

ABSTRACT

Introduction

The study of slums with respect to cultural, social, economic, and environmental aspects claims a comprehensive understanding of the dwellers. The perspective of urbanization along with the development of cities that allows slums to form and prosper requires attention. Slums are crucial part of urban environment. This decides the dynamics of urban informal settlement, housing issues, infrastructural deficiencies, deficiencies in health services, environmental concerns, etc. These deficiencies and challenges are both the factors and result of urban slums. The study, thus, allows to find out the existing slum areas, their contemporary positions, their living conditions, their developmental levels and few suggestive contextual measures.

Objectives

The present study focuses on various aspects of slums in Alipurduar municipality. The following are the objectives that have been framed for the study:

1. To analyze the socio-cultural condition of the slum dwellers.
2. To analyze the economic condition of the slum dwellers.
3. To examine the housing and environmental aspects of the slums.
4. To study the health status of the slum dwellers.
5. To calculate the levels of development in slums across the various wards and identify the problems and suggest measures for their solution.

Hypothesis

1. There is a positive relationship between literacy rate and age at marriage among the slum dwellers.
2. There is a positive relationship between economic condition and literacy rate of the slum dwellers.
3. There is a positive relationship between housing conditions and income level of the slum dwellers.
4. There is a positive relationship between literacy rate and health conditions among the slum dwellers.

5. The health condition of the slum dwellers depends significantly on their economic and housing characteristics.

Database and Methodology

It is essential to collect various qualitative and quantitative information for the discussion and analysis of the research study. Therefore, these are collected from journals, books, periodicals, and other records. The field survey for primary data collection has been done to fulfill the objectives and purpose of study through relevant scheduled questionnaire related to social, economic, environmental, health and related aspects of the slum dwellers. The secondary data are collected from various census publications, district handbooks, statistical records, records and projects by various government offices, state map series and the Alipurduar Municipality. The preparation of various physical maps for the district incorporates the use of satellite imageries where the data are collected and analyzed, viz. slope and elevation map, physiography and soil map, drainage and vegetation map, etc. sources like National Bureau of Soil Survey (NBSS) and Land Use Planning (LUP), Cartosat DEM, SOI toposheet no. 78 F/1, F/2, F/3, F/5, F/6 etc. has been used. The spatial variation of various characteristics for the selected parameters of slum dwellers and related aspects of their living conditions has been portrayed and visually represented under GIS platform, this are further interpreted and analyzed.

The research is based on both primary and secondary data, various information has been collected from the municipality and 2015 demand survey by the municipality shows there are twenty wards in the municipality having 46 slum pockets in total. In every ward, there are a minimum of two slum pockets with a few wards having three. For the purpose of the survey major slum pockets from each ward will be taken into consideration. Households will be selected on the basis of a simple random sampling technique and will cover 10% of slum households from each ward.

Major Findings

Based on the extensive study conducted in the slums of Alipurduar district, several major findings emerge across various dimensions, including economic, housing, environmental, health, and social aspects. The economic activity rate is 39.30%, indicating a significant portion of the population contributing to the region's economic development. The male workforce dominates with 78.81%, while female participation is significantly lower at 21.19%. The organized employment is minimal (1.24% male-only), with the majority engaged in

unorganized and self-employment sectors. A positive correlation (0.47) exists between the literacy rate of the head of the family and household income, indicating education's impact on economic well-being. The majority of households (98.33%) earn less than \$4000 monthly, highlighting economic challenges. Regarding the housing and environmental findings, it is revealed that the housing conditions varies, with mud (37%) and burnt brick (26.67%) being a common material for floors and walls respectively. There is a lack of separate kitchen facilities as 77.67% households use living room or verandah that severely impacts cooking and living practices. Access to clean water (77% rely on hand pumps) is relatively high, but drainage facilities are lacking (60.30% of households lack drainage). Open disposal of waste is prevalent (61.50% practice open disposal), posing environmental and health risks. The health of the slum dwellers shows the BMI analysis reveals 29.85% underweight individuals, 8.32% in pre-obesity, and 0.56% in obesity class I. A positive correlation between literacy rate, income, housing condition, and BMI suggest socio-economic factors influence health. There is a high prevalence of tobacco use among males (41.87%) indicates health risk behaviors. Women's reproductive health indicators, including maternal mortality rate (46 per lakh live births), highlight areas for improvement in maternal care and family planning. Regarding social findings, a significant proportion of women (70.80%) in reproductive age group is found and high marriage rates (61.38%) are found which suggest potentiality for population growth. Limited use of sanitary napkins (6.78%) and reliance on reusable materials pose reproductive health risks. Majority of children (97%) receive necessary vaccinations, but malnutrition is prevalent (42.62% affected), indicating health challenges. The development and policy implications show composite index analysis which identified wards with varying levels of development, indicating disparities in socio-economic conditions. The economic dependency with 60.70% of dependent members and limited female participation in the workforce underscore the need for targeted interventions. The infrastructural gaps such as lack of LPG connections with 34.17% households, inadequate sanitation, and drainage systems require immediate attention. Environmental concerns including air and noise pollution highlight the need for regulatory measures and urban planning interventions.

Overall, the study underscores the complex interplay of economic, environmental, health, and social factors in shaping the living conditions of slum dwellers in Alipurduar municipality.