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LIVING CONDITIONS AND ACCESS TO BASIC AMENITIES AMONG MUSLIM HOUSEHOLDS: EVIDENCE FROM PURBA MEDINIPUR DISTRICT, WEST BENGAL, INDIA

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ABSTRACT

The present study examines the socio-economic and infrastructural conditions of Muslim households in five selected villages – Sarberya, Jaga Mohanpur, Lal Chandrabar, Dhusia, and Babuia – located under Bhagwanpur-I and Chandipur Community Development Blocks of Purba Medinipur district, West Bengal. The study is based on primary data collected from 50 purposively selected households, covering a total of 267 household members during June–August 2025. Data were gathered using a self-designed household survey schedule and observation techniques. The findings reveal substantial progress in basic amenities, including universal access to electricity, sanitation facilities, and school enrolment among children. A significant proportion of households reside in pucca houses and have access to relatively adequate living space. However, challenges remain in areas such as dependence on public taps for drinking water, continued use of traditional biomass fuels alongside LPG, and the predominance of open dumping as a waste disposal method. The study highlights a transitional phase of rural development characterized by infrastructural achievements alongside persisting environmental and sustainability concerns. It underscores the need for targeted policy interventions and community-based development strategies to ensure inclusive and sustainable improvement in the quality of life of the Muslim population in the study area.

KEYWORDS: *Rural Development, Muslim Households, Basic Amenities, Living Conditions*

INTRODUCTION

Rural development remains a central concern in India's socio-economic planning, particularly in relation to access to basic amenities, housing conditions, sanitation, education, and overall quality of life. Despite various governmental initiatives aimed at improving rural infrastructure and social welfare, disparities continue to persist among different communities and regions. Minority communities, especially in rural areas, often experience distinct socio-economic challenges that influence their living standards and access to essential services.

The Muslim population constitutes a significant minority group in West Bengal, with a substantial concentration in districts such as Purba Medinipur. Understanding the socio-economic and infrastructural conditions of this community at the village level is essential for identifying developmental gaps and formulating targeted interventions. Household-level assessments provide valuable insights into living conditions, including housing types, access to electricity, drinking water sources, sanitation facilities, waste management practices, cooking fuel usage, and educational participation. These indicators collectively reflect the broader developmental status and well-being of a community.

In this context, the present study focuses on selected villages under Bhagwanpur-I and Chandipur Community Development Blocks of Purba Medinipur district, West Bengal. By examining the Muslim households in these villages, the study seeks to analyze their socio-economic conditions and access to basic amenities. The findings aim

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to contribute to a better understanding of grassroots-level realities and to support evidence-based planning for inclusive rural development.

OBJECTIVES OF THE STUDY

1. To examine the socio-economic and housing conditions of the Muslim households in the selected villages under Bhagwanpur-I and Chandipur Community Development Blocks of Purba Medinipur district.
2. To assess the availability and accessibility of basic amenities, including electricity, drinking water, sanitation facilities, and waste disposal systems among the surveyed households.
3. To analyze the living standards of the households based on indicators such as type of house, number of rooms, cooking fuel used, and infrastructural facilities.
4. To evaluate the educational status of children within the selected Muslim households.
5. To identify gaps in basic services and infrastructure and suggest areas requiring policy intervention for improving the overall quality of life in the study area.

METHODOLOGY

The present study was conducted in five selected villages of Purba Medinipur district, West Bengal, India. The study area comprised three villages—Sarberya, Jaga Mohanpur, and Lal Chandrabar—under Bhagwanpur-I Community Development Block, and two villages—Dhusia and Babuia—under Chandipur Community Development Block. The research focused exclusively on the Muslim population residing in these villages.

A purposive sampling technique was adopted at every stage of the study to select both the villages and the respondents. From each selected village, 10 households were surveyed, resulting in a total sample of 50 households. The study covered 267 household members belonging to these households.

Primary data were collected during the period from June to August 2025. A self-designed household survey schedule was used as the principal tool for data collection, enabling the systematic gathering of socio-economic and infrastructural information. In addition, direct observation was employed to supplement and validate the information obtained through the survey schedule. The collected data were compiled, organized, and analyzed to draw meaningful inferences in accordance with the objectives of the study.

FINDINGS

Distribution of Housing Types among Households

The distribution of housing types indicates a clear predominance of pucca (brick and cement) structures, which constitute 46.94% of the total housing stock. Semi-pucca houses account for 34.69%, representing a substantial intermediate category in terms of construction quality and durability. In contrast, kutcha (mud/thatched) houses comprise only 18.37%, making them the least prevalent housing type. Overall, the findings suggest a relatively higher level of permanent housing structures within the study area, with nearly half of the households residing in fully constructed pucca dwellings.

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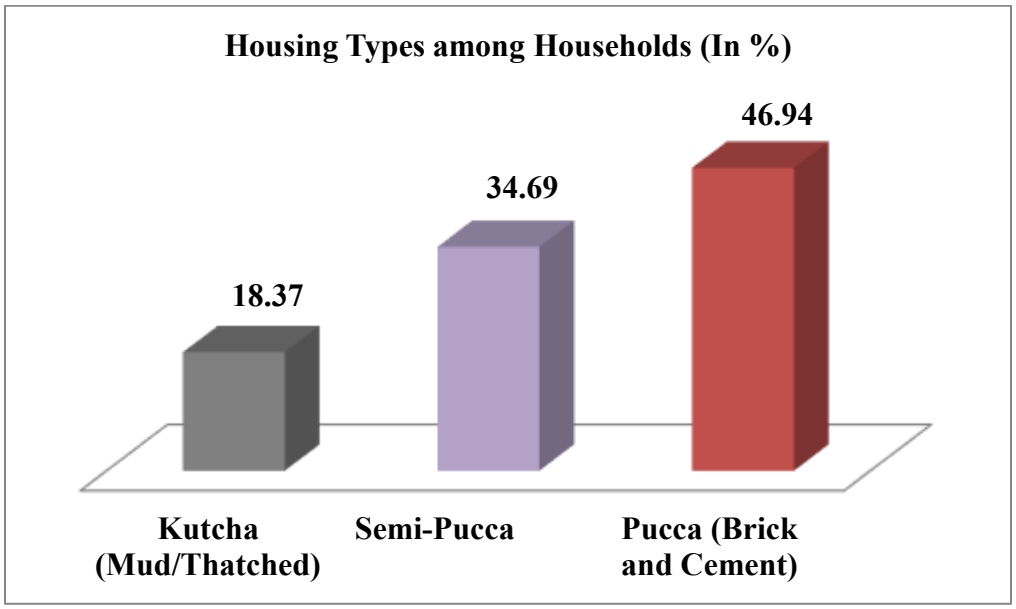


Figure 1: Housing Types among Households

Distribution of Number of Rooms per Household

The distribution of the number of rooms per house reveals that the largest proportion of households (40.82%) reside in dwellings with more than three rooms, indicating a relatively higher level of residential space availability. Houses with two rooms account for 24.49%, while 22.45% of households occupy three-room units. In contrast, only 12.24% of respondents live in single-room houses, representing the smallest category. Overall, the findings suggest that a substantial share of households have access to comparatively spacious housing, with more than three-room units forming the dominant segment.

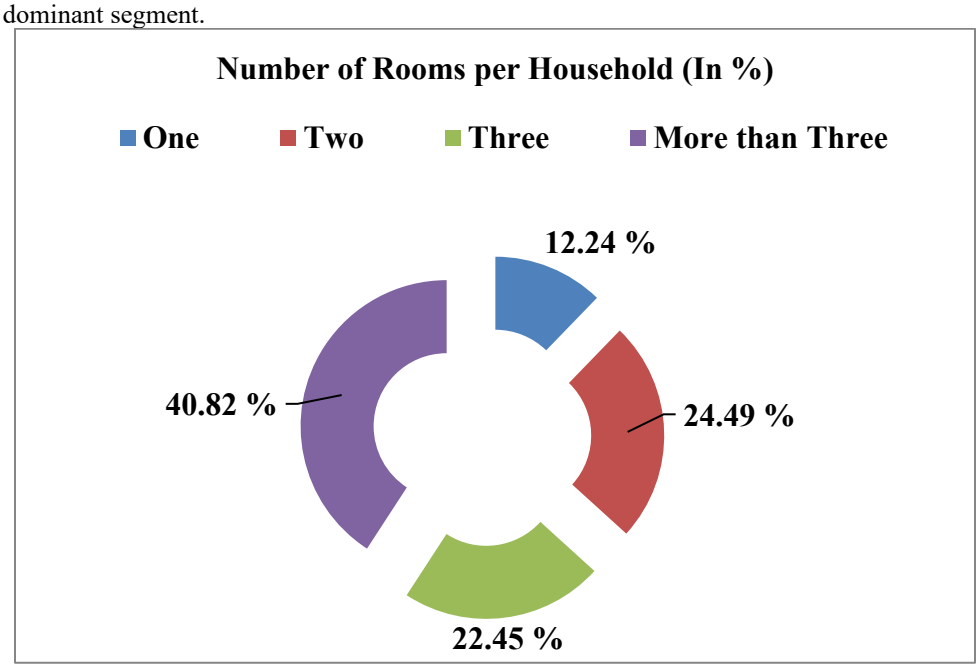


Figure 2: Number of Rooms per Household

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Household Access to Electricity

The findings reveal universal access to electricity among the surveyed households, with 100% reporting availability of electricity and none indicating lack of access (0%). This result highlights complete electrification within the study area, reflecting a significant level of infrastructural development and service coverage.

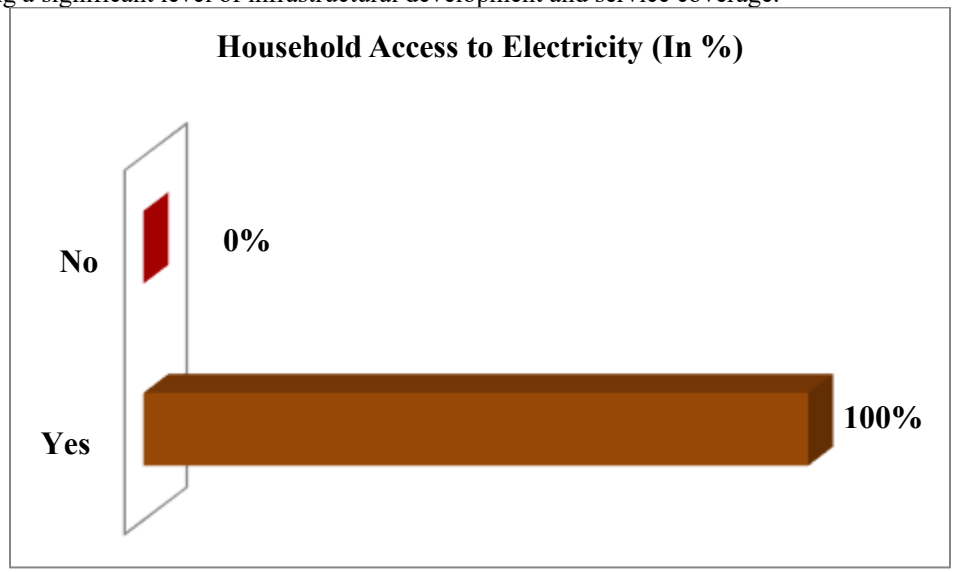


Figure 3:Household Access to Electricity

Sources of Drinking Water among Households

The distribution of drinking water sources indicates that a substantial majority of households (65.31%) rely on public taps as their primary source of drinking water. Submersible pumps account for 18.37%, while 14.29% of households access water through private taps. In contrast, only 2.04% depend on hand pumps, representing the least utilized source. The findings suggest a predominant dependence on publicly supplied water infrastructure within the study area.

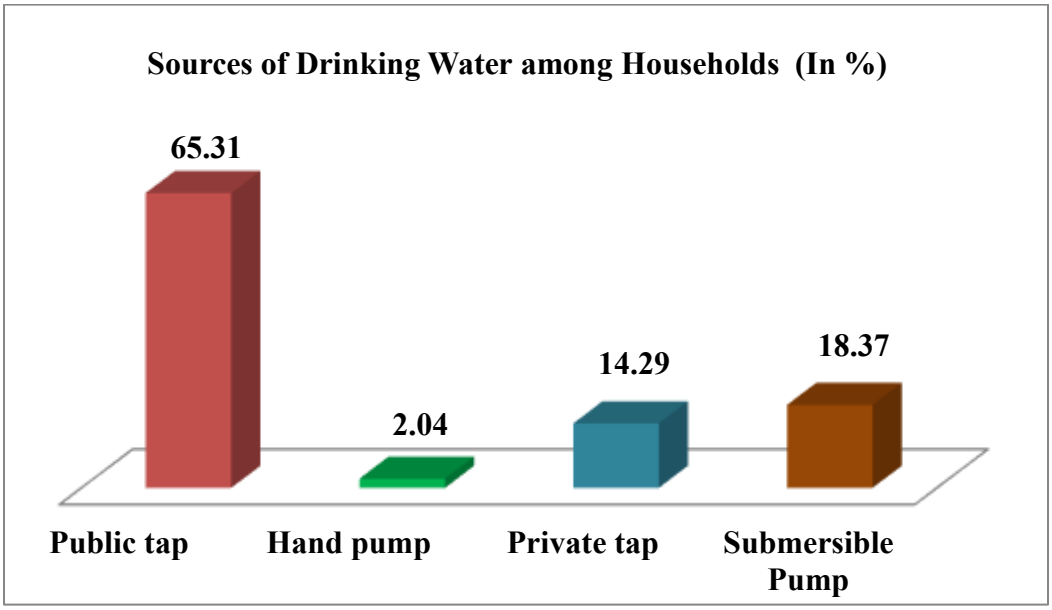


Figure 4:Sources of Drinking Water among Households

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Availability of Toilet Facilities in Households

The findings indicate universal access to toilet facilities among the surveyed households, with 100% reporting the availability of toilets within their premises and none indicating the absence of such facilities (0%). This reflects complete sanitation coverage in the study area, suggesting a high level of household sanitation infrastructure and improved living conditions.

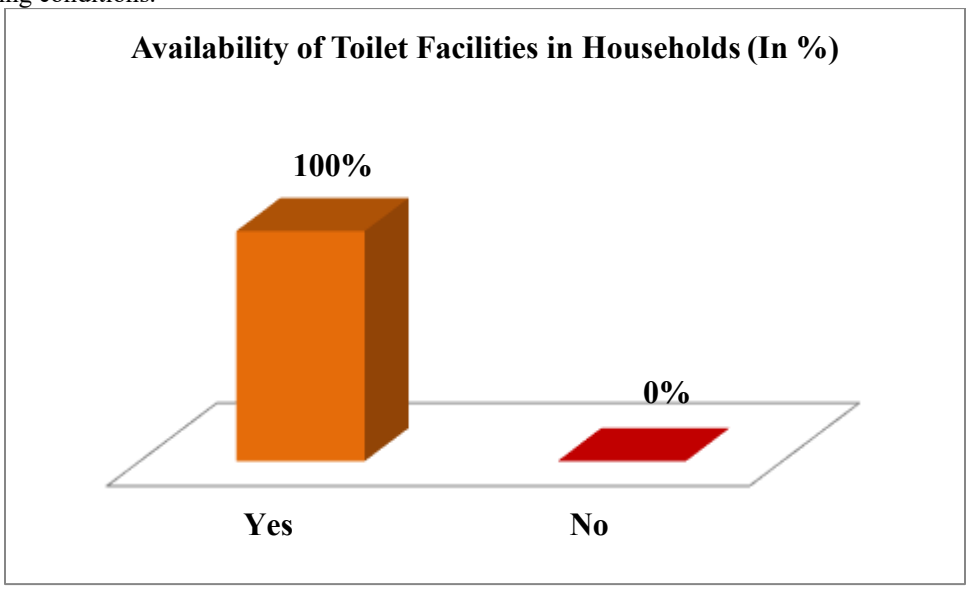


Figure 5: Availability of Toilet Facilities in Households

Type of Fuel Used for Cooking among Households

The distribution of cooking fuel types reveals that LPG is the most commonly used fuel, accounting for 38.78% of households, indicating a significant shift toward cleaner energy sources. Traditional fuels remain prevalent, with 16.33% relying solely on firewood and 20.41% using cow dung cakes. A smaller proportion of households use combined fuel sources, including firewood and LPG (8.16%), firewood and cow dung cake (6.12%), firewood and paddy straw (4.08%), and cow dung cake and LPG (4.08%). Only 2.04% depend exclusively on paddy straw, while none reported using kerosene (0%). Overall, although LPG emerges as the dominant single fuel type, a considerable share of households continues to rely on traditional biomass fuels, either independently or in combination.

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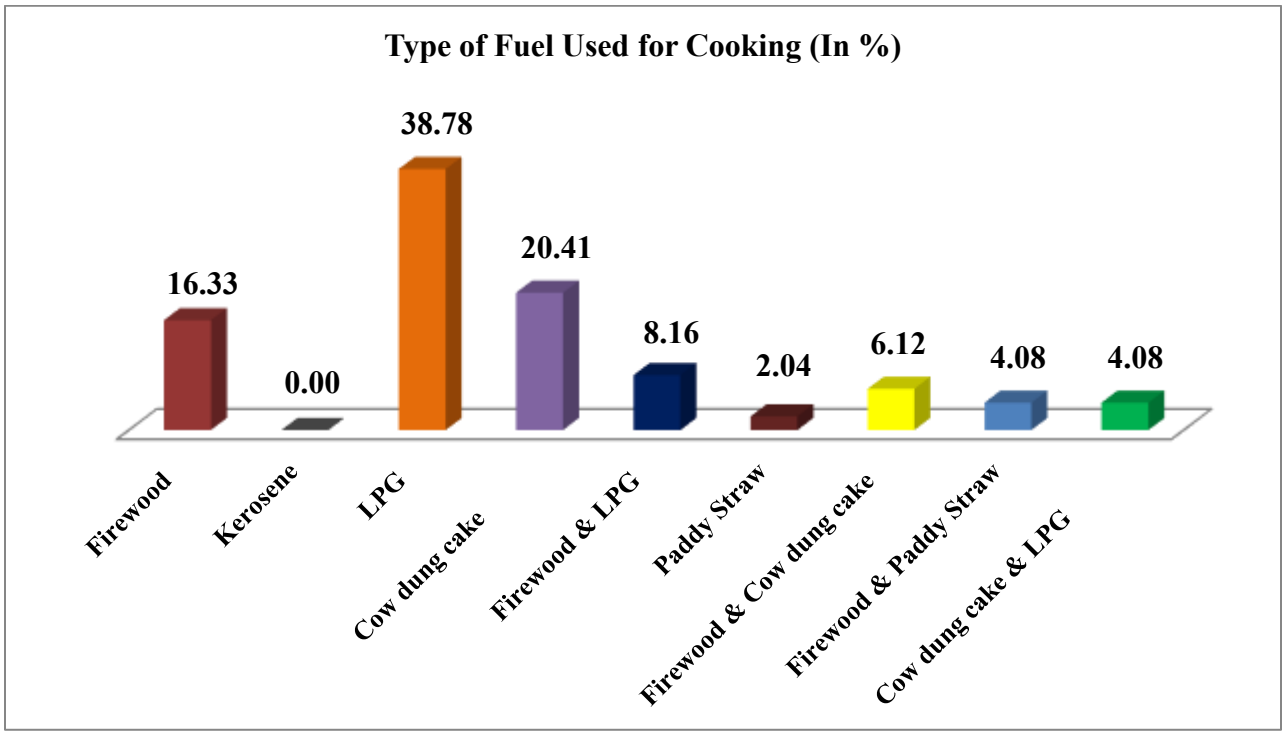


Figure 6: Type of Fuel Used for Cooking among Households

Household Access to Proper Waste Disposal Facilities

The findings indicate that 65.31% of households have access to proper waste disposal facilities, while 34.69% lack such access. Although a majority of households benefit from organized waste management services, a substantial proportion remains without adequate disposal facilities, highlighting the need for improved coverage and infrastructure to ensure comprehensive environmental sanitation within the study area.

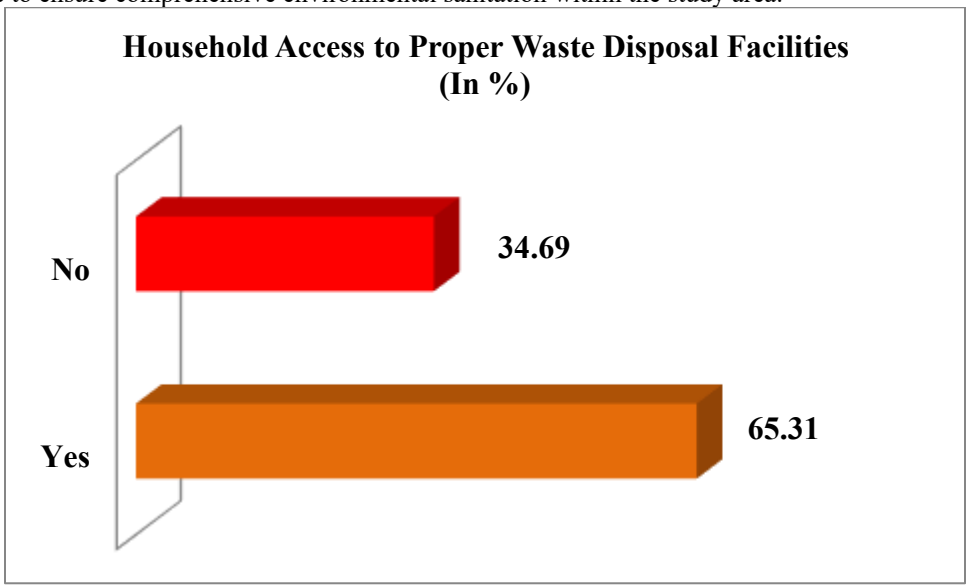


Figure 7:Household Access to Proper Waste Disposal Facilities

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Types of Waste Material Disposal Systems Used by Households

The distribution of waste material disposal practices indicates that open dumping is the predominant method, reported by 76.47% of households. Disposal into canals and ponds is considerably less common, each accounting for 11.76% of households. The findings reveal a heavy reliance on open dumping, underscoring concerns regarding environmental sustainability and public health, and highlighting the urgent need for improved and environmentally sound waste management systems within the study area.

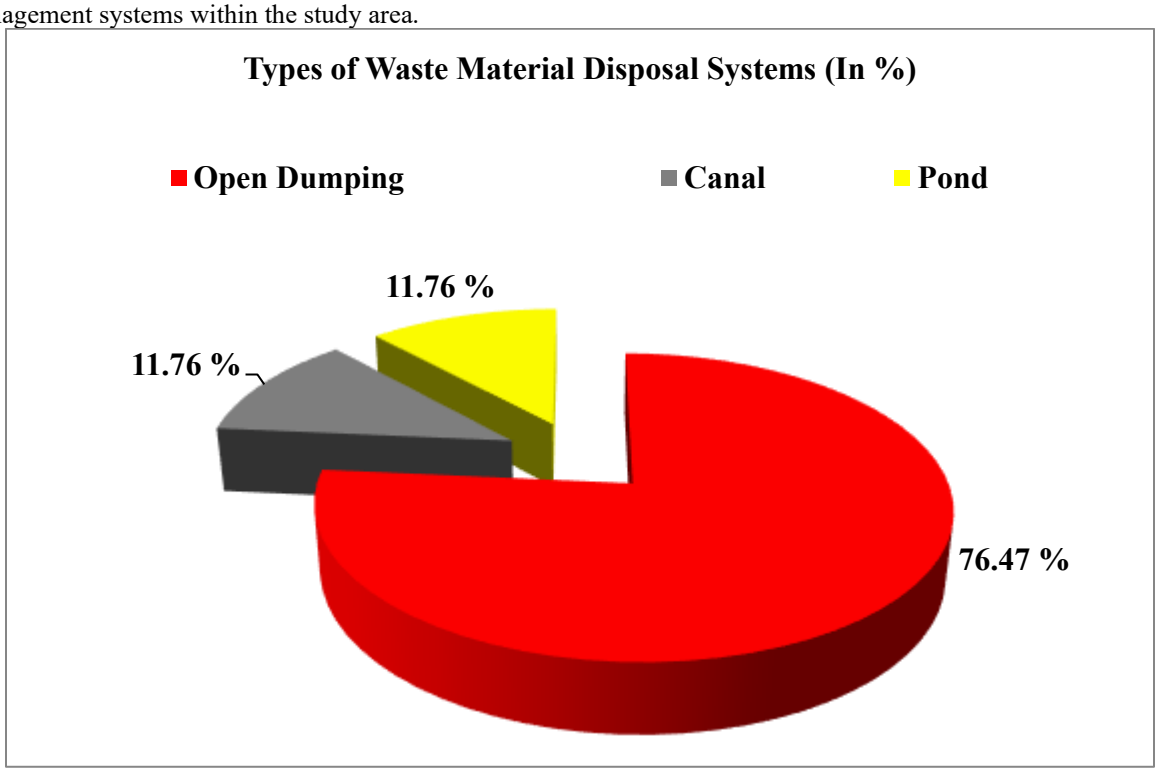


Figure 8: Types of Waste Material Disposal Systems Used by Households

Schooling Status of Children

The findings reveal that all surveyed households (100%) reported that their children are attending school, with none indicating non-enrolment (0%). This reflects universal school participation among children in the study area, suggesting a high level of educational access and awareness within the community.

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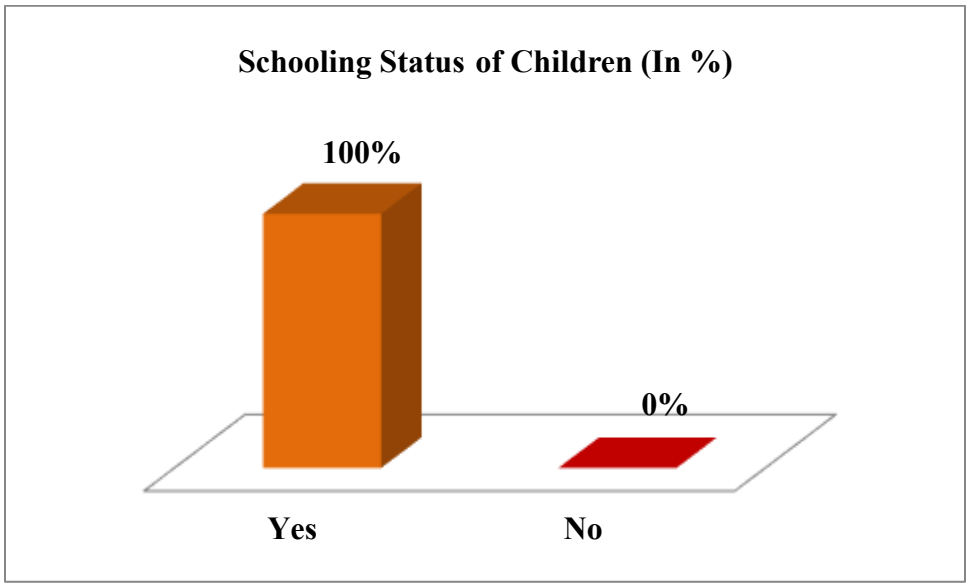


Figure 9: Schooling Status of Children

DISCUSSION

The findings of the present study provide significant insights into the socio-economic and infrastructural conditions of Muslim households in the selected villages of Bhagwanpur-I and Chandipur Community Development Blocks of Purba Medinipur district. The overall results indicate a mixed pattern of development, where certain basic amenities demonstrate substantial coverage, while other aspects reveal persistent gaps and structural challenges.

In terms of housing conditions, a considerable proportion of households reside in pucca houses, followed by semi-pucca structures, while a smaller share continues to live in kutcha dwellings. This distribution reflects a gradual transition toward more permanent and durable housing structures, suggesting improvement in economic stability and access to housing-related schemes. However, the continued presence of kutcha houses indicates that a segment of the population remains economically vulnerable.

The analysis of household infrastructure reveals universal access to electricity and toilet facilities, which represents a noteworthy achievement in terms of rural electrification and sanitation coverage. Similarly, the schooling status of children shows complete enrolment, highlighting strong educational participation within the community. These findings suggest increased awareness and effective implementation of government initiatives aimed at improving education and sanitation outcomes.

Access to drinking water is largely dependent on public taps, with smaller proportions relying on private taps and submersible pumps. While the dominance of public water supply indicates infrastructural outreach, dependence on shared sources may raise concerns regarding reliability and long-term sustainability. Waste management practices, however, present a critical area of concern. Although a majority of households report access to some form of waste disposal facility, open dumping remains the predominant method of waste disposal. This practice poses environmental and public health risks, underscoring the need for improved waste management systems and awareness programs.

The pattern of cooking fuel usage reflects a transitional energy scenario. While LPG is the most commonly used fuel, a significant proportion of households continue to rely on traditional biomass fuels such as firewood and cow dung cakes, either exclusively or in combination. This continued dependence on traditional fuels may have implications for indoor air pollution and health outcomes, particularly for women and children.

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Overall, the discussion reveals that the study area demonstrates considerable progress in basic infrastructure such as electrification, sanitation, and education. However, challenges persist in areas such as waste management and reliance on traditional energy sources. These findings highlight the importance of sustained policy interventions, improved service delivery, and targeted developmental programs to ensure inclusive and sustainable improvement in the quality of life of the Muslim population in the study area.

Major Findings

1. Nearly half of the surveyed households reside in pucca houses, followed by semi-pucca structures, while a smaller proportion still live in kutcha houses, indicating a gradual improvement in housing quality with some persisting vulnerability.
2. A significant proportion of households have more than three rooms, suggesting relatively better residential space availability, whereas only a small percentage live in single-room houses.
3. The study reveals universal access to electricity and toilet facilities (100%), reflecting complete coverage of basic infrastructural amenities in the study area.
4. The majority of households depend on public taps for drinking water, with fewer households relying on private taps, submersible pumps, or hand pumps.
5. LPG emerges as the most commonly used cooking fuel; however, a considerable number of households continue to depend on traditional biomass fuels such as firewood and cow dung cakes, either exclusively or in combination.
6. Although a majority of households report access to waste disposal facilities, open dumping remains the predominant method of waste disposal, raising environmental and health concerns.
7. All surveyed households reported that their children are attending school, indicating universal school enrolment within the study population.

Overall, the findings suggest substantial progress in basic amenities and education, alongside ongoing challenges in sustainable waste management and clean energy adoption.

Policy Recommendations

1. Given the predominance of open dumping practices, local authorities should establish organized waste collection and scientific disposal mechanisms at the village level. Community-based waste segregation, regular collection services, and awareness campaigns on environmental sanitation should be prioritized to reduce health and ecological risks.
2. Although LPG usage is relatively high, continued reliance on traditional biomass fuels indicates the need for enhanced awareness and subsidy support. Expanding access to clean energy schemes, ensuring timely LPG refills, and promoting behavioral change communication can facilitate a complete transition to cleaner cooking fuels.
3. As a majority of households depend on public taps, efforts should be made to ensure regular supply, maintenance of pipelines, and water quality monitoring. Expanding household-level tap connections under rural water supply schemes would enhance convenience and reduce dependency on shared sources.
4. For households still residing in kutcha and semi-pucca houses, targeted implementation of rural housing schemes should be strengthened to promote the construction of durable pucca houses, thereby improving living standards and resilience against environmental hazards.
5. The universal enrolment of children and full sanitation coverage should be maintained through continuous monitoring, awareness programs, and infrastructural maintenance. Special attention should be given to preventing school dropouts and ensuring the functional sustainability of toilet facilities.
6. Since the study focuses on the Muslim population in selected villages, policy interventions should adopt a culturally sensitive and inclusive approach. Community participation in planning and implementation processes can enhance the effectiveness and sustainability of development initiatives.

Overall, an integrated and participatory development strategy, combining infrastructure improvement with awareness generation and effective policy implementation, is essential to enhance the long-term socio-economic well-being of the study population.

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CONCLUSION

The present study provides a comprehensive assessment of the socio-economic and infrastructural conditions of Muslim households in five selected villages under Bhagwanpur-I and Chandipur Community Development Blocks of Purba Medinipur district, West Bengal, India. The findings reveal notable progress in several key areas, particularly in terms of universal access to electricity, sanitation facilities, and school enrolment among children. A considerable proportion of households reside in pucca houses and have relatively adequate living space, indicating gradual improvements in housing and overall living standards.

However, certain challenges persist. A segment of households continues to live in kutcha and semi-pucca structures, reflecting ongoing economic vulnerability. Dependence on public taps for drinking water highlights the need for strengthened and sustainable water supply systems. Moreover, despite the increasing adoption of LPG, the continued use of traditional biomass fuels and the predominance of open waste dumping practices pose environmental and health concerns.

Overall, the study underscores a transitional phase of rural development in the selected villages, marked by significant infrastructural achievements alongside areas requiring targeted intervention. Sustained policy support, improved service delivery, and community participation are essential to ensure inclusive and sustainable development, thereby enhancing the overall quality of life of the Muslim population in the study area.

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