

Socio-Economic Status of Fishermen of the Jamuna River in Bangladesh

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Abstract: *The study was designed to assess the socio-economic status of fishermen and fishing activities dependent on the Jamuna River of Chukaibari Union near Dewangonj Upazilla to study and understand the socio-economic status of fishermen. The study was conducted for four months from July to October 2014. Results of the study revealed that three types of fishermen were engaged in fishing in the Jamuna River. They were professional fishermen, seasonal fishermen and subsistence fishermen. Various Participatory rural appraisal (PRA) tools were used to conduct the study. Among of the fishermen, muslim covered around 95% where rest was hindus. It was found that age group of 31-40 years was the highest (41.67%) and age group of 51-60 years was the lowest (13.33%). Among the fishermen, 13.33% had no education, 20% could write their names, 36.67% were educated up to PSC level, 25% up to JSC level and 5% up to SSC level. Most of the fishermen's (31.67%) housing conditions were kacha while 36.67% were tin shed and only 25% were semi pacca. It was found that 53.33% of toilets were kacha and 61.67% were dependent on village doctor. On an average, the highest and the lowest annual income of the fishermen were Tk. 58,507 and Tk. 39,131, respectively. Most of the fishermen expressed that they were happy but not fully satisfied by fishing due to some obstacles such as - embankment erosion, pollution and over fishing.*

I. Introduction

Bangladesh is one of the developing and most densely populated countries. About 16 mpeople are directly or indirectly related to fisheries sector. Among them 8.00 lakhs are inland fisherman and 5.16 lakhs are marine fisherman. The number of fish farmer and shrimp farmer is about 138.64 lakh and 8.33 lakhs respectively (DoF, 2013).

The Jamuna River plays an important role in the fisheries of Bangladesh. In every year large amounts of fish are caught from this river. There are many portion of this river are breeding ground of Indian major carps. Large quantities of carp fry are caught from numerous breeding grounds of this river (DoF, 1996).

The main channel of the Brahmaputra flowing through Bangladesh is known as the Jamuna and the old channel is known as the Old Brahmaputra which is arising near Bahadurabad. There are many tributaries arise from the Jamuna river. Some important towns and business centers situated on the bank of the river (Shahjahan, 2000).

To study the socio-economic status of the riverine fishermen of the Jamuna river, Dewangonj, Jamalpur. The current study was designed to address the following objectives:

- To determine the socio-economic status of the riverine fishermen; and
- To identify the problems of the fishermen in the study area.

II. Materials And Methods

Selection and description of the Study Area

Jamuna river of Dewangonj Upazila under Jamalpur District was considered for the study. The study area was extended from Eastern border of Bakshigonj Upazila to southern border of Islampur Upazilla under Jamalpur district.

Data collection period

The study was carried out for a period of four months from July to October, 2014.

Selection of Sampling Method

This selection of fishermen depended on several factors, such as financial constraints. For this study sample size was 60. Fishermen were randomly selected for face to face questionnaire interviews for data collection.

3.5 Methods of Data Collection

The data were collected through direct (face-to-face) interviews with fishermen. Simple random sampling method was followed for selection of 60 fishermen of the Jamuna River. The interview of fishermen was made at home or river sites. Each interview of fishermen required about one and half an hour. Participatory rural appraisal (PRA) is a process of enquiring from rural people, directly on the site and face-to-face, gaining from local, physical, technical and social knowledge. The advantage of PRA over other methods is that through wider participation of the fishermen, the collected information is likely to be more accurate. For the present study, PRA tool such as focus group discussion (FGD) was conducted with fishermen. The FGD is a group meeting where fishermen from the target communities discuss selected topics. In this study, FGD was used to get on overview of particular issue such as existing fishing systems, constraints of fishing, socio-economic conditions of fishermen etc.

III. Results And Discussion

Socio economic status of the fishermen in study area

The aim of this section was to understand the socio-economic status of the riverine fishermen of the Jamuna River. Sixty fishermen lived in several villages under Chukaibari Union, were interviewed from various places like house, fishing places, field etc. The relevant data were collected on the socio- economic characteristics such as religion, family size, educational status, experience in fishing, occupational structure, income etc. The outcome of this section was social and economic structure of the fishermen.

Types of fishermen

Fishes were caught throughout the year by a large number of fishermen in the Jamuna River. The ability of fishermen varied with their capability of catching fish. Fishermen were categorized into three groups on the basis of standard practice. They were: i) professional fishermen (62%) who depended on fishing almost around the year for their livelihood, ii) seasonal fishermen (23%) who catch during a part of the year as an additional income earning and iii) subsistence fishermen (15%) who caught fish mostly for their own consumption.

Family status of fishermen

In the study area about 45% of the fishermen families were small size, 36.67% were medium size and 18.33% were large size.

Marital status

In the study area, the majority of the respondents were married (70%) while the unmarried fishermen were 30%.

Religious status

In the study area, majority of the fishermen (95%) were the muslims and 5% of fishermen were hindus with no Buddhist or Christian.

Educational status

From the present study, 13.33% fishermen had no education and could not write their name, 20% fishermen could write their name, 36.67% fishermen had education up to PSC, 25% fishermen were JSC and 5% fishermen had education up to SSC level.

Housing condition

In the study area, most of the fishermen lived in poor housing conditions. There were four types of house in the study area: 1) Kacha made of jute sticks or bamboo fencing and roofing with one kind of weed leaves locally called shawnpata and mud flooring, 2) Tin shed- made of tin fencing, and tin shed. 3) Semi pakka- made of brick wall, brick flooring and tin shed, and 4) Pakka house- made of brick wall, and brick

flooring .The study found that 31.67% of housing structure were kacha, while 36.67% were tin shed and only 25% were semi pakka.

In the study area, 30% fishermen used electricity where as 70% fishermen had no electricity.

Source of drinking water

Majority of the fishermen family depended on their tube-well water. In the study area, there were various source of water. It was found that 53.33% of fishermen household were dependent on ‘‘ Own tube-well’’. Only 15% and 31.67% of fishermen depended on neighbors tube-well and Govt. tube-well, respectively It was observed that fishermen sanitary conditions were very poor. Three types of toilets were found to be used by riverine fishermen: (i) kacha- made of bamboo with leaf shelter and inadequate drainage disposal; (ii) semi-pucca made of brick with leaf or tin fencing and inadequate drainage disposal and (iii) pucca-made of brick with good drainage disposal. In the study area, it was found that 25% of toilets were kacha while 60% were semi-pucca and only 15% were pucca.

The health facilities enjoyed by the fishermen were not at all satisfactory. In the study area, there were poor health facilities and it was found that 61.67% of fishermen family were dependent on "village doctors". Only 25% and 13.33% got health service from Community clinic and Upazila hospital doctors, respectively

Recreational media of the fishermen

In the study area some of the fishermen had various modern electronic and non-electronic accessories for their recreation. About 33.33% of the fishermen have radio electronic accessories, while 28.33% have only television, 8.33% have both radio and television. But 16.67% of fishermen have cassette player. Others (13.33%) fishermen had any recreational media.

Improvement of socio-economic condition

In the study area, the survey suggested that most of the fishermen (80%) have improved their socio-economic status through fishing. Only 20% of fishermen could not improve their socio-economic status.

Annual income of fishermen

Fishermen were categorized into three types of study area. The average annual income of professional fishermen was found to be Tk.39131 and only income from fishing was Tk. 36,542. The average annual income of seasonal fishermen was Tk. 42,476 and only income from fishing was Tk.15,180. The average annual income of subsistence fishermen was Tk. 58,507 and the average income from fishing was Tk. 7,235.

Fish marketing system

In the Jamuna river, the result of the present study indicated that three types of marketing channel were 60% (36) of channel-1 (fishermen — consumer), 30% (18) of channel-2 (fishermen — retailer — consumer) and 10% (6) of channel-3 (fishermen whole sellers — retailer -- consumer).

1. Low income

The major constraint was reported by more than 53.33% of the respondents which low income of fishermen. The majority of fishermen depend on fishing in the study area. In general, fishermen are socially, economically and educationally disadvantaged and lack their own financial resources. Overall fishing and fisheries activities are important for fishermen in Chukaibari Union.

2. Population pressure

Another major constraint was reported by 41.67% respondent which increasing of population pressure at a present time. Fish and fish related others aquatic organisms are decreasing due to over fishing day by day.

3. Lack of alternative employment

From the present study, it was identified that about 45% fishermen have lack of alternative employment in the study area. Alternative income sources of fishermen should be provided by the technical officer.

4. Lack of technical knowledge

From the present study, it was identified that about 58.33% fishermen have lack of alternative employment. They also did not take training about fishing. Only 41.67% fishermen have training knowledge on fishing. It is one of most important constraints in commercial fishermen in the study area.

5. Lack of loan facility

In the study area, 53.33% fishermen get loan facility where as 46.67% fishermen have no loan facility. It was found that loan facilities were comparatively very low in the study area. Loan should be provided to the fishermen by govt. and non govt organization with easy terms for the fishermen at their crisis moment.

6. Lack of appropriate gear

Fishes were caught throughout the year by a large number of fishermen in the Jamuna River. The ability of fishermen varied with their capability of catching fish. It was observed that appropriate gear of fishermen were very poor. Among them 25% fishermen have no appropriate gear in the study area.

The following recommended can be made to improve the socio-economic condition of the Jamuna River fishermen:

- Loan of Govt. and Non-Govt. Organization should be provided with easy terms for the fishermen at their crisis moment.
- The Upazilla Fisheries Officer (UFO) should frequently visit to the study area of fishermen.
- They should be provided with technical knowledge and alternative income sources to the fishermen by technical officer.
- School and college should be set up in fishermen's village to improve their educational status.
- Should be developed transportation system of the riverine fishermen.

On the other hand, fish abundance in this river have declined due to indiscriminate gears used, embankment erosion, pollution, over fishing and as a whole due to lack of serious management policy for the study area. In order to increase the fish abundance from the Jamuna River, some immediate action plans should be taken. These are as follows :

- Prohibition of brood fishes;
- Protection of fishing of small and undersized fish;
- Prohibition of current jal for fishing; and
- Establishment of the fish sanctuary in certain part of the River etc.

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