

CHAPTER-2

GEOGRAPHICAL PROFILE OF THE

STUDY AREA

2.1 GUJARAT : AN INTRODUCTION

Gujarat has a long historical and cultural tradition dating back to the days of the Harappan civilization established by relics found at Lothal(*Figure-1*). It is also called as the “*Jewel of the West*”, is the westernmost state of India(*Figure-2*). The name “*Gujarat*” itself suggests that it is the land of *Gurjars*, which derives its name from ‘*Gujaratta*’ or ‘*Gujaratra*’ that is the land protected by or ruled by Gurjars. Gurjars were a migrant tribe who came to India in the wake of the invading Huna’s in the 5th century. The History of Gujarat dates back to 2000 BC. Some derive it from ‘*Gurjar-Rashtra*’ that is the country inhabited by Gurjars. Al-Beruni has referred to this region as ‘*Gujratt*’. According to N.B. Divetia the original name of the state was Gujarat & the above-mentioned name are the Prakrit & Sanskrit forms respectively. The name GUJARAT, which is formed by adding suffix ‘AT’ to the word ‘*Gurjar*’ as in the case of Vakilat etc.

There are many opinions regarding the arrivals of Gurjars, two of them are, according to an old clan, they inhabited the area during the Mahabharat period and another opined that they belonged to Central Asia and came to India during the first century. The Gurjars passed through the Punjab and settled in some parts of Western India, which came to be known as Gujarat. Gujarat was also inhabited by the citizens of the Indus Valley and Harappan civilizations. This was fortified by the excavations at Lothal and Dholavira.

The signs of civilization in the Gujarat region dated back to the period from 3000 to 1500 BC. In the 3rd century BC under King Ashoka, the region was part of the Mauryan Empire. The state saw various kingdoms like Mauryas, Guptas, Pratihara etc, but it was under the regime of Chalukyas (Solanki) when Gujarat witnesses progress and prosperity. In spite of the plundering of Muhammad Ghazni, the Chalukyan kings were able to maintain general prosperity and well being of the state. After this glorious respite, Gujarat faced troubled times under the Muslims, Marathas and the British rules. In 1818 AD, the British East India Company took control of Gujarat by administering the state through local princely rulers. With the independence of India in 1947, Gujarat became part of the state of Bombay. On 1st May 1960, Bombay state was split and Gujarat was formed from the northern and western portions, which were predominantly Gujarati-speaking areas. The remainder of Bombay state became the state of Maharashtra. According to the census 2011, the state currently has 26 districts and 225 sub districts encompassing 18,225 villages and 348 towns.

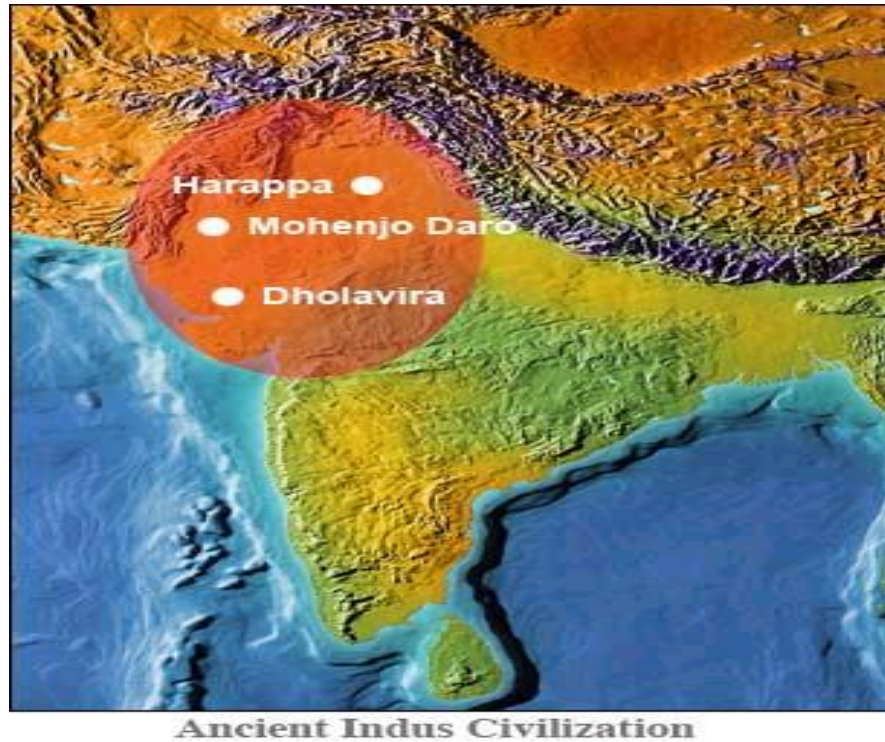


Figure 1: (The map showing early expansion of Indus Valley Civilization)¹

The word 'Gujarat' gained currency during the Chaulukya period (942-1299 A.D.). Before this period parts of Gujarat were known as Anarta, Lata and Saurashtra. North Gujarat from Abu up to Sabarmati River was known as **Anarta**. **Lata** was the region between Narmada and Tapi and generally the whole southern Gujarat was known as Lata. When the Muslim rule extended to southern Gujarat, the word Lata ceased to be used. Kathiawar Peninsula was known as '*Surastra*' and now it is called as Saurashtra. Because of the predominance of Kathi tribes who opposed Marathas, they gave the name Kathiawar to this peninsula. The whole mainland of Gujarat was known by this name from thirteenth (13th) century onwards².

Gandhinagar, the capital of Gujarat, lies on the banks of the Sabarmati River, north of the former capital of Ahmedabad. Laid out in 30 residential sectors, in an ordered style influenced by the work of **Le Corbusier**, who designed Chandigarh, its near-symmetrical numbered streets are wide and strangely quiet, lined with a total of 16 lakh trees. An expressway connects Gandhinagar with Ahmedabad. Gujarat is the birthplace of many who played an important role in shaping modern India. Prominent among them are Shri Dadabhai Navroji, the grand old man of the freedom fight, Sardar Vallabhbhai Patel,

¹ The Map has been taken from an article published on website by Anil Mulchandani on the topic, "The Indus Valley Civilization at Lothal."

² 'Gujaratno Rajakiya and Sanskriti Itihas', Vol.I. (1972), pp. 253-256, 274, 279-283.

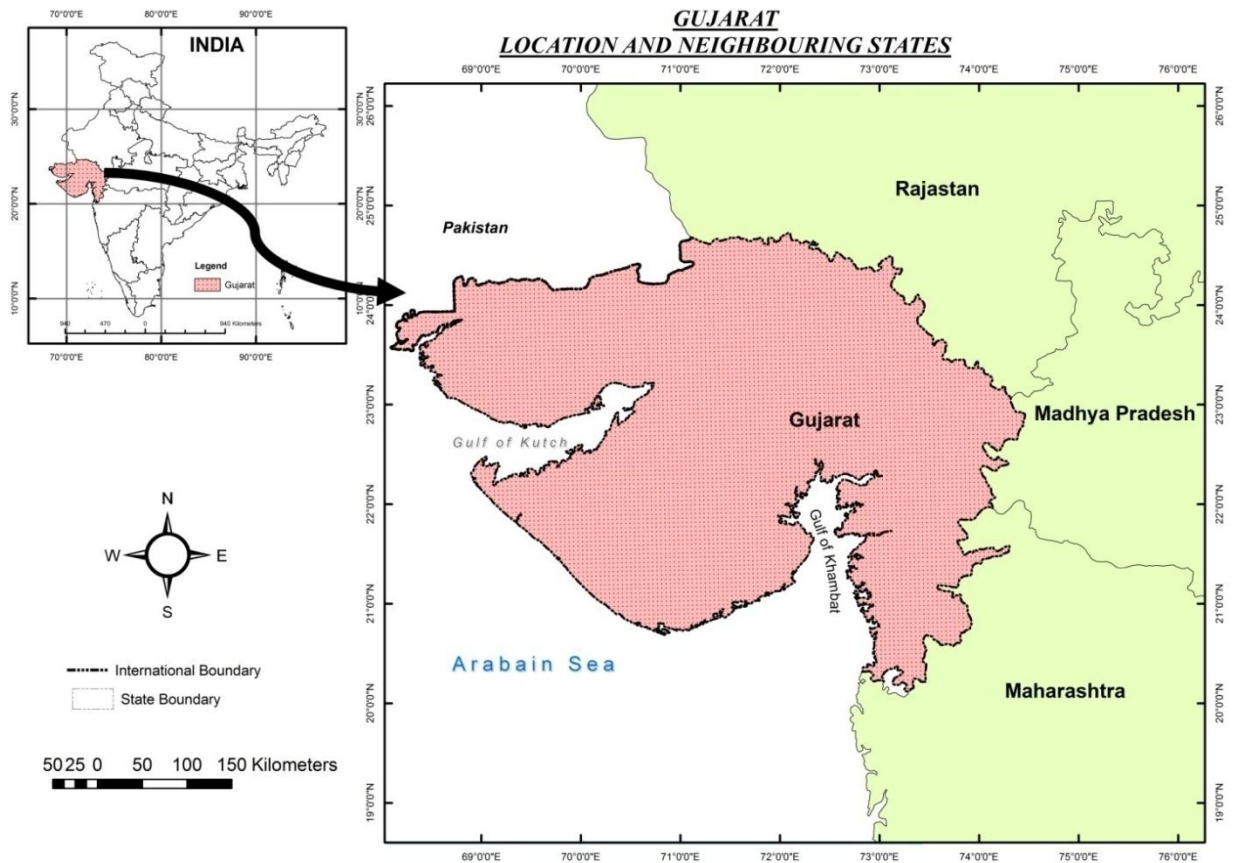
an 'Iron Man' & the architect of a united India and Mahatma Gandhi, the father of the Nation. These men carried the torch of national freedom and integration by infusing the qualities of tolerance, brotherhood, non-violence and patriotism (Jingoism) amongst Indians.

The Gujarat is one of the most prosperous states in the country, and considered to be the most financially secure communities. In India and abroad, Gujarati's with their indomitable spirit have reputed among the world's premier business communities. One can see the hardworking Gujarati's operating hotels and motels in California, running stores in Australia and New Zealand and newspaper kiosks in England & also engaged in various jobs in USA and Canada. The most distinguished son of Gujarat was Mahatma Gandhi who won for India its independence through non-violence movement. The Gujarat is not a popular tourist destination for national & international tourists. Although it is easy to travel to Gujarat during trips to Mumbai or Rajasthan, few people pause to explore this very interesting part of India. Gujarat has the longest coastline in India, stretching 1600 km, is dotted with 9 ports (including 1 international & 8 domestic).

In spite of possessing a variety of tourist attractions, state has not been able to accelerate the pace of tourism in comparison to other states. In 1991, the state did declare a tourism policy but it did not elicit adequate response from the private sector since the policy contained only a handful of benefits while the implementation was tardy (belated) due to legal and administrative constraints. This was at a time when the Government of India had already declared tourism as an industry and a large number of states had followed suit. This enabled the tourism industry to avail of incentives, reliefs & benefits available to the industry in those states.



Figure 2-Geographical Location of Gujarat in the world map



Map-1: The Map Showing position of Gujarat amongsts Neighbouring States of India

2.2 ADMINISTRATIVE SETUP OF GUJARAT STATE

After acquirement of independence in 1947, the Indian National Congress party (INC) ruled the Bombay State (which included present-day Gujarat and Maharashtra). Gujarat was created out of 17 northern districts of former State of Bombay on 1st May 1960. Like any other states of India, Gujarat is divided into districts. According to census 2011, report, It has total of 26 revenue districts, of which 13, Kutch, Rajkot, Jamnagar, Junagadh, Porbandar, Amreli, Bhavnagar, Anand, Kheda, Bharuch, Surat, Valsad and Navsari (**Table-1, Map-2**) are the coastal districts and Gandhinagar is as its capital. The state is divided into 225 Talukas (**Map-3**), 348 Towns and 18270 villages (census 2011). The State has an international boundary and has a common border with the Pakistan at the north-western fringe. The two deserts, one north of Kutch and other between Kutch and mainland Gujarat are saline wastes. The Government of Gujarat has banned alcohol since 1960 looking to the security of its population. Gujarat government bagged the *Best State Award* for 'Citizen Security' by IBN-7 Diamond States on 24 December 2012 (information from Wikipedia).

Table-1

Districts of Gujarat

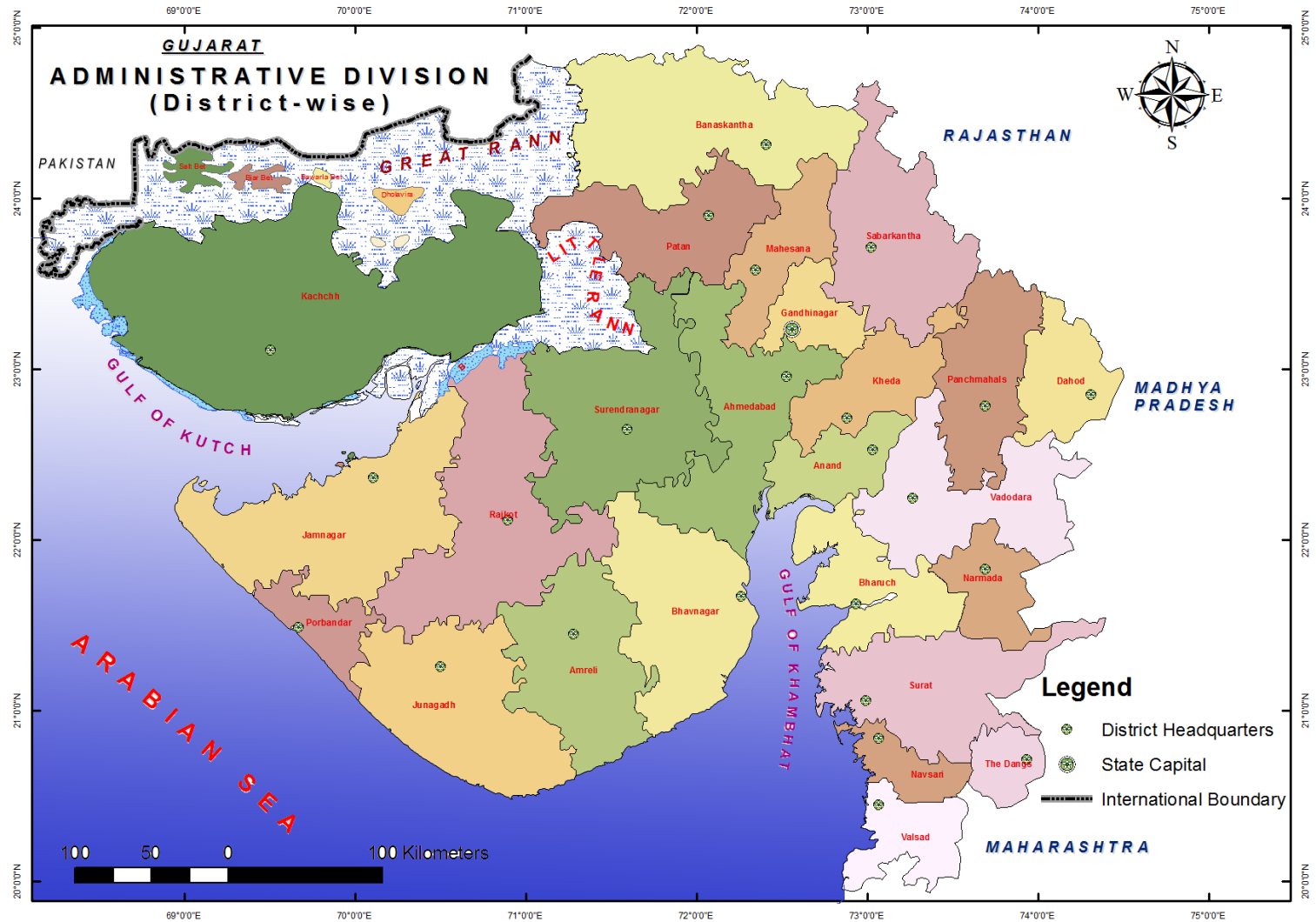
Sr. No.	Districts	Sr. No.	Districts	Sr. No.	Districts	Sr. No.	Districts
1	Ahmedabad	8	Amreli	15	Dahod	22	Dangs
2	Bharuch	9	Bhavnagar	16	Junagadh	23	Kutch
3	Gandhinagar	10	Jamnagar	17	Narmada	24	Navsari
4	Kheda	11	Mahesana	18	Porbandar	25	Rajkot
5	Panchmahal	12	Patan	19	Surendranagar	26	Tapi ³
6	Sabarkantha	13	Surat	20	Valsad		
7	Vadodara	14	Anand	21	Banaskantha		

Table-2

Some facts about Gujarat

Anthem	Jay JayGarvi Gujarat
Fruit	Mango
Tree	Banyan
Bird	Greater Flamingo
Land animal	Asiatic Lion
Flower	Marigold

³ For Study purpose the district Tapi has been included in Surat district, so, no separate boundary is shown in Gujarat Maps.



Map 2: Administrative divisions (district wise) of Gujarat States

2.3 GEOGRAPHICAL SETTING OF THE STUDY AREA

The State of Gujarat is situated on the west coast of the Indian Peninsula. It is extended between 20° 02' N and 24° 39' N latitudes, and 68° 10' E and 74° 37' E⁴ longitudes. Its establishment as a State of the Indian Union completed on 1st May, 1960, after separation of Bombay into Gujarat and Maharashtra with occupied area is 196,024 square km. The best time to visit the state is October through March. The state is further divided into 26 sub-regions (Districts) for administrative purpose. The state is the sixth largest economy in the country. Relatively, the State is bounded in the west by the Arabian Sea, on the north-west by Sindh (Pakistan), by Rajasthan on the north & north-east by Madhya Pradesh and Maharashtra (*Map-1*) on the east and by Nasik district on the south, by 'Konkan' (Maharashtra) on the south east & Union territories of Diu, Daman, Dadra and Nagar Haveli to the south. Forests and hills of Vindhyas, Satpuras & Sahyadri lie on the eastern border while mount Abu and the outliers of Aravalli range forms the border in the north. The river Damanganga once formed the southernmost limit of Gujarat.

The state's 1600 km (994 miles) coastline has attracted the sea-farers through the ages, lured by the rich prospects of trade. The Arabs Portuguese, Dutch. Mughals and British, as well as Parsis fleeing their native Iran, have all left their mark on Gujarat culture. The major languages spoken are Gujarati, Marathi, Hindi & English.

The sparkling Arabian Sea at its verge by its gentle touch makes the hot sands blush. The astounding beauties of the State can be witnessed in the areas of Kutch and Bhuj. The sunlight makes a netted sunbeam dance over its shimmering silver sands. In the Gir Forest the 'Kings of the Jungle', Lions crouch to maintain their privacy that is hampered by the visitors. The temples of Gujarat that are emblem of rich cultural tradition by the fragrance of incense sticks and chanting of mantras spread peace and unique euphoria.

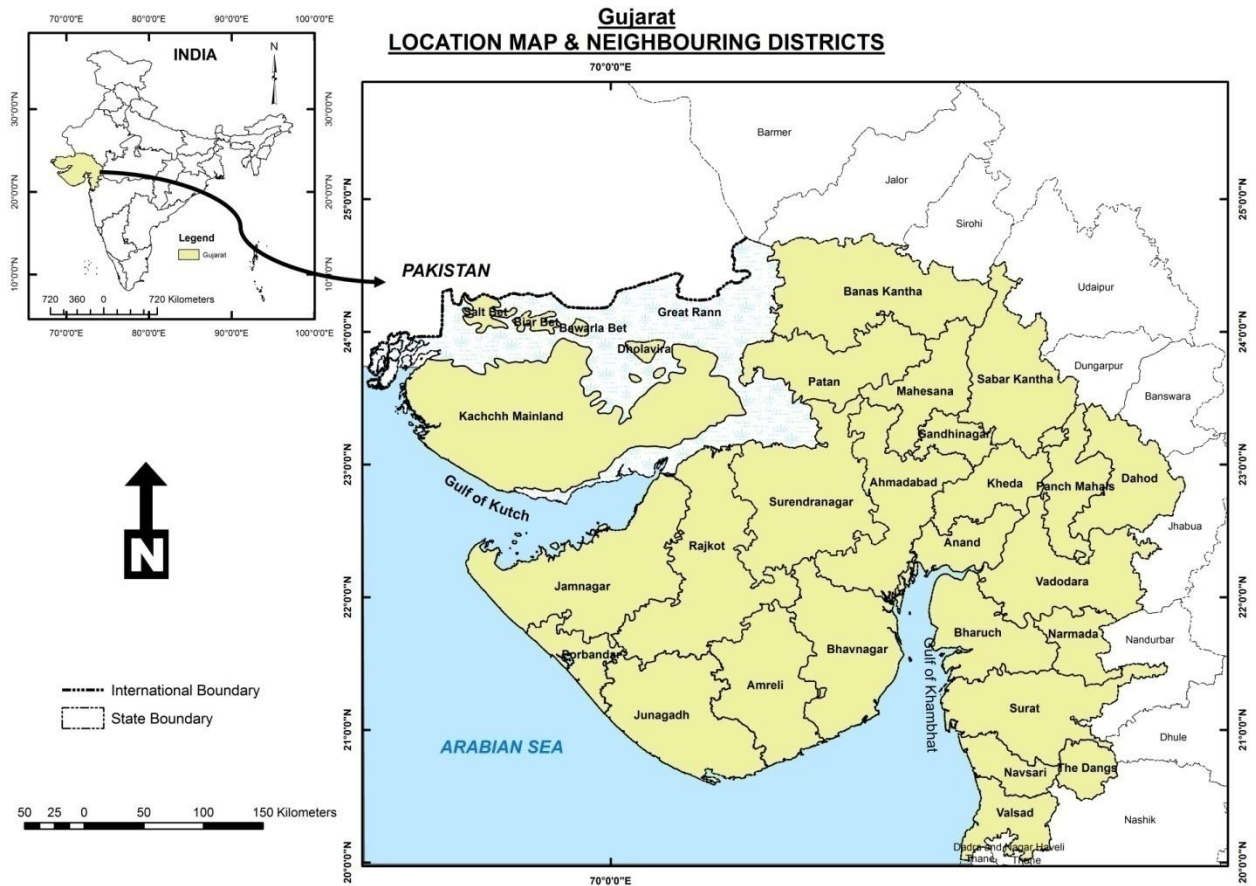
Table-3

PHYSIO-GEOGRAPHIC ZONES (1991)			
Divisions (Micro)	Total/	Area in	Districts/

⁴ "India Guide Gujarat", edited by Desai, Anjali H., published by India Guide Publications, ISSN 978-0-9789517-2-6 (2011) pg.-17.

		Sq. Km	
	Rural/	1991	(States/
	Urban		Union
			Territories)
Regions (Macro): The Coastal Plains and Islands			
<i>Sub-Regions (Meso): Gujarat Region</i>			
Gujarat Plain	Total	75966	Ahmadabad, Bharuch, BanasKantha, Gandhinagar
	Rural	73649.15	Kheda, Mahesana, SabarKantha, Surat, Vadodara
	Urban	2316.85	Valsad, Daman and Dadra & Nagar Haveli (Gujarat, Dadra & Nagar Haveli U.T. and Daman & Diu U.T)
Eastern Hilly Region	Total	10630	PanchMahals and the Dangs
	Rural	10510.55	
	Urban	119.45	(Gujarat)
Kathiawar - Peninsula	Total	64379	Amreli, Bhavnagar, Jamnagar, Junagadh,
	Rural	61997.45	Surendrenagar, Rajkot and Diu
	Urban	2381.55	(Gujarat and Daman & Diu U.T.)
Kutch - Peninsula	Total	45652	Kutch (Gujarat)
	Rural	45302.48	
	Urban	349.52	

Source: Population Atlas India, Census of India 1991.



Map-4: Position of Gujarat among Neighbouring Districts of surrounding Indian States.

2.4 PHYSICAL SETTING OF THE STUDY AREA

Virtually the general configuration of Gujarat is same as the whole of Peninsular India. The composite gneisses (Biotite and Chlorite) actually devoid of fossils exposed over the Archaean igneous material. The State has faced Successive tectonic disturbances result in intense metamorphism, occurs in the eastern part of the state. The Aravallis, contemporary to Dharwars occurs at Champaner, along Narmada valley, east of Pavagarh further merges into southern alluvium. The main type of rocks in this series includes phyllitic and slaty rocks, quartzites and marbles with intrusive granites. In addition, there are many less common types including conglomerate, impure limestone, ferruginous bands, amphibolites and other hornblendic green stones⁵, which are devoid of plants and animal life are also found. The Cuddappah and Vindhyan system are almost absent in Gujarat but the Jurassic rocks are widespread and with great thickness occurs in Kutch & NE Kathiawar(**Table-3**) on the

⁵ Dixit, K.R., "Geography of Gujarat", pg.-6, para- 1.

Dhrangadhara plateau⁶. The discovery of *Jurassic dinosaur eggs* indicates the well existence of Jurassic era. During the close of the Cretaceous the enormous outpouring and solidification of lava form extensive trap covering the whole of Kathiawar and eastern margin of south of Narmada. The thickness of this trap in Gujarat varies between 1000 and 3000 feet. During Pleistocene the recent formation such as the lithification of calcareous rocks, coral reefs etc. occurred. The Quaternary period is marked by the upliftment of continental shelf in Kutch.

The physiography of Gujarat shows a variety of physical features from mountainous highlands to coastal lowlands. The varied landscape, beautifully branched drainage system, inconsistency soil deposition & type of vegetation cover make it impressively different from other states of India. Gujarat State spread over a vast area & physiographically, it is divisible into three well defined regions, namely: The mainland that extends from the Rann of Kutch and the Aravalli hills to the river Damanganga, The Peninsula, which is also known as Saurashtra, is essentially a hilly tract & finally the Kutch, which is barren and rocky with large patches of salt tract, further it is divided into the Great and Little Rann.

Most of the land of Gujarat is dry and arid in nature on account of nearness to Thar Desert. It consists of four broad zones viz., (i) the Upland zone (hilly area), (ii) the Pediment Zone with a thin sediment cover, (iii) the Basinal Zone and (iv) Coastal Zone⁷. **(Map-5)** The Hilly Zone comprises the highlands of Aravallis & Vindhyans, which practically forms a water divide for river flowing into the Arabian Sea & Rann of Kutch. The Pediment Zone is the prominent feature bordering the hilly areas. The Basinal Zone is mainly a featureless plain area. It includes the Aeolian landforms of north Gujarat and small hilly areas in the north. The coastal zone includes broad estuarine inlets, mudflats, mangrove swamps, salt-marshes and other associated features of the Narmada, Tapi, Mahi, Sabarmati rivers. **(Mathur, 2005)** The Saurashtra peninsula forms watershed of almost all the radially flowing rivers, falls into Arabian Sea. The highlands of Kathiawar have resulted from the denudation of the basaltic plateau⁸. The Chotila hill forms the highest topographic feature in north (340 m AMSL). More rugged topography occupied part of Sabarkantha, Panchmahals, Baroda,

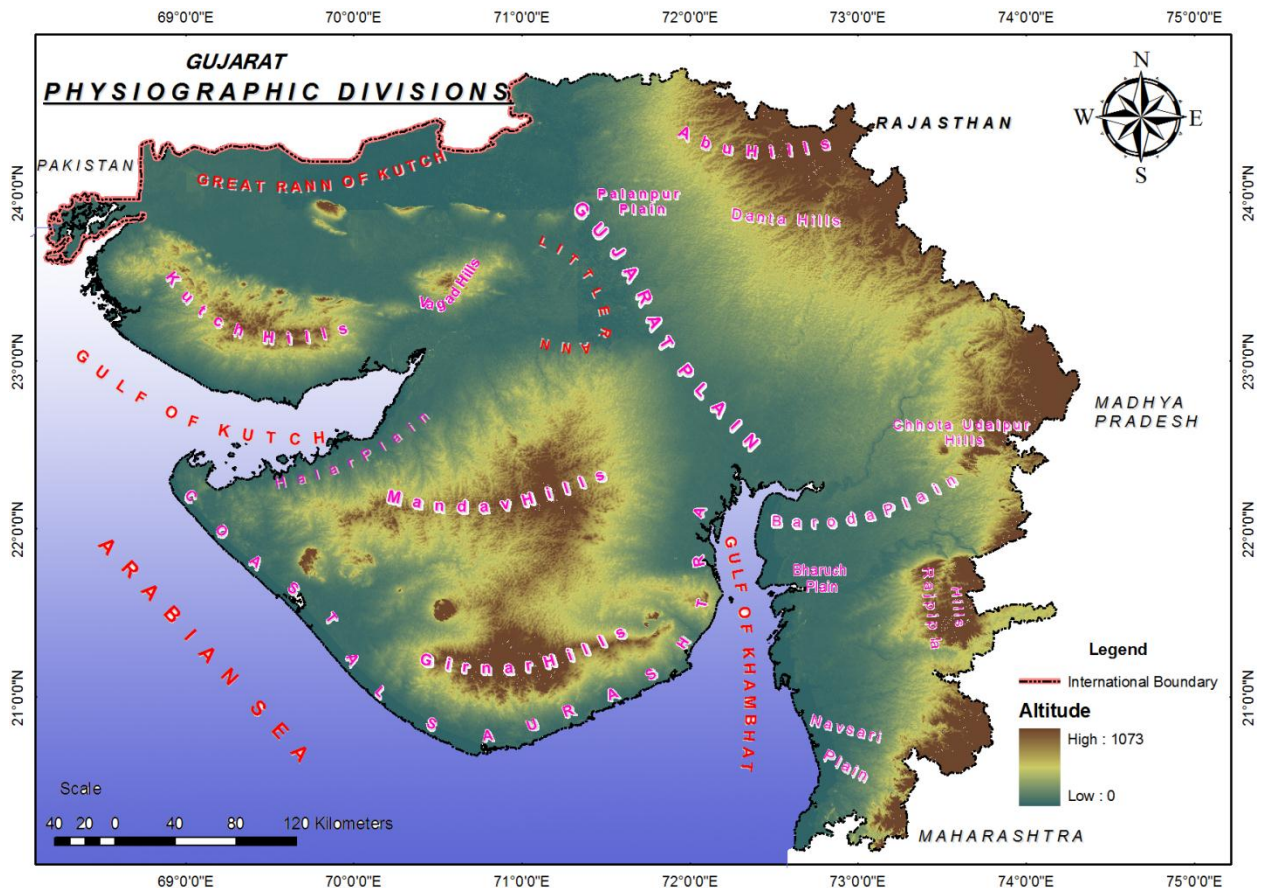
⁶Dixit, K.R., "Geography of Gujarat", pg.-7 para 2.

⁷Mathur, U.B., (2005), "Quaternary Geology, Indian Perspective", Geological Society of India, Bangalore, pp. 243.

⁸Dixit, K.R., "Geography of Gujarat", pg.-19 para 2.

Surat and Bharuch districts, include Vanmala, Rajpipla, Satpura, Ratanmal and Pavagadh hills.

Moreover, the topography of Gujarat is characterized by the small hilly tracts especially around the Rann of Kutch region consists of five broad zones viz., The Hilly Zone, the Pediment Zone, the Alluvial Plain, Banni Plains, Mud Flats and the Coastal Zone. The Kaladungar hill in the Pachcham Island forms the highest point (465 m AMSL). The Banni Plain is salt affected plain with low tableland and sparsely distributed grasses and bushes. The plain is well demarcated by its confinement between the coastal marshes on the west and a rupture slope on the east rising up to the mountains⁹. The today's plains are mostly has alluvial deposition brought by rivers of Sabarmati, Mahi, Narmada and Tapi. They are broader in north & tapers towards south. Thus, it can be concluded that the topography of Gujarat is divided into many regions based on the texture of the land and its geographical features.



Map-5: Physiographic divisions of the Gujarat State.

⁹Dixit, K.R., "Geography of Gujarat", pg.-16 para 2.

2.4.1 CLIMATE

The Gujarat state is situated along the Tropic of Cancer (crossing northern Gujarat) with low land relief in most parts falls in the sub-tropical climatic zone and has a varied climate. The state experiences extreme type of climate. The summer season temperature are high and vary from 27°C & 42°C¹⁰ and have been known to reach as high as 48°C, while the winter temperature vary from 14°C to 29°C¹¹, although freezing levels have also been recorded in the state. The rains are moderate to heavy between June and September. The northwestern part (semi-desert Kutch) of the state is dry, with less than 500 mm rain a year. In the southern part (**Table-4**) of Gujarat, rainfall averages 2000 mm a year. The district Dangs records highest average of about 190 cm. All over the state the average rainfall varies from 33 to 152cms. Some areas in Ahmedabad, Mehsana, Banaskantha, Panchmahals, Surendranagar, Jamnagar and Kutch districts face chronic shortage of water because of inadequate rains. These factors account for the wide diversity in the climate of Gujarat. Due to proximity to Arabian Sea, the climate of Gujarat is mainly moist in the southern districts as compared to north because of adjoining desert. In Gujarat, a year can be roughly divided into the winter season (November to February), summer season (March to May), southwest monsoon season (June to September), and the transitional month of October. Best time to visit is October to March.

Table-4 Agro-Climatic Features of the Sub Regions

Agro Climatic Features of the Sub Regions				
Sub Region	Rainfall(in mm)	Climate	Soil	Crop
North-West arid	340	Arid to semi-arid	Grey brown, deltaic alluvium	Bajra, groundnut, Jowar, cotton
South Gujarat	974	Semi-arid to dry sub-humid	Deep black, coastal alluvium	Jowar, Arhar, cotton, wheat
South Saurashtra	844	Dry sub-humid	Coastal alluvium, medium black	Groundnut, Wheat, Bajra, cotton
Middle Gujarat	904	Semi-arid	Medium black	Rice, Maize, Bajra, cotton

¹⁰ Desai, Anjali H., (2011), "Gujarat: India Guide", published by India Guide publications, (ISBN 978-0-9789517-2-6), p. 17 (from Fact At A Glance).

¹¹ Desai, Anjali H., (2011), "Gujarat: India Guide", published by India Guide publications, (ISBN 978-0-9789517-2-6), p. 17 (from Fact At A Glance).

North Saurashtra	537	Dry sub-humid	Medium black	Bajra, Jowar, groundnut, cotton
South Gujarat (heavy rainfall)	1793	Semi-arid to dry sub-humid	Deep black, coastal alluvium	Rice, Ragi, sugarcane, Jowar
North Gujarat	735	Arid to semi-arid	Grey brown, Coastal alluvium	Bajra, cotton, Jowar, wheat

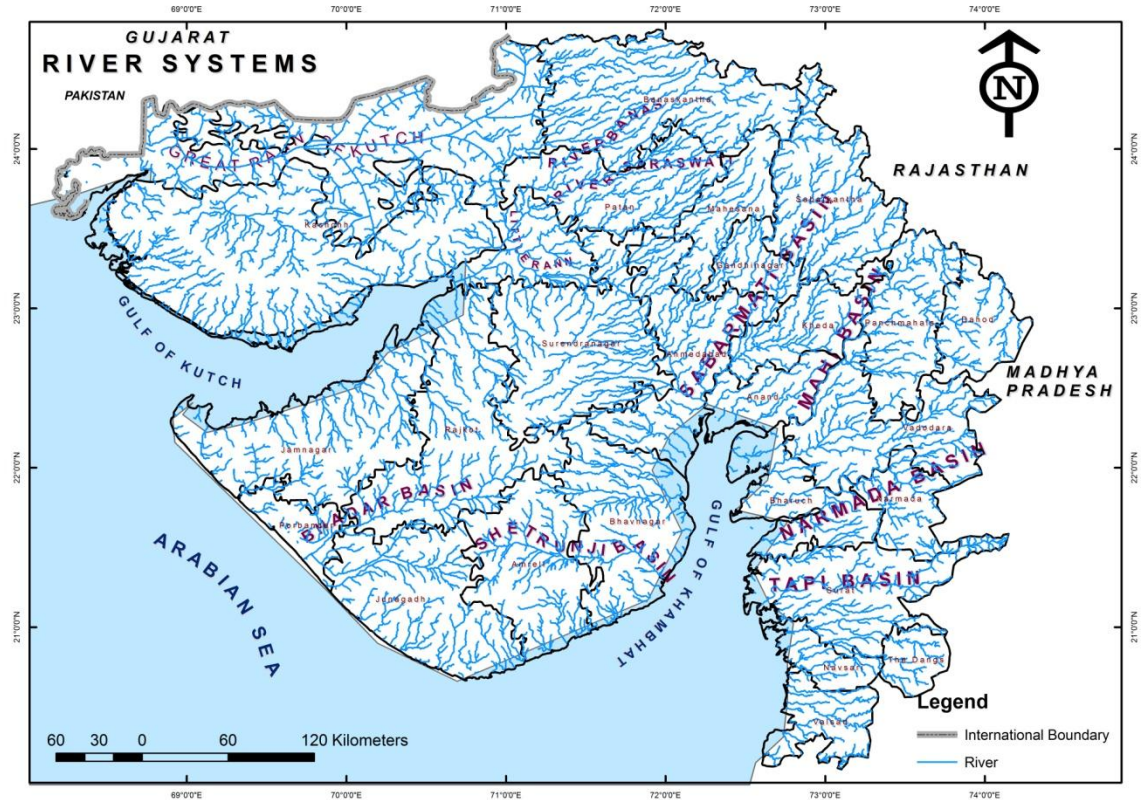
2.4.2 THE DRAINAGE SYSTEM

The Aravalli hills forms the main watershed for the rivers of north Gujarat. The Luni, Banas, Saraswati, Khari, Rupen, and Sabarmati drain the plains and debouching into Rann of Kutch and Gulf of Khambhat. The Luni forms the part of the mighty Saraswati(**Welhelmy, 1969**), which had its origin in the Himalayas. Today this river is dried up and lies buried beneath desert sand. Banas River originates near Sirohi hills in southwestern Rajasthan. Rupen, originates from the slopes of Tarangda Hills.

The Sabarmati is one of the important rivers of northern Gujarat, originating near Mount Abu, (**Map-6**) flowing all through 400 km crossing Sabarkantha, Banaskantha and Mahesana districts, carries water into Gulf of Khambhat. The Mahi is the third largest river in Gujarat after Narmada and Tapi, originates in the Malwa plateau in Madhya Pradesh, run for 550 km, through Panchmahal and Kheda districts (**K. R. Dikshit**). Narmada and Tapi are the two important west flowing rivers and both originate in the Vindhyan Mountains. Narmada flows for 1313 km and Tapi for 720 km before joining Arabian Sea. The main tributaries of Narmada are Orsang&Karjan. As compare to Narmada, the river Tapi is a smaller river but the area drained by it in Gujarat is large. The other important rivers draining south Gujarat are Kim, Mindhola, Purna, Ambika. The Dhadhar and its tributary Vishwamitri rise from near Pavagadh hills in Panchmahals.

The drainage of Saurashtra follows radial pattern, flowing out in all directions from central highlands. The drainage pattern is controlled by two major hill ranges, viz., Mandva range near Rajkot (383m AMSL) and Gir ranges in southern Saurashtra (higher than 390 m AMSL). The Bhadar is the largest westerly flowing river (260 km) of Saurashtra. The Shetrunji, The Machhu and The Aji are other important river of Saurashtra. The Kutch drainage also shows radial pattern with central highlands forming main watershed towards

north and south. Rivers follow deeply incised courses with entrenched meanders. Hardly any river runs over 80 km in Kutch.



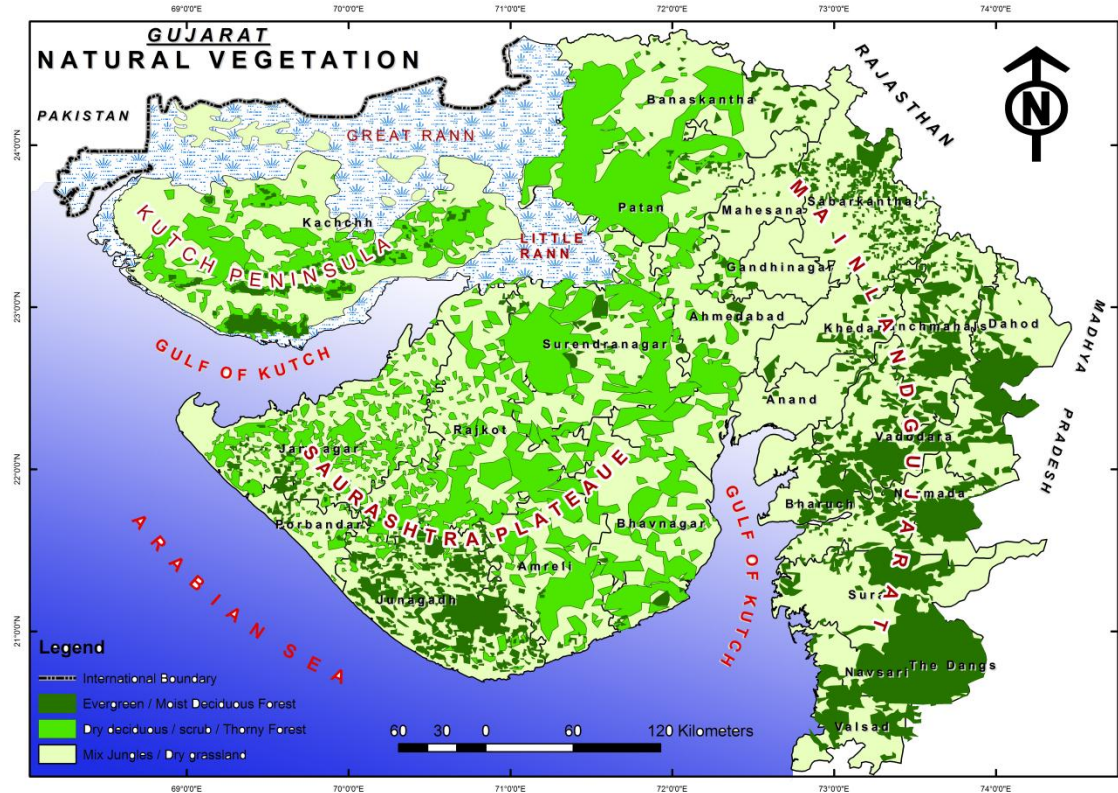
Map-6: Drainage Basins of Gujarat State

2.4.3 NATURAL VEGETATION, SOIL & WILDLIFE

Gujarat is endowed with full of natural resources, that is very rich in natural vegetation and wildlife. The total forest cover land area of Gujarat is 34222 acre¹² i.e. 7.6% of the total of India. The differential climatic conditions give rise variety of vegetation cover and accordingly animal life. The natural vegetation (**Map-7**) of the study area spread throughout its length and breadth. Being a part of one of the largest dry deciduous forests in the western region of India, here we find more than 400 species of flora; comprises mostly hardwood variety of trees like Teak, Sal, Boswelliaserrata, Anogeissuslatifolia, Diospyros, etc. Owing to its arid climate, also home of a wide range of Xerophytic vegetation mainly belongs to acacia family. In fact, it has one internationally recognized major forest, i.e. the Gir Forest which has the highest number of Asian lions. Gujarat's forest also includes some

¹² Village Profile (Col. 2.4), Gujarat: A study on land usage and Pressures (Growing pressure on land), CRY (Child Rights and You).

special varieties of Mangrove's occupy creeks and tributaries that crisscross the coastal belt in the Kutch & the Gulf of Khambhat, i.e. the second largest after Sundarban. The state characteristically consists of several type of soil, i.e., deep black soil, coastal alluvial soil, medium black soil, grey brown soil, calcareous medium black soil, clayey soil, sandy soil etc.



MAP-7: *Distribution of Natural Vegetation in Gujarat*

Ranging geographically from the desert plains of Kutch to the moist forests of the Dangs in the southeast, Gujarat's variety of habitats makes it an ideal destination for those interested in wildlife viewing and bird-watching¹³. The state has 21 Wildlife Sanctuaries & 4 National Parks¹⁴, some of them have accommodations and other facilities for the eco-travelers. In Gujarat, one can find as many as 500 varieties of mammals, more than 2000 species of birds, a wide range of insects, fishes, amphibians, reptiles, rodents, creepers etc., this aspect, indeed, makes Gujarat rich in terms of biodiversity. Some are worth important to such as; The Black Bucks or Indian Antelopes, Chitals, Chinkara, Wild Boar, Indian Gazelle,

¹³Destination Gujarat, Incredible India, Vibrant Gujarat, Tourism Year 2006, pg 49.

¹⁴ "India Guide Gujarat", edited by Desai, Anjali H., published by India Guide Publications, ISSN 978-0-9789517-2-6 (2011) pg.-17.

endangered Indian Wolf, four horned Antelope, Rusty Spotted Cats and more important the Wild Ass. The Gujarat also has a number of global label (proposed in 2011 on World Migratory Bird Day) wetlands such as; Wadhvana, NalSarovar, Thol, ChhariDhand, Khijadia etc. which becomes the home of lakhs of migratory birds such as; Great Indian & Macqueen's Bustard, Flamingos, Storks, Ibises Spoonbills, Pelicans, Cranes etc. The wildlife is well sheltered in a natural environment with proper care in the form of national parks (04) and sanctuaries (21) such as; Gir Forest National Park & wildlife sanctuary, Blackbuck National Park, Vansda National Park, Marine National Park, DevgadBaria Bear sanctuary, Wild Ass sanctuary etc. The Gujarat coast is also famous for breeding ground for some endangered species such as Whale shark and Dugong.

2.5 DEMOGRAPHY

The people of Gujarat trace their lineage from the people originally known as Gujjars. They are believed to have come to India with the Huns and while passing through Punjab, settled in Gujarat. According to census 2011, Gujarat ranks 10th (4.99%) in population¹⁵, 9th in area & 2nd in urbanization¹⁶ among the other states, union territories republics of India. According to the latest census of 2011, the provisional estimation (because Gujarat was hit by earth quake, no survey was conducted) showed that the population (Map-8) of Gujarat is approx. 6.03crores. The density of population(Map-9) of the state is also very high i.e. 308 persons/sq km. The decadal changes in population also have been significant in the state (Map-10 & Map-11). In terms of literacy rate the state has gained its prestige by increase of 79.31% as compare to 69.14% in 2001. The big achievement is in high increase of female literacy (70.73%) in the state which was 57.80% in 2001¹⁷. The sex ratio of the population of Gujarat state has worsened in that period. The number of females has come down to 918 from the 920 number recorded during the preceding census¹⁸. In terms of migratory character, the Gujarati's are among the top to foreign countries primarily to Canada & U.K. Gujarat's *Non-Ecumene* areas are confined partly to deserts (Great Rann) and northern

¹⁵ Gujarat Census, 2011, Table-1, Distribution of Population, Decadal Growth Rate, Sex-Ratio and Population Density - Gujarat State

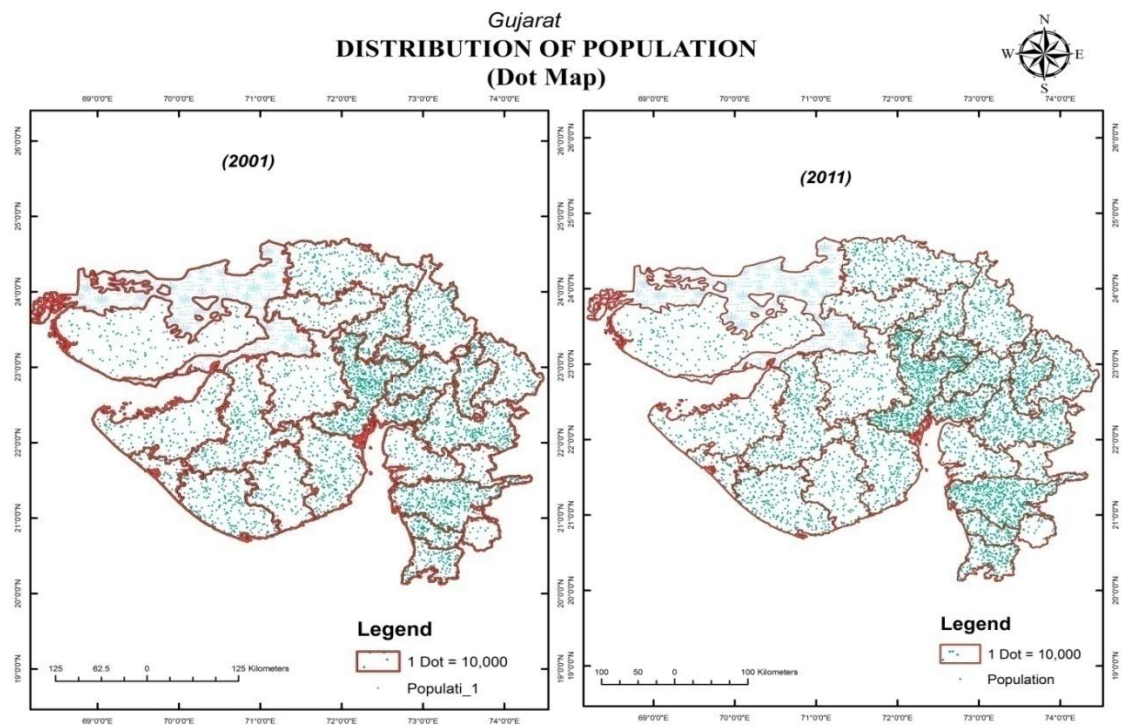
¹⁶ Prabhudesai Arun "Urban India 2030" (in numbers) on April 4, 2010, Urbanized states, 2008.

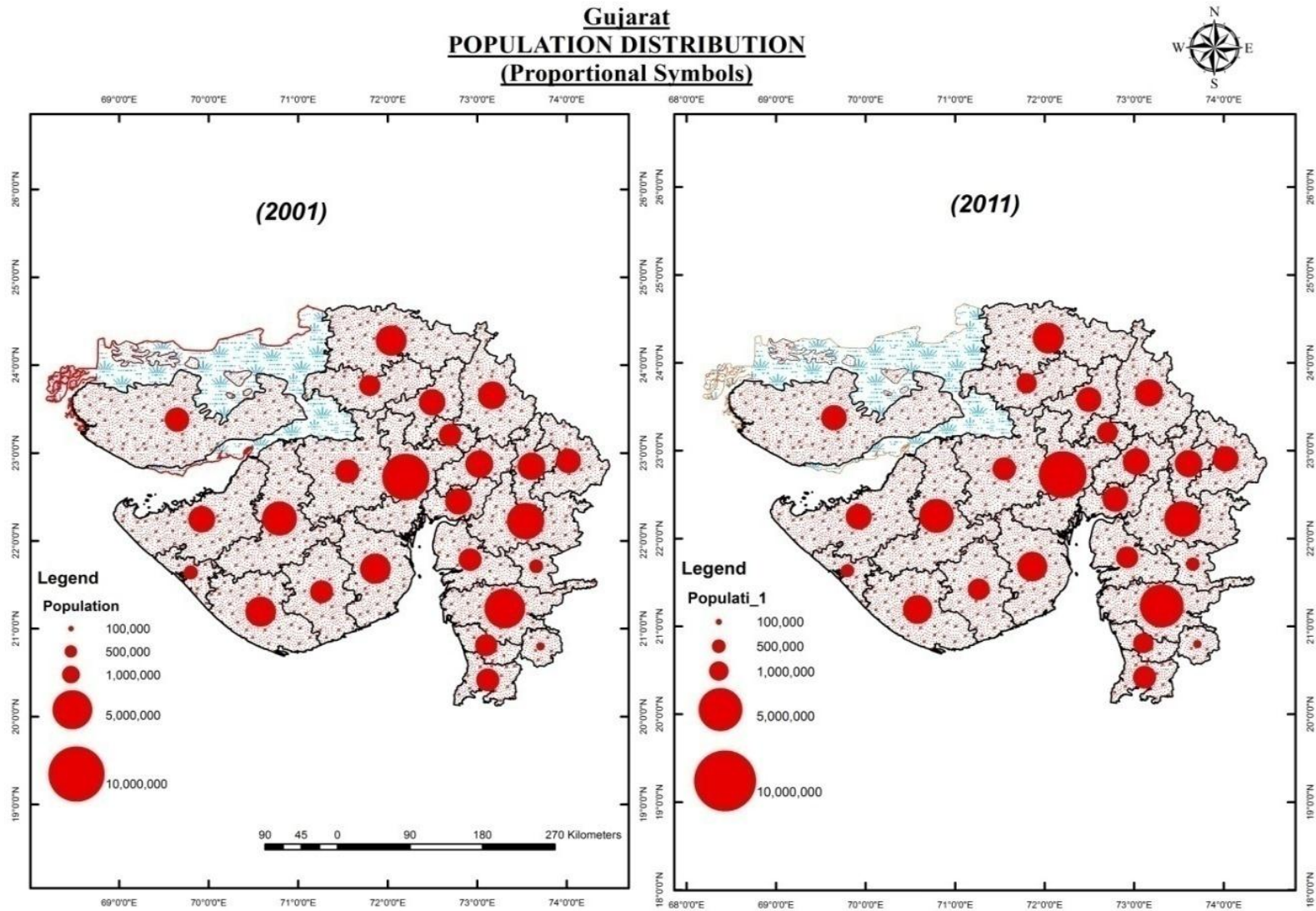
¹⁷ Gujarat Census, 2011, Table-4, Literacy rate by sex for Gujarat State and District-2001 & 2011.

¹⁸ Gujarat Census, 2011, Table-1, Distribution of Population, Decadal Growth Rate, Sex-Ratio and Population Density - Gujarat State

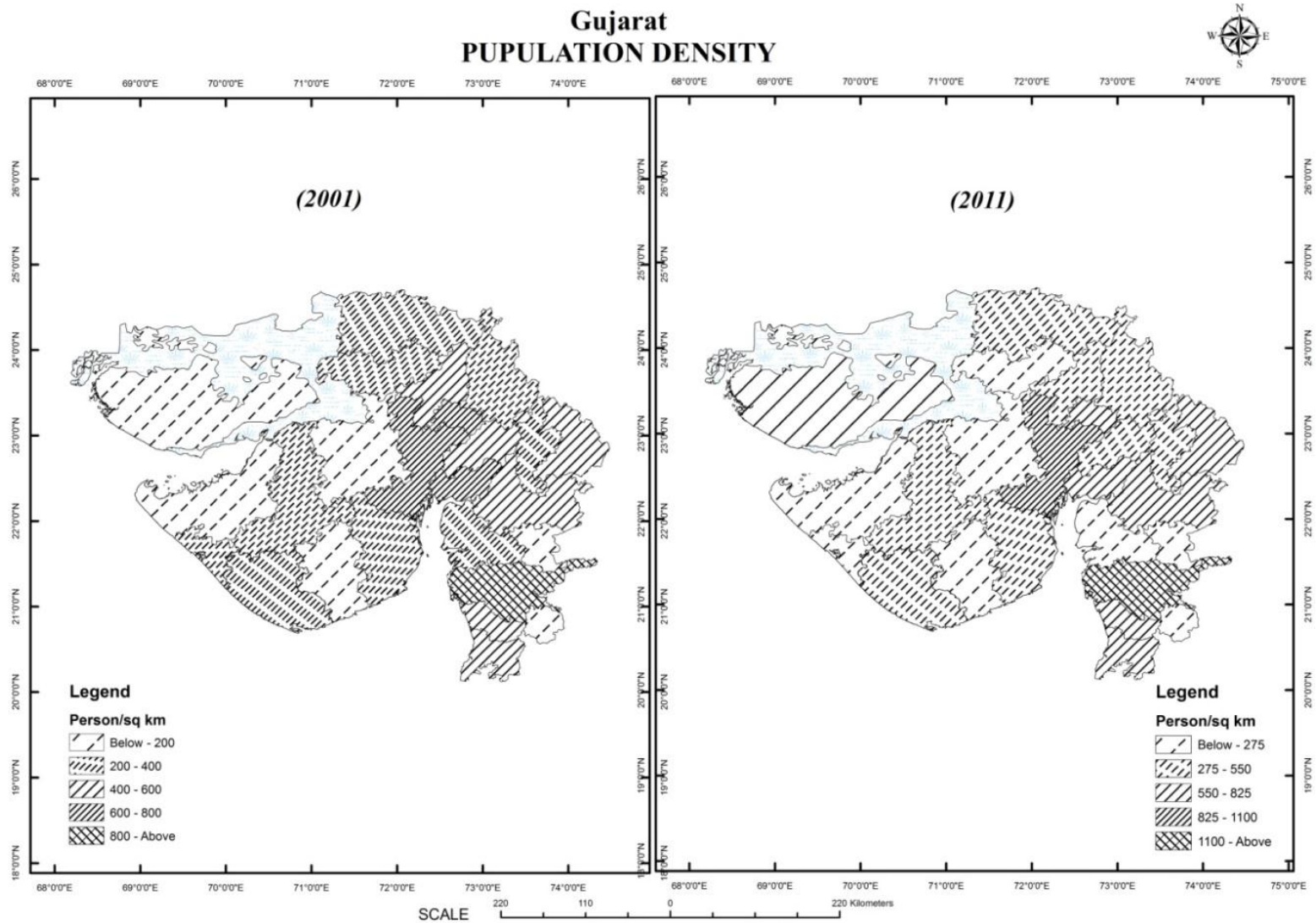
& north-eastern hilly areas (Aravallis). The regional variation (population-resource ratio) is commonly observed in most of the districts. Gujarat's population is overwhelmingly dominated by Hindus, with Muslims and Jain minorities. The diverse ethnic groups may be broadly categorized as Indic (i.e., northern-derived) or Dravidian (southern-derived). The former include the Nagar Brahman, Bhatia, Bhadela, Rabari, and Mina castes (the Parsis, originally from Persia, represent a much later northern influx); among the people of southern origin are the Bhils, Bhangi, Koli, Dubla, Naikda, and Macchi-Kharwa tribes. Members of the scheduled castes and of the aboriginal tribes form nearly one-fifth of the state's population. Gujarati and Hindi are the state's official languages.

The Kutchi's are those who were the natives of the peninsula of Kutch. They have their own dialects. The Kutchi's are both Hindus and Muslims and a large number of them have migrated from Sindh. The Jadejas, Rajputs, the Lohanas and even the Muslims many of whom are 'Maldharis', the cattle-breeders, has all come from Sindh consequent upon their defeat at the hands of some kings or as a result of some religious persecution. Rabaris' are a community of cattle-breeders who have migrated from Sindh and Marwar and claim a Rajput ancestry. The Rabaris stand out prominently by their features and dress. They lead a nomadic life.

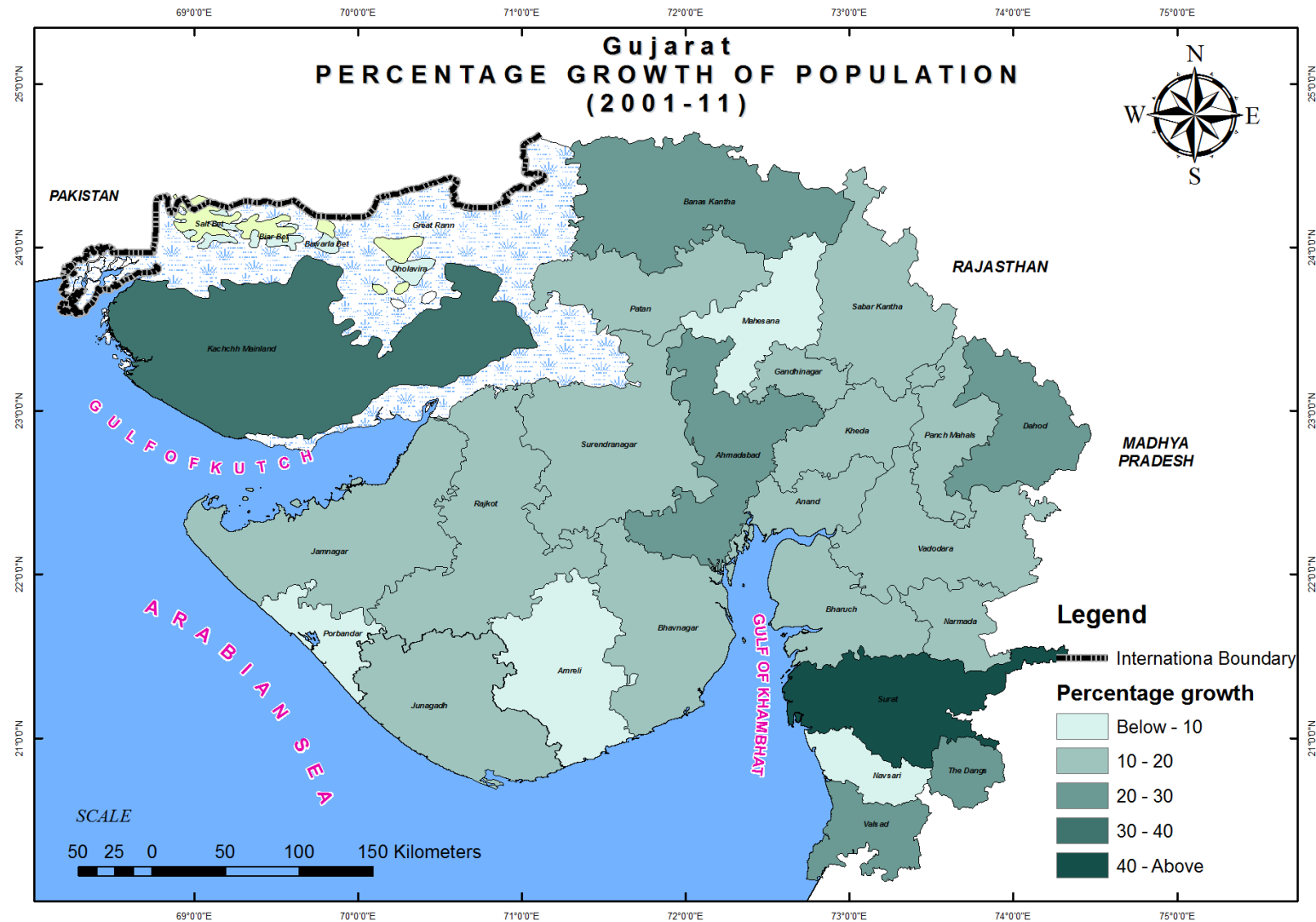




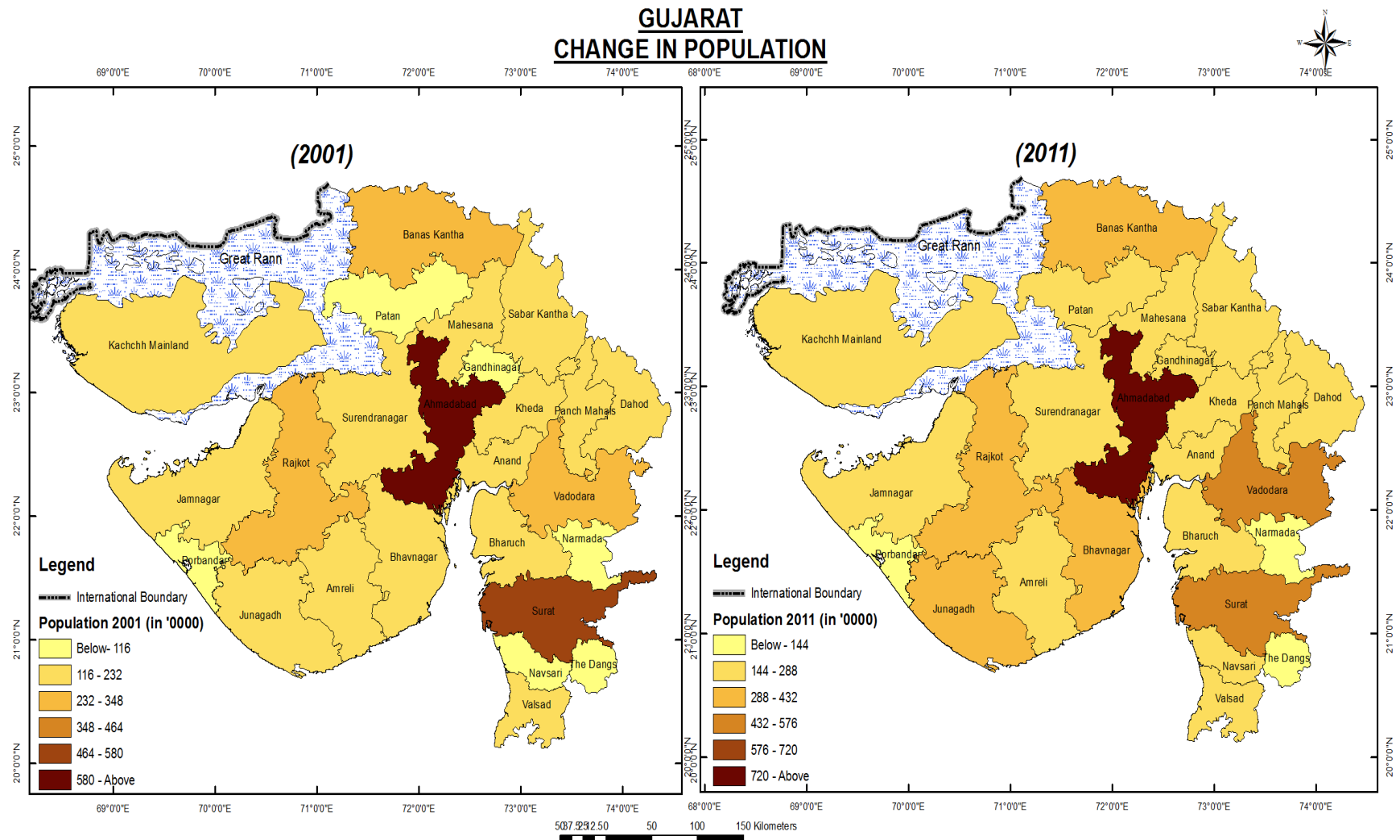
Map-8: Distribution of Population in Gujarat (both the above map)



Map-9: *Density of Population of Gujarat*



Map-10: Percentage Growth of Population in Gujarat



Map-11: Decadal change in population of Gujarat

2.6 CULTURE

The culture, as the whole way of life of a people, is both a part of nature and apart from nature. Such ways of life are also usually well-adapted to their environment and are easily seen as a part of nature. The Gujarati's are known all over the world for their cultural contribution. The contribution of oldest civilization is not untouched with Gujarat tourism history. The state is steeped in tradition, where festivals abound. The folklore and folk culture of Gujarat can be traced to the mythology of Krishna an incarnation of the God Vishnu. Dances in honour of Krishna have survived in the form of the popular folk dance, the '**Garba**'. A folk drama, the '**Bhavai**', also has survived. On 14 January, every year on the day of '**Makar-sakranti**' Ahmedabad hosts an international kite festival. A three-day extravaganza takes place towards the end of August every year at **Tarnetar**, 176 km from Ahmedabad. And the most-eagerly awaited festival is Navaratri consisting of nine nights of festivity when the entire state resounds with the beat of the dhol, cymbals, flute and the thrilling wail of the *shehnais*. Every street and village square comes alive with men and women, young and old, dancing the '**raas-garba**' from late night to the wee hours of the morning.

Gujarat is also famous for its art and craft products. The religion and religious impulses have acted as a catalyst for producing the purest and intensely delightful art, architecture, painting, poetry and music in Gujarat. Temples in the state, like anywhere else in India, were built as abodes of Gods. All are sculptured with great design. The Shetrunjay, Dilwara and Girnar are some of exclusive examples. Among the most durable and effective of the state's cultural institutions are the trade and craft guilds known as 'mahajans', which often solves disputes, acted as channels of philanthropy (humanity), and encouraged the arts. The Gujarat's cultural value is very high as its people have great strongholds on their cultural heritage, festivals, fairs, songs etc.

2.7 ECONOMY OF THE STATE

Gujarat, located in the west of India, is the sixth (6th) largest economy in the country, contributing 6.2% of India's national income. It endowed with important economic resources such as agriculture, minerals, marine, besides animal and human resources. In the past 50 years Gujarat, as a state, has been on the move. Looking back now, Gujarat has certainly

come a long way from where it was. The journey of Gujarat has been marked by several vital transformations. Back in the 1960's, the economy of Gujarat used to be driven by textiles. In contrast, Gujarat's economy today is being driven by a wide array of industries viz., salt, diamonds, pharmaceuticals, chemicals, milk products and much more. Due to state's poor quality of soils, inadequate rainfall & drainage, frequent droughts and floods, and underdeveloped irrigation facilities, the yield from agriculture is distressingly poor. But agriculture & animal husbandry continues to be the primary occupation of the large majority of its people (59.8%). The principal revenue generation from agriculture comes from the cash crops such as castor, cotton, tobacco & groundnuts. Gujarat is also well known for its success in dairy cooperatives, owned by the **GCMMF**. The dairy industry has made tremendous advance and the now the accounts for major percentage of infant milk produced in the country¹⁹. The economy of Gujarat is one of the most prosperous state economies within the Indian Republic. After the division & formation of the new State, industrial development has also taken rapid rate. The natural entrepreneurship of the native Gujaratis has led to an enviable resurgence of the industrial economy, which makes it ranked just behind Maharashtra in manufacturing gross state domestic product (**GSDP**)²⁰.

The economy of the state is highly industrialized, although dominated by service sector, which contributes 43.3% of the GSDP. The largest component in this sector is trade, hotels, restaurants, banking and financial facilities. There has been impressive development of mineral based mining industries (4% of the state's income), such as limestone, marble, lignite, bauxite, china clay & granite; besides oil and natural gas. The graph of annual growth succeeded every year except during droughts, industrial recession and earthquakes, that disrupted the economy. Business & financial acumen, industry and thrift are the three principal characteristics, which discern the residents of this part of the country. The per capita income is among the highest among the large states of India. Almost 14.07% lives BPL, which is much lower than the national average of 26.1% (2005-06). The long coastline facilitates trade have enabled Gujaratis to carry on brisk maritime trade with foreign countries since ancient times. Even now many people from this part of the country have settled for business reasons in other parts of the country and abroad. Today, Gujaratis have

¹⁹Rahman S.A., (editor-in-chief) (2005), *"The Beautiful India"*, p. 4, para-3.

²⁰ Kale S., Bhandari L., *"Gujarat, Performance, Facts and Figures"*, edited, *State at a Glance 2006-07*, A PHDCCI initiative, pp 11.

penetrated in the countries of East and South Africa, Aden, New Zealand, U. K and U. S. A, In view of these connections the residents here have a cosmopolitan and noninterventionist outlook.

Besides Industries the tourism also has contributed a lot in development of the state. The entrepreneurship skill of the Gujarati people has led them to become economic developers and marketers also. In areas of the world where the Industrial Age has ended, there is only a semantic distinction between tourism developers and economic developers, in terms of how they function to serve prospects. Most people worldwide still think of economic development in terms of industrial development. Separating economic development activities into "industrial" or "tourism" is of little importance until it causes confusion for those who own opportunities and have decisions to make that affect locations or expansions and start-ups²¹. Entrepreneurs are more likely to be involved in tourism-related product development. In addition to entrepreneurs, investors and property or project developers are generally what make up a "whole" tourism-related prospect.

2.8 MAJOR ATTRACTIONS OF THE STUDY

Gujarat has tremendous prospective for developing all domestic, national and international tourism. There is everything that provides such opportunities: vast territory, rich historical and cultural legacy, in some regions virginal locations. The variety of landscape provides for development of different types of tourism. There are number of hotels and resorts almost all over the state, which makes Gujarat a good place to enjoy beach recreation and health recreation at seas. One could enjoy by taking ethnic tours to different areas in the state.

Any kind of mountain tourism (*alpinism, speleo-tourism, hiking, rafting in "turbulent" mountain rivers, mountain biking and hang-glider riding*) is possible to do in the state. One can also visit health recreation resorts in the areas of water springs. The full-flowing and long rivers, such as the Narmada, Tapi and Sabarmati seem to have been created for fishing, rafting, riding catamarans and boating. The long coastline surrounded from west, south of the state offer cruises for tourists. Numerous lakes at some places (mostly Saputara)

²¹ Glover Bob, article on 'Tourism as Economic Development' A Brief Guide for Communities and Enterprise Developer.

are visually more appealing and impressive. Water in these lakes is not only pure but one can drink.

Forests of south central and south Gujarat are full of birds and animals (biodiversity). This fact attracts many educational and naturalist tourists. There are many areas of the untouched and virginal nature. That is where ecologic tours are best. The Gir Forest is the only natural habitat for Asiatic lions, where one does not meet any personal cars driving along a forest for several hours. However, it is very likely that one will see a wild Bears among the trees in Panchmahal area of Dahod district. An interested tourist will point out rare migratory birds such as flamingos, pelicans and other at different wetlands. None of those who are fond of adventure tours left untouched by paragliding in the fabulous region of Dang's district.

The reputation of Gujarat is famed all over the world as a popular tourist destination of optimum class and high quality. It provides to keep that impression alive in the hearts of its thousands of tourists. It is famous for its temples, beaches, wildlife, national parks, hill stations, festivals and all other types of tourist attractions. Gujarat is also famous all over the world for its exceptional cuisine. It's not one of India's most regular visited regions, but has long been an important centre for Jains. It is one of India's wealthiest states, supporting modern industrial complexes as well as thriving village handicrafts. The last Asiatic lions are here, and the pleasant beaches make for a good evening.

Gujarat with its immense tourism has unending list of tourist destinations, right from Ahmedabad- the Manchester of India, Gandhiji's Sabarmati Ashram, spectacular peninsula of Saurashtra, the historic Jain Temple of Palitana, Sasan Gir the last natural habitat of majestic Asiatic lions, the coastal towns of Porbandar and Dwarka the semi-inland of Kutch etc, the list is unending.

Various fairs and festivals are celebrated in every month in Gujarat. Some of the main festivals which are celebrated in Gujarat are the Kite Flying Festival or Makar Sankranti, Navaratri Festival, Dang Darbar and three day Tarnetar Fair. Each year in January different venues decided for IKF competition to promote that particular area through the kite festival²². Apart from this the Modhera Dance Festival in January, the Kutch Rannotsav in

²²Mittra Vipul, Secretary Tourism, Gujarat, during a press conference held in Mumbai to promote IKF on Jan 5, 2010.

February/March, Bhavanath Fair (Junagadh), Chitra-Vichitra fair in March, Janmashtami in August, BhadraPurnima at Ambaji in September, Shamlaji Fair in November & Somnath Fair in November/December are peculiar in its cultural characteristics.

The handicrafts of the Gujarat are also unique like the Gujarati cuisine. Craftsmen and women who left their villages to work as stone crushers for the living have been brought back to practice their traditional arts. Their products are also available & can be purchased from Gujarat emporiums in Ahmedabad, Delhi and Mumbai. Besides these, the Patola silk saris are another famous item of Gujarat that are extremely fine and quite expensive and made by very small master craftsmen at Patan. The zari or gold thread embroidery work comes from Surat. Jamnagar in Saurashtra is known for its woolen shawls, blankets, rugs, wooden chest and traditional furniture. Gujarat is also known for the famous and unique Kutch embroidery.

There are about four national parks and twenty one wildlife sanctuaries in Gujarat. Some of the wildlife sanctuaries and national parks are the Marine National Park at Jamnagar, Gir National Park at Junagadh, Indian Wild Ass Wildlife sanctuary at Kutch, Velavadar National Park at Bhavnagar. Nalsarovar, Khijadia Bird Sanctuary at Ahmedabad and the Porbandar Bird sanctuary are the other bird sanctuaries in different districts of Gujarat.

Some of the famous cities in Gujarat are Ahmedabad, Bhavnagar, Gandhinagar, Junagadh, Somnath, Surat, Dwarka, Porbandar and Vadodara, have an archaeological, historical and cultural and architectural importance. Many fine examples of Muslim architecture found in Ahmedabad. Baroda was the capital of the princely state of Gaekwad.

Apart from natural, the historical and cultural factors that contribute to development of foreign tourism in Gujarat. For example the State has introduced 'Walk in the Ashram' tours in Sabarmati ashram, which has a historical connection with Mahatma Gandhi. Foreign and domestic tourism in the state is characterized by variety of its types. Such types as ecologic, sport, extreme tourism, mountain touring, cognitive tourism, business tourism, health recreation tourism, cruising & fishing, event tours and gastronomic tourism are developing most rapidly. Such types as individual tours and youth tourism are also becoming more popular now days.

In spite of possessing a variety of tourist attractions such as wildlife, scenic beauty, pilgrimage centres, exotic traditional crafts, beaches and a varied healthy and tasteful cuisine, the State has been ranked number 7 in terms of tourist arrivals in India. The State can accelerate the pace of tourism development by improving the tourism infrastructure and aggressively promoting tourism in India and outside. In recent years, Gujarat has faced increased competition from other states who have aggressively promoted tourism e.g.: Kerala- “Gods Own Country” and “Maharashtra Unlimited” campaign²³.

Besides all above mentioned tourist attractions the activities like religious and archeological tourism, heritage, corporate tourism, coastal and beach tourism, medical tourism, adventure tourism, highway tourism etc. are being encouraged in certain areas. The State thus offering a new scope for investment in tourism related activities in the form of accommodation projects, food oriented projects, amusement parks and water sports, handicraft village complexes, sea/river cruise, safari project, sports/health facility complexes, etc. The Government would also like to encourage service-oriented projects like travel operation, tour operation, transport operation, etc.

Gujarat had a strong tourism base dating from Jurassic era to modern times, the dinosaur fossils at Balasinor and Kutch and the Indus Valley sites of Lothal and Dholavira, the natural beauties of unindulged golden sand beaches and having the vast modern life like dolphins, whale-sharks and other mammals, excellent heritage sites and religious places like Somnath, Dwarka, Ambaji, Pavagadh, Palitana etc., the huge scenic beauties of hills and mountains of Saputara, Taranga, Girnar, Wilson Hill and Jessor Hill, rich wild-life sanctuaries of Asiatic lion, leopard, tigers, sloth bear, wild ass, wolf, Indian Bustard, flamingos and pelicans, historical monuments like Patan's Sahashtalingh Lake and RankiVav, AdalejVav, Modhera Sun Temple, VadnagarToranetc²⁴. All this shows the real attractive potential of Gujarat tourism. The specialty of Kutch District of Gujarat has to be put to the optimum use on the tourism sector. The district has the distinct features of sea and desert in the same district and the rich dinosaur fossils. There is a good scope for exploiting these indigenous resources for the development of Tourism sector in Gujarat

²³A discussion note on “Accelerating Growth in Gujarat” by KPMG in India, pg. 19.

²⁴ Tourism Policy 2003-10, Tourism at a Glance, A Global Scenario, B., Industries, Mines & Tourism Department Government of Gujarat