

## **Chapter – VI**

### **SPATIAL PATTERNS OF LITERACY AND EDUCATIONAL ATTAINMENT IN VADODARA DISTRICT**

#### **6.1 INTRODUCTION:**

The total area of the district is 7,546 sq km., which comprises of 3.79 per cent of the geographical area of the State. Physiographically; the district is characterized by plains in the western part and hilly terrain in the eastern part. Vadodara district has twelve *talukas*. Total population of Vadodara district increased from 30.90 lakhs in 1991, 36.41 lakhs in 2001 and to 41.65 lakhs in 2011. Share of total literates increased by about 15 per cent from 65 per cent in 1991 to 70.76 per cent in 2001 and 78.92 per cent in 2011. Rural and female literacy in the State registered almost 20 per cent increment during the last twenty years. Rural literacy increased from 46 per cent in 1991 to 57.62 per cent in 2001 and 67.84 per cent in 2011. Female literacy increased from 53 per cent in 1991 to 60.73 per cent in 2001 and 72.03 per cent in 2011. Urban and male literacy rates in the State were substantially high at the 1991 Census and have reached very close to cent per cent mark at the 2011 Census count. The increment in urban literacy was from 72 per cent in 1991 to 85.08 per cent in 2001 and 89.74 per cent in 2011, Male literacy similarly increased from 75 per cent in 1991 to 80.08 per cent in 2001 to 85.39 per cent in 2011.

Vadodara city is the administrative headquarter of the Vadodara district. It is often termed as Baroda and is the cultural capital of the State. The city stands on the bank of River Vishwamitri. The city served as the capital of the erstwhile Gaekwad state of Baroda. The contributions of the Gaekwad rulers placed Vadodara, particularly the city of Vadodara much ahead of other areas of the State in terms of industrial and educational development (District Census Handbook, Vadodara, 2011, 12)

#### **6.2 GENERAL CHARACTERISTICS:**

The undivided Vadodara district is located between 21 ° 49' and 22 ° 47' North latitude and 72° 50' and 74° 17' East longitude. The district has a maximum north-south and east-west stretch of 109.3 and 148.1 kilometers respectively. It is bounded

by Kheda and Anand in the north-west, Panchmahals and Dohad in the east, Narmada and Bharuch in the south. This district also touches the border of Madhya Pradesh and Maharashtra states. It occupies 10<sup>th</sup> rank in terms of area (District Census Handbook, Vadodara, 2001, 8).

### **6.2.1 Physiography:**

Vadodara district occupies the part of the Gujarat plain which is sub-divided into seven micro units. Kambhat silt, Mahi Plain, Vadodara Plain, Orsang-Heran Plain, Narmada Gorge, lower Narmada valley, Vindhayan hills. Kambhat silt is seen the western part of Padra *taluka* enclosed by the Vadodara Plain in the east. Mahi plain covers Padra, Vadodara and Savli *talukas*. Vadodara plain occupies central part and extend over Padra, Vadodara, Savli, Vaghodia, Dabhoi, Karjan, Sinor and Sankheda. Orsang-Heran plain occupies mid eastern part of the district which extends up to Dabhoi, Sankheda, Chhota Udaipur, Nasvadi. Narmada gorge lies in the south-eastern part and includes Chhota Udaipur, Kavant and Nasvadi *talukas*. It marks its limits with the border of the Madhya Pradesh. Lower Narmada valley includes parts of Dabhoi, Karjan and Sinor in the southern parts of the district. Vindhyan hills extend over Chhota Udaipur, Kavant and Nasvadi *talukas* (District Census Handbook, Vadodara 2001, 7).

### **6.2.2 Drainage:**

Major portion of the district is drained by Mahi River and its tributaries. The flow of Mahi River through the *talukas* of Savli, Vadodara and Padra, has rendered these *talukas* the most fertile tract of the district. Before joining the Arabian Sea at the Gulf of Khmbhat, the river flows through the district of Kheda. Narmada River marks the border of the district with Bharuch district. Other minor rivers are Jambua, Viswamitri, Suria, Dhadhar, Uncchha, Orsang, Vijeti, Heran, Karjan, Madhumati, Kasad, Masari, Guma, Bhuki, Men, and Kaveri. Important lakes are, Wadhwana, Ajwa, and Pratappura. Ajwa Lake, situated in Vaghodia *taluka*, used to be and is still one of the most important drinking water supply sources of Vadodara city (Ibid.).

### **6.2.3 Climate:**

The climate of Vadodara district is characterized by hot summer and dry winters. The winds in the summer season are hot and dry. Winter is experienced between the months of December and February (Ibid.).

### **6.2.4 Forests:**

The district has 796.4 sq. km. or 10.55 per cent of its area under forest cover. Out of the total forest area, 705.7 sq. km. (88.61%) are reserved forests, 5.5 sq. km. (0.69%) are protected forests and 88.5 sq. km. (11.11%) are unclassified forests. The main forest products are timber, sesam, wood and fire wood, mahuda, and amla (Ibid.).

### **6.2.5 Minerals:**

The major minerals found in the district are Dolomite, Clay, Sand, Sandstone, Black Trap, Quartz, Fluoride, Gravel, Marble, Fluorspar, Agate, Graphite, Manganese ore, and Granite. Dolomite and Fluorspar are found only in Vadodara (Ibid.).

### **6.2.6 Soil and Agriculture:**

Most parts of the district are covered with fertile black and red-yellowish soils. Major crops cultivated in the district include, rice, wheat, grams, jowar, oilseeds, groundnuts and sugarcane. Vadodara is a leading producer of pulses contributing about 14.7 per cent of total pulse production of the State. Vadodara district is also an important fruit producing district, contributing about 11.25 per cent of the total fruit production of the State. The district is the highest producer of banana in Gujarat. With a contribution of about 12.6 per cent, the district is the largest producer of brinjal producer in the State. A substantial proportion of flower produced in the State comes from Vadodara (Ibid.).

### 6.2.7 District Highlights – 2011

Vadodara district has 12 sub-districts or *talukas*, 25 towns and 1,537 villages of which 1,533 are inhabited villages (Table 6.1). The district covers 3.85 per cent of the total area of the state of Gujarat. With 552 persons per square kilometer as per census 2011, Vadodara district ranks ninth in the State with respect to population density. Vadodara district is the third most populous district in the State. Within the district, Vadodara *taluka* has the largest population of 2,009,434 persons, whereas Sinor *taluka* has the smallest population of 65,440 persons. Among its villages, Anagarh village in Vadodara *taluka* is the most populated village with a population of 14,780 persons and Bhagavanpura village of Nasvadi *taluka* has the lowest population of 6 persons. Vadodara district has a sex ratio of 934. Chhota Udaipur *taluka* has the highest sex ratio of 989 and Padra *taluka* has lowest sex ratio of 897. Kavant *taluka* has highest child sex ratio of 975 and Vadodara *taluka* has least child sex ratio of 855. Vadodara *taluka* has the highest literacy rate of 89.86 per cent and Chhota Udaipur *taluka* has the lowest literacy rate of 43.51 per cent. The district has the dominance of agrarian economy as more than half (52.11%) of the working population is engaged in agricultural work. Chemical and Fertilizers, Pharmaceutical, Biotechnology, Cotton textiles, Machines tools, Glass engineering, Fisheries and Dairies are the major industries in the district that accommodate the industrial workforce (Ibid., 20).

**Table - 6.1: Taluka-Wise Number of Towns and Villages in Vadodara District**

<i>Taluka</i>	Number of Towns	Number of Villages	
		Total	Inhabited
Savli	1	136	136
Vadodara	12	82	82
Vaghodia	3	94	93
Jetpur Pavi	1	212	212
Chhota Udaipur	1	144	144
Kavant	1	132	131
Nasvadi	1	218	216
Shankheda	2	185	185
Dabhoi	1	118	118
Padra	1	82	82
Karjan	1	93	93
Sinor	0	41	41
<b>Vadodara</b>	<b>25</b>	<b>1537</b>	<b>1533</b>

Source: District Census Handbook, Vadodara, 2011.

### **6.3 INDUSTRIAL GROWTH:**

Traditionally Vadodara city in particular and the district in general is known for its social and cultural heritages. However, the district was not behind any district of the State in terms of industrialization. The World famous Alembic Pharmaceuticals was set up way back in 1907. Sarabhai Chemical and Jyoti industries came up during the 1940's. By 1962, there were 88 factories in the district of Vadodara. The main industries during those times were chemical, pharmaceuticals, cotton textiles and machine tools. With the starting of the Gujarat Refinery, the district witnessed steady progress of industrial activity. Factors like availability of raw materials, demand of the products, skilled and semi-skilled human resources, finances and most important government and private entrepreneurs, played very important role to boost the industrialization of the district. Discovery of mineral oil in the western onshore basin in 1965 further boosted the process of industrialization of Gujarat in which Vadodara region became the greatest beneficiary. Industrial giants like Gujarat State Fertilizer Corporation (GSFC), Indian Petrochemicals Limited (IPCL), Gujarat Alkali, Heavy Water Project, Gujarat Industries Power Company Limited (GIPCL) and Gujarat State Chemical Limited (GACL) set up their units in and around Vadodara city. All these were public sectors units. Equal number of private sector units also came up in due course of time. These large industrial units attracted a large number of auxiliary industries. Thus, the district of Vadodara got dotted with by large number of large, medium and small scale industries, making it an industrial hub. Being located on the Delhi-Mumbai Industrial Corridor (DMIC), and being the exclusive producer of Dolomite and Fluorspar in the entire country, Vadodara district has remained an important area of attraction for varieties of industrial investments and activities.

### **6.4 SOCIAL CHARACTERISTICS:**

The population of Vadodara district has a typical multi-cultural character. The variation in the social composition of the district population clearly corresponds with its physiographic variations. As mentioned above, the district has broadly two distinct physiographic divisions – the plains and the hilly areas. These two physiographic segments of the district have since ages been the traditional habitations of the non-tribes and tribes respectively. Even today, the non-tribal segment of the district population is largely confined to the *talukas* with fertile plain lands in the western part

of the district, and the tribal segment is concentrated in the *talukas* with hilly, forested and agriculturally unsuitable tracts in the eastern part of the district.

The physical characteristics of four *talukas* of Jetpur Pavi, Chhota Udaipur, Kavant and Nasvadi are mostly marked by hilly, forested and agriculturally negative topography. These four *talukas* taken together, account for almost two-thirds (66.27%) of the total ST population in the district as per the 2011 Census count (Table – 6.2). Major tribes in Vadodara district are Bhils, Rathwa, Tadvīs, Naiks, and Kolcha Tadvīs (MRHD, 1995, 50).

#### **6.4.1 Characteristics of the Tribal *Talukas*:**

These traditional abodes of the tribes are in fact the western margin of the Central Indian Tribal belt (Tribal Atlas, Raza & Ahmad, 1990, 37), which has its typical backward characteristics. Backwardness in these *talukas* may be ascribed to their age old geographical and social isolation. Most of these areas lack in the basic amenities – transportation, electricity, roads and water scarcity. Even non-governmental and private entrepreneur activities that may lead to profitable ventures, are also less here. The tribes in these agriculturally unsuitable ecological set ups lived a harmonious life depending heavily on the naturally available resources, especially forest based resources. Cultivation of crops was practiced in rudimentary form mostly in the available river plains of the hills (Ahmad, 1999, 160). With depletion of forests and absence of alternative economic avenues, the tribes became fully dependant on agriculture in these agriculturally unsuitable hilly areas with thin soil cover. Mostly dependent on erratic monsoon rainfall and insufficient irrigation infrastructure, agriculture in these predominantly tribal *talukas* are much less lucrative. Consequentially, the level of living and human capital development of the ST population in the district in general and in these *talukas* in particular is relatively lower than the general population (Mehta, 2009, 61).

**Table - 6.2: Share of SC and ST Population – Vadodara District (2001 and 2011)**

Taluka / District	Percentage Share of							
	SC Population				ST Population			
	to Total SC Pop. in the District		to Total Pop. in the Taluka		to Total ST Pop. in the District		to Total Pop. in the Taluka	
	2001	2011	2001	2011	2001	2011	2001	2011
Savli	6.07	6.04	5.21	5.25	1.76	1.61	7.17	7.26
Vadodara	57.39	60.88	6.87	6.71	8.31	8.47	4.71	4.85
Vaghodia	3.10	3.02	4.76	4.47	3.96	3.93	28.78	30.16
Jetpur Pavi	2.67	2.36	2.42	2.00	18.11	18.94	77.55	83.33
Chhota Udaipur	3.13	3.55	3.15	3.26	18.14	18.39	86.57	87.62
Kavant	2.05	2.33	2.46	2.45	16.31	17.08	92.50	93.51
Nasvadi	0.82	0.62	1.34	0.88	11.12	11.86	86.16	87.72
Sankheda	2.92	2.56	3.21	2.79	8.61	8.24	44.81	46.56
Dabhoi	5.75	4.71	6.42	5.78	6.02	5.15	31.81	32.82
Padra	7.66	7.07	6.51	5.89	0.82	0.70	3.30	3.04
Karjan	5.88	4.90	7.39	6.49	4.26	3.69	25.37	25.33
Sinor	2.54	1.97	7.50	6.66	2.59	1.93	36.21	33.85
<b>Vadodara</b>	<b>100</b>	<b>100</b>	<b>5.61</b>	<b>5.32</b>	<b>100</b>	<b>100</b>	<b>26.56</b>	<b>27.60</b>

Source: Computed from Census of India Data.

Several committees have been constituted in Gujarat to identify the nature and level of backwardness of these *talukas*, for example the Colwagi Committee in 2005 ranked all the 225 *talukas* of the State on the basis of 44 indicators. These indicators were grouped into four main categories like standard of living, economic, infrastructure and social development. The assessment of the Committee designated Kavant *taluka* of Vadodara district as the most backward *taluka* in the entire State (Mehta, 2009, 62).

Some of the causes of the backwardness of the *taluka* are poor industrial development, poor infrastructure and inefficient agriculture, low level of social and demographic development including illiteracy and lower educational attainment, lack of required skills in the population to take up diversified economic activity and non-availability of alternative economic avenues. The tribes generally practice rain fed agriculture during the *Kharif* season and migrate seeking employment in the unorganized sector of the nearby urban centers (Mehta, 2009, 69).

**Table - 6.3: Taluka Wise Schedule Caste and Schedule Tribe Total Effective Literacy Rate - Vadodara (2001 and 2011)**

<i>Taluka</i>	Schedule Caste		Schedule Tribe	
	2001	2011	2001	2011
Savli	67.87	78.44	40.27	61.03
Vadodara	79.67	87.68	47.34	69.92
Vaghodia	72.08	85.64	45.61	70.44
Jetpur Pavi	59.25	67.70	43.81	56.60
Chhota Udaipur	49.28	59.81	21.93	37.11
Kavant	57.87	64.47	29.90	43.85
Nasvadi	76.29	79.07	41.53	54.81
Sankheda	74.14	80.68	47.86	61.14
Dabhoi	71.84	80.48	44.85	64.76
Padra	70.27	80.30	39.89	55.43
Karjan	72.63	82.13	37.68	59.76
Sinor	72.04	77.75	41.84	61.51
<b>Vadodara</b>	<b>77.16</b>	<b>84.47</b>	<b>38.98</b>	<b>54.27</b>

District Census Handbook, Vadodara, 2001 and 2011

## 6.5 BRIEF HISTORY:

Vadodara was initially known as the *Chandan Vati* after the King named Raja Chandan. Abundance of sandalwood trees in the district is also ascribed to the name *Chandan Vati*. Thereafter, the city was known as the *Vira Vati* or the abode of the warriors. Following which, because of the abundance of the banyan trees, the district was known as *Vadpatra* or *Vadapatraka* or the leaf of the banyan tree. The present name Vadodara has been derived from the *Vadapatraka*, which was pronounced as Baroda by the British. Present day Vadodara district includes the areas which were under the state of Baroda along with the state of Chhota Udaipur, Sankheda Mewas, Pandu Mewas and Bhadarva (District Census Handbook, Vadodara, 2001, 5).

### 6.5.1 History of the Rulers:

The district as an integral part of Gujarat had been under the rule of Mauryas, Greeks, Guptas, Valabhijs and Rakshtras. The Vadapadraka was ruled by the Chalukya dynasty in the 10th century, followed by the Solankis, and the Vaghelas. Khilji invaded Gujarat in 1274. During the Khilji period, Vadapratraka was the

headquarters. The Sultans of Delhi had taken over the rule of Vadaprataka from Khilji before it was brought under the rule of the Mughals. In 1674, the Maratha Empire declared war on the Mughal Empire, and defeated them in central and eastern Gujarat in mid-18th century. Their representatives, the Gaekwads, after being prompted by the Bhil and Koli tribal kings attacked the Mughals and made Vadodara their capital. In the early 19th century, after the Anglo-Maratha war, the British took control of much of Gujarat. The Gaekwads had conflict with the Peshwas, the Marathas of Pune. The Gaekwads signed a treaty with the British for their protection from the Peshwas, and to give Baroda a degree of self-rule. Baroda remained autonomous until Independence, and it still retains a flavor of the former princely Gaekwad state, which had never got integrated into the central administration (Desai and Clarke, 1923, 363).

The Marathas invaded Gujarat in 1705 after the death of Aurangzeb. Peshwa Balaji Vishwanath attacked the viceroy of Gujarat Khaderao Dabhade (District Census Handbook, Vadodara, 2001, 5). After 1720, the Senapati received authority from the Raja of Satara to release the dues from Gujarat and Belgam. One of his officers named Damaji Gaekwad, showed much gallantry in the battle. On Damaji's death in 1721, his nephew Pilaji, the son of Jhingoji Gaekwad took his place. Pilaji Gaekwad founded the House of Gaekwad at Baroda between 1721 and 1732 which existed as a separate princely state till it got merged with the Bombay State in 1949. After 1802, the Marathas become powerful in British Gujarat. Peshwa Damaji erected the Mandvi gate, symbolizing the beginning of the Maratha rule (Dash and Kumar, 2010, 3).

The ruler of Baroda state in 1875 Malharrao, was dethroned and Sir Richard Meade made Sayajirao III seated on the throne. Sayajirao III was adopted by Jamnabai, widow of Kandrao Gaekwad from Khandesh branch of Gaekwad family. At the same time, Raja Sir T. Madhavrao became the *Dewan* of Baroda (Ibid.).

## **6.6 CONTRIBUTIONS OF SIR SAYAJIRAO GAEKWAD III:**

After Sir Sayajirao Gaekwad III took charge of Baroda State from Sir T. Madhavrao in 1882, a new Vadodara evolved. Lots of new reforms were carried out to end the chaos and to bring transformation in the administration, economy, society and culture. During his regime, the city limit expanded, property tax was introduced and Ajwa Dam was constructed. The underground water treatment plant was also started. Among all the Gaekwad rulers, Maharaja Sayajirao III, who ruled the Baroda State between 1875 and 1939,(from 1875-1882 he ruled under Sir T.Madhavrao, as he was minor that time; in 1882 he started ruling independently) is credited with the most significant developments in the State as a whole and as well as in Vadodara city. He brought in changes in textile and other manufacturing processes that moved Baroda towards becoming a booming industrial center (District Census Handbook, Vadodara 2011, 14).

It was the vision of Sir Sayajirao to make Baroda an educational, industrial and commercial centre. Sir Sayajirao III (1875-1939) is known as the architect of modern Vadodara. Under his regime, Vadodara progressed in all fields. He took initiatives of all kinds for bringing in reforms. A large number of new industries were started during his rule. Industrialization in the region of Vadodara started with textile industry and tile factory. It was for his initiatives that today Vadodara is a leading centre of textile, chemical and petroleum industries.

Under the rule of Sir Sayajirao III, Baroda flourished as never before. He was a great foresighted administrator and reformer of his times. He gave importance to economic development and started model industries. Baroda retained beauty of its rich and cultural past and holds a unique position in educational, cultural and industrial map of India all because of the concerted efforts of its erstwhile ruler, Sir Sayjirao Gaekwad III.

Maharaja Sayajirao started numerous social reforms too. Compulsory primary education and library movement started during his regime. Adult education was also started. It was because of the foresightedness of this ruler that today, The Maharaja Sayajirao University of Baroda is one of the apex educational institutions of the State and Western India. He was also a leader among other Indian kings in his patronage of

the arts, in a time when the British largely ignored the local arts, judging them with a biased eye as inferior.

Revolution was also seen in the sector of education. For male and female teachers training institutes was started in 1885 and 1892. Technical as well as the vocational training started in 1890 at the Kalabhavan Technical Institute. For the education of the backward classes, special training centers were opened in 1893. For the upliftment of public health, a general hospital was built in 1886 (presently known as Sir Sayajirao General Hospital), and Bank of Baroda was opened in 1908 (Dash and Kumar, 2010, 4).

Thus, Baroda became one of the most progressive princely states of India by the end of 19<sup>th</sup> century. Baroda retains its status as an important centre of education till date. He introduced compulsory primary education, even for girls, which was rare in India then and organized schools for oppressed classes, tribals, and Muslims. He was a promoter of adult education, setting up a network of libraries that are still thriving, and are appreciated as a legacy of the Gaekwad rule. Primary education in general and girl's education in particular was made free and compulsory throughout the Baroda State in 1906. Some specialized schools like schools for deaf and dumb in 1901, schools for blind in 1915, night school for working children and adults in 1915, training college for secondary teachers in 1935 were opened. Baroda had become an educational hub way back in 1881. Numbers of schools in 1881 were 55, which increased to 1190 in 1940, out of which 632 schools were in the rural areas (Ibid, 5).

Maharaja Sayajirao started adult literacy campaign in 1939. Sanskrit Maha Vidyalaya started operating in 1915. Library movement too started in his regime. By 1940, each *taluka* was linked to the public library network. By 1916, many cultural, social, religious organizations had started (Ibid.).

With the rule of Sir Sayajirao, a new chapter in the history of Baroda opened up. The whole era was very progressive (Subbarao, 1953, 130). The Baroda State was merged with the State of Bombay in 1949, and subsequently became part of Gujarat in 1960.

## **6.7 LITERACY AND EDUCATION IN VADODARA DISTRICT:**

Vadodara is the leading educational hub which offers skilled and intelligent man power for industries as well as for research and development. Apart from having a very visionary administrator in the erstwhile Gaekwad rulers, location of Vadodara on the Mumbai-Ahmadabad Industrial corridor with other industrial towns like Ahmadabad, Bharuch, and Surat nearby has helped in its overall development to a great extent.

Under the aegis of National Literacy Mission and the Jilla Shaksarta Samiti of Vadodara district, the Total Literacy Campaign (TLC) was launched in 1993. The main objective of this Campaign was to enhance the literacy level in the district. This campaign turned out to be a much focused campaign. It involved the village leaders, volunteers and the neo-literates. It emphasized on the three Rs - Reading, wRiting, and aRithmetic (MHRD, 1995, 50).

The evaluation of the TLC in Vadodara was done by Sardar Patel Institute of Economic and Social Research (SPIER), Ahmadabad in order to review its achievement and progress of literacy. The purpose of this evaluation was to indicate the policy measures, and other efforts required for the progress of literacy, and to review the gap between expectations and achievements (Ibid, 51).

This campaign helped to arouse awareness about family planning, the importance of visiting PHC regularly, various Government schemes, minimum wages, use of forest resources, health and social evils etcetera. The volunteers played a very significant role in the propaganda and publicity, training and teaching work. The documentation works of the district was much better than the other districts

Presently, primary as well as the secondary and higher secondary education in the districts are controlled by the district education officer (District Census Handbook, Vadodara 2001, 7).

### **6.7.1 The Case of the *Talukas* in Vadodara District with Predominance of ST Population:**

Improvement of the educational levels is important as it is expected to promote access to productive employment, increase labor productivity and help people to make effective use of economic opportunities created through the growth process. Literacy also helps in reducing poverty level (Mehta, 2009, 70).

Spread of higher education in the tribal areas of the Vadodara district is dismal. Occupational structure of the population in the tribal *talukas* of Vadodara district shows that a large segment belongs to the landless agricultural labourer category, reflecting on their level of poverty. The land owners engaged in direct crop cultivation produce only food crops for self consumption in their small and relatively less productive agricultural plots (Mehta, 2009, 60). These cultivators do not go for crop diversification or adopt modern methods of farming mostly due to lack of financial constraints. Consequentially, the returns from cultivation remain lower, and do not help in eradicating poverty among them (Ibid, 66).

Poverty can also be linked with the educational characteristics of the households. Ignorance due to illiteracy, lack of education and limited employment opportunities are also responsible for persistent poverty in the tribal areas. Without proper education and skill, their employment in formal non-farm activities becomes difficult. Cultivators as well as agricultural labourers migrate in the non-agricultural season to the nearby urban centers to work as casual wage earners, mostly in construction activities, which do not lead to the up-gradation of their economic status (Ibid, 67). Thus, the status of the tribal education can be related with the persistence of poverty among the ST segment of population of Vadodara district.

The level of education among the tribes of the district is much lower than their tribes in the district (Table 6.2). More than half the population in almost every predominantly tribal village is illiterate. Tribal female literacy is miserably lower than the literacy among the females of other categories, including the SC females (Table – 6.3, 6.4 & 6.5), (Figure 6.1 & 6.2). The reason for the educational backwardness of the tribal *talukas* can perhaps be lack of trickling down effect of the ongoing

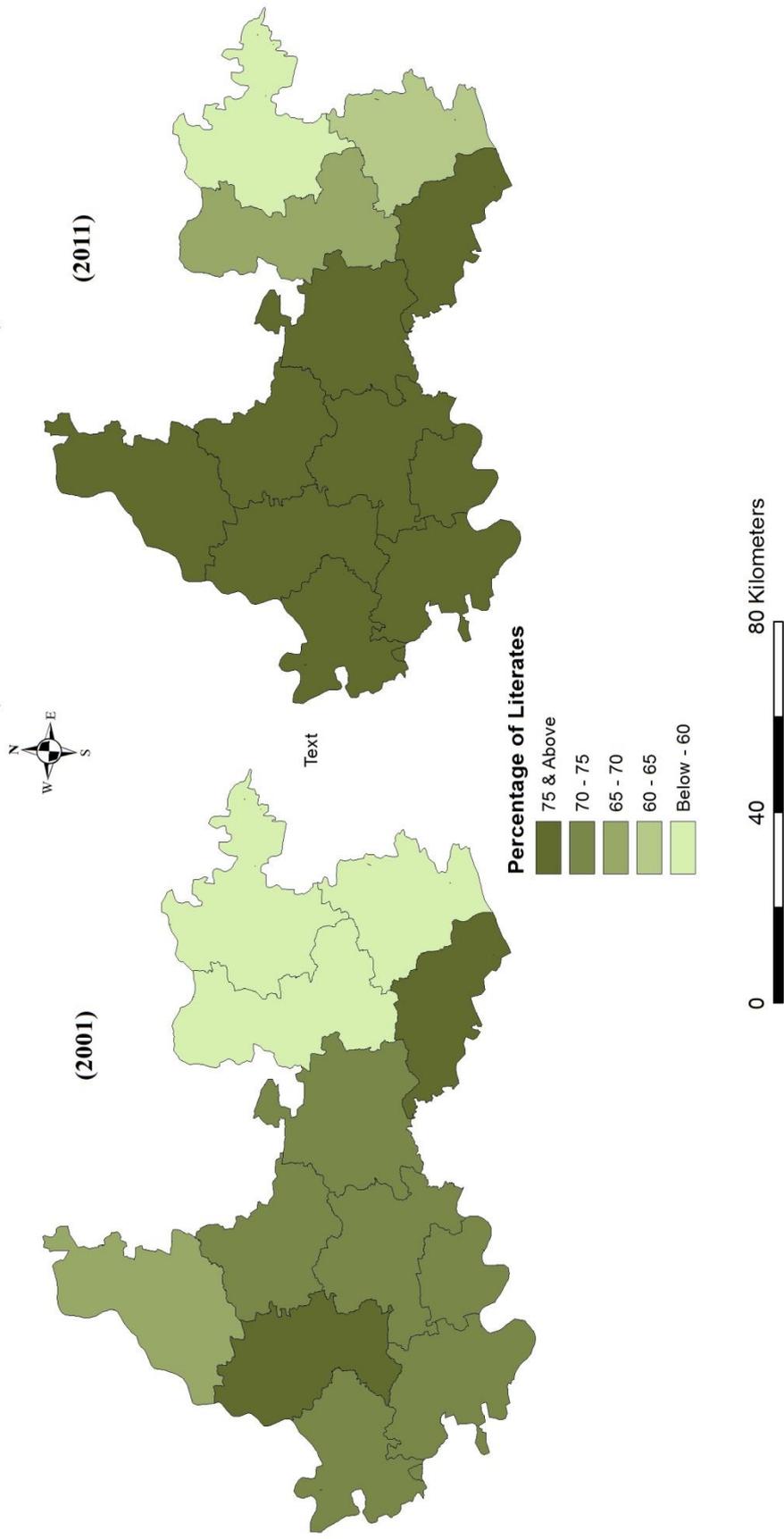
development processes in the non-tribal *talukas* of the district to the tribal *talukas* and absence of economic dynamism in the tribal *talukas*. Absence of perceptible structural changes in the tribal workforce and seasonal migration of families with children to work as casual labours in the nearby urban centers, are the ramifications of the economic stagnation in the tribal *talukas* of Vadodara district. Chronic poverty has become the chief characteristic of the tribal areas of Vadodara district due to poor economic resource base, fragile ecology, geographical isolation, inadequate investment, poor infrastructure and demographic characteristics. Regional imbalances in post reform period have further aggravated poverty in the tribal *talukas* of the district (Mehta, 2009, 69).

**Table - 6.4: Taluka-Wise Schedule Caste Literacy Rate - Vadodara (2011)**

<i>Taluka / District</i>	<b>Total</b>	<b>Rural</b>	<b>Urban</b>	<b>Male</b>	<b>Female</b>
Savli	78.44	78.44	0.00	87.59	68.48
Vadodara	87.68	87.11	88.14	93.82	81.02
Vaghodia	85.64	83.73	89.61	92.10	78.99
Jetpur Pavi	67.70	67.04	77.08	78.57	56.43
Chhota Udaipur	59.81	59.81	0.00	69.19	49.81
Kavant	64.47	64.25	65.06	74.52	53.60
Nasvadi	79.07	76.32	82.62	91.33	66.72
Sankheda	80.68	79.29	90.37	89.95	70.77
Dabhoi	80.48	80.48	0.00	90.31	70.15
Padra	80.30	80.29	87.50	89.16	70.89
Karjan	82.13	82.13	0.00	92.08	71.66
Sinor	77.75	77.75	0.00	88.59	66.48
<b>Vadodara</b>	<b>84.47</b>	<b>78.15</b>	<b>88.27</b>	<b>91.27</b>	<b>77.24</b>

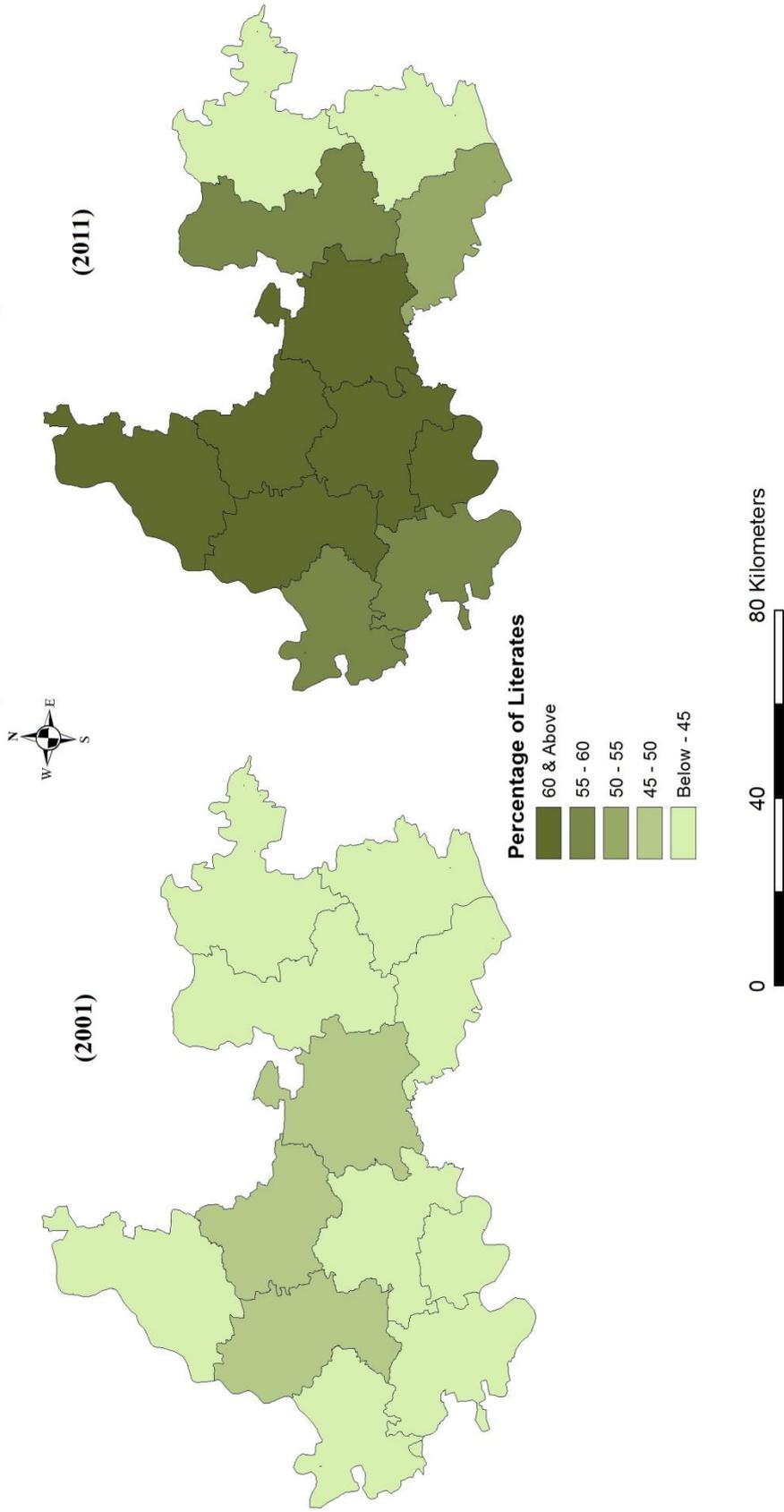
Source: Primary Census Abstract, Census of India, 2011.

**VADODARA DISTRICT  
EFFECTIVE LITERACY (SCHEDULE CASTE)**



**Figure – 6.1: Vadodara District: Effective Literacy (Schedule Caste)**

**VADODARA DISTRICT  
EFFECTIVE LITERACY (SCHEDULE TRIBES)**



**Figure – 6.2: Vadodara District: Effective Literacy (Schedule Tribe)**

**Table - 6.5: Taluka-Wise Schedule Tribe Literacy rate - Vadodara (2011)**

<i>Taluka / District</i>	<b>Total</b>	<b>Rural</b>	<b>Urban</b>	<b>Male</b>	<b>Female</b>
Savli	61.03	61.03	0.00	71.83	49.17
Vadodara	69.92	67.55	74.68	79.10	59.95
Vaghodia	70.44	70.09	74.41	79.37	60.90
Jetpur Pavi	56.60	56.32	75.32	69.25	43.42
Chhota Udaipur	37.11	37.11	0.00	45.35	28.91
Kavant	43.85	43.01	80.68	54.51	33.16
Nasvadi	54.81	54.52	75.54	65.26	44.17
Sankheda	61.14	60.48	78.52	72.00	49.42
Dabhoi	64.76	64.76	0.00	75.21	53.59
Padra	55.43	55.40	64.00	65.46	43.94
Karjan	59.76	59.76	0.00	70.21	48.41
Sinor	61.51	61.51	0.00	73.11	48.77
<b>Vadodara</b>	<b>54.27</b>	<b>51.96</b>	<b>75.24</b>	<b>64.72</b>	<b>43.39</b>

Source: Primary Census Abstract, Census of India , 2011.

A comparison of per capita rural income places Gujarat at 20 per cent higher than the country. However, the same for the tribes of the State is at par with the National average. Incidence of rural poverty is more prominent among the ST population than the general population, hence specifically targeted intervention for this group is required (Mehta, 2009, 68).

There is urgent need to focus on training, skill enhancement, development of infrastructure and expansion of credit and market facilities in the tribal areas to bring in positive changes in the literacy and educational levels of the tribal population.

### **6.8 Spatial Patterns of Literacy in Vadodara District:**

The district of Vadodara is located in the central part of Gujarat. It has great diversity in physical characteristics with hilly as well as the plain areas, and corresponding diversity in its social composition. The Vadodara district can be clearly demarked between less developed, hilly, forested and tribal areas, and developed plain land non-tribal areas. Since the pre-historic times, the western part of the Vadodara district witnessed great deal of cultural churning, while the eastern hilly part remained bereft

of these processes. Even the initiatives of the Maharaja Sayajirao III, did not help dissemination of educational benefits into the tribal tracts of the then Baroda State.

**Table - 6.6: General Literacy Rate (2001 & 2011)**

Unit	2001			2011			Point % Growth		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>Vadodara</b>	70.76	80.08	60.73	78.92	85.39	72.03	8.16	5.31	11.30
<b>Gujarat</b>	69.14	79.66	57.80	78.03	85.75	69.68	8.89	6.09	11.88
<b>India</b>	64.84	75.30	53.67	72.99	80.89	64.64	8.15	5.59	10.97

Source: Census of India, 2001 and 2011.

**Table - 6.7: Taluka-Wise General Literacy Rate by Residence – Vadodara (2001 and 2011)**

Taluka (% of Tribal Pop.)	2001			Total 2011			Point % Increase		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
Savli (7.26)	65.96	65.96	-	78.56	78.29	82.01	12.60	12.33	82.01
Vadodara (4.85)	85.06	72.76	86.79	89.86	84.77	90.36	4.80	12.01	3.57
Vaghodia (30.16)	65.80	65.73	74.91	82.09	80.76	89.01	16.29	15.03	14.10
Jetpur Pavi (83.33)	48.86	48.86	-	59.91	59.22	81.50	11.05	10.36	81.50
Chhota Udaipur (87.62)	30.57	23.97	77.31	43.51	38.65	81.12	12.94	14.68	3.81
Kavant (93.51)	33.35	33.35	-	46.96	44.14	81.30	13.61	10.79	81.30
Nasvadi (87.72)	47.16	47.16	-	58.54	56.95	86.09	11.38	9.79	86.09
Sankheda (46.56)	64.01	62.98	81.13	73.01	71.34	87.36	9.00	8.36	6.23
Dabhoi (32.82)	68.87	65.82	75.87	79.40	78.00	82.94	10.53	12.18	7.07
Padra(3.04)	72.70	70.26	84.88	81.03	79.49	88.11	8.33	9.23	3.23
Karjan (25.33)	68.82	66.87	78.80	80.37	79.12	81.08	11.55	12.25	2.28
Sinor (33.85)	67.05	67.05	-	78.08	78.08	-	11.03	11.03	-
<b>Vadodara</b>	<b>70.76</b>	<b>57.62</b>	<b>85.08</b>	<b>78.92</b>	<b>67.84</b>	<b>89.74</b>	<b>8.16</b>	<b>10.22</b>	<b>4.66</b>

Source: Primary Census Abstract, Census of India (2001 and 2011).

Traditionally formal education was alien to the preliterate tribal societies. Complete dependence on Nature for sustenance of life, required tribal children to learn Nature's art and science from their elder generation and pass them on to their next generation.

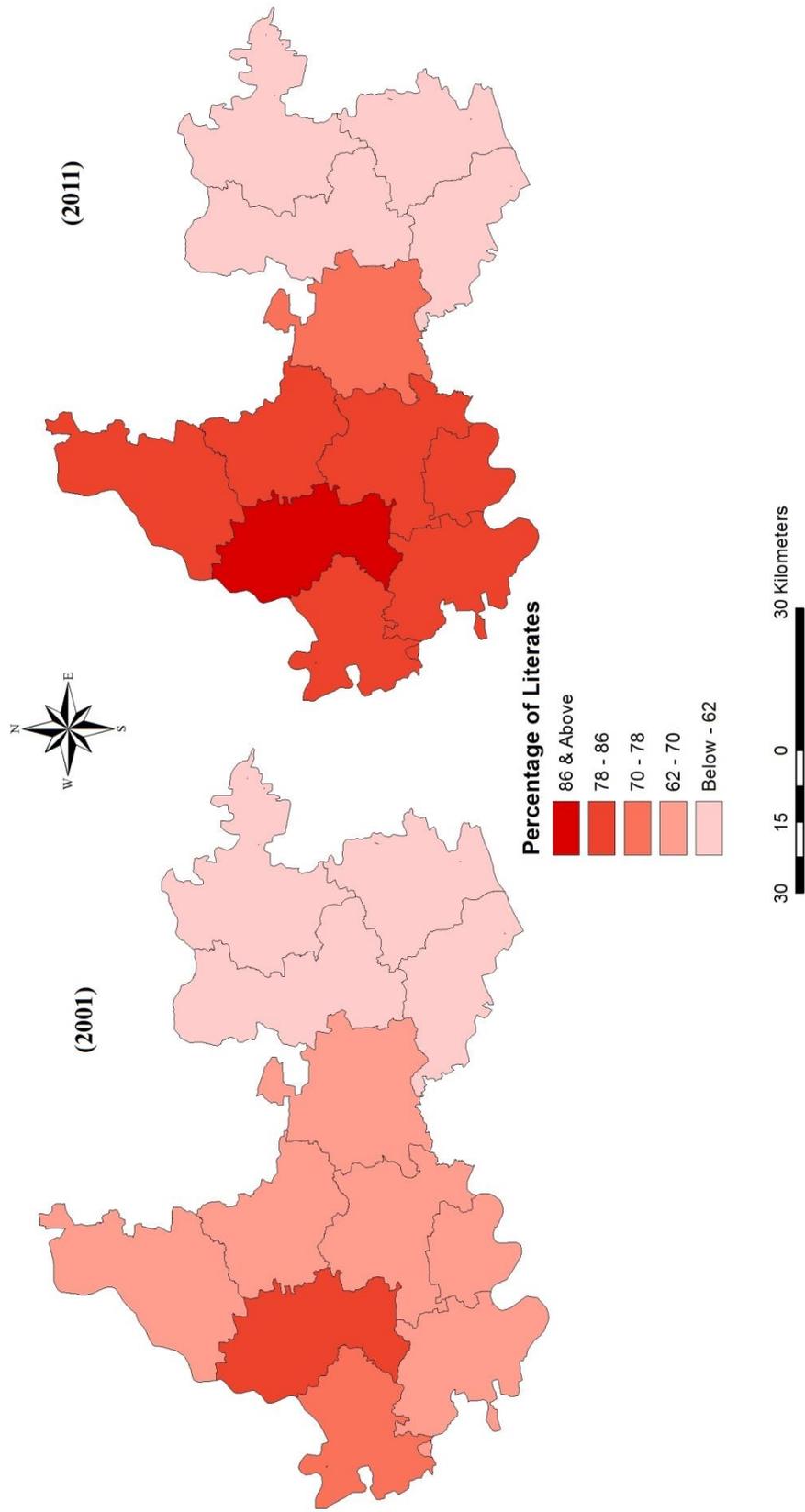
They had developed their typical way of learning without having any formal platform like the modern educational institutions. Although their dependence on Nature has reduced to great extent due to depletion of natural resources of their habitats through external interventions, population pressure and legal restrictions on resource use etcetera, the significance of modern formal education is yet to be realized by the tribal masses

Thus, the tribal population in the country has adopted formal education system only very recently and their society is slowly and gradually getting transformed from pre-literate to literate state. Lack of motivation remains an important cause for slower pace of spread of formal education among the tribes (Bhatty, 1998, 1858). Many of them lack interest in the formal education (Swamy, 2010, 30). While low enrollment (Sengupta and Ghosh, 2012, 79; Midatala, 2009, 220) of the tribal children is a key parameter for slow progress, absenteeism (Midatala, 2009, 176) among them is no less significant. As the tribal people are generally the first generation learners, poor understanding of the concepts (Padhi, 2013, 219) is one of the major problems which results in drop-outs. Thus, these pre-dominantly tribal areas of Vadodara display low literacy and educational attainment.

As per the 2011 Census count (Table 6.7), literacy rates are significantly higher (above 70% on an average) in the non-tribal *talukas* as compared to that of the tribal *talukas* (less than 60% on an average) (Figure 6.3). Among all the twelve *talukas*, the most urbanized and industrial *taluka* of Vadodara registered the highest literacy (89.9%) at the 2011 Census, with a 4.8 point percentage increase over the earlier 2001 Census. The four predominantly tribal *talukas* of Jetpur Pavi, Chhota Udaipur, Kavant and Nasvadi have the maximum proportion of illiterates in their population (Table 6.6).

The tribal people have their own culture and customs as well as their own method of learning. They are yet to realize the importance of formal training in education.

**VADODARA DISTRICT  
EFFECTIVE LITERACY (TOTAL)**



**Figure – 6.3: Vadodara District: Effective Literacy (Total)**

The four predominantly tribal *talukas* had less literacy rate compared to the district average at both the 2001 and 2011 Census counts. Only the two *talukas* of Jetpur Pavi and Nasvadi have crossed the 50 per cent mark in ten years with 59.91 and 58.94 per cent literacy respectively. Although the progress in terms of point percentage growth of literates during the two census years is relatively higher in all the predominantly tribal *talukas*, the other two predominantly tribal *talukas* of Kavant and Chhota Udaipur are much behind with 46.96 and 43.51 per cent literacy. The tribal population is mostly rural by residence, hence there is very less difference in the total and the rural literacy rates. The significantly high level of urban literacy in these four *talukas* may be due to the presence of literate tribal and non-tribal migrant populations in the urban centers of these *talukas*.

Among the non-tribal *talukas*, the highest literacy rates in 2001 was registered by Vadodara *taluka* (85.06%) followed by Padra (72.70%), Karjan (68.82%) and Dabhoi (68.87%). Only Vadodara and Padra *talukas* registered literacy rates above the district average (70.70%). Rest all were below the district average. In the non-tribal *talukas*, literacy rates of both rural and urban areas were higher with urban areas at the lead. The highest rural and urban literacy rates were recorded in the Vadodara *taluka*. The highly industrialized and urbanized character of the *taluka* has impacted its rural areas too in the matter of literacy. The district average of rural literacy rate was only 57.62 per cent in 2001, because five *talukas* including the three predominantly tribal *talukas* with cent per cent rural population had substantial proportion of illiterates. Urban literacy was above the district average (85.08%) only in Vadodara *taluka* (86.79%), followed by Padra (84.84%), Sankheda (81.13%), Karjan (78.89%) and Chhota Udaipur (77.31%).

Fairly satisfactory progress of literacy in all the *talukas* of the district have been noticed during the census decade of 2001 to 2011. The proportion of literates increased by 11 to 14 per cent with very high increase in all the four predominantly tribal *talukas* of Kavant (13.61 point percentage), Chhota Udaipur (12.94 point percentage), Nasvadi (11.38 point percentage) and Jetpur Pavi (11.05 point percentage). The highest increase was of course in Vaghodia *taluka* (16.29 point percentage), which has a substantial proportion (30.16%) of tribal population.

VADODARA DISTRICT  
EFFECTIVE LITERACY (RURAL)

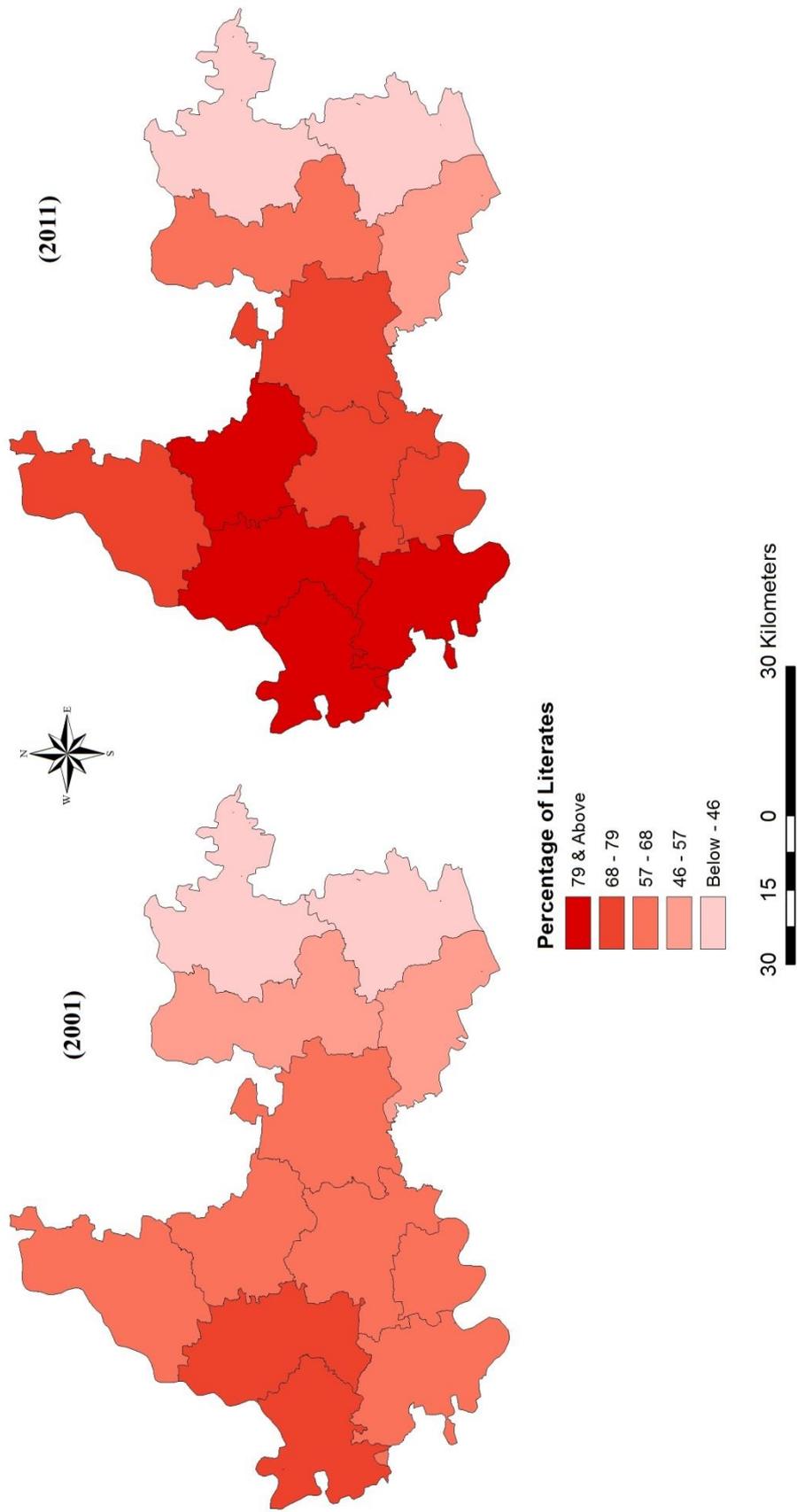


Figure – 6.4: Vadodara District: Effective Literacy (Rural)

Even in case of the rural literacy, (Figure 6.4) increase in the proportion of literates in the tribal *talukas* was between 9 to 15 point percentages, with the highest in Chhota Udaipur *taluka* (14.68 point percentage), although Vaghodia *taluka* surpassed it with 15.03 point percentage gain in rural literacy during the decade. *Talukas* with urban centers at the 2001 Census had a relatively smaller increase in the share of urban literates as the level of literacy at 2001 was already very high in all the *talukas*. The *talukas* without urban centers at the 2001 Census count have similarly attained above 80 per cent urban literacy at the 2011 Census.

Establishment of industrial parks and GIDC complexes, increased pace of urbanization, increase in the share of workers in the secondary and tertiary sectors, better transportation and communication facilities have had a definite impact on the demand and supply of literate persons, particularly in the predominantly non-tribal *talukas*. The rural spaces of the district have also gained substantially in the level of literacy during the decade. The adjoining *talukas* of Vadodara *taluka* like, Vaghodia (16.29 point %), Savli (12.60 point %) and Karjan (11.55 point %) have gained the maximum during the period. Savli *taluka* which didn't have any urban population by 2001, under the influence of modern developments has been a strong gainer. The highest increment in rural literacy (Figure 6.4) was seen in Vaghodia *taluka* (15.03 point %), followed by Savli (12.33 point %) and Karjan (12.25 point %) *talukas*. The literacy dynamics between 2001 and 2011 census years indicates that literacy is spreading satisfactorily in the rural areas of the district, and the urban areas (Figure 6.5) have attained very high level of literacy.



**Table - 6.8: Taluka-Wise General Literacy Rate by Sex - Vadodara (2001 and 2011)**

Taluka (% of Tribal Pop.)	2001			2011			Point % Increase		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Savli (7.26)	65.96	79.83	50.60	78.56	88.02	68.44	12.60	8.19	17.84
Vadodara (4.85)	85.06	90.94	78.65	89.86	93.53	85.88	4.80	2.59	7.23
Vaghodia (30.16)	65.80	79.24	51.30	82.09	89.40	74.32	16.29	10.16	23.02
Jet. Pavi (83.33)	48.86	64.08	32.77	59.91	72.27	46.98	11.05	8.19	14.21
Chhota Udaipur (87.62)	30.57	39.49	21.55	43.51	51.60	35.37	12.94	12.11	13.82
Kavant (93.51)	33.35	45.85	20.48	46.96	56.54	35.28	13.61	10.69	14.80
Nasvadi (87.72)	47.16	61.10	32.57	58.54	68.66	48.17	11.38	7.56	15.60
Sankheda (46.56)	64.01	76.67	50.30	73.01	82.15	63.23	9.00	5.48	12.93
Dabhoi (32.82)	68.87	78.79	58.12	79.40	86.55	71.75	10.53	7.76	13.63
Padra (3.04)	72.70	83.88	60.33	81.03	88.28	73.15	8.33	4.40	12.82
Karjan (25.33)	68.82	79.21	57.43	80.37	87.24	73.03	11.55	8.03	15.60
Sinor (33.85)	67.05	76.79	56.46	78.08	85.98	69.56	11.03	9.19	13.10
<b>Vadodara</b>	<b>70.76</b>	<b>80.08</b>	<b>60.73</b>	<b>78.92</b>	<b>85.39</b>	<b>72.03</b>	<b>8.16</b>	<b>5.31</b>	<b>11.30</b>

Source: Primary Census Abstract, Census of India (2001 and 2011).

Literacy by sex (Table 6.8) also displays variation across the *talukas* of the Vadodara district. Here too, the tribal areas lagged much behind the non-tribal areas. Only around one-third of the females in the tribal *talukas* had acquired the skill of reading and writing by 2001. Despite concerted efforts during the decade, the share of such females in the total population of the tribal *talukas*, did not cross the 50 per cent mark in 2011. Male literacy rate (Figure 6.6). in 2001 varied between 40 per cent in Chhota Udaipur to 65 per cent in Jetpur Pavi. Even at the 2011 Census, the four predominantly tribal *talukas* registered the lowest male literacy among all the twelve *talukas* of the district, with Chhota Udaipur (51.60%) and Kavant (56.54%) having less than 60 per cent male literacy. As discussed earlier, the tribes had different methods learning life skills, and formal education holds little significance to them. Hence, literacy remains low in these regions. Perhaps, the realization of the importance of formal education is gradually but slowly spreading among them, which is evident from the highest rate of increment of literacy in the predominantly tribal *talukas*. This is particularly so in Vaghodia *taluka*, which has a substantial proportion of ST population in its total population.

VADODARA DISTRICT  
EFFECTIVE LITERACY (MALE)

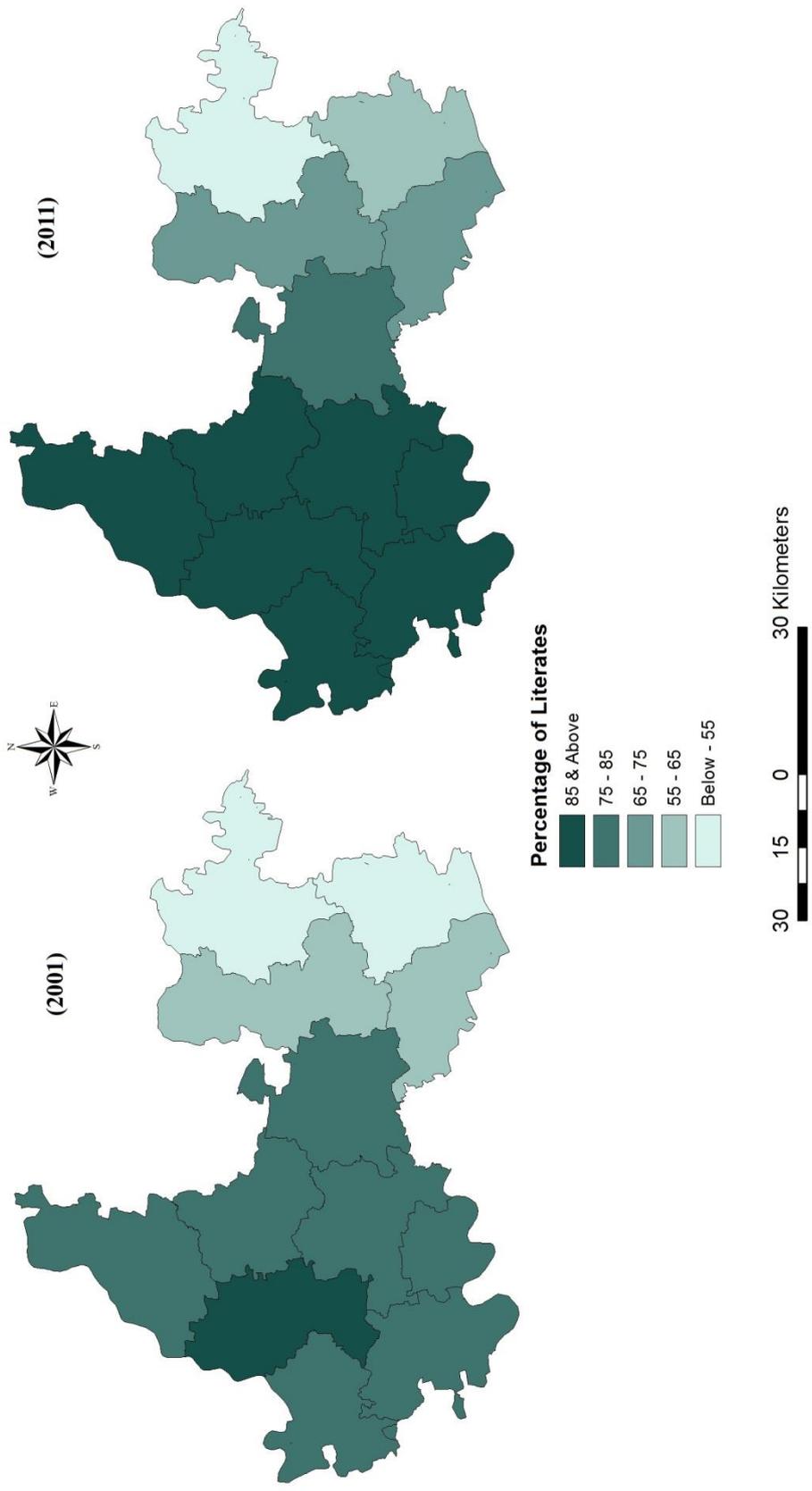


Figure – 6.6: Vadodara District: Effective Literacy (Male)

VADODARA DISTRICT  
**EFFECTIVE LITERACY (FEMALE)**

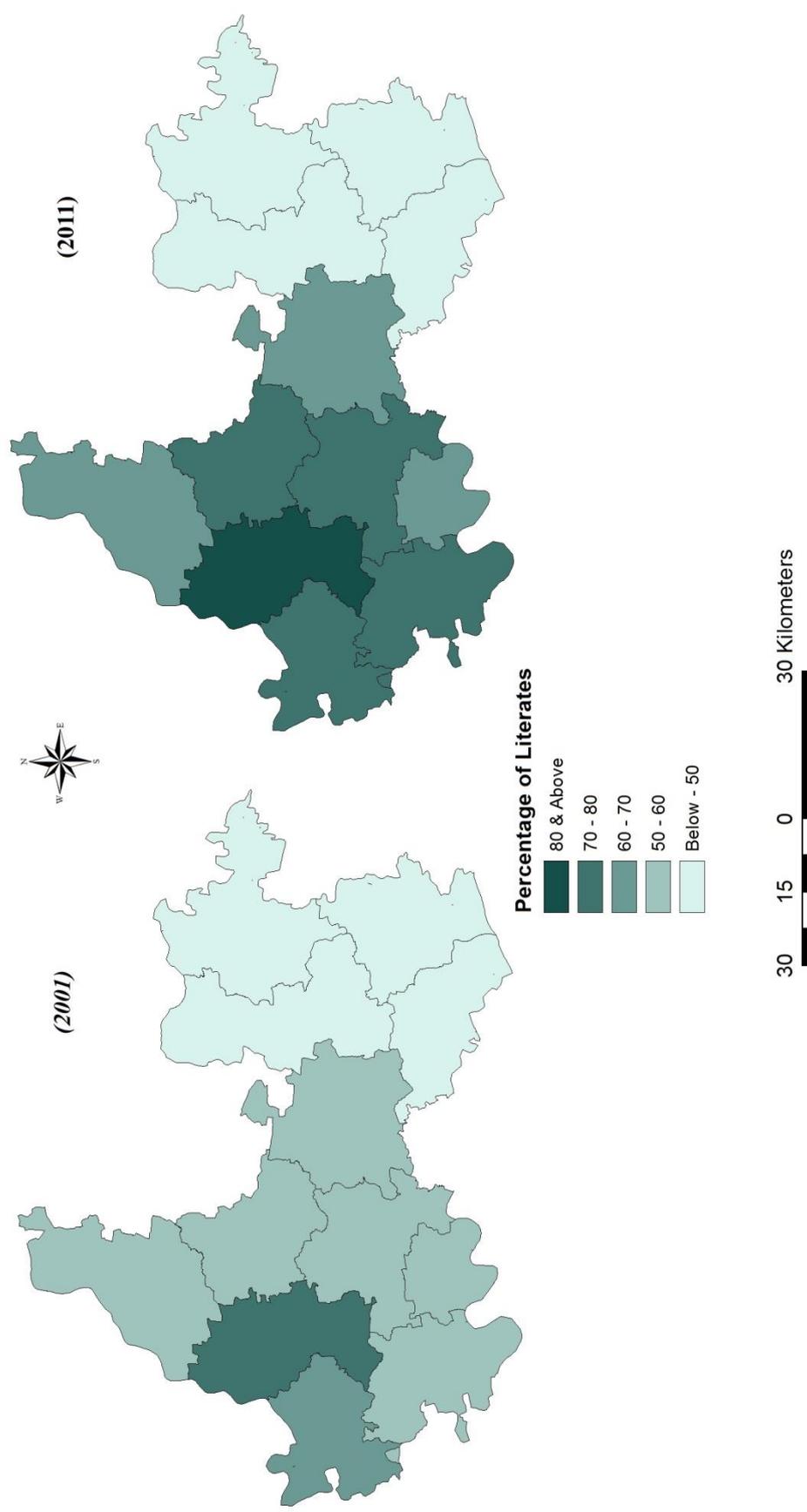


Figure – 6.7: Vadodara District: Effective Literacy (Female)

Among the non-tribal *talukas*, the maximum literacy rate in 2001 was in Vadodara *taluka* (90.94%), which increased to 93.53 per cent in 2011. Maximum increase in male literacy during the decade was observed in Vaghodia *taluka* (10.16 point %). Maximum proportion of females registered themselves as literates in Vadodara *taluka* at both the census counts with respectively 78.65 and 85.85 per cent literacy. However, Vaghodia *taluka* with 23.02 point percentage increase in female literacy (Figure 6.7) emerged as the most progressive *taluka* in the district during the decade. The Sankheda *taluka* lagged behind with the lowest female literacy (63.23%) amongst all the non-tribal *talukas* of the district.

## 6.9 LITERACY DISPARITIES IN VADODARA DISTRICT:

Disparity Index has been worked out at the *taluka* level for the rural-urban as well as for the male-female literacy rates. This disparity index also indicates gap between the tribal and non-tribal *talukas* of the district.

**Table - 6.9: Taluka-Wise Literacy Disparity by Residence and Sex – Vadodara (2001 and 2011)**

Taluka (% of Tribal Pop.)	Disparity Index					
	Rural-Urban			Male-Female		
	2001	2011	Decrease (2001-2011)	2001	2011	Decrease (2001-2011)
Savli (7.26)	RA	0.03	-	0.29	0.18	0.11
Vadodara (4.85)	0.13	0.05	0.08	0.11	0.07	0.04
Vaghodia (30.16)	0.09	0.07	0.02	0.28	0.14	0.14
Jetpur Pavi (83.33)	RA	0.21	-	0.38	0.27	0.11
Chhota Udaipur (87.62)	0.67	0.45	0.22	0.31	0.21	0.10
Kavant (93.51)	RA	0.38	-	0.42	0.26	0.16
Nasvadi (87.72)	RA	0.28	-	0.35	0.22	0.13
Sankheda (46.56)	0.17	0.15	0.02	0.27	0.18	0.09
Dabhoi (32.82)	0.10	0.04	0.06	0.20	0.13	0.07
Padra (3.04)	0.13	0.08	0.05	0.22	0.14	0.06
Karjan (25.33)	0.11	0.02	0.09	0.21	0.13	0.08
Sinor (33.85)	RA	RA	-	0.20	0.15	0.05
<b>Vadodara</b>	<b>0.20</b>	<b>0.26</b>	<b>-0.06</b>	<b>0.20</b>	<b>0.19</b>	<b>0.01</b>

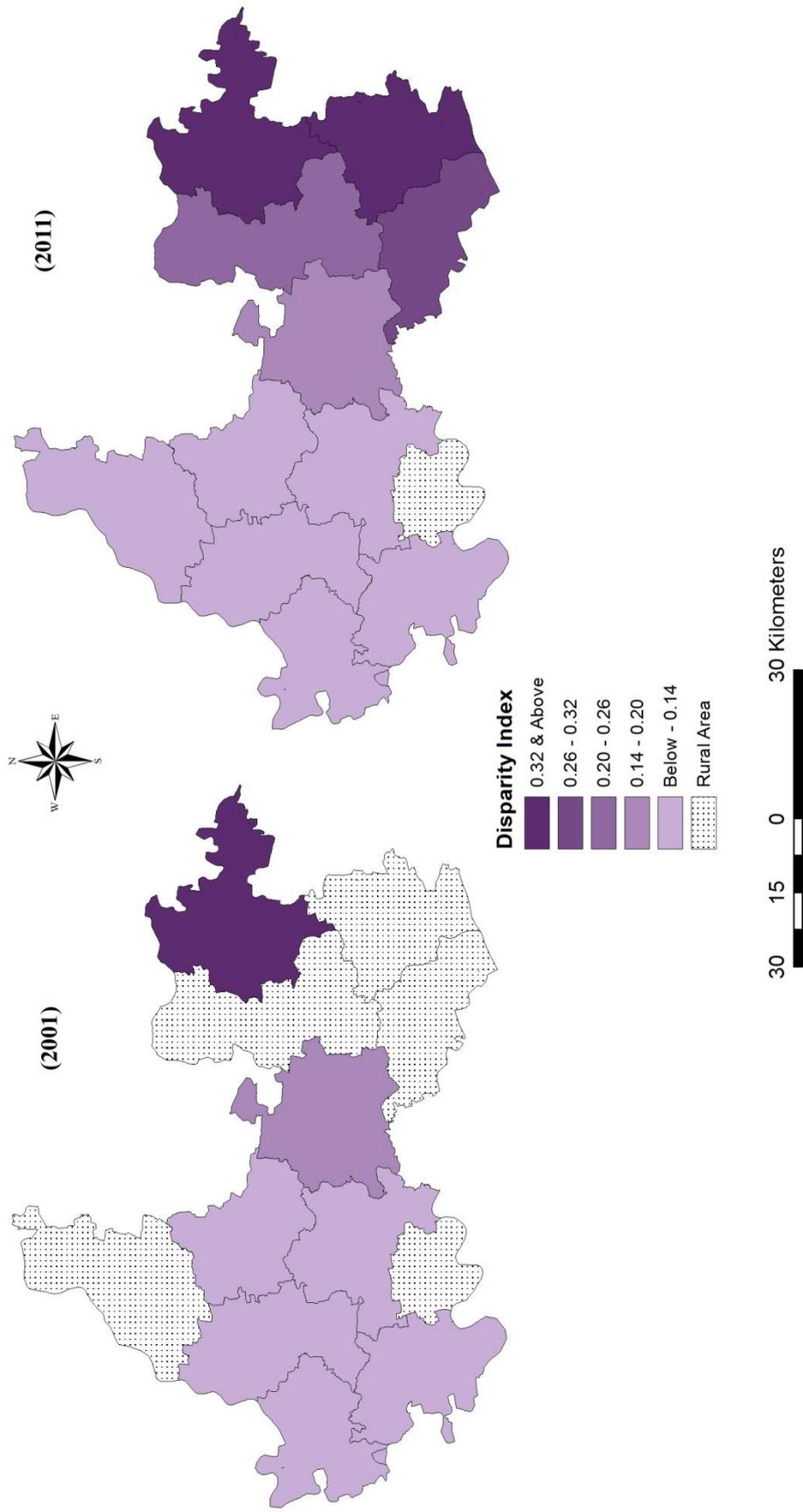
Source: Calculated; RA = Rural Area.

The disparity in the tribal segment of the district population (Table 6.9) is much higher in comparison to the non-tribal segment at both the census years. For the purpose of analysis, the disparity indices have been categorized into, below 0.14, 0.14 to 0.20, 0.20 to 0.26, 0.26 to 0.32, and 0.32 and above. Five out of the eight *talukas* with urban population at the 2001 Census (Padra, Karjan, Vadodara, Vaghodia and Dabhoi) had very low (less than 0.14) rural-urban disparity indices. This is the indication of the fact that literacy attainment in the rural areas has increased substantially in the recent decades. The only tribal *taluka* with urban population at the 2001 Census had the highest rural-urban disparity of 0.67.

Out of the five *talukas* without urban population at the 2001 Census, urban centers developed in four of them by 2011. As the rural literacy rates were in general low in these *talukas*, the rural-urban literacy disparities (Figure 6.8) remained very high. Six out of twelve *talukas* have very low disparity index, which are (Karjan (0.02), Savli (0.03), Dabhoi (0.04), Vadodara (0.05), Vaghodia (0.07) and Padra (0.08). Excepting Sankheda (0.15) which has low disparity index, rest all *talukas* have moderate to very high disparity indices with Chhota Udaipur at the bottom (0.45). Thus, it is evident that rural-urban disparity in the pre-dominantly tribal areas is much higher than the non-tribal areas. The district average in 2001 was 0.20 which increased to 0.26 in 2011 because of the high level of disparity in the newly created urban centers in tribal *talukas*. Although the disparity decreased during the decade in Chhota Udaipur, the only tribal *taluka* which had urban centre in 2001, it remained the highest among all *talukas* of the district at the 2011 count.

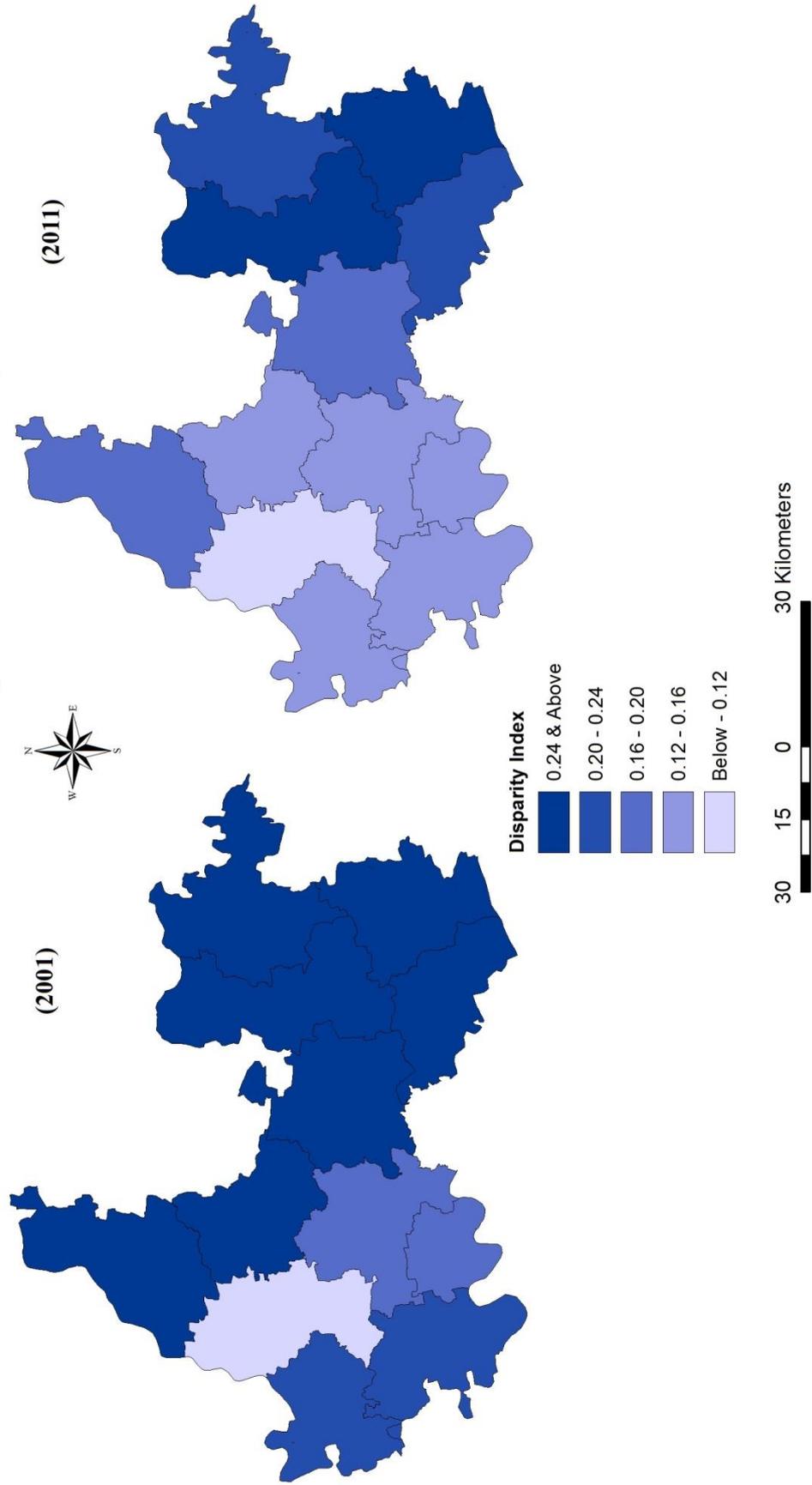
Male-female disparity index (Figure 6.9) in literacy has remained higher in almost all the *talukas* excepting Vadodara *taluka*. On comparing the two census years, it is found that the disparity index remained higher in all the four pre-dominantly tribal *talukas* as compared to the non-tribal *talukas*.

VADODARA DISTRICT  
**LITERACY DISPARITY (RURAL-URBAN)**



**Figure – 6.8: Vadodara District: Literacy Disparity (Rural - Urban)**

**VADODARA DISTRICT  
LITERACY DISPARITY (MALE-FEMALE)**



**Figure – 6.9: Vadodara District: Literacy Disparity (Male - Female)**

The categorization of male-female disparity was, below 0.10, 0.10 to 0.15, 0.15 to 0.20, 0.20 to 0.25, and 0.25 and above. Male-female disparity in 2001 was the lowest in Vadodara *taluka* (0.11), whereas remaining all *talukas* were having either high (Dabhoi - 0.20, Sinor - 0.20, Karjan - 0.21, Padra - 0.22) or very high (Sankheda - 0.27, Vaghodia - 0.28, Savli - 0.29, Chhota Udaipur - 0.31, Nasvadi - 0.35, Kavant - 0.42 and Jetpur Pavi - 0.38) disparity indices. Here again, the predominantly tribal districts were at the bottom with very high male-female literacy disparities.

At the beginning of the century, excepting for in Vadodara *taluka*, female literacy was not more than 60 per cent in any of the *talukas* of the district (Table – 6.7). It varied approximately between 20 to 30 per cent in the predominantly tribal *talukas* and approximately between 50 to 60 per cent in the remaining *talukas*.

Resultantly, male-female literacy disparity was high to very high in almost all the *talukas* of the district, excepting in Vadodara *taluka*. During the first decade of the century, there was substantial improvement in the level of literacy, perhaps due to purposeful and planned interventions and changes in the socio-economic circumstances. Although male-female literacy disparity has decreased to lower levels, there are distinctive spatial variations in the patterns. Highest male-female disparity in literacy was seen in the pre-dominantly tribal *talukas*. Although gender discrimination is uncommon in traditional tribal societies, in the matter of literacy and education, it is observed extremely prominently, as the concept of literacy and education were alien to them. With gradual closer of alternative economic avenues in their milieu, and opening up of avenues in the nearby urban industrial centers, part of the male segment of the tribal population has started to adopt it, while their female counterpart is still engrossed with the traditional occupations, where literacy and education in their perception have of no utility. However, the situation is gradually changing as is evident from the reduction of disparity level at the 2011 Census by almost 0.10 to 0.16 point percentage.

Among the non-tribal *talukas*, Vadodara *taluka* (0.07) with very low disparity was followed by Vaghodia (0.14), Padra (0.14) and Karjan (0.13) *talukas* with low disparity. Here the disparity declined by 0.06-0.14 points. Moderate disparity was seen in the *talukas* of Savli (0.18), Sankheda (0.18) and Sinor (0.15), where the disparity declined between 0.05 to 0.11 points. Very high disparity index was found

only in the predominantly tribal *talukas* of Chhota Udaipur (0.21), Nasvadi (0.22), Kavant (0.26) and Jetpur Pavi (0.27). However, the highest decrease in disparity in the entire district was in Kavant *taluka* (0.16 point percentage). This is followed by Vaghodia *taluka* (0.14 point percentage). Higher decrease of male-female literacy disparity is indicative of the fact that female literacy is increasing fast even in the predominantly tribal *talukas* of the district. Enrollment of the female child is increasing gradually in both tribal and non-tribal *talukas*. Growth in the female literacy rates supports this view. Never the less, the gap in literacy rates and disparity indices between the tribal and non-tribal areas even after seventy years of independence remains a matter of concern and needs special attention of the policy makers.

## 6.10 EDUCATIONAL DEVELOPMENT INDEX IN VADODARA DISTRICT:

Education Development Index (EDI) has been worked out at the *taluka* level taking literacy and enrollment rates of 2001 and 2011 as the variables (Figure 6.10). Both have been calculated taking the population above 7 years of age. Total literacy rates and total enrollment rates are taken as 100 per cent (Table 6.10).

**Table - 6.10: Taluka-Wise Educational Development Index at Different Levels and its Rank (2001-02 and 2010-11)**

Talukas /District	EDI & Rank				EDI & Rank				Composite EDI & Rank			
	Primary Level				Secondary Level				(Primary & Secondary)			
	2001-02	R	2010-11	R	2001-02	R	2010-11	R	2001-02	R	2010-11	R
Savli	0.372	6	0.448	5	0.348	6	0.419	6	0.360	6	0.433	6
Vadodara	0.523	1	0.547	1	0.537	1	0.563	1	0.530	1	0.555	1
Vaghodia	0.375	5	0.488	2	0.343	7	0.456	2	0.359	7	0.472	2
Jetpur Pavi	0.211	9	0.229	9	0.185	9	0.196	9	0.198	9	0.212	9
Chh. Udaipur	0.025	11	0.037	12	0.010	12	0.000	12	0.017	12	0.018	12
Kavant	0.060	12	0.067	11	0.027	11	0.029	11	0.043	11	0.048	11
Nasvadi	0.194	10	0.210	10	0.164	10	0.180	10	0.179	10	0.195	10
Sankheda	0.352	8	0.374	8	0.333	8	0.358	8	0.343	8	0.366	8
Dabhoi	0.398	3	0.443	6	0.379	3	0.433	5	0.389	3	0.438	5
Padra	0.439	2	0.474	3	0.417	2	0.454	3	0.428	2	0.464	3
Karjan	0.390	4	0.462	4	0.374	4	0.444	4	0.382	4	0.453	4
Sinor	0.371	7	0.426	7	0.353	5	0.417	7	0.362	5	0.422	7
<b>Vadodara</b>	<b>0.402</b>		<b>0.434</b>		<b>0.397</b>		<b>0.428</b>		<b>0.400</b>		<b>0.431</b>	

Source: Calculated

# VADODARA DISTRICT EDUCATIONAL DEVELOPMENT INDEX

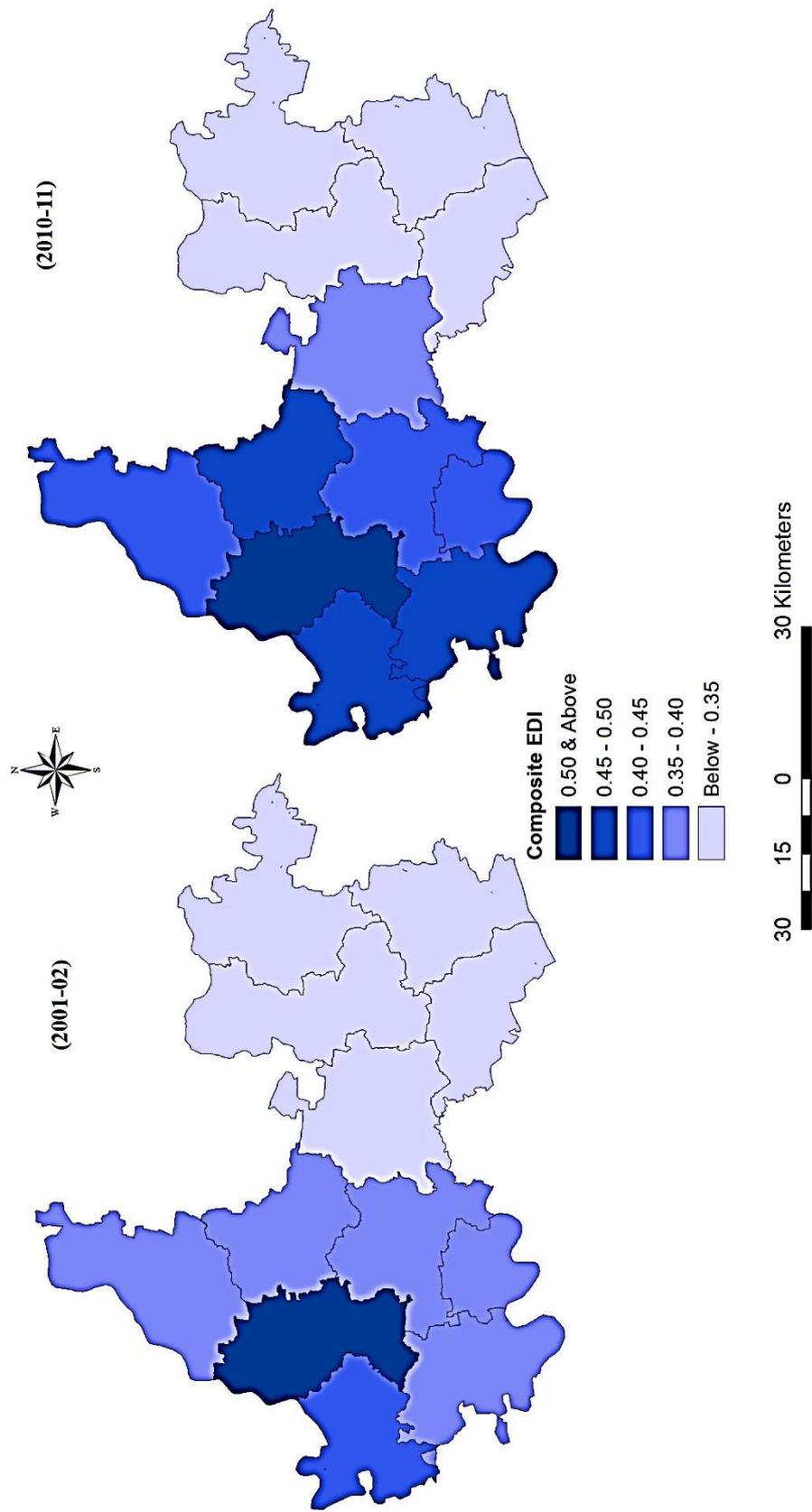


Figure – 6.10: Vadodara District: Education Development Index

Vadodara *taluka* registered the highest EDI in 2001, with the score of 0.530. Vadodara has been designated as the educational hub since the rule of Sayajirao Gaekwad III. Primary education was made compulsory for both boys and girls during his rule. It was for those initiatives that today Vadodara has the highest EDI.

Padra (0.428) *taluka* has the second position in terms of EDI, where the development is moderate. Following which the 3<sup>th</sup> to 7<sup>th</sup> positions are occupied by the Dabhoi (0.389), Karjan (0.382), Sinor (0.362), Savli (0.360) and Vaghodia (0.359) with low EDI. Very low EDI was found in the *talukas* where the tribal share in the *taluka* population was substantial or predominant. Among these *talukas*, the situation in Kavant (0.043) and Chhota Udaipur (0.017) was miserably poor.

During the decade, all the *talukas* have uplifted their positions in terms of their relative EDI scores. In 2011 too, Vadodara *taluka*, bagged the top slot in EDI among all the *talukas* of the district, with an improvement of 0.025 points. EDI remained high in the *talukas* of Vaghodia (0.472), which moved from 7<sup>th</sup> to 2<sup>nd</sup> position and its EDI score increased by 0.113 points. Padra (0.464) and Karjan (0.453) bagged the 3<sup>rd</sup> and 4<sup>th</sup> spots respectively in 2011. Karjan retained its position, while Padra lost its 2<sup>nd</sup> position to Vaghodia and slipped to the 3<sup>rd</sup> position. Vaghodia with lots of new industrial parks, manufacturing units, service sector units experienced unprecedented increase in the share of literates in its population. Thus, its EDI improved.

Moderate EDI was found in the *talukas* of Dabhoi (0.438), Savli (0.433) and Sinor (0.422), which occupied 5<sup>th</sup> to 7<sup>th</sup> positions respectively. While Savli retained its position, Dabhoi slipped from 3<sup>rd</sup> to 5<sup>th</sup> and Sinor from 5<sup>th</sup> to 7<sup>th</sup> place. EDI remained low in Sankheda (0.366) placing it at 8<sup>th</sup> position where it was at 2001. A very low EDI is found in the predominantly tribal *talukas* of Jetpur Pavi (0.212), Nasvadi (0.195), Kavant (0.048) and Chhota Udaipur (0.018). However, all these *talukas* have improvised their individual scores of EDI during the decade. Overall, progress is seen in all the *talukas* of the district, but the predominantly tribal *talukas* need to be attended seriously for further and faster progress.

## **6.11 CONCLUSION:**

A detailed study of the Vadodara district with the mixed population of general and tribal population divulged that despite having very strong tradition of education, the

district displays not a very good picture especially in the *talukas* having larger share of the ST population.

The highest literacy was registered by Vadodara *taluka* (89.9%), with an increase of 4.8 point percentage during 2001 and 2011. With much of its spaces industrialized and urbanized, the rural areas of the district too have achieved progress in the matter of literacy. After Vadodara, the highest growth in total literacy was seen in Vaghodia followed by Savli and Karjan *talukas*.

Over the census decade, enrollment has increased steadily in all the *talukas* including the predominantly tribal *talukas* of the district. Growth in the female literacy also substantiates this fact. Nevertheless, the gap between the tribal and non-tribal areas in literacy rates and disparity index even after seventy years of Independence remains a matter of concern and need special attention of the policy makers. Till the end of the last century, most of the predominantly tribal *talukas* were devoid of any urban centre and their population was completely rural by residence. At the last census count, in four of the five predominantly tribal *talukas* some urban growth is noticed. But the rural-urban literacy disparity in these *talukas* remains much higher in comparison to the same disparity in the non-tribal *talukas*. Male-female disparity in literacy has remained higher in almost all the *talukas* excepting in Vadodara *taluka*.

As the population of the predominantly tribal *talukas* is mostly rural, there is not much of difference between their total and rural literacy rates. The ST population in the urban centers of the predominantly tribal *talukas* is mostly illiterate. Rather the migrant literate non-tribal population of these centers account for the urban literacy of these *talukas*. Although male literacy is higher in most of the *talukas*, female literacy is very low, particularly in the predominantly tribal *talukas*. Females in these *talukas* are yet to achieve fifty per cent literacy. Thus, on the disparity index, there is a wide variation between tribal and non-tribal regions in terms of rural-urban and male-female disparity. As a consequence, there remains a striking difference between the tribal and non-tribal areas in terms of the educational development index, which remains low for these predominantly tribal *talukas*.

Vadodara *taluka* registered the highest Educational Development Index in 2001. Vadodara *taluka* has been the education hub since the Gaekwad period. Primary

education was compulsory for both boys and girls. It was for those initiatives that today Vadodara *taluka* has the highest EDI. With the coming in of new industrial parks, manufacturing units and service sectors in Vaghodia *taluka* in the recent decade, literacy as well as EDI of the *taluka* has improved significantly. *Talukas* with higher level of industrialization and higher proportion of secondary and tertiary workers are found in general to display higher EDI.

On the silver lining note, people in the tribal areas are now understanding the significance of formal education in today's life and even trying to mould themselves to reap the benefits of education without withdrawing away from their culture and customs. It would not be wrong to expect by the next census of 2021, that the literacy and education scenario in the tribal regions would be much closer to or at par with their non-tribal counterpart regions.

However, in order to achieve this, proper educational planning must be envisaged and effectively implemented in these areas keeping in mind the cultural and economic needs of the tribes (Jha and Dash, 2014, 336).

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