# Chapter - I

# INTRODUCTION

### 1.1 INTRODUCTION:

Education is the basic requirement and Fundamental Right of every citizen of a nation. Attainment of basic education is essential because it has an impact on the living standard of the people and improving their capabilities (Mukherjee, 2004, 1). When people are able to read and write it leads to their empowerment and transform them into higher earning and better living beings.

Education is a powerful tool for reducing poverty and unemployment, improving health and nutritional standard, and achieving sustainable development. Within the formal education system, primary education is recognized as a basic human right and significant for the development of both the individual as well as the society (Sharma, 2009, 61).

Significance of education cannot be neglected. Education acts as the catalyst, which brings economic, social, cultural as well as technological changes in the society (Dey and Rajput, 2013, 16). It is considered to be the most important means of enhancing personal attributes, overcome constraints, availing more opportunities for sustainable improvement in well-being.

Education has been identified as one of the most important determinants of economic growth. It is both, an indicator and an instrument of development. It increases labour productivity in both urban and rural sectors and the economic return to investment in education are typically high (Rao, 1966, 58). With the increased level of education, the economic output increases, poverty is reduced, thus the whole of the region is developed which leads to the overall development of the nation (Tilak, 1986, 40). The return from education is not only economic but also social. Education alters the way of thinking, behavior and attitude, increases awareness, develops personality for the development of the country and welfare for its people (Joshi, 1979, 1).

Education has an acculturating role. It is an essential factor of national development. It is an instrument which brings social, economic, political and cultural change

(Midatala, 2009, 1). Education gives knowledge, develop skill sets, and inculcate right type of attitude value and interest (Ibid.). In fact, it should be related with life and aspiration of the people. It helps to increase productivity, achieve social and national integration, and develops social, moral and spiritual value amongst the future citizens (Ibid.). Education plays a significance role in promoting economic, social, political development of all sectors including agriculture, industry, and social sector. The social returns of education actually weigh more than the economic returns. Social rate of return is high in case of primary education followed by secondary and higher education (Malhotra, 1998, 115). At times, it cannot be judged in terms of productivity or economic terms but it should be viewed as a structure in the market place (Rao, 1966, 5).

Generally, if a person is literate, he can better avail the economic opportunities in the market. Education helps in enhancing one's own capabilities, self confidence and improving quality of life (Singh, 2009, 15). It is also regarded as the catalyst of social change. Education helps in arousing physical, intellectual and moral state in a child that is required in a society (Singh, 2009, 15).

#### 1.2 THE RESEARCH PROBLEM

The Constitution of India committed in 1950 that, "The state shall endeavor to promote within a period of ten years from the commencement of the Constitution, free and compulsory education for all children until they complete to age of fourteen years" (Article 45, Constitution of India). In reality, however, much of these words have remained on paper only. The country has made tremendous progress in higher education, but a very slow progress in spreading elementary education among its masses. Thus, the research problem here is to understand the problems associated with the attainment of literacy and educational attainment.

The spread of education has been uneven not only in terms of inter-state disparity but also between rural and urban areas, with urban areas at an advantageous position than rural areas. Thus, disparity in educational attainment is vividly seen across society and space. Despite several decades of planned efforts, disparity between rural and urban, scheduled and non-scheduled populations, religious communities and male and

female segments of population is yet to reduce (Dash, 1993, 19; Dutta and Sivaramakrishnan, 2013, 187).

One of the millennium development goals at the September 2000 UN Summit, was the achievement of universal primary school attendance for boys and girls by 2015. The intention of the UN agreement was not only the spread of education but also closing of gender gap in education attainment. India, where primary education has been neglected by the State through the initial planning phases, and where remarkable degree of illiteracy co-exists with high level of research in science and technology needs to give serious consideration to the UN agreement (Gupta, 2013, 5).

The affirmative role of education is the question related to inequality (Dash, 1993, 19). The difference in the level of literacy and educational attainment between socially deprived sections and the rest of the population is mainly because of the caste based division of the Indian society, where caste has acted as a surrogate of class. The notion that knowledge should be separate from work, forbade people of the deprived classes and castes from the learning process – i.e. formal education. Thus, it can be said that though India has a long history of learning, stratification of the society based on caste has obstructed the even spread of education among different segments of its population. In other words, the basic inequalities in socio-economic condition of people and stratified structure of the society have led to the disparity in levels of literacy and educational attainment. Besides social inequality, unequal distribution of income, disparity in access to institution and a host of other factors have played equally important role in the creation of disparities in the level of literacy and educational attainment across society and space.

The present study on level of literacy and educational attainment is being done in a geographical perspective. In this study, role of space in the level of literacy and educational attainment would be analyzed. Levels of literacy and educational attainment for all social strata have been kept in mind while undertaking the study.

# 1.3 LITERACY AND EDUCATION

The Census of India (2001) defines literacy as the ability to read and write with understanding in any language and literacy rate as the total percentage of the

population of an area at a particular time aged seven years or above who can read and write with understanding. Here the denominator is the population aged seven years or more. Thus, a person above seven years of age who can both read and write with understanding in any language is known as literate. This is also called effective literates (Khayamkhani and Chaplot, 2014, 78). Literacy and education is essential for eradication of poverty and development of intellectual as well as creation of peaceful and friendly human circumstances (Rai, 2014, 146). It is a vital tool for communication, learning and understanding the world around us. It is important for development of the individual as well as the nation. Human development of any place is possible only if the population is educated (Ibid.).

Literacy is an important parameter of socio-economic transformation (Dash, 1986, 3). It helps to attain awareness as well as to improve economic base of the individual, society, region and nation (Rai, 2014, 147). It enables social upliftment and enhances the return in every aspect of economy and polity. It is an important yardstick for the empowerment of women and deprived sections of the society (Ibid.). Literacy enhances human resources, helps to control population, and is a reliable index of socio-economic development (Pore and Mote, 2010, 59). However, disparity in the attainment of literacy and education creates unhealthy social and economic circumstances, which including India, many developing countries of the World are facing.

Education system can be divided into three types - formal, informal and non-formal. Formal education is given in school-like institutions. Informal education is what people learn from the daily lives and non-formal some-where between the formal and the non-formal (Kerkar, 2006, 72). For the substantial improvement in the quality of education, the 3Rs which stand for Reading, wRiting and aRithmetic are essential (Rai, 2014, 149). Under the present day school system, 7Rs are imparted: Reading, Writing, Arithmetic, Recreation, Rights, Responsibilities and Relationship (Midatala, 2009, 2). Education is the fundamental right of all. It helps in both vertical as well as horizontal development. Vertical development in a way is the development of the individual and the society, and horizontal development is, it paves the way for future development (Dhabiya et. al., 2015, 1).

#### 1.4 EDUCATIONAL ATTAINMENT

Educational attainment means the achievement in education or the highest level of education a person has achieved. Census of India defines different levels of educational attainment like not literate, literate without formal schooling, below primary, primary, middle, secondary, higher secondary, diploma, graduate, post graduate and above. If a person has successfully passed the final year of a given level, then only he/she would be considered to have attained that level of education (Chamar, 2015, 27). It is a measure of a person's knowledge and skill level that specifies how likely one would succeed in the workforce. It reflects the skills that are useful to the society, the labour market and ultimately to the nation. Educational attainment has a strong impact on social outcomes such as child mortality, fertility, education of children and income distribution in the society. The educational attainment is also dependent upon education of the earlier generation and the facility for learning and environment at home (Bhatty, 1998, 1863). Educational attainment is measured across the society and space with the help of various indicators, such as, (a) literacy rate, (b) enrolment rates, (c) attendance rates (d) dropout rates (e) retention rates of the school going children or the girl child and, (f) the proportion of population having qualifications in technical and higher education.

Attainment of literacy and education has become an essential skill in the contemporary society. For progress in any field of social and economic life, every section of the population in every spatial segment of a nation needs to achieve the skill of literacy. India, with varied geographical, social and economic character, displays an equally varied pattern of literacy achievement across society and space. Concerted efforts through planned measures are being made to bring down the sociospatial imbalances in educational and literacy attainment. It is therefore, pertinent to assess the effects of these measures, particularly on the regions and societies which have traditionally lagged behind in this regard.

## 1.5 SIGNIFICANCE OF EDUCATION

The significance of education has always been widely recognized. It is said that education or *vidya* or knowledge is the third eye of the humans which gives insight and stimuli. Education illuminates human beings and enables them to understand true

value of life (Gupta, 2005, 1). It is the way of learning skills, gaining knowledge, and understanding the World as well as one's self. It is the medium through which transmission of human values and accumulated knowledge is passed on to the next generation (Kerkar, 2006, 72). It plays a significant role in the positive transformation of people not only intellectually but also in every other aspects (Mishra, 2012, 116).

The relationship between education and economic development is quite an old one (Rao, 1966, 57). Education promotes economic development, while the progress of education depends partly on the policies and partly on the spending capacity of the country (Prakash and Buragohain, 1999, 75). The role of education in driving the country's economic growth and causing socio-cultural transformation as well as political reform are well established (Sankar, 2010, 35). Education has been long associated with the economic growth and is said to the important determinant of economic growth (Sengupta and Guha, 2002, 1621).

Education is also considered as an input, which brings change and development (Lakshmaiah and Jayakumar, 1994, 1). The education brings change in the society which could lead a way to the prestigious occupations (Breen and Vaid, 2008, 3). Education can be linked with life, livelihood, peace as well as social justice. Through education, a farmer is able to increase his productivity (Ramachandran, 2006, 4856). Education helps in the increase of labour productivity in both rural and in urban areas, although economic returns to the investment in the education are more in the urban areas (Sengupta and Guha, 2002, 1621). When technical skill of the people increases, the productivity of the workforce increases, which in turn facilitates diffusion of new technologies and new ideas (Hussain and Chatterjee, 2009, 59).

Education helps to build confidence that boosts up diversity. It empowers people and can bring happiness to the people (Sengupta and Guha, 2002, 1621). The enhanced confidence level in people boosts their strength to face the world and helps them in decision making (Sharma and et. al., 2007, 201). With education, a person is also able to understand the impact of such serious issues like, climate change, consequences of racism, and communalism on humanity etcetera. Skilled and unskilled workers are able to negotiate their wages with education (Ramachandran, 2006, 4856). The role of the education in economic development has already been recognized. Education can also determine the location of the production unit and uplift economic backwardness

apart from the social and cultural backwardness (Tilak, 1979, 46). It is an investment which contributes to the productivity and income.

Education helps to improve lives, break the cycle of poverty, and ensures all particularly females to have control over their destiny (Dhabriya and et. al., 2015, 9). It has an affirmative impact on women's ability to attain their rights in addition to their economic independence and political equality (Thaha, 2008, 1). Education of the girls improves the health of the infants and children, family nutrition levels and also educational outcome in subsequent generation (Hussain and Chatterjee, 2009, 59). The present era of globalization, demands tolerance towards the World level diversity in race, ethnicity and language, which is possible to develop in the minds of people to a great extent through education (Nicto, 2002, 51). Education do has the social returns. It alters the perception, attitude, behavior, increases and builds personality to promote development and welfare of the people. Educated parents guide their wards well in the matter of education. Hence, it can be said that the benefit of education passes from one generation to the other generation (Sengupta and Guha, 2002, 1621).

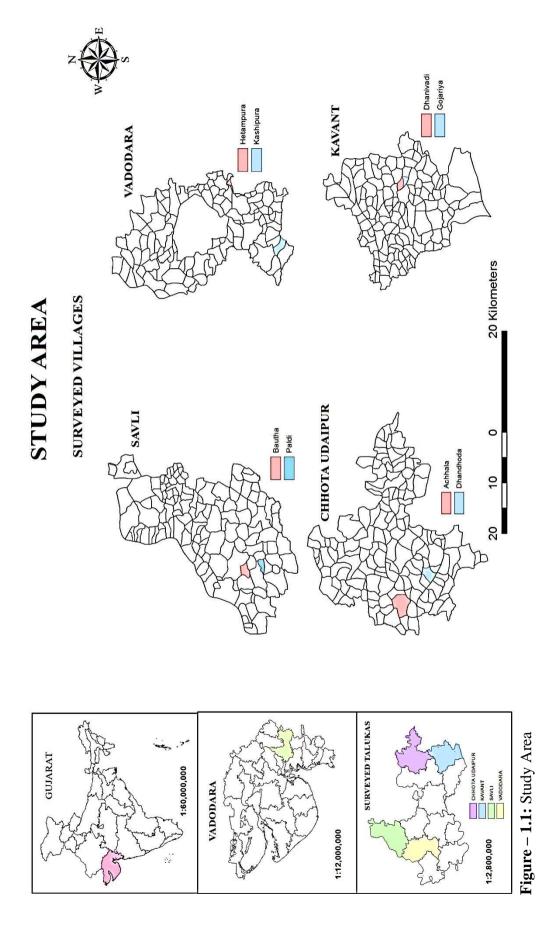
Development can be said as a process of desirable change in the social order. In other words, it brings improvement in the quality of life through education (Lakshmaiah and Jayakymar, 1994, 1). Women education is the key to development (Ramachandran, 2006, 4858). Education can be the vehicle for other developmental goals, such as improvement in the quality of life, income generation and enhancement, access to information, survival issue of the poor and the deprived, including women (Ramachandran, 2006, 4856). Basically, it is the route to development (Singh, 2009, 15).

Education is the vehicle of the holistic development of man. It helps to rationalize human behavior, which in turn helps in humanization of nature. The creation of the better cultural landscape by human is the outcome of education. It is the basis of any kind of job and business (Prasad, 2012, 59). Education is a pre-requisite for human development. It is an instrument, which helps in awakening the child to the cultural forces and helps to be a responsible, intelligent, strong and healthy citizen (Sharma and et. al., 2007, 201). It has a value in itself, which helps in the development of one's personality or in the building of the character (Rao, 1966, 4).

Education is the basic indicator of human development. It helps people to improve their standard of living and quality of life. It also helps people in their social, political and cultural development (Rai, 2014, 147). Education is essential for the development of the society (Dey and Basumastary, 2007, 105). It determines the status of a person, hence it is considered as an integral part of the country's developmental process. With development in education, personality, skill and efficiency of individuals develop, which in turn contribute in the development of the nation and the society. It also helps in the improvement of the quality of life of the population (Banu and Rawal, 2015, 93).

Education is the fundamental right of every citizen. The central and state governments are taking steps to fulfill this right. Spread of education helps in getting rid of social problems like poverty, ignorance, diseases, population and environmental degradation (Midatala, 2009, 1). Education makes people strong, intellectual and alert, emotionally stable and culturally sound and efficient (Ibid.).

Education helps the person to understand one's own personality and potential qualities. It helps in the development of the mind, the body, the senses and the skills. It helps a person to earn his livelihood and serve the society. Education also acts as a catalyst for social upliftment, enhancing the return on investments made in all the aspects of development, like health, hygiene, environment, fertility, mortality, sexratio and occupation (Mishra and Singh, 2015, 1).



#### 1.6 **OBJECTIVES:**

The following objectives are set before the present research endeavour.

- To identify spatial patterns in the levels of literacy and education among different segments of the population.
- To identify spatial patterns of disparity in the levels of literacy and educational attainment among different segments of the population.
- To identify the role / association of different socio economic parameters in the levels of literacy and disparity in literacy and educational attainment.
- To understand the nature of utilization of acquired levels of literacy and education in different areas of activity.
- To suggest possible ways of improving the levels and minimizing disparity in the levels of literacy and educational attainment.

### 1.7 HYPOTHESES:

The following hypotheses have been formulated at the outset of the study:

- Levels of literacy and education are lower in the predominantly tribal areas.
- Level of literacy and educational attainment is lower amongst the socially and economically deprived segments of the population including the females.
- Levels of literacy and educational attainment remain higher in the regions with appropriate educational infrastructure.
- The levels of literacy and educational attainment increase and disparities decrease with the increase in the share of secondary and tertiary workers.

# **1.8** STUDY AREA:

For analyzing the 'Levels of Literacy and Educational Attainment' Vadodara district of Gujarat has been selected as the study area. The state of Gujarat has been known for high industrial development and entrepreneurship since long. Never the less, it is also known lagging on the social sector front. The researcher has tried to assess the

spatial characteristics of one of the important social sectors, i.e. education, in this industrial state of Gujarat,.

Vadodara district has twelve *talukas* (sub-districts or blocks), some of which are highly urbanized and industrialized, while others are basically rural having a dominance of the ST population. In the midst of developed pockets, there are some backward pockets too. Along these pockets, the researcher has tried to explore and analyze the problems of level of literacy and educational attainment across society and space with reference to rural areas of Vadodara district.

Although, Chhota Udaipur has been designated in 2014 as a separate district incorporating parts of Vadodara district, the pre-2014 Vadodara district has been considered in the present research, as it was designed in 2009 and much of the data had been collected accordingly.

# 1.9 DATA SOURCES:

The study is based on both secondary and primary sources of data.

- Secondary sources: Secondary sources of data include, All India Educational Survey (various volumes), Selected Educational Statistics (various years), District Information on School Education (various years), Annual Survey of Educational Report (various years), Census of India publications particularly District Census Handbooks of 2001 and 2011 Censuses, Statistical Abstract of India and Gujarat (various years), Socio-Economic Survey of Gujarat 2013-14, Director of Literacy, Education Department Gujarat State, Human Development Report of Gujarat. Other secondary sources include contemporary literature, published unpublished reports, government documents, news paper clippings etcetera.
- **Primary sources:** Primary data have been generated by the researcher at household level with the use of household schedules. Information relevant to the present research has also been generated through personal observation, informal discussion with school teachers and village elders, and through Rapid Rural Appraisal (RRA) technique.

#### 1.10 METHODOLOGY:

The study of the "Levels of the Literacy and Educational Attainment" has been done at different units of analysis, such as, state, district, *taluka*, village and household. The attainment of education in Vadodara district has been measured in terms of literacy, enrolment, disparity and education development indices. These have been examined using both secondary as well as primary sources of data. For analysis based on secondary data, the following methods have been adopted.

# • Disparity Index:

Sopher's Disparity Index modified by Kundu and Rao (1974) has been used to examine the disparity in literacy from the state level to the village level. Gender disparity in literacy and literacy disparity by residence have been calculated with the help of this method. Sopher's modified Disparity Index reads as the following.

$$[DS = log (X2/X1) + log [(200-X1)/(200-X2)], where X2>X1]$$

### • Education Development Index (EDI) :

The EDI at the state level has been used as given by National University of Education Planning and Administration (NUEPA). For the districts and for the lower units of analysis below district, the EDI has been calculated with the help of United Nations Development Programme - Human Development Report (UNDP-HDR) formula as adopted by Adhikari and Kamle taking weighted literacy rates and enrollment ratio/enrollment rates (depends upon availability of data) as the parameters. The formula is as below:

Iij = (Maximum Xij-Xij) / (Maximum Xij-Minimum Xij).

Where, Iij = Index of Deprivation on variable I in j<sup>th</sup> state

Xij = Value of the i<sup>th</sup> variable on the j<sup>th</sup> state.

Index of Deprivation has been taken out for both variables, Literacy and Enrollment Ratio/Enrollment Rates. Combined Index of Deprivation (CID) =

2/3 Index of Deprivation of Literacy+1/3 Index of Deprivation of Enrollment Ratio/Enrollment Rates.

Thus, Education Development Index (EDI) = 1-Iij (CID).

For both the indices, the region/district were classified according to whether these display higher, medium or low levels of literacy and educational attainment in comparison to the average worked out for the district. Choropleth technique has been used for mapping the same, based on which, characteristics of each region have been analysed. Characteristics of exceptional areas have also been found out. The results have then been compared with selected socio-economic indicators and the linkages established.

# • Multiple Linear Regression:

Regression is the degree of association between two or more variables by predicting specific value of one variable in terms of others. Here one is independent value (x) and others are dependent values (y). Through the regression, it can be found out how much association is there between the variables. In other words, how much of the change in one variable is explained by other variable.

Thus, 
$$\hat{y} = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + \dots + b_k x_k$$

Where, y is the predicted value of dependent variable and x is independent variable, a and b are regression coefficients.

Here, multiple linear regressions was used in order to find out the association between the educational characteristics and infrastructure available at different levels as well as the association of socio-economic parameters with the educational parameters. Linkages were established with the associated factors.

• Correlation: The correlation can be defined as the relation between the variables. The value of which known as the coefficient value, which can range between -1.00 and 1.00. A positive correlation indicates a positive association between the variables (increasing values in one variable in relation to increasing values in the other variable), while a negative correlation indicates a negative association between the variables (increasing values is one variable and decreasing values in the other variable). A correlation value close to 0 indicates no association between the variables.

The formula for Pearson Correlation is as follows:

$$r = \frac{cov(x, y)}{\sigma_x \sigma_y},$$
  $cov(x, y) = \frac{\sum xy}{n} - \bar{x}\bar{y}$ 

$$\sigma_x = \sqrt{\frac{\sum x^2}{N} - (\bar{x})^2}$$
  $\sigma_y = \sqrt{\frac{\sum y^2}{N} - (\bar{y})^2}$ 

# • Descriptive Statistics:

Descriptive statistics such as percentages, ratio, point percentage growth, bar diagram, line graph has been applied to describe and explain the patterns and characteristics of educational attainment. For statistical techniques, MS Excel was used.

# • Cartographic Method:

In order to show pictorial representation, cartographic techniques have been applied. To show the variation in the variable, choropleth maps have been prepared using Arc GIS 10.3. Apart from this, various other types of diagrams, such as bar diagram and line graphs have been used to display the analyzed data. MS Excel has been used for the various diagrams.

Further, for **primary investigation**, on the basis of different parameters of development, four *talukas* have been selected, viz. Vadodara and Savli *talukas* with the highest rank, Kavant and Chhota Udaipur *talukas* with the lowest ranks. In fact, the Colwagi Committee (2004) has identified Kavant as the

most backward taluka of the state of Gujarat. The linkage between the tribal areas and the levels of development is well established. Thus, the selected developed talukas can be considered as representatives of the developed nontribal tracts and the backward talukas as representatives of the less developed tribal tracts of the district. Two villages each were randomly selected from each selected taluka for detailed field investigation. The selected villages are Kashipura and Hetampura of Vadodara taluka, Bautha and Paldi villages of Savli taluka, Gojariya and Dhanivadi villages of Kavant taluka and Achhala and Dhandhoda villages of Chhota Udaipur taluka. Thus, an attempt has been made to comprehend the issue in hand by analyzing grass root level data from four non-tribal, developed villages, and four tribal, less developed villages. Characteristically, the first set of four villages lie in the western plain areas of the district, while the second set of four villages lie in eastern hilly and forested tracts of the district. The primary investigation is done with the help of structured household schedules, discussion with school teachers along with group discussions, personal observations and the use of Rapid Rural Appraisal (RRA) technique. Out of the total households of 2422 in all the eight villages, 422 households have been surveyed, which accounts for 17.42 per cent of the total households in these villages. An attempt has been made in Figure 1.2 to clarify the sample design.

# • Rapid Rural Appraisal (RRA)

Rapid Rural Appraisal (RRA) consists of techniques for quick research that help to generate result of greater evidential value than classic quantitative survey techniques. In all the surveyed villages, this technique was applied to fulfill the gaps of a structured schedule. All the segments of population, be it scheduled, non-scheduled, women, children were involved in the process of data collection under this technique. Issues pertaining literacy and educational attainment and associated phenomena were raised and discussed among the participants in the RRA Process.

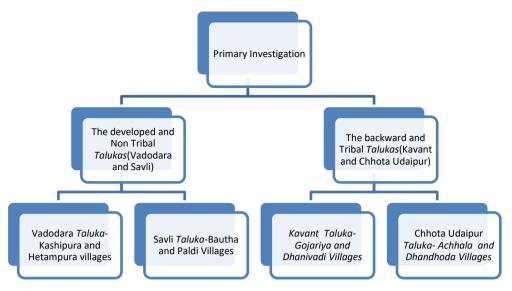


Figure – 1.2: Structure of the Primary Investigation

### 1.11 ORGANIZATION OF THE STUDY:

To analyze the level of educational attainment in rural areas of Vadodara district, the study is organized in eight chapters.

The introductory **first** chapter gives the overview of the whole study. Here the research problem has been introduced along with the conceptual frame-work of the research. A certain set of aims and objectives have been presented along with some hypotheses. An attempt has been made to justify the area of study. It also presents the sources of data chosen in addition to the methodology adopted. This chapter further ends with the chapter scheme and limitations of the study.

The **second** chapter deals with the review of relevant literature under the following aspects:

- Role of Literacy and Education in Social and Economic Development
- History of Education in India/Gujarat/Vadodara:
- Government Policies and Educational Development
- Role of Infrastructure and Educational Development
- Economy/Economic Development and Education
- Society/Community/Culture/Custom/Ethnicity/Religion and Education
- Physical Environment (Accessibility Aspect) and Educational Development

- Levels of Education
- Disparity in Education
- Gender Issues in Education
- Utilization of Education
- Determinants of Education
- Dropouts and Educational Development
- Tribal Education
- Rural Education

The chapter ends with highlighting the gaps in the available literature and how the present research endeavour has attempted to reduce this gap.

The **third** chapter deals with the various educational plans and policies right from the *Gurukul* days of ancient India, policies during the Buddhist and Jainism periods, medieval period, British period and after Independence. The policies formulated during the post-Independence period have been discussed in greater detail in this chapter. The chapter ends up highlighting the gaps in the policies and the challenges ahead.

The **fourth** chapter entitled "Literacy and Educational Attainment in India: An Overview" deals with the levels of literacy and education at state level. It deals with levels of literacy in India during various post-Independent census years. Census years of 2001 and 2011 have been taken for detail analysis. Pattern of literacy has been taken out and their point percentage growths over the two census years have been worked out. Sopher's disparity index modified by Kundu and Rao was calculated at state level and results interpreted. Education Development Index as calculated by NUEPA have been presented and analyzed.

The **fifth** chapter deals with literacy and educational attainment in Gujarat at district level. This chapter starts with the introduction of the State, its economy and people. Further, it deals with the history of education in Gujarat. Various state level educational plans and policies by central and state governments have been discussed in this chapter. Education among the entire segment of population is also presented here along with problems of drop-outs.

The **sixth** chapter deals with the spatial patterns of literacy and educational attainment in Vadodara district at *taluka* level. It starts with introduction of the district, highlighting its glorious history and contributions different rulers, particularly that of Sir Sayajirao Gaekwad III, towards the spread of literacy and education in the erstwhile Baroda State. Here, the general characteristics of the district are described along with its physiographic divisions, tribal and non-tribal areas and nature of industrialization. Further, the educational characteristic of the district has been discussed in this chapter, along with the problems associated with it. The exercise has helped the researcher to comparatively verify the findings derived at different units of analysis.

The household level data generated through primary investigation of the eight sample villages have been analysed in the seventh chapter. The chapter opens up with the introduction eight sample villages of Vadodara district, significance of education and different educational programmes in the rural areas. The relationship between development and education, tribes and education, and development and the tribes have been discussed in the chapter. As mentioned earlier, the sample included both tribal and non-tribal villages. The data generated through primary investigation have been interpreted in terms of demographic, economic, social, psychological parameters to develop a holistic understanding of the issues and problems of literacy and educational attainment in the rural areas. For the purpose, apart from household level data, parameters related to schools and teachers have been assessed. Perceptions of the target population of every sample village regarding education and educational attainment have been assessed based on data generated with the help of RRA technique. The chapter also deals with different challenges faced by the villagers for attaining education. Literacy scene during the last two census years of 2001 and 2011 in the selected villages have been assessed and presented in this chapter. Even malefemale disparity index and EDI for these villages have been worked out. A regression analysis has been attempted to relate literacy rate with EDI, GDI and other indicators.

The thesis has been summarized in the last (eighth) chapter along with the conclusions and suggestions.

### 1.12 LIMITATIONS OF THE STUDY:

Maximum effort has been made by the researcher to unravel the finer nuances of literacy and educational attainment and development. For the purpose, the analysis has depended on both secondary and primary data. This happens to be the major limitation of the study, as secondary data on each and every aspect are not always available, and generation of data personally from the field also involves several problems. Besides, while generating primary level data, the problem of non-availability and/or non-cooperation of the respondents on some occasions created problem.

## REFERENCES

- 1. Adhikari, S. and M. Kamte (2010): "Spatial Pattern of Education and Development in West Bengal", *Annals of the National Association of Geographers*, *India*, Vol. XXX (2), pp. 55-67.
- 2. Banu, Nafisa and S. K. Rawal (2015): "Regional Variation of Education Facilities in West Bengal", *The Deccan Geographer*, Vol. LIII (2), pp. 93-108.
- 3. Bhatty, Kiran (1998): "Education Deprivation in India, A Survey of Field Investigation," *Economic and Political Weekly*, Vol. XXXIII, (27), & (28), pp. 1731-1740 and 1858-1869.
- 4. Breen, R. and Divya Vaid (2008): Inequality in Educational Attainment in India A Birth Cohort Approach, Center for Research on Inequalities and Life Courses, Yale University, www.ibrarian.net/navon/.../Inequality\_in\_Educational\_Attainment\_in\_India\_A. pdf. Accessed on 2nd June, 2017.
- 5. Chamar, K.V. and S. K. Chamar (2015): "Caste Differential in Levels of Educational Attainment in Village Sirsa Kheri", *Transactions*, Vol. XXXVII (1), pp. 27-34.
- 6. Dash, N. R. (1986): "Determinants and Correlates of Spatial Pattern of Tribal Literacy in North-East India", *Hill Geographer*, Vol. V (1&2), pp. 1-12.
- 7. Dash, T. R. (1993): "Regional Inequalities in Educational Development in Orissa", *Indian Journal of Regional Science*, Vol. XXV (1), pp. 19-29.
- 8. Dey, S. and A. Basumatary, (2007): "Multiple Regression Analysis on the Role of Educational Institute on Literacy in Meghalaya", *Hill Geographer*, Vol. XXIII (1&2), pp. 105-110.
- 9. Dey, S. and K. S. Rajput (2003): "Population and Education Profile of Meghalaya", *Hill Geographer*, Vol. XIX (1&2), pp.14-19.
- 10. Dhabriya, C. V. et. al. (2015): "Assessment of Elementary School Education in Rajasthan", The *Deccan Geographer*, Vol. LIII (1), pp. 1-10.
- 11. Dutta, (Dasgupta), S. and L. Sivaramakrishnan (2013): "Disparity in the Literacy Level among the Scheduled and Non-Scheduled Population: Indian Scenario in the 21<sup>st</sup> Century", *Transactions, Journal of the Institute of Indian Geographers*, Vol. XXXV (2), pp. 185-200.

- 12. Gupta, Anju (2013): <u>Education Status Report Gujarat</u>, Catalyst Management Services, Centre for Education Innovation, Bangalore.
- 13. Gupta, S. (2005): <u>Education in Emerging India Teachers Role in Society</u>, Shipra Publication, Delhi.
- 14. Husain, Zakir and Amrita Chatterjee (2009): "Primary Completion Rates Across Socio-Religious Communities in West Bengal", *Economic and Political Weekly*, Vol. XLIV (15), pp. 59-67.
- 15. Joshi, R. N. (1979): <u>Education Elsewhere and Here A Key to Prosperity</u>, Bhatiya Vidya Bhavan , Bombay.
- 16. Kerkar, Pravina (2006): "Facility Differentials among Rural Schools: An Analytical Study of Some Schools in Goa", *The Goa Geographer*, Vol. III (3), pp. 72-79.
- 17. Kayamkhani, I. M. and B. Chaplot (2014): "Comparative Analysis of Literacy and Sex-Ratio in Rajasthan," *Annals of the Rajasthan Geographical Association* Vol. XXXI, pp. 78-85.
- 18. Kundu, A. and J. M. Rao, (1986): "Inequity in Educational Development Issues in Measurement of Changing Structure and its Socio-Economic Correlates with Special Reference to India", in Moonis Raza (Ed.), <u>Educational Planning A Long term Perspective</u>, NUEPA and Concept Publishing Company, New Delhi, pp. 435-466.
- 19. Lakshmaiah, T. and E. C. Jayakumar (1994): <u>Education and Development</u>, Printwell Publication, Jaipur.
- 20. Malhotra, Neena, (1998): "Human Development in India and Inter-State Pattern" *Anveshak*, Vol. XXVIII (2), pp. 115-131.
- 21. Midatala, Rani, (2009): <u>Problems of Tribal Education in India: Issues and Prospects</u>," Kaniska Publishers and Distributors, New Delhi.
- 22. Mishra, R. P. (2012): "Bridging the Widening Development Gap: Case of Uttar Pradesh, *Annals of the National Association of Geographers, India*, Vol. XXXII (2), pp. 97-119.
- 23. Mishra, N. K. and M. B. Singh (2015): "Regional Aspect of Urban-Rural Differential in Literacy in Bihar, India", *The Deccan Geographer*, Vol. LXXX (2), pp. 1-11.
- 24. Mukherjee, Dipa (2004): <u>Education Attainment in India: Trend Pattern and Policy Issues.</u> Dept of Economics, https://mpra.ub.uni-muenchen.de/4869/1/MPRA\_paper\_4869.pdf. Accessed on 24<sup>th</sup> May, 2016.
- 25. Nicto, Sonia (2002): "Cultural Difference and Education Change in a Socio-Political Context", in Sonia Nicto (Ed.), <u>Language</u>, <u>Culture and Teaching</u>: <u>Critical Perspective for New Century</u>, Lawrence Erlbaum Associates, Publication, London.
- 26. Pore, A. V. and Y. S. Mote, (2010): "A Study of Hierarchical Exclusion in terms of Literacy in Kolhapur District", *The Goa Geographer*, Vol. VII (1), pp. 59-65.
- 27. Prakash, Shri and T. J. Buragohain (2003): "Indicators of Educational Development: Analysis of Average Completed School Years in India", *Journal of Education Planning and Administration*, Vol. VII (1), pp. 75-93.
- 28. Prasad, K. N (2012): "Education and Agricultural Labourer in Western Chhattisgarh, India", *The Deccan Geographer*, Vol. L (2), pp. 59-68.
- 29. Rai, G. (2014): "Pattern of Literacy in Bihar (2001-2011)", Annals of the National Association of Geographers, India, Vol. XXXIV (2), pp. 146-161.
- 30. Ramachandran, V. (2006): "Literacy and Education, *Economic and Political Weekly*, Vol. XL (5), pp. 4853-4856.

- 31. Rao, V. K. R. V. (1966): <u>Education and Human Resource Development</u>, Allied Publishers, New Delhi.
- 32. Sankar, Deepa, (2010): "Education Sector in India: Progress, Challenges and Way Forward", *Yojana*, January, Publication Department, Government of India, pp. 35-38.
- 33. Sengupta, P. and Guha, J. (2002): "Enrolment Dropout and Grade Completion in West Bengal", *Economic and Political Weekly*, Vol. XXXVII (17), pp. 1621-1637.
- 34. Sharma, Ruchita et. al. (2007): "Extent of Female School Dropouts in Kangra District of Himachal Pradesh", *Journal of Social Science*, Vol. 15 (3), pp. 201-204.
- 35. Sharma, Rajeev (2009): "Primary Education in India: Current Status and Future Challenges", *Vikalpa*, Vol. XXXIV (2), pp. 61-63.
- 36. Singh, Nidhi, (2009): "The Role of Education in India A Regional Perspective", *The Deccan Geographer*, Vol. XLVII (1), pp. 13-27.
- 37. Thaha, M. (2008): "Gender Issues in Education", in Yadappanavar, A.V. and Gyanmudra (Eds.), Gender Issues in Education, National Institute of Rural Development, Hyderabad, pp. 1-25.
- 38. Tilak, J. B. G (1979): "Inter-State Disparities in Educational Development", in K. R. G. Nair (ed.), <u>Regional Disparity in India</u>, Agricole Publishing Academy, Delhi, pp. 33-47.
- 39. Tilak, J B G (1986): "Education in an Unequal World", in Moonis Raza (ed.) Educational Planning A Long Term Perspective, NUEPA and Concept Publishing Company, New Delhi, pp. 27-50.