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Analyzing the Socio-economic Condition of the Urban Poor at West Bakalia, Chittagong

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Abstract

Chittagong city dwellers face the consequences of inadequately planned and managed urbanization as the city is unable to provide proper services and facilities to all classes of people. West Bakalia area is a deprived part of the Chittagong city located near the Karnafuli river. One of the main canals of the city 'Chaktai khal' and its branches passes through it. Questionnaire survey and focus group discussion are conducted to understand the nature of this problem. Multidimensional Poverty Index (MPI) method is used to identify the poverty level of the people in West Bakalia. Participatory Rural Approach (PRA) method is used to seek out the causes and effects of the poor's socio-economic condition with cause-effect diagram tool, mobility pattern showing frequency, mode choice and destination of the respondents with mobility map, social institutions and resources of the area with social and resource map. They suffer from poor road surface condition, poor accessibility and safety issues too. Also, unavailability of healthcare center facility and recreational places has worsened the situation in the area with poor livable condition. The urban poor and their right to have livable condition must be accepted as an important factor and therefore included in the more appropriate planning framework for Chittagong city following the recommendations provided in this research.

Introduction

Chittagong city as a fast growing city in a developing country like Bangladesh is confronting difficulties in guaranteeing proper services and facilities for the city dwellers of all classes of society. In view of alluring openings for work and accessibility of different social administrations, amid the most recent couple of decades, quick urban development and urbanization have been observed in Chittagong city (Samad, 2016). It is bringing about various issues like lodging shortage, poor environmental condition, and absence of fundamental offices. Therefore, Slum and squatter are becoming all over inside the city in a spontaneous way. These sorts of settlements scarcely meet every one of the ways of life. The absence of essential needs, sanitation issue, squander administration, shortage of drinkable water and inaccessibility of seepage framework are a portion of the concerning issues of financial condition urban poor face in the city (Chakma et al., 2014). The settlement and empty land delineation exercise investigated 44,804 poor settlements in the 29 urban communities of Bangladesh. These incorporate 1,162,971 families with an assessed five million individuals (in view of a normal of 4.4 people for every family). In the survey, 25.9% of the poor settlements and family unit is

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found in Chittagong city which is more than some other cities in the nation and significantly higher than Dhaka. The greater part of them is unlawful settlements (Fortuny et al., 2011)

The financial state of the urban poor is regrettable. Ordinarily, urban poor live in Slums situated on negligible terrains. These are packed, need a framework, and have low quality lodging, restricted access to administrations and uncertain land residency (Masika et al., 1997). The urban poor frequently confronts hardship of training and wellbeing administrations. This is going on notwithstanding the way that urbanization is happening quickly in the nation, and that more than 60 percent of the national GDP originates from urban areas. Financial experts and urban specialists bring up the way that policymakers have been concentrating on country neediness throughout the decades, while urban destitution stayed disregarded (BBS and PPRC, 2016). The will and way to deal with enhancing the financial condition for a specific individual or a gathering in a specific place of an urban territory is a standout amongst the most critical issues in regard for the city organizers (Lotfi and Solaimani, 2009). Appropriate and adequate financial condition must be guaranteed to enhance better life of the poor slum occupants in Chittagong city. High essentialness ought to be given to the urban poor and transient poor who live in the poor financial condition in impromptu settlements. Supportable arrangement and approach that can be implemented in any place in some other poor zone must be given to realize improvement in the financial state of their lives.

Study Area Profile

West Bakalia (Chittagong metropolitan) with an area of 12.33 sq. Km is situated in the middle of 22°26' and 22°19' north and in the middle of 91°50' and 91°54' east. It is surrounded by Chandgaon thana on the north, Karnafuli thana and Karnafuli river on the east and on the south, and Kotwali thana on the west (CCC, 2018). Figure 1 shows the location of West Bakalia. Total household of the area is about 1521 in number. Most of the families live in semi-pucca houses in almost two to five storied buildings that are used for residential and commercial purposes. A few buildings are used for commercial purposes that are mostly shops. Besides in the low land area, a few slums are located that are katcha, and mostly in brick walled with straw. Table 1 shows the housing condition.

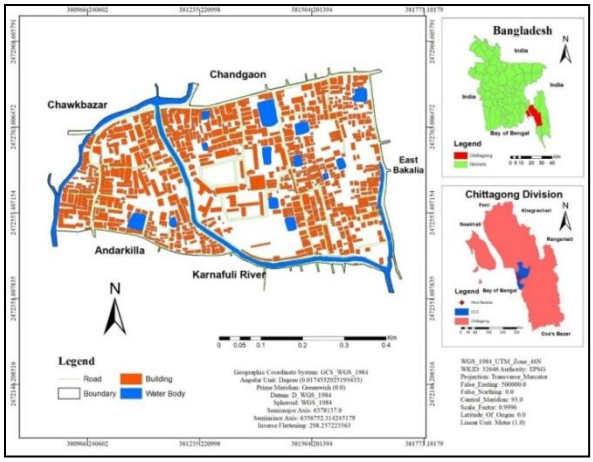


Figure 1: Location map

Table 1: Household information of West Bakalia area

Type	Percentage
Pucca	34%
Semi-pucca	40%
Kacha	26%

Source: Field survey, 2018

Although it is the mostly a commercial area and almost all of the roads are bituminous road that are located nearly in all four sides and parts of some roads are brick and concrete made that is located in every front side and beside residential buildings. The slum becomes muddy in the rainy season and causes difficulties to the local people. The slum area mostly in the low land area is vulnerable of water logging for lack of proper road and drainage condition. There are adequate numbers of drains in the slum and beside the roads to drain the water but in most places these drains are blocked. As most of the drains cannot link with main stream water logging is occurred in this area mainly in the rainy season and during tidal wave. Social map given in Figure 2 describes the present scenario of the study area.

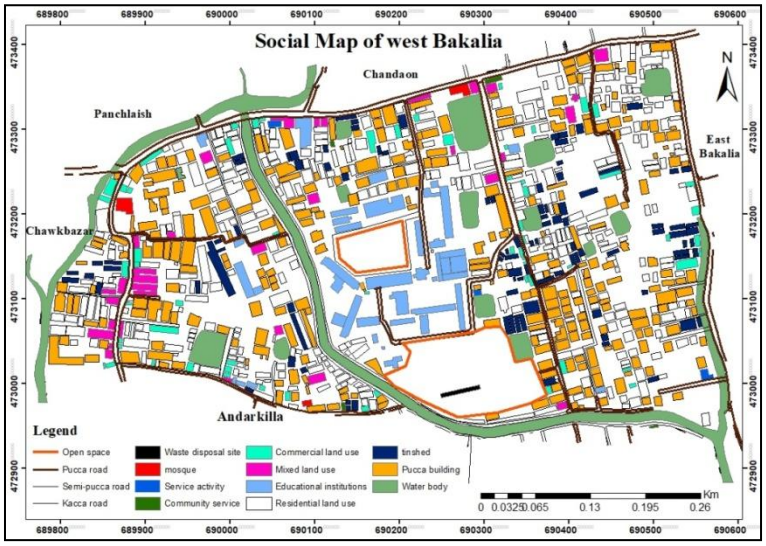


Figure 2: Social map

Methodology

This study is selected to analyze the socio-economic condition of the urban poor people because it is a major problem of the local residents of Chittagong. After selection of the topic, relevant literatures were reviewed to gather information about responsible factors that affecting the urban poor condition. At first, MPI is calculated to identify the urban poor of the area with considering different indicators. Then to evaluate the socio-economic condition two methods are followed. One by questionnaire survey and other is done by PRA approach. Different indicators are selected to find out the socio-economic

condition. Safety at home and on the street, accessibility to health care center, market, recreational place, public transport facility, neighborhood interaction are analyzed based on questionnaire survey. User satisfaction index is employed to find out the satisfaction level. In PRA method, different PRA tools like social and resource map, mobility map, cause-effect diagram are chosen.

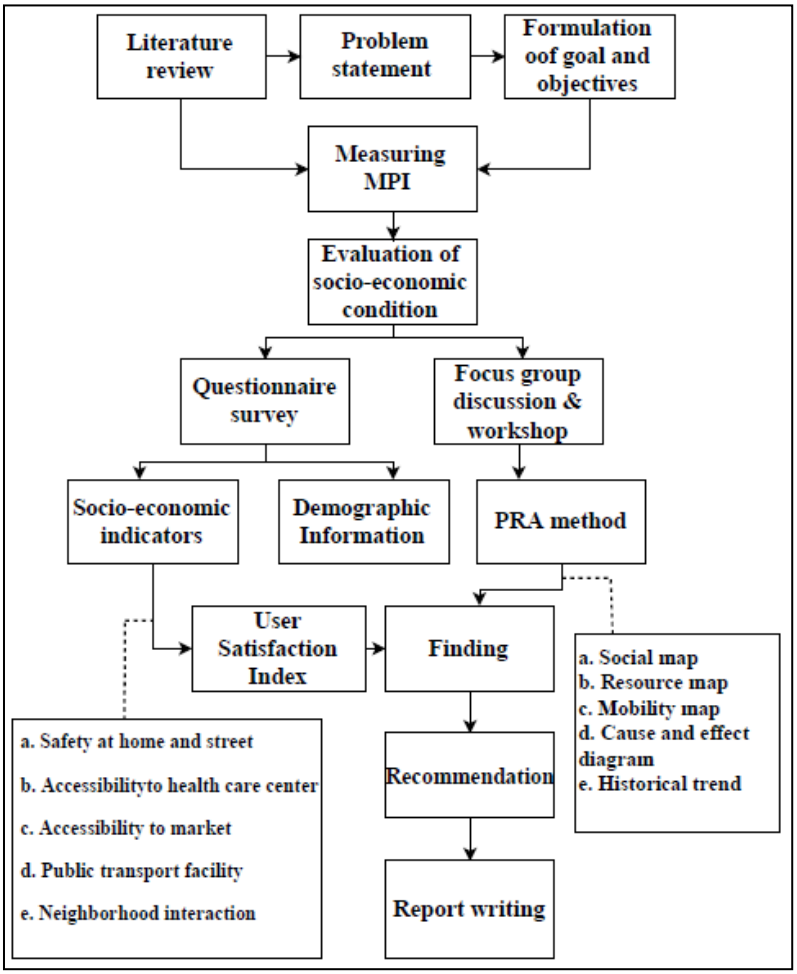


Figure 3: Methodology of the study in flow chart

Methods of Data Collection

A reconnaissance survey was conducted before the collection of final data. Data collection procedure has been done through formal and informal approaches. Primary and secondary data are needed to fulfill the objectives of the study. All the necessary data has been collected from various sources. To know the existing condition of the study area, a field survey, questionnaire survey, informal interview, and PRA survey has been conducted with the people living in the area. The questionnaire is designed in such a way that it would track down the influencing dimension related to poor people and their

socio-economic condition. Secondary data was collected in the form of a qualitative approach such as reports of the municipalities, web materials, various national and international articles, journals and books. Review of government strategy and NGO's reports of poverty and BBS report was made. Satellite image is used for delineating the study area.

Results and Discussions

According to the theory of MPI, first of all, the head count ratio (H= number of poor people/total population) was needed to be calculated to show the proportion of households that are poor. Then the intensity of poverty (A) has been calculated to measure the average deprivation. Finally the MPI is calculated by multiplying H with A. The result is shown in Table 2.

Table 2: Result of MPI analysis

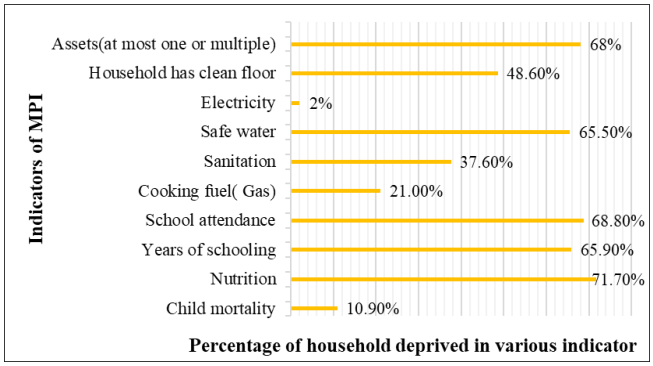
Multidimensional Headcount Ratio (H)	0.54102
Intensity of Poverty (A)	0..51259
MPI (H*A)	0.2773

Source: Prepared by authors

The interpretation of the result shown in Table 2 is straightforward. The value of multidimensional headcount ratio (H) presents that 54.11%% of people are MPI poor. According to the MPI, this means that they are in acute poverty. They have been deprived at least either in all the indicators of a single dimension or a combined across dimensions. The average poor person is deprived in 51.26% of the weighted indicators, so the intensity is 54.7%. The MPI presents the share of the population as 27.73% that is multidimensionally poor is adjusted by the intensity of the deprivation suffered. This adjustment is necessary because it is estimated that the value of H is 54.11% of the population who are poor.

Overall Identification of Deprivation According to Indicators

Percentage of household's deprivation related to each dimension is presented in Figure 4. About 71.70% population are deprived of nutrition, 68.80% population are deprived of school attendance, 68% population are deprived of assets, and only 2% population are deprived of electricity. As most of the people's income is low, they cannot afford the cost of nutritious food as the price of food is considerably high in this area because of its location. It is located in the city corporation area. Besides the nutrition problem, the years of schooling are deprived lack of school as well as the cost of education and they cannot afford that.



Source: Field survey, 2018

Figure 4: Overall identification of deprivation in different indicators

Safe water is another problem in this area. As most of the time, this area is underfed the waterlogging so safe water is not available here. Although WASA supply the safe water but it is in lower amount than demanded.

Demographic Information of the Respondents

Demographic information includes age, sex, income, dwelling type, ownership of dwelling, Educational status, occupation, housing condition. Relationship between them has been established with cross tabulation to understand further how one factor affects the other. The demographic information is shown in Table 3 where males are 51.8% and female are 48.2% which does not reflect much gender sensitivity. It also shows that most of the respondents in west Bakalia are within the age group of 41-50 (51.1%), 31-40 (35.4%). The table also shows that dwelling type in where 56.3% are tenants and 43.7% are owners. Housing condition of this area shows that kacha is 26%, semi-pucca is 39.9% and pucca is 34.1%.

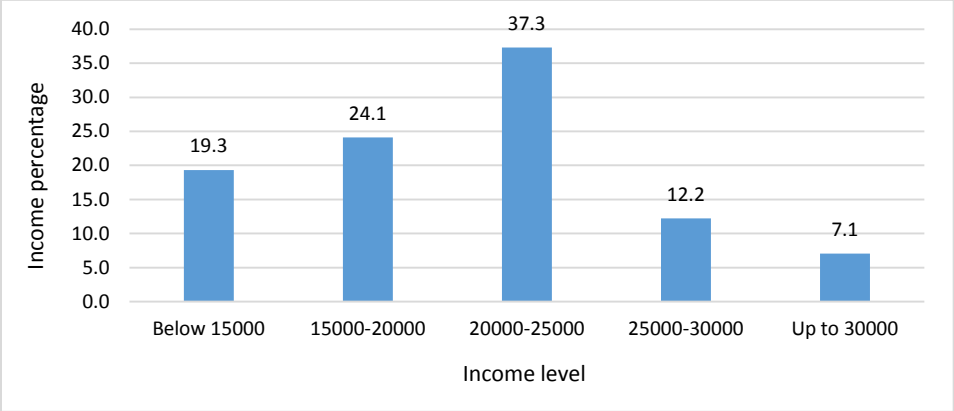
Table 3: Demographic information of west Bakalia

Description	Category	Number	Percentage(%)
Sex	Male	159	51.80%
	Female	152	48.20%
Age	below 30	33	10.6%
	31-40	110	35.4%
	41-50	159	51.1%
	above 50	9	2.9%
Dwelling type	Tenant	175	56.3%
	Owner	136	43.7%
Housing condition	Kacha	81	26%
	Semi-pucca	124	39.9%
	Pucca	106	34.1%

Source: Field survey, 2018

Monthly Income of the Respondents

The income scenario of the respondents is shown in Figure 5. It is found that most of people's income range is between BDT 20000 to 25000, which comprises about 37.3% of the people, 12.2% of the people's income is BDT 25000-30000. And few number of the poor people have an income of above BDT 30000 which are 7.1%. So, most of the poor people have income of less than BDT 25000.



Source: Field survey, 2018

Figure 5: Monthly income

Correlation among Income, Occupation, Housing Condition and Education

From the data analysis, it is found that occupation and income is hardly correlated, it means income does not depend on the occupation which is represented in Table 4. Some earn higher doing business than service job or others and vice versa is possible too. Housing condition in relation with income however, is a different story. Its highly correlated meaning as income is higher housing condition is also high. Housing condition is also highly correlated with educational status of the head of household. The higher the education level it seems that housing condition also improves. But it is not dependent on occupation. Regardless of occupation, the housing condition remains unaffected here.

Table 4: Correlation among income, occupation, housing condition and education

	Household income (monthly)	Occupation	Housing condition	Education of household head
Household income (monthly)	1	-0.058**	.769**	.685**
Occupation	-.058**	1	-.050**	-.027
Housing condition	.769**	-.050**	1	.663**
Education of household head	.685**	-.027	.663**	1

Source: Field survey, 2018

Occupation also does not depend on the education level. Some highly educated person is found to do business rather than corporate service job. Many illiterate, primary,

secondary level educated persons are found to be more earning than graduated individuals here by doing business.

Satisfaction Level of Different Components of Socio-economic Condition

The illustration of the satisfaction level of different existing facilities of West Bakalia area is portrayed in Figure 6. The vertical axis shows the user satisfaction scale and the horizontal axis is for the indicators of socio-economic condition. The horizontal line arrow represents the mean satisfaction level. In this study, every indicator has been scaled from 1 to 5 where '1' indicates 'very bad' and '5' indicates 'very good' level of satisfaction. The graph depicted that most of the facilities are lying under the mean satisfaction line. Neighborhood interaction is in the highest position of the graph meaning respondents are highly satisfied with it. In general, city people said to be not connected with each other for different causes in same neighborhood.

Source: Field survey, 2018

Figure 6: Satisfaction level of different indicators

But in west Bakalia area, this scenario does not exist. Also they are satisfied with the market accessibility as market for daily necessities are available within walking distance and varieties of goods meet their needs. They are not so happy or not very dissatisfied with their safety at home since in time of waterlogging they have to compromise their comfort and safety unwillingly. Public transport is within walking distance and enough in number but occurrence like pickpocket, seat scarcity etc cause them with dissatisfaction to use public transport. Health care facility is found to be in the lowest position meaning respondents are highly dissatisfied with it. There is no health care center e.g. hospital, medical center, clinic in the area and people have to travel far for health service causing them money and time let alone the need to be served in case of emergency. After health care facilities, safety at street is the factor in which respondents are most disappointed, because of unavailability of street light, frequent accidents, mugging, harassment at street and so on. Recreational facility is also a factor they are deprived of. Because of waterlogging, existing play fields are drowned or stacking up of waste and thus become useless for recreational activities. People are forced to travel 3-4 km to distant playfield to play. Also there is no park or other sources of entertainment.

Cause-Effect Diagram of Socio-economic Condition

Cause-effect diagram presents visually the causes, effects and their linkages, which help in arriving at an in-depth understanding of landslide hazard. The causes and its effects of poor socio-economic problem is shown in Figure 7. In the study area, the main problem is poor socio-economic condition which is the undeniable results of lack of facilities and poor accessibility. Water logging is the root cause. It is found that the roadside drain is narrow so when there is overflow of water then the drain cannot accumulate water properly and also due to absence of dustbin in the study area, residents of this area dump their waste in the drain which blocks the drain that is another important cause of water logging. The drains are not cleaned properly in time and encroachment of drain at the time of construction is another cause of Water logging in this area. Drains and canals are filled by wastes, high tide of the Karnafuli river, lack of awareness from both the authority and the residents are some major problems. No recreational facilities, no health care center and lack of vehicles for internal circulation are some of the main factors of lack of facilities that are pointed out by the respondents

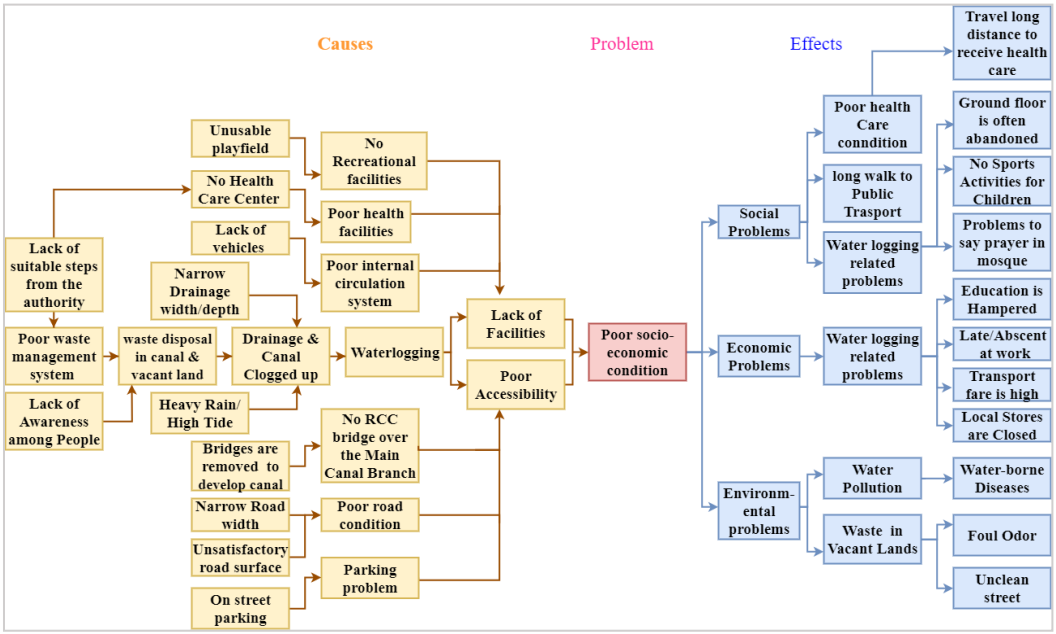


Figure 7: Cause-effect diagram

On the other hand, Lack of bridges to access in the community over the canal with vehicles, poor internal road width and surface condition are the main factors for poor accessibility are noted by the inhabitants. Some of the severe effects felt by the residents are social problems like poor health care condition, poor recreational facility, economic problems like educational deficiency and other.

Recommendations

In this section, some recommendations are provided to help overcoming the problem of the study area. Recommendations are given on social and economic problems in the study area which have been identified in this research. These are:

- Investment should be made for the local businessmen to make them stable and employment opportunities to increase productivity.
- Most of the people of the study area fall into low income group. They failed to increase economic capacity due to lack of skills. So if the people can be provided with skills, it will help to increase their income level. People of the area are not financially strong to solve the problem of the area, so financial assistance should be provided which will help to make the area safe and livable
- In every year they are affected by natural disaster specially water logging, so to prevent the problem there should be made house above the road surface level to save the housing from rain water and getting imprisoned within the house boundary.
- Proper drainage planning should be implemented in this area very urgently. Security should be increased in the area.
- Number of Night guards should be increased. Road width should be increased and proper investment is needed for running it. Police box should be made in the area. CCTV monitoring system is necessary to improve safety.
- In the area, there are no any public hospital, so for their healthcare, it should be immediately built a public health complex. The public health complex should be located in reasonable distance so that the community people can go there easily. The government should take care of their health.
- Public transport should be available in the area so that the poor people can easily get it.
- Shopping market should be located in the reasonable distance. Public transport especially bus should be increased. Security should be strong in the marketplace.
- Number of daily markets is not adequate for them, it should be increased. The market condition should be improved. A proper management should be followed to run the market. Most of the people use public transport, but the number of public transport is not adequate for them. Its number should be increased.
- Seat capacity is not enough for them. Bus seat capacity should be increased. All public transport should obey common rules and regulations.
- It is recommended that a small size park should be built in the area in where child can go for playing, and an old person can go for refreshment. A playground should be made in this area.

Conclusion

National development accelerates when all the areas of a country play supportive role. Unplanned urbanization and poverty are the major barriers to improving the development in most cases. Urban poor people exist in most of the cities of south Asia and Chittagong city is not different from this. West Bakalia area is one of the most

deprived parts of the Chittagong city. This study has shown that it is one of the most lagged area of Chittagong city with poor livable environment and urban poor area. Urban poor is identified by using the MPI method. This method shows that this area is multidimensionaly a poor area. To understand the socio-economic condition of this area, two methods were applied, one is questionnaire survey and another is PRA method. By analyzing the questionnaire data, it is found that there exists a number of problems, such as lack of safety at home and on the street. Lack of health care facility is the biggest problem in the study area. In this area, there is no health care center. Participatory Rural Approach (PRA) method is used to seek out the causes and effects, mobility pattern, vulnerable areas, social institutions and resources of the area right from local people through direct participation from their perspectives. In the end, some very intriguing factors like severity of water logging and poor waste disposal system came out in relation to poor socio-economic condition.

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