

- BELOW 35
- 35 TO 39
- 39 TO 43
- 43 TO 47
- 47 & ABOVE



ED UPON SURVEY OF INDIA MAP WITH THE PERMISSION OF THE  
 VEYER GENERAL OF INDIA  
 TERRITORIAL WATERS OF INDIA EXTEND INTO THE SEA TO A DISTANCE OF TWELVE NAUTICAL MILES  
 SURED FROM THE APPROPRIATE BASE LINE.  
 ONSIBILITY FOR THE CORRECTNESS OF INTERNAL DETAILS RESTS WITH THE PUBLISHER.



9.6 According to Fifth All India Educational Survey 50107 Class rooms are required to be constructed. It is a huge task to meet with the whole requirement however, the State envisages to wipe out the shortage of classrooms through the various schemes viz, RLEGP, NREP, District Planning Board Scheme and also with the help of public contribution. The State also envisage to fulfil the requirement of schools which are lacking in physical facilities viz. compound wall, drinking water, electrification and sanitary facilities etc. by implementing a special scheme over and above the scheme of 'operation blackboard', under which educational equipments, charts, maps, books, furniture etc. are supplied for qualitative improvement of education.

9.7 Out of 24390 habitations in the rural areas, 23670 habitations have primary schools either in their own habitations or within easily walkable distance. It is targetted that 523 habitations where primary school facilities are available at a distance of more than 1.6 kms. will be furnished with such facilities and 2742 habitations where upper primary school facilities are available at a distance of more than 3 kms. will be upgraded during the Eighth Plan. It will be ensured that every village in the State has adequate physical facilities and manpower for primary education.

#### Teachers Training :

9.8 The National Policy on Education--1986 has emphasised to set-up District Institute for Education and Training in each District, accordingly all the Districts will be covered during the Eighth Plan as well as State Institute of Education will also be converted into Gujarat Council for Educational Research and Training on the line of NCERT.

#### Adult Education :

9.9 The major objective in the Eighth Plan is to organise adult education programmes with a view to providing functional literacy to 49.40 lakh adult illiterates in the target group of 15--35 years before 1995.

9.10 The aim is achieving cent per cent literacy in the State. It also aims at providing skills for self directed learning, self-reliance and active participation in self development as well as in National progress.

9.11 This highly ambitious programme cannot be viewed only as a scheme for increasing the number of literate persons in the State; the problem has to be viewed in the total perspective of the socio-economic development of society, especially of the weaker sections of society.

9.12 Women learners form a big section in the target group of 15--35 years, the literacy rate is very low. Women learners face a number of difficulties in attending Adult Education Centres. This plan provides more centres for women. More and more women instructors and women officials would be employed.

9.13 While preparing the Eighth Plan the main guiding force in education has to be the National Policy on Education 1986 and the Programme of Action. According in the area of secondary education the thrust should be to extend the school system to the unserved areas and consolidate the existing facilities by way of upgrading the infrastructure and teachers' competence.

9.14 In the area of Vocational Education, the programme should aim at preparing students before they leave high school to be able to choose an occupation. At the higher Secondary stage specific Vocational Courses should be provided (by the end of Eighth Plan) to accommodate 25% of the student seeking admission at the (+)2 stage. Structural arrangement to involve employers participation in curriculum transaction, employment as well as promotion of self employment which also need to be provided for.

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Date: 2/12/88

## Higher Education :

1.15 The National Policy on Education visualises that higher education should become dynamic. The main features of the programmes and strategies to impart the necessary dynamism to the higher education system will consist of the following.

- (i) Consolidation and expansion of Institutions ;
- (ii) Development of Autonomous Colleges and Departments ;
- (iii) Redesigning courses ;
- (iv) Training of teachers ;
- (v) Strengthening research ;
- (vi) Improvements in efficiency ;
- (vii) Creation of structures for coordination at the State and National levels and
- (viii) Mobility.

## Technical Education :

1.16 Under the Technical Education, policies on Technical and Management Education as laid down by the All India Council of Technical Education for post-graduate, under Graduate and Diploma level programmes, from time to time, to satisfy the needs of the State and the Country as a whole, shall have to be executed during the Eighth Plan. Specific schemes will also include the items under the programme of Action of National Policy on Education approved by the Parliament. The financial provision shall have to be judiciously apportioned to spill over liabilities of schemes under implementation in Seventh Plan and to new programmes and modifications of priorities. Due emphasis envisaged includes :—

- (i) Strengthening management of system ;
- (ii) Interaction and networking ;
- (iii) Strengthening and infrastructural development ;
- (iv) Staff development and proper staff appraisal system;
- (v) Innovations and introduction of programmes of new/improved technologies ;
- (vi) Updating renewal of curricula and programme of continuing education and
- (vii) Consolidating the gains of expansion of Sixth and Seventh Five Year Plans.

## MEDICAL AND PUBLIC HEALTH

### Minimum Needs Programme :

**Rural health:**—In pursuance of the National Policy, State Government has already committed to achieve the goal of "Health for all by 2000 AD". It is envisaged to provide community Health Guide and Trained Dais at every village per 1000 population, a sub-centre in every 5000 Rural and 3000 tribal population and primary health centre for every 30,000 Rural and 20,000 tribal population and community health centre with 30 bedded hospital for every one lakh rural population.

9.18 It is planned to select proper number of female health guides, training them, providing enough medicines during the Eighth Plan so that they can work effectively in rural areas. For safe deliveries in rural areas all untrained Dais will have to be trained. It is also envisaged to have 7090 sub-centres by 2000 AD by covering 5000 Rural and 3000 tribal population. Moreover, 1160 primary health centres will be required to be established by 2000 AD and necessary primary health centres will be established during Eighth Plan. Construction work of PHC buildings even by donation will be taken up during Eighth Plan and provision will be made to supply vehicles to all PHCs. Besides this, as per norms, 263 Community Health Centres are envisaged to be opened by 2000 AD.

9.19. Under the Rural Health Services Programme, it is envisaged to provide Health Care facilities in each and every corner of the State upto village level.

#### **National Malaria Eradication Programme :**

9.20. Under this programme, the present spraying programme will be continued for control of malaria. Moreover, some new and latest methods to control and eradicate malaria will be taken up. The latest methods thought to be introduced will be Biological Control, Radical Treatment campaign and Fever Treatment Department. Under Biological control, it is planned to introduce larvivorous fishes for Biological control. Immediate radical treatment will be given to positive malaria cases by chemotherapy. Fever Treatment Depots will be opened at Village level for collection of blood slides and presumptive treatment to all fever cases. Health Education Programme with community participation will be taken up to teach the people about origin of malaria, how it is spread, prevention and control of malaria, etc. Thus, it is the earnest desire to eradicate malaria if possible and atleast to control it thoroughly during the Eighth Plan.

#### **National T. B. Control Programme :**

9.21. Under this programme, steps will be taken to decrease the present mortality rate of 52 per lakh. During the Eighth Plan, it will be seen that ratio of T. B. Patients is brought down as far as possible.

#### **National Leprosy Eradication Programme :**

9.22. The main objective of this programme is to control and eradicate the disease through multi-drug therapy treatment alongwith early case detection, health education and comprehensive control efforts with participation at all levels by establishment of leprosy control units, survey education and treatment units etc. All efforts will be made to eradicate and control leprosy disease.

#### **National Programme for Control of Blindness :**

9.23. The main aim of this programme is to reduce the incidence of blindness from 1.4% to 0.3 % by the end of this century. Accordingly, during Eighth Plan—(1) Every dispensary, PHC. and CHC. will be covered with the services of Ophthalmic Assistants. (2) Similarly, all 26 hospitals will be having facilities of ophthalmic staff and necessary equipments. (3) Compilation of information pertaining to this programme will be taken care. (4) State Ophthalmic Cell will also be strengthened. (5) Lastly, six more District Mobile Units will be sanctioned for organising camps, surveys in the rural areas and necessary staff and equipments will be provided.

#### **Control of Communicable Diseases :**

9.24. **I. Guinea worm eradication programme** :-Under this programme, it is planned to eradicate this disease by 1995. i. e. during the Eighth Plan.



25. **II. AIDS control programme :-** The new and fastest growing challenge at the end of Seventh Plan and starting of Eighth Plan is control of AIDS. For this, more surveillance centres will be opened in all big hospitals. It is also planned to take more blood samples for examination from high risk groups and it is also planned to educate people including high risk groups regarding causes and eradication of AIDS.

#### **Health Education Programme :**

26. Health education helps in mass media approach group dynamics and make people aware of modern health practices. Health Education Programme is being done through media division, School Health Division, Training Division and Administrative Division. It is being carried out through literature, filmshows, posters, exhibitions, TVs, training for para-medical and non-medical staff and also by conducting various useful courses. Health Education Programme in the Eighth Plan will be community oriented. All Health workers will be equipped with health education materials, flash card, flip book etc. for imparting message in effective manner. All PHCs and CHCs will be equipped with audio-visual kits, educational slides, PVC portable exhibition sets, display wall panels. Services of Doordarshan and All India Radio will be utilised. More emphasis will be given to propagate themes appropriate to "Health for all by 2000AD". Video film library will be established. Six Regional Health Education Cells and 19 district level Health Education Bureaux will be established in the Eighth Plan. Thus, during Eighth Plan, more importance will be given to preventive and educative measures on Health as compared to curative measures.

#### **Integrated Health Information System :**

27 Gujarat State is selected by Government of India for the development of health information support to Health for all strategy Management. Accordingly monitoring and evaluation mechanisms including information support at all levels for Integrated Health Services is planned. During the Eighth Plan, a well balanced and permanent level intergrated health information system will be established.

#### **Family Welfare Programme :**

28 This programme forms an essential and integral part of the 20 point programme which stresses the need for the promotion of Family Planning on voluntary basis as a Peoples' Movement. The main approach of this programme during Eighth Plan is to achieve effective, couple protection rate to 60%, crude birth per thousand population to 27, crude death rate per thousand population to 10, Infant Mortality Rate per thousand live births to 80, Immunisation Rate at 100 and Anti-natal care at 90%. To reach above targets, it is thought to stipulate 15 lakh sterilisations, 15 lakh IUD insertions and 7.5 lakh C.C.Users.

#### **Medical Services :**

29 During the Eighth Plan, it is proposed to have district hospitals with completely modern and speciality services and to contribute towards the fulfilment of "Health for all by 2000 AD." Medical Services are curative and directly deals with the treatment of the patients by indoor, outdoor, curative and diagnosis services.

#### **Medical Education and Research :**

30 This programme is constituted of three fields namely Medical Relief, Medical Education and Training and Research. During the Eighth Plan, under Medical Relief, Central Air-conditioning plant at a cost of Rs. 5 crores will be established.

ed at all four teaching hospitals. Post operative wards, well-equipped with the facilities of all modern equipments will be established. Internal Telephones Systems in the Hospitals and Staff quarters will be established with a view to attend emergency duties and to have proper communication channel. The estimated cost for this is Rs. 15 lakhs. Emergency Aids Services will be provided by providing emergency Ambulance vans with facilities. of first aid and oxygen etc. and also by strengthening emergency wards with the facilities of entillators, suction apparatus X-Ray Machines, E. C. G. Machines etc. This will provide at all 4 big Hospitals. This will be done at an estimated cost of Rs. 115 lakhs. Similarly, Pathology Departments, Blood Banks, orthopedic wards, Radiology Sections etc. will be strengthened by providing latest and useful equipments and machineries. In the same way Anaesthesiology Departments, Neurological and shock wards will be strengthened. Super speciality services like EEG, EMG machines and other necessary services will be provided at all of the teaching hospitals. In the same way, Neuro Surgery Department, Cardiology Department, Urology Department, Nephrology Department, and Burns and Plastic Surgery Department will be strengthened by providing the latest equipments.

9.31 More Occupational and Physio-Therapy schools will be established. Hostels for ladies will be constructed on top priority basis. Graduate and post graduate courses of general nursing will be upgraded, Libraries at all Medical Colleges will be upgraded and facilities of video cassetts, TV and VCRs. will be given. Teachers' Training Institute will be established and training of Medical, Para-medical and Nursing personnels will be given special attention. Staff quarters in enough numbers will be constructed. All Medical and Para Medical personnels will be provided training courses, refresher courses and attention will be paid to Research work. Thus, during the Eighth Plan, it will be our approach to provide above mentioned wide and utmost necessary services on Medical Education, Medical Relief and Research.

#### **Employees' State Insurance Scheme :**

9.32 This scheme is a social security scheme for providing benefits like medical, maternity, protection against disablement and death on duties to all industrial workers who are covered under E.S.I. Act and they are insured beneficiaries under this scheme.

#### **Central Medical Stores Organisation :**

9.33 This organisation deals with procurement, storage and distribution of drugs, equipments, furniture of best quality and in required quantity as demanded by State medical institutions of all levels. At present we are not having facility of testing all drugs for maintaining quality. Therefore, during Eighth Plan, quality control laboratory of CMSO will be established.

#### **Food and Drugs Control Administration :**

9.34 This administration implements the provisions of Drugs and Cosmetics Act, 1940 and Prevention of Food Adulteration Act, 1954 and Rules under these Acts with a view to protect the health of the consumers.

9.35 The ultimate goal of this authority is to see that standard quality drugs are made available to the people. During Eighth Plan, a broad policy and a system will be established to control and eradicate the production of spurious drugs. For this, Drugs Control Administration will be strengthened.

## ian Systems of Medicine and Homeopathy :

36 As a new innovative approach, establishment of Ayurvedic Medicines centres, collection centres, rural ayurvedic and homeopathic dispensaries, long-term centres is accepted to be the requirement of this age to contribute towards goal "Health for all by 2000 AD". These traditional curative methods of health are now accepted widely.

During the Eighth Plan, besides opening the Ayurvedic and Homeopathic dispensaries, hospitals, gardens etc., longevity centres will be established. The main object of this scheme will be to advise the people in forming proper habits, to be free from smoking and narcotic drugs habits and to discontinue such medicines to increase the vitality to fight diseases which will expand life span of the people at cheaper rates.

## WATER SUPPLY :

37 Water supply is a basic amenity. To ensure that the drinking water supply is provided to all the villages and towns, a Technology Mission for drinking water supply has been set up by Government of India. In Gujarat State, out of a total of 18,114 habitated villages, more than 5,000 villages/hamlets have been identified as 'no course' villages. It is expected that by the end of the Eighth Plan all the Villages would be provided with water supply arrangements. However, there will be a few hard core villages with difficulty of access, which may still be left out. Such number is expected to be around 100. In the case of urban areas out of 255 towns in the State 220 towns will be provided with safe drinking water supply by the end of the Seventh Plan. The remaining towns are proposed to be covered during the Eighth Plan. The cost of water supply facility to such towns has been estimated and the financial pattern will be decided depending on the availability of funds.

38 In the case of urban areas sewerage facilities will have to be provided to all villages by the end of the Seventh Plan. Additional towns would be covered with sewerage facilities during the Eighth Plan. In addition to the on going sewerage schemes spilling in the Seventh Plan would be covered during the Eighth Plan.

39 In the Eighth Plan major areas of concern in the water supply sector would be rehabilitation of covered villages, special/repairs and replacement of water supply schemes and maintenance of rural water supply schemes.

Research and development will also become an important activity in the Eighth Plan. Technology on ground water recharge, water conservation methods, design of pumps etc., are areas in which research and development work will be required.

40 Since almost all the villages and towns would be covered under the water supply schemes by the end of the Seventh Plan, the next phase will be of quality monitoring of the supply of water. Effective quality of water monitoring is essential to supply hygienic water to the people and to reduce the incidence of water borne diseases. The task on the quality front is two-fold; firstly is to provide each of 800 primary health centres with portable testing kits; secondly these centres will periodically check quality of water through their own staff, who will be trained for this purpose. Secondly water supply board will check the parameters required to ensure hygienic water supply twice a year for all the water works in the State. This will be done through the mobile laboratories located in the sub-divisional headquarters.

41 About 20,000 operators will be responsible for maintenance of the water works. These operators will need training to supply hygienic water in requisite quantity to the rural population without interruptions. The State has established a training institute. This institute will run regular training programmes for operators at zonal and regional levels. The programmes will be modified according to the requirements.

## HOUSING

### Urban Housing :

9.44. A number of positive measures have been initiated by the State Government in introducing various social housing schemes with objective to help the people in general and the economically weaker sections in particular. Housing is one of the basic necessities of life next only to food and clothing. It is an activity that is labour intensive and therefore fits well with pattern of development envisaged in plan formulation. On expansion of housing activities, profound structural changes take place within the urban economy. The housing situation is acute and is not keeping pace with the growth of the population due to natural growth as well as rapid urbanisation and industrialisation and also immigration thereof. The resultant slums are proliferating and becoming equally challenging in the urban areas. According to the 1981 census, 17.8% of the urban population is living in slums. The objective of housing will, therefore, be to provide the basic need of house to each and every family to improve their living environment and to enhance their quality of life in the long time interval during the period of Eighth Plan. It will also be necessary to provide for slum dwellers and those in squatter settlements the basic need of housing in the form of slum rehabilitation, slum upgradation, and environment improvement to each and every family to improve their living standard. The institutions like HUDCO, Housing Development Finance Corporation, (Rural as well as Urban) will have to play a vital role during the period of Eight Five Year Plan. It will be necessary to provide finance to every one for housing. More number of housing should be provided in the form of serviced plots with a facility of availing cash loan for constructing one's livable home, as per one's social and cultural needs. National Housing Policy and report on National Commission on Urbanisation have suggested certain changes to effectively meet with the housing crisis in the urban areas. The most important of the suggested changes is that the traditional housing agencies have to play a new role not of controllers but of facilitators, not as providers but as promoters. It has also been emphasised to give new thrust by providing a massive supply of serviced land instead of merely a few finished houses. It is also envisaged a new relationship between housing agency and the housing clients, as not givers or receivers but as partners. It will also be necessary to materialise this goal narrated in the National Housing Policy and National Commission on Urbanisation by devising suitable programmes during the period of Eighth Five Year Plan. The final goal should be to provide housing facility at the rate of one of house for a household size of five persons by 2001 A. D., The household size of 5.39 persons in 1990 is required to be reduced by phanned and phased manner so as to achieve 5.22 by 1995 and to 5 by 2001 A.D.

9.45. The department shall have to formulate the plan programmes keeping in view the above goals preached in the National Housing Policy and National Commission on urbanisation during the period of Five Year Eighth Plan.

### Rural Housing:

9.46. Rural housing is one of the basic minimum needs.

9.47. By the end of 1987-88, 9.66 lakh free plots had been distributed to the rural poor in the State.

9.48. The exact number of families in need of free plots has not been assessed so far. However, as per approximate data received from district panchayats, there are nearly 10.25 lakh families eligible for the free plots and 9.66 lakh plots have been distributed to them at the end of March, 1988. Hence, nearly 0.59 lakh families still remain without plot. It is not possible to find out the exact trend in the increase of eligible families. However, on average nearly 40,000 more families become eligible every year for the free plot. With regard to providing house sites to each eligible family at the end of Eighth Plan, about 50,000 housesites are required to be distributed during every year of the Eighth Plan. The State Government has appointed a task mission on

g to work out the projected requirements of housing needs and evolve and means to achieve the targets and to evolve procedure and recom-policy modifications.

2. Looking to the objectives of the National Housing Policy and recommendations made by Task Force, a major change will be required in the content of current housing policy during the Eighth Plan. Some new schemes are to be started considering the objectives of National Housing Policy.

#### **Government Residential Buildings and Administrative Buildings ;**

1. The State Government has been able to provide residential accommodation to about 70,000 Government employees so far. 16,000 additional residential quarters are required to be constructed. Similarly, administrative buildings mainly Central Government office buildings at the district headquarters, where no such office buildings exist will have to be constructed. Eighth Plan will have to provide to meet the requirement of residential as well as non-residential Government buildings.

#### **Police and Jail Housing :**

1. It is accepted that the need for houses of the police personnel need to be viewed differently from the housing for Government employees. Police personnel have duties to maintain law and order and as such emergency services are required round the clock to deal with urgent situations. On the other side, the jail employees are required to stay in jail premises. Considering this adequate attention will be paid to police and, jail housing in the Eighth plan.

#### **House Building Advances to Government Employees :**

52. There has been a large demand from, the employees of Government Panchayats for houses building advance for purchase or construction of houses for which house building advance is sanctioned by the State Government. Due attention would need to be given to augment house building activity in the State through the means of house building advance.

#### **URBAN DEVELOPMENT**

53. The 255 urban areas in the State account for about 31% of the population of the State. Urban population had a growth rate of 3.5% during years 1971-81 as compared to 2.1% for rural areas. The urbanisation has been rapid in Gujarat. This has led to proliferation of slums, steep increase in the land price, strains in civic amenities such as provision of drinking-water, sanitation and roads.

54 Urban development authorities have been set up for preparing regional plans. Programmes of preparation of original plans, community development projects in urban areas, integrated development of small and medium towns, environmental improvement of slums socio-economic development of urban areas etc. need special consideration at least to check further deterioration in urban services. The major problems for the urban authorities is the financial constraint for implementation of various programmes. Schemes of regular evolution of funds from State Government and to establish the necessary institutional framework for generating the capital funds for the improvement of urban infrastructure require attention.

#### **Capital Project :**

9.55. The contemplated works during the Eighth Plan under the Capital Project will be to complete the construction of Indroda barrage so as to serve a dual purpose of providing recreation facilities and using the water supply for Gandhinagar town. It is also necessary to start the work of storm water drain for Gandhinagar township in order to facilitate the draining of the rain water. Government has framed a new policy for sale of land to Government employees/public and private institutions in Gandhinagar town. Necessary infrastructure facilities will have to be provided to the new developing sectors.

## INFORMATION AND PUBLICITY :

9.56. Information has to play a vital role in a developing society undergoing a process of social restructuring and change during the period of Eighth Five Year Plan. The effectiveness of the programmes of different departments of the Government whether under plan or non-plan programmes will depend upon the awareness and participation by the masses. In the earlier days of the era of planning, print media and traditional methods of communication through folk arts and exhibitions etc. played an important role in carrying messages to the rural population.

9.57. But with the advent of television and video as well as computers and ultra-modern facilities of telex, teleprinters and other systems there has now been a qualitative change in the means of communication. The rapid expansion of TV network in India is unprecedented and therefore the Information and Broadcasting Department will have to enable the population in rural areas to have access to the TV programmes by community viewing. If TV combined with V.C.P. it will bring all important messages of the Govt. to the rural population and have tremendous impact on account of audio-visual presentation. However, the traditional media through folk art as well as print media, out-door publicity, film documentaries and exhibitions etc. would also continue to play equally important role during the period of Eighth Five Year Plan.

9.58. Keeping the above needs in view the administrative machinery of the department shall have also to be suitably restructured and strengthened to meet the challenges posed by a new technology in which communication through all medias will require expertise and professional approach. It will also require innovative measures which should create the desired impact on the population of the State with regard to developmental programmes of the Government. Besides, it will also be necessary to disseminate information to taluka level units so as to avail of the benefits of the different plan programmes of the Government to the rural beneficiaries.

## WELFARE OF SCHEDULED CASTES /TRIBAL AND THE OTHER BACKWARD CLASSES :

9.59. Gujarat State with relatively higher per capita income has also high inequalities in development. The weaker sections constitute a very large proportion of the population. Scheduled castes and scheduled tribes account for about 21% of the total population of the State. The other weaker sections of population is minorities (about 30 lakhs) and the nomadic and denotified tribes (about 7 lakhs). Apart from these weaker sections, the socially and educationally backward classes and economically backward class constitute a sizeable section of the total population.

9.60. Plan efforts are directed specifically for bringing the standard of living of these weaker sections to the level of the remaining population. The two prominent components of effort for the development of the scheduled castes and tribes have been protection and plan development programme for the socio-economic development of these groups will be continued during the Eighth Plan with a basic objective of strengthening their economic base through the mechanism of scheduled castes component plan and tribal area sub-plan and by ensuring compliance with the constitutional provisions and laws. Over and above the State Plan investment, the centre provides additional funds in the form of special central assistance. During the Seventh Plan the expenditure flows under the plan programmes for these sections would be sizeable. The proportion of the flows will need to be raised for these weaker sections.

9.61. The literacy percentage of the scheduled tribes is only 21.14% against the general literacy of 43.70%. In view of this, the programmes of human resources development will need emphasis. In view of this programmes of opening of Ashramshalas, grant-in-aid hostels, and hostels for college going students will be of added importance.

9.62. A mid-term evaluation of the programmes of this sector has indicated that proper co-ordination and integration in implementation of the tribal development programmes will need to be ensured by the District Planning Machinery. The demographic scenario and the occupational patterns should be taken special note of particularly in the case of scheduled castes in formulation of schemes for their poverty alleviation. A bigger role may be assigned to the tribals in the forestry sector and in plantation, harvesting and marketing of forest produce.

9.63. Approval of projects displacing tribals should be contingent on formulation of a satisfactory/comprehensive rehabilitation plan.

9.64. The programmes for weaker sections other than SC/ST will require focus on employment generation and training rather than on the usual assistance, scholarships, fees, books etc.

## SOCIAL WELFARE

9.65 Programmes under social defence relate to welfare of women, destitute, exploited children, handicapped persons and those who are deprived of social opportunities. Women and children have been a vulnerable group of the society needing special care and protection.

9.66 Deprivation of equal opportunities and amenities for women in their social life is a matter of concern to the planners. Now at the National level, it has been preached for the equal opportunities to women in every walk of life. It will therefore be very necessary to have special types of programmes for the overall welfare of women in all the different sectors. The Social Welfare Department will have to adopt an integrated approach for the developmental and welfare programmes for the women in the period of Eighth Five Year Plan. The activities of Gujarat Women Economic Development Corporation will require to be expanded in such a way so as to achieve overall economic upliftment of women in the State. Number of programmes for the welfare of children are under implementation through the different departments. The Social Welfare Department therefore, will have to take an integrated view of the programmes like ICDS; education of the children, programmes relating to the Health care of children, mid-day-meal programme, programmes for the child labourers etc. and will have to give a concrete and definite direction to the programmes meant for the upliftment of children and women during the period of Eighth Five Year Plan. Similarly, the measures for destitutes and delinquent children and distressed women, young girls who are vulnerable to social evils, young offenders, handicapped persons, old and infirm persons, deserted and divorced women, widows and beggars etc. will require specific attention during the period of Eighth Five Year Plan. Fortunately in Gujarat, there is a network of voluntary organisations functioning for the upliftment of women, children, handicapped, old and infirm persons etc. and therefore, the efforts of the voluntary organisations shall have to be coordinated and integrated so as to have maximum supplementation in respect of such social defence programmes during the period of Eighth Five Year Plan. It will also be necessary to take measures to combat such social problems with the help of institutional and non-institutional services and to build awareness towards better social life and services so as to generate potential for self-employment particularly among the women. The activities of the Gujarat Social Welfare Advisory Board, Self Employed Women Association (SEWA) Institute of Social and Moral hygiene and other such institutes working in the field of welfare for women, children, physically handicapped, exploited children, delinquent children, destitutes, young offenders etc. will require effective coordination so as to avoid maximum benefits from the programmes they implement. Besides, the programmes shall have to be designed in such a way that they are income generating and the above referred categories of persons become self-reliant. The Social Welfare Department, therefore shall have to incorporate all such programmes and even design new programmes for the welfare of such classes of the society who deserve special attention.

## LABOUR AND EMPLOYMENT

9.67. Industrial peace is an important input for raising the production in the State. By and large, peaceful industrial relations have been maintained in Gujarat, which have been responsible for the increase in trade and industry. In order to sustain this factor contributing to Gujarat's industrialisation, it would be necessary to further strengthen the machinery for effective implementation of the Labour Laws, modernisation of the conciliation machinery and faster redressal of the grievances of the labour forces. It will be necessary to identify sectors, where work force has remained unorganised and required to be provided statutory protection. Gandhi Labour Institute has been assisting in disseminating information pertaining to the needs of protecting the rights of the workers various groups by undertaking field studies. This will need extensive coverage in the coming years. Industrial Courts play a major role in the redressal of grievances of the workmen. At the end of the year 1987, there were more than 10,000 cases pending before Industrial Courts/Tribunal and more than 76,000 cases pending before various Labour Courts of the State. In view of this, it would be necessary to strengthen the Industrial Courts and Labour Courts. They will also require their own buildings with adequate space.

9.68. The 1981 population census has returned 25 lakh workers as agricultural laborers in the State. They form the biggest unorganised labour force. The main problem for these unorganised workers is ensuring the payment of minimum wages according to the current laws. Welfare Centres for this class may need to be opened in talukas where the population of agricultural labour is more than 10,000.

9.69. Unemployment is increasing at a faster rate than in the past. The number on the live registers of Employment Exchanges of the State has increased from 7.7 lakh in 1985-86 to 8.6 lakh in 1986-87. Global estimates of unemployment are not available but indications are available that there is large scale unemployment which will have to be tackled during the Eighth Plan. Employment Exchanges play a role in identifying the available job opportunities and sorting of the unemployed and dates according to the requirements of the employing establishment. The present role of the Employment Exchanges will have to be expanded in assessment of structure of unemployed persons, in terms of skill and educational background. Considering the swelling number of registrations computerisation is inevitable in Employment Exchanges. The feedback from Employment Exchanges will be required to be coordinated with the programmes for training. In the Eighth Plan, each Taluka will have an Industrial Training Institute. Courses package in each institute will have to be prepared depending on the type of employment opportunities in the vicinity of area.

### NUTRITION PROGRAMME :

9.70. We have accepted the policy of improving the nutritional and health status of pregnant and lactating mothers and children below 6 years age. Programme of reduction in mortality and morbidity of infants and early childhood diseases is also implemented. This is being done through Anganwadies run by village level functionaries. This package of services include nutrition and health education, health check-up establishment of referral services, immunisation and providing supplementary nutrition. During Eighth Plan, all these programmes will be taken up and continued and it will seen that they become result oriented as the present progress is very slow. These ancillary services will help to achieve the main goal of "Health for all by 2000 AD". At present, only half of the population is covered under this programme and remaining half will be covered during the Eighth Plan.



## DAY MEAL PROGRAMME

1 The existing Mid Day Meal Programme will have to be improved quantitatively and qualitatively so as to give the best services to the children for whom this programme is meant for. Looking to the experience of the Seventh Five Year Plan, the department shall have to recon- sider the administrative and other measures for the effective implementation of the programme. The supplementation of efforts of the voluntary organisations and other agencies in the implementation of this programme will be the welcome measure during the period of Eighth Five Year Plan.

### FOR ALL :

2 This programme has been commenced with the objective of taking various measures to satisfy the basic requirements to the people. Under the well-organised network of the public distribution system, the State Government should supply foodgrains, edible oils, sugar and other such commodities at reasonable prices to the consumers of Gujarat and especially the economically weaker sections of the society at the subsidised rates. The Government shall have to consider whether the existing norms of providing rations upto 3 kgs at subsidised rates to the families having annual income exceeding Rs. 5000/- will require any change during the period of Eighth Five Year Plan. The department will have to consider the supplementation of funds for this programme from the institutional finance or voluntary organisations for the purpose during the period Eighth Five Year Plan.

## 10. GENERAL SERVICES

### TRAINING OF DEVELOPMENT PERSONNEL :

1 Plan projects and programmes in various sectors are being implemented by a number of agencies like Government Departments, Public Enterprises, Panchayats and other local bodies and voluntary agencies. The State Government has certain training institutions/centres through which training courses are conducted to suit the needs of programmes in specific sectors. Advantage is also taken of the training facilities available with the Government of India National Institutes engaged in Training and Research. The existing training facilities will need to be augmented during the Eighth Plan keeping in view the necessity arising out of the stress laid on District Planning for the advancement in the fields like computer, engineering etc. The Regional Training Institutes alongwith the model administrative Institute Sardar Patel Institute of Public Administration at Ahmadabad need to be strengthened to cater to the needs of training of personnels of different Governmental Departments of the State Government during the period of Eighth Five Year Plan.

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**III STATEMENTS**

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**STATEMENT 1**

**WORLD AND INDIA—AREA AND POPULATION**

Country 1	Area (000 km <sup>2</sup> ) 2	Projected Population 1986 (Mn) 3
World	135,837	4917.00
<i>Of which</i>		
India	3,287 (190)	766.10 (37.7)
Australia	7,687	15.97
Bangladesh	144	100.62
Brazil	8,517	138.49
Burma	677	39.41
Canada	9,976	25.61
China	9,561	1072.22
Egypt	1,001	49.61
France	547	55.39
Germany(W)	249	61.05
Iran	1,648	49.76
Israel	21	4.30
Italy	301	57.22
Japan	372	121.49
Kenya	583	21.16
Korea—Rep	98	41.57
Mexico	1,973	79.56
Pakistan	804	99.16
Philippines	300	56.00
Singapore	0.58	2.59
Sri Lanka	66	16.12
Sweden	450	8.37
U.K.	245	56.76
U.S.A.	9,363	241.00
U.S.S.R.	22,402	280.14

*Note:*—Figures in brackets below India relate to Gujarat State.

*Source:*—Statistical Outline of India, 1938-89, Tata Service, Limited.

## STATEMENT 2

## VITAL STATISTICS—SELECTED COUNTRIES

Country	Birth rate (per 1,000) (1986)	Death rate (Per 1,000) (1986)	Infant mortality (per 1,000 live births) (1985)
1	2	3	4
India	33.2+ (32.4)	12.2+ (11.1)	97 (96)
Australia	15.0	7.3	9
Bangladesh	40.0	15.0	123
Brazil	29.0	8.0	67
Canada	14.8	7.3	8
China	18.0	7.0	35
Egypt	36.0	10.0	93
France	14.1	9.9	8
Germany (W)	10.2	11.5	10
Israel	23.1	6.8	14
Italy	10.1	9.5	12
Japan	11.5	6.2	6
Korea, Rep	21.0	6.0	27
Mexico	33.0	7.0	50
Pakistan	44.0	15.0	115
Philippines	33.0	8.0	48
Singapore	14.8	5.0	9
Sri Lanka	25.0	6.0	36
Sweden	12.2	11.1	6
Switzerland	11.7	9.2	8
U K	13.3	11.6	9
U.S.A.	15.5	8.7	11
U.S.S.R.	19.0	10.0	29

Data for Bangladesh, Brazil, China, Egypt Italy Korea Rep., Australia Mexico, Pakistan, Philippines, Shrilanka and U.S.S.R. relate to 1985.

+ Estimates for mid-year 1981-86.

Note:— Figures in brackets relate to Gujarat State. Infant Mortality Rate for Gujarat State is for the year 1986.

Source:—Statistical Outline of India, 1988-89, Tata Services Limited.

**STATEMENT 3**  
**INDIA AND GUJARAT**

Sl. No.	Item	Unit	India	Gujarat
1	2	3	4	5
<b>1. AREA AND POPULATION (1981)</b>				
1.1	Area	'000 km <sup>2</sup>	3287	196
1.2	Total Population	Lakh No.	6852	341
1.3	Density	No.	216	174
1.4	Total Males	Lakh No.	3544	176
1.5	Total Females	,,	3308	165
1.6	Sex Ratio	Females per '000 males	933	942
1.7	Rural Population	Lakh No.	5255	235
1.8	Urban Population	,,	1597	106
1.9	Urban Population as %age to total	Percentage	23.3	31.1
1.10	Literates	Lakh No.	2410	149
1.11	Literate Males	,,	1613	96
1.12	Literate Females	,,	797	53
1.13	Literates in Rural areas	,,	1505	85
1.14	Literates in Urban Areas	,,	905	64
1.15	Scheduled Castes Population	,,	1048	24
1.16	Scheduled Tribes Population	,,	516	48
1.17	Main Workers	,,	2225	110
1.18	Marginal Workers	,,	230	17
1.19	Growth of population 1971-81	Percentage	25.0	27.7
<b>2. VITAL STATISTICS (1986—Provisional)</b>				
2.1	Birth rate	per '000 persons	32.4	32.5
2.2	Death Rate	,,	11.1	11.1
2.3	Infant Mortality rate	per '000 Births	96	101

**STATEMENT 3 (Contd.)**

1	2	3	4	5
<b>3. NATIONAL/STATE INCOME (1987-88-Quick)</b>				
3.1	Total Income at current prices	Abja Rs.	2587	141
3.2	Per capita Income at current prices	Rs.	3284	3636
<b>4. LAND USE (1983-84-Provisional)</b>				
4.1	Cropping Intensity	Percentage	126	116
4.2	Net cropped area per agricultural worker	Hectare	9.64	1.46
4.3	Cross area irrigated as %age to Gross cropped area	Percentage	29.88	25.09
4.4	Forest area as %age to total reporting area	Percentage	22	10
<b>5. AREA UNDER PRINCIPAL CROPS</b> (Average of Triennium ending 1986-87-Final Forecast)				
5.1	Rice	Lakh Hect.	410	5
5.2	Wheat	"	231	5
5.3	Jowar	"	159	9
5.4	Bajri	"	108	13
5.5	All Cereals	"	1035	36
5.6	All Pulses	"	234	8
5.7	All Foodgrains	"	1269	44
5.8	Groundnut	"	71	19
5.9	Cotton	"	73	14
<b>6. PRODUCTION OF PRINCIPAL CROPS</b> (Average of Triennium ending 1986-87-Final Forecast)				
6.1	Rice	Lakh tonnes	609	6
6.2	Wheat	"	456	9
6.3	Jowar	"	102	4
6.4	Bajri	"	47	11
6.5	All Cereals	"	1343	33
6.6	All Pulses	"	124	4

## STATEMENT 3 (Contd)

1	2	3	4	5
6.7	All Foodgrains	Lakh tonnes	1467	37
6.8	Groundnut	„	59	11
6.9	Cotton	Lakh bales of 170 kg each	81	17
<b>7. IRRIGATION(1983-84)</b>				
7.1	Net Area Irrigated	Lakh Hect.	399 (1982-83)	23
7.2	Gross Area Irrigated	„	520 (1982-83)	28
<b>8. LIVESTOCKE (1982)</b>				
8.1	Total livestock	Lakh No.	369 (1977)	184
8.2	Total Poultry	„	1592 (1977)	36
<b>9. ELECTRICITY</b>				
9.1	Installed Capacity (1986-87)	'00MW	608	39
9.2	Electricity Generated (1986-87)	Million KWH	182777	14683
9.3	Per capita consumption of electricity (1985-86)	KWH	164	277
9.4	Towns and villages electrified as on 31-3-88	'000 No. No.	436	18
<b>10. MINING</b>				
10.1	Value of Mineral output Metallic, Non-metallic and fuels (1986)	Crore Rs.	92	7
<b>11. FACTORIES (1987-Provisional)</b>				
11.1	Working factories	No.	157598 (1982)	13540
11.2	Average no. of workers employed daily in working factories	Lakh No.	73.53 (1982)	6.81



**STATEMENT 3 (Concl'd)**

	2	3	4	5
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**PRODUCTION OF SELECTED INDUSTRIES (1987-Provisional)****12.1 Cotton Textile (Mill sector)**

12.1.1 Yarn	Lakh kgs.	14881 (1986)	1191
12.1.2 Cloth	Lakh Mtrs.	33366 (1986)	5194
12.2 Caustic Soda	'00 tonnes	7289 (1986)	1170
12.3 Salt	'00 tonnes	95704 (1986)	64012
12.4 Vegetable oil products (Vanaspati)	"	9202 (1986)	809
12.5 Cement	'000 tonnes	34979 (1986)	2538

**SCHEDULED COMMERCIAL BANKS  
(June, 1988-Provisional)**

13.1 Offices	No.	55198	3145
13.2 Deposits	Crore Rs.	126781	7703
13.3 Advances	"	76563	4159

**RAILWAYS—1985-86.**

14.1 Total length	Km.	61836	5564
14.2 Length per 100 km of area	"	1.88	2.84
14.3 Length per one lakh of population	"	8.41	15.37

**ROADS**

15.1 No. of villages connected with pucca roads (as on 31-3-88)	"	N.A.	13641
Employment in public sector (Persons employed-1988)	Lakh No.	180.28	9.15

Source : Directorate of Economics and Statistics, Gujarat.

**STATEMENT 4**  
**POPULATION OF GUJARAT-1901 TO 1981**

Sr. No.	Item	India/ State	1901	1911	1921	1931	1941	1951	1961	1971	1981
			4	5	6	7	8	9	10	11	12
1	Total Population (in lakh)	Gujarat	91	98	102	115	137	163	206	267	341
		India	2383	2520	2512	2789	3185	3610	4391	5479	6852
2	Decennial Population growth rate in percentage	Gujarat	—	+7.79	+3.79	+12.92	+19.25	+18.69	+26.88	+29.39	+27.67
		India	—	+5.75	-0.30	+11.00	+14.23	+13.31	+21.64	+24.80	+25.00
3	Density of population per Sq.Km.	Gujarat	46	50	52	59	70	83	105	136	174
		India	77	82	81	90	103	117	142	178	216
4	Literacy(Percentage)	Gujarat	7.33	9.12	10.85	11.98	N.A.	21.69	30.45	35.79	43.70
		India	5.35*	5.92*	7.10*	9.50*	N.A.	19.69@	24.02	29.46	36.23
5	Sex Ratio (Number of females per 1000 males).	Gujarat	954	946	944	945	941	952	940.	934	942
		India	972	964	955	950+	945+	946	941	930	933

Source : Socio Economic Review, Gujarat State 1988-89.

\* For undivided India.

@ Excludes Jammu and Kashmir.

+ Excluding Pondicherry.

## STATEMENT 5

**QUINQUENNIAL PROJECTIONS (MEDIUM) OF POPULATION BY AGE  
AS ON 1st MARCH 1981—2001 : GUJARAT**

(Figures in lakhs)

Age Group	1981	1986	1991	1996	2001
1	2	3	4	5	6
00—04	47	49	47	43	42
05—09	45	45	47	45	42
10—14	42	44	44	47	45
15—19	37	42	44	44	47
20—24	32	37	41	43	44
25—29	27	32	36	41	43
30—34	22	26	31	36	40
35—39	19	22	26	31	35
40—44	17	19	22	26	30
45—49	14	16	18	21	25
50—54	11	13	15	17	20
55—59	9	10	13	14	16
60—64	7	8	10	11	13
65 +	12	14	16	19	23
<b>All ages</b>	<b>341</b>	<b>377</b>	<b>410</b>	<b>438</b>	<b>465</b>

Source : "Report of the Expert Committee on Population Projection", Office of the Registrar General, India.

## STATEMENT 6

**CLASS I AND II CITIES/TOWNS WITH THEIR POPULATION ACCORDING  
TO 1971 AND 1981 CENSUSES AND PERCENTAGE POPULATION  
INCREASE DURING 1971-81**

(In lakhs)

Sl No	Name of the City/town	District	Population		Percentage increase 1971-81
			1971	1981	
1	2	3	4	5	6
<b>I. Class—I City/town</b>					
(Popln. 1 Lakh and above)					
1	Jamnagar City	Jamnagar	2.15	2.94	36.74
2	Rajkot City	Rajkot	3.01	4.45	47.84
3	Bhavnagar City	Bhavnagar	2.26	3.09	36.73
4	Junagadh	Junagadh	0.96	1.20	25.00
5	Porbandar	Junagadh	0.97	1.15	18.56
6	Ahmadabad City	Ahmadabad	15.92	21.59	35.62
7	Nadiad	Kheda	1.08	1.43	32.41
8	Vadodara City	Vadodara	4.67	7.34	57.17
9	Bharuch	Bharuch	0.92	1.13	22.83
10	Surat City	Surat	4.72	7.77	64.62
11	Navsari	Valsad	0.73	1.07	46.58
<b>II. Class—II Towns</b>					
(Popln. 50,000—99,999)					
1	Gondal	Rajkot	0.55	0.67	21.82
2	Jetpur	Rajkot	0.42	0.63	50.00
3	Dhoraji	Rajkot	0.60	0.78	30.00
4	Upleta	Rajkot	0.35	0.55	57.14
5	Morvi	Rajkot	0.61	0.73	19.67
6	Surendranagar	Surendranagar	0.67	0.92	37.31
7	Dhrangaghra	Surendranagar	0.41	0.51	24.39
8	Mahuva	Bhavnagar	0.42	0.56	33.33
9	Botad	Bhavnagar	0.32	0.50	56.25
10	Savarkundla	Bhavnagar	0.39	0.51	30.77
11	Amreli	Amreli	0.44	0.58	31.82

## STATEMENT 6 (Conold)

2	3	4	5	6
2 Veraval	Junagadh	0.59	0.85	44.07
3 Bhuj	Kachchh	0.53	0.70	32.08
4 Gandhidham	Kachchh	0.39	0.61	56.41
5 Palanpur	Banaskantha	0.42	0.61	45.24
6 Mahesana	Mahesana	0.52	0.73	40.38
7 Patan	Mahesana	0.65	0.79	21.54
8 Sidhpur	Mahesana	0.41	0.53	29.27
9 Kalol	Mahesana	0.50	0.70	40.00
0 Gandhinagar	Gandhinagar	0.24	0.62	158.33
1 Sardarnagar	Ahmadabad	0.39	0.50	28.21
2 Saijpur Bogha	Ahmadabad	0.32	0.65	103.13
3 Anand	Kheda	0.59	0.84	42.37
4 Khambhat	Kheda	0.62	0.69	11.29
5 Godhra	Panchmahal	0.67	0.86	28.36
6 Dohad	Panchmahal	0.45	0.64	42.22
7 Valsad	Valsad	0.55	0.73	32.73

Source : "General Population Tables, Series 5, Gujarat, Part - II-A 1931 Census".

## STATEMENT 7

NET STATE DOMESTIC PRODUCT AT FACTOR COST AT CONSTANT  
(1970-71) PRICES GUJARAT STATE

(Rs. in Crores)

Year	At Constant (1970--71) Prices			
	Primary sector 2	Secondary sector 3	Tertiary sector 4	Total 5
1960—61	628	328	450	1406
1965—66	683	419	550	1652
1970—71	1071	456	662	2189
1971—72	1116	440	700	2256
1972—73	614	524	662	1800
1973—74	895	589	738	2202
1974—75	604	873	721	1898
1975—76	1066	564	809	2439
1976—77	1099	611	886	2596
1977—78	1132	694	952	2778
1978—79	1192	728	1041	2961
1979—80	1156	764	1049	2969
1980—81	1193	770	1094	3057
1981—82	1439	796	1184	3419
1982—83	1165	873	1239	3277
1983—84	1258	1027	1332	3617
1984—85	1322	948	1382	3652
1985—86	892	1025	1445	3362
1986—87	940	1110	1516	3567
1987—88	506	1198	1604	3308
<b>*Average annual growth rate</b>				
1960—61 to 1970—71	2.93	3.63	3.53	3.32
1970—71 to 1980—81	3.46	5.87	5.80	4.69
1970—71 to 1987—88	0.26	5.80	5.74	3.90

\*Average Annual Rate of Growth worked out by fitting a trend line to the Logarithmic value of State Domestic product.

Source : Directorate of Economics and Statistics, Gujarat State.

## STATEMENT 8

AVERAGE PERCENTAGE SHARE IN THE STATE DOMESTIC PRODUCT  
CURRENT PRICES (BASED ON TRIENNIUM ENDING) GUJARAT STATE

Triennium ending	Agriculture	Manufacturing (Registered)	Primary sector	Secondary sector	Tertiary sector
	2	3	4	5	6
1963	41.1	13.2	42.4	25.0	32.6
1966	41.8	12.8	43.3	23.8	32.9
1969	42.9	12.1	45.1	22.3	32.6
1975	36.7	16.1	38.9	26.7	34.4
1981	35.0	16.2	37.5	26.4	36.1
1985	30.5	16.2	34.8	27.1	38.1
1988	19.82	19.03	24.5	30.6	44.9

Source :- (i) Directorate of Economics and Statistics, Gujarat State

(ii) Respective Planning Unit, Planning Division, General Administration Department, Government of Gujarat.

STATEMENT 9

**NUMBER AND PERCENTAGE OF POPULATION BELOW THE POVERTY  
LINE BY STATES SEPARATELY FOR RURAL AND URBAN AREAS:  
1983-84 (PROVISIONAL)**

Sl No.	State	Rural		Urban		Combined	
		Number (lakhs)	%age	Number (lakhs)	%age	Number (lakhs)	%age
1	2	3	4	5	6	7	8
1.	Andhra Pradesh	164.4	38.7	40.7	29.05	205.1	36.4
2.	Assam	44.9	23.8	4.9	21.6	49.8	23.5
3.	Bihar	329.4	51.4	36.1	37.0	365.5	49.5
4.	Gujarat	67.7	27.6	19.9	17.3	87.6	24.3
5.	Haryana	16.2	15.2	5.5	16.9	21.7	15.6
6.	Himachal Pradesh	5.8	14.0	0.3	8.0	6.1	13.5
7.	Jammu & Kashmir	8.1	16.4	2.2	15.8	10.3	16.3
8.	Karnataka	102.9	37.5	34.7	29.2	137.6	35.0
9.	Kerala	55.9	26.1	15.6	30.1	71.5	26.8
10.	Madhya Pradesh	218.0	50.3	36.9	31.1	254.9	46.2
11.	Maharashtra	176.1	41.5	55.9	23.3	232.0	34.9
12.	Manipur	1.3	11.7	0.6	13.8	1.9	12.3
13.	Meghalaya	3.9	33.7	0.1	4.0	4.0	28.0
14.	Orissa	107.7	44.8	10.4	29.3	118.1	42.8
15.	Punjab	13.7	10.9	10.7	21.0	24.4	13.8
16.	Rajasthan	105.0	36.6	21.2	26.1	126.2	34.3
17.	Tamil Nadu	147.6	44.1	52.6	30.9	200.2	39.6
18.	Tripura	4.6	23.5	0.5	19.6	5.1	23.0
19.	Uttar Pradesh	440.0	46.5	90.6	40.3	530.6	45.3
20.	West Bengal	183.9	43.8	41.2	26.5	225.1	39.2
21.	Nagaland, Sikkim & All Union Territories	17.9	47.4	14.4	17.7	32.3	27.1
	All India	2215.0	40.4	495.0	28.1	2710.0	37.4

Note:-(1) The above estimates are derived by using the poverty line of Rs. 49.09 per capita per month at 1973-74 prices corresponding to daily calorie requirement of 2400 per person in rural areas and the poverty line of Rs. 56.64 per capita per month corresponding to calorie requirement of 2100 in urban areas.

(2) For up-dating the poverty line for 1983-84, C.S.O., Private Consumption deflator has been used.

(3) These results are based on the provisional and quick tabulation of the NSS on household consumer expenditure of 30th Round (Jan. 1983 to Dec. 1983).

(4) The difference between the aggregate all India private consumption expenditure estimated by Central Statistical Organisation in their National Accounts Statistics and that derived from the NSSO data has been prorata adjusted among the different States and Union Territories in the absence of any information to allocate this difference among the States and U.Ts.

(5) The number of people below poverty line relates to the population on 1st March, 1984.

Source:- Answer to Parliament Question on 27th February, 1989.



## STATEMENT 10

## DROUGHT PRONE AREAS IN GUJARAT

DISTRICT	TALUKA
2	3
Ahmadabad	<ol style="list-style-type: none"> <li>1. Dhandhuka</li> <li>2. Virangam</li> </ol>
Amreli	<ol style="list-style-type: none"> <li>1. Dhari</li> <li>2. Khambha</li> <li>3. Lathi</li> <li>4. Rajula</li> <li>5. Liliya</li> <li>6. Babara</li> <li>7. Jafrabad</li> <li>8. Kunkawav</li> </ol>
Bhavnagar	<ol style="list-style-type: none"> <li>1. Gadhada</li> <li>2. Savarkundla</li> <li>3. Gariyadhar</li> </ol>
Jamnagar	<ol style="list-style-type: none"> <li>1. Kalyanpur</li> <li>2. Okha Mandal</li> </ol>
Kachchh	<ol style="list-style-type: none"> <li>1. Abdasa</li> <li>2. Anjar</li> <li>3. Bhuj</li> <li>4. Bhachau</li> <li>5. Lakhpat</li> <li>6. Nakhatrana</li> <li>7. Rapar</li> </ol>
Panchmahal	<ol style="list-style-type: none"> <li>1. Jhalod</li> <li>2. Godhra</li> <li>3. Dahod</li> <li>4. Limkheda</li> <li>5. Lunawada</li> <li>6. Santrampur</li> <li>7. Shahera</li> </ol>
Rajkot	<ol style="list-style-type: none"> <li>1. Jasdan</li> <li>2. Wankaner</li> <li>3. Maliya</li> <li>4. Paddhari</li> <li>5. Lodhika</li> </ol>

STATEMENT 10 (Contd)

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1	2	3
8	Surendranagar	1. Wadhwan 2. Dasada 3. Halwad 4. Lakhtar 5. Limbdi 6. Muli 7. Sayala 8. Chotila 9. Dhrangadhra
TOTAL : 43 Talukas		

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Source:—Agriculture and Rural Development Department.

**STATEMENT 11****DESERT AREAS IN GUJARAT**

No.	District	Taluka
1	2	3
1	Banaskantha	1. Wav 2. Tharad 3. Deodar 4. Kankrej 5. Radhanpur 6. Santalpur 7. Dhanera
2	Mahesana	1. Sami 2. Harij
		<b>TOTAL : 9 Talukas</b>

*Source* :—Agriculture and Rural Development Department.

## STATEMENT 12

## TRIBAL AREAS IN GUJARAT

Sl No.	Name of the Project with Head Quarters	Name of the District	Taluka/Pocket/Cluster	No. of Total Villages Towns	Area covered in Sq.Kms.	Population		1981 Census Scheduled Tribe	Percentage
						Total	Scheduled Tribe		
1	2	3	4	5	6	7	8	9	
1.	Khedbrahma Sabarkantha		(1) Khedbrahma	137	846	1,36,044	79,878	58.71	
			(2) Vijaynagar	85	456	58,776	42,375	73.10	
			(3) Bhiloda	168	724	1,46,114	75,326	51.55	
			(4) Meghraj	128	545	91,437	31,340	34.27	
			Total	518	2,571	4,32,371	2,28,919	52.95	
2.	Dahod	Panchmahal	(5) Dahod	120	875	2,96,322	2,15,774	72.82	
			(6) Jhalod	151	798	2,00,445	1,71,549	85.58	
			(7) Santrampur	395	1,360	3,23,268	2,14,693	66.41	
			(8) Limkheda	242	1,064	2,11,470	1,23,557	58.43	
			(9) Devgadbaria	187	1,145	2,75,104	1,04,983	38.16	
			(i) Kathala(Kalol)	61	193	49,857	26,346	52.84	
			(ii) Mora (Godhra)	31	194	49,213	28,031	56.96	
			(iii) Govindi(Godhra)	15	87	17,661	9,779	55.39	
			(a) Karoli(Kalol)	3	29	6,315	3,356	53.14	
			Total	1,205	5,745	14,29,655	8,98,068	62.82	
3.	Chhotaudaipur Vadodara		(10) Chhota Udaipur	278	1,379	2,40,699	1,97,222	81.94	
			(11) Naswadi	219	535	89,263	72,736	81.49	
			(12) Tilakwada	97	245	48,661	23,231	47.74	
			(iv) Vadeli(Sankheda)	53	182	28,539	18,520	4.89	
			(v) Karali(Pavi-Jetpur)	52	80	38,683	28,996	74.96	
			(vi) Bhikhapur	45	170	35,944	24,030	66.85	
			(vii) Bhatpur	51	212	33,063	16,486	49.86	
			Total	795	2.80	5,14.852	3,81,221	74.00	
4.	Rajpipla	Bharuch	(13) Dediapada	214	1,022	88,431	82,545	93.34	
			(14) Sagbara	107	400	58,285	52,301	89.27	
			(15) Valia	95	514	94,319	71,989	76.33	
			(16) Nandod	206	1,091	1,79,263	1,71,191	65.37	
			(17) Jhagadia	168	813	1,28,134	82,329	64.25	
			(viii) Ankleshwar	38	228	47,637	23,320	48.95	
			(ix) Amod	15	92	13,645	6,820	49.98	
			(x) Utraj(Hansot)	13	92	10,373	5,151	19.66	
			Total	850	4,252	6,20,387	4,41,646	71.19	
			5.	Songadh	Surat--I	(18) Songadh	179	853	1,46,227
(19) Uchchhal	68	324				52,692	51,342	97.44	
(20) Vyara	150	813				1,82,078	1,60,764	88.29	
(21) Valod	40	202				66,291	48,391	73.00	
(22) Nizar	87	400				80,683	60,451	74.92	
Total	524	2,592				5,27,971	4,40,730	83.48	

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STATEMENT 12 (Conold)

3	4	5	6	7	8	9
Gujarat--II	(23) Mandvi	149	731	1,37,727	1,06,358	77.22
	(24) Mahuva	69	354	1,04,241	83,832	80.42
	(25) Bardoli	86	379	1,55,274	80,210	51.66
	(26) Mangrol	150	782	1,62,113	1,07,764	66.47
	(xi) Kamrej	60	305	78,438	41,034	52.31
	(xii) Palsana	43	170	61,582	30,296	49.20
	(xii) Olpad	38	179	33,762	18,811	55.72
	(b) Wanjh (Choryasi)	8	31	7,751	3,953	51.00
	Total	603	2,931	7,40,888	4,72,258	63.74
Valsad	(27) Vansada	95	600	1,45,791	1,31,276	90.04
	(28) Dharampur	238	1,650	2,37,073	2,22,744	93.96
	(29) Chikhli	85	575	2,14,128	1,47,894	69.07
	(30) Pardi	81	428	2,05,538	1,16,221	56.54
	(31) Umargam	50	361	1,43,727	79,425	55.26
	(xiv) Rahej(Gandevi)	32	123	57,791	30,732	53.18
	(xv) Atgam	42	209	87,280	48,235	55.26
	(xvi) Ronvel(Valsad)	30	169	58,500	36,187	61.86
	(xvii) Sisodra-Ganesh(Navsari)	73	280	1,11,419	59,274	53.20
Total	726	4,395	12,61,247	8,71,988	69.44	
Dang	(32) Dang	311	1,683	1,13,664	1,04,918	92.31
	Total	311	1,683	1,13,664	1,04,918	92.31
Anaskantha	(xviii) Amirgadh (Palanpur)	54	643	55,704	29,244	52.50
	(xix) Danta	124	579	53,458	44,828	83.86
	Total	178	1,222	1,09,162	74,072	67.86
Grand Total		5,716*	28,194	57,50,197	39,13,820	68.06

oman indicate the pockets.

Alphabetic indicate the clusters.

uninhabited villages and 20 villages/towns under urban area.

al Development Department, Gujarat.

## STATEMENT 18

## ECONOMICALLY BACKWARD TALUKAS IN GUJARAT STATE

Sl. No	District	Total No. of Talukas	Name of Taluka identified as Backward
1	2	3	4
1.	Panchmahal	11	1. Limkheda 2. Santrampur 3. Devgadhi Baria 4. Zhalod 5. Shahera 6. Jambughoda 7. Dohad 8. Halol 9. Lunawada 10. Godhra
2.	Banaskantha	11	1. Santalpur 2. Vav 3. Deodar 4. Tharad 5. Kankrej 6. Dhanera 7. Danta 8. Deesa
3.	Surat	13	1. Uchchhal 2. Songadh 3. Nizar 4. Vyara 5. Mandvi 6. Mangrol
4.	Bharuch	11	1. Dediapada 2. Sagbara 3. Jhagadia 4. Vagra 5. Valia
5.	Vadodara	12	1. Chhota-Udaipur 2. Nasvadi 3. Jetpur-Pavi 4. Tilakwada
6.	Kachchh	9	1. Rapar 2. Lakhpat 3. Bhachau 4. Abdasa
7.	Jamnagar	10	1. Kalyanpur 2. Lalpur 3. Bhanvad 4. Okhamandal
8.	Junagadh	15	1. Una 2. Malia 3. Visavadar

## STATEMENT 13 (Consolid)

2	3	4
Valsad	8	1. Dharampur 2. Vansda
Sabarkantha	10	1. Meghraj 2. Khedbrahma
Amreli	10	1. Jafrahad 2. Babra
Surendranagar	9	1. Sayla 2. Chotila
Rajkot	13	1. Lodhika 2. Jasdhan
Dangs	1	1. Dangs
Mahesana	11	1. Sami

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TOTAL 56 TALUKAS.

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Source:—Backward Area Unit, Planning Division, General Administration Department, Gujarat.

**STATEMENT 14**

**GEOGRAPHICALLY BACKWARD AREAS IN GUJARAT  
AS ON 1-10-1988**

Sr. No.	Name of the Backward area	District	Taluka	No. of Villages		
1	2	3	4	5		
1.	Nalkantha	1. Amdavad	1. Dholka	11		
			2. Viramgam	23		
			3. Sanand	10		
						<hr/>
						44
						<hr/>
				2. Surendranagar	1. Limbdi	21
					2. Lakhtar	16
						<hr/>
						37
				<hr/>		
<b>TOTAL VILLAGES IN NALKANTHA</b>				<b>81</b>		
2.	Bhal	1. Bhavnagar	1. Shihor	6		
			2. Vallabhipur	32		
			3. Bhavnagar	20		
						<hr/>
						58
						<hr/>
				2. Surendranagar	1. Limbdi	20
				3. Amdavad	1. Dholka	50
					2. Dhandhuka	69
						<hr/>
						119
						<hr/>
		4. Kheda	1. Khambhat	57		
			2. Matar	21		
				<hr/>		
				78		
				<hr/>		
<b>TOTAL VILLAGES IN BHAL</b>				<b>275</b>		
3	Panchal	1. Surendranagar	1. Chotila	42		
			2. Sayla	49		
			3. Mali	32		
			4. Halvad	11		
						<hr/>
						134
						<hr/>
				2. Amreli	1. Babra	20
		3. Rajkot	1. Rajkot	9		
			2. Wankaner	51		
			3. Jasdan	50		
				<hr/>		
				110		
				<hr/>		
<b>TOTAL VILLAGES IN PANCHAL</b>				<b>264</b>		



**STATEMENT 14 (Concd)**

Se. No.	Name of the Back- ward area.	District	Taluka	No. of Villages
1	2	3	4	5
4	Ghed	1. Junagadh	1. Porbandar (Barda Ghed)	28+28
			2. Katiyana	22
			3. Mangrol	24
			(13+11 Keshod)	
			4. Manavadar	4
			5. Ranawav	9
				<hr/> 81+28
			<b>TOTAL VILLAGES IN GHED</b>	109
5	Dwarka Okha Mandal	1. Jamnagar	1. Okha Mandal	43
			<b>TOTAL VILLAGES IN DWARKA OKHA MANDAL</b>	43
6	Pandu Mewas	1. Vadodara	1. Savli	59
			<b>TOTAL VILLAGES IN PANDU MEWAS</b>	59
7	Khakharia Tappa	1. Mahesana	1. Kalol	34
			2. Kadi	62
				<hr/> 96
		2. Amdavad	1. Viramgam	15
			<b>TOTAL VILLAGES IN KHAKHARIA TAPPA</b>	111
8	Ukai Effected	1. Surat	1. Songadh	18
			2. Uchchhal	49
			3. Nizar	64
			4. Mangrol	40
			<b>TOTAL VILLAGES IN UKAI EFFECTED AREA</b>	171
9	Kharapat	1. Amreli	1. Amreli	24
			2. Lathi	17
			3. Liliya	37
			4. Dhari	16
				<hr/> 94
		2. Bhavnagar	1. Savar Kundla	32
			2. Gariadhar	14
			3. Palitana	28
				<hr/> 74
			<b>TOTAL VILLAGES IN KHARAPAT</b>	168
10	Vagdod	1. Mahesana	1. Patan	79
			<b>TOTAL VILLAGES IN VAGDOD</b>	79

*Source* :—Backward Area Unit, Planning Division, General Administration Department, Gujarat.

## STATEMENT 15

DECENNIAL GROWTH OF POPULATION AND SEX RATIO—GUJARAT  
AND OTHER STATES 1981 CENSUS

State	Decennial growth of population (%)		Females per 1,000 males	
	1971-81 2	1961-71 3	1981 4	1971 5
Andhra Pradesh	23.1	20.9	975	977
Assam	36.1	35.0	901	896
Bihar	24.1	21.3	946	954
Gujarat	27.7	29.4	942	934
Haryana	28.8	32.2	870	867
Himachal Pradesh	23.7	23.0	973	958
Jammu & Kashmir	29.7	29.7	892	878
Karnataka	26.8	24.2	963	957
Kerala	19.2	26.3	1032	1016
Madhya Pradesh	25.3	28.7	941	941
Maharashtra	24.5	27.5	937	930
Manipur	32.5	37.5	971	980
Meghalaya	32.0	31.5	954	942
Nagaland	50.1	39.9	863	971
Orissa	20.2	25.1	981	988
Punjab	23.9	21.7	879	865
Rajasthan	33.0	27.8	919	911
Sikkim	50.8	29.4	835	863
Tamil Nadu	17.5	22.3	977	978
Tripura	31.9	36.3	946	943
Uttar Pradesh	25.5	19.8	885	879
West Bengal	23.2	26.9	911	891
Delhi	53.0	52.9	808	801
All India (incl. others) *	25.0	24.8	933	930

Source :—Statistical Outline of India, 1988-89, Tata Services Limited

## STATEMENT 16

## LITERACY PERCENTAGE AND URBANISATION—GUJARAT AND OTHER STATES 1981 CENSUS

State	Literacy rate (%)		Ratio of urban population (%)	
	1981 2	1971 3	1981 4	1971 5
Andhra Pradesh	29.9	24.6	23.3	19.3
Assam	<i>n.a.</i>	28.2	10.3*	8.9
Bihar	26.2	19.9	12.5	10.0
Madhya Pradesh	43.7	35.8	31.1	28.1
Karnataka	36.1	26.9	21.9	17.7
Uttar Pradesh	42.5	32.0	7.6	7.0
Jammu & Kashmir	26.7	18.6	21.1	18.6
Tamil Nadu	38.5	31.5	28.9	24.3
West Bengal	70.4	60.4	18.7	16.2
Rajasthan	27.9	22.1	20.3	16.3
Madhya Pradesh	47.2	39.2	35.0	31.2
Uttar Pradesh	41.4	32.9	26.4	13.2
Andhra Pradesh	34.1	29.5	18.1	14.6
Madhya Pradesh	42.6	27.4	15.5	10.0
Uttar Pradesh	34.2	26.2	11.8	8.4
West Bengal	40.9	33.7	27.7	23.7
Uttar Pradesh	24.4	19.1	21.0	17.6
Uttar Pradesh	34.1	17.7	16.1	<i>n.a.</i>
Tamil Nadu	46.8	39.5	33.0	30.3
Uttar Pradesh	42.1	31.0	11.0	10.4
Uttar Pradesh	27.2	21.7	17.9	14.0
West Bengal	40.9	33.2	26.5	24.8
Uttar Pradesh	61.5	56.6	92.7	89.7
India (incl. others)	36.2†	29.5	23.3	19.9

\* Official projection and not Census estimate  
 † Including Assam

Source: Statistical Outline of India, 1988-89, Tata Services Limited.

## STATEMENT 17

## RURAL ELECTRIFICATION—GUJARAT AND OTHER STATES

State	Villages electrified (No)		Pumps energised (000s)		
	1987-88*	1965-66	1987-88*	1965-66	
End of 1	2	3	4	5	
Andhra Pradesh	25,085	(91.6)	4,099	891	57
Assam	16,620	(75.6)	66	3	..
Bihar	39,466	(58.4)	3,744	223	11
Gujarat	18,029	(99.5)	1,671	363	17
Haryana	6,745	(100.0)	1,179	323	15
Himachal Pradesh	16,718	(99.5)	1,438	3	..
Jammu & Kashmir	5,976	(92.3)	383	2	..
Karnataka	26,363	(97.5)	4,627	575	42
Kerala	1,268	(100.0)	1,083	170	7
Madhya Pradesh	49,991	(70.1)	1,133	597	7
Maharashtra	37,444	(95.1)	4,273	1,209	45
Orissa	27,161	(58.3)	534	36	..
Punjab	12,342	(100.0)	3,697	508	25
Rajasthan	22,595	(64.6)	1,115	305	7
Tamil Nadu	15,731	(99.4)	7,830	1,160	257
Uttar Pradesh	73,492	(65.3)	5,855	588	17
West Bengal	22,722	(59.8)	1,594	57	..
Total (incl.others)	426,323	(73.6)	45,144	7,046	513

\* As on 31.1.1988 figures in brackets show the percentage of electrified villages to the total number of villages in each State.

Source :-Statistical Outline of India, 1988-89, Tata Services Limited.

H-1658-19

HOSPITALS AND HOSPITAL BEDS—GUJARAT AND OTHER STATES,  
AS IN JANUARY, 1986

State	Hospitals (No)		Beds (000s)*		Population per bed
	Total	Of which Govt.	Total	Of which Govt.	
1	2	3	4	5	6
Andhra Pradesh	612	346	35.9	24.8	1,599
Assam	125	96	12.5	9.6	1,791
Bihar	226	101	22.6	14.1	3,026
Goa (incl. Daman & Diu)	95	16	3.0	1.8	400
Gujarat	1,236	206	38.9	19.0	968
Haryana	87	69	7.5	5.0	1,902
Himachal Pradesh	68	60	4.3	3.9	1,091
Jammu & Kashmir	47	45	5.9	5.9	1,130
Karnataka	238	194	31.3	24.6	1,307
Kerala	328	155	43.5	2.92	631
Madhya Pradesh	289	289	19.9	19.9	2,831
Maharashtra	1,540	420	91.2	55.9	755
Orissa	311	280	12.2	11.0	2,333
Punjab	258	223	14.6	11.7	1,234
Rajasthan	244	206	19.5	17.5	1,964
Tamil Nadu	402	338	44.3	34.8	1,174
Uttar Pradesh	735	576	47.3	35.3	2,577
West Bengal	409	284	52.9	46.5	1,126
Delhi	71	52	15.2	12.3	479
Chandicherry	10	8	2.4	2.2	277
Total (incl. others)	7,474	4,093	5.35.7	394.6	1,404

Note :—Figures for Andhra Pradesh relate to 1.1.85, Bihar to 1.1.81 and Punjab to 1.4.85.

\* Excluding dispensary beds.

Source : Statistical Outline of India, 1988--89, Tata Services Limited.

STATEMENT 19

FAMILY WELFARE-GUJARAT AND OTHER STATES-1986-87

State	% of couples effectively protected by			
	Sterilisation	I.U.D.	Other methods	Total
1	2	3	4	5
Andhra Pradesh	32.6	1.6	1.6	35.8
Assam	24.3	1.4	0.8	26.6
Bihar	18.3	1.9	0.4	20.6
Goa (incl. Daman & Diu)	20.3	2.0	4.4	26.7
Gujarat	38.0	7.2	5.8	51.0
Haryana	30.6	11.6	11.0	53.2
Himachal Pradesh	33.5	5.9	3.6	43.0
Jammu & Kashmir	17.6	2.6	0.8	21.0
Karnataka	33.2	4.4	2.1	39.7
Kerala	39.0	2.8	2.8	44.6
Madhya Pradesh	27.6	3.2	5.3	36.1
Maharashtra	42.9	7.2	4.9	54.9
Manipur	17.2	4.0	0.6	21.9
Meghalaya	3.9	0.9	1.0	5.8
Nagaland	2.4	1.2	0.8	1.5
Orissa	30.6	3.3	2.5	36.4
Punjab	33.9	18.0	10.5	62.4
Rajasthan	3	2.5	2.2	26.0
Sikkim	0	3.5	2.3	13.9
Tamil Nadu	39.5	4.9	1.9	46.3
Tripura	13.3	0.8	1.0	15.0
Uttar Pradesh	15.3	7.0	2.7	25.0
West Bengal	27.2	1.2	1.1	29.5
Delhi	22.3	8.6	8.1	39.0
Pondicherry	46.5	5.8	5.3	57.6
Total (incl. others)	27.9	4.5	5.0	37.5



Source :-Statistical Outline of India, 1933-89, Tata Services Limited.

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