

Check list No-4
Employment Generation

Indian Academy of Highway Engineers Ministry of Road, Transport & Highway, Govt of India, is taking up the Project for widening of Dhoraji-Jamkandorna-Kalavad-Jamnagar section of NH-927D in the State of Gujarat (Package no - NH/IAHE/18). During construction of existing road to two /four lane with paved shoulder about 30000 mandays, employment will be generated.


Deputy Executive Engineer,
National Highway Division,
Rajkot


Executive Engineer
National Highway Division,
Rajkot

SOCIO-ECONOMIC PROFILE OF THE PROJECT INFLUENCE AREA

3.1 INTRODUCTION

Road project always influences the whole of the district through which it passes, bringing prosperity, safety and faster accessibility for all road users.

The project influence area is considered to be the district through which the Corridors road is passing. National Highway No. 927D (NH 927D) lies in western India. Earlier it was SH-26 and recently converted into NH-927D. NH-927D connects Dhoraji in Rajkot district with Kalavadi in Jamnagar district in the state of Gujarat. The project length in which 23.35 km lies in Jamnagar district and remaining length lies in Rajkot district. The present SH-26 notified into NH-927D vide S.O. No. 1522(E).

The Project study corridor starts at junction of NH-27 km 96/300 and NH-927D (SH-26) Existing Km 107/500 in Dhoraji and ends at Existing Km 48/850 before Kalavadi town via Jamkandorna. The total proposed length of the project road is 58.300 km.

Government of India felt the necessity of partially access controlled corridor between Dhoraji and Kalavadi through up gradation of Dhoraji-Kalavadi section of NH-927D. The proposed improvements of Dhoraji-Kalavadi highway aims for:

- Important Interstate connectivity between Dhoraji to Jamnagar Port Centre.
- Connectivity too many head quarters/taluka place developed as business centre and Agriculture Marketing Yard.
- Better connectivity to important town Kalavadi and Jamkandorna along the project corridor.
- Provide a platform for better economic and Industrial growth of the region

This chapter contains the socio-economic profile for the state of Gujarat as well as the project-impacted districts for the purpose of providing a contextual background to understand the social impacts of the proposed Project. The remaining information has been provided as a supplement for the contextual background. The Key Map depicting the project road is presented in **Figure 1.1 in Chapter-1**.

3.1.1 Existing Road

The existing road alignment passes through 2 district of the Gujarat state namely; Rajkot and Jamnagar districts. The project highway is passes through major town Jamkandorna. Right of Way As per the details obtained from the State PWD, Rajkot and Site road inventory, the Right of Way varies from 24m to 30m.



3.2 DEMOGRAPHIC FEATURES

The Land of the Legends, stands bordered by Pakistan and Rajasthan in the north east, Madhya Pradesh in the east, and Maharashtra and the Union territories of Diu, Daman, Dadra and Nagar Haveli in the south. The Arabian Gujarat is located on the western coast of India and has the longest coastline of 1,600 km in the country. The state shares its borders with Rajasthan, Madhya Pradesh, Maharashtra and the Union Territories of Daman & Diu and Dadra & Nagar Haveli. The Arabian Sea borders the state both to the west and the south-western borders the state both to the west and the south west.

3.2.1 Population

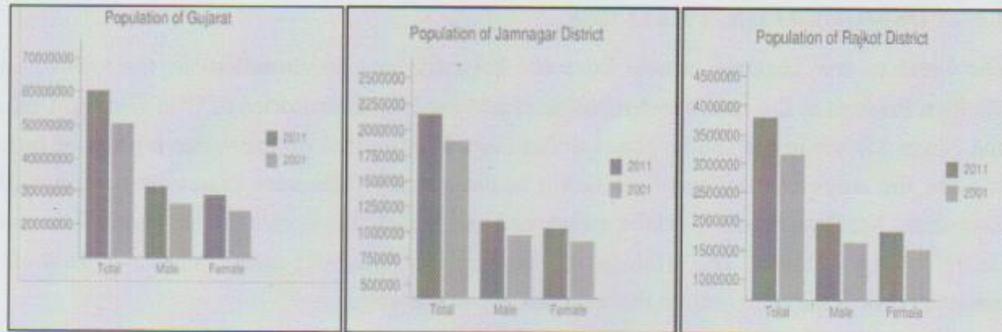
Total population of Gujarat as per 2011 census is 60,439,692 of which male and female are 31,491,260 and 28,948,432 respectively. **Jamnagar** had population of 2,160,119 of which male and female were 1,114,192 and 1,045,927 respectively. **Rajkot** district had population of 3,169,881 of which male were 1,642,018 and remaining 1,527,863 were females. **Table 3.1** and **Figure 3.1** show the demography of Project Influenced Area in 2011.

Table 3.1: Demography of Project Influenced Area in 2011

Section Dhoraji-Jamnagar	Project Area	Jamnagar	Rajkot	Gujarat
		67.500 km	35.300 km	-
Population	2506856	2,160,119	3,169,881	6,04,39,692
Population density per sq. km.	217	152	340	308
Decadal Growth	15.7	13.44%	20.02%	19.28 %
Male	1295440	1,114,192	1,642,018	3,14,91,260
Female	1211417	1,045,927	1,527,863	2,89,48,432
Sex Ratio	942	939	949	919
Percentage of total population	4.5	3.57%	6.29%	4.99%
Child sex Ratio (0-6)	895	904	879	890
Literacy Rate	74.0	73.65%	74.65%	78.03%
Male Literacy	82.0	81.50%	83.01%	85.75%
Female Literacy	65.5	65.33%	65.93%	63.31%
Scheduled Caste Population (in %)	8.0	8.13%	7.71%	6.7
Scheduled Tribe Population.(in %)	0.5	0.55%	0.42%	14.8%
Urban Population	49.5	44.95%	58.19%	42.06%
Rural Population	50.5	55.05%	41.81%	57.04%

Source: Primary Census Abstract 2011

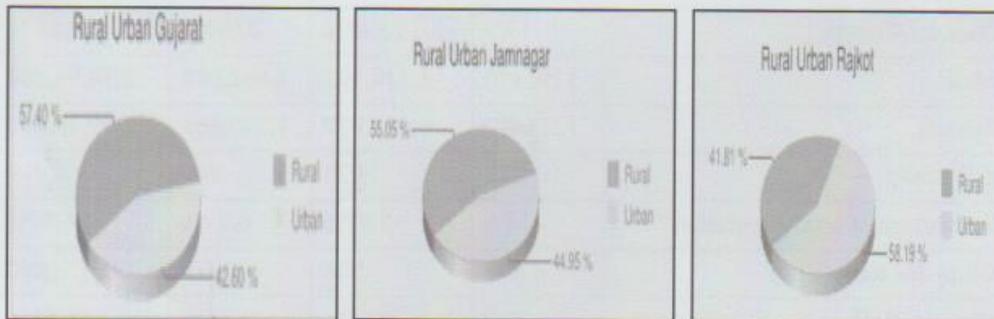




Source: Primary Census Abstract 2011

Figure 3.1: Demography of Project Districts and State

Total area of Gujarat is 196,244 Sq.km. Density of Gujarat is 308 per sq.km which is lower than National average 382 per sq.km. Census 2011 shows that density of Jamnagar district is 152 people per sq.km and Rajkot district density of 2011 is 340 people per sq.km. of the total population of Gujarat state, around 57.40 percent live in the villages of rural areas. The population of rural areas of Gujarat state was 34,694,609. As per 2011 census, 55.50% population of Jamnagar districts lives in rural areas of villages. The total Jamnagar district population living in rural areas is 1,189,054. In 2011 census 41.81% population of Rajkot district lives in rural areas of village. **Figure 3.2** shows Rural & Urban population of, where project road traverses.



Source: Primary Census Abstract 2011

Figure 3.2: Rural & Urban population of Project Districts and State

Gujarat State had 42.60 % people live in urban regions. The total figure of population living in urban areas is 25,745,083. In 2011 district Jamnagar had 44.95% lives in urban regions of Rajkot district 58.19% lives in urban regions of the district in 2011 as per census.

Sex ratio in Gujarat is 919 i.e. for each 1000 male which is below national average of 940 as per census 2011. With regards to sex ratio in Jamnagar, it stood at 939 per 1000 male

compared to 2001 census figure of 941. Sex ratio in Rajkot, it stood at 927 per 1000 male compared to 2001 census figure of 930.

The total population growth in this decade was 19.28 percent while in previous decade it was 22.48 percent. The population of Gujarat forms 4.99 percent of India in 2011. In the previous census of India Jamnagar district recorded increase of 21.79 percent to its population compared to 1991. In the previous census of India 2001, Rajkot district recorded increase of 26.08 percent to its population compared to 1991.

Literacy rate in Gujarat has been upward trend and is 78.033 percent as per 2011 population census. Of that, male literacy stands at 85.75% while female literacy is at 63.31 percent. The literacy rates for both sexes in urban areas are, as expected, much higher than for those in rural areas.

3.2.2 Vulnerable Population

The vulnerable population of the project districts and state is analyzed and given in this section.

Jamnagar district had 154819 schedule cast populations and Rajkot district schedule cast population is 244364 which is 8.13% & 7.71% respectively. A per 2011 census, Gujarat State had 40,74,447 scheduled caste population, which is 6.74 percent of the total population.

Jamnagar district has 10459 schedule tribe populations which is 0.55% of the total population. District of Rajkot has 13163 of scheduled tribe population which is 0.42% of the total population. The Scheduled Tribe population of Gujarat State had 89,17,174 which is 14.8% of the total population.

3.3 THE SOCIAL SERVICES

In order to strengthen various basic amenities either area based or population based, the Social and Community Programmes are required to be geared up at State level as well as district level so as the life of the people can be improved, Additional efforts in important sectors like health, education, women & child welfare, labour, environment, water supply, and sanitation, social welfare, rural housing, village & cottage industries etc. are required to bring significant improvement in the Human Development of the State. With a view to achieve the above mentioned objectives, various initiatives have been taken by the State Government.

In terms of overall social development, Gujarat has many more miles to cover to ensure that its economic growth translates into improved and sustainable human development. Although there has been significant improvement in terms of health and education infrastructure over the years, the challenge remains to further improve the access to these basic services to by communities in remote and marginalized rural areas.

- In recent years, social infrastructure in areas such as **health and education** has improved significantly. This can, to some extent, be attributed to the increased presence of the private sector in the state. However, it is crucial to ensure that access to services is enhanced for those who need it the most, especially the marginalized tribal communities living in hard-to-reach areas.
- Issues of quality and access to basic services by the poor have emerged as a priority for the State Government. Responding to this, Gujarat's 12th Five Year plan has enhanced allocations for the social sector by 40 per cent. This will not only help address the infrastructural gaps, but will also be instrumental in meeting the critical needs and entitlements of children and women.

3.3.1 Education Infrastructure

The education department of the state pays special attention to the improvement of elementary education in Gujarat. The state government has also launched the district primary education program for making primary education compulsory and free for all students up to a certain age limit. It has also taken up several measures for checking the rate of dropout at schools in Gujarat. The same uniform structure of 10+2 education is followed in the schools of Gujarat. Saurashtra University is a major university. The university is well known for several schools including private, government granted schools. Project influenced.

Rajkot district had Primary Schools 1845, Secondary Schools 426, and Higher Secondary is 40. There are 5 Engineering Colleges in the district, ITIs 17 offering courses and 7 Polytechnic.

Jamnagar has many schools including private, government granted schools. Primary Schools 1316, Secondary Schools 156, and Higher Secondary are 45. The M.P. Shah Medical College is considered to be one of the top colleges in India for Medical studies. The Gujarat Ayurved University in Jamnagar is considered to be the best university in the world for Ayurvedic studies & has students from all around the globe. Besides this, there are several colleges for arts, commerce and science.

3.3.2 Literacy

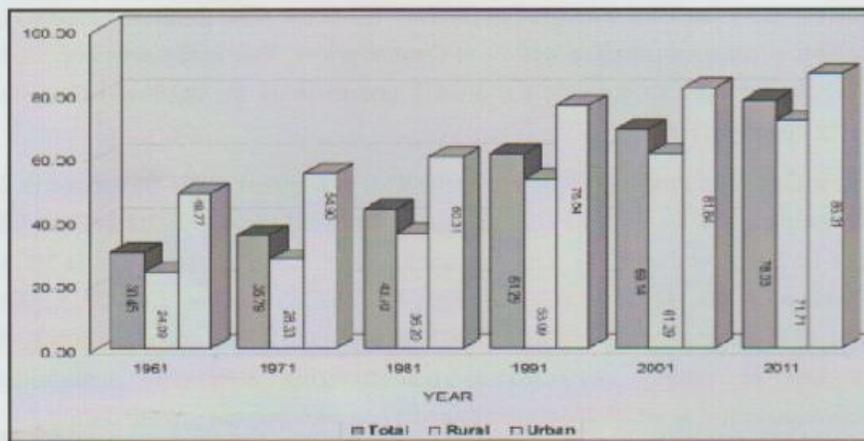
Average literacy rate of project influence area in 2011 was 74% compared to 66.48% of 2001. If things are looked out at gender wise, male and female literacy were 82% and 65.5% respectively.

Average literacy rate of Jamnagar in 2011 was 73.65% compared to 66.48% of 2001. If things are looked out at gender wise, male and female literacy were 81.50% and 65.33% respectively.



In Rajkot district literacy rate in 2011 were 80.96% compared to 74.16% of 2001. Gender wise male and female literacy were 87.07% and 74.43%. Literacy in Gujarat State (1961-2011) Shown in **Figure 3.3** below.

The Literacy rate of Gujarat is 78.33 % which is higher than the all India average of 68.84%. The state has 51989 recognized government schools with primary and upper primary grades. The state is having total enrolment of 106'462 at the primary level of which the girls constitute 46.57% of the total enrolment.



Source: Statistical Abstract of Gujarat State- 2011

Figure 3.3: Literacy in Gujarat State (1961-2011)

One, improvements in literacy have been quite impressive especially among girls in the Decade of 1991-2001 and one can surmise optimistically that at long last a corner has been turned. The achievement is both because the demand for education has increased and the supply has also improved in most parts of the state.

3.4 ECONOMIC FEATURES

State Domestic Product (SDP) in Common Parlance know ad “ State Income” is a measure in monetary terms of the volume of all goods and services produced during a given period of time within the geographical boundaries of the state, accounted without duplication. This is the most important single economic indicator used to measure the growth and study the structural changes taking place in the economy. SDP estimates over a period of time reveal the extent and direction of the changes in the level of economic development. Sectoral composition of SDP gives an idea about the relative position of different sectors in the economy over a period of time, which not only indicates the real structural changes taking place in the economy, but also facilitates in formulation of the plans for overall economic development.

The Per Capita Net State Domestic Product, also Known as per capita income is used to determine both the absolute and relative performance of the state economy. It is also considered as an important tool to measure the regional disparities.

The state is among the top six major state economics and it contributes about 7.0 percent to the GDP at National level during the year 209-10, though the states share to India's population is about 4.99 percent. For the Eleventh Five Year plan, a very high growth target of 11.2 percent has been set for Gujarat State by Planning commission Government of India. The State economy has been measured in terms of the Gross State Domestic Product (GSDP) at factor cost at constant prices as well as at Current prices. This is the most important single economic dictator used to measure the growth and to study the structural changes taking place in the economy

Gross State Domestic Product (GSDP) at factor cost at constant (2004-05) prices in 2009-10 has been estimated at Rs. 331633 core as against Rs. 300847 core in 2008-09 registering a growth of 10.2 percent during the year. At current prices, GSDP at factor cost in 2009-10 has been estimated at Rs. 429356 core as against Rs. 367745 core in 2008-09, registering a growth of 16.8 percent during the year. The higher growth in the economy during the year 2009-10 can be mainly attributed to manufacturing electricity, construction and communication sectors, which have contributed 11 to 34.6 percent growth during 2009-10 at constant (2004-05) prices.

The performance of the State economy in terms of GSDP in absolute values and percentage change over previous year at current and at constant (2004-05) prices are presented below:

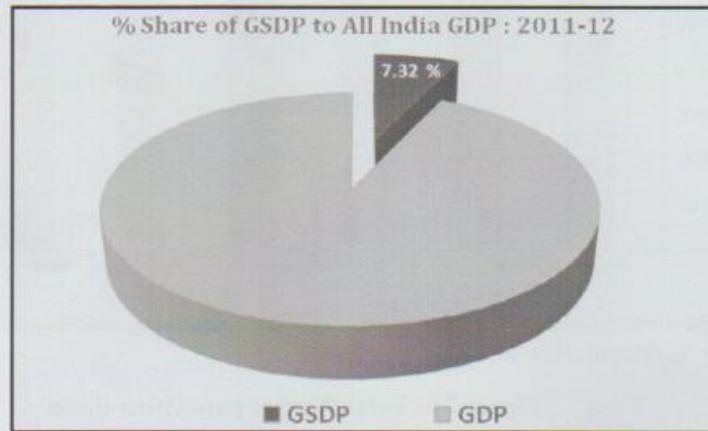
Table 3.2: GSDP at Current and Constant (2004-05)

Year	Gross State Domestic Product			
	Current Prices	Growth	Constant Price	Growth
2004-05	203373	-	203373	-
2005-06	244736	20.3	233776	14.9
2006-07	283693	15.9	253393	8.4
2007-08	329285	16.1	281273	11.0
2008-09	367745	11.7	300847	7.0
2009-10	429356	16.8	331633	10.2
2011-12	611767	15.3	398884	8.5

(Prices Value in Rs. Core and Growth in percent) *Provisional, ** Quick Estimates

Source: State Domestic Product, Gujarat State

Gujarat is very strong in the petroleum sector and is considered the petro capital of India. The state attracted cumulative FDI worth US\$ 9.6 billion from April 2000-May 2014 and is the second highest recipient of FDI in India after Maharashtra. At current prices, Gujarat's gross state domestic product (GSDP) was about US\$ 123.4 billion over 2012-13. **Figure 3.4** Shows percentage share of GSDP to all India: 2011-12



Source: State Domestic Product, Gujarat State

Figure 3.4: Percentage Share of GSDP to All India: 2011-12

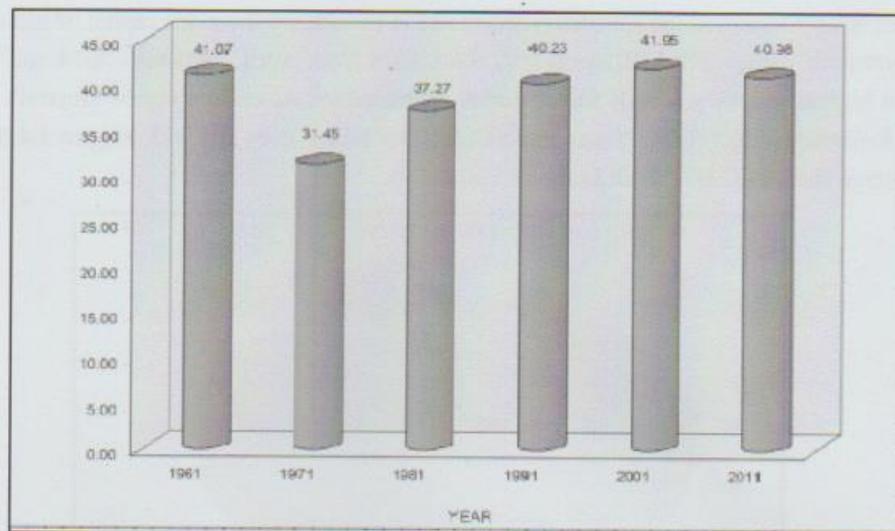
3.4.1 Distribution of Population by Workers and Non-Workers

Work participation rate is 41.0% of the total population in **Gujarat State** and in view of districts **Jamnagar & Rajkot** work participation is 8,47,440 and 14,79,050 respectively. Participation rate in project influence districts Jamnagar & Rajkot district is 33.39% -34.82% the percentage scenario of Non-Workers in State of Gujarat is 59.02% and in districts of Jamnagar & Rajkot are 60.77% and 61.12% respectively. **Table 3.3** and **Figure 3.5** show the Gujarat State Work Participation in 2011.

Table 3.3: Work Participation in Gujarat State in 2011

Section	Work Participation	Gujarat	Jamnagar	Rajkot
Dhoraji-Jamnagar	Work Participation Rate	40.97%	39.02%	38.09%
	Total Worker	40.98%	39.23%	38.88%
	Main Worker	33.70%	33.39%	34.82%
	Marginal Worker	7.28%	5.84%	4.05%
	Non Worker	59.02%	60.77%	61.12%

Source: Statistical Abstract of Gujarat State- 2011



Source: Statistical Abstract of Gujarat State- 2011

Figure 3.5: Total Worker population Ratio

3.5 INFRASTRUCTURE

Infrastructure refers to the fundamental facilities and systems serving a country, city, or area, including the services and facilities necessary for its economy to function. It typically characterizes technical structures such as roads, bridges, tunnels, water supply, sewers, electrical grids, telecommunications, and so forth, and can be defined as "the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions."

A discussion of infrastructural development has to recognize: (1) The regional specialization of the State's economy and hence of the space that is possible and desirable for the region in question; and also (2) the level of overall economic development as indicated by the per capita income GDP and assess whether infrastructural services like those which are final consumption goods drinking water, municipal infrastructure, road services and such like are adequate. It would also have to outline the actions required for the adequate development of infrastructure.

3.5.1 Infrastructure in Gujarat State

Gujarat also known as Jewel of the West is the fastest growing state of India and it's a country in itself having all the resource within. It is also the role model state for rest of India in terms of Infrastructure Projects, Tourism and economy. Gujarat state has ancient history of Indus Valley Civilization, world's first seaports Lothal and an archaeological site Dholavira.



Gujarat has a robust Infrastructure and is pioneer in Public-Private partnership. It takes to its credit as 'Asia's Biggest' Investment Infrastructure Opportunity Centre.' Gujarat state have strategically developed very efficient and cost affective infrastructure which boost states Urban and Industrial growth.

Gujarat is well-known for its double digit economic growth, which is much higher than the national growth rate besides providing excellent infrastructure and basic services to its citizen. The State has excellent road connectivity to all villages, large number of small and large ports well distributed along with 1700 km long coast, 24 hours power supply, State-wide water supply grid, excellent educational institutions, healthcare facilities, marketing yards, State-wide fiber optic network connecting all villages, etc. With best infrastructure in the country, coupled with Good Governance, Gujarat has become the hot destination for investors not only in the country but in this part of world. Its relentless quest for a larger image of Gujarat with all round development is foreseen bearing fruits of success. As one of the youngest States of the Indian Federation, Gujarat's track record has shown impressive Development which make it a 'Growth Engine of Gujarat.'

3.5.2 Industrial Development

Gujarat is located on the western coast of the Indian Peninsula. It has the longest coastline in the country of about 1600 kms. Therefore, Gujarat plays host to foreign trade and is a natural 'Gateway' to the fast growing economy. Conducive business environment, abundance of natural resources, skilled and semi-skilled man power, proximity to markets, responsive administration are a few reasons why Gujarat has turned a 'Leader.' A steady implementation of structural reforms to make Gujarat shine with its 'Vibrant Economy' is steadfastly growing at 15% of Industrial Growth with 18% of Country's Industrial Investment in Gujarat. A large part of the investments that Gujarat realized, especially in organised industries, could not have gone elsewhere. This is true for instance of the public and private sector investment in oil, and petrochemicals and downstream chemical units.

The state of Gujarat is one of the highly industrialized states in India with its reputation of being a highly investor-friendly state. The state has a proven track record of attracting high volumes of investment becoming the most favored investment destination in India. In the backdrop of these developments, the Government of Gujarat has declared Industrial Policy - 2009. And after series of respective studies and meetings new industrial policy will be declared shortly.

The new Industrial Policy - 2009 with its holistic approach would identify specific interventions across sectors which would facilitate in fostering significant growth and in the process to attract global investments. The new industrial policy has been formulated with the primary policy objectives of:



1. Facilitate investments in the state.
2. Employment generation and Employability enhancement.
3. Adherence to high quality standards.

During the period before 1991 attracting investment in Gujarat, especially manufacturing investment was largely dependent upon the ability to offer low cost land, supporting physical infrastructure, a benign or nurturing environment in terms of industrial promotion, a politics that allowed labour flexibility to the extent possible under national law and an administrative machinery that was geared to remove many of the hurdles that industries faced in attracting investment elsewhere in the country.

3.5.3 Human Development

Poverty levels while much lower than in the rest of India should have been even lower given the high per capita SDP of the state. The state's performance on many of the human development indicators but especially morbidity, life expectancy, gender, and most importantly literacy has been poorer than that of many states, and adjusted for its higher income, it would be much worse than is indicated by absolute values. Inequality in income distribution is likely to be much higher than in other states.

The nature of physical infrastructure development has an indirect influence on human development. Rural roads that increase access to urban functions and services for rural people, and electricity distribution both of which, are important determinants of the quality of life in rural areas.

3.5.4 Rural and Urban Development

Gujarat has a host of Government Agencies looking after the development of Infrastructure facilities like roads, ports, power, Industrial parks, etc. As a front runner in economic development, the State has set an example worth emulation and has embarked upon Infrastructure development with '**World Class Infrastructure**' charting the roadmap to a future as "**Gujarat – The World Class Growth Engine.**"

Infrastructure development in a state is importantly determined by the policies, capacities and actions of the state government more than is overall economic development. The relative autonomy for the state and the lower levels of government is much larger in because the constitutional division of responsibilities between state and the centre specifies many of the infrastructure areas to be with the state government. Even more importantly the economics of infrastructure-especially the locational aspects and localization influences are strong. Typically the products and services of infrastructure, unlike other sectors are consumed locally. Thus irrigation water, town and city services, electricity, roads (except national



highways), industrial services and estates, are in the states portfolio. Oil and gas, railways and ports (where both states and the centre have roles), and telecom are with the centre.

The social infrastructure areas are even more with the state government, the impact of investments is crucially dependent upon the level of economic development besides the local culture and preferences. The impact of investments in education in the south has been somewhat higher than in states like Gujarat and Rajasthan, but the cultural aspect should not be exaggerated.

3.5.5 Villages and their Connectivity by Road

Perhaps the most crucial infrastructure is connectivity of habitats by road and it is here that state governments can make a big difference. While there are few villages in India that are not connected by roads, their quality varies considerably. The Prime Minister's Gram Sadak Yoyana (PMGSY) given the large outlays and some organizational innovation such as, transparency and performance monitoring, has been significantly better than the run of the mill programmes supported by the centre. Gujarat in comparison to its peers has done well in improving rural connectivity. Gujarat has a low population density except in the southern parts of the state, and that too, only the Golden Corridor. In Saurashtra and North Gujarat despite the lower density which reduces the social returns on roads, the connectivity is excellent and most villagers can easily reach urban places to access services like emergency healthcare.

3.5.6 Tourism

With the announcement of a National Tourism Policy in 2002 and the revival of the economy, tourism again picked up in the country and India has emerged as one of the five most important destinations in the world according to Lonely Planet. Large resources totaling over Rs 2,900 crore were allocated under the 10th Plan for the tourism sector. The hotel industry was given the status of infrastructure.

The emphasis of the central government would be to open up the eco-tourism business-trekking and wild life, besides continuation of heritage and monuments related tourism.

3.5.7 Education

'Smart Goals' with a future vision 'Education for All' is a major Project of the Education Department with its Continuous Education and Literacy Policies geared to promote Literacy, reduce dropout rates, Focus on Girl Education, Teachers' Training and a series of other Initiatives being implemented.

Girl Education, Infrastructure, Health and Sanitation are the many areas in the process of continuous Education, Literacy, and Education awareness and on path to



enhancement in quality implementation. The Government vision is for SEE (Socio-Economic-Education) growth with primary education, secondary education, higher education, continuous education, literacy education, technical education, pharmacy education etc.

3.5.8 Transportation

Gujarat's towns and cities are well connected-to each other and to the rest of India-by road and rail. Coastal shipping routes link the state's many ports. Kandla is a major international shipping terminal. There is air service both within the state and to major Indian cities outside Gujarat.

3.5.9 Health

Gujarat State has an expensive network of health and medical service institutions. To meet primary health care needs, it has 911 Primary centers, 7284 Sub Centers and 161 Community Health Centers to meet emergency referred needs.

Department of Health & Family Welfare, Government of Gujarat has created wide network of health and medical care facilities in the state to provides primary, secondary and tertiary health care at the door step of every citizen of Gujarat with prime focus on BPL families, marginalized population and weaker sections in rural and urban slum areas. Department also takes appropriate actions to create adequate educational facilities for medical and paramedical manpower in the state of Gujarat. Government of Gujarat is committed to provide medical facilities at the most level, keeping pace with rapid technological developments in the field of Healthcare.

3.5.10 Drinking Water

Gujarat is a water stressed state, with its per capita availability of fresh water at 1137 m³ (less than 1700 m³ per year). Several region of the state even suffer from chronic water shortages. This shortage is reflected in the shortage of potable water in many parts of the state, particularly in North Gujarat, Saurashtra and Kachachh.

The main source of water for Gujarat is surface water. The State has 185 river basins and the available quota of water in the State is 55608 million cubic meters, out of which, 38100 million cubic meters is surface water, which is only 2% of the entire quota of surface water of the country. Moreover, the available quota of surface water is also not distributed properly. Gujarat, Saurashtra and Kutch have water resources of 89%, 9% and 2% respectively, against this; the total geographical area of these regions is 45%, 31% and 24% respectively. The underground water resources of State are 17508 million cubic meters.

The quota of available surface and underground water is used for drinking purpose, industries, agriculture and hydal power, fisheries etc. Out of which, nearly 80% quota is used for agricultural production, in which irrigation also plays an important role.



3.5.11 Infrastructure in Rajkot District

3.5.11.1 Economy and Industry

Rajkot has a strong manufacturing economic base, with a market that extends not only beyond the state of Gujarat, but even the national boundaries. In its early history Rajkot was organized around the establishment of cloth mills. More recently, the emphasis has shifted to small and medium industries dominated by foundries, manufacture of oil engine, machine tools, engineering and automobile works, castor oil processing, gold and silver jewelers, handicrafts, readymade ladies garment, spices, medicines and wall clocks. Manufacturing activities are concentrated in two main industrial estates namely, Aji industrial estate and Bhaktinagar industrial estate; in addition, many small units are scattered through the city.

The occupational pattern in Rajkot is primarily based on manufacturing and service sector. About 42% of workers are engaged in service activities and 34% in manufacturing activities.

3.5.11.2 Transport

Transportation is the backbone to the development of urban areas. It enables functioning of urban areas efficiently by providing access and mobility. Passenger transport has an overriding influence on the functioning of the city. Traffic, Transportation service and Road network are key indicators to provide the image of city. The city has a dense road network. Because of the concentration of various commercial and industrial activities in Rajkot and surrounding towns, the city road network leading to the surrounding towns is heavily congested. The regional network includes NH-8B, State Highways (SH-26, SH-27 & SH-42) and District Roads. The influence area, in terms of travel demand, covers the revenue districts of Rajkot. There is heavy inflow of traffic from the region into the city and vice-versa. The Jamnagar, Gondal and Viramgaon railway lines pass through middle of Rajkot City.

The city is connected with other parts of the country by Rail, Road and Air. There are two railway stations, one at Junction Plot area and another at Bhaktinager. There are broad gauge railway line of Western Railway between Viramgam-Okha-Porbandar and meter gauge railway line between Jetalsar-Veraval-Bhavanagar. It is also well connected by broad gauge railway line with Delhi and Bombay the important two Metropolitan cities of India.

There is an airport in Rajkot and the major domestic airlines run flights between Rajkot and Mumbai. Indian Airlines has four flights a week to Mumbai while Jet and Sahara have daily flights.

3.5.11.3 Education

Saurashtra University is a major university. The university is well known for several schools including private, government granted schools. Primary Schools 1845, Secondary Schools 426, and Higher Secondary are 40. There are 5 Engineering colleges in the district, ITIs 17 offering courses and 7 Polytechnic

3.5.11.4 Health

Rajkot has 50 primary healthcare centers, 13 Community healthcare centers, 3 Civil Hospitals and 12 Government Hospitals.

3.5.11.5 Tourism

The main tourist attractions in Rajkot are the Mahatma Gandhi House or Karba Gandhi No Delo, Watson museum, Aji Dam, Jagat Mandir, Rajkumar College, Lang Library, Lal Pari Lake and Randerda. The Karba Gandhi No Delo is the house of the Mahatma Gandhi where he lived from the age of six. The Mahatma Gandhi House has a good collection of things related to the Mahatma Gandhi's life. The Mahatma's Passion for the handloom is preserved in the form of a small weaving school. Lal Pari Lake and Randerda is a picturesque picnic spot, situated about 5 km from Rajkot. Aji Dam is situated about 8 km from Rajkot and supplies the town's water. Rashtriya Shala was founded by Mahatma Gandhi which has a center of patola weaving. The Lang Library has a collection of thousands of documents and books covering every period in Rajkot and Saurashtra (region) history.

3.5.12 Infrastructure in Jamnagar District

3.5.12.1 Economy and Industry

Jamnagar city has a burgeoning economy and its economic development may be attributed to the many prosperous business, trades and Industries that have their base in the city and really functioning as a major economic backbone for the city. Providing employment to a really large number of people settled there.

Jamnagar is known as 'World's Oil City' because the world's biggest oil refinery, belonging to Reliance Industries, and a smaller one belonging to Essar Oil are located in Jamnagar. It was formerly known as 'Brass City', since it houses more than 5,000 large-scale and 10,000 small-scale workshops manufacturing brass items in and around the industrial estates of Shankar Tekari, Udhyognagar, M P Shah Udhyognagar and Dared.

Jamnagar has base stations of all three wings of Defence: the Indian Air Force, Indian Army, and Indian Navy. Geographically Jamnagar supports all branches of defiance, as it has access to the sea for the Indian Navy and a large air base due to the city's strategic location close to Pakistan. The city has an all-weather intermediate seaport

3.5.12.2 Transport

The district is well connected with the State capital and surrounding district headquarters through road and rail linkages. The road network consists of National Highways, State Highways and Major District Roads. The rail network consists of both broad gauge as well as single track lines. The district headquarter has connectivity through airways for transport and trade to major airports within the country and to select international destinations. The city



has an airport (IATA: JGA – ICAO: VAJM) with direct flights to Mumbai. The airport is a civil enclave which allows commercial flights.

3.5.12.3 Education

Jamnagar has many schools including private, government granted schools. Primary Schools 1316, Secondary Schools 156, and Higher Secondary are 45. The M.P. Shah Medical College is considered to be one of the top colleges in India for Medical studies. The Gujarat Ayurveda University in Jamnagar is considered to be the best university in the world for Ayurveda studies & has students from all around the globe. Besides this, there are several colleges for arts, commerce and science.

3.5.12.4 Health

The district has 36 primary healthcare centers and 11 community healthcare centers Apollo Group of Hospitals has its telemedicine center linked at a hospital in Jamnagar The Ayurveda University in the district hosts a renowned 36 Ayurveda center equipped with state -of-the-art-techniques and provide a whole range of Ayurveda treatments.

3.5.12.5 Tourism

Jamnagar the Jewel of Kathiawar, is on the coast of Gulf of Kutch in the state of Gujarat, India. It has unspoilt Islands & Beaches, Hills, Temples, Palaces, Forest, Fantastic Bird life in the Bird Sanctuary & Marine Sanctuaries and Fascinating Corals One can visit the:

- City Lake full of 75 varieties of Birds.
- Islands full of sea shells, corals, birds, octopus.
- Unspoilt Beaches, both white and golden sands.
- Hills with temples on top.
- Forest with leopards, jackals, wolves, jungle cat, blue bulls, hyena, snakes.
- Temples ranging from the ancient to the new also includes a Guinness World Record holder.
- Bird Sanctuaries with 250 varieties of birds.
- Marine Sanctuaries with dolphins, octopus, turtles, dugong, fish.
- Marine National Park. And Marine Life in the Marine National Park.

3.6 TOURSIM IN GUJARAT STATE

Gujarat is the 6th largest state in India, located in the western part of India with a coastline of 1600 km (longest in India). It is one of the most popular tourist regions in the country, and was visited by 19.8 million domestic and international tourists in 2010-11. Gujarat offers scenic beauty from Great Rann of Kutch to the hills of Saputara. Gujarat is the one and only

