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Impacts of Banning Period on the Socio-Economic Condition of Hilsa Fishermen in Shakhchor Union of Lakshmipur Sadar Upazila, Bangladesh

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Abstract: The present research was carried out to determine the impacts of banning period on the hilsa fishermen of Bangladesh. The study revealed that 38% fishermen were belonged to the age group of 31 to 40 years and fisher's community represented by 92% Muslim. Usually the family size of fishers (60%) consisted of 1-5 members and nuclear family was the predominant (58%) in the community. It was found that 30% fishermen had their own boats and nets and 80% of them had no own land. Annual income of hilsa fishermen varied from BDT 15,000 to 150,000 and in banning season fishermen's monthly average income decreased to BDT 21,600 from BDT 50,400. There are 82% fishermen were illiterate and during the banning season no farmer discontinued their child's education but sometimes they were unable to maintain the cost of buying accessories regarding education. During the banning period the poor fishermen's household suffered from food shortage and they had taken reduced amount of meal and consumed less expensive foods. In this study area 48% fishermen involved in labor activities during banning season and more than 21% fishermen took loan during banning season compared with non-banning period. Most of them (58%) had to sell their own boat and net for paying loan and gradually become poor to poorer. Although 60% fishermen got subsidy (VGF card) from Government during banning period but it was not sufficient to maintain their livelihood. The main problems were identified as extortion by local extortionist; other problems were inadequate credit, lack of appropriate gears and increase rate of theft and robbing.

Key words: Hilsa Fish · Fishermen · Banning period · Livelihood status

INTRODUCTION

Hilsa is the national fish of Bangladesh having unique taste and nutritional value which earning foreign currency. A Fisheries and Livestock Ministry of Bangladesh statement said hilsa still has a 13 % stake in fisheries sector in terms of volume and the species contributes 1% to the GDP. The annual production of hilsa is about 2.5 lakh tons with a market value of Taka 4,000 core while 4.5 lakh fishermen and another 25 lakh people directly or indirectly depend on hilsa for their livelihood. According to the Department of Fisheries [1], about 125,000 metric tons of jatka are caught every year, which seems to be the major cause of the fall of hilsa production.

For ensuring sustainable production of hilsa the government has adopted a coordinated program to conserve *jatka* in 2003-2004. Each year from November 1st to May 31st ban on *Jatka* catch is being implemented. Every year, during the full moon of the Bengali month of Agrahayan (15-24, October, 2009) is completed ban on hilsa catch was implemented in all major spawning grounds. All types of fish catch by using any sorts of gear were banned during March-April 2009 and November to January to facilitate sea-ward migration of *jatka*. Hilsa fishermen are one of the most vulnerable communities in Bangladesh who lives hand to mouth and are considered as the poor [2]. From the view point of socio-economic conditions of fishermen, it is told that the fishers are the poor group of people in the country. The strategy of banning period increased 0.58 lakh MT more production of this national fish in the recent years [3]. Unfortunately increasing production did not improve the economic condition of the hilsa fishers and they had suffered most

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during the full banning season (March to April) because fishers have little access for alternative livelihoods in this area. Being an isolated community, fishermen are deprived of many amenities of life mostly in banning season. Unfortunately, there have very minor governmental and other organizations (NGOs) initiative to manage and improve hilsa fishers' condition in this area and there have no clear understanding about the impact of banning period on the livelihoods of hilsa fishermen. That is why present study was undertaken to know the impacts of banning season on the socio-economic conditions and also know the alternative livelihood of hilsa fisherman during banning period.

MATERIALS AND METHODS

The present investigation was carried out to assess the impacts of banning period on the socio-economic conditions of the hilsa fishermen in Shakhchor union of Lakshmipur sadar Upazila under Lakshmipur district during October (2011) to March (2012). Data were collected from randomly selected 50 hilsa fishermen by personal interviewing with a well structured questionnaire, Focus Group Discussion (FGD) and Crosscheck Interviews (CI) with key informants.

Data Processing and Analysis: After collection of data, these were edited and coded in excell sheet. All the collected data were summarized and scrutinized carefully and recorded. Finally, relevant tables were prepared in accordance with the objectives of the study. Data were presented mostly in the tabular form because it was simple in calculation, widely used and easy to understand

RESULTS AND DISCUSSION

There were about 1600 people living at the study area, about 60% of them were hilsa fishermen. In the region hilsa was found more or less all the year round and the peak season was believed to be September-October, some minor peak also occurred in February, April and June. The study emphasized on the impact of banning season on socio-economic conditions of hilsa fishers of the area.

Age of the respondents were classified into four categories as young (20-30 years), middle aged (31-40 years) and old (41-50 years) and above 50 years. The highest proportions (38.00%) of hilsa community were middle aged and above 50 years was the lowest (8.00%) (Fig.1).

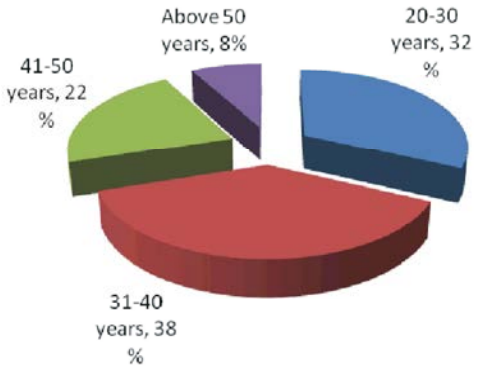


Fig. 1: Age structure of the hilsa fishermen

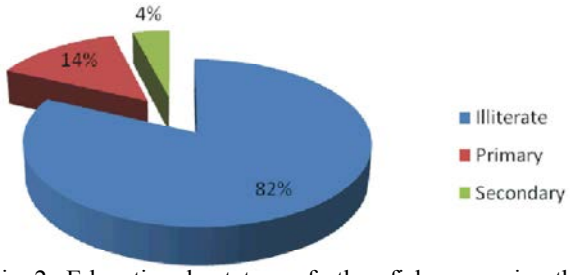
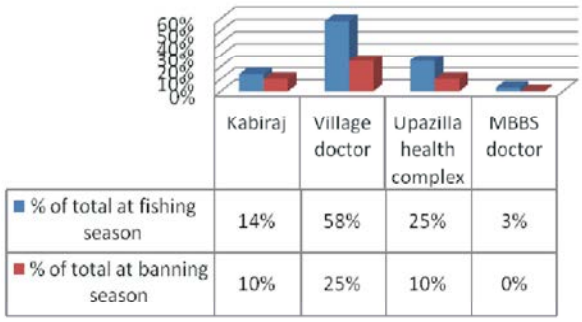


Fig. 2: Educational status of the fishermen in the study area

Ahmed [4] found that 66% of the fishermen are in the age class of 40 in Tangail district and which is similar to the present study. Although majority of the fishermen in different parts of the country are Hindus [4, 5] but in present study 92% fishermen is Muslim and 8 % are Hindus. In the study, average family size of the hilsa fishermen was found 6-15. In Mymensingh district, Ali [6] found that 45% fishermen family had 5-6 members. The fishermen families are mostly joint type [7, 8] and in shakhchor union 42% of fishermen in joint family and 58% as in nuclear form.

The present study showed that 82% of the fishermen were illiterate, 14% had primary level of education and the rest 4% were up to secondary level (Fig. 2). Mondal [9] found that 76% fishermen at the Meghna River at Ramgati Upazilla area were illiterate. Around 18% of the fishermen were primarily educated and remaining 6% of total fishermen got education at secondary level only. Though, the education level found in the present study is low, it is much higher than the findings of Mazid [10] and Azam [5].

The study indicated that 28% houses were owned, while 66% were free used and only 6% were rented. 43% households of the fishermen were *tinshed*, 56% *katcha* and only 1% half building. The scenario is same throughout the country that most of the fishermen possess *katcha* houses [7, 11]. The provision of clean and safe drinking water is considered to be the most



	Kabiraj	Village doctor	Upazilla health complex	MBBS doctor
% of total at fishing season	14%	58%	25%	3%
% of total at banning season	10%	25%	10%	0%

Fig. 3: Health facilities of the fishermen during fishing season and banning season

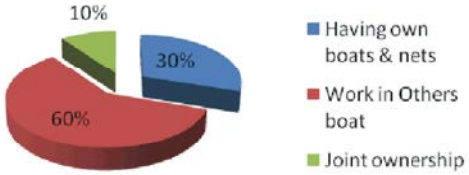


Fig. 4: Fishing assets of the fishermen

valued elements in the society. 100% of the studied fishermen used tube-wells' water for drinking purposes and among them 10% fishermen had own tube-well, 77% used Government tube-well and remaining 13% used neighbors tube-well. This scenario was very common among the fishermen in most areas of Bangladesh and similar results were noted by Hossain [8] and Alam [12].

Sanitary condition of the fishermen were very poor, 17% of toilets were *katcha*, 60% were semi-pacca, 17 % at open space and remaining 6% were *pacca*, Which reflects poor socio-economic condition and lower income. Swapan [13] noted the sanitary condition of the fishermen of Monpura Island; there were 74 % katcha houses, 22% semi pacca and 4% pacca. A significant proportion of fishermen depended upon village *kabiraj* (14%) and village doctors and (58%) who actually possessed no knowledge on medical science and only 3% fishermen got health service from MBBS doctors (Fig. 3.). Swapan [13] studied on the health facilities of the fishermen of Monpura Island during banning season of fish and found that, significant proportion (14% and 38%) of fishermen depends upon village *kabiraj* and village doctors.

The fishing community suffers from various problems such as, extortion, lack of fishing gear, inadequate credit facilities, ineffective marketing system etc. These types of problems were also being faced by the fishermen elsewhere [7, 8].

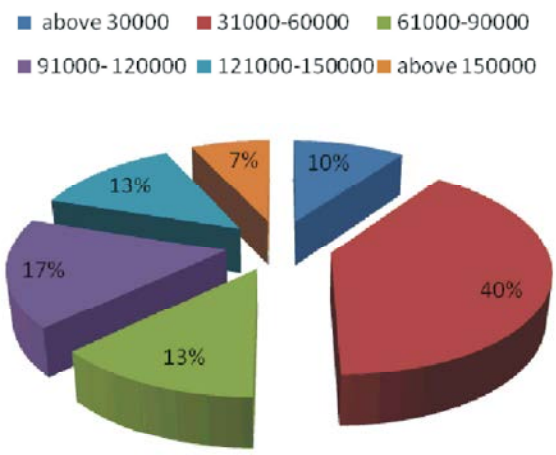


Fig. 5: Annual income of the fishermen in the study area

There was no electricity facility. Fishermen used kerosene oil to light their "hurricane". Majority (80%) of hilsa fishermen have no land if their own while only 1% of them had 21-30 decimal lands. The landless fishermen lived in *khas jomi* (Govt. land). Hilsa fishermen were very poor. Only 30% fishermen had their own boats and nets and most of the fishermen (60%) worked in others boats and remaining 10% had joint ownership. (Fig. 4).

The selected fishermen were grouped into six categories based on the level of their annual income. The 1st category included the fishermen having annual income up to 30,000 Tk. The 2nd, 3rd, 4th, 5th and 6th categories had income levels of Tk. 31,000-60,000; Tk. 61,000-90,000; Tk. 91,000-120,000; Tk. 121,000-150,000 and above Tk. 150,000 respectively. It revealed that the Tk. 31,000-60,000 category had the highest number (40%) of farmers while the above Tk. 150,000 category had the lowest number (7%) (Fig.5). During banning period, monthly income of the hilsa fishermen decreased to BDT 1800 from BDT 4200 and sometimes income goes to nearly zero due to lack of alternative employment opportunity. The study reveals that 40% of the fishermen had income level as 31,000-60,000, 10% had above 30,000, 13% had 61,000-90,000 and only 7% had upper level of BDT 150,000. Ramgati Upazilla in Meghna River Mondal [9] observed that 28% of fishermen had monthly income ranged from 5000-10000 BDT and 72% of the respondents at the income ranged from 15000-30000 BDT.

Few years ago hilsa production decreased in our country due to many reasons, one of which was tremendous catching of *jatka* (Hilsa fish having a length of less than 23 cm). Therefore Govt. banned jatka fishing during November to May and all types of fishing during March-April and 15 October to 24 October.

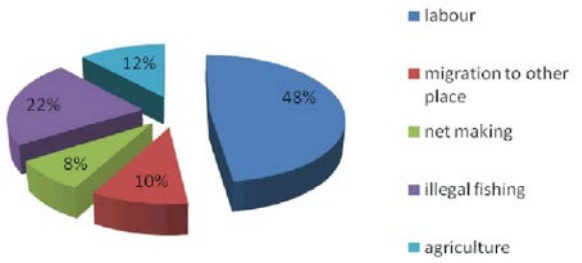


Fig. 6: Occupation during banning season

Banning period had a tremendous influence on the livelihoods of hilsa fishermen. During banning season fishermen hardly managed their necessary foods and were unable to meet the demand of school going children. During banning season fishermen sought alternative income generation opportunities and involved in various occupations such as day laborer, net making and mending, agricultural works etc. A significant proportion of people (22%) compelled to involve in illegal fishing and 10% people migrated to other districts for seeking a job (Fig. 6).

During banning season as their income source was about to cease they were bound to borrow money from local *mohajon* or NGO or local depot holder at a very high interest with some conditions. Amount of loan ranged between BDT 2,000 to 60,000. 21% more fishermen took loan during banning season compared with non-banning period. Most of them (58%) had to sell their own boat and net for paying loan and gradually become poor to poorer. During the fishing ban period the poor fishermen's household suffered food shortage and withstood the situation by reducing the number of meal taken and through consuming less expensive foods as shown in. In general, the following alternatives with financial support have been provided by the government like, (1) cow rearing (2) goat and poultry rearing (3) vegetable business and (4) tree plantation.

Besides, some alternative livelihood options for hilsa fishermen have been driven by some NGOs. These are goat and poultry rearing, seasonal fruit and vegetables business, van pulling, tree plantation etc. Anon [14] proposed some social protection measures to make the transition to alternative livelihoods which could be applied for hilsa fisher community, includes: (l) food for education program targeting the children of the poor; (2) food/cash for work and training; (3) better targeting of VGF cards to the women.

In this study it was found that 40% fishermen got subsidy (VGF card) from government and 60% fishermen had no VGF card. The survey suggests that 20% of the interviewed fishermen improved their livelihood status through VGF service where 80% fishermen have not yet improved their status due to inadequate rice, net making materials given by the government authority. Due to increasing fishing pressure and habitat destruction the production of Ilish fish (*Tenualosa ilisha*) still are decreasing. To protect overfishing govt. of Bangladesh banned jatka fishing (juvenile hilsa less than 25 cm) during November to May and in March to April all types of fishing is prohibited. Again to let allow the gravid fish to release eggs, all types of fishing is prohibited during 14 October to 24 October in the four breeding grounds (Moulavirchar area, Monpura area, Dhalchar area and Kalirchar area) depending on full moon. No doubt this strategy resulted in increasing production of this national fish in the recent years. Unfortunately increasing production does not improves the economic condition of the hilsa fishers and they suffers most during the full banning season (March to April) because fishers have little access for alternative livelihoods in this coastal area.

CONCLUSION

The study was focused on the impacts of banning period on the socio-economic conditions of` the hilsa fishermen of Shakhchor union of Lakshmipur sadar upazila, Bangladesh. They are poor by any standard and over the years economic condition of the fishermen had further deteriorated. Population pressure, low income, lack of alternative employment opportunities, extortion by the local extortionist, loan problem, robbing etc. were the common socio-economic constraints of the fishermen of the study area. Fishermen also faced various problems such as child education, health facilities, food consumption, during banning season. Almost all fishermen mentioned lack of capital and lack of viable alternatives during banning period as their main problems. Necessary steps should be taken to develop the awareness among the fishermen by Govt. and NGOs. Therefore, a pro-poor strategy must be taken to build sustainable hilsa fishery and in building links between sustainable livelihoods at the community level that are beneficial to hilsa fisher communities. Based on the findings of the study, the following recommendations can be made to improve the socio-economic conditions of the hilsa fishermen and thereby improve their welfare such as educational institution should be set up in fishermen's village. Need to women participation in various income generating activities. Government should provide the necessary infrastructural, financial and technical assistance for the improvement of the livelihood of this fishing community.

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