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Socio-Economic Aspects of the Fishermen of Lohalia River, Bangladesh

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Abstract: This survey aimed at providing base line information of socio-economic aspects of the fishermen engaged in fishing in the Lohalia River, Patuakhali. To assess their socio-economic status, some essential socio-economic information e.g. literacy, income level, religion, gender, health hazards, sanitation and medical facilities, family structure and size, types of fishermen, child labour engagement were taken into account. Results indicated that most of the fishermen (60%) belonged to the age class 21-40 years and dominated by Muslims (75%). Three educational categories were logged where illiteracy was dominant (60%) and 35% had primary level of education and 5% could only sign. It was found that 20% of toilets were *pakka*, 60% were semi-*pakka*, 15% were *kacha* and 3% of the fishermen had no sanitary facilities. In addition, 10% fishermen used their own tube-well, 30% fishermen used shared or neighborhood tube-well and the remaining majority (60%) used the government tube-well in Schools area. Lack of scientific knowledge, illiteracy and lack of governmental support were the major constraints. They did not any alternative livelihood options to earn their bread other than fishing in the area. The government as well as non-government organizations (NGOs) should take initiatives to improve their living standard and to develop such techniques or alternatives that can help at least the poor fishermen to hold present profession of fishing in the Lohalia River and its vicinity.

Key words: Fishermen • Socio-Economic Profile • Livelihood Status • Lohalia River • Bangladesh

INTRODUCTION

Fisheries sector has already been recognized as a leading income and employment-generating sector in Bangladesh by creating a number of subsidiary industries, cheap sources of nutritious food and most importantly, source of livelihood for a large marginal population of the country. Bangladesh emerged as the 5th largest aquaculture producing country with its estimated production of 1,523,759 tonnes in 2011 [1]. The people normally associated to earn their bread depending upon catching fish are called the fisherman (locally *jailla/jele* in

Bangladesh). They are one of the most vulnerable and poorest communities in Bangladesh due to having the income below the marginal level [2, 3].

For the development of an economically backward sector, information about fisherman of a particular region is necessary and vital [4]. But sustainable livelihood has the ability to cope with and recover from stress and shocks by assessing present and future assets but not undermining the natural resource base. Not only the natural resources but also river resources are essential to meet up the challenge of life as the fisherman solely depends upon river resources [5].

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Lohalia River is an important riverine ecosystem located in the coastal district, Patuakhali Bangladesh and supports diverse fisheries communities. It is also an important ecosystem with much aquaculture potential. This flood fishery plays a very important role in alleviation of rural poverty and supplying food to the poor fishing community. Hence forth pattern of livelihood were assessed by some authors in Bangladesh [3, 5, 6]. But no attempt has been taken so far to determine livelihood status of the fishing community of Lohalia River, Patuakhali. Considering the above fact, this study was carried out to assess the socio-economic condition of the fishermen communities living around the Lohalia river.

MATERIALS AND METHODS

This survey was conducted from 12 February to 11 September 2012 among the fishermen engaged in fishing in Lohalia River (Fig. 1) Patuakhali, Bangladesh. The primary data were collected through personal interview, questionnaire, discussion and observation. Before collecting the primary data, a draft questionnaire

was developed which was pre-tested with a few fishermen. The questionnaire was designed to provide essential socio-economic information e.g. fishing occupation, religion, gender, education levels, owing fishing gear, ways of fishing, training programs, time spending in fishing and fishing license. A total of 60 fishermen were interviewed. Collected data were analyzed to explain the socio-economic and livelihood condition of fishermen of Lohalia River. All the collected information were accumulated and analyzed by MS-Excel 2010.

RESULTS AND DISCUSSION

Age Structure: The study reveals that the age of the fishermen ranged from 10-60 years (Table 1). 10% of fishermen were in the young group, 60% were in the middle age group, where 25% was represented by group of seniors and 5% being very old person. Kabir *et al.* [3] found that age group of 31-40 years was the highest (50%) and 41-60 years was the lowest (10%) considering all fishermen in Old Brahmaputra river in Mymensingh.



Fig. 1: The location of the Lohalia River and Lohalia Union as the study area

Table 1: Age distribution of the riverine fishermen

Age Group	No. of the Fishermen	% of the fishermen
10- 20	6	10
21-40	36	60
41-60	15	25
Above 60	3	5

Table 2: Religious status of the riverine fishermen

Religion	No. of the Fishermen	% of the fishermen
fishermen		
Muslims	45	75
Hindus	12	20
Buddhists	3	5
Christians	0	0

Table 3: Family type of the fishermen

Family Type	No. of the fishermen	% of the fishermen
Joint Family	39	65
Unit Family	21	35

Table 4: Family size of the fishermen

Family Size	No. of the Fishermen	% of the fishermen
2-3	9	15
4-6	30	50
7-10	18	30
Above 10	3	5

Religion: It was noted that most fisherman (75%) are belonging to Muslims in the study area. 20% and 5% fishermen were Hindus and Buddhists respectively though it is well known that only the lowest caste the Hindu community was engaged in this sector (Table 2). Similar type of majority in Muslims was observed in the study conducted by Ali *et al.* [6] in Tarakanda Upazila, Mymensingh and Kabir *et al.* [3] in Old Brahmaputra River, Mymensingh.

Family Size and Type: The family size of the fishermen was divided into four classes based on the number of family members (2-3), (4-6), (7-10) and above 10. Most of the fishermen family were composed of 4 to 6 members (60%) and marked as medium family, small family as 2 to 3 members (15%), the large family as 7 to 10 (30%) and very large family is as above 10 members (5%) (Tables 3 and 4). It was found that, 65% fishermen families were jointed and 35% of families were unit. About 42.5% of the fish farmers lived in nuclear family and the rest (57.5%) in joint family in Mymensingh district [6].

Table 5: Educational Status of the riverine fishermen

Level of education	No. of the fishermen	% of the fishermen
Illiterate	36	60
Primary	21	35
Secondary	3	5
Higher Secondary	0	0
Bachelor	0	0

Table 6: Source of income of the riverine fishermen

Source of income	Average (Tk)	Percent (%)
Fishing	1250	51.19
Agriculture	850	20.24
Day Labor	700	16.67
Net mending	350	8.33
Other source	150	3.57

Educational Status: Educational status of the fishermen have been grouped into five categories viz. illiterate, primary, secondary, higher secondary and bachelor. The highest of the fishermen were illiterate (60%) that matches with the findings of Khan *et al.* [5]. Some can sign only but illiterate some were primary level of education (35%) that can sign only (Table 5). About 5% went to the secondary level in the study area. None of the fishermen were from Higher Secondary and Bachelor level. Mahabubur [7] reported that 68% of *hoar* fishermen were illiterate, 28% up to primary level and 4% had only secondary level education.

Source of Income: The average monthly income of the fishermen was BDT 4200 (Table 6). The average annual income of fishermen in the study area was estimated at BDT 50,400 which indicating better than national average income at BDT 22,000 [8]. It is a great sorrow for them, the total income is finished for buying the necessary goods, food item, fuel, cloths, health care and educational purpose which was more or less similar to the results of Ali *et al.* [6] and Kabir *et al.* [3].

Housing Condition: The nature of house was indicates the social status of the people. During the survey, attempts were made to find out the condition of living house of the people. From the survey, it was found that 15% households of the fishermen were Jute, Straw, Plant leaves and Soil. 60% households were tin shed with wooden wall. 20% households were containing of Brick, wood and tin and only 5% having the Brick and Cemented house (Table 7). Khan *et al.* [5] found two major categories of house i.e. 83% had *kacha* and 17% had semi *pakka* house in the fishing community near Tista River.

Table 7: Housing condition of the riverine fishermen

Housing condition	No. of the fishermen	% of the fishermen
Jute, Straw, Plant leaves and Soil	9	15
Tin and wood	36	60
Brick, wood and tin	12	20
Brick and Cement	3	5

Table 8: Health facilities of the riverine fishermen

Health care center	No. of the fishermen	% of the fishermen
Health care center, PSTU*	12	20
General Hospital, Dumki	30	50
Village Doctor	18	30

*PSTU= Patuakhali Science and Technology University, a leading University in Bangladesh

Table 9: Drinking water facilities of the riverine fishermen

Source of drinking water	No. of the fishermen	% of the fishermen
Own Tube well	6	10
From Neighbor tube well	18	30
Government tube well in school	36	60

Table 10: Sanitary condition of the riverine fishermen

Sanitary condition	No. of the Fishermen	% of the fishermen
<i>Pakka</i>	12	20
Ring Slap and Wooden House	36	60
<i>Kacha</i>	9	15
Open	3	5

Table 11: Electricity facilities of the riverine fishermen

Electricity supply	No. of the Fishermen	% of the fishermen
Present	21	35
Absent	39	65

So the evidence found from the study was the indicator of one's economic capability and choice.

Health Facilities: The health facilities of the fishermen were poor and it was found that 30% of the fishermen households were dependent on village doctors who did not have any understanding and knowledge of medical science. 50% of the fishermen got health service from General Hospital, Dumki and remaining 20% got health service from MBBS doctors in the Health Care Center, Patuakhali Science and Technology University (PSTU) (Table 8) which was more or less similar to the findings of Ali *et al.* [6].

Drinking Water Facilities: During the study period, it was observed that 100% fishermen used tube-wells water for drinking purposes (Table 9) and among them 10% fishermen used their own tube-well, 30% fishermen used shared or neighbor tube-well and remaining majority part as 60% used Government tube-well in Schools area. In Bangladesh the fisherman are very. It is very difficult for them to establish tube well water for their own drinking purpose. Instead, mostly, they have to depend upon on Government.

Sanitary Facilities: The fishermen in this area are very poor and not conscious about the sanitation. In the study period it was found that 20% of toilets were *pakka*, 60% were Ring Slap and Wooden House as semi-*pakka*, 15% were *kacha* and 3% of the fishermen had no sanitary facilities as open (Table 10). They use agricultural land, crop field, *Aails* (boundaries of the land), canals, bushy area and hidden place as latrine. The present study revealed that the sanitary conditions of the fishermen were not satisfactory than fish farmers in Mymensingh district where Ali *et al.* [6] in his study found that 62.5% of the farmers had semi-*pakka*, 25% had *kacha*.

Electricity Facilities: From the present survey, it was found that there were 35% fishermen had electricity facilities and 65% did not have the electricity facility for the fishermen (Table 11).

CONCLUSION

The results of the study reflects that most of the fishermen live from hand to mouth in the Lohalia river area but exert their best effort to increase their income level for smooth maintaining of family. The NGOs and the government authorities should ensure for at least their basic level of education, health, sanitation, nutrition status, rights, fishing laws and training. The NGO's should be helpful for providing sufficient loan which may be used for the up gradation of their way of earning and living. It is therefore recommended that the government and industrial companies should plan to enhance fisheries activities and encourage the growth of other occupational types.

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