"Socio-Economic Development in Bundelkhand: A Micro-Level Analysis"

Amarjeet[1]

Abstract

A level of development of any region can be assumed by living standard of their people. Planned and proper development can improve overall life-style of the citizens. However, despite planned intervention for improvement of development induces regional variation or disparity. So, disparity may be defined as the unequal or unbalanced distribution of development across various regions.

In this Paper, an effort has been made to analyze the socio-economic development in Bundelkhand with the help of primary data. Data has been collected from 16 villages of four districts of the Bundelkhand i.e Jhansi, Chitrakoot, Panna, Sagar. As Bundelkhand region is divided into two states; thus, development indicators have been analyzed here with perspectives to get the comprehensive picture of development in the Bundelkhand region. With the help of Z-score method, composite index has been derived for all 23 development indicators. These indicators are further divided into five group viz. social, economic, health, family assets and housing infrastructure.

Key Words: Bundelkhand Region, Regional Development, Social Development, Disparities, Development Indicators.

Introduction:

The Report of Finance Commission (1967) has been stated that "the development of a country actually depends on the development of backward regions". Persisting nature of socio-economic disparities often causes the distress among the states and create a crisis in national unity. Therefore, the reduction in regional disparity is one of the main objectives of socio-economic policies of any country.

Regional disparities in the socio-economic development may be responsible for the low level of per capita income, poor standards of living and stagnant overall socio-economic growth of any region. According to Williamson (1965), "In the beginning of 19th century many western countries like USA, Canada, UK and other nations of European continent encountered with broad and extensive regional disparities". Thus, we can say that the concept and problem of the regional disparities is not a new phenomenon for the world.

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[1] PhD Research Scholar, Discipline of Geography, School of Sciences (SOS), Indira Gandhi National Open University (IGNOU), New Delhi-110068

After the Industrial Revolution, economic growth has accelerated in many areas of the world. This has not only strengthened economic and social activities, but also economic competitiveness among the countries. As a result, the differences between the regions have grown at the levels of development. Without eliminating these differences, no economy can be given the status of an integrated economy. At the levels of development, regional imbalances and social inequalities are complementary for the growing inequalities in any country (Mandal, 1987).

Bundelkhand region comprises of thirteen districts. Seven districts are comes from Uttar Pradesh named as- Lalitpur, Jhansi, Jalaun, Banda, Chitrakoot, Mahoba and Hamirpur and six districts are comes from Madhya Pradesh. The names of districts of Madhya Pradesh Bundelkhand are- Panna, Sagar, Damoh, Datia, Tikamgarh and Chhatarpur. Besides its common history and geography now the region is divided into states of Uttar Pradesh and Madhya Pradesh. The region of Bundelkhand is known for its backwardness, but the question is what factors are affecting its development after the longtime of independence? Several studies have been done to find the appropriate answer of its poor condition. In a holistic way there are number of factors including Geographic, Climatic, Social and Economic responsible for its present least developed condition after the huge investment in the post-independence time. Diwakar (2009) in his study finds Bundelkhand region as most backward and least developed region.

Review of Literature:

Number of studies highlighted the growing trend of regional inequalities in India. An effort has been made here to review and analyze the prominent studies conducted to inspect the nature of socio-economic development and disparities in the inter-regional and intra-regional sphere. Despite the steps taken by Indian Government for balanced development; some studies by R.K. Sampath (1977), Nair(1971), V.S. Singh (1986) and A. Tiwari (1985) showing the picture of widening regional inequalities in the nation.

An important study was conducted by Ashok Mitra (1961) by using census data and number of development indicators for district level development analysis. Composite development index was made with the help of co-variance of selected indicators. Simple ranking method was also used and an association between selected indicators and development level's was brought out in

his analysis. Beside the complication of procedures, this study became famous for the comparison of levels of development between the regions.

Regional disparities has been analysed by S.K. Rao (1973) with the help of six indicators. He classified Indian states into three categories- Most developed, Not so developed and Least developed states. Richard Stone's method has been used by him, in which region is represented by points and distance between two points known as the distance in development. He found that, in the beginning of 15 years planning, there is no reduction in regional disparities in India. According to him states like Assam, Orissa, Madhya Pradesh, Uttar Pradesh, Rajasthan, Bihar and Kerala remain depressed in above period of planning.

With the help of net domestic product of 17 Indian states, A. K. Singh (1984) analyzed the trend of interstate disparities for the period of 1951-81. All the states were classified into four groups (Very high, High, Low and Very low developed states.); and Punjab and Uttar Pradesh were ranked as first and last position respectively. The positive association in PCI and growth rates was found and thus, income disparities have increased in the time of 1961-81.

R. Singh (2015) has examined the spatial pattern of regional disparities in India with the help of four selected indicators. In his study he has used the Human Development Report technique to get the deprivation score. Further, this deprivation score has been converted into development score. District's composite index was calculated by summing up the development score of every district. Sumedha Bajar (2015) tried to establish the nexus between per capita net state domestic products (PCNSDP) and availability of infrastructure for seventeen major Indian states. She distinguished significant regional disparities in the PCNSDP over the time period of 1981 to 2010. States were grouped into four categories. Direct relationship has been found between development and quality of infrastructure. Developed states had comparatively better quality of infrastructure.

In the above discussion it is seen that, inequalities in the states at the level of economic and social development are either increased or remained unchanged. Despite all the backdrops, these all studies are an important guide for future work. Hence, their utility is indisputable.

Objectives:

The objective of the study includes:

1. To examine levels of development at village level in the study area.

2. To examine regional disparities at village level across the states.

3. To identify the factors behind the emergence of disparities and overall Socio Economic development in the region.

Methodology:

The process of collection of primary data is as following-

In the first step, systematic random method of sampling has been used. Where, bocks and villages are selected on the basis of distance from district head quarter. Two villages from each block (One remote village and one nearest village) have been taken and overall 16 villages (two from each block) have been selected here.

In the second step, the sum of household from each sample village has been calculated and 10% of the household from each village has been taken as a sample size. When, taking 10% households as sample size, each village receives an irregular pattern. To remove this variation, the number of 30 households has been considered as an ideal condition. After that, 35 households have been taken from the villages which have size of 10% is equal to or less than 30 households and 50 households have been taken from the villages which have the size of 10% is more than 30 households.

Third, one village Basaura of Shahnagar block in Panna district has only 25 households; therefore all households are taken here in the sample size. Finally, 655 households have been selected from all villages as sample size (Table-1).

Finally, Questionnaire (consists 32 questions) has been made to gather primary data by field survey (Annexure-II). Information has been gathered by surveying selected households from each sample village.

Table 1: Selection of Sample Villages and Households

District Name	Block Name	Location	Distance from District Head Quarter (In km)	Village Name	Total Number of Households	10 % of Total Households	Sample Size of Households	Final Number of Sample Households in Each Village
Chitrakoot	Karwi	Near	2	Bankat	1079	107.9	108	**50**
		Away	85	Kanthipur	343	34.3	34	**50**
	Ramnagar	Near	25	Bhakharwar	250	25	25	**35**
		Away	92	Dhadhawar	203	20.3	20	**35**
Jhansi	Babina	Near	5	Athodna	514	51.4	51	**50**
		Away	43	Sukwan	227	22.7	23	**35**
	Gursarai	Near	8	Bagrauni	377	37.7	38	**50**
		Away	110	Mathaniya	109	10.9	11	**35**
Panna	Panna	Near	3	Purushottampur	431	43.1	43	**50**
		Away	60	Tara	417	41.7	42	**50**
	Shahnagar	Near	68	Ama	115	11.5	11	**35**
		Away	160	Basaura	25	2.5	25	**25**
Sagar	Sagar	Near	2	Raitwari	300	30	30	**35**
		Away	60	Chaturbhata	600	60	60	**50**
	Kesli	Near	15	Ramkheri	300	30	30	**35**
		Away	110	Untkata	145	14.5	14	**35**
				Total	**5435**	**543.5**	**565**	**655**

Z-Score method of standardization has been used here to make the composite index. Where, the actual value of any indicator is subtracted by their actual mean and divided by standard deviation. Finally, sum of the standardized value of every indicator shows the development composite index. This is very simple in calculation but is the most appropriate in its results. For the 'z score' Smith (1979) has given a formula:-

$$Z_{ij} = \frac{X_{ij} - X_i}{\delta X_i}$$

Where:-

Z_{ij} = Standardized value of indicator i in district/village j.

X_{ij} = Actual value of indicator i in district/village j.

X = Means value of variable i in all the districts/villages.

δX_i = Standard deviation of variables i in all districts/villages.

Where:-

$$\text{Composite Index (CI)} = \sum Zij_1 + Zij_2 + Zij_3 \ldots\ldots Zij_n$$

Zij_1, Zij_2, Zij_3,......Zij_n are the standardized values of various indicators.

Coefficient of variation has been used here to calculate the disparities between the districts/villages.

$$CV = (\partial \text{ of CI/ Mean of CI})*100$$

Where:-

    CV= Coefficient of Variance

    ∂ = Standard Deviation, and

CI = Composite Index

Table 2: Development Indicators Based on Primary Survey

S.N.	Group	Indicators
1	Social	Sex ratio
2		Literacy rate
3		Percentage of population graduated
4	Economic	Percentage of Population under APL
5		Work participation rate
6		Percentage of population engaged in secondary work
7		Percentage of population engaged in tertiary work
8	Health	Percentage of population having access to private health facility
9		Percentage of households having their own toilet facility
10		Percentage of households having safe drinking water facility
11	Family Assets	Percentage of households having motor car
12		Percentage of households having tractor
13		Percentage of households having water pump
14		Percentage of households having TV
15		Percentage of households having cable connection/dish antenna
16		Percentage of households having cooking gas
17		Percentage of households having fan
18		Percentage of households having flour mill
19		Percentage of households having solar lamp
20	Housing Infrastructure	Percentage of households having pucca house
21		Percentage of households having rooms two or more
22		Percentage of households having separate kitchen
23		Percentage of households electrified

Analysis and Findings:

With the help of Z-score method, composite index has been derived for all 23 development indicators. These indicators are further divided into five group viz. social, economic, health, family assets and housing infrastructure. The villages has been analysed and ranked accordingly with respect to above five groups of indicators. The indicators used have been given in the above table 2.

Levels of Development at Village level:

Athodna, Bankat, Purushottampur and Raitwari are the top performers in overall development group and villages of Tara, Untkata, Sukwan and Basaura are showing the lowest level of socio-economic development among all villages.

Besides the indicators of social, economic, health, family assets and housing infrastructure, the good overall development of the villages of Athodna, Bankat, Purushottampur and Raitwari are attributed to the following factors:
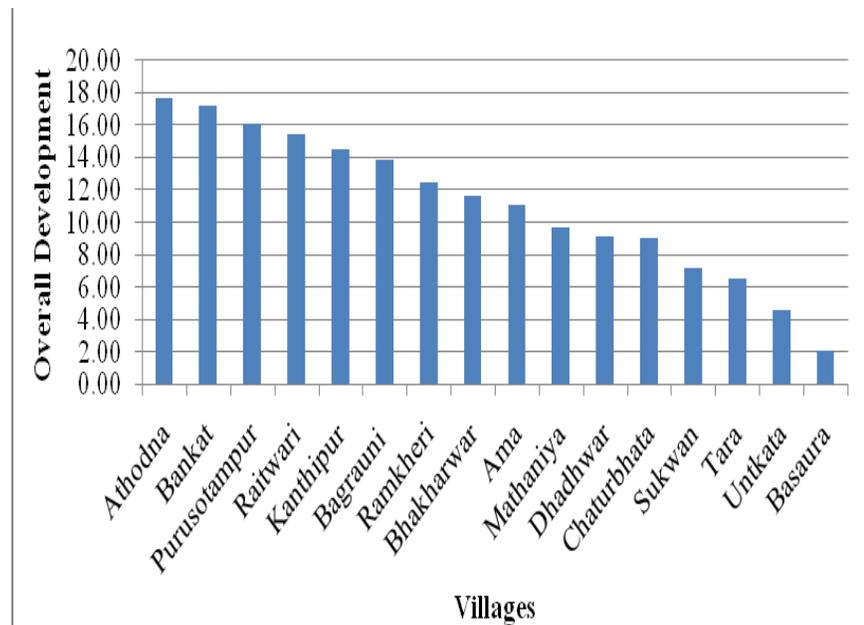
Vicinity of the village headquarters: Villages like Athodna, Bankat, Purushottampur and Raitwari are relatively more developed due to their vicinity with the district headquarters and blocks. Their closeness to developed town has put them in the development sphere where they could get access to the resources easily despite external efforts by government or other agencies. Further, it is also convenient for the administration to implement the government schemes and programs in the villages. For example, Athodna (Babina, Jhansi) has schools, health centers, sanitation facilities and other basic amenities whereas Basaura (Shahnagar, Panna) being far from the district headquarters is lacking in these areas. Also they remain within the reach of NGOs and other voluntary organizations who can fight for the under-developed areas with minimum efforts.

Better road connectivity: Athodna, Bankat, Purushottampur are having good road network which enables them to access other infrastructures as well. As a result, good level of development is observed in these villages.

Low percentage of tribal population: It has been observed that villages like Basuara are having high percentage of tribal population who are involved in primary activities and are unaware of the modern assets do not possess them, as a result they are unable to live a quality life as per the set parameters of the development.

Levels of Development at Village Level

Village Name	Composite Index Value	Rank
Athodna	17.70	1
Bankat	17.18	2
Purushottampu	16.13	3
Raitwari	15.43	4
Kanthipur	14.48	5
Bagrauni	13.88	6
Ramkheri	12.43	7
Bhakharwar	11.63	8
Ama	11.02	9
Mathaniya	9.67	10
Dhadhawar	9.08	11
Chaturbhata	9.07	12
Sukwan	7.17	13
Tara	6.52	14
Untkata	4.56	15
Basaura	2.04	16

Better implementation of government schemes and programs: Due to combination of factors like better road connectivity, vicinity to village headquarters and Non-Government Organizations some villages have been successful in obtaining the maximum benefits of the government schemes and programs. This has resulted in overall development of the villages.

Personal efforts of the Villagers and village headman: Due to high literacy rate and high percentage of Graduates, the villagers are active in some villages and put personal efforts to maximize the usage of available resources for development of the village.

Sense of belongingness for the ex-villagers: There are many instances where people left out village and migrate to other developed places. If they prosper and have sense of belongingness for their village they contribute in the development of the village by building community toilets, pucca houses, and drinking water facilities and help villagers to get exposure of outside world.

This help in building the positive attitude in the villagers who enthusiastically put their efforts in the personal growth as well as the development of the village.

Less Geo-political issue: Prevailing geo-political issues have been a major cause for the under development of some of the regions and even the villages. For example, Tara village in the Panna district is lying in the vicinity of Panna Tiger Reserve. Due to this Tiger Reserve and environment protection policy of Government of India, villagers of Tara village frequently face the loss of lives and property. This loss drags them behind the development and put village in least developed category.

Disparity:

Disparity is the state of being unequal and it is a visible and noticeable difference. It generally refers to a difference which is unfair. Further, socio-economic disparity means differences in the various economic and social factors which influences living standard and overall well-being of the concerned. This indicates towards the differences in the level of development in the particular region.

In this chapter, magnitude of disparity has been assessed in terms of different sectors and specific indicators separately to predict the differences in the levels of socio-economic development at village level.

Table 3

Sector-Wise Magnitude of Disparity						
MEAN/ SD/CV	Social	Economic	Health	Family Assets	Housing Infrastructure	Overall
SD	0.82	0.94	0.97	0.96	0.99	4.60
MEAN	2.04	2.25	2.33	2.00	2.50	11.12
CV	40.06	41.88	41.77	47.98	39.69	41.34

There is a disparity of 41.34 percent in the overall development of the villages of different districts of Bundelkhand region. It is observed that the said percentage of disparity is evenly distributed in all the sectors of development. For example: Social, Economic and health sectors have recorded a disparity of 40.06, 41.88 and 41.77 respectively and family assets and housing infrastructure are showing a disparity of 47.98 and 39.69 respectively (Table V.07). The results

are not showing a definite pattern of disparity among the villages. So, it is inferred from the above data that inter-sectoral disparity alone has failed to predict the root cause of under development in the villages. Thus, it becomes necessary to look at indicator wise disparity.

Conclusion:

The composite index of development and individual indicators values has provided insights to the development pattern of the selected villages. Further, the calculation of disparity has given information about the prevailing gap between the different sectors as well as indicators. As the aim of the sampling of the villages was to check whether outcomes of secondary data are being replicated at the village level or not. The findings of primary data analysis indicates that Athodna, Bankat, Purushottampur, Raitwari are comparatively developed villages which are located in the Jhansi, Chitrakoot, Panna and Sagar respectively. While the least developed villages are Basaura, Untkata, Tara and Sukwan which are situated in the districts of Panna, Sagar, Panna and Jhansi respectively. It can be reasonably concluded that the development levels of district does not find any replication at the village level. For example, Purushottampur and Tara are the villages in the Panna district. One of them is highly developed and other is the least developed. Whereas Panna district is one of the least developed villages in Bundelkhand region. Similarly, Bankat is a highly developed village in the Chitrakoot district, while Chitrakoot itself is a least developed district in the region. On contrast, Jhansi is one of the highly developed districts of Bundelkhand region and Sukwan is a village in this district which is showing least development. Similarly, Untkata is one of the backward villages in the Sagar district and this district is ranked high among the districts of Bundelkhand. So, it can be certainly argued here that district level development depends on other factors than the factors influencing the village level development. District level development depends on the sectoral indicators which were considered under secondary data but this is not the case with villages. The only factor which seems to influence the levels of development of villages is their distance from the district headquarters or relatively developed towns. Nearer the village to the district headquarters, more is the level of development.

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