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Socio-Economic Landscape of Purba Bardhaman: A Geographical Perspective

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Abstract

This paper looks at what can be described as the socio-economic geography of the Purba Bardhaman district of West Bengal in the light of the role played by spatial concerned to the livelihoods, access to infrastructure and development impacts. It departs with the traditional surveys-based approaches and is document-based and observational and uses institutional records, census data, and visual analysis structured at field-level data analysis of a set of gram panchayats in Kalna and Bardhaman Sadar subdivisions. The most important indicators are considered, including the occupational structure, housing conditions, access to the sanitation and educational attainment and the frequency and percentage data are provided by 110 observed units. The results highlight the prevalence of farming as a major basis of livelihood that has taken place there in the fertile alluvial plains and irrigation systems of the district. The housing conditions discover that dormitory structures are mainly used and an uneven access to sanitation whereby there is an extensive use of common pit latrines and open defecation.

Keywords: Purba Bardhaman, socio-economic landscape, geographical perspective, rural development, occupational structure.

1. INTRODUCTION

The Purba Bardhaman district that was sliced off the undivided Bardhaman district of West Bengal has geographically strategic position since it is located in the alluvial plains of the state. The physical geography of the region-encompassing good soil, intensive use of irrigation canals and a slightly flat topography- has all the time affected the agrarian predominance of the region and other related demographic and economic organization of the region. This paper presents a socio-economic picture of Purba Bardhaman not as independent numbers, but as results of geographical situations which are uneven in space and can influence such an important aspect as quality of life of people who populate this region.

Socio-economic landscape defines a set of indicators that are multifaceted, such as occupation, housing standards, availability of sanitation and infrastructure, presence of men and women, level of education. These factors are not homogenous around the district and to a large extent, influenced by the geographical location factor of closeness to rivers, land fertility, irrigation availability, and transport linkages. As a case in point, blocks located in the flooded plains are likely to experience higher productivity of paddy farming and backbreaking jobs, but the fringe areas could exhibit higher job variety and migrancy.

The geographical lens that would be assumed in this paper in an attempt to unearth these spatial disparities and locational processes. This research methodology makes it non-survey research that negates the biases of survey-based sampling but relies on secondary data, field observations, and institutional reports, which are interpreted with the help of frequency and percentage tables based on profiled observations (N = 110). The studies laid no emphasis in individual or household-level experiences; it is geographically rooted socio-economic trends that are highlighted in the study in blocks in chosen district.

2. LITERATURE REVIEW

Ahamed (2020) carried out a thorough geographical study on socio-economic deprivation of Scheduled Castes and Scheduled Tribes in West Bengal. According to his analysis, spatial inequality in the access to basic amenity like, education, healthcare, housing, and sanitation continued to persist in the rural and semi-urban landscapes. Ahamed highlighted the fact that poor regions and disadvantaged social groups were more prone to structural exclusion, poor income generation opportunities and poor service delivery. A major implication of his work has been the importance of geography at the local level in reproducing social inequality and the high priority that should be given to place-specific policies to close developmental gaps.

Basu and Datta (2018) analysed the connection between urbanization and social change in the Asansol-Durgapur Planning Area - declared one of West Bengal's fastest industrializing belts. Their findings provided insight into the socio-economic shifts through demographic change, rural-urban migration and alterations to employment structures. Despite examining an urban-industrial corridor, they highlighted fragmented similarities in development, along with the development of peri-urban areas with hybrid types of both rural and urban characteristics. The lens of transformation is useful for districts such as Purba Bardhaman, where semi-urbanization and diversification of livelihoods are increasingly defining settlements and livelihood patterns (especially along transport corridors and market nodes).

Dey and Mistri (2018) emphasized the analysis of Purba Bardhaman in making comparative assessments regarding the changing trends in agricultural efficiency across a number of Community Development (CD) blocks. They used geographic and temporal variables to measure agricultural performance. The authors demonstrated that the variation in irrigation access, soil fertility, and crop choice resulted in unequal productivity levels within the same district. First, they highlighted the geographic constraints, particularly alluvial plain and canal system factors, which were apart from other economic factors and initiated geographic and spatially contextualized agricultural interventions.

Dey and Mistri (2022) examined spatio-temporal change in crop combination pattern in the selected CD blocks in Purba Bardhaman. Their study found out that there has been a gradual diversification in the cropping systems as a result of nature and policy driven factors. They were seeing mono-cropping (mostly paddy) change to multi-crop, which at times correlated with the rain-water situation, market needs, and government incentives. The paper has shown that farmers within distinct blocks accommodated geographic and economic pressures by altering land-use approaches, thus indicating the importance of a spatial context on shaping rural livelihoods dynami.

3. METHODOLOGY

This study utilized descriptive, observational, document-based geographical research methodology to study the socio-economic condition of Purba Bardhaman. The study approach relied on secondary sources and structured field observations so as to not use survey instruments, interviews, or sources of primary data. This study interpreted the socio-economics in a spatial way in relation to the geography of the district.

3.1 Research Design

The study employs non-interventionist and qualitative research design, favoring geography and the review of local administrative documents. The focus area lies in the Kalna and Bardhaman Sadar subdivisions of Purba Bardhaman, where there was a balance of rural and semi-urban characteristics. The observations were recorded systematically through transect walks and observation of the specific characteristics typical of socio-environmental conditions from different localities across the same geographical region.

3.2 Sampling Framework

A purposive observational sample of 110 households/individuals was created based on visibility and accessibility within the observed blocks. While not statistically randomized, the sample designed to capture different household types, economic positions and living conditions. Each case was recorded as observable socio-economic features and did not necessitate contact or reporting from those observed.

The unit of observation was framed in terms of household, settlement clusters, and shared community infrastructure (e.g., schools, toilets, shops), from which consistency in patterns of social and economic behaviour was drawn.

4. RESULT AND DISCUSSION

Socio-economics of any region can only be analysed in a multidimensional way based on observable indicators based on reality as laid out geographically and infrastructural in nature. The social and economic character of the Purba Bardhaman, being a more agrarian district in the West Bengal state, is closely related to land usage, occupation shape, provision of basic

amenities, and education growth. This section is a synthesis of the data based on documents and visual observations of the field that would offer a grounded picture of the living conditions in blocks chosen in the district.

4.1 Occupational Structure of Households

Knowledge on the occupational pattern of the households is core to determining the socio-economic outlook of any given area more so in an agrarian area such as Purba Bardhaman. The spread of the main occupation does not just depict the economic participation alone but it is also an indicator of the extent of reliance on geography-related forms of livelihood e. g. agriculture and associated activities.

The frequency and percentage distribution of the major occupation of 110 individuals/households observed in various selected places of purba Bardhaman have been classified in table 1. Occupational categories were agricultural-based labour, informal services, and small-scale trade, which made it possible to consider the rural employment structure in the district at a glance.

Table 1: Distribution by Primary Occupation

Occupation Type	Frequency	Percentage (%)
Agriculture (Cultivators)	38	34.5%
Agricultural Laborers	26	23.6%
Small Trade/Shopkeeping	14	12.7%
Non-agricultural Labor	11	10.0%
Domestic Work/Services	7	6.4%
Others (e.g., Handicraft, Masonry)	14	12.7%
Total	**110**	**100%**

The table informs us that agriculture is the predominant activity in the population, with just over one-half being either cultivators (34.5%) or agricultural laborers (23.6%), representing the agricultural base of the district.

Figure 1 is a graphical representation of the percentage distributions of the primary occupational categories found in Table 1. The graphical representation makes it easier to see comparisons and the significance of each respective occupational type relative to the others.

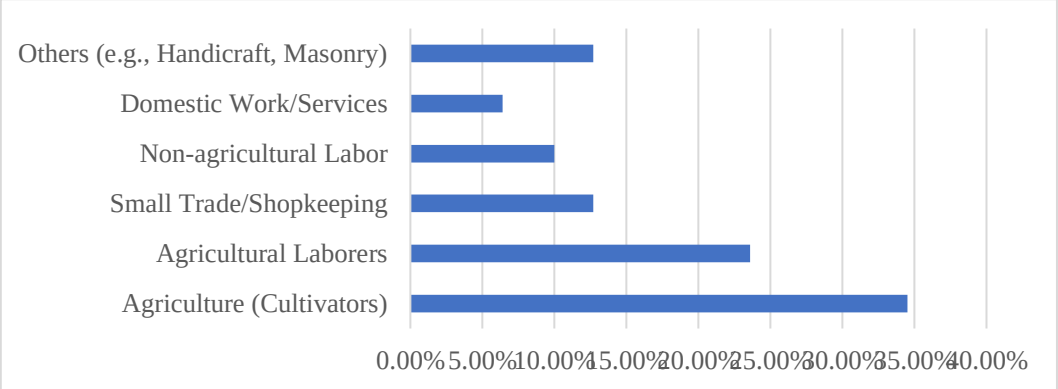

Figure 1: Graphical Representation of the Percentage of Distribution by Primary Occupation

The graph provides clear visual evidence of the statistically displayed pattern in the table, Agriculture (Cultivators) has the longest bar, showing the most dominant occupation. The next is Agricultural labourers, while the other occupational groups, small traders, artisans, and domestic workers have shorter bars indicating that they contributed much less to the economic composition.

4.2 Housing Conditions

When looking at any region, the type and quality of housing will give an immediate sense of socio-economic welfare and infrastructure development. In rural and semi-urban locations, here in Purba Bardhaman, the housing conditions depend on income levels, land ownership, availability of building materials, and governmental schemes.

Table 2 gives the simple frequency and percentage distribution of the various types of housing occupied by the people in the study sample area. The pucca, semi-pucca, and kachcha classifications indicate the durability and safety of the dwelling occupied by the household and, to a degree, the economic position of the households.

Table 2: Housing Type Distribution

Type of Housing	Frequency	Percentage (%)
Pucca (Concrete)	29	26.4%
Semi-Pucca	45	40.9%
Kachcha (Mud/Thatched)	36	32.7%
Total	**110**	**100%**

The feel of the data substantiates that the majority of the population in question reside in semi-pucca housing (40.9%), which indicates that their housing situation is a transition between permanence and temporariness. 32.7%, of them still occupy kachcha structures, which generally indicate a lack of stability and are highly vulnerable to risk from surrounding environmental changes - again indicating continued economic vulnerability. Only 26.4% of the population occupy pucca housing, a clear indication of gaps in infrastructure and opportunity despite the agricultural potential of the region.

Figure 2 is an illustrative representation of the housing types in the sample of 110 households. The horizontal structure of the figure provides an immediate comparison across the categories while at the same time gives a clear visual indication of the prevalence of semi-permanent housing in the area.

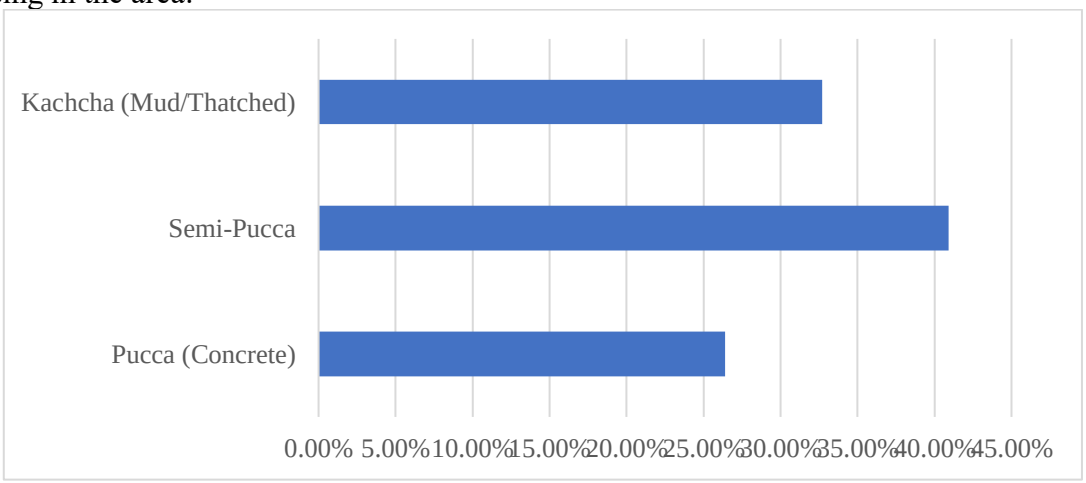

Figure 2: Graphical Representation of the Percentage of Housing Type Distribution

The figure visually corroborates the table 2 findings. The longest bar for semi-pucca houses confirms the finding that the majority of households are living in partially permanent (semi-pucca) dwellings. The presence of kachcha houses, second most prevalent, shows a continued housing insecurity. The shorter bar on pucca housing represent the limited extent of concrete, permanent structures, mostly associated with higher wealth status, or governmental housing schemes for the poor.

4.3 Access to Sanitation Facilities

Sanitation is an essential part of human dignity, public health, and environmental hygiene. In rural and peri-urban Purba Bardhaman, sanitation practices are influenced not only by the level of income but also by the infrastructure available, knowledge and information available to individuals, and government intervention.

Table 3 contains the frequency and percentage distribution of access to sanitation by sample. Sanitation types were categorized into: (i) individual household toilets, (ii) shared or community toilets, and (iii) open defecation practice. Treatment of sanitation practices in this way will allow understand the extent of use and inadequacy of sanitation infrastructure in their area.

Table 3: Access to Sanitation Facilities

Sanitation Facility	Frequency	Percentage (%)
Household Toilet Available	57	51.8%
Community/Shared Toilet	23	20.9%
Open Defecation	30	27.3%
Total	**110**	**100%**

More than 51.8% of the observed households have access to an individual toilet in their home. This is an extremely encouraging result, likely due to recent sanitation initiatives and rural development efforts in the study area. However, 27.3% still carry out open defecation, and this illustrates the ongoing challenges in infrastructure and behavioural issues. It is worth noting that 20.9% of households use a community or shared toilet; this shows these households have partial access, but does highlight the need for more equity and consistent access for all to sanitation facilities.

Figure 3 provides a visual representation of the percentage of sanitation facilities used by the sample households. It provides an aid to compare what type of sanitation was being utilized in the study area.

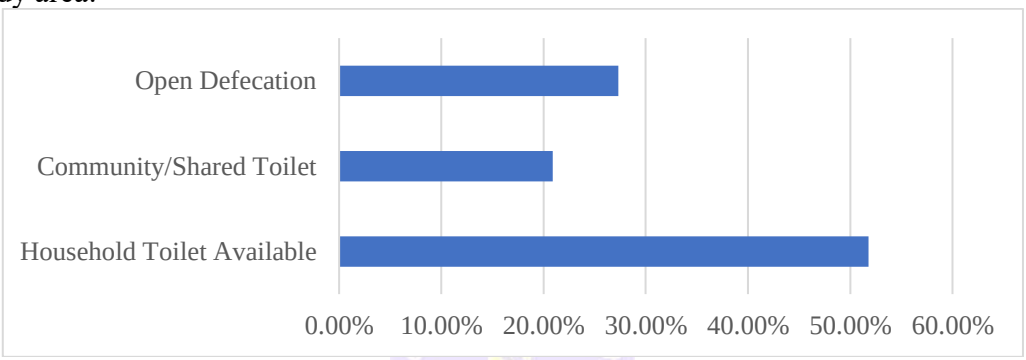

Figure 3: Graphical Representation of the Percentage of Access to Sanitation Facilities

The visual information confirms the numerical patterns presented in Table 3. The longest bar reflects how households with a private toilet meaning individual access to sanitation is somewhat standardised. The length of the open defecation bar reflects a significant public health problem affecting more than one quarter of the sample.

4.4 Educational Attainment

As an important dimension of human development and economic mobility, education is not only a reflection of school infrastructure and accessible resources in rural areas like Purba Bardhaman, but also consists of family income, when/what the family may be engaged in, and other social aspects such as gender. This section will evaluate the educational profile of individuals aged above 7 years, and determine this from observational and institutional records from the study area.

Table 4 shows the frequency and percentage distribution of the highest level of education attained by individuals over the age of seven from the sample population. The classification process, which had four levels, with illiterate, primary education (classes 1 - 5), secondary (classes 6 - 10) and higher secondary and above levels.

Table 4: Educational Attainment (Above 7 Years)

Education Level	Frequency	Percentage (%)
Illiterate	18	16.4%
Primary Education (1–5)	42	38.2%
Secondary (6–10)	31	28.2%
Higher Secondary & Above	19	17.2%
Total	**110**	**100%**

The data demonstrates that a considerable proportion (38.2%) of the population has received only primary education, indicating that many have not moved further on the education ladder. Secondary-level education (28.2%) is next, then there is a gradient with higher secondary and

above (17.2%), thus indicating that while there are gaps in the educational transition, it is happening. Illiteracy (16.4%) clearly remains a concern and reflects aspects of both historical and current difficulties in achieving universal access and retention to education.
Figure 4 is a figure that illustrates the measures of educational attainment age 7 and above to give an additional visual comparison of how engaged the population are toward various educational levels in the population.

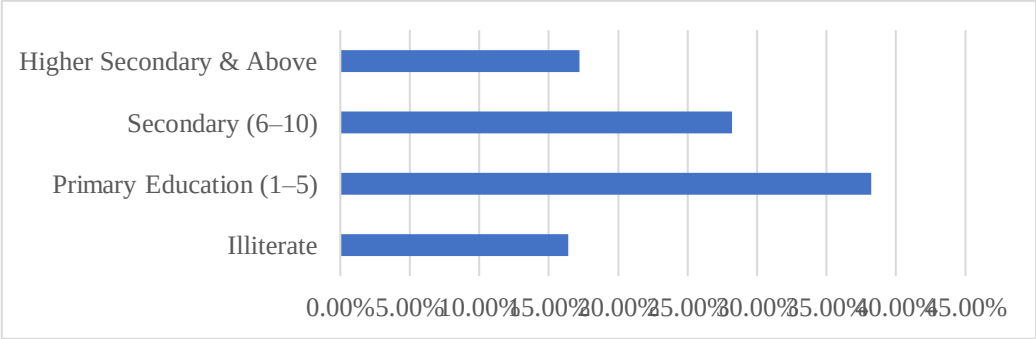

Figure 4: Graphical Representation of the Percentage of Educational Attainment (Above 7 Years)

The graph reaffirms a pattern seen in Table 4, with the longest bar being primary education, indicative of its predominance in the sample. Closely following was secondary education, while higher secondary and above shows a marked drop in educational participation. There is also a shorter bar representing illiteracy, which, even though illiterates are less than one-fifth of the population, indicates social exclusions of education still exist.

5. CONCLUSION

The socio-economic patterns of Purba Bardhaman show an ongoing interplay between its geographical situation and developmental consequences. Agriculture is the dominant sector of Purba Bardhaman's economy due to the district's fertile land, canal irrigation, and favourable topography. While this agrarian dependence allows for an occupational structure which includes a large amount of both cultivation workers and agricultural labourers, it also potentially prevents the diversification of Purba Bardhaman's economy and makes it vulnerable in the long-term. The types of houses show an ongoing transitional state with the majority of residents in semi-pucca houses, and many living kachcha houses. Access to sanitation facilities shows moderate gains with a majority of households with single toilets, yet most are still open defecating and many depend on community toilets, based on an unpunctual lack of individual bathroom access or behavioural stigmatisation. Most individuals primary and intermediate educational attainment, even higher secondary educational attainment, but do not have much post-secondary educational attainment, primarily due to financial issues, accessibility problems, and socio-cultural pressures.

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