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Socio-demographic observation of fishing community of the Shari-Goyain River, Bangladesh

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Abstract. This study was conducted among the residing fishermen of the Shari-Goyain River, Bangladesh to assess the socio-demographic status. The highest percentage (46.25%) of the fishermen belonged to middle age group, and 68.75% were Muslim. Among the respondents 61.25% had nuclear family, 17.50% had no education, 72.50% had access to drinking water from tube-wells and 71.25% lived in earthen houses. Around 93.75% fishermen had homestead land, 56.25% borrowed money from non-government organizations, 75.00% fishermen got Vulnerable Group Feeding (VGF) card from the government. The result of this study shows poor livelihood status of the fishermen with a number of constraints for fishing. To improve the fisheries resources and livelihood status of the fishermen credit facilities and alternative livelihood opportunities should be ensured.
Keywords: Socio-demographic status, Livelihood, Fishermen, Shari-Goyain River

Introduction

Bangladesh is a tropical and densely populated country where around 700 rivers flow with their tributaries (Wazed 1991). These rivers offer enormous scope and potentiality for fish production and economic security of the fishing people who live around these water bodies. This fisheries sector provides full-time or part-time employment to approximately 1.78 million people (DoF 2014). The fishers' communities are usually poor community in context of Bangladesh. To improve their social as well as economic status it is necessary to know their livelihood status. Their livelihood will be sustainable when they can be coping up and recover from different stresses and shocks through enhancing or at least maintaining its capabilities and assets, while not declining the natural resources (Chambers and Conway 1992). Socio-demographic status of fishermen mostly depends on fisheries resources because fishing is the main source of income for the fishermen living adjacent to river or other water bodies.

The Shari-Goyain River is an important river in Sylhet district of Bangladesh originated from the Meghalaya State of India and enters into Bangladesh through northern part of Jaintiapur Upazila in Sylhet district and flows through Gowainghat Upazila. The average width of the river is around 100 meters (Banglapedia 2015). Alike other rivers of Bangladesh it plays an important role to the economy of local people through employment generation, poverty alleviation, supply of animal protein, etc. Besides, many families are directly involved in fishing, and thus maintain their livelihood from fishing throughout the year. However, till now there is no sufficient information about socio-demographic status of fishermen of the Shari-Goyain River. Therefore, this study was carried out to know the socio-demographic status of the fishing community of the Shari-Goyain River of Bangladesh.

Materials and Methods

Study area and duration: Gowainghat is a medium size Upazila in Bangladesh (486.10 km^2) which is located in between 24°55' and 25°11' north latitudes, and 91°45' and 92°07' east longitudes. It is bounded by the Meghalaya state of India on the north, Sylhet Sadar and Jaintiapur Upazilas on the south, Jaintiapur Upazila on the east, and Companiganj Upazila on the west. The survey works on the fishermen were conducted in 4 villages *viz.*, Chailtabari, Jalurmukh, Baimarpar, and Shiala of Nandirgaon union under Gowainghat Upazila, Sylhet, Bangladesh. Total period of this study was 12 months from December, 2016 to November, 2017.

Collection of data: During the study data were collected both from primary and secondary sources. Primary data were mainly obtained from the direct observation and surveying the fishermen through questionnaire interviewing. For this purpose 80 fishermen were randomly selected from the fisher's community. Additionally, Focus Group Discussions (FGDs) were done to get an overview of issues such as, existing fishing systems, socio-demographic condition of fishermen, etc. Cross-check interviews were also conducted with key persons in the community such as school teachers, local leaders, officials from relevant non-government organization (NGO) and elderly people in the community.

Data processing and analysis: The collected data were summarized, scrutinized and tabulated in Microsoft Excel spreadsheet. For the purpose of analysis Statistical Package SPSS version 20 was used.

Results

Age structure: Age structures of the sampled fishermen were categorized into three groups; young (20-30 years), middle aged (31-50 years), and elderly people (51-70 years). Results of the present study reveals that 46.25% of the respondents were middle aged which constituted the major group of the fishermen, whereas the young (27.5%) and the elderly people (26.25%) constituted almost similar portion.

Religion: Though, in general it is supposed that most of the fisher's community is comprised of Hindu, the results of this study reveals that majority of the sampled fishermen (68.75%) were Muslim as usually seen in most of the communities of Bangladesh. The rest 31.25% were Hindu, and no other religion like Buddhism or Christianity were practiced by the fishermen in the study areas.

Family type and size: In rural areas of Bangladesh families can be suitably classified into two types: i) nuclear family where married couples live with children, and ii) joint family where group of people related by blood or law lives together. From this survey it is found that majority of the fishermen (61.25%) belonged to nuclear family and the rest 38.75% maintained joint family. The fishermen were grouped into three categories according to family sizes, such as small family (3-4 members), medium family (5-7 members) and large family (8-12 members). From the present study it is found that about 60% of the fishermen had medium family with 5 to 7 members, 15% of the fishermen had small family with 3 to 4 members, and 25% had large family with 8-12 members.

Educational status: There is a significant impact of education on the society. Therefore, the educational status information of the fishermen were also collected and analyzed in this study. The fishermen were classified into four categories according to their year of schooling or their ability to write names. Results of this study indicate that 17.5% of the fishermen had no education, 58.75% could sign only, 16.25% had primary education and 7.5% had secondary education (Fig. 1).

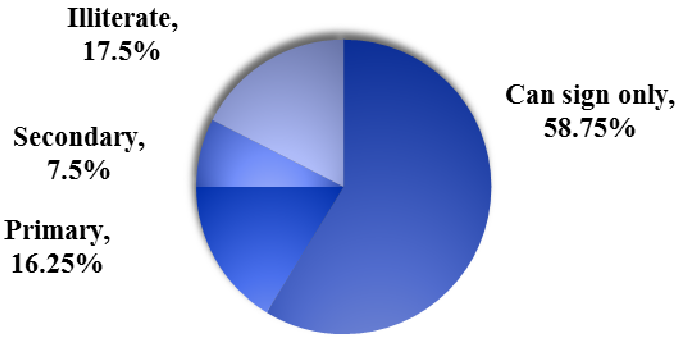

Fig. 1. Educational status of fishermen in the sampled areas.

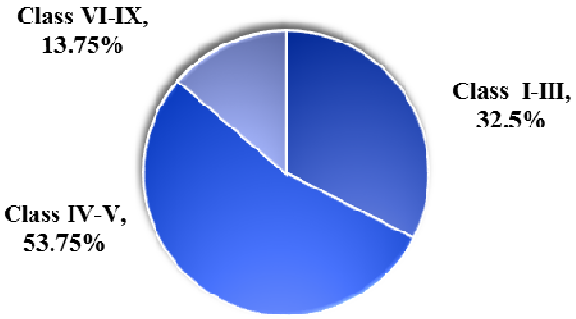

Fig. 2. Education of the fishermen's children.

It is reported that all the children of the fishermen are getting primary and/or secondary school education. Around 32.5% of the fishermen had children studying in class ranges from I to III, 53.75% of the fishermen had the children studying in class ranges from IV to V and 13.75% had the children studying in class ranges from VI to IX. They were also engaged in collecting fire wood, cow-dung as fuel for cooking food, etc. Some children also used to go for fishing with their family members (Fig. 2).

Occupations: All of the respondents stated fishing as their main occupation. However, the income derived from fishing is not sufficient to provide adequate means of livelihood support. Therefore, many fishermen were engaged in other activities as their secondary occupation like boating (36.25%), agriculture (30%), and day labour (33.75%) (Fig. 3). Almost all the fishermen reported that there was no other earning member in their family.

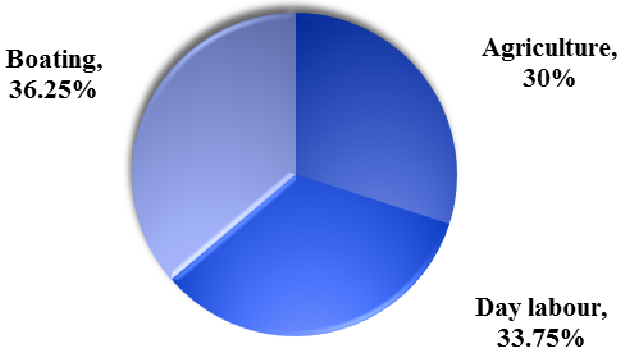

Fig. 3. Secondary occupations of the respondents in the study area.

Electricity facility: In the study area there was no cable supplied electricity except their own solar systems. Still, the number of people having the solar system facility access is not high enough (32.5%) with limited capacity. Thus, rest of the fishermen couldn't use daily essential electric equipment for household purpose like light, fan, television, etc. and thus they had to rely on conventional candles and oil lamps for lighting purpose.

Household water facilities: There were diverse sources of drinking water in the study areas such as tube-well, river and pond. Tube-well was the main source of drinking water in the study area. Most of the fishermen were depended on tube-well as a source of their drinking water. However, for other household purposes like bathing, washing cloth, utensils and cooking foods they mainly used river water. Only a few fishermen (8.75%) had own tube-wells, and many fishermen (63.75%) used neighbors' or government supplied tube-wells. However, around 27.50% of the fishermen's family used river water for drinking due to their lack of fund for installing tube-well, remoteness from the main fishing community, living close to rivers, lack of necessary health education, etc.

Sanitation facilities: Three types of toilet facilities found to be used by the local people were *katcha* (traditional earthen), semi-cemented, and hanging on water bodies types latrines. Among the sampled fishermen, 50.00% were found to use *katcha* latrines, 43.75% hanging latrines, and 6.25% semi-cemented latrines.

Changing trend in fisher's livelihood: Almost all of the fishers (67.50%) of the present study stated that their livelihood status was decreasing day by day because of the reduced fish availability in the river. Only some fishers (about 25.00%) claimed that their livelihood remained same as the past. However, very small portion of the fishermen (7.50%) found that their livelihood status improved than the past because of the financial support received from the immigrant family members and relatives who earn foreign income (Fig. 4).

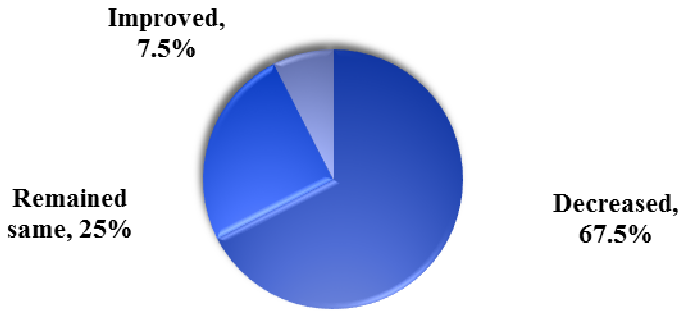

Fig. 4. Changing trends in fishers' livelihood.

Household land holding: Through this study about 93.75% of the fishermen were found to have their homestead lands. A small number of the fishermen (6.25%) were landless and they live on the *khas* land (government owned land).

Household status: Results of the present study indicate that 71.25% fishermen had *katcha* houses (made of straw, bamboo and wood) and 28.75% had semi-bricked houses made of bricks, tin, and woods. No fully bricked houses were evident to be owned by the fishermen.

Loan information: Most of the fishermen lived on hand to mouth. During dry season as their income sources is about to cease due to decrease in fish catches in rivers; thus, they were bound to borrow money from their relatives and different NGOs at a very high. According to fishers' statement 56.25% of them borrowed money from NGOs, 37.50% from relatives and 6.25% fishers did not borrow money during their financial crisis (Fig. 5). The national and local NGOs provide credit only to the members of organized societies. Some NGOs were found to operate in the study areas such as ASA, BRAC, etc. The fishermen expected more facilities from government organizations and projects in delivering credit with low interest for alleviation of their poverty.

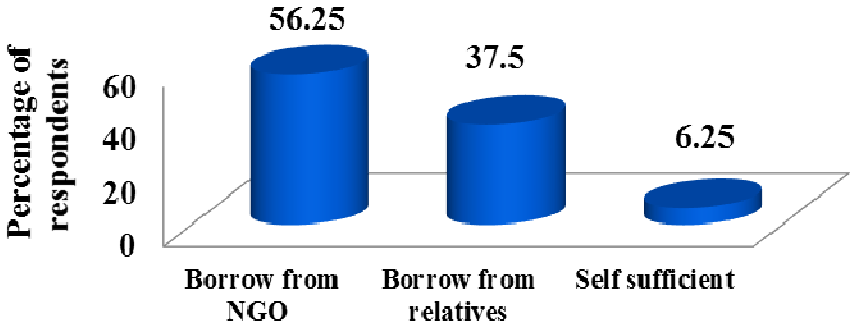

Fig. 5. Sources of credit facilities for fishermen.

Health facilities: Very few people (12.5%) had ability to visit MBBS (Bachelor of Medicine and Bachelor of Surgery) doctors for treatment purpose. In fact, in most cases they had no or very minimum health education. Therefore, only 17.50% fishermen received health facilities from nearby Upazila Health Complex which seems that they are reluctant to receive treatment. Majority of them (70.00%) visited to unskilled village doctors and *kabiraj* (traditional herbal practitioners) to receive treatment because of their poor economic status or for ignorance about government health facilities in the hospital. People also fetching problem due to poor road communication, lack of money to avail transport and in the rainy season boat is the only means to reach upazila health complex. In case of emergency, they had to suffer immensely due to the lack of medical facilities in their village.

VGF (Vulnerable Group Feeding) facilities: The Government of Bangladesh provides feeding facilities through VGF program to the fishermen from February to May which includes 30 kg food grains per family per month as they become jobless during the ban period of fishing. However, during the present study it was observed that all fishermen could not avail this facility. Among the respondents 75.00% got this facilities and rest 25.00% did not get any card of such type from the government.

Discussion

Baseline status of socio-demographic condition of fishers is very much important to take necessary steps to improve their livelihood through proper development project or program. Age is one of the important demographic observations for the fisher community, because efficient fishing may vary depending on the age group. Apart from the fishing, other income generating work distribution among the community people can be done effectively based on the age group. Hossain *et al*. (2015) also found the middle aged group (40.00%) as the major group of the fishermen in the Punarbhaba River. Similarly, in coastal region around 70.00% were found under the similar age group (Ahamed 1999). Ali *et al*. (2014) also found similar results from the fishing community of Lohalia River, Patuakhali where 60.00% fishermen belonged to the age group of 21 to 40 years. Family type and family size is also important features of the socio-demographic observations which is immensely necessary to develop improvement plan for the community. Hossain *et al*. (2015) also found that 60.00% fishermen had 5-7 members was predominant from the study on the socio-economic condition of the fishermen of the Punarbhaba River which is similar to the result of the present study. Literacy improves the life style and work efficiency; thus it is essential to enhance literacy rate in a community. Present status of the literacy rate in the study area supports the study of Mahbubullah (1986) in the Sundarbans and Ahmed (1996) in Tangail where literacy rates of the respondents recorded were 45.00% and 68.00%, respectively. Literacy rate of the study area better than the study done by Rahman (l994) where most of the fishermen (57.00%) were illiterate and a few had up to secondary level of education in Bangladesh.

Due to decreasing trend of fish in the open water, fishermen are not getting fish round the year and try to engage themselves with alternate income generating activities during fishing lean period. According to Ahmed (1996), 81.00% fishermen carried out fishing throughout the year which is supported the present study. Minar *et al*. (2012) found 80.00% fishermen engaged in

fishing as primary occupation, 10.00% was engaged in agriculture and daily labour activities, respectively. These results are different from the present findings.

Sanitary system of the study area was found very poor. No one had Pacca (brick build) Latrine. Kostori (2012) found that 16.00% of toilets were *katcha* while 64.00% and 20.00% were semi-cemented and cemented, respectively which are dissimilar to the result of the present study. Another study conducted by CPP (1996) in Tangail reported that 4% fishermen's household used no latrines that are different from the result. Housing is one the good indicator of the socio-economic condition of any community. In the present study 71.25% people had *katcha* houses which indicated poor housing facilities. Ali *et al*. (2008) observed 54.00% fishermen had tin-shed, 26.00% had half-building, 14.00% had building and 6.00% had *katcha* house in Rajshahi. The condition of the houses in this study area is quite different.

Generally, the fishermen of Bangladesh are poor and most of them borrow money during fishing lean period. In the present study the same picture found which supports by the study of Minar *et al*. (2012) where 38.00% of the fishermen of Kirtonkhola River, Barishal were found self-sufficient, 10.00% borrow money from their neighbors, 18.00% from relatives, 30.00% from NGOs and 4.00% from co-operatives. Hossain *et al*. (2015) observed that 40.00% of the fishermen households of the Punarbhaba River were dependent on village doctors, 23.00% got health service from upazila hospital and 30.00% from *kobiraj* which is not similar to the present result. Minar *et al*. (2012) found that government provides no VGF cards to the fishermen of Kirtonkhola River, Barishal. However, in the present study it is recorded that 75.00% of the respondents got VGF facilities.

Conclusions

The fishermen of the Shari-Goyain River were mostly illiterate and they were not conscious about health and sanitation facilities. Fishermen of the study areas were facing various problems which decrease fish catch and income from fishing. The major problems were natural calamities, water pollution, lack of credit facilities, lack of training facilities, lack of communication facilities, lack of capital to purchase fishing gears/nets, lack of ice factory, unstable market price of fish, lack of appropriate gears. To improve the fisheries and livelihood status of the fishermen some measures are suggested like technical knowledge support from NGOs, credit support and alternative income sources to the fishermen, fishermen training on alternate income generating activities, development of educational institutions through institutional framework in the fishers' community, etc. Finally, government organizations and NGOs should come forward to build awareness among the fishermen about the importance of conservation and management of fisheries resources by arranging meetings or seminars.

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