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Perspective of Development Disparities in Bankura District, West Bengal

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Abstract: Regional disparity is a worldwide phenomenon which exists even in various developed countries. The co-existence of such condition in the developing and less developed nations or a region within a nation is known as regional disparity or regional imbalance. The regional disparity may be total or partial i.e. it may be intra-state or inter-state, it may be intra-district or even it may be a Block. The district Bankura is situated in the western part of West Bengal. At present, it is the fourth larger district of the state in respect to its size. The district has 3596,292 populations (2011) which share 3.94% of the state total population and is characterized by a predominance of the rural population. Out of the total population of the district, 86.52% live in rural areas and are dependent mostly on agricultural pursuits. Out of 3828 Mouzas, 569 are considered as a backward. The District holds a distinct type of physical characteristics and is described as connecting link between the plains of Bengal on the east and the Chotanagpur plateau on the west. Geographically, the district has been distinguished in terms of its distinct physiographic units. The Western part differs from the eastern part in terms of physical as well as development perspectives. This paper attempts to explore the correlation between the three physiographic divisions and the spatiality of human development by using geospatial technologies.

Keyword: Regional Disparities, Rural Development, Human Development, Spatial Variation, Geospatial Techniques.

INTRODUCTION

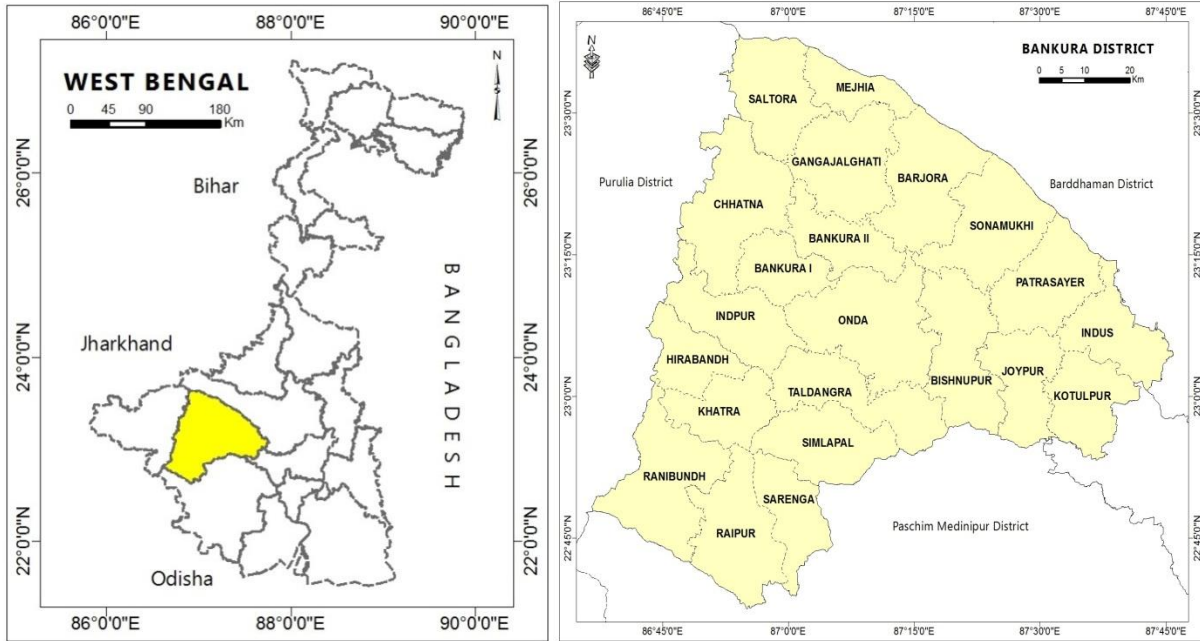
The concept of human development embraces every development issue, including economic growth, social investment and people's empowerment; provision of basic needs and social safety nets, and political and cultural freedom. The objective of all the intervention is to bring in human development. The human development is not only a matter of social well-being but its conceptual root is found in a very common philosophical dualism in geography that is Determinism and Possibilism. Although the development of science and technology have cleared most of the natural resistance in the way of human civilization but there are also some physical, social and as well as cultural determinants that control the human development of a region. It is proved that human development social progress and economic growth of an area are not equally balanced because of various types of factors. Some of the communities are deprived than others, even some of the development plans working in a region are unable to minimize the intra-regional disparities in human development.

Objectives

The objective of the present research work is to investigate the intra-district disparity of human development in Bankura district of West Bengal and to find out the role of different physical, social and infrastructural factors influencing these regional imbalances of human development of the district.

The study area

Bankura, the fourth largest district of West Bengal is located in the western part of the state, which is popularly known as *Rarh*. It forms a part of the Bardhaman Division and is situated between 22°38' to 23°38' north latitudes and 86°36' to 87°47' east longitudes. It covers an area of 6882 km² and accommodates 3192695 no of people (District Census Handbook, 2001). It is bounded by PaschimMedinipur in the south, Puruliyain the west, Bardhaman, and Hugli district in the north and east respectively. In shape, it resembles an isosceles triangle wedged in between Puruliya and Bardhaman, with its apex nearly opposite to Raniganj and with an irregular baseline resting on PaschimMedinipur and Hugli. The district has undulating topography in the western part and its eastern part is characterized by lower alluvial plain. The district falls under the tropical monsoon climatic region. The district is drained by Damodar, Darakeswar, and Kangsabati rivers along with their tributaries of which Gandeswari, Silai and Kumari deserve special attention.



DATABASE AND METHODOLOGY

The Study has been entirely made on secondary data and sources are District Statistical Handbook -2012-2014 of Bankura District. Census Handbook (2001) Levels of development at the block level, and factors leading to the deprivation have been examined using deprivation method. Development Index has been calculated from for Educational index-(i) No. of Primary School/10000population(ii) No. of High Schools/10000 population (iii) No of Higher Secondary Schools/10000 population; (iv)Female literacy rate in percentage; and(v) Pupil teacher ratio Primary and Secondary level. For Health index,(i) No of health centre /10000population, (ii)No of ICDScentre /10000population,(iii)No. child immunisation /10000population , (iv)No. of Family Welfare Centre/10000 population;(v)No. of registered doctors/10000population, I have been considering. Likewise (i) No. of main worker /10000 population, (ii)No. of commercial bank /10000population (iii)Percentage of net-sown area to total area, (iv)Cropping Intensity in percentage, (v)No. of marginal worker /10000 population, I have been accepted. Similarly for Infrastructural index-(i) No of Post Office /10000population, (ii)No. of Fair Price Shops /10000 population, (iii)percentage of village electrified to total electrification,.(iv)Percentage of the village with tap water facility.(v)No. of registered bus routes are considered.,for Social index-(i) Percentage Scheduled Cast population(ii)No. of BPL family to total household(iii)Female work participation ratio, (iv)Gender-Gap in literacy in percentage (v)Female work participation ratio are some other considerations. To measure deprivation, the Development Index (DI) is constructed in five steps.

The first step has been taken to select proxy indicators (I) which are subdivided into different indices (j). The second step has been followed to define a measure of deprivation that a region suffers in each selected variable. To obtain the index of deprivation, the following mathematical equation has been used:

$$I_{ji} = (Maxi - X_{ij}) / (Max - Mini)$$

Where, I_{ij} denotes Deprivation Index of the i th variable at j th unit of study, $Maxi$ and $Mini$ denotes the maximum and minimum values of an i th variable in the series respectively, and X_{ij} denotes the original value of i th variable at j th units of study.

The third step is related to the Average Deprivation Index by taking a simple average of all indicators using following equation as:

$$C_{ij} = \sum_{i=1}^n I_{ij} / n$$

Where C_{ij} denotes the index of average deprivation of j th unit of study.

The fourth step obtains the Development Index (DI) and is defined as the absence of deprivation, which mathematically is as:

$$DI = 1 - \left(\sum_{i=1}^n \frac{C_{ij}}{n} \right)$$

Where DI denotes the development index at a j th unit of study.

Finally, overall combined development score of each Block is derived from

$$\sum DI / N$$

Where N is a total number of unit of study.

The preservation of real variations among the different observation is the primary objective of the method for computation of Development Index. The categories are High, Medium and Low developed regions; the standard deviation grouping technique is applied based on the combined score of all the selected variables. The visual presentation of regional generalization has been made with cartographic techniques using MapInfo Professional (Version 10.5) and for statistical analysis, Microsoft Excel 2010 and SPSS (Version 17.0) have been used.

RESULT AND DISCUSSION

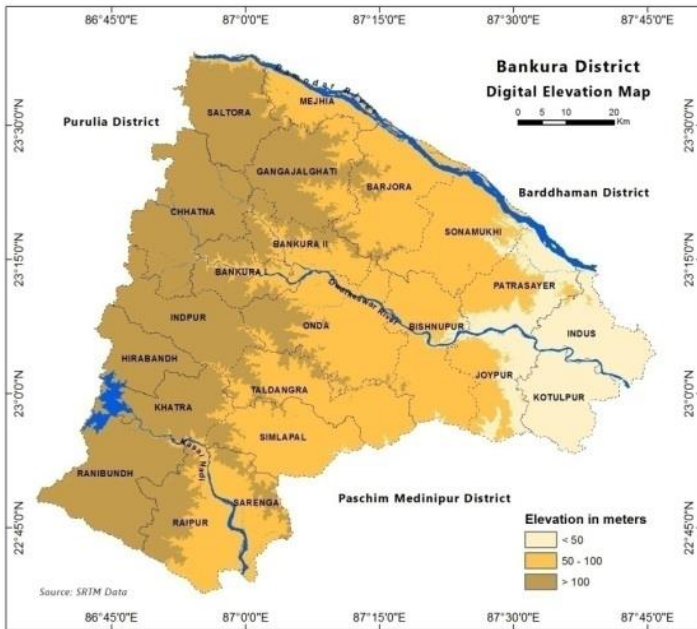
Physiographically, the district of Bankura is situated on the eastern margin of the Chhotanagpur Plateau and the western margin of the Bengal plain, covering a considerable part of the Rarh Plain. Even an empiric observation shows dissimilarities in the characteristics of land and people and their differential development. On its west, the district of Puruliya also resembles plateau character but with the absence of true plain region and accommodates more percentage of tribal people in its total. On its south, the district of PaschimMedinipur accommodates more forested tracts and shares more tribal people in its total. On its east, the district of Hugli shows clear differences in its land and people with that of Bankura. Burdwan, located on its north is rich in agriculture and industry, being the champion in rice production. Thus the district bears differential characters in its physical characteristics, stepping down from west to east as well as productivity of soil and availability of water- the basic resources, which may have effects on the zonal or regional disparities in development. On the Basis of Physiography, the entire district divided into three main regions in this present study. These regions are

Western Plateau fringe part: This is the area adjoining to the Chotanagpur tableland lying immediately to the northwest of the district. The elevation gradually rises towards the west where the land is intersected with hillocks and broken up into low rides and valleys. Susunia and Biharinath hills are situated in this tract which have 1442ft and 1469ft height respectively.

Transitional Rolling Plain: The middle portion of the district basically is an undulating plain which gradually steps down to the east. This unit is mainly drained by Silabatariver and the Gandeswaririver.

Eastern Alluvial Plain: This unit is situated to the east of the district with gently sloping terrain and covering Joypur, Kotulpur, Indas, and PatrasairBlocks. The region is drained by the river Darkeswar. Basically, this part has low elevation and gentle or almost level slope. (Map No.1 and 2)

Map No.1



Map No.2

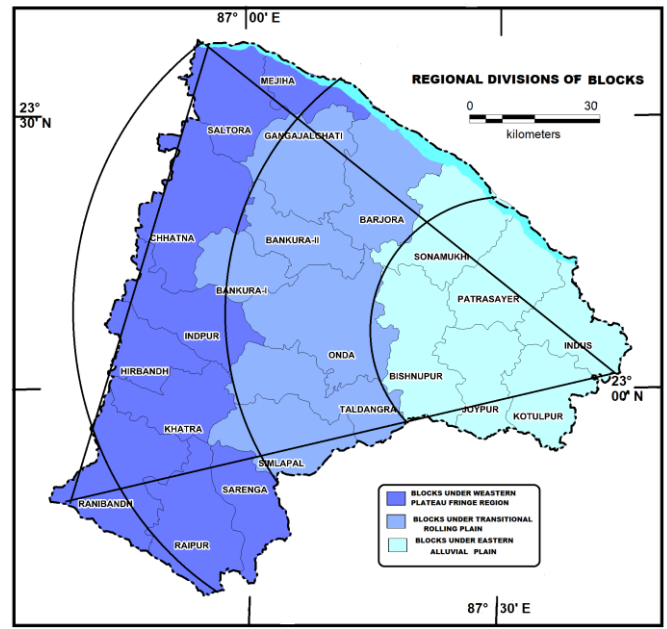


Table No.1 Regional Divisions of the District

Regions	CD Blocks	No. of Blocks
Western Plateau fringe Tract	Saltora, Mejia, Chhatna, Indpur, Hirbandh, Khatra, Raipur, Sarenga	9
Transitional Rolling Plain	Barjora, Gangajalghati, Bankura-I, Bankura-II, Onda, Taldangra, Simlapal	7
Eastern Alluvial Plain	Sonamukhi, Indas, Patrasayer, Bishnupur, Joypur, Kotalpur	6

Table No.2

Regionwise Development Index

Regions	CD Blocks	Education	Average	Health	Average	Economy	Average	Infrastructure	Average	Social	Average	Average Index	Average
Western Plateau fringe	SALTORA	0.35	0.350	0.48	0.390	0.35	0.400	0.29	0.360	0.51	0.470	0.40	0.400
	MEJIA	0.44		0.5		0.45		0.46		0.55		0.48	
	CHHATNA	0.38		0.36		0.43		0.34		0.41		0.38	
	INDPUR	0.39		0.38		0.25		0.32		0.44		0.36	
	HIRBANDH	0.41		0.35		0.48		0.4		0.48		0.42	
	KHATRA	0.27		0.4		0.39		0.37		0.46		0.38	
	RANIBANDH	0.29		0.3		0.3		0.42		0.46		0.35	
	RAIPUR	0.27		0.38		0.5		0.35		0.5		0.40	
	SARENGA	0.37		0.34		0.48		0.31		0.43		0.39	
Transitional Rolling Plain	GANGAJALGHATI	0.34	0.450	0.37	0.480	0.46	0.520	0.44	0.460	0.54	0.580	0.43	0.500
	BARJORA	0.44		0.57		0.53		0.49		0.63		0.53	
	BANKURA-I	0.67		0.67		0.67		0.59		0.67		0.65	
	BANKURA-II	0.47		0.58		0.55		0.42		0.56		0.52	
	ONDA	0.35		0.44		0.5		0.52		0.52		0.47	
	TALDANGRA	0.44		0.39		0.48		0.43		0.56		0.46	
	SIMLAPAL	0.47		0.37		0.46		0.36		0.6		0.45	
Eastern alluvian Plain	SONAMUKHI	0.45	0.490	0.52	0.520	0.55	0.530	0.48	0.510	0.46	0.520	0.49	0.51
	BISHNUPUR	0.6		0.46		0.5		0.56		0.56		0.54	
	PATRASAYER	0.46		0.52		0.5		0.57		0.61		0.53	
	JOYPUR	0.52		0.44		0.46		0.39		0.44		0.45	
	INDAS	0.42		0.56		0.55		0.36		0.52		0.48	
	KOTALPUR	0.5		0.62		0.61		0.67		0.54		0.59	

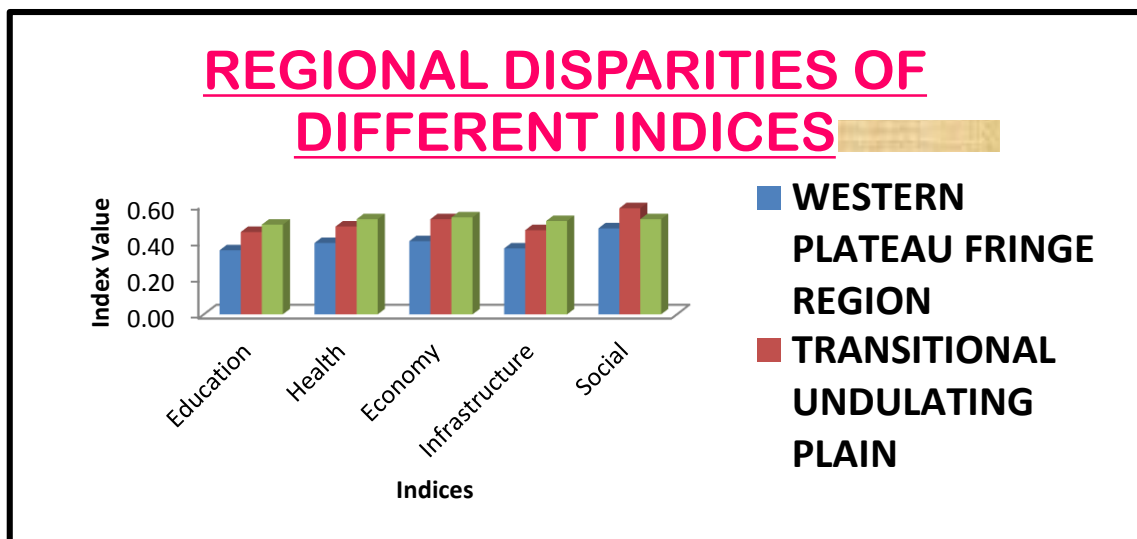
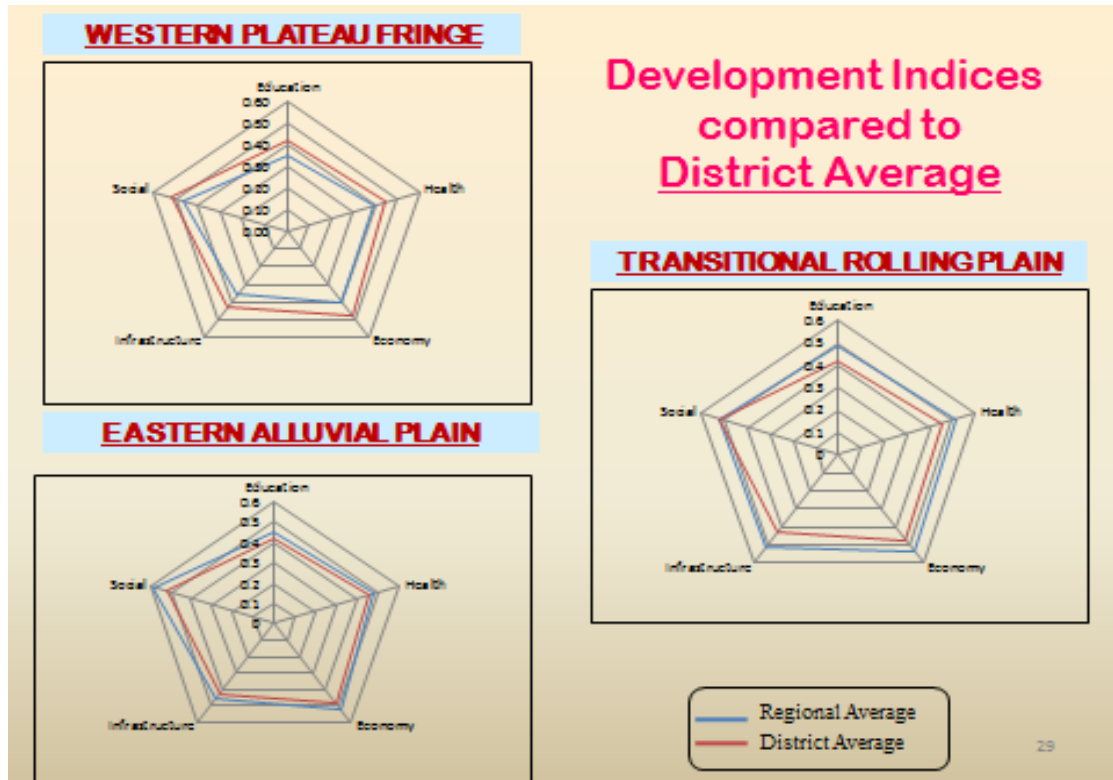


Table No.3 Region wise Comparison among Different Development Indices

DEVELOPMENT INDEX	WESTERN PLATEAU FRINGE REGION	TRANSITIONAL ROLLING PLAIN	EASTERN ALLUVIAL PLAIN
Education	0.35	0.45	0.49
Health	0.39	0.48	0.52
Economy	0.40	0.52	0.53
Infrastructure	0.36	0.46	0.51
Social	0.47	0.58	0.52



MAJOR FINDINGS

1. The analyses based on the quantitative and qualitative information result in clear disparities in the degree of development among the Blocks.
2. The disparity exists between and among the Blocks.
3. The Blocks grouped under Western Plateau Fringe region experience less development reflected by almost all indices, whereas the Blocks grouped under the eastern plain region experience comparatively more development reflected in similar indices. The Blocks grouped under the intermediate rolling plain experience intermediate status of development.
4. The section of the people with the social status of SC and ST receives less benefit of well-being compared to the section formed of General category.
5. The disparity signifies that the natural resources, the combination of land, soil, and water have direct control over the degree of development, The availability or access to those resources is coterminous with development. The degree of natural slope gradually diminishes to the east and slope of development comes down to the west.
6. The micro-level finding signifies that the absence or reduction in area under forest does not provide resources to the section of people previously dependent upon. It forces the section to be associated with marginal or non-worker. The points remember a researcher in Geography the strength of environmental determinism that points against dependency on techno-centrism.
7. Deprivation is more prominent among the weaker, economically and educationally section of the people, mostly accommodated by the western zone.
8. One or more infrastructural development may not be able to uplift the position, the western region lags still behind, though have excellent road facilities.

Conclusion

Varieties of forces and factors have been resultant on the development disparity of the district with perceptible differences between and within the Blocks that can be minimized with the active implementation of economic and social justice to the unprivileged group.

REFERENCE

1. Bagchi, K.K., (2011), Regional Disparities in India's Socio-economic Development, New Century Publications, New Delhi.
2. Bandhopadhyay, A.K., (1968) Bengal District Gazetteers: Bankura, Govt. of West Bengal, Calcutta.
3. Banerjee, N. and Marjit, S. (ed), (2005), Development, Displacement and Disparity, Orient Longman Pvt. Ltd., New Delhi.
4. District Census Handbook, Bankura.2001, 2011, Govt. of India.
5. District Statistical Handbook, Bankura.2012, 2013, 2014, Govt. of West Bengal.
6. Hopper, P., (2012), Understanding Development Polity Press, Cambridge, UK.
7. Kalpagma, U. and Arunachalam, J.,(ed) (2008), Rural Women and Development in India, Rawat Publications, India.
8. Key, D., (1977), Development and Underdevelopment-A Marxist Analysis, the Macmillan Press Ltd., London.
9. Kumari, A.,(2006) (ed), Balanced Regional Development in India, New Century Publication, New Delhi.
10. Nachimuthu, V., (2009), Regional Economic Disparities in India, New Century Publications, New Delhi.

11. Nayak, N.C. et.al.,(2007), Economic Reforms, Human Welfare and Sustainable Development in India, New Century Publication, New Delhi.
12. O'Malley, L.S.S., (1908, Reprint 1995), Bengal District Gazetteers, Bankura, Govt. of West Bengal, Calcutta.
13. Rao, D.P.,(ed)(2011), Human Development and Socio-Exclusion, Serial Publication, New Delhi.
14. Ront, H.S., and Panda, P.K. (ed), (2009) Human Development: Dimensions and Strategies, New Century Publication, New Delhi.
15. Roy, D., (2013), Development Economics, Oxford University Press, New Delhi.
16. Sen, A., (1988), Concept of Development in Handbook of Development of Economics Volume-1, ed by Chenery, H., and Srinivasan, T. N., Elsevier Science Publishers B.V.
17. Singh, A.K. and Singh A. P. (2012), Social Development: Perspective, Issues, and Dimensions for India, Global Research Publication, New Delhi.
18. Sinha, B.R.K.,(ed), (2009), Population, Environment and Development, New Century Publications, New Delhi.
19. Soubbotina, P.T. and Sheram, A.K. (2000), Beyond Economic Growth, the World Bank Report, New York.
20. Thakur, R., et.al. (2014) Resources and Regional Development in India, Rawat Publications, New Delhi.

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