# Socio-Economic Condition and Livelihood Status of the Fisherman Community at Muradnagar Upazila in Cumilla 

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#### Abstract

The present study become carried out to assess the socio-economic condition and livelihood structure of fishermen community at Muradnagar Upazila under Cumilla district during the period from February 2019 to July 2019. This Upazila is very close to Gumti River. Data were collected from randomly selected 40 respondents of local fishermen community through questionnaire interview. The study was performed on the basis of personal interview and Focus Group Discussion. From the survey, it was estimated that most of them are directly or indirectly involved in fishing. They are engaged in different fishing-related activities during banning season. The study shows that the majority ( $66 \%$ ) of fishermen were Hindu, where $34 \%$ were Muslim. The literacy rate was only $18 \%$ here. The research indicates that $70 \%$ of fishers directly involved in fishing. They were provided license card from Upazila Fisheries Office. Their jointed family was $70 \%$. Most of them live in a tin shed house which is $90 \%$. The survey also informed that most of the fisher, like $80 \%$ use tube-well for drinking water. Treatment facilities were developed, but it depends upon their economic condition. Poor fishermen go to village doctor and kabiraj for treatment. Comparatively wealthy fishermen go to Upazila Health Complex and Sadar hospital in serious condition. In the study area, there were no training facilities for local fishermen. Sometime they could not get enough loans for lack of proper management program. As a result, fishers became helpless while flooding occurs. Electricity facilities in the study area were better than before. Annual incomes of the fishermen were varied from BDT 50000-100000. Except fishing, fishermen were involved in net making, boat construction, agricultural activities etc. The government should come forward to take necessary steps to manage their problems and to motivate them for creating significant opportunities for their better livelihood structures.


Keywords: Gumti river; Livelihood; Socio-economic; Fish farmer

## INTRODUCTION

Muradnagar is an Upazila of Cumilla District in the Division of Chittagong, Bangladesh. This Upazila is situated at 35.42 km from Cumilla proper and very close to Gumti river.

Gumti River originates from Dumur inside the northeastern hilly place of Tripura state of India. From its source, it flows approximately a hundred and fifty km along a meandering path through the hills, turns west and enters Bangladesh close to Katak Bazar (Cumilla proper). The Gumti is a rocky river having a strong current. Its flow varies from 100 to 20,000 cusec at

Cumilla. Tides influence the Gumti up to Daudkandi, but upstream it is free from tidal effects. Based on the river, there is a lot of fishing and fish farming activities occurred by the rural people.

Freshwater fish farming plays an essential role in the livelihoods of rural people in Bangladesh [1]. Freshwater fish farming is likely to be a primary activity which may have a significant impact on the daily life of rural people in Bangladesh [1]. A large number of rural people depends directly or indirectly on fish farming for their livelihood. Among them, many are below the poverty level and engaged as farmers, operators, employees,

[^0]traders, intermediaries, day labourers and transporters [2]. Moreover, fish farming in the pond appears to be a profitable business compared to rice cultivation. Currently, rural farmers are found to convert their rice field into aquaculture pond [3]. We know that Bangladesh is a riverine country. About 700 rivers including tributaries flow through the country. Although few fish farmers in rural areas accepted pond aquaculture as their secondary occupation, most of them involved in fish farming, this is the typical scenario of rural people livelihood in Bangladesh. However, it may vary from one area to another area. In broad aspects, livelihood includes the capabilities, assets and activities, which are essential for continuing daily life. In another way, the components which can cope with and recover from stress and shocks can be considered as a livelihood [4]. Rural livelihood diversification is defined because the technique via which rural livelihood construct a more and more diverse portfolio of functions and belongings with a purpose to survive and to enhance they're widespread of living [5]. Household combines their livelihood resources within the limit of their contact and utilize their institutional connections to pursue many different livelihood strategies. Strategies can consist of diverse styles of production and earnings-generating functions (e.g., agricultural production, farm employment, formal sector employment etc.) or processing and exchange activities (e.g., informal sector traders, merchants, commodity processors, etc.) or some combination of two. Household Livelihood Security (HLS) analysis should determine the livelihood strategy portfolios that different households pursue and the classical pathway they have taken. The present study aims to study the socio-economic condition and livelihood status of fishermen community at Muradnagar Upazila in Cumilla, Bangladesh.

## MATERIALS AND METHODS

## Study area

The study was conducted at Muradnagar Upazila under the district of Cumilla, which is near to Gumti river. According to Upazila Fisheries Officer (UFO), there was 1748 fisherman directly or indirectly depend on capturing fish from Gumti river. The study period was from February 2019 to July 2019.

## Data collection

The present study was based on field survey where primary data were collected from 40 fishers who were involved in fishing. According to Dillion and Hardaker [6] there are three methods by which survey and data can be gathered, including direct observation, interviewing respondents and record kept by respondents.

## Data processing and analysis

Recorded data were presented mostly in the tabular form because it is simple in a calculation, widely used and easy to understand. After data entry, all the collected information were accumulated and analyzed by MS Excel and then presented in tabular and graphical forms to understand the present socioeconomic condition and livelihood structure of the fishermen community.

## RESULTS AND DISCUSSION

The present finding shows that the fisherman community depends on their livelihood to the fishing and fishing-related activities. For clear understanding the entire scenario regarding their socio-economic condition, several parameters were considered such as house type, educational level, occupation, sanitation, electricity facilities, cropland, daily and monthly income, fishing asset, drinking water source, treatment facilities, school-going children, members of their family etc.

## Age structure

The maximum number ( $45 \%$ ) of fisherman were young aged ranging from 20-30 years, while the minimum amount (5\%) of fishermen were above 50 years (Figure 1). A similar study was also found that the age of the fishermen ranges from 18-45 years [7-9].


Figure 1: Age structure of fishermen.

## Gender

All respondents involved in the fishing, of which $100 \%$ were male and no female were found engaged in fishing activities.

## Religious status

Hindus had the majority in number ( $66 \%$ ) where Muslims had (34\%), and there were no Cristian or Buddhist involved in fishing activities. Kabir et al. [10] and Hannan [11] also found that the majority of Hindu people involved in catching fish.

## Occupational status

Almost $70 \%$ of the fishermen involved in fishing as their primary occupation. However, others were engaged in net making, handicrafts, livestock, agricultural work etc. (Figure 2). Similarly, Bhuyan and Islam, show that $73 \%$ of the fishers engaged in fishing.


Figure 2: Occupational status of fishermen.

## Educational status

Most of them were illiterate (48\%), $32 \%$ can sign only, $13 \%$ fisherman had education up to primary level, and fisherman who had education level up to secondary level were lowest $7 \%$ (Figure 3). However, previous studies show that the rate of uneducated fishermen were $71.12 \%$ [12] and $66.63 \%$ [13], which is inconsistent with the present findings.


- Iliterate
- Can sign only
- Primary education
- Secondary education

Figure 3: Educational status of fishermen.

## Marital status

The fisherman was mostly married. Only $6 \%$ of the fisherman were unmarried who ranged up to 25 years.

## Family size

In the study area, $70 \%$ of families of the fishermen were joints, and $30 \%$ of families were nuclear (Table 1). In contrast, fishermen around the Marjat Baor at Kaligonj, Jenidah having $44 \%$ joint and $56 \%$ nuclear family [14].

Table 1: Family type of fishermen.

| Type of family | Number of fishermen | Percentage |
| :--- | :---: | :---: |
| Joint | 28 | $70 \%$ |
| Nuclear | 12 | $30 \%$ |

## Annual income

About $60 \%$ of the fisherman had a yearly income between BDT 50000 to 70000 , and $35 \%$ of the respondents had income in the range BDT 80000 to 100000 about $5 \%$ of the fishermen had income over then BDT 100000 (Figure 4). The present finding is more or less similar to the previous studies where they show the annual income of subsistence fishermen (72\%) varies from BDT 40000 to 60000 [7].


Figure 4: Annual incomes of fishermen.

## Housing condition

In the study area, a tin shade house was $90 \%$, while the cottage house was 10\% (Table 2). Although fishermen are poor, they live in their own home. Similarly, Ahamed [13] found that $92.22 \%$ of people likely to live in their own house.

Table 2: Housing condition of fishermen.

| Housing condition | Number | Percentage |
| ---: | :---: | :---: |
| Tin shed | 36 | $90 \%$ |
| Cottage | 4 | $10 \%$ |

## Health facilities

Health condition of fishermen was not so good probably due to lacking proper nutritional diet. They depend on nearby Upazila Health Complex and village doctor for medication. Similar health facilities also reported by Ali et al., [15]; Bhuyan and Islam, [7]; Kabir et al. [10].

## Drinking water facilities

About $80 \%$ of fishermen have their tube-well, whereas $20 \%$ of fishermen use neighbour tube-well for drinking purpose. The present finding is consistent with another previous study where $82 \%$ of fishermen use tube-well for their daily purposes [14].

## Sanitation facilities

Three major types of sanitary facilities are personal, jointed, and community sanitation in the study area. At present, $75 \%$ of fishermen have private sanitation facilities, followed by $19 \%$ jointed and $6 \%$ community-based sanitary facility (Figure 5). Besides, Kacha toilet system was dominated (56\%). Only 4\% of fishermen had building system toilet, and the rest of $25 \%$ and $15 \%$ fishers had a toilet with semi building and ring \& slum respectively (Figure 6).


Figure 5: Sanitary condition of fishermen.


Figure 6: Sanitary facilities of fishermen.

## Electricity facilities

In the study area, $85 \%$ of the fishermen had electricity facilities, whereas $15 \%$ had no electricity facilities at the residence (Table 3). The present results suggest there is an excellent electricity facility in the study area.

Table 3: Availability of electricity.

| Use of electricity | Number | Percentage |
| :--- | :---: | :---: |
| Electricity available | 34 | $85 \%$ |
| No electricity | 6 | $15 \%$ |

## Loan for fishermen

The fishermen take a loan from different NGOs like Proshika, BRAC and different somobaysomitti for several reasons including boat construction, net buying, marriage, food and medicine etc. Similar findings also reported by Bhuyan and Islam [7] (Table 4).

Table 4: Use of loan in different purpose.

| Use of loan | Number | Percentage |
| :--- | :---: | :---: |
| Boat construction | 8 | $20 \%$ |
| Net buying or making | 12 | $30 \%$ |
| Household construction | 14 | $35 \%$ |
| Food | 2 | $5 \%$ |
| Marriage | 4 | $10 \%$ |

## CONCLUSION AND RECOMMENDATIONS

Socio-economic condition and livelihood structure of farmer of the study area is not satisfactory. The fishermen were deprived of many rights. Besides, the availability of fish in Gumti River is being reduced due to environmental and human made activities such as overfishing and illegal fishing during banning season, using of restricted gear, siltation and social problem among the fishermen and as a whole due to absence of management policy. Most of the fishermen are not interested in agricultural works. During banning season, they are involved in net making,
handicrafts, cutting soil, agrarian activities etc. All of the women members of the study communities remain unemployed, and they were housewife. The annual income of the fishermen depends on the fishing assets, activity during banning period, subsidy by the government, family members, alternative income source and loan are taken from various NGOs.

In order to enhance the current state of affairs of the fishermen, numerous measures could be made. Pollution from industries should be managed. The educational group need to be set up in fishing villages to improve their educational condition. The authorities ought to deliver loans for them at a low-interest charge and create alternative activity possibility in off-top season. Local Government, NGOs need to play an essential role in enhancing the sanitation gadget. Increase of public cognizance through the various publications and publicity for shielding fishery sources have to be executed. Organization of fishery cooperative society should be formulated.

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