

Assessing the living conditions of fisherman community as low-income housing: A Case Study of Pitaitikor Village, Fenchuganj, Sylhet

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Abstract

A study was conducted among the Pitaitikor village near the Kushiara River and the Hakaluki Haor fishermen in the Fenchuganj area of Sylhet, Bangladesh. The fisherman community comprises individuals or families whose primary source of income or subsistence is fishing. The objective of this study was to identify and present their living conditions, house forms, and settlement patterns. The study revealed the conventional and inadequate way of life among rural fishermen. To improve their living conditions, the study aimed to elucidate the opportunities, coping strategies, and challenges associated with livelihood in this community. Using a mixed-methods approach involving observations, surveys interviews, field, and literature reviews, a semi-structured questionnaire was employed to interview a total of 50 fishermen chosen randomly from the study region. Ultimately, by focusing on specific interventions to enhance the well-being of the fisherman community in Sylhet, this research contributes to a deeper understanding of the socio-economic dynamics of that community.

Keywords: Fishermen Community; Housing; Settlement patterns; Kushiara River; Pitaitikor Village

1. Introduction

Bangladesh is known as a riverine country because it has a lot of rivers. The country's waterways, which span an approximate 22,155 km, are formed by this river and its tributaries and distributaries. About 1.78 million people can find full-time and part-time work in this sector [1]. Fish and fisheries are an essential component of the population, particularly in Bangladesh and they are crucial to the country's socioeconomic growth. Bangladesh is one of the top fish-producing nations in the world, with 32.62 MT of fish produced overall in the 2011–2012 fiscal year [2]. Additionally, this industry provides roughly 60% of the country's animal protein intake and 19% of all the protein consumed in an average Bangladeshi diet [8].

Fishing and Crop cultivation are the two main sources of income for Bangladeshi fishermen. All fishermen, however, rely on fishing as their primary source of income. Fishermen have historically been Hindus. When their labor in the fields was not needed, they worked as boatmen, fishermen, or house builders. There are 23 distinct castes of Hindu fishermen in Assam and Eastern Bengal. Kaibartas, kewat, karita, tiwar or rajbangshi, das shikari, malo or jhalo, namasudras or chandals, berua, jiani, karal, pod, bind or bindu, bagdi, patni, nadial, mali, hari, gonrhi, banpar, gangota, murari, surahiya, and lohait are among them. Muslims typically participated in fishing-related activities like carrying and trading fish. The main Muslim groups in Bangladesh who work as fishermen or in similar fields are called mahefarosh or mahimals (the Persian word mahi means fish and farosh means vendor), dalatya, nikari, gutia jelia, jiani, dhawa, abdal, and bebajya [3]. Sylhet, located in the northeastern region of Bangladesh, is renowned for its vibrant culture and diverse communities. Among these communities, the fisherman population plays a significant role in the socio-economic fabric of the region. The number of Sylhet mahimals is 35,195, of which 17556 are male and 17,639 are female. The Dom and Patni castes are referred to as Nadials. Their job is to catch fish and prepare nets, dam, chati, chach,

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etc. Patnis also do boat work. Patnis are not a modern caste. Although Dom and Patni are basically the same caste, Patnis feel shy to identify themselves as Dom. Their number is 73246, of which 37168 are men and 36078 are women. Rivers like Kushiara, Surma, Bibiana, Dhaleswari etc. catch a lot of hilsa every year. Besides, many types of fish are available such as Ghania, Gajar, Shaul, Kanla, Pabia, Bacha, Bain, Magur, Kai, Cheng, Prawn (Icha), Rani, Tengra, Punti etc. "Tiger fish" of Ghaghat are very large in size. Not less than eight people can carry it, even tigers of such large size are caught. Hindus do not eat fish such as tiger fish, gajar, naninda and hornfish [4].

The primary source of income for the fishermen's household next to the river is fishing. Nevertheless, societal, technological, and economic limitations prevent the fishermen from effectively catching fish. As a result, the fishermen's socioeconomic circumstances are not ideal. They are unable to make enough money to cover their basic expenses [5]. The community of fishermen is thought to be among the most vulnerable groups in terms of employment prospects [6]. Many conveniences are denied to the majority of fishermen. Because they constantly struggle to survive, the fishing community's standard of living is completely unsatisfactory [7].

Therefore, A fisherman's lifestyle is amazing and challenging. They are always working to catch fish for the community and make a living. Despite the fact that they are generally very poor, fishermen have incredibly intelligent hearts. They live hand to mouth because they are so poor. It is a really challenging job. However, despite their importance, the socio-economic conditions of fishermen in Sylhet remain underexplored. In this study, the housing situation of the Fisherman community in Sylhet, Bangladesh, will be clearly illustrated.

2. Aim and Objectives

This study aims to assess the present state of fishermen's utility and community service facilities and analyze the living conditions of housing amenities. This research will assist policymakers in formulating a future development strategy for the neighborhood or any analogous low-income housing region.

3. Methodology

Between Julys to December 2021, A preliminary field survey was carried out among the Pitaitikor near Kushiara River fishermen in the Sylhet, Bangladesh. Furthermore, during the literature review phase, secondary data sources like journals, newspapers, books and magazines were carefully examined. A total of 50 fisherman from the randomly chosen study region were interviewed. For the study, primary data were gathered. The primary data were gathered using focus groups, interviews, questionnaires, and observation. A semi- structured questionnaire was created prior to gathering the primary data, and it was later corrected as needed. Gathered data by going to the site repeatedly during the survey time. Age, family type and size, religion, marital status, education levels, housing conditions, health services, alternative occupations, access to sanitation and drinking water, income, access to electricity, access to food and nutrition intake, and other significant socioeconomic factors were all inquired about from the fishermen. After gathered the information, it was compiled and tallied. Microsoft Excel was used to analyze the tabulated data in the end.

4. Study Area

4.1. Site Location

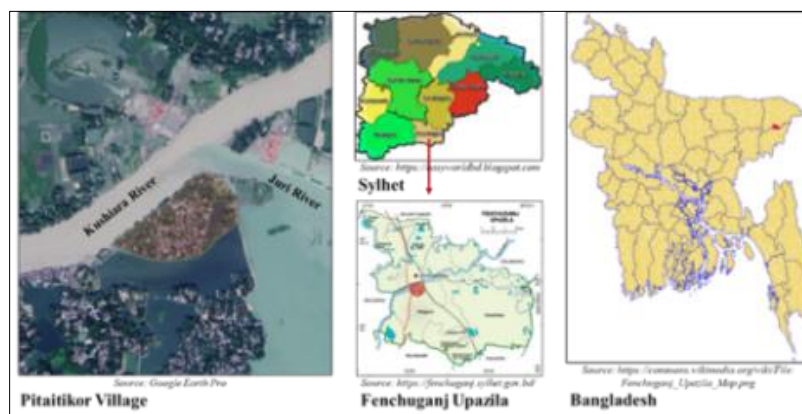


Figure 1 Study Area Location



Source: Author

Figure 2 Land use Plan



Figure 3 Greenery Plan

4.2. Site Details

Pitaitikor is a village under Sylhet district, Fenchuganj Upazila, situated 30 kilometers away from the city of Sylhet. The village is under Word No. 01 of the local area administration. Pitaitikor covers a total area of 28.5 acres and is inhabited predominantly by the fishing community, who survive based on fishing alone. The village has around 1,050 houses with a combined population of nearly 8,000 individuals. Transportation in Pitaitikor is mainly done by cars and boats since it is close to water bodies. There are no health facilities in the village; the closest hospital is approximately 3 kilometers away. For education, there is one primary school and a secondary school. The dominant religion among the villagers is Muslim, and there are two mosques that serve the religious purposes of the villagers.

4.3. Site Surroundings

Pitaitikor village is surrounded by four surrounding villages: Goyashil, Bagmara, Lamagongapur and Sottish. Goyashil and Sottish were formerly included in Pitaitikor village. Over time, with administrative and territorial reorganization, these places slowly separated and emerged as independent villages. Goyashil was initially a part of eastern Pitaitikor and Sottish was a part of the western part of it. Despite being separated, these villages have intimate geographical, cultural, and communal relations.

5. Field Survey and findings

In this village, the population is spread in various age groups; 15% of the population is aged between 20 years and below, 50% between 20 to 40 years, 30% between 41 to 60 years and 5% above 60 years. There are two kinds of families in this village; the nuclear families with 60% of the total families and the joint families with the 40% proportion. When it comes to family size, the largest percentage 50% of families are 7 and 8 members in number. 4 to 6 member families are 30%, while 10 to 12 members take up 15%. The lowest numbers, making up 5% of families, are those with over 12 members. Approximately 30% of the fishermen have stated that their daily fishing income ranges from 150 to 350 taka. Whereas 50% have stated that they earn between 350 to 550 taka per day, the rest of the 20% of the fishermen have stated that their per day income ranges from 550 to 800 taka.

5.1. Housing Facilities

In this study, Various types of housing schemes and their relevant details will be presented. It is well known that several families combine and share a house in this village. This increases the population density of the area. Each of the types of houses described will provide some enumeration in the form of; Number of family members, Occupations, Number of fishermen, Education levels, Daily income. Because of the lack of space, small houses are often occupied by extended families and including many of the new generation. Joint families tend to face enormous difficulty managing daily domestic activities in an overcrowded space. Improving the surrounding living conditions greatly improves the need for proper housing plans and adequate facilities to aid the development of living conditions.

5.2. House Type: 01

In this house plan, four independent families under one roof in this home design, which holds 24 people. Fishing is the common source of livelihood among the inhabitants, where six working fishermen live there. The educational level in the locality is up to primary level, and the average everyday income of each individual ranges between 250 and 500 takas. The present residential condition is that of absolute congestions without the presence of a well-planned layout of the house. Limited movement of the house through an extremely narrow corridor. The house is basically composed of tin sheets and the bamboo partitions representing the resource constraint and unavailability of permanent material.



Source: Author

Figure 4 Existing condition of a house (House Plan 01)

Sanitation conditions are extremely poor; there are no attached toilets. The inhabitants instead utilize improvised, unhygienic toilets outside the house, constructed from nylon bags and tin sheets. During the rainy season, it becomes even more difficult and dangerous to reach these toilets since they have to go through muddy, slippery paths. The house itself is constructed of delicate materials such as bamboo and tin and sections of it are now collapsing because of years of neglect and exposure to the elements.



Source: Author

Figure 5 Existing condition of a house (House Plan 01)

5.3. House Plan 02

The household consists of five members, one of whom is a fisherman. The educational level of the family is up to the secondary level. The average daily income of the fisherman ranges from 550 to 700 Taka. In regards to the equipment utilized while fishing, he does not own a boat and relies on just one net for his livelihood.



Source: Author

Figure 6 Existing condition of a house (House Plan 02)

5.4. House Plan 03

The members of the family are fifteen in number and four of the members are involved in fishing as their main activity. The education of the members of the family ranges from primary to secondary. Each of the fishermen earns 350 to 600 Taka on average per day. They have a boat and nets for the fishing profession.

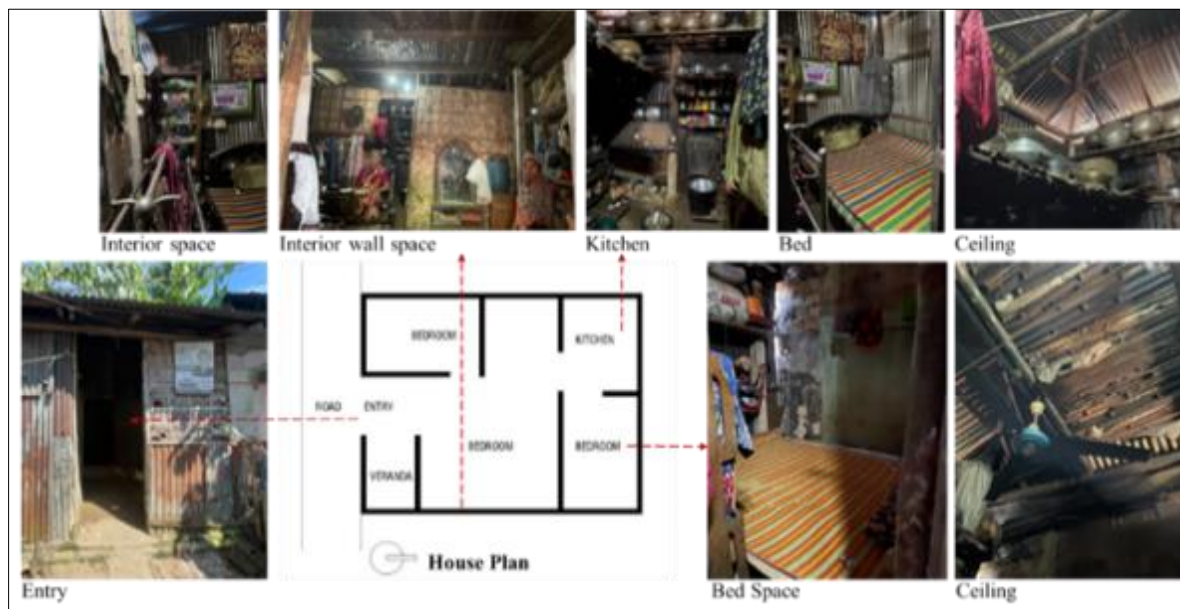


Source: Author

Figure 7 Existing condition of a house (House Plan 03)

5.5. House Plan 04

The household size is ten, and three members are engaged in the fishing profession. The education level of the family is up to the primary level. All the fishermen are earning between 250 to 450 Taka on average per day. They have a boat and nets to conduct their fishing activities to make their living.

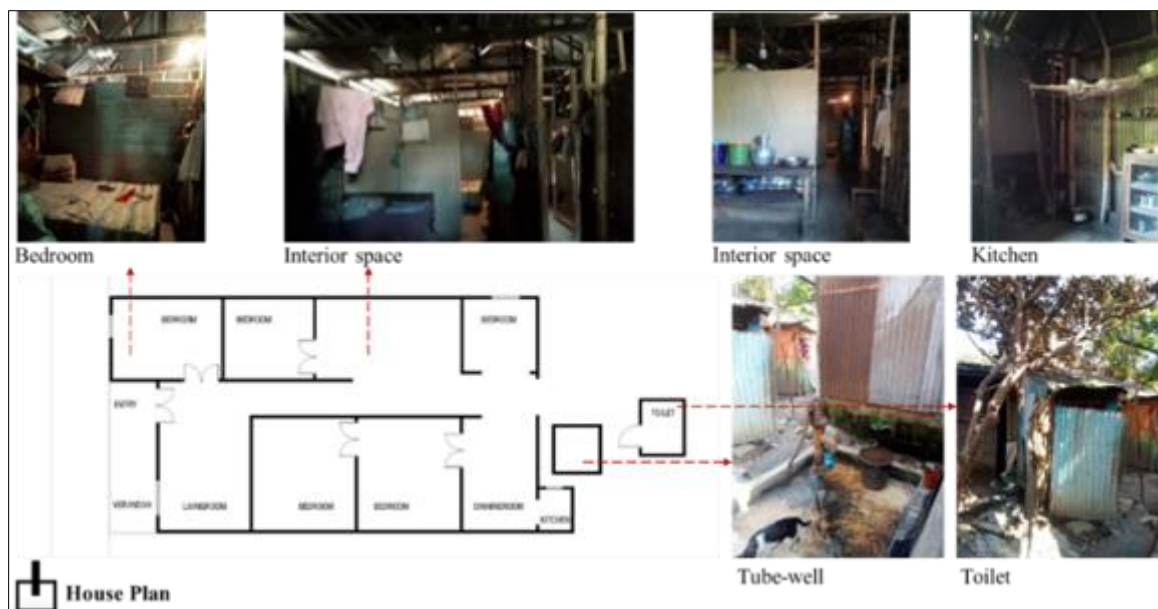


Source: Author

Figure 8 Existing condition of a house (House Plan 04)

5.6. House Plan 05

The household has nineteen members, and five of the members work as fishermen. The education level of the household members is up to primary and secondary. Their earnings as fishermen are 150 to 800 Taka on a daily basis for each fisherman. In terms of fishing gear, there are no boats and they only rely on nets for fishing.



Source: Author

Figure 9 Existing condition of a house (House Plan 05)

5.7. House Types

The pattern of house indicates the social status of the people. Houses in this village are not of the same type. It was observed that 60% households of the fishermen have tin made house either roof was made with thatch or tin. 30% houses were brick wall and tin made roof. 6% houses were brick wall and RCC made roof. 4% households of the fishermen have earthen house either roof was made with thatch or tin. In the majority of the houses, a portion is damaged but due to a lack of money, the house dwellers are not able to repair them.



Source: Author

Figure 10 Different types of houses

5.8. Sanitary Facilities

Toilets of 40% of the population consist of earthen pits whose walls are constructed of nylon bags. Bamboo and tin walls constitute the toilets of another 40%. Brick walls constitute the toilets of almost 15% of the population. There is no toilet facility for the rest 5%. Overall, their sanitar conditions are not hygienic.



Source: Author

Figure 11 Overall sanitary condition

5.9. Drinking Water Facilities

Safe and pure drinking water supply is considered one of the most highly valued facilities in the community. Most of the fishermen were noted to depend on tube-well water for consumption, either from community tube-wells or their own tube-wells.

5.10. Health Facilities

The health facilities of the fishermen were not satisfactory at all. The health facilities of the fishermen were not good and it was found that 30% of the fishermen families depended on village doctors who had no idea and proper knowledge about medical science. 55% of the fishermen received health service from Upazila hospital. The rest 15% from District hospital.

5.11. Electricity Facilities

The majority of the population, around 85%, use electricity, while 12% use solar energy. The remaining population has no access to electricity or solar energy and still relies on oil lamps for lighting purposes.

5.12. Education Facility

The village's educational infrastructure is inadequate. Basic education from Class One to Class Five is currently offered by the only operational primary learning center, Pitaitikor Government Primary School. Furthermore, Kasim Ali Model High School is a recently opened secondary institution. However, because the school is still in the planning stages of its establishment, the teaching process has not yet begun.

5.13. Occupational Status

Nearly 80% of the fishermen are engaged in fishing as their main occupation and the other 20% are occupied in other activities. Apart from that, they also engaged in crop production, fish trading, small businesses or work as a day laborer during off-season.

5.14. Community Service Facility

In Pitaitikor there are a lot of people who cannot even have their daily food because of poverty. Some family gave their children to orphanage because they cannot afford their expense. Then the other people of this area help them with whatever they can give. The children of this area play in the school playground. Muslim populations constitute the majority of the population in the study territory. Two mosques are situated within the community.

5.15. Monsoon Flood Conditions

The flood situation in Fenchuganj upazila of the district deteriorated further, leaving 30,000 people of 25 villages in five unions marooned. The Kushiara River was flowing 118 cm above the danger level at Fenchuganj Bazar June 20, 2018 said sources at the local Water Development Board office. Locals said Baghmara, Pitaitikor, Chhattis, Uttar Islampur, Monurtuk, KM Tilla, Fenchuganj Madhya Bazar, Nath Colony, Intaz Ali Residential Area and Paschim Bazar Residential Area went under water due to the flood caused by heavy rain and onrush from the upstream [9].

6. Result and Discussion

The current status of fishermen in and around Pitaitikor is mediocre in general terms. Most of the fishermen lack basic amenities and are exclusively reliant on riverine resources for their subsistence. Their socio-economic status is fragile, as they encounter several issues in their daily life. One of the most significant revelations is the absence of proper housing facilities. A majority of the fishermen reside in poorly built homes with no provision of basic infrastructure. Absence of public spaces and poor roads further compounds the isolation of these communities from basic services. Economic downturn in the fishing business has also compelled some of the fishermen to look for alternative profession, which further strains their already vulnerable livelihood. Moreover, the Pitaitikor fishermen lack sanitation facilities, drainage is poor, there is no education, poor diet and less awareness about their own health status. They have almost zero basic health facilities, which is proof of the dire necessity for a separate health center or hospital in the region for the enhancement of their overall health status. To solve these various problems, the study recommends that the government needs to take practical measures. First, it needs to provide educational institutions to empower the young generation and remove poverty from their lives. Second, a master plan needs to be prepared exclusively for the area. The plan needs to focus on proper planning management in order to house the increasing population and develop the area in a systematic way with proper facilities. There should also be training and awareness programs to educate local fishermen on issues of health, hygiene, and sanitation. There may be supplementation by NGOs with easily available microfinance and loans to facilitate the fishermen to invest in better equipment and alternative livelihoods. If both government and NGOs make coordinated and planned efforts, the present conditions of the fishermen of the Pitaitikor region can be improved significantly. Empowerment of the people, integrated planning, infrastructural development, and awareness generation are the only ways to bring in long-term sustainable development

7. Conclusion

The present state of the fishermen in Pitaitikor village is unsatisfactory. The fishermen are unable to obtain the necessary number of fish to ensure a subsistence pay for their family, leading to considerable financial hardship. The bulk of fishermen in the market face several problems in fishing and marketing their products. The principal issue was recognized as extortion by the local perpetrator; further concerns were inadequate credit facilities, deficient marketing resources, lack of fishing knowledge, and unavailability of appropriate equipment. Government authorities must ensure essential rights, encompassing education, health, nutrition, sanitation, fishing rules, and training for the residents of low-income housing like the study area. National and international NGOs must provide enough facilities and other livelihood opportunities for fishermen. Otherwise, they cannot function effectively, which may impact the whole economy of Bangladesh.

Compliance with ethical standards

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Disclosure of conflict of interest

Authors declare no conflicts of interests.

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