

# Gender Disparity in Literacy in Chamba District of Himachal Pradesh: A Geographical Analysis

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#### Abstract

Literacy is an important component for the poverty eradication and for cultivation of friendly relationship, for attaining quality of life and enabling effective demographic processes. The present paper aims to examine disparity in literacy between male and females in the least literate district of Himachal Pradesh i.e. Chamba at the block level. The Sopher index has been used to calculate disparity among males and females and simple percentage method has been used for computing the literacy and its various components. It has been concluded from the study that in 2001 only three blocks namely Chamba, Bhattiyat and Bharmaur were falling under the low gender disparity category and two blocks namely Tisa and Saluni came under the high gender disparity category. In 2011 all the blocks witnessed low gender disparity because of increase in the availability of educational institutions, reduction in discrimination among females, generation of awareness among the parents.

Keywords: Development. Chamba District. Gender Disparity. Literacy. Disparity Index.

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## 1 Introduction and Review of Literature

Development is a multi-dimensional and integrated phenomenon both socially and economically. There are various dimensions such as facilities in terms of health and education, modernization, communication access and quality of housing. It is dynamic and long-term process improving social conditions of people of region, holding central place in developing countries therefore influencing the economy. It helps in the expansion of facilities like education, health, means of communication, electricity, helps in generation of capital and promotion of scientific knowledge and technology thus help in judicious utilization of natural resources. Problem of inequality is inherent due to the variation in accessibility of resources and services creating regional disparities. The socio-economic disparities occur at all levels i.e. international, national, regional, urban and village level (Prem Chand, 2024). Literacy and level of education in any society are considered as one of the important indicators of development.

The definition of literacy, which differs from nation to nation, usually refers to the bare minimal of literacy abilities (Keefe & Copeland, 2011). A person can be considered literate if they can read and write a basic message in any language with comprehension, according to the United Nations Population Commission. The Indian census has adopted this definition. Eliminating poverty and mental isolation, fostering amicable and peaceful international relations, and allowing demographic processes to unfold naturally all depend on literacy (Chandna, 2006). It is the capacity to use printed and written resources connected to various contexts in order to identify, comprehend, interpret, create, communicate, and compute. Literacy necessitates a continuum of learning in order to assist people in reaching their objectives, expanding their knowledge and potential, and actively engaging in their communities and larger society (Limberg, Sundin, & Talja, 2012). Alike that Himachal Pradesh, A noteworthy discrepancy in male-female literacy rates is another characteristic of literacy in the study area. Quality education has been considered as an important goal to be achieved under the 17 sustainable development goals and forms part of goal four i.e. to be achieved by 2030. Government of India has initiated many plans and schemes for improving quality of education in the institutions by incorporating various schemes and rolling out the new education policy (Sharma & Agarwal, 2020). Chamba district has been witnessing development of educational institutions and thus there has been a noticeable improvement in the gender gap in literacy.

Gender differences in educational attainment means a gap between men and women in getting education. It is evident from the requirement for reservations that women have fallen behind men in every aspect of life. Numerous investigations have been carried out to determine the extent of gender differences in the workforce and in education. It has taken a long time for society to permit women to pursue higher education and catch up to men in areas of comprehension (Choudhary, 2017). The socio-economic considerations play a

major role in explaining this discrepancy. Gender inequality is detrimental to society as a whole since it prevents women from engaging in social, political, and economic spheres, which can have a negative impact on the entire nation (Bhat, 2011). A country's literacy rate is one of the most crucial indicators of its economic health since it enhances the human capital of the nation. This also provides better employment prospects and may result into higher socio-economic status. Gender inequality in literacy has also adverse impact on socio-economic development. The Census of India has defined 'Literates' as" A person is considered literate if they can read and write in any language with comprehension and are seven years of age or older." The definition of literacy rate is "the percentage of literate people to the total population aged 7 and above (Directorate of Census Operations, 2011)." Reading ability makes it easier to acquire more educational opportunities, which helps people overcome poverty and ongoing underdevelopment. People's educational attainment affects their socioeconomic situation and causes them to undergo progressive changes. The growth capacities of individuals, communities, groups, institutions, and nations are enhanced and reinforced by education (Turkkahraman, 2012). Educational institutions play an important role in educational infrastructural development to enhance curricular and co-curricular activities which finally leads to development of any region (Anaman, Zottor, & Egyir, 2022). Educational infrastructure includes the availability of primary, middle, high and higher secondary schools and degree colleges.

Many researchers have studied the various aspects of the education and literacy at the national and international level and thus some of the studies have been reviewed. Tukundane, Sudi, and Jean's (2022) has studied the Buhweju district's chosen primary schools' utilization of its educational facilities and the caliber of instruction provided. Examining the connection between the quality of instruction and the utilization of educational facilities was the primary goal of the research. In this study both qualitative and quantitative approaches have been applied by using a cross-sectional survey design. It has been discovered that a reasonable level of utilization of educational facilities was seen in a subset of elementary schools within the study area. Prajapati, Chauhan, and Ratandhariya's (2022) has looked at an analytical study on Indians' perceptions of literacy. This study aims to know that India's literacy rate is increasing at a slow or fast rate especially after rolling out the Right to Education Act in 2009. Primary and secondary data sources are foundation of any research. A small-scale survey has been done using questionnaire method. The frequency distribution and Chi-Square Tables methodology have been used. It has been revealed that the literacy rate of India has been increased at a fast rate after the introduction of Right to Education Act. Singh's (2016) has researched India's economic growth and female literacy. The goal of this research is to identify the geographic distribution of female literacy and economic advancement in India. It was found that the higher female literacy rate, districts are noted for lower population of poor. Priyanka Sharma's (2018)

has conducted a comparative study about the status of literacy rate in India and Assam. This study tries to highlight the impact of literacy on economic development. Secondary sources of data have been used. It was revealed that female literate in India and Assam was lower as compared to male literates. The percentage of primary and upper primary schools located within habitation in Assam is less as compared to the national average.

Differences in literacy between genders continue to be a significant issue in various regions, impacting economic and social progress. In India, particularly in Chamba district of Himachal Pradesh, there exists a notable gap in literacy rates between males and females. This disparity not only affects individual opportunities but also hampers overall societal well-being by restricting women's participation in social, political, and economic activities. Recognizing the contributing elements to this gender disparity is crucial for devising effective strategies to address the issue and promote inclusive development. Chamba district of Himachal Pradesh is identified as the least literate district in the state. This makes it a critical area for study as it presents an opportunity to understand the challenges faced by the area with low literacy rates, particularly in terms of gender disparity. The study is conducted at block level and the research seeks to contribute to the understanding of gender disparities in literacy and provide recommendations for policy interventions to promote equitable access to education in Chamba district and other areas.

The study examines the gender disparity in literacy and to analyse the factors responsible for the disparity at block level in Chamba district.

# 2 Study Area

The focus of study is Chamba district, situated in the northwest part of Himachal Pradesh, India.(see figure 1). It spans from latitudes  $32 \circ 10$ ' to  $33 \circ 13$ ' and longitudes  $75 \circ 45$ ' to  $77 \circ 33$ ', covering an area of 6522 square kilometres. It shares borders with Jammu and Kashmir to the west, Lahaul and Spiti to the northeast, Kangra to the south and southeast, and Punjab to the south. District is divided into seven Community Development blocks: Pangi, Tisa, Saluni, Bhattiyat, Chamba, Mehla, and Bharmaur. The entire district is mountainous, ranging from 2000 to 21000 feet in elevation. Chamba district is primarily nourished by two rivers, the Ravi and Chenab, with some tributaries of the Beas River also flowing through. In total, there are 1591 villages in the study area, out of which 481 were uninhabited as per the 2011 census. The population of the study area is 5,19,080, with 2,61,320 males and 2,57,760 females. Among them, 3,23,842 are literate, with 1,86,064 males and 1,37,778 females being literate. The literacy gap is 20.92 percent, with a literacy gender disparity of 0.19 (2011 census). The district's economy heavily relies on agriculture, with a majority of the population engaged in farming. Chamba district is renowned for its stunning natural beauty, which attracts a large number of tourists.

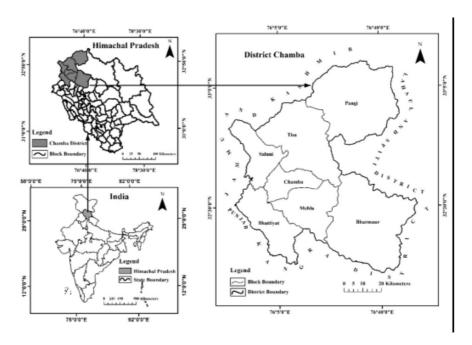


Figure 1. Location Map

# 3 Database and Methodology

Secondary sources gathered from the Census of India, District Census Handbook Chamba, and other government reports for the year 2001 and 2011 and 2022-23 are used in the present study. The census year 2001 is served as the base year and block is the primary unit of analysis for the study. In the present study the indicators that have been used are Total population over the age of six, population of men over the age of six, population of women over the age of six, total literacy rate, total male literacy rate, total female literacy rate, and total literacy rates. The male and female literacy rates as well as the overall literacy rate were determined using the straightforward percentage approach. The disparity index, created by David V. Sopher in 1974 and later refined by Kundu and Rao's (1986), has been used to quantify the literacy gap between males and females. The formula used to get the Disparity Index (DI) is:

$$DI = \log\left(\frac{X_2}{X_1}\right) + \log\left(\frac{Q - X_1}{Q - X_2}\right) \tag{1}$$

Where  $X_2$  represents the male literacy rate and  $X_1$  represents the female literacy rate, with the condition  $X_2 > X_1$  and Q = 200.

The Disparity Index has a range of values from 0.00 to 1.00. The value of DI will be 0 in the event of perfect equality, which implies no disparity; as DI increases, the disparity increases as well. When the variables' values are given as percentages, this strategy can be helpful. After that the study area is divided into three disparity categories on the basis of disparity value i.e. Areas of High Gender Disparity in Literacy, Areas of Medium Gender Disparity in Literacy and Areas of Low Gender Disparity in Literacy. The interpreted results were presented through suitable tables and maps. Maps were prepared using Arc GIS.

#### 4 Results and Discussions

## 4.1 Gender Disparity in Literacy

Among the underprivileged populations, literacy is strong marker of social and economic development, particularly for women in India. Male literacy in India is higher than that of female literacy. This discrepancy can be attributed to the widespread stereotypes surrounding female employment and out-of-home mobility. When men and women have consistently different levels of education, there is a gender gap in education (Kumar Kaushik & Kaushik, 2012). The literary statistics have been revealed in table 1.

# 4.2 Areas of High Gender Disparity in Literacy (More than 0.35)

It is revealed from figure 2 that western and central parts of the study area have registered very high gender disparity in 2001. From the total seven blocks, two blocks namely Tissa and Saluni witnessed very high gender disparity (More than 0.35) in 2001 as shown in the table 2. Lack of educational facilities such as schools within the villages, teaching learning materials and social factors such as early marriages of the girls, preference for the male child education and long-distance travel to reach schools could be attributed to very high gender disparity in literacy. It is illustrated from table 2 that none of the blocks experienced high gender disparity in literacy in 2011. This indicates a significant improvement in reducing the gap in educational attainment between genders.

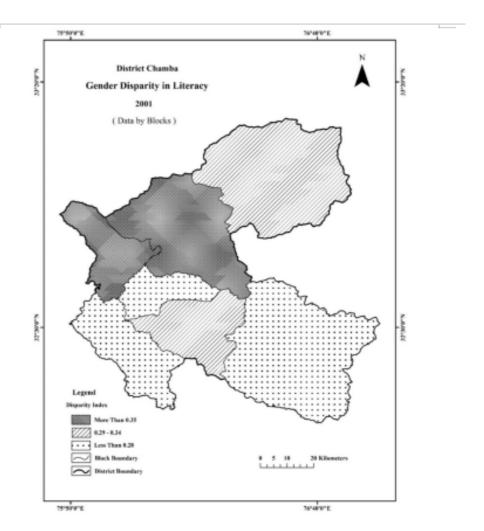


Figure 2. Gender Disparity in Literacy (2001)

## 4.3 Areas of Medium Gender Disparity in Literacy (0.29-0.34)

It is revealed from table 2 that two blocks namely Pangi and Mehla blocks of Chamba district in the study area exhibited medium gender disparity (0.29-0.34) in 2001 and none of the blocks fall under the category in 2011. These blocks were mainly concentrated in the north-eastern and central parts of the study area as shown in the figure 2. The social thinking about female education, unwillingness of parents towards the education of their daughters, lack of adequate sanitation facilities, early marriages of girls and poverty have resulted into medium gender disparity in 2001 and improvement in all these facilities over the decade has led to an increase in literacy among the females thereby improving the gender disparity gap in the district. Expansion of schooling facilities, road provision, improvement in the economic conditions of the residents, interest of parents towards the education of female children and restrictions on early marriages of girls are some of the factors responsible for conspicuous decline of gender disparity in literacy in 2011.

## 4.4 Areas of Low Gender Disparity in Literacy (less than 0.28)

It is revealed from table 2 that there were three blocks namely Chamba, Bhattiyat and Bharmaur registered under the low gender disparity (less than 0.28) in literacy in 2001 and all the blocks namely Pangi, Tisa, Saluni, Mehla, Chamba, Bhattiyat and Bharmaur in 2011. These villages were mainly distributed in the north-western, central, central-western and eastern parts of the study area as shown in figure 2 according to 2001 census. The number of educational institutions in the Chamba district are 1196 primary schools, 230 middle schools, 94 high schools, 165 senior secondary school and 13 colleges as per 2022-23 data (Economic and Statistical Department of Himachal Pradesh). The availability of educational institutions, low gender-based discrimination, generation of awareness among the parents, educated parents and many government schemes such as Sarva Shiksha Abhiyan (2001) and Mid-day meal (2004), have played an important role in the advancement of education in Chamba district.

Table 1. Literacy Statistics (2001-2011): A Block Level Analysis

C. D. Blocks	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
C. D. DIOCKS	Total LR		Male LR		Female LR		Literacy Gap		Gender Disp	
Pangi	60.31	71.02	74.6	82.52	44.2	59.3	30.43	23.3	0.32	0.22
Tisa	48.9	60.44	64.63	72.71	31.93	47.7	32.70	25.01	0.40	0.26
Saluni	58.83	67.84	75.2	83.01	41.54	51.3	33.65	31.38	0.354	0.244
Chamba	74.83	81.78	84.89	89.16	64.78	73.13	20.11	16.03	0.178	0.145
Bhattiyat	66.06	75.63	79.62	83.53	51.63	66.15	27.74	17.38	0.314	0.19
Mehla	57.3	68.7	72.5	77.37	41.1	57.8	31.4	21.79	0.343	0.271
Bharmour	62.22	73.9	73.85	82.54	50.1	64.7	23.74	17.79	0.293	0.231
Chamba	62.91	72.21	76.41	82.6	48.9	61.7	27.6	20.92	0.28	0.19

LR-Literacy Rate, Disp-Disparity

Table 2. Gender Disparity in Literacy: A Block level Analysis

Disparity Category	Name of Blocks 2001	Name of Blocks 2011		
High Gender Disparity	Tisa and Saluni	-		
Medium Gender Disparity	Pangi and Mehla	-		
Low Gender Disparity	Chamba, Bhattiyat, and Bharmour	Pangi, Tisa, Saluni, Mehla, Chamba, Bhattiyat, and Bharmour		

#### 5 Conclusions

Although Chamba district is the least literate area in the Himalayan state of Himachal Pradesh, the previous discussion makes clear that over the course of a decade, the status of literacy has demonstrated considerable positive development in seven blocks of the district. The average literacy rate in the study area is 72.21 percent, as per the 2011 census. All seven blocks in the study comprising of the northern, southern, central, and western portions witnessed high rates of literacy during the 2011 census. Development of elementary schools at the village level, building of roads, enhancement of transportation options, and several other government initiatives all contributed significantly to increase in the literacy rate in the study area. Continued investment in education infrastructure and awareness is crucial to maintain and build upon these positive trends.

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