Regional Disparities in Socio-Economic Development of Pune Administrative Division: A Geographical Analysis

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Abstract

Social development in Maharashtra over the past three decades has varied across regions, with western Maharashtra far ahead of other regions in key development indicators. Overall, there are large gaps in social and economic development among districts in western Maharashtra, while the western part of the state shows high development. Socio-economic development has been observed to be concentrated in major industrial hubs such as the Mumbai-Pune Industrial Corridor. This study sought to assess regional disparities in social and economic development in five districts of the Pune administrative divisions. As a striking feature of the level of development in the study area, the districts, Pune, Kolhapur and Solapur, are overall better developed in terms of industry, agriculture, transport network and urbanization. However, Sangli and Satara districts have a low level of economic development in terms of industry, transportation and urbanization, but good agricultural development although these two regions are still covered by drought zones. In summary, it can be said that regional economic and social development has a great impact on the changes in regional demographic characteristics. With the development of economy and industry, it mainly affects the social, economic and political status of people living in the region.

Keywords: Social Development, Economic Development, Demography, Imbalance, Disparity

Introduction:

The entire economic and social system must be reorganized and reoriented as part of the multifaceted process of development. It requires the nation to develop its human resources in a balanced way. Planning has gone into the development of the nation's programmes, with the major goal being to improve peoples' quality of life by meeting their fundamental needs and promoting their social and economic well-being. It has been reported that the regional difference in terms of economic growth is not decreasing with time, despite the fact that

resource transfers are being carried out in the underdeveloped regions through a variety of tools, such as subsidies.
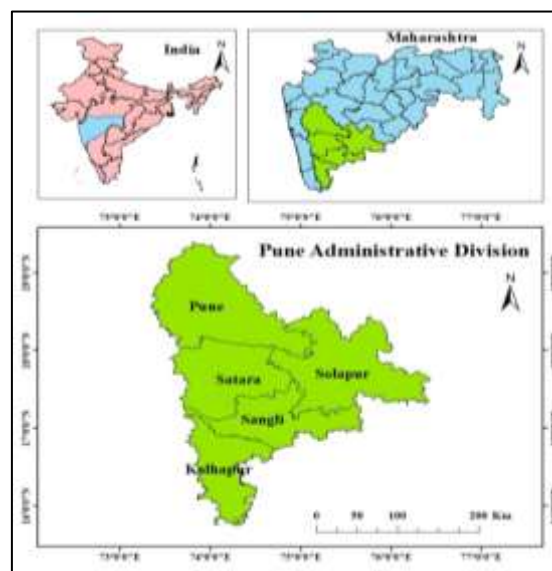
Regional disparities arise from certain regions' faster growth while others lag behind and perform poorly in terms of industry expansion, employment growth, and other high-yielding economic activities. A process of improving a vast human population, socio-economic development comprises both economic growth and social change. An important factor in a region's development is the socioeconomic infrastructure. The social situation of the locals is improved as a result.

This study is crucial for emerging nations because it has an impact on every aspect of society and the economy. It promotes the employment of modern technologies, which advances agricultural development. It aids in capital creation as well as the extension of facilities including those for health, education, and communication as well as power. Understanding the various regional levels of development will aid in determining how one region compares to another. The study sheds insight on how changes in agriculture, industry, infrastructural amenities, and the level of literacy in five districts within the study area relate to socio-economic growth.

Study Area:

Pune Administrative Division comprised five districts of the State of Maharashtra namely, Pune, Satara, Solapur, Sangali and Kolhapur. The geographical location of the study area is 15° 45' N to 19° 24' N latitudes and 73° 19' E to 76° 15' E longitudes comprising 57,235 sq. km. of total geographical area. The study area is surrounded by Karnataka State in the south, Konkan division in the west, Nashik division in the north and the north eastern boundary is surrounded by Aurangabad division. The total population of the region is 23.4 million as per 2011 census.

Figure 1: Location Map of the Study Area

The selected study area for the present research is in general, homogeneous in many geographical aspects, but there are many underlying diversities as far as population and other socio-economic aspects are considered. Growth and distribution of many such aspects shows uneven distribution causing disparity

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across the districts which has motivated the researcher to study the regional scenario of disparity among various socio-economic and demographic aspects.

Aim and Objectives:

The main aim of the present study is to investigate the regional level of disparity and its causes at district level. The following objectives are considered to fulfill the aim of the study:

1. To study the spatial variation in the level of socio-economic development.

2. To identify the backward districts in terms of social, economic and demographic aspects.

3. To study the underlying causes responsible for the inequality and areal variations in the development.

Database and Methodology:

The study is based on the secondary data collected from various sources and particularly from District Statistical Handbook & District Census Handbooks for the year 2011. The differences in the nature of social, economic, and demographic elements are what cause the regional variations. Their identification is vital in order to reduce development gaps. Twenty Five indicators are chosen and divided into three categories; viz. social, economic, and demographic, keeping in mind the region's current socioeconomic matrix. All these parameters analyzed using Kendall's ranking co-efficient method to illustrate the spatial variation in socio-economic development.

Kendall's Rank Order Score Method:

The spatial variance in socio-economic development has been examined using Kendall's ranking co-efficient method. District-level distinction has been done in order to analyze the development of socioeconomic amenities in Pune division. Different types of indicators have been employed for this. The order of these indicators is based on the total number of them. Blocks with the greatest number of socioeconomic amenities have been given rank 1, and the remaining blocks have been ranked in accordance at positions 2, 3, 4, and so on.

Accordingly, the average of each sector's indicator has been determined, and the district with the highest average score is classified as low developed, while the district with the lowest average score is been classified as well developed. The collected data have been examined, tallied, and presented in tables and diagrams for interpretation. Using the appropriate statistical approaches, the acquired numerical and non-numerical data has been examined. The whole indexes of all the chosen social, economic, and demographic indicators show the comprehensive picture of the gap in degree of development between districts.

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Results and Discussion:

The obtained results are categorized into the following three categories:

Disparities in the Level of Social Development:

Social disparities have many causes ranging from historical to present status in health, education and other such amenities. Based on the combined rank score of 09 indicators, the level of social development has been calculated. The pattern of spatial distribution accentuates inter-district disparities sin social development of Pune division. It can be observed that, the Pune district ranks 1st (1.66) followed by Kolhapur district in terms of social indicators (Table 1). The Satara and Solapur districts scored same in terms of social indicators, but overall Solapur is more developed as per the existing literature. The rank average score is similar for these districts because the data for two parameters for Solapur district is not available. Otherwise, it can be said that the Solapur district may have higher rank in terms of social development. Lastly, the Sangli district is behind of all the other four districts of Pune division.

Disparities in the Level of Economic Development:

The issue of economic inequality is related to the ideas of equality, equality of outcome and equality of opportunities. The ranking of the districts are calculated based on 10 economic indicators. It may be noted that the Pune district is front at all other districts in terms of economic development. Satara ranks second in terms of economic development (Table 2). Whereas, the Kolhapur and Solapur districts shows equal amount of development. But, it may be noted that the geographical conditions in these two districts are not similar. Therefore, some indicators may have variations in their values. Lastly, Sangli district lag behind of all the other four districts in terms of economic development

Disparities in the Level of Human Resource Development:

The human resource development is also an important criterion in order to gauge the level of development. The demographic composition of any region has a close bearing to the level of development. The level of human resource development is based on a combined rank score of 6 indicators. It is observed that, each district ranked differently from the other district in the Pune division. Similar to social and economic ranking, Pune district scored First rank in terms of human resource development / demographic development (Table 3). Exceptionally, Satara is at Second rank having 2.66 average rank score among all other districts. It may be noted here that, the Sex-ratio of this district is much

higher than the other four districts. Solapur and Sangli are at moderate level of human resource development while, Kolhapur is lagging behind all of four districts.

Table 1: Ranking of Social Indicators

Name of the District	Number of Primary school (X1)	Number of Senior Secondary School (X2)	Number of High Secondary school (X3)	Number of Primary Health Centers (X4)	Number of Beds in PHCs & Sub-Health Centers (X5)	Number of Sub Health Centers (X6)	Number of households having Electricity (X7)	No. of Households having tap water from treated source (X8)	Number of Post Office (X9)
Pune	5335	1529	56	96	1426	541	19,25,019	5,37,819	780
Kolhapur	2628	698	198	77	2207	424	7,70,005	4,93,333	562
Solapur	4134	*NA	NA	77	1785	427	5,95,560	4,03,120	533
Sangli	2184	616	193	59	1257	320	4,85,126	3,45,153	412
Satara	3073	705	169	71	1517	400	5,62,653	3,98,114	666

Ranks According to the No. of Amenities											
Name of the District	**X1**	**X2**	**X3**	**X4**	**X5**	**X6**	**X7**	**X8**	**X9**	Total Rank	Average Rank
Pune	1	1	4	1	4	1	1	1	1	15	1.67
Kolhapur	4	3	1	2	1	3	2	2	3	21	2.33
Solapur	2	5	5	3	2	2	3	3	4	29	3.22
Sangli	5	4	2	5	5	5	5	5	5	41	4.56
Satara	3	2	3	4	3	4	4	4	2	29	3.22

Authors Calculations

*NA: The Data is not available for that district and in the year 2011.

Composite Level of Disparities in Socio-Economic-Demographic Development:
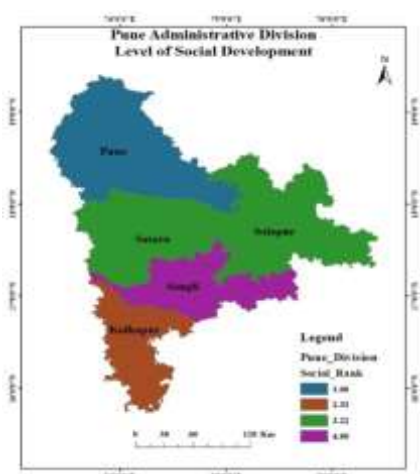
Inter-district variation in the socio-economic development has been analyzed on the basis of overall development with the help of Kendall's rank score method. The indices of overall socio-economic development of the district can be derived from various dimensions of their development in different socio-economic sectors. The analysis of sectorial development in the proceeding sections brought out the fact that by itself each sector may not have only one dimension or typology of development across different districts. Among all the five districts, Pune district is at the First rank in Social, Economic and Demographic development. While other four districts have variations among them in terms of the level of social development, economic terms and human resource development may altogether show different results. The proceeding analysis of three sectors consists of 25 indicators of development, Pune (2.04) is highly developed district followed by Kolhapur (3), and Satara (3) which may be said

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moderately developed and the less developed districts include Solapur (3.12) and Sangli (3.84).

Table 2: Ranking of Economic Indicators

Name of the District	Percentage of Net sown area to gross cropped area (X10)	Surface Irrigation (X11)	Ground Water Irrigation (X12)	Number of Households availing Banking Facility (X13)	Number of non-agricultural cooperative credit societies (X14)	Number of agricultural cooperative credit societies (X15)	Percentage of Total Workers (X16)	Percentage of Agricultural labour to total workers (X17)	Percentage of Cultivators to total workers (X18)	Total Road Length (X19)		
Pune	1172952	124358	145543	16,78,829	4369	1353	42.94	10.24	21.9	18976.72		
Kolhapur	575576	49018	79566	6,18,233	1812	1872	43.96	15.61	38.78	68632.5		
Solapur	1048596	43059	22809	5,99,035	1240	1220	43.97	29.41	33.57	52043		
Sangli	802913	41810	102327	4,60,374	1171	763	43.06	23.92	39.55	69097.5		
Satara	695739	65248	113364	5,10,818	985	964	45.11	21.94	43.24	12448.59		
Ranks According to the No. of Amenities												
Name of the District	**X10**	**X11**	**X12**	**X13**	**X14**	**X15**	**X16**	**X17**	**X18**	**X19**	Total Rank	Average Rank
Pune	1	1	1	1	1	2	5	3	5	4	24	2.4
Kolhapur	3	5	5	2	2	1	3	4	4	2	31	3.1
Solapur	4	2	4	3	3	3	2	5	2	3	31	3.1
Sangli	5	3	2	5	4	5	4	2	3	1	34	3.4
Satara	2	4	3	4	5	4	1	1	1	5	30	3

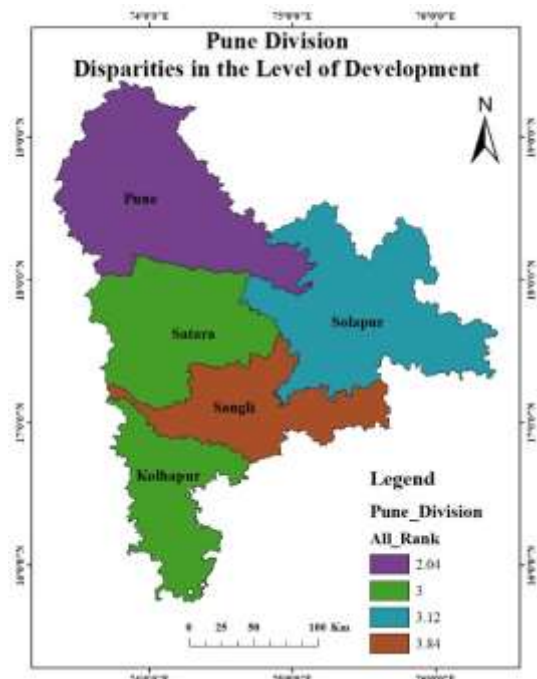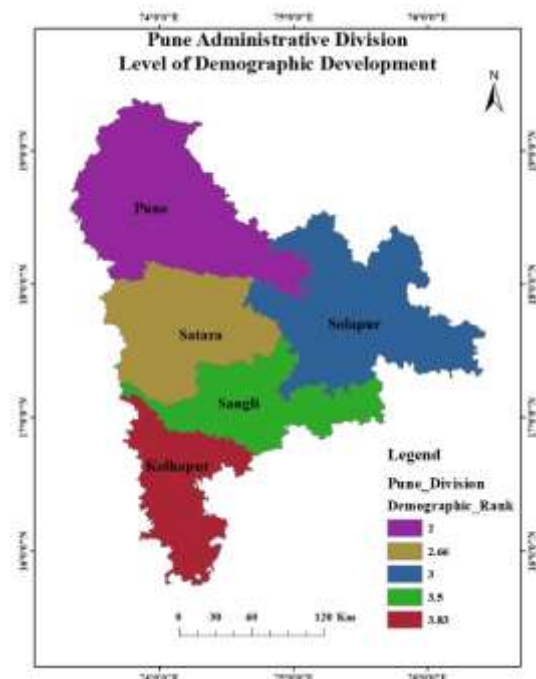*Authors Calculations*

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Table 3: Ranking of Demographic Indicators

Name of the District	Density of population (X20)	Sex Ratio (X21)	Literacy rate as percentage of total population (X22)	Percentage of Male Literacy (X23)	Percentage of Female Literacy (X24)	Gap in Male-Female literacy (X25)	
Pune	603	915	86.15	90.84	81.05	9.79	
Kolhapur	504	957	81.51	88.57	74.22	14.35	
Solapur	290	938	77.02	85.03	68.55	16.48	
Sangli	329	966	81.48	88.22	74.59	13.63	
Satara	287	988	82.87	89.42	76.31	13.11	

Ranks According to the No. of Amenities								
Name of the District	**X20**	**X21**	**X22**	**X23**	**X24**	**X25**	**Total Rank**	**Average Rank**
Pune	1	5	1	1	1	3	12	2
Kolhapur	2	4	5	5	5	2	23	3.83
Solapur	4	2	2	2	4	4	18	3
Sangli	3	3	4	4	2	5	21	3.50
Satara	5	1	3	3	3	1	16	2.67

Authors Calculations

Table 4: Ranking of Social, Economic and Demographic Indicators

Indicators	Districts				
	Pune	**Kolhapur**	**Solapur**	**Sangli**	**Satara**
X1	1	4	2	5	3
X2	1	3	5	4	2
X3	4	1	5	2	3
X4	1	2	3	5	4
X5	4	1	2	5	3
X6	1	3	2	5	4
X7	1	2	3	5	4
X8	1	2	3	5	4

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X9	1	3	4	5	2
Total Rank	15	21	29	41	29
X10	1	3	4	5	2
X11	1	5	2	3	4
X12	1	5	4	2	3
X13	1	2	3	5	4
X14	1	2	3	4	5
X15	2	1	3	5	4
X16	5	3	2	4	1
X17	3	4	5	2	1
X18	5	4	2	3	1
X19	4	2	3	1	5
Total Rank	24	31	31	34	30
X20	1	2	4	3	5
X21	5	4	2	3	1
X22	1	5	2	4	3
X23	1	5	2	4	3
X24	1	5	4	2	3
X25	3	2	4	5	1
Total Rank	**12**	**23**	**18**	**21**	**16**
Grand Total Rank	**51**	**75**	**78**	**96**	**75**
Average Rank	**2.04**	**3**	**3.12**	**3.84**	**3**

Conclusion:

The socio-economic development in Pune Administrative Division is co-related with regional disparities. Therefore, it is necessary to reduce gap of disparity of development from one district to another. So that, this may be lead to reduce the disparities in the levels of socio-economic development. It is hoped that, this type of study will certainly give enough clues about problems and prosperities of socio-economic development of meso-level areas. Therefore, it is anticipated that

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the present research endeavors will certainly add to the knowledge of regional dimensions of socio-economic development of India in general and Pune Division in particular. Moreover, the present study gives the pathway to analyze the disparity at micro level, so that another picture may appear for the same districts. Hence, in future the researcher will study the level of socio-economic disparity at micro level such as Tahsil or Village level which may be helpful for the delineation of different blocks of High, Moderate and Low developed region in each district.

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