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Status of the Working Population and its Impact on Socio-Economic Condition: A Case Study of Murshidabad District, West Bengal

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Abstract

Worker profile is perhaps the clearest indicator of the overall backwardness of any developing area. Low work participation rate generally force to live people in an economically backward region in urban as well as rural. The present paper is an attempt to analyze the status of the workers and its impact on socio-economic conditions in Murshidabad district, West Bengal and also explore the correlation with different socio- economic parameters for sustainable development. Based on the blockwise secondary data obtained from the Census of India, residual analysis has been done with 'population' as independent variable and 'total worker' as dependent variable. The results show that the mean work and non-work participation rates of the study area in northern and southern part are respectively 39.49% & 33.5% and 60.51% & 66.5%. The residual map shows that the southern part of the study area faces the problems of year round work deficit, while the northern part of the district show a comparatively good condition of work facilities because of agricultural and industrial infrastructure.

Introduction

Development of a mouza is a complex socio-economic process that aims at helping its entire population (Mandal, 2001). Rural economy is an integral part of the Indian economy with three-quarters of people below the poverty line reside in rural areas (Rajani, 2011). Rural people faces numerous problems in terms of personal consumption and access to education, health care, potable water and sanitation, housing, transport, and communications. Persistently high levels of poverty, with or without overall economic growth, have contributed to rapid population growth and rural-urban migration. Distorted government policies, such as penalizing the agriculture sector and neglecting rural (social and physical) infrastructure, have been the major contributors to the backwardness of rural areas (Khan, 2001).

Murshidabad district basically relies on agriculture; hence, no major industries are there. Mulberry cultivation and silk worm production, peeling of silk and its weaving are highly developed in the district. Historically, silk of Murshidabad district is well developed (Mukherjee, 1990). Due to the influence of East India Company it got a major thrust. But after industrial revolution in England, Murshidabad district received a major setback due to the availability of cheaper and more durable machine made textiles (Mukherjee, 1992). It adversely affected the mulberry production but still it continued to be an important source of economy. Small scale industry of ivory carving in Khagra and Jiaganj is also an important economic activity since the time of Nawab. In Samshergunj and Suti blocks thousands of families are engaged in 'Beedi' manufacturing (District Census Handbook, 2011). Other than silk, Khadi and Muslin industry of the district also hold a very significant position. Among the 280 active Khadi societies in West Bengal, 96 are located in Murshidabad district. Khadi cloth and apparel are even exported. The district is also associated with several small-scale household industries like jute products, ornament making, manufacturing and polishing of brass utensils and ivory products (Saeed, 2003). All these are well developed mainly in the northern part of the district.

Paddy and jute are the major crops of the district. Wheat, oilseeds, pulses, jute and potato are some of the other important crops (Murshidabad.net 2013, District Census Hand Book, 2011). In the last few decades, the production of jute has almost doubled; it is mainly cultivated in the northern and eastern part of the district, but paddy cultivation is well developed in the southern part. To understand the mouza wise

worker pattern and structure in Murshidabad district and also to find out the causes of diversification of economic structure, the paper analyzes and examines the C.D. Blockwise share of workers, non- workers and total population of Murshidabad district.

Objectives

The major objective is to extract information about the spatial pattern of the residuals of working population as well as the the distribution of dependent population in the district of Murshidabad.

Study Area

Murshidabad district, West Bengal is located on the left bank of the river Ganges and extends from 24°50'20" N to 23°43'30" N latitudes and 88°46' E to 87°49'17" E longitudes covering an area of about 5342 sq. km. (District Census Handbook, 2011). The district has 26 C. D. Blocks and 2249 mouzas. It borders West Bengal's Malda district to the north, Jharkhand's Sahebganj district and Pakur district to north west, Birbhum to west, Bardhaman to the south-west and Nadia district due south. The international border with Bangladesh's Rajshahi division is on the east (Fig. 1)

Methodology

The study is based on the secondary data obtained from the District Primary Census Abstract of Murshidabad from Census of India, 2011, C.M.O.H. Office, Murshidabad and the Office of the Director, Bureau of Applied Economics and Statistics, Govt. of West Bengal, various books, articles etc. The C. D. Block has been taken as a unit of study, for analysis and mapping purpose. Data thus collected has been analysed using residual technique, and cartographically represented by choropleth method. The total population has been taken as independent variable (x) and total worker as dependent variable (y). The linear regression model of the form Yc = a + b.x has been solved using MS Excel. The magnitude of residual has been computed as (y - Yc) that may be both positive and negative. The proportion of dependent population has also been computed as a percentage of total population and accordingly mapped in order to associate with the pattern of working population.

Results and Discussion

While the total population refers to the entire population inhabiting the district, working population consist of only those persons who could participate in economically gainful activities likes self employed, business people, labour and salaried employees etc. (Table -1 and 2 and Fig. 2). It is observed that out of 26 C.D. Blocks positive scores are found in 8 C.D. Blocks and negative in 18 C.D. Blocks of Murshidabad district and may be divided into 6 different zones, as follows:

1)Areas of High Positive

Six C.D. Blocks fall under this category, namely Farakka, Samsherganj, Suti-I & II and Raghunathganj-I & II. These blocks are situated in the northern part of Murshidabad district and it can be accounted for by the adequate supply of water through feeder cannel, flat topography, fertile soil, year round agricultural activities in khadar region of Ganga or Padma river and presence of small-scale industries.

2)Areas of Medium Positive

Lalgola C.D. Block belongs to this category. Adequate water supplies through cannel system, flat terrain and fertile soil have made this possible.

3)Areas of Low Positive

This zone includes the C.D. Block of Murshidabad-Jiaganj and is attributed to adequate supplies of water through different rivers for irrigation and fertile alluvial soils.

4)Areas of Low Negative

Bharatpur-II and Domkal C.D. Block belong to this category. These two blocks are situated in the southern and south eastern part of the district. Traditional farming methods along with lack of proper irrigation facility are characteristic features of this zone.

5)Areas of Medium Negative

Eight C.D. Blocks, viz. Baharampur, Beldanga-II, Nabagram, Bharatpur-I, Hariharpara, Jalangi, Raninagar- I and Raninagar-II belong to this category. It is characterized by low levels of soil fertility, inadequate supply of irrigation water, and lack of household industry.

6)Areas of High Negative

Eight C.D. Blocks fall under this category, viz. Sagardighi, Bhagabangola-I and II, Kandi, Khargram, Barowa, Beldanga-I and Nawda. Undulating topography, low soil fertility status in older alluvial and red soils, lack of industries and lack of facilities for year-round cultivation and others works are mainly responsible for high negative.

Economy in the southern part of the study area is highly diverse. Most of the work forces are devoted to agriculture in rural areas and tailoring, embroidery, construction and transport workers in urban sectors. The southern part of the district is relatively poor than the northern part with 79% of the total work force in primary sector, 6% in secondary sector and the remaining 15% in tertiary sector. The proportions in secondary and tertiary sectors are far below the state average.

Spatial Pattern of Dependent Population

Dependent population refers to the children and elderly who can not be engaged in productive occupations. The more the proportion, the less the per capita production, income or profit and less the degree of development. It also implies lower growth rate of population, lesser share of child population, higher mortality and lesser life expectancy. Based on its proportion, the district has been divided into 4 zones, as follows (Table -3 and Fig. 3):

***Low Proportion*:** This category consists of seven C.D. Blocks, namely Murshidabad- Jiaganj, Berhampore, Hariharpara, Kandi, Bharatpur-I, Bharatpur-II and Barowan. The

percentage of dependent population is the lowest in Barowan (14.97).

***Medium Proportion*:** This category includes ten C.D. Blocks of Murshidabad district, viz, Raghunathganj-I, Nabagram, Khargram, Bhagabangola-I, Raninagar-I, Raninagar-II, Domkal, Jalangi, Nowda and Beldanga-II.

***High Proportion*:** Only one C.D. Block belongs to in this category i.e. Beldanga-I, which has 19.97% dependent population.

***Very High Proportion*:** Three C.D. Blocks fall under this category, namely Farakka, Samsherganj and Suti-I. The percentages of dependent population to its total populations are above 20%.

Conclusion

Thus, the spatial pattern of working population percent varies from one part of the district to another. Positive residuals or surplus workers are mainly found in the northern part of the district while negative residuals cover the southern part. Accordingly, proportion of dependent population varies spatially from one part of the district to another. Due to relatively better soil and irrigation facilities, northern part of the district is relatively resourceful in agriculture. Recently, Govt of West Bengal has taken measures to improve economic infrastructure in the district and some positive changes have been found in the south western part. As year round job facility is inadequate, proportion of marginal workers remains at a higher level but main worker percent is considerably low. The backward areas essentially need higher economic input not only for economic development but also for reduction of regional disparities in the study area.

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Table - 1: Computation of Residuals of Working Population

Total Population ("000)	Worker Population ("000)	Yc = 0.361.x + 0.140	Residual (y – Yc)
446.887	154.351	161.869	-7.518
319.322	106.279	115.703	-9.424
250.458	83.904	90.781	-6.877
226.859	73.947	82.241	-8.294
257.571	88.37	93.355	-4.985
220.145	70.41	79.811	-9.401
273.332	90.057	99.059	-9.002
257.466	84.561	93.317	-8.756
172.702	57.972	62.641	-4.669
176.368	62.551	63.968	-1.417
274.111	120.946	99.341	21.605
284.072	122.491	102.946	19.545
179.908	78.903	65.249	13.654
278.922	128.606	101.082	27.524
195.627	85.342	70.938	14.404
265.336	116.317	96.166	20.151
335.831	111.808	121.678	-9.870
310.461	117.018	112.496	4.522
202.071	64.179	73.270	-9.091
158.024	48.464	57.329	-8.865
234.565	85.53	85.030	0.500
227.586	78.046	82.504	-4.458
363.976	128.298	131.863	-3.565
252.477	86.017	91.512	-5.495
189.105	63.302	68.578	-5.276
190.885	64.316	69.222	-4.906

Table -.2: Distribution of Residuals

Nature	Residual Values	Name of Blocks	No. of Blocks
High Positive	> 8	Farakka, Samsherganj Suti-I, Suti-II, Raghunathganj-I, Raghunathganj-II	6
Medium Positive	4 to 8	Lalgola	1
Low Positive	0 to 4	Murshidabad-Jiaganj	1
Low Negative	0 to -4	Bharatpur-II, Domkal	2
Medium Negative	-4 to -8	Baharampur, Beldanga-II, Nabagram, Bharatpur-I, Hariharpara, Jalangi, Raninagar- I, Raninagar-II	8
High Negative	> - 8	Sagardighi, Bhagabangola-I and II, , Kandi, Khargram, Barowa, Beldanga-I , Nawda	8

Table -3: Distribution of Dependent Population, Murshidabad district, 2011

Blocks	Total Population	Total Dependent Population	% of Dependent Population to Total Block Population
Baharampore	446887	73023	16.34
Beldanga-I	319322	63775	19.97
Beldanga-II	250458	45299	18.09
Nowda	226859	37534	16.55
Hariharpara	257571	38554	14.97
Kandi	220145	35091	15.94
Khargram	273332	47657	17.44
Burwan	257466	36560	14.20
Bharatpur-I	172702	27283	15.80
Bharatpur-II	176368	28568	16.20
Farakka	274111	57573	21.00
Samserganj	284072	65847	23.18
Suti-I	179908	36353	20.21
Suti-II	278922	59634	21.38
Raghunathganj-I	195627	33275	17.01
Raghunathganj-II	265336	52642	19.84
Sagardighi	335831	65591	19.53
Lalgola	310461	58572	18.87
Bhagwangola-I	202071	35142	17.39
Bhagwangola-II	158024	30137	19.07
Murshidabad-Jiaganj	234565	36890	15.73
Nabagram	227586	38004	16.70
Domkal	363976	60139	16.52
Jalangi	252477	43037	17.05
Raninagar-I	189105	31910	16.87
Raninagar-II	190885	33076	17.33

Source: Census of India, 2011, Govt. of India

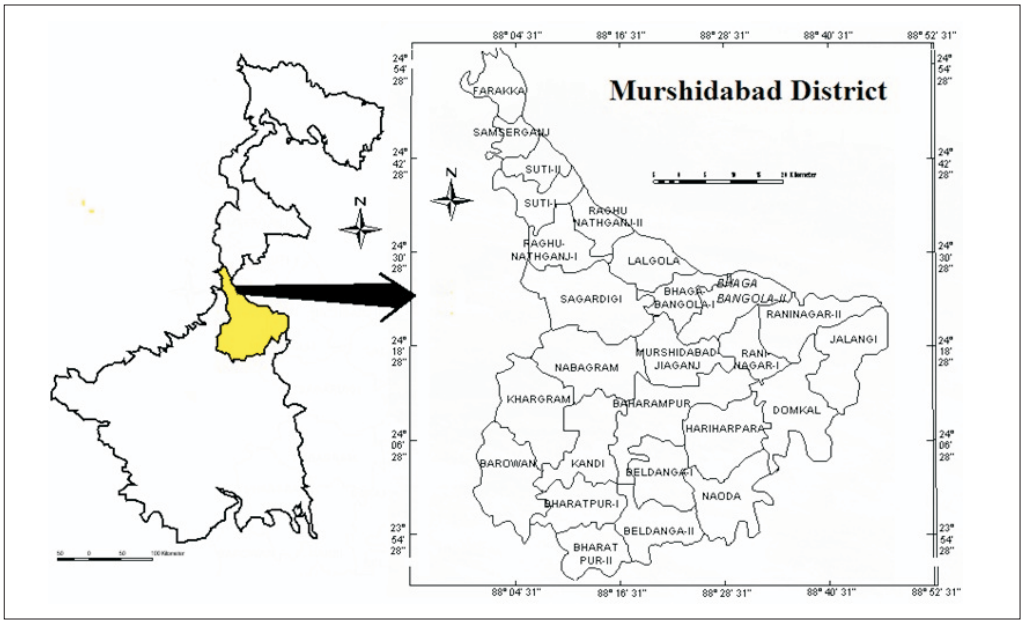

Fig. 1: Location of the Study Area

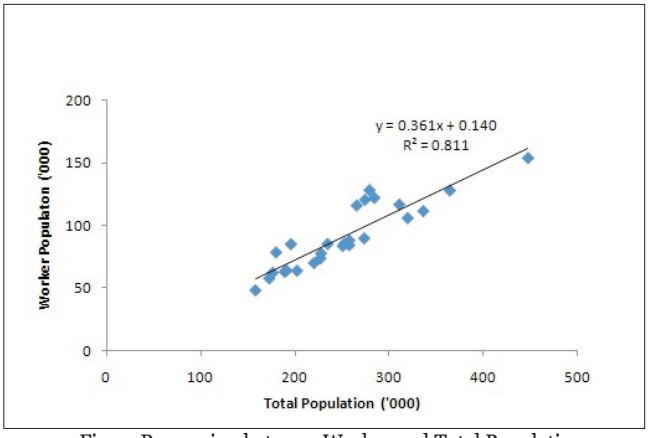

Fig. 2: Regression between Worker and Total Population

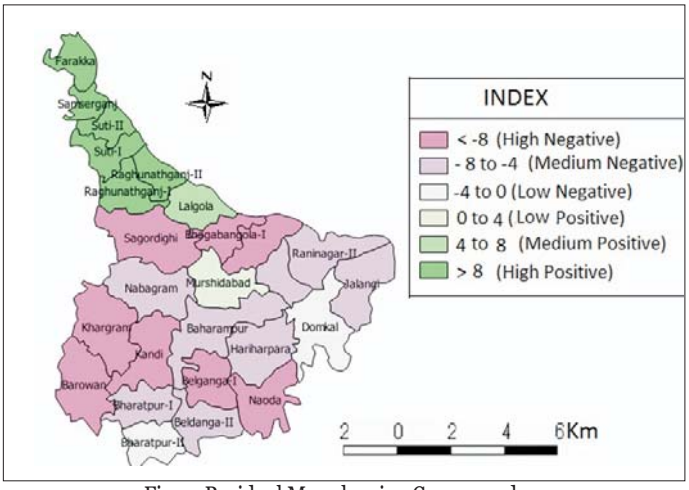

Fig. 3: Residual Map showing Correspondence between Workers and Total Population

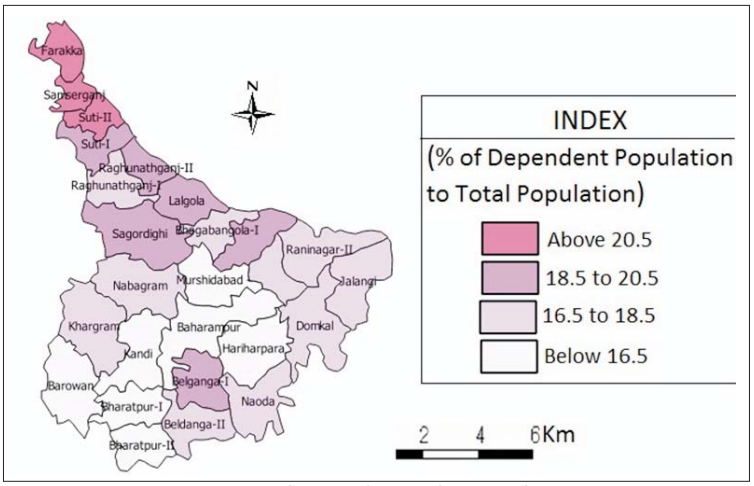

Fig. 4: Distribution of Dependent Population

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