© IDOSI Publications, 2015

DOI: 10.5829/idosi.wjfms.2015.7.2.9334

Livelihood Status of Hilsha Fishers Around Mohipur Fish Landing Site, Bangladesh

¹M.R. Sharker, ²S. Mahmud, ¹M.A.B. Siddik, ³M.J. Alam and ²M.R. Alam

¹Department of Fisheries Biology and Genetics,
Patuakhali Science and Technology University, Patuakhali-8602, Bangladesh
²Department of Aquaculture, Patuakhali Science and Technology University, Patuakhali-8602, Bangladesh
³Department of Fisheries Management,
Patuakhali Science and Technology University, Patuakhali-8602, Bangladesh

Abstract: A study was conducted to evaluate the livelihood condition of hilsha fishers around Mohipur fish landing centre for a period of five months. A total of 75 respondents were randomly selected from the study area. Livelihood status of hilsha fishers was depicted in terms of religious status, age structure, educational status, health facilities, housing condition, sanitary facilities, electricity facilities and annual income. Livelihood status of the fishing communities was not satisfactory. They were deprived of many amenities. Results indicated that 57% hilsha fishers were belonged to the age groups of 36 to 50 years. Muslims were recorded as absolute majority in fishing activities. Most of the people of the community are illiterate while 9%, 7% had primary and secondary level of education respectively. About 30% of hilsha fishers represented nuclear family while 70% of fishers had joint family. The highest (64%) percentage of hilsha fishers enjoyed health service from village doctor whereas only 12% were able to take health facilities from Upzilla Health Complex. In case of housing condition majority (76%) of the community had kacha house. On the other hand 16% and 6% of hilsha fisher had semi pacca and pacca house respectively. It was found that only 13% used their own tubewell 24% fishermen used shared or neighborhood tube-well and the remaining majority (63%) used the government tube-well in Schools area. In addition to only a few of them had proper sanitary facilities. Lack of inadequate technical knowledge on fish harvesting, post harvest technology, non availability of netting material and poor marketing facilities are recognized as major constraints in this area. It is therefore, indispensible to provide the necessary training facilities with institutional and organizational supports, credit facilities and extension services to augment the better livelihood condition of hilsha fisherman.

Key words: Hilsha Fishers • Livelihood Status • Constraints • Bangladesh

INTRODUCTION

Bangladesh is uniquely blessed with vast water resources scattered all over the country in the form of rivers, ponds, ditches, beels, lakes, haors, baors, floodplains and canals covering an area of 46,99,387 ha [1]. These resources are rich with diversified aquatic species due to its unique geo-physical location [2-4]. Fisheries play pivotal role in the economy of Bangladesh in terms of nutrition, employment and income generation. This sector also plays an immensely requisite role on the socioeconomic development of Bangladesh from the time immemorial and it is the part of our cultural heritage.

Bangladesh has earned Tk. 47030.95 million by exporting 92,479 MT of fish and fisheries product in 2011-2012 [1]. There are about 800 fish and shrimp species in fresh and marine water environment in the country. However, only 4 species are actually exported to foreign countries. Hilsha is one of them and it is considered a nutritious and tasty fish. Hilsha is the national fish of Bangladesh that contributes to national economy, protein supply, employment generation and export earnings. It has the highest contribution in country's fish production amounting 1% to the GDP. According to DoF [1] total hilsha production is 3, 46,512 MT in our country and among them 1, 14,475 MT come from inland open water

Corresponding Author: Md. Rajib Sharker, Department of Fisheries Biology and Genetics, Patuakhali Science and Technology University, Patuakhali-8602, Bangladesh. Mob: +01726227578.

and 3,46,512 from marine water. About 5 lakh fishermen have been maintaining their livelihood by catching hilsha. But most of the hilsha fishers are poor and their living standards are deteriorating day by day. They are considered as most vulnerable and poorest communities in Bangladesh due to having the income below marginal level [5, 6]. Sustainable development and livelihoods are the pre-requisites factor for achieving the Millennium Development Goals (MDGs). Information about fisherman of a particular region is important and crucial for the development of economically backward sector [7]. That is way it is very important for us to know the livelihood and nutritional status of hilsha fishers. Lack of adequate and authentic information on socio-economic condition of the target population is one of the serious impediments in the successful implementation of developmental program. Considering the above fact, the present study was carried out to assess the livelihood status and to identify the existing problems and their recommendations to improve the socio-economic conditions of the fishermen.

MATERIALS AND METHODS

The study was conducted around Mohipur hilsha landing site under Patuakhali District from November 2013 to March 2014. The study was based on both of primary and secondary data. Before collection of the primary data, a draft questionnaire was developed which was pre-tested with a few hilsha fishers. In the pre-testing, much attention was given to pick up the new information in the draft questionnaire in order to achieve the objectives of the study. Primary data was collected through market survey using multiple methodological Participatory Rural Appraisal (PRA) tools such as Focus Group Discussion (FGD) and Interviews with key informants.

The collected data was summarized and processed for analysis. These data was verified to eliminate all possible errors and inconsistencies and analyzed by MS excel 2010 and then presented in textual, tabular and graphical forms to understand the current status of livelihood of hilsha fishers of the studied area.

RESULTS AND DISCUSSION

A total of 75 hilsha fishermen were interviewed to acquire information in various aspects of livelihood characteristics. A detailed analysis were made on the following parameters and presented in this section.

Table 1: Religious status of the Hilsha fishermen

Religion	Number of the fisherman	% of the fisherman
Muslim	61	81
Hindus	14	19

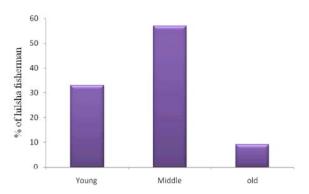


Fig. 1: Distribution of age group of hilsha fishers in the study area

Age Structure: The study reveals that about 57% of fishermen belong to middle age group, while 33% was represented by young age and 9% being aged person (Fig. 1). Most of the fish farmers in Noakhali district belonged to 30 to 40 years recorded by Ali *et al.* [8] which is more or less similar to the present study.

Religion: People of various caste and status include in the fisherman communities of Bangladesh. Muslims (81%) were featuring as the absolute majority of the respondents in the study area. It was noted that only 19% of the Hindus community was involved in this sector (Table 1). 75% of fishermen are Muslims in Loalia River, Patuakhali reported by Ali *et al.* [9]. Similar results were also observed by Ali *et al.* [8] in Tarakanda Upazila, Mymensingh and Kabir *et al.* [6] in Old Brahmaputra River, Mymensingh.

Family Size and Type: In the present study, families were categorized into two types as nuclear family and joint family. The great majority of hilsha fishers belong to joint family. Only 30% of the fish farmers linked to live in nuclear family (Table 2 and Fig. 2). It was revealed that the majority of hilsha fisher had medium family whereas the rest of them had small to large family. 57% fisherman family found by Rahman *et al.* [10] in Tista River composed of 5-7 members marked as medium family which is more or less coincide to the present study.

Educational Status: Educational status of the fishermen has been grouped into five categories according to the level of education. In study the highest percentage (84%)

Table 2: Family type of the fisherman

Family type	Number of the fisherman	% of the fisherman
Joint family	52	70
Unit family	23	30

Table 3: Source of income of the Hilsha fishermen

Average	Percent
1000	37.73
750	28.30
500	18.87
250	9.43
150	5.67
	1000 750 500 250

Table 4: Drinking water facilities of the Hilsha fisherman

Source of drinking water	No of the fisherman	% of the fisherman
Own Tubewell	10	13
Neighbouring Tubewell	18	24
Government tubewell in school	47	63

of respondents are illiterate. Only (7%) had secondary level and none of the fishermen had any higher secondary and bachelor level (Fig. 3) which matches the findings of Ali *et al.* [9]. 65% riverine fishermen were illiterate, 30% were upto primary level and only 5% had secondary level noted by Hossain [11].

Source of Income: The average annual incomes of the fishermen were varied from 25,000-35,000 BDT (Table 3) which was relatively lower than the findings of Rahman *et al.* [10]. It was reported that the total income is insufficient to provide adequate means of livelihood. Annual income of maximum fisherman was below 30,000 BDT at kaligonj in Jhenaidah district reported by Bappa *et al.* [12] which is more or less agreed to the present findings.

Housing Condition: The pattern of house indicates the social status of the people. It was evident from data that 76 % of respondent had kacha house (straw components) whereas 16% and 8 % had semi pacca (tin shed with wooden wall) and pacca (brick and cemented building) house respectively (Fig. 4). According to Khan *et al.* [13] fishing community near Tista River had 83% kacha and 3% semi pacca house respectively. 62% of fisherman house structure was kacha in mymensingh reported by Rabbani [14] which is more or less similar to the present findings.

Drinking Water Facilities: During the study period, it was appeared that 100% hilsha fishers used tube-wells water for drinking purposes which indicates positive sign for sound health (Table 4). The great majority (63%) of hilsha fishers used Government tube-well in Schools area



Fig. 2: Family size of hilsha fishers in the study area

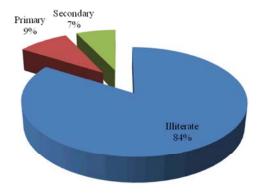


Fig. 3: Educational status of hilsha fisherman

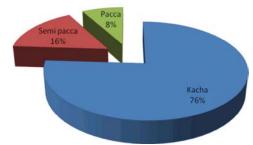


Fig. 4: House condition of the hilsha fisherrman

and the remaining part used own and shared or neighbor tube-well to collect drinking water which is almost identical to the findings of Ali *et al.* [9].

Sanitary Facilities: The sanitary conditions of hilsha fish farmers in this area were very poor. Most of the people about 76% are used kacha latrines (Made of bamboo with leaf and inadequate drainage system) and rest of the 17% used semi pacca (made of tin or wood with inadequate drainage system) and 7% of fisher was used as pacca latrine (made of brick with cement and well drainage system) (Fig. 5). Akter [15] recorded that 20% families use pacca latrine and 64% use semi pacca latrine in Chalan beel under Sirajgonj district which is relatively satisfactory than the present study.

Table 5: Electricity facilities of the Hilsha fisherman

Categories	No of the fisherman	% of the fisherman
Present	63	84
Absent	12	16

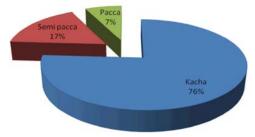


Fig. 5: Sanitary condition of the hilsha fisherrman

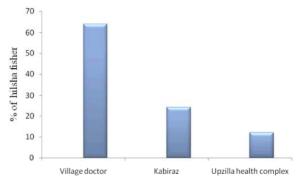


Fig. 6: Health facilities of the Hilsha fisherman

Health Facilities: The health facilities of the fishermen in this area were not at all upto satisfactory level. It was observed that the highest percentage (64%) of the fishermen were dependent on unskilled village doctors who have no knowledge of medical science (Fig. 6). On the contrary 24% of the fishermen were depend kabiraz and 12% getting standardized health service from the Upazila health complex.

Electricity Facilities:From the present survey, it was found that the maximum (84%) of surveyed hilsha fisher enjoyed electricity facilities (Table 5). On the other hand only (16%) was not able to get electricity facilities. 62% fish farmers had electricity facilities in Rajshahi district noted by Ali *et al.* [16].

CONCLUSION

The present livelihood status of hilsha fishers around Mohipur fish landing site was not satisfactory. They were not aware of proper sanitation system, education, nutritional status and even their health conditions. If the farmers get proper training programs, credit facilities on easy terms and condition, more profitability would be

reflected. It is therefore recommended that Government and other support organizations should take initiatives to uphold their socioeconomic condition.

REFERENCES

- DoF (Department of Fisheries), 2013. Jatiya Matshaw saptaho sankalan, Department of Fisheries, Ministry of fisheries and livestock, Dhaka, Bangladesh.
- Hossain, M.K., 2001. Overview of the forest biodiversity in Bangladesh. In: Assessment, conservation and sustainable use of forest biodiversity (CBD Technical Series no. 3). SCBD, Montreal, Canada. pp: 33-35.
- Barua, S.P., M.M.H. Khan and A.H.M.A. Reza, 2001.
 The Status of Alien Invasive Species in Bangladesh and their Impact on the Ecosystems. In: P. Balakrishna (ed), Alien Invasive Species- Report of workshop on Alien Invasive Species. IUCN Regional Biodiversity Program of Asia, Colombo, Sri Lanka. pp: 1-7.
- 4. Nishat, A.S.M., S.P. Huq, R. Barua, A.H.M. Ali and A.S. Moniruzzaman, (eds.), 2002. Bio-ecological Zones of Bangladesh. IUCN, Bangladesh. pp: 141.
- 5. Alam, M.F. and M.A. Bashar, 1995. Structure of cost and profitability of small scale riverine fishing in Bangladesh. J. Res. Prog., 9: 235-241.
- Kabir, K.M.R., R.K. Adhikary, M.B. Hossain and M.H. Minar, 2012. Livelihood status of fishermen of the Old Brahmaputra River, Bangladesh. J. World Applied Sci., 16: 869-873.
- Ofuoku, A.U., G.N. Emah and B.E. Itedjere, 2008. Information utilization among rural fish farmers in central agricultural zone of delta state, Nigeria. World J. Agric. Sci., 4: 558-564.
- 8. Ali, H., M.A.K. Azad, M. Anisuzzaman, M.M.R. Chowdhury, M. Hoque and M.I. Sharful, 2009. Livelihood status of the fish farmers in some selected areas of Tarakanda Upazila of Mymensingh District. J. Agrofor. Environ., 3: 85-89.
- Ali, M.M., M.B. Hossain, M.H. Minar S. Rahman and M.S. Islam, 2014. Socio-economic aspects of the fishermen of Lohalia River, Bangladesh. Middle-East J. Sci. Res., 19: 191-195.
- Rahman, M., M.F. Tazim, S.C. Dey, A.K. Azam and M.R. Islam, 2012. Alternative livelihood options of fishermen of Nijhum Dwip under Hatiya Upazila of Noakhali district, Bangladesh, Asian J. Rural. Dev., 2: 24-31.

- Hossain, A., 2008. Knowledge of coastal communities on biodiversity conservation issues. MS thesis. Department of Aquaculture Bangladesh Agricultural University, Mymensingh.
- 12. Bappa, S.B., M.M.M. Hossain, B.K. Dey, S. Akter and M.H. Jaman, 2014. Socio-economic status of fishermen of the Marjat baor at Kaligonj in Jhenidah district, Bangladesh. J. Fisheries. 2: 100-105.
- Khan, M.A.R., M.I. Miah, M.B. Hossain, A. Begum, M.H. Minar and R. Karim, 2013. Fish biodiversity and livelihood status of fishing community of Tista River, Bangladesh. J. Global Veterinaria, 10: 417-423.
- Rabbani, M.G., 2007. Fisheries and socioeconomic condition of fisherman of Karatoa River MS thesis.
 Department of Fisheries Management Bangladesh Agricultural University, Mymensingh.
- 15. Akter, M.F., 2012. Socioeconomic condition of fisherman of the chalan beel under Tarash Upzilla in Sirajganj district in Bangladesh. Bangladesh Res. Pub., 6(4): 393-402.
- Ali, M.H.. M.A.H. Chowdhury, M.A. Kabir and N.N. Nur, 2010. Assessment of the livelihood status of the fish farmers in some selected areas of Rajshahi district. J. Agrofor. Environ. 3: 25-29.