

Livelihood status of the fisherman of the Kirtonkhola River nearby to the Barisal town

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Abstract: The present study was conducted to evaluate the livelihood status of fishing community of the Kirtonkhola River adjacent to the Barisal town during the period from April to November, 2011. The investigation was conducted on Beltala, Rasulpur and Amanatganj area of the Barisal town adjacent to the river using structured questionnaire. It was found that most of the fishermen were belonged to the age groups of 31 to 40 years (56.00%), represented by 88% muslim. The family size of fishing community is usually consisted of 5-6 members and medium family is the predominant (70%) among the fishermen but in a joint family (84.00%). Over 80% of the fishermen primary occupation was fishing, 10% was engaged in agriculture and daily labour activities respectively. About 12% of the fishermen were only could write name while 80%, 8% and 0% of the fishermen were illiterate, primary and secondary level of education, respectively. About 70% of the fishermen received health service from village doctors, 24% from *upazila* health complex and remaining 6% got health service from MBBS doctors. About 74% of the fishermen used *katcha* sanitary while 10% used semi-*pucca* sanitary, and 16% of the fishers had no sanitary facilities. Around 14% fishermen used their own tube-well, 62% used shared tube-well and remaining 24% used neighbors tube-well for drinking water purpose. The government provides no kind of VGF cards for them. Lack of scientific knowledge, illiteracy, and lack of government providation were the major constraints. They were the poorest of the poor in the society and they have no alternative livelihood options to earn their bread other than fishing in the area.

Key words: Kirtonkhola river, fishermen, livelihood status, constraints.

Introduction

Fish and Fisheries sector play an immensely important role on the socio-economic development of Bangladesh from time immemorial and it is the part of our cultural heritage. Fisheries sector contributes about 3.00% of the total export earning, 3.74% to GDP and 22.23% to agricultural sector (DoF, 2010). Annual fish production was 2,701,370MT in 2008-09 fiscal years (DoF, 2010). Fish also contributed about 58% to the nation's animal protein intake during 2008-09 (DoF, 2010). At present annual fish intake by an individual is 17.52kg and the annual fish demand is 29.74 metric tons (DoF, 2010). So it can reduce its malnutrition problem by increasing the production of fish.

It creates 1.4 million full time employment and part time employment of nearly 11 million people (Haque *et al.*, 1991). A large portion of rural family members are engaged in part time fishing from the beels (Hughes *et al.*, 1994).

Fishermen are one of the most vulnerable communities in Bangladesh. They are poor by any standard and over the years economic condition of the fishermen had further deteriorated. Alam and Bashar (1995) estimated the average per capital annual income of the fishermen families to be BDT 2,442 i.e. about 70% lower than the per capital income of the country as a whole. Being an isolated community fishermen are deprived of many amenities of life.

A livelihood is a sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in future, while not undermining the natural resource base (Chambers and Conway, 1992). For sustainable rural development and poverty elimination, different approaches had been adopted and the sustainable livelihood approach has been gradually expanded with its own core and principles for poverty focused development activities (DFID, 1998). The approach basically based on the fundamental principle analysis of capital assets in the context of the external environment. A sustainable livelihood is a way of thinking about the objectives, scope and priorities for development,

in order to enhance progress in poverty elimination (Scones, 1998).

Kirtonkhola river adjacent to the Barisal town is one of the most important ecosystem with much aquaculture impending. This area consisting of fishery plays a very important role in alleviation of rural poverty and supplying food to the poor fishing community. However, socioeconomic status of this fisherman is not satisfactory; production of fish in this river is also declining day by day. Considering the above fact, the present study was carried out to assess the livelihood status and constraint faced by the fishermen in the area.

Materials and Methods

The present study was conducted to assess the livelihood status and constraint faced by the fishermen of the Kirtonkhola river adjacent to the Barisal town. This study was conducted from April to November, 2011. The investigation was imposed on Beltala, Rasulpur and Amanatganj. The study was based on collection of primary and secondary data. Before collecting the primary data a draft questionnaire was developed which was pre-tested with few fishermen. In this pre-testing, much attention was given to any new information in the draft questionnaire in order to reach the objectives of the study. According to the experience gained in pre-testing, the final questionnaire was improved, rearranged and modified. The final questionnaire included the questions on the age structure, family size and type, occupation status, educational status, housing condition, drinking water facilities, sanitary facilities, health facilities, credit facilities and monthly income, factors affecting the level of fish production etc. Primary data were collected through personal interview supplemented by multiple methodological Participatory Rural Appraisal tools such as Focus Group Discussion (FGD) and Crosscheck Interviews (CI) with key informants. Necessary relevant information on the socio-economic condition of fishermen was collected from regional offices.

All the collected information were accumulated and analyzed by MS-Excel and then presented in textual, tabular and graphical forms to understand the present

status of the livelihood status and constraints of the fishermen of the studied area.

Results and Discussion

Livelihood status of the fishermen in the Kirtonkhola river: A total of 50 fishermen were interviewed various aspects of livelihood status of the fishermen. A detailed analysis were made on the following parameters and presented in this section.

Human capital

Age distribution: Different categories of age groups; young (20-30 years), middle aged (31-40 years) and old (41-60 years) were considered to examine the age distribution. It appeared that age group of 31-40 years was the highest (56.00%) and 41-60 years was the lowest (14.00%) and 20-30 years was 30% within considering all fishermen (Fig. 1). Ali *et al.* (2009) found that most of the fish farmers (50%) belong to age group of 31 to 40 years in Mymensingh district. Bhaumik and Saha (1994) reported that age structure of fishermen at Sundarbans was ranged from 20 to 70 years which more or less agreed with the present findings.

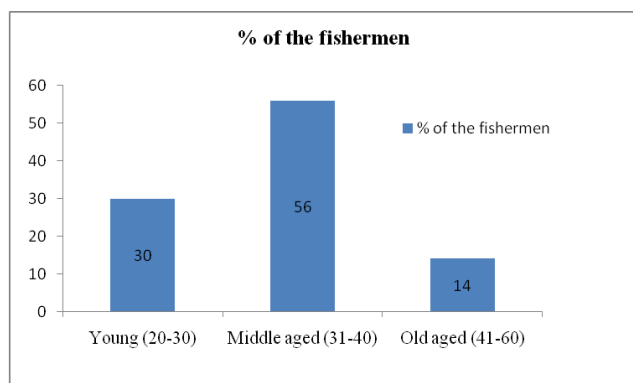


Fig. 1. Age distribution of the fishermen in the study area.

Family status: From the study it was found that, 84% fishermen family were jointed and 16 % family were nuclear (Table 1). About 42.5% of the fish farmers lived in nuclear family and the rest (57.5%) in joint family in Mymensingh district (Ali *et al.*, 2009).

Table 1. Family type of the fishermen in the study area

Family type	No. of fishermen (n=50)	% of total fishermen
Joint family	42	84
Nuclear family	8	16

Family size: The family sizes of the fishermen were divided into three classes as small, medium and large. From this research it was found that, most of the fishermen family were composed of 5 to 6 members (70%), marked as medium family. Very little family contains of small family as 2 to 4 members as 12% and the large family (7-10) as 18%. (Table 2). Most of the fish farmer (45%) belonged in the 4 to 5 member's family in Mymensingh district (Ali *et al.*, 2009).

Educational status: Most of the fishermen are illiterate (80%). Only small portion of them can sign only (12%). Some are primary level of educated (8%). None of the

fishermen were from secondary level (Table 3). None of the fishermen were from secondary level. Mahbubur (2001) reported that 68% of hoar fishermen were illiterate, 28% up to primary level and 4% had only secondary level education.

Table 2. Family size of the fishermen in the study area

Family size	No. of fishermen (n=50)	% of total fishermen
Small family (2-4)	6	12
Medium family (5-6)	35	70
Large family (7-10)	9	18

Table 3. Educational status of the fishermen in the old Brahmaputra river area

Educational status	No. of fishermen (n=50)	% of total fishermen
Illiterate	40	80
Capable to sign only	6	12
Primary	4	8
Secondary	0	0

Natural capital: Natural capital of the fishermen represents the natural resources such as land, water, timber and wider environmental goods that are critical for fishermen and associated groups to support production (Ali *et al.*, 2009). Rapid population growth has led to accelerate capital depletion that has affected their income in the fishermen of study area.

Religion status: From the present study, it was found that Muslims were featuring as the absolute majority of the fishermen. The status of religion of riverine fishermen as shown in the Table. About 88% and 12% riverine fishermen were Muslims and Hindus respectively.

Financial capital:

Credit access: The national and local NGO like BRAC provide credit only to the organized poor members for purchase fishing gears and boats. After repayment only 38% became self sufficient who did not need financial help but 10% borrow money from their neighbors, 18% from relatives, 30% from NGO's and 4% from co-operatives for their fishing business (Fig. 2) which was similar to the findings of Alam *et al.* (2009) in Mymensingh district.

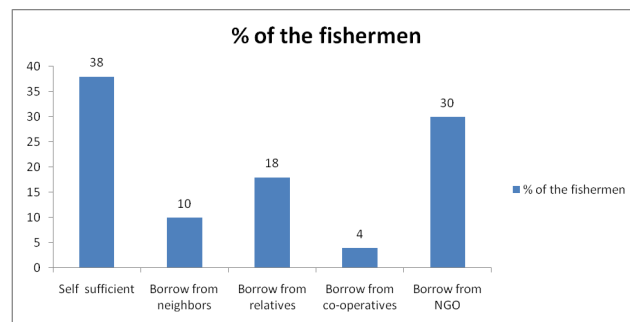


Fig. 2. Sources of credit facilities for buying fishing gear of fishermen in the study area.

Sources of income: From the present survey, it was found that there were three types of fishermen such as professional, occasional and subsistence. The average

annual income of professional, occasional and subsistence fishermen were BDT 40000, 19500 and 30000, respectively (Table 4). The average annual income of

fishermen in the study area was estimated at BDT 34333.33 which indicating better than national average income at BDT 22,000 (BBS, 2002).

Table 4. Sources of income of the fishermen in the study area

Types of fishermen	Fishing	Agriculture	Day labor	Small trader	Fish sale	Total amount
Professional	30000	-	-	-	10000	40000
Occasional	10000	3500	6000	-	-	19500
Subsistence	3000	20000	-	7000	-	30000

Occupational status: Most of the fishermen around the old Kirtonkhola river area are involved in fishing as their main occupation. However, some were also engaged in agriculture and day labor as their main occupation. The present study has revealed that 80% of fishermen were engaged in fishing as their main occupation, 10% was in agriculture and 10% in daily labor as in sand business (Fig. 3) which was more or less similar to the findings of Alam *et al.*, (2009).

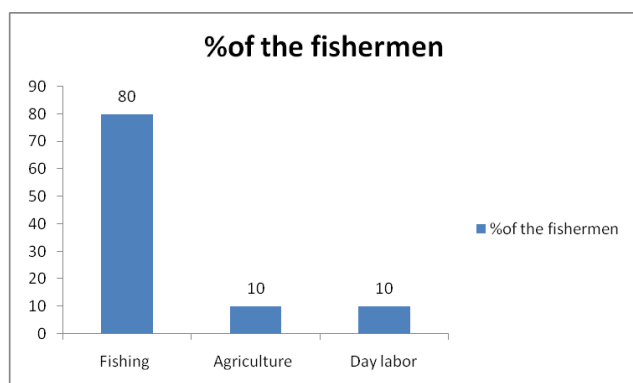


Fig 3. Main occupation in the study area of the fishermen.

Annual income: Annual incomes of the fishermen were varied from BDT 25000 to 50000. The selected fishermen were grouped into three categories based on the level of annual income and it was found that about 60% of the fishermen had annual income between BDT 25000 to 35000 and 64% of the respondent had income in the ranged BDT 35001 to 45000 (Table 5) which was more or less similar with the findings of Ali *et al.*, (2009).

Table 5. Annual income of the fishermen in the study area

Income level (BDT)	no. of fishermen (n=50)	% of total fishermen
25000-35000	32	64
35001-45000	13	26
45001-50000	5	10

Physical capital

Housing conditions: 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 66% households of the fishermen were tinshed with bamboo, 24% households were tinshed with tin wall. 10% households were containing of straw components (Fig. 4). Alam *et al.* (2009) found that about 82.22% of household structures were *katcha* whilst 11.11% were semi-*pucca*

and only 6.66% were *pucca* of the Basantapur beel fishermen.

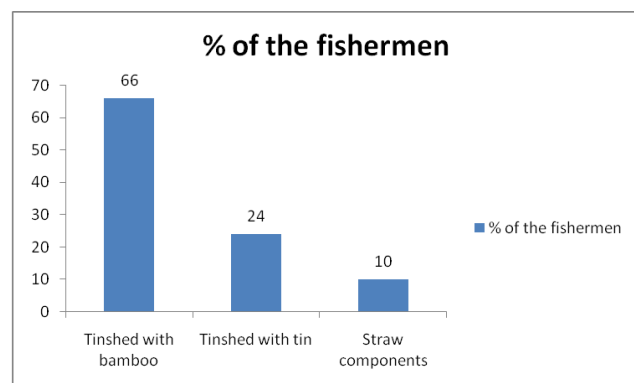


Fig 4. Housing condition of the fishermen.

Health facilities: In the study area health facilities of the fishermen were poor and it was found that 60% of the fishermen households were dependent on village doctors who did not have any understanding and knowledge of medical science, 30% of the fishermen got health service from upazilla health complex and remaining 10% got health service from MBBS doctors (Table 6) which was more or less similar to the findings of Ali *et al.*, (2009).

Table 6. Health facilities for the fishermen of the study area

Health facilities	no. of fishermen (n=50)	% of total fishermen
Village doctor	35	70
Upazilla health complex	12	24
MBBS doctor	3	6

Drinking water facilities: The provision of clean and safe drinking water is considered to be the most valued elements in the society. The study showed that 100% of fishermen households used tube-wells water for drinking purposes (Fig. 5) and among them 14% fishermen used their own tube-well, 62% fishermen used shared tube-well and remaining 24% used neighbors tube-well. This scenario was very common among the fishermen in most areas of Bangladesh and similar results were noted by Alam *et al.*, (2009).

Sanitary facilities: It was observed that sanitary conditions of the fishermen were very poor. In the study area, it was found that 74% of toilets were *kacha* while 10% were semi-*pucca* and 16% of the fishermen had no sanitary facilities (Fig. 6). There were no kinds of *pucca* sanitation found in the investigation. The present study revealed that the sanitary conditions of the fishermen were not

satisfactory than fish farmers in Mymensingh district where Ali *et al.* (2009) in his study found that 62.5% of the farmers had semi-pucca, 25% kacha and 12.5% no sanitary facility.

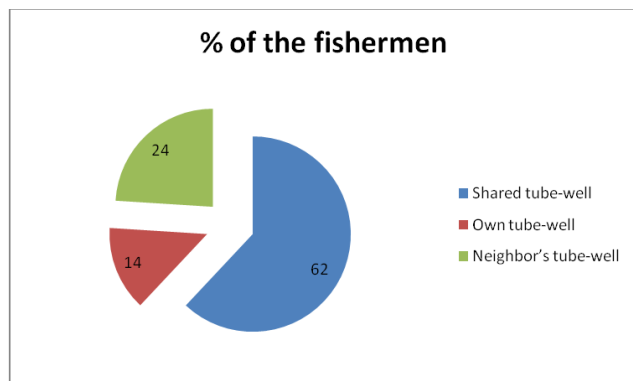


Fig 5. Drinking water sources status of the fishermen in the study area.

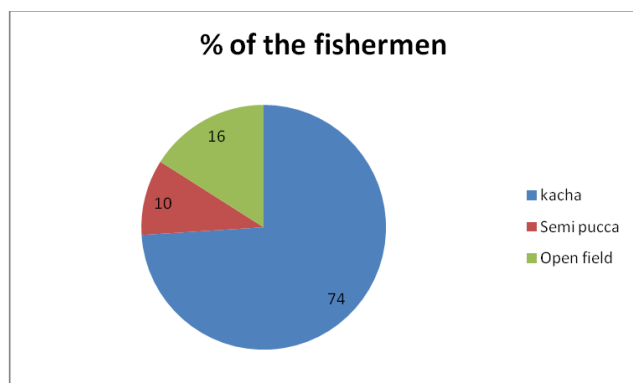


Fig 6. Sanitary facilities of the fishermen in the study area.

Electricity facilities: From the present survey, it was found that there was no electricity facility for the fishermen.

Influence of Mahajan: As there are no sorts of providence from the government. So why, the poor fishermen have to manage loan from the Mahajan to buy the fishing boat or the fishing net.

Socio-economic constraints of the fishermen: In the market most of the fishermen are facing various problems during fishing and marketing their goods. The main problem was recognized as extortion by the local extortionist, other problems were inadequate credit facility, presence of aquatic vegetation, lack of marketing facilities, lack of knowledge of fishing, lack of appropriate gears and disturbances by dacoits and thieves and sometimes by the local people themselves. Most of the fishermen were very poor and they have limited resources to buy nets and other fishing equipments. They are neglected in all respect in the society. Most of them are illiterate and live from hand to mouth. Being very poor their children often go for fishing rather than going school. As a result, generation after generation they remain illiterate and not being able to contributes for the betterment of their community.

Conclusion and recommendation: The socio-economic condition of the fishermen in the adjacent area was not

satisfactory. The fishermen were deprived of many amenities. The education level of the fishermen was so poor. Due to the lack of awareness as well as the poor income of the fishermen families, the study of the poor fishermen student doesn't go so far. The educational status should be improved in the adjacent area. So why, some educational institutes should be built up in the adjacent area. The Government should take some important stage by providing some sorts of management policy as well as providing of some extra providence during the ban season of the fishing. That may be done within the providing of the VGF card. Some forms of NGO's activity must be ensured in the adjacent area for the improvement of the life leading status of the fishermen. The NGO's must be helpful about the providence of the loan which may be used for the up gradation of the income procedure. As well as health facilities should be ensured by the government assistance.

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