



**Levels of Educational Development in Kolhapur District: A
Geographical Study**

Mr. Amit Bhagavan Sarate¹ & Dr. Adinath Dnyandeo Gade²

¹Research Scholar

²Department of Geography, D. R. Mane Mahavidyalaya, Kagal (MH) India

Corresponding Author - Mr. Amit Bhagavan Sarate

DOI - 10.5281/zenodo.10934794

Abstract:

Education; the foundation of sustainable development, is the key to 'social inclusion'. It is an important factor that is used to calculate the Human Development Index of any region. Education and development are inseparable parts of each other and without education there will be no development. There are different educational development levels in India and the disparity is due to the influence of many geographical factors. Efforts have been made by the government from time to time to reduce this disparity. It has improved a lot but still has a lot to achieve. The present study aimed at to explore residential area wise and gender wise regional (tehsil-wise) disparities in literacy rates on educational indicators in Kolhapur district, which is by far the best-performing district in terms of education. Secondary sources of data i.e., the Census of India Report, District Census Handbook, District Socio-Economic Review, and District Official Website were used to conduct this study. Kendall's rank-order approach was applied to analyze spatial variation and detect differences in educational development. Findings of the study revealed that Karveer, Hatkanangle, Shirol, and Panhala groups have relatively good development due to a higher number of educational institutions. Which shares range of rank average on educational indicator between 2.6 and 4.6. On the other hand, remote and mountainous regions with rugged topography like; Gaganbawda, Ajra, Shahuwadi, Chandgad, and Gadhinglaj are the least developed blocks in terms of literacy rate shares range of rank average between 7.4 and 10.4 on educational indicator. According to the 2011 census the literacy rate of the Kolhapur district is 81.51. Which is 0.83% less than the state-level literacy rate.

Keywords: Education; Development, Inequalities, Kendall's Rank order

Introduction:

Development means providing welfare to the citizens of a particular area by providing them with various options. Different sectors of the economy and their performance are important to indicate the level of development of a region. Other

sectors of the economy such as industry, agriculture, trade, and communication are directly linked to the level of educational development of a particular region. Some regions are developed and some are underdeveloped so the regions have not

developed uniformly. Education is a force that is useful in determining the level of development of any region. The literacy rate is an important demographic factor to achieve human progress towards modernization. According to Plato, it is essential for a good society's economic well-being because education produces "reasonable men". As far as education is concerned, there are many disparities globally. This problem exists particularly in developing as well as underdeveloped nations of the world. Due to both natural and man-made factors, there is variation or disparity in education levels internationally and India is also facing the same problem. Some regions are well-off while others are neglected due to availability and lack of resources. Physical and socio-economic factors affecting literacy rate in western Maharashtra" (H Malhotra). The present work focuses on the Kolhapur district of Maharashtra, which is by far the most developed district in terms of education. This study will be very helpful in identifying the educationally backward regions of the district.

Study Area:

The "district of Kolhapur is situated in the extreme southern region of Maharashtra state. Its latitude is between 15°43'N and 17°17'N, and its longitude is between 73°40'E and 74°42'. It is bounded by Sangli district to the north, Karnataka state to the east and south, and Ratnagiri and Sindhudurg districts to the west. The natural boundaries are the Sahyadri range in the west and the Warna River in the

north. According to the 2011 census 38,76,001 people live in the district, which has a land area of 7,685.00 sq km. The district's area constitutes 2.50% of the state's total area, while its population accounts for 3.45% of the state's total population. There are 504 people per sq km in the population density. Among the 35 districts in the state, the district" is ranked fifth in terms of density, ninth in terms of population, and twentieth in terms of area. With 5,49,236 residents according to the 2011 census, Kolhapur serves as the district headquarters.

Objectives of the Study:

1. To study the group-wise levels of educational development in the district.
2. To study the classification of blocks based on educational development.

Database and Methodology:

Secondary sources of data have been used to conduct this study. Data related to Kolhapur has been taken from various sources like the Census of India Report, District Census Handbook, District Socio-Economic Review, and District Official Website. Kendall's rank-order approach was applied to analyze spatial variation and detect differences in educational development. Social, economic, demographic, and geographic factors influence different levels of educational development. To eliminate the disparities between regions and adopt equal development, it is necessary to find out and study the causes responsible for

uneven development. This study will be useful for formulating specific policies for

such regions.

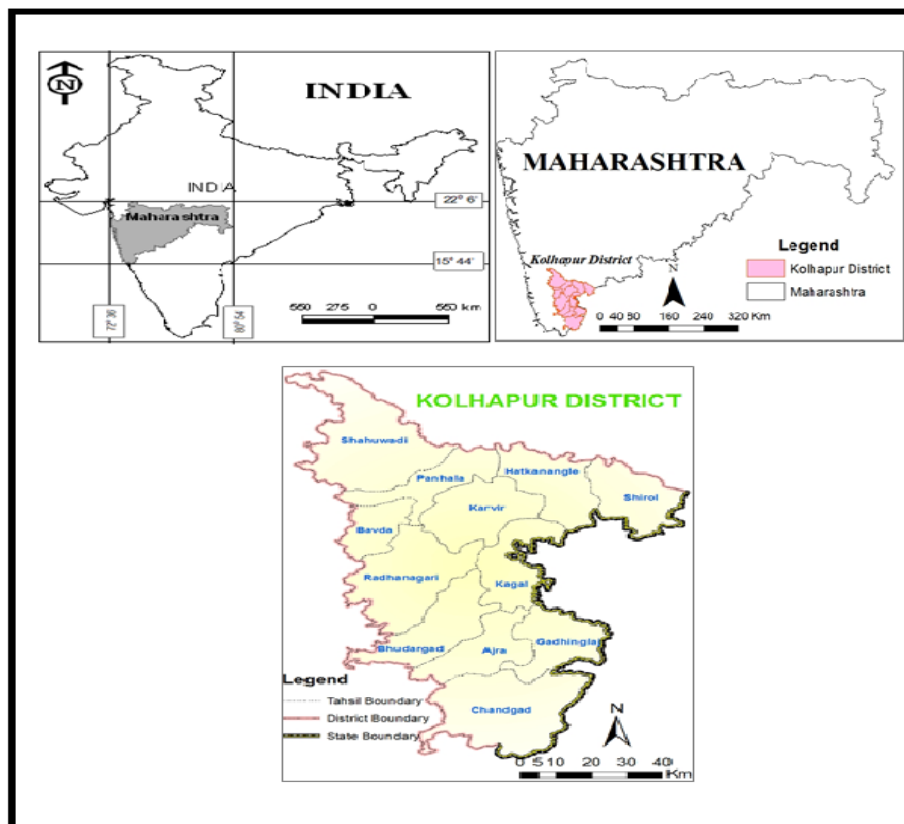


Figure 1: Location Map

Indicators Used:

X1 – Literacy rate. X2 – Male literacy. X3 – Female literacy. X4 – Number of Govt. and private primary schools. X5– Number of Govt. and private high schools. X6 – Number of Govt. and private higher secondary schools. X7 – Number of schools per 1000 of population.

Kendall's Rank Order Score Method:

An attempt was made to assess the status of educational development in the Kolhapur district with the help of available data from various groups. The indicators used have been assigned their values and ranked using Kendall's rank order score method. Based on this, each block is

averaged and the highest average of block scoring will fall in the least developed group and vice versa. A block-wise analysis has been performed to compare blocks.

Analysis and Discussion:

Physical, social, economic, and demographic factors are responsible for inequality in educational development. Therefore, a comparative study is necessary to understand these differences. This will help in identifying backward regions for the implementation of development plans.

Table 1: Differential Levels of Educational Development

Name of Block	X1	X2	X3	X4	X5	X6	X7
Shahuwadi	72.68	81.99	63.68	276	43	12	1.78
Panhala	79.27	87.15	70.73	227	65	31	1.24
Hatkanangale	84.37	89.97	78.41	390	117	52	0.69
Shirol	83.44	89.84	76.83	214	70	18	0.77
Karveer	86.64	91.51	81.5	423	168	60	0.62
Gaganbawada	70	80.5	58.83	71	9	7	2.43
Radhanagari	77.59	88.58	66	215	48	19	1.41
Kagal	78.65	87.01	69.96	160	59	30	0.9
Bhudargad	77.71	87.84	67.57	172	44	13	1.52
Ajara	73.93	83.62	65.23	135	27	8	1.41
Gadhingalaj	76.62	85.2	68.49	160	53	24	1.04
Chandgad	72.94	82.62	63.52	212	60	15	1.53

Levels of Educational Development:

Poverty, infrastructure, student-teacher ratio, schools and their current condition, enrollment ratio, and other social, political, and religious factors are

responsible for inequality in educational development. Based on seven (07) selected indicators, levels of educational development have been measured.

Table 2: Kendall's Rank Order Score Method

Name of Block	X1	X2	X3	X4	X5	X6	X7	Total Rank of Educational Indicators	Average
Shahuwadi	11	11	10	3	10	10	2	57	8.1
Panhala	4	6	4	4	4	3	7	32	4.6
Hatkanangale	2	2	2	2	2	2	11	23	3.2
Shirol	3	3	3	6	3	7	10	35	5
Karveer	1	1	1	1	1	1	12	18	2.6
Gaganbawada	12	12	12	12	12	12	1	73	10.4
Radhanagari	7	4	8	5	8	6	6	44	6.3
Kagal	5	7	5	9	6	4	9	45	6.4
Bhudargad	6	5	7	8	9	9	4	48	6.8
Ajara	9	9	9	11	11	11	5	65	9.3
Gadhingalaj	8	8	6	10	7	5	8	52	7.4
Chandgad	10	10	11	7	5	8	3	54	7.7

Selected indicators related to education and their composite index provide an overall picture of the current status of various sections of the district. For inequality in the development of the education sector in the study area. In the table below, the structural level of

educational development and inequality has been calculated based on the indicators used. The study has been divided into three (03) categories to explain the inequality in educational development.

Moderately developed blocks:

Three blocks fall under this category viz. Karveer, Hatkanangle and Panhala. Their average range is between 2.6 and 4.6. The reason behind this is that the number of educational institutions and literacy rates in these blocks are higher than in other blocks. Karveer has a high number of educational institutions and ranks first in the categories of educational institutions and literacy rate. The Hatkanangle group is also well positioned and has a high male-to-female literacy ratio with fairly good educational

institutions. However, in Karveer and Hatkanangle, the number of educational institutions is less compared to the population. Panhala stands fourth in literacy rate and educational institution among all groups. These blocks are near to Kolhapur city and could provides students with good opportunities and alternative options to pursue education. In addition, these blocks are relatively flat and there are not many challenges associated with development works.

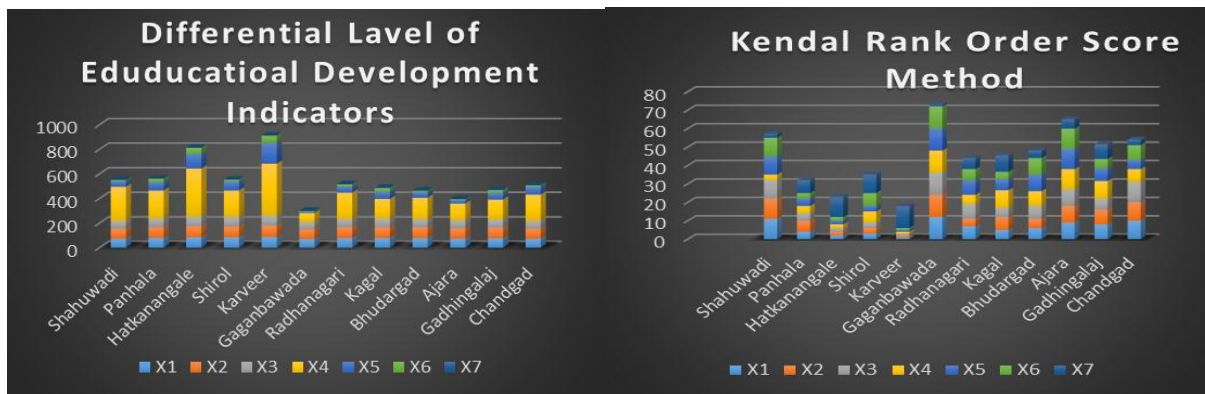


Figure 2: Differential level of educational development indicators & Kendal Rank Order Score Method

Low-developed blocks:

Less-developed blocks include Shirol, Radhanagari, Kagal, and Bhudargarh, with an overall average value between 5 and 6.8. These blocks show a mixed trend in relation to educational indicators. Some indicators show a high rank while others show a low rank. Shirol and Kagal fall into the less developed category with low literacy rates and the number of educational institutions compared to the population. Similarly, Bhudargarh ranks fourth among institutions in terms of population.



Figure 3: District Map

Least developed blocks:

Gaganbawda, Ajra, Shahuwadi, Chandgad, and Gadhinglaj blocks fall under this category. These blocks show poor performance in almost all the indicators used. Gaganbawda, Shahuwadi, and Chandgad have a good number of institutions relative to population, but poor performance in other indicators puts them in the less developed category. Similarly, Ajra and Gadhinglaj show poor performance in all indicators. All the above blocks are hilly and their topography is rough and this is another reason for their underdevelopment. Which needs further development as the number of educational institutions in these blocks is insufficient compared to their population. Apart from that, the infrastructure of schools' is insufficient like; Small classrooms, insufficient play ground, no or less library facilities and inavailability of hostels. Probably that could be one of the barriers in the overall development of students. The transport and communication network is also less developed. With a literacy rate of only 81.51% (as of 2011 census), it ranks 14th among the thirty-five (35) districts of Maharashtra.

Conclusion:

The present study revealed residential area wise and gender wise regional (tehsil-wise) disparities in literacy rates on educational indicators in Kolhapur district. Karveer, Hatkanangle, Shirol, and Panhala groups have relatively good development due to a higher number of educational institutions. Which shares

range of rank average on educational indicator between 2.6 and 4.6. On the other hand, remote and mountainous regions with rugged topography like; Gaganbawda, Ajra, Shahuwadi, Chandgad, and Gadhinglaj are the least developed blocks in terms of literacy rate shares range of rank average between 7.4 and 10.4 on educational indicator. According to the 2011 census the literacy rate of the Kolhapur district is 81.51. Which is 0.83% less than the state-level literacy rate. This study provides a comprehensive analysis of the educational development of the district zone-wise classification as medium developed, less developed, and least developed. Several indicators have been used to rank relative with the help of Kendall's rank order method.

Recommendations:

Since, the majority of the district's residents reside in rural areas, the district needs to give the growth of the educational sector more attention. Laws governing the education sector should be implemented with effective mechanisms and controls. There is a need to build more schools with good infrastructure. Old repairs are needed and leakage rates need to be reduced. Efficient and qualified teachers should be appointed and student-teacher ratio should be balanced. It is necessary to effectively implement government schemes targeting the poor and underdeveloped sections through various government schemes, scholarships, and free education.

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