

## Socio-economic status of fishermen of the Marjat Baor at Kaligonj in Jhenidah district, Bangladesh

Sanjoy Banerjee Bappa • Md. Mer Mosharraf Hossain • Bipul Kumar Dey • Shirin Akter • Md. Hasan-Uj-Jaman

Department of Fisheries and Marine Bioscience, Jessore University of Science and Technology, Jessore, Bangladesh

Correspondence: Sanjoy Banerjee Bappa, Department of Fisheries and Marine Bioscience, Jessore University of Science and Technology; Email: banerjee.jstu@gmail.com

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### Abstract

This study was carried out to assess the socio-economic status of fishermen of the Marjat Baor at Kaligonj of Jhenidah district. Fifty fishermen from 50 families were interviewed. Results revealed that 94% respondents were married and age varied between 30 and 45 years. Almost all the fishermen were Hindus (96%). Most of the people of the community were illiterate (60%) and among all of the school going children (58%) were boys and (42%) were girls. Above fifty percent people lived in nuclear family. 40% people lived in earthen house, constructed by grass leaves and mud. Only a few (18%) of them were found to be use electricity. Primary occupation of 60% respondents was fishing and few were also involved in agriculture. They were often found to suffer from various diseases due to lack of pure drinking water. Majority of them got fever and receive treatment from quack. Only twelve percent (12%) women were engaged in making nets for fishing. Annual household income of maximum beneficiaries (44%) was below BDT 30,000 and above BDT 50,000 found in only 4% cases. In the present study, educational, organizational, and technical credit support were very crucial to develop their better socio-economic conditions.

**Keywords:** Fishermen, Marjat Baor, oxbow lake, socio-economics, livelihood, Jhenidah

### INTRODUCTION

Bangladesh is fortunate enough having an extensive water resources scattered with vast water bodies (5,433,900 ha) of inland fisheries (DoF 2005) which consists of small ponds, *beels*, lakes, canals, rivers, *baors* (oxbow lakes), *haors* and estuaries covering an area of about 4.34 million ha. Promise for improvement of human livelihood through land based production system seems quite feeble hence fisheries have a greater promise and attaining a steady rise in contribution to GDP (4.39%) and as well as fisheries sector contributes almost 60% of an animal protein to our daily diet (DoF 2013).

Bangladesh is one of the world's leading fish producing countries and the competent fisheries manpower can play an important role to bring a change in fisheries production and profitability that have such a crucial place in national economy, nutrition and employment.

The overall growth performance from inland aquaculture shows a moderate increased trend due to dissemination of improved technology packages and supportive/need-based extension services at farmer's level. The inland water bodies are rich in freshwater fish species comprising 260 indigenous, 12 exotic and 24 freshwater prawn species (Rahman 1989, DoF 2013).

There are approximately 600 oxbow lakes in the southwest part of Bangladesh with an estimated combined water area of 5,488 ha (DoF 1996). It is generally estimated around 14,000 fishers (2.5 fishers per ha water body) are directly involved and nearly 70,000 rural people are the direct beneficiaries of this fishery (Imam 1997). *Baor* were the properties of *zomindars* (land lords) during the British colonial days (1757-1947) and became government property after the addition of the *zomindary* system through a land settlement act in 1951 (Apu *et al.* 1997). The average yield of stocked carps

of oxbow lakes under culture based fisheries management increased from 121 kg/ha/yr in 1991-92 to 700 kg/ha/yr in 1996-97 (Hasan and Middendrop 1997), production and income were also increased successively between 2007-2012 (Dey *et al.* 2014).

Marjat Baor in Kaligonj plays a significant role in fisheries of Jhenidah district. Area of Marjat Baor is about 253 ha with the length of 7.50 km. The area represents different degree of social aspects. Fishers are one of the most valuable communities here. They are poor. Over the years, the livelihood status of the fishers has further deteriorated. Being an isolated community fishers are deprived of many amenities of life. Actual condition of the *baor* fishers must be assessed to know the real potential of *baor* fisheries as a source of income. Though this *baor* is important for fisheries, hence the socio-economic condition of the inhabitants of Marjat Baor is not satisfactory. As a result, the potentiality of this *baor* fishery is now declining. Considering the above stated facts, the objectives of the current study was to investigate the socio-economic conditions of the inhabitants of Marjat Baor and to identify the existing problems and their recommendations to develop the socio-economic conditions of the fishermen.

## METHODOLOGY

**Study area:** The study was conducted in Marjat Baor area at Kaligonj under Jhenidah district of Bangladesh (Figure 1). The area of this *baor* represents different degree of social aspects. The study was conducted for a period of 4 month, from September 2012 to January 2013.



**Figure 1:** Map of Kaligonj sub-district showing the study area (marked with black rectangular)

**Field survey and data collection:** For the collection of data regarding socio-economic issues, field surveys were made in 50 families of the Marjat village. A structural questionnaire survey was purposively developed, pretested and updated with the necessary corrections.

The final questionnaire was developed in logical sequences, so that the people can answer chronologically.

**Data analyses:** Collected data and information obtained from the survey we accumulated, grouped and interpreted according to the objective as well as parameters. Some data contained numeric and some contained narrative facts. The data were then presented in graphs and tabular forms. Data were analyzed using MS Excel 2007.

## RESULTS AND DISCUSSION

**Religion and marital status:** Inquiries were made to see the marital status of the people of the study area. It was found that in the middle age group (30-40) majority (94%) was married while the unmarried responded was only 6%. Ahamed (1996) in Tangail, Mannu (1996) in Kuakata, and Samima (2000) in Gallamari recorded 94%, 92% and 70% married fishermen respectively. Hasan and Mahamud (2002) studied on the coastal fishing community, Kuakata showed that 89.39% fishermen were married and rest 10.61% was single. So the present result is more and less similar to those results.

In the study area most of the inhabitants were found Hindus (96%) and remaining 4% were Muslim. According to Islam *et al.* (2013), all the fisherman were belonging to the Hindus religion and it is a common trend in Bangladesh that almost all the by-born fishermen or fishing community are belonging to the Hindus religion. Alam (2003) noted that, social changes are related not only economic factors, but also to religious factors. Religion can play very important role in the socio-cultural environmental life of people of a given area, and can act as a notable constraint or modifies in social change. The study of Chantarasi (1994) and Rabbani and Sarker (1997) in Sundarbans Reserve Forest sated that most fishermen were Muslim (68.33%). Study by Hassan and Mahmud (2002) on the coastal fishing community in Kuakata showed that the majority of fishermen were Muslim (93.94%). Hindu was found at 32% at Sundarban (Ahmed 1999).

**Family type and size:** In the study area, it was found that 56% people lived in nuclear families and 44% live in joint families. Nuclear families were popular because of getting freedom of movement and economic opportunities, well dress, better education and authority. The highest percentages (47.76%) found for 7-8 members in a family, the lowest percentage (1.27%) was obtained for 1-2 members (Figure 2). Small family (members <5) was found in majority (48%) cases in fishermen of the Baluhar Baor, Jhenaidah, Bangladesh (Abdullah-Bin-Farid *et al.* 2013). Mahabubullah (1986) found that family size of 44% household was varied between 6 and 8 members.

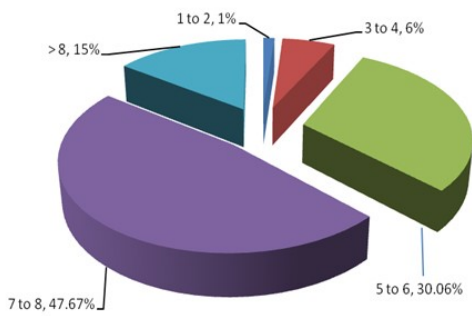


Figure 2: Family size of the fishermen

**Educational status:** The illiteracy level of majority fishermen (60%) in the study area was found illiterate and only a small portion (10%) passed SSC/HSC examinations (Figure 3). Among the total school going children, 58% were boys and 42% were girls. Different scenario was found by Hassan and Mahmud (2002) who recorded 96.9% illiterate fishermen in the coastal fishing community of the Kalapara village. Study by Mahabubullah (1986) in Sundarban and Ahmed (1996) in Tangail revealed literacy rates of the respondents were 45% and 68% respectively.

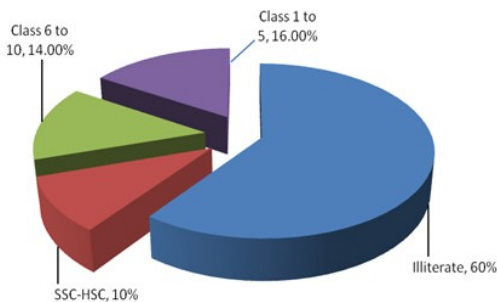


Figure 3: Educational status of the fishermen

**Ownership of the house and housing condition:** From the survey, it was found that most of the families were living their owned house. The survey result also revealed that about 68% people constructed their house on their owned land and 5% have no house (Figure 4).

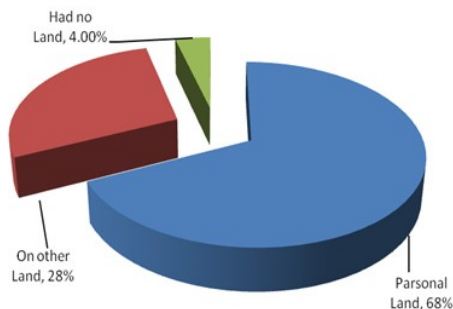


Figure 4: Ownership of household land

Those who had no house, live with their relatives or neighbors. It was recorded that majority 66% respondents were living in earthen house (Figure 5). Ahmed (1999) reports that the housing conditions of most of the fishermen are poor, their house made of mud and one kind of wood leaves. Most of the family constructed their house in own land. The fishermen communities of the Dhaleswari River show that 97.22% people lived in their own house.

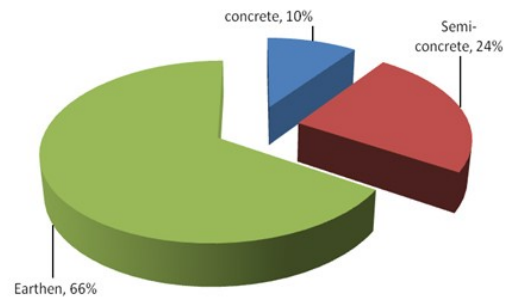


Figure 5: Type of housing

**Use of electricity:** It was observed in the study area that majority households (82%) had no electricity connection. DoF (1996) reported from that only 2% fishermen used electricity. Samima (2000) reported that 20% used electricity in Gollamari fishing community.

**Occupation:** The main occupation of majority 60% respondents was fishing. A considerable number of respondents were student (Figure 6). Nowadays they were engaging themselves in different types of jobs like agriculture, business, shop keeping etc. Ahmed (1999) recorded angling as the most common subsidiary profession for 34% respondents in Tangail.

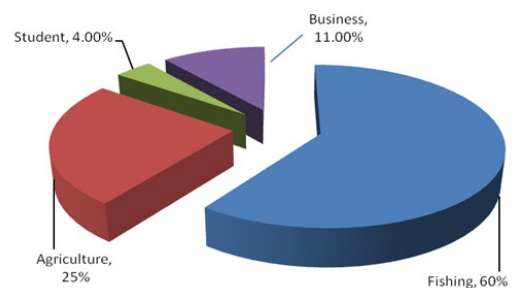


Figure 6: Occupation of the respondents

**Gross annual household income:** Fishers family income (BDT) were categorized into four groups: 'below 30000', '30000 to below 40000', '40000 to below 50000' and 'above 50000'. The maximum respondent's (44%) income was found in 'below 30000' groups whereas the lowest income was found in 'above 50000' group in the surveyed area (Figure 7).

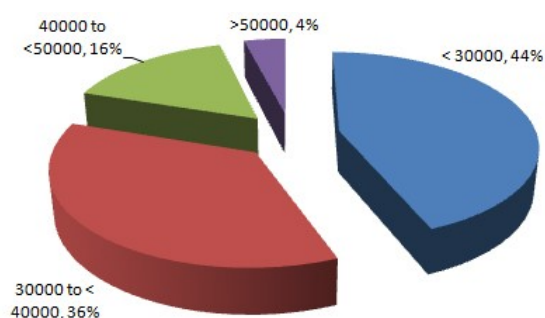


Figure 7: Annual income of the fishermen's households

**Livestock and poultry rearing:** The study showed an encouraging picture regarding ownership and rearing of livestock and poultry. Most of the families had cow and poultry in their possession. The study revealed that there were 62% fishermen who reared cow and only 2% respondents reared pig (Figure 8). Different result was recorded by Mahabubullah (1986) who mentioned that 82.30% fish farmer had no animal and poultry. This result is quite different from the present study.

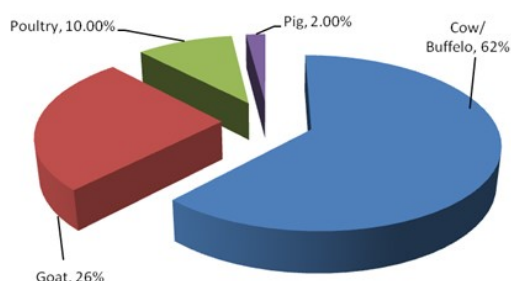


Figure 8: Livestock and poultry rearing status

**Food and nutrition intake:** Investigation was carried out on intake of some major food items like fish, meat, vegetable, pulse, milk and egg. It was recorded that maximum 60% respondent took fish and only 2% took milk (Figure 9).

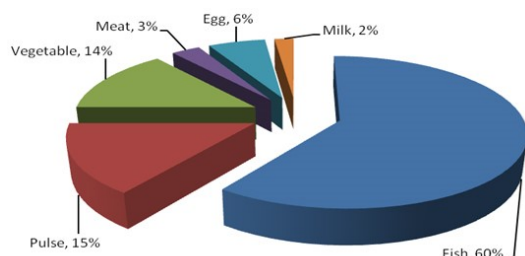


Figure 9: Status of nutrient sources in the diet with rice

**Sources of drinking water:** The study showed that 82% fishermen used deep tube well water while remaining 18% collected water from other sources such as river, canal water etc. Mahabubullah (1986) noted that 41% fishermen used tube well for drinking, cooking, bathing

and washing.

**Sanitation status:** The sanitation status found poor in most cases. The finding of the survey revealed that 36% households used closed pit latrines followed by earthen latrines (32%) (Figure 10).

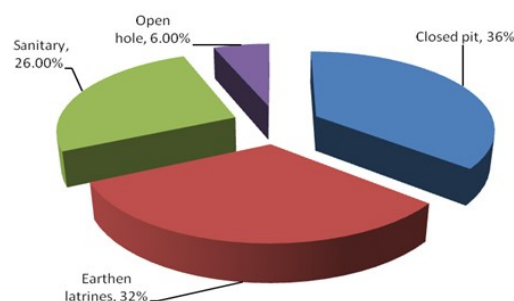


Figure 10: Sanitation status in the study area

**Health and diseases:** Information was collected on the nature of treatment of the people. It was found that 64% respondents received treatment from the quack and only 16% visited trained doctors for treatment of disease (Figure 11).

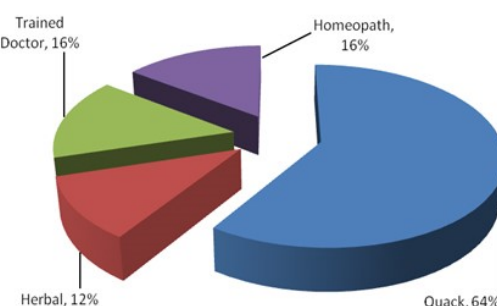


Figure 11: Status of treatment sources during disease

From the survey, it was found that 45% women suffered from skin diseases like fungal skin diseases, skin irritation, (Figure 12).

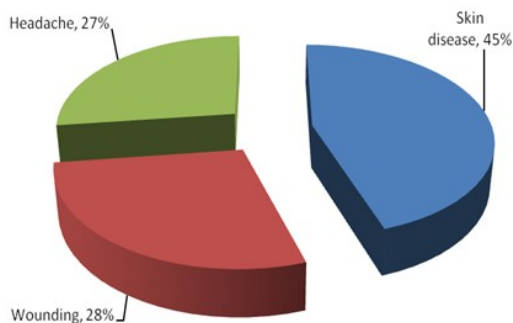
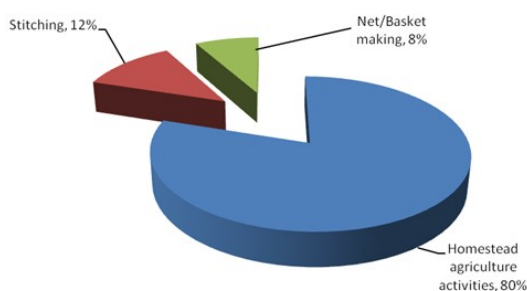


Figure 12: Common diseases of the fishermen in the study area

**Women's contribution in various activities:** Most of the women in the study area were found home makers. They are the main worker for homestead agriculture activities.

They also engaged in net making, stitching, and basket maker. Maximum women 80% engaged in homestead agriculture activities (Figure 13).



**Figure 13:** Participation in various activities, other than household works, by the women

**Problems:** The major problems were lack of technical knowledge about fish farming, livestock and poultry farming, educational institutions like school, college, etc. as well as infrastructural facilities for the respondents, poor sanitation, credit facilities, insufficient medical facilities, and lack of social security for them due to unstable political situation. There was a low-income period, generally from November to April. During these time many fishermen became workless. This gradually forcing them to shift to a new profession from their traditional occupation, fishing. Social conflict also a common problem. There were few non-government organizations such as Proshikha, ASA, and BRAC working in the study area. But these organizations were failing to meet their demands.

## CONCLUSION

The present socio economic status of the fishermen of Marjat Baor at Kaligonj was not satisfactory. Most of them were solely depended on fishing for their livelihood. They were not aware of proper sanitation system, schooling of children, balance nutrition and even their health conditions. However, some of them wanted to change their profession for better living. Better and effective initiatives from both the government and non-government organizations may lead to a rapid development of the socio-economic conditions of the fishermen in the study area.

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