



Understanding Spatial Disparities In Quality Of Rural Life: A Case Study Of Meja Block, Prayagraj

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Abstract: This study examines spatial disparities in the quality of rural life in Meja Block, Prayagraj. Using a mixed-methods approach, the research analyses three key dimensions: housing quality, economic conditions, and social well-being. Primary data from household surveys, alongside secondary sources such as Census reports, inform the study. GIS mapping highlights the spatial distribution of disparities. Results reveal significant intra-regional disparities. Findings emphasize the need for targeted policy interventions to bridge these gaps and promote sustainable rural development. The study contributes to the discourse on rural spatial inequalities and provides insights for evidence-based policymaking.

Index Terms - Rural quality of life, Spatial disparities, Sustainable rural development.

Introduction

Rural quality of life has emerged as a critical subject of inquiry in development studies, reflecting the complex interplay between socio-economic, environmental, and institutional factors that shape the lived experiences of rural populations. Despite global advancements in technology and infrastructure, spatial disparities between rural and urban areas remain pronounced, particularly in developing countries like India. Meja Block, located in Prayagraj District of Uttar Pradesh, serves as a compelling case study for understanding these disparities. Known for its predominantly agrarian economy and socio-cultural diversity, Meja Block faces multifaceted challenges ranging from limited access to healthcare and education to inadequate infrastructure and environmental degradation.

The significance of studying spatial disparities in rural quality of life lies in its potential to inform policies aimed at achieving equitable and sustainable development. While rural areas are often treated as homogeneous entities in policy discourse, ground realities reveal substantial intra-rural variations in quality of life. These variations, shaped by geographical, economic, and social factors, demand granular analyses that can unearth the nuances of rural life. The concept of rural quality of life has been extensively explored in academic literature, with researchers adopting diverse perspectives and methodologies. Early studies primarily focused on material well-being, emphasizing income levels, employment opportunities, and access to basic services such as healthcare and education (Nussbaum & Sen, 1993). However, contemporary frameworks have expanded the scope to include non-material dimensions such as social cohesion, cultural identity, and environmental sustainability (Marans & Stimson, 2011). These multidimensional approaches have provided deeper insights into the complex nature of rural life. Spatial disparities in rural quality of life have been a recurring theme in development studies. Scholars argue that such disparities are shaped by a combination of geographical factors, socio-economic inequalities, and institutional frameworks (Das, 2020; Mishra, 2019). In the Indian context, disparities are often accentuated by historical patterns of land distribution, caste-based social

hierarchies, and regional imbalances in resource allocation (Sharma, 2017). Studies have shown that rural areas with better connectivity to urban centers tend to have higher quality of life indices, highlighting the role of infrastructure in bridging spatial divides (Singh et al., 2015). Research has identified several determinants of rural quality of life, including economic, social, and environmental factors. Economic determinants such as income levels, employment opportunities, and access to credit play a pivotal role in shaping rural livelihoods (Ellis, 2000). Social determinants, including education, healthcare, and social capital, have been equally significant in improving rural well-being (Putnam, 2000). Environmental factors, such as access to clean water, arable land, and air quality, further influence the quality of rural life (Dasgupta & Wheeler, 2005).

While substantial research has been conducted on rural quality of life, several gaps remain. First, most studies tend to focus on macro-level analyses, overlooking intra-regional variations within rural areas. Second, there is limited research on the role of governance and policy interventions in mitigating spatial disparities. Third, existing frameworks often fail to incorporate qualitative dimensions of rural life, such as cultural identity and community well-being. The present study seeks to address these gaps by adopting a case-study approach that combines quantitative and qualitative methods to examine spatial disparities in Meja Block.

Study Area:

Meja block is one of the 20 blocks in Prayagraj district, Uttar Pradesh, India. The total area of Meja is 436.63 sq. Km and total population is 1,97,086. The male population is 1,02,828 while the female count is 94,258. This population comprises of 31,244 households. The block consists of 159 villages out of which 150 are inhabited villages and 9 are uninhabited.

Research Objectives:

This paper aims to achieve the following objectives:

1. To identify and analyze spatial disparities in aspects of quality of life indicators in Meja Block;
2. To explore the socio-economic and environmental factors contributing to these disparities;
3. To provide actionable recommendations for policymakers.

Guided by these objectives, the study employs a mixed-methods approach, leveraging both quantitative and qualitative data to provide a comprehensive understanding of the issue. The structure of this paper is organized as follows. The methodology section outlines the research design, data collection methods, and analytical tools employed. This is followed by the results section, which presents key findings on spatial disparities in Meja Block.

Data Base and Research Methodology

The study employs a case study approach to examine spatial disparities in rural quality of life within Meja Block, Prayagraj. This approach is particularly suited to exploring complex socio-economic phenomena in a specific geographical context. A mixed-methods design has been adopted, integrating both quantitative and qualitative data to provide a holistic understanding of the research problem.

Primary data were collected through household surveys and focus group discussions conducted across a representative sample of villages in Meja Block. The survey captured information on key quality of life indicators, including education, healthcare access, and housing conditions. Secondary data sources included Census 2001 and 2011 reports, government publications, and existing academic studies. These sources provided baseline data on demographic, socio-economic, and infrastructural characteristics of Meja Block. Quantitative data were analysed using simple statistical tools.

Results and Discussions:

The results section examines the quality of life in Meja Block through three key dimensions: housing quality, economic quality, and social quality. These dimensions provide a comprehensive framework for analysing spatial disparities across the block.

Housing Quality Index

Housing quality was assessed based on indicators such as housing material, availability of basic amenities, and access to sanitation. The Housing Quality Index (HGI) revealed significant spatial disparities. Availability of decent, safe and sustainable housing space is a very crucial component of rural transformation. Adequate housing is an important component in the overall growth and

development of an individual wherewith he can enjoy both mental and physical health and live in a state of security, peace and dignity. (Kumar, Deka, & Sinha, 2017). Rural housing includes a range of facets that shape the living conditions and lifestyles of its residents. About the situation of houses in the rural areas, S.K. Chandhoke says, only a small number of the houses in rural India are pucca (built with durable materials having long life expectancy), while a large majority of these are either completely kucha (built with non-durable materials) or are partly pucca and partly kucha. The size of the houses is general small. (Chandhoke, 1977).

The survey data reveals a predominance of self-owned houses (822) in the study area. This indicates strong tendency towards property ownership among the population, mostly influenced by cultural preferences- to own property is considered as life goal and investment in property is seen as a means of wealth accumulation. The presence of rental housing in village shows population mobility. In most cases, the original owners are settled outside in cities and have rented the house and farms to nearest kins and acquaintances to look after. The houselessness can be attributed to poverty, lack of access to housing resources, inadequate government support among other things. Houselessness has significant social and economic effects, including increased vulnerability, limited access to services, and reduced economic opportunities for affected families.

Similarly, house type indicates the standard of living. Each response has been tabulated below to show how many of the total number of respondents from the survey, own which type of house. It is also shown further in the form of a bar chart.

Bar Chart Representing Distribution of House Types

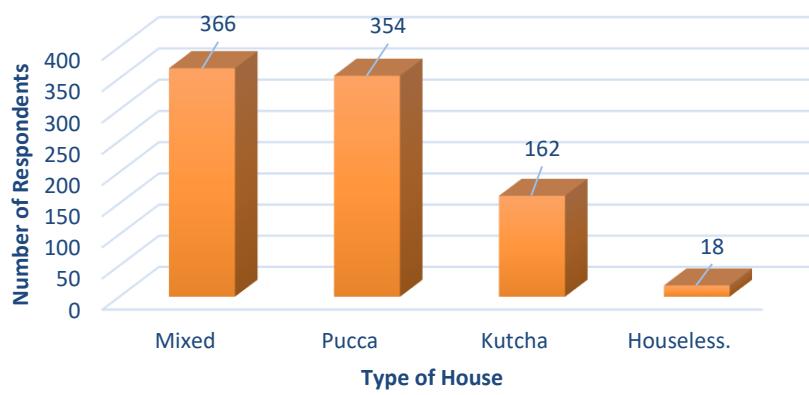


Fig. 1

Source: Field survey conducted in 2023 in Meja block of Prayagraj district.

The maximum of houses were of the "Mixed" type, which more often than not indicates that some households have upgraded their houses over time. In villages, poverty is prevalent and people have irregular source of income (mostly have cash flow following the harvesting season). Couple this with the strong desire to own property, the houses are upgraded over long periods of time as and when the cash is available. The presence of 354 "Pucca" houses indicates that a significant portion of the population lives in well-constructed, permanent structures made of durable materials such as bricks, concrete, or cement. Pucca houses are typically more resilient to environmental factors and offer better living conditions. The 162 "Kutcha" houses represent a smaller but still notable portion of the housing scenario in the study area. Kutcha houses are often made from less durable materials like mud, thatch, or bamboo. Their prevalence can be a sign of economic disparities and a need for housing improvement in the area.



Fig. 2: Types of houses: kutcha, pucca and mixed houses in Meja block.
Source: Field survey conducted in 2023 in Meja block of Prayagraj district.

Economic Quality

Economic quality was evaluated using analysis of occupational structure.

Employment, labour force, and occupational structure in India play a crucial role in shaping the country's economic landscape and social dynamics. India's labour force is characterized by a mix of formal and informal workers. Formal workers are part of the organized sector and benefit from social security measures, while informal workers, who constitute a substantial portion of the labour force, lack access to such benefits and often face precarious working conditions. Challenges persist in the labour market, including underemployment, low wage levels, gender disparities, and skill shortages. The workforce's skill mismatch remains a concern, as it impacts the employability of youth and prevents the full realization of economic potential. Additionally, the COVID-19 pandemic has further aggravated unemployment and job losses, leading to increased vulnerabilities for workers. The occupational structure of the study area is as follows:

Table 1: Occupational Structure of Meja block.

Category	Total population	Total workers (main + marginal workers)	Number of Cultivators	Percent of Cultivators	Number of Agricultural labourers	Percent of Agricultural labourer	Number of Household industry workers	Percent of Household industry workers	Number of Other workers	Percent of Other workers
Males	102828	44636	14545	32.59	14734	33.01	2235	5.01	13122	29.40
Females	94258	23032	6264	27.20	10107	43.88	2297	9.97	4364	18.95
Total	197086	67668	20809	30.75	24841	36.71	4532	6.70	17486	25.84

Source: Analysis from District Census Handbook, Prayagraj, 2011

The occupational structure of the given population highlights a strong dependence on agriculture with significant gender disparities in workforce participation. Out of a total population of 197,086, only 67,668 individuals (34.34%) are engaged in work, indicating that nearly two-thirds of the population is either unemployed or engaged in non-wage labor such as domestic work. A clear gender gap exists, with male workforce participation at 43.41% (44,636 workers out of 102,828) being much higher than female participation at just 24.43% (23,032 workers out of 94,258), which may be attributed to societal norms, domestic responsibilities, and limited employment opportunities for women outside the agricultural sector.

Agriculture remains the dominant source of employment, engaging 67.46% of the total workforce, with 30.75% working as cultivators and 36.71% as agricultural laborers. However, the nature of engagement differs significantly between men and women. Among male workers, 32.59% are cultivators, suggesting

a relatively higher rate of land ownership or control over agricultural production, while only 27.20% of female workers are cultivators, reflecting their limited access to land and farming resources. On the other hand, 43.88% of female workers are agricultural laborers, compared to 33.01% of male workers, indicating that women are more likely to work as wage laborers in agriculture rather than own or manage farms. This trend suggests a socio-economic divide where men predominantly control agricultural production, whereas women are engaged in lower-paying, labor-intensive jobs. Apart from agriculture, household industries provide employment to 6.70% of the total workforce, with a higher proportion of women (9.97%) than men (5.01%) engaged in these industries. This highlights the prevalence of traditional gender roles where women participate in small-scale or home-based industries such as handicrafts, weaving, and food processing, likely due to restricted mobility and the need to balance domestic responsibilities. Non-agricultural employment, which includes government jobs, trade, construction, and services, accounts for 25.84% of the total workforce, with 29.40% of male workers engaged in such occupations compared to only 18.95% of female workers. This disparity underscores the limited access women have to formal employment and alternative livelihood opportunities, further reinforcing their economic dependence on agriculture and household industries. The overall occupational structure suggests that diversification into non-agricultural sectors is relatively low, with a majority of the workforce still dependent on traditional rural employment patterns. The high percentage of agricultural laborers, particularly among women, indicates economic vulnerability, as labor-intensive jobs in agriculture are often low-paying and seasonal. The limited participation of women in non-agricultural jobs further suggests a need for policy interventions that promote skill development, rural industrialization, and gender-inclusive employment opportunities. Expanding access to education, vocational training, and financial resources for women, along with the promotion of alternative livelihood options beyond agriculture, could help address these disparities and create a more balanced and resilient rural economy.

Social Quality

Social quality encompassed indicators such as literacy rates and healthcare access.

Accessibility to education and patterns of literacy in Meja, like many other rural areas in India, is a crucial aspect that significantly impacts the development and well-being of the community. Literacy patterns in Meja block is represented below. The following maps show the overall literacy pattern in the study area along with village wise male and female literacy levels separately in the block.

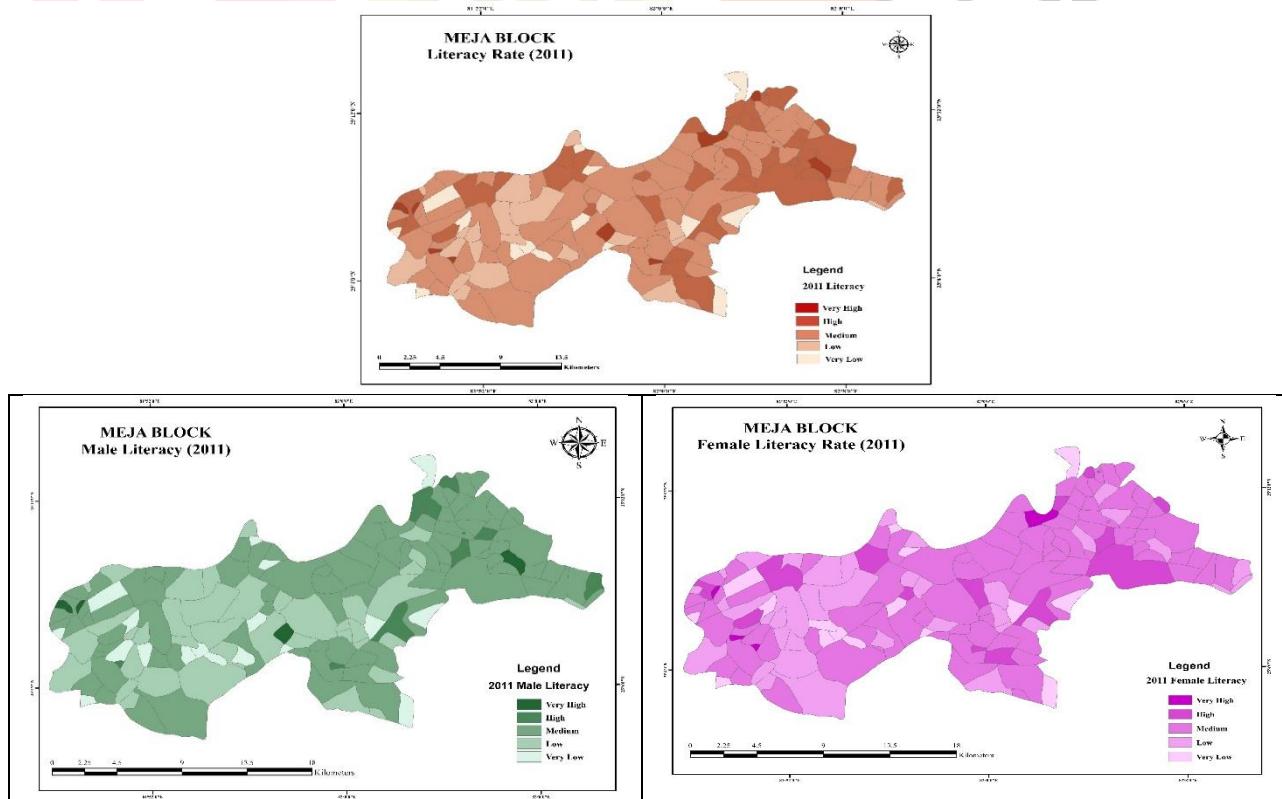


Fig. 3

Source: District Census Handbook-2011, Prayagraj.

The next aspect of social quality is of health. WHO (2000) has rightly emphasised that the primary goal of a health system should be to provide better health in a responsive manner and with fair financial distribution. The performance of the public health systems in rural areas is of great significance as they are available, accessible and affordable to people in areas where the private health sector is virtually non-existent. (Sankar & Kathuria, 2004). Meja faces significant issues and challenges when it comes to accessibility to health and sanitation services. These challenges not only impact the well-being of the community but also hinder the overall development and progress of the region.

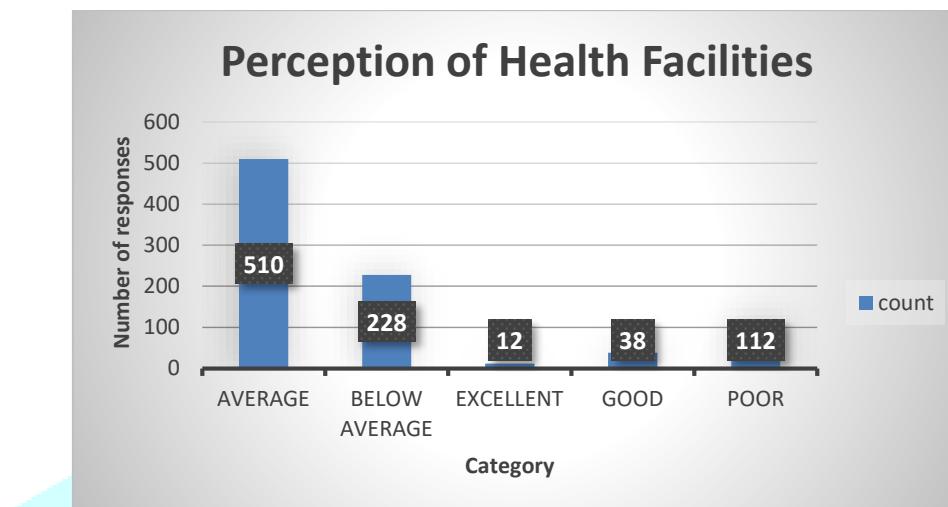


Fig. 4

Source: Prepared from data obtained during field survey conducted in 2023 in Meja block of Prayagraj District

The bar chart illustrates public perception regarding healthcare facilities, categorized into five levels: Excellent, Good, Average, Below Average, and Poor. The majority of respondents (510) rated healthcare facilities as Average, followed by 228 who considered them Below Average. A significant number (112) rated them as Poor, while very few perceived them as Good (38) or Excellent (12). This indicates an overall dissatisfaction with healthcare services, with the majority falling in the mid to lower range of perception.

High concentration in the "Average" category suggests that while healthcare services are functional, they are not meeting higher expectations. More respondents rated facilities as Below Average or Poor (340 in total) than Good or Excellent (50 in total), signalling a need for improvement. Low ratings in "Good" and "Excellent" categories indicate a lack of high-quality healthcare services in the surveyed region.

The above discussion highlights the scenario among the population in the study area on the various aspects of housing, economic scenario and occupational structure as well as social aspects like health and education. Based on the study, the following conclusions and recommendations can be drawn.

Recommendations:

- Establish schools, vocational training centers, and healthcare facilities in low-ranked villages, prioritizing maternal and child health, while also promoting awareness and accessibility to government health programs.
- Investment in healthcare infrastructure, including better-equipped hospitals, more medical staff, and improved availability of medicines.
- Launch awareness campaigns on available health programs, improving accessibility, and enhancing primary healthcare outreach could help bridge gaps in service perception.
- Expanding access to government housing schemes like PMAY (Pradhan Mantri Awas Yojana) can facilitate the transition from kutcha and mixed housing to pucca structures. Subsidies, affordable loans, and incentives should be provided to low-income groups for house construction and improvement.
- Provide modern farming tools, irrigation facilities, and financial assistance to farmers, while promoting alternative livelihoods like small-scale industries, dairy, and fisheries to enhance income.

- Focus on effective implementation of welfare schemes like MNREGA, rural housing, and food security programs, while prioritizing regions with the greatest socio-economic challenges.

Addressing the disparities in Meja Block requires a multifaceted approach that integrates infrastructure development, education, healthcare, and livelihood enhancement with active community participation. These measures will foster inclusive growth and ensure sustainable development across the region.

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