

Socio-Economic Status Improvement of Deprived Crab Fatteners of Paikgachaupazila, Khulna in Bangladesh

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Abstract

The study was designed to assess the socio-economic development of introducing crab fattening at Paikgachaupazila under Khulna district in Bangladesh. This study was conducted from the month of February to October, 2013. The key purpose of the study was to find out the changes of socio-economic status of poor people by crab fattening at Paikgachaupazila. Sample size was selected by 'simple random method' and data were collected by direct one to one interview and crosscheck interview with key informants. Data analysis revealed that most of the crab fatteners were Hindu (73.7%), but a few were Muslim (26.3%). About 60% respondents were involved in shrimp farming as their secondary occupation. Monthly income of the crab fatteners has increased 38.6% crab fatteners earned in a range of 8000-10000 BDT. The savings percentage of people was increasing day by day because they were conscious about their future. It is concluded that proper steps should be launched by Govt. and NGOs both to enhance the production and to keep or increase the uprising graph of improvement of social and economical condition.

Keywords mud crab, Khulna, Socio-economic status, crab fattening.

Introduction

The mud crab (*Scylla serrata*) is very common in estuaries and mangrove swamps throughout the Indo-pacific region as mangrove associated fauna. It is a euryhaline, bottom feeder; invertebrate belongs to the family Portunidae, class of Crustacea (Macintosh *et al.*, 2002). Mud crab is locally called as "Shilakakra", "habbakakra" or "kakra". It is commonly known as "green crab" or "mangrove crab" (Shafi and Quddus, 1982). In Bangladesh, crab fattening in ponds was started in early 1990's (Kamal, 2002), while fattening and culture of mud crab in bamboo cages, pens and pots only at experimental level and started at early 2000's (Khatun, 2007). Salam *et al.* (2012) conducted a research on Crab culture potential in South-western region as the alternative to shrimp culture for climate change adaptation using GIS (Geographical Information System) tools in Bangladesh. Mud crab fattening and culture have been reported as sustainable and promising for the poor coastal communities in South-east Asian countries (Patterson and Samuel, 2005). The study was undertaken with following objectives:

- To determine the livelihood condition and present status of crab fatteners; and
- To evaluate the changes of socio-economic status of the fatteners.

Materials and methods

The South-western part of Bangladesh is famous for crab fattening. Paikgachaupazila under Khulna district was leading one which was famous for crab fattening. So, different localities of Paikgacha were selected for this survey and the study was conducted from February to October, 2013. A considerable portion of people living in Paikgacha were engaged in crab fattening and hardening. Among the crab fatteners around 230 of them were being formed a group named "PaikgachaKakraBaboshaieSomiti". For this study mainly the members of this somiti were focused. According to the "PaikgachaKakraBaboshaieSomiti", approximately 138 people were permanently involved in crab fattening and hardening. Data were collected from maximum of them. For the research purpose "Creative Research System Survey Software" was used by which 57 respondents were selected through "Simple Random Method" while confidence level was 95% and the confidence interval was 10. The PRA (Participatory Rural Appraisal) tools like Focus Group Discussion (FGD) were also conducted. Key informants are known to the particular topic and able to answer questions in relatively important way about the knowledge and behavior of others. Key informants were considered as local leaders, school teachers, Upazilla Fisheries Officer (UFO). The collected data were accumulated, grouped and interpreted according to the objectives of this study. Some information was numeric and some was narrative. All the data were compiled by Microsoft Excel and SPSS (Statistical Package for Social Science) software for statistical analysis.

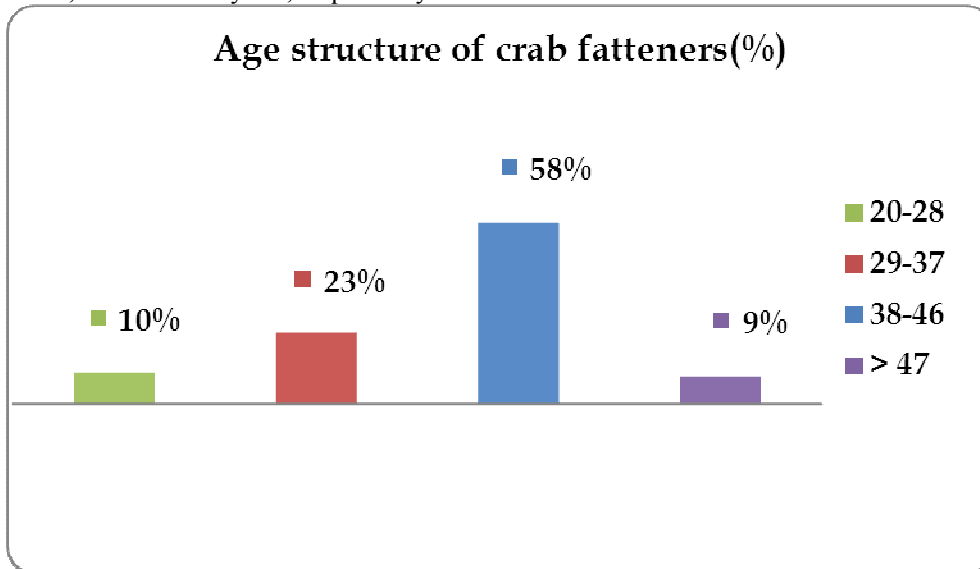
Results and discussions

Social Status of Mud Crab Fatteners

Age Structure

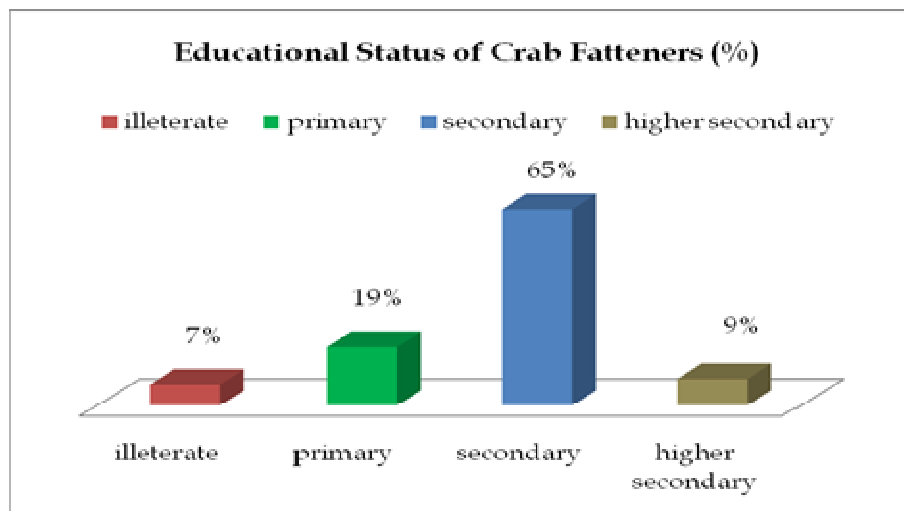
In Paikgachaupazila, it was found that the highest percentage of mud crab fatteners were belonged to year class

of 38-46 years (57.9%), whereas 0%, 10.5%, 22.8% and 8.8% of them were under the age group of 11-19, 20-28, 38-46, and above 47 years, respectively.



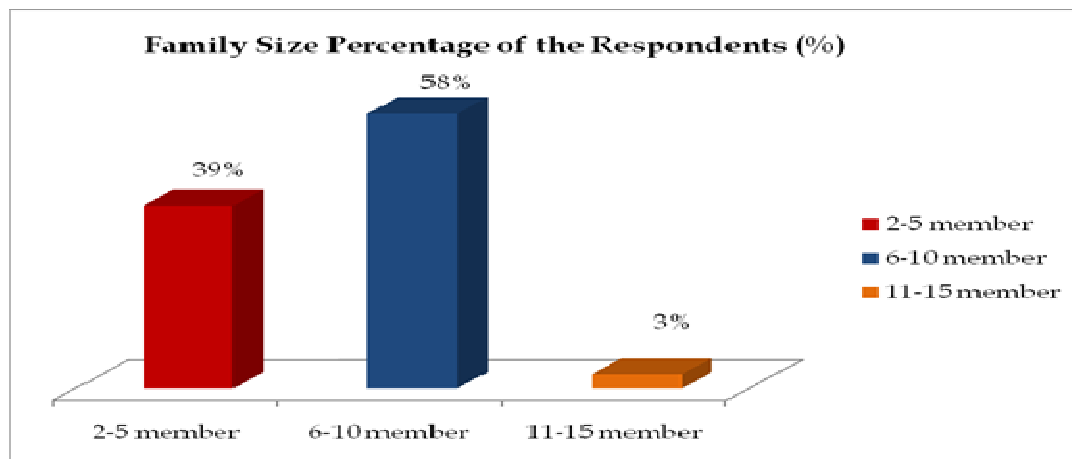
Educational status

Till study period highly educated people were not engaged themselves in crab fattening. In the study area it was found that 64.9% of crab fatteners were up to S. S. C. pass where 19.3%, 8.8% as well as 7% were up to primary, H. S. C. and illiterate respectively.



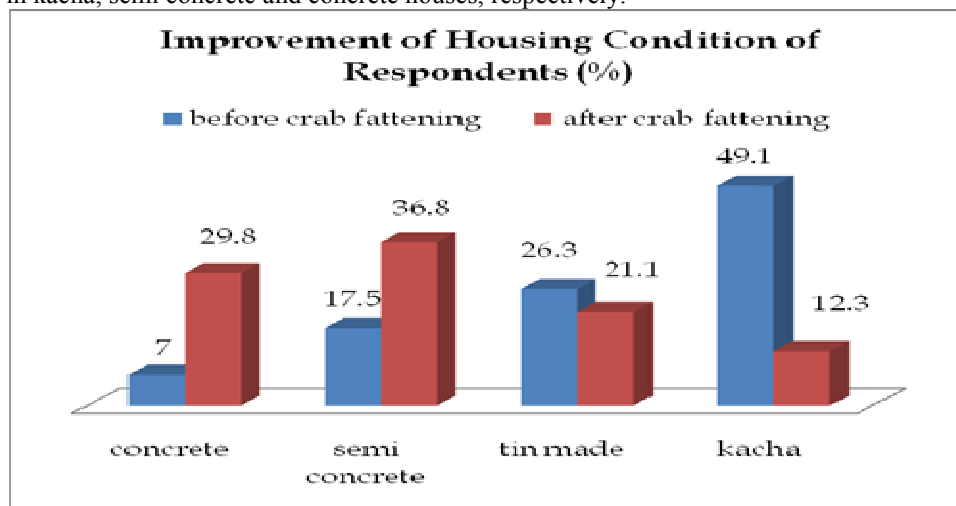
Family Size

It was observed that 57.9% of crab fatteners had 6-10 members in their family and 38.6% was 2-5 members' family whereas 3.5% was 11-15 members' family. Joint family model was very common in the study area. But the family pattern was being changing and nuclear family was getting popular among the crab fatteners.



Housing Condition

It was observed that crab fatteners were lived in four types of houses- Highest percentage of crab fatteners (37%) were lived in tin made house whereas 12%, 24% and 7% were lived in kacha, semi concrete and concrete houses, respectively.

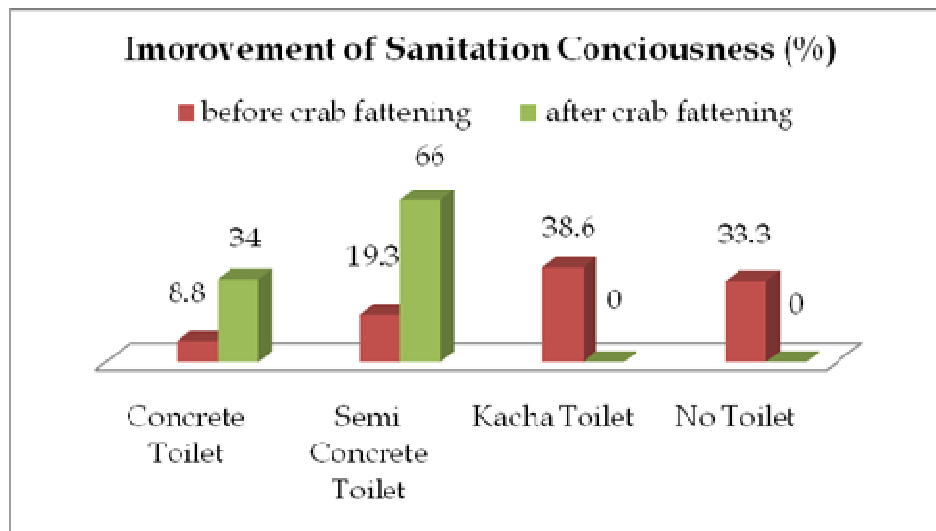


Sanitation Facility

The crab fatteners were used two types of toilet:

- I. Concreted toilet; and
- II. Semi concreted toilet

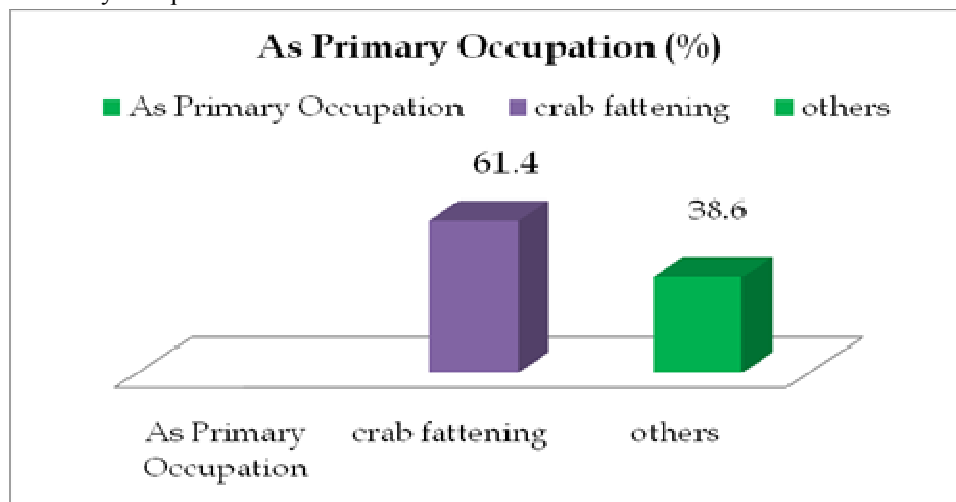
In the study area, 34% of respondents used concreted latrine where rest of 66% fatteners used semi concreted latrine.



Economic Status of Mud Crab Fatteners

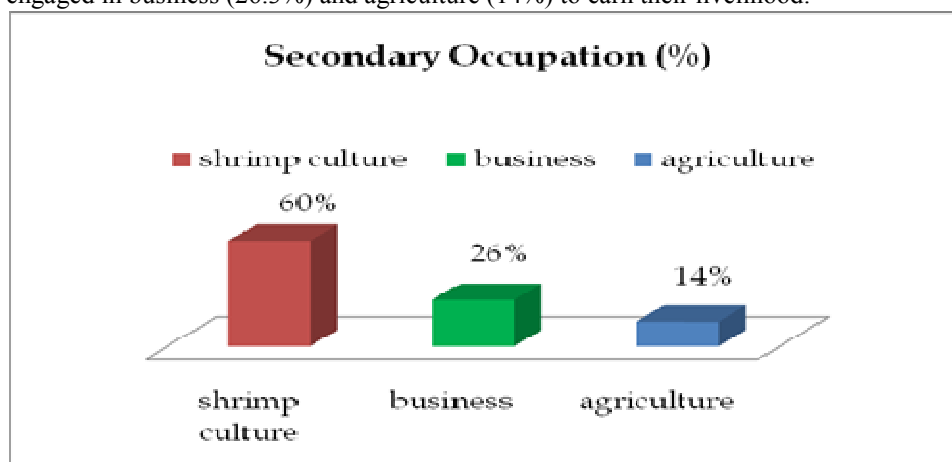
Primary Occupation

It was observed that 61.4% respondents took crab fattening as their primary occupation while 39.6% took as secondary occupation.



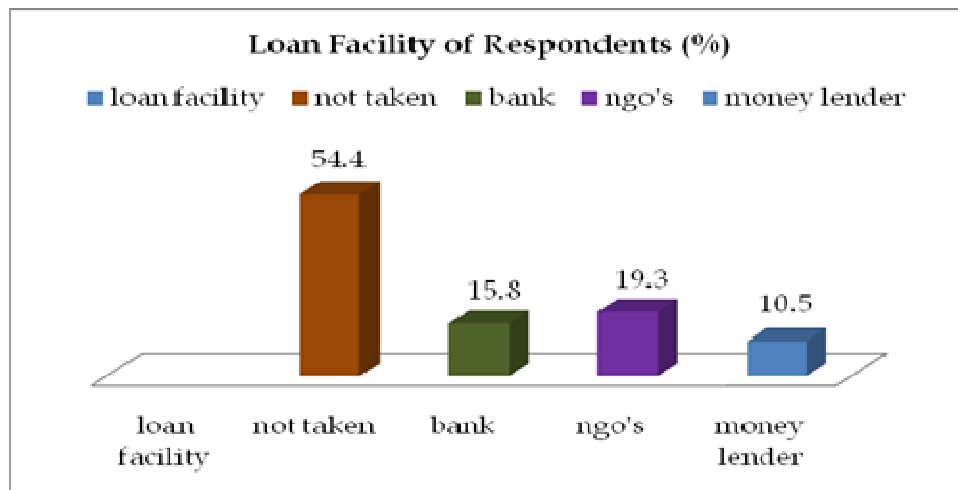
Secondary Occupation

The highest percentage of crab fattener's secondary occupation was shrimp culture (59.6%) where as others were engaged in business (26.3%) and agriculture (14%) to earn their livelihood.



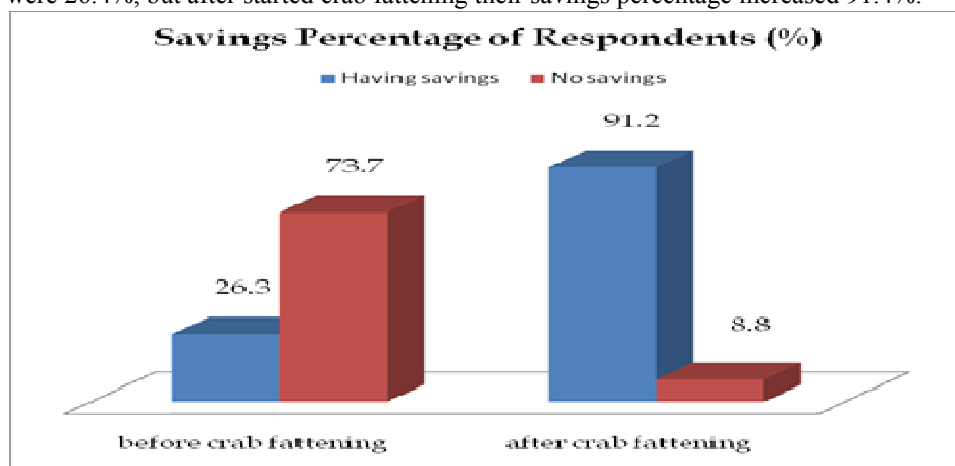
Loan Facilities

In study area 54.4% crab fatteners did not take any loan, where as 15.8% took loan from bank, 19.3% took loan from NGO's and 10.5% took loan from money lenders.



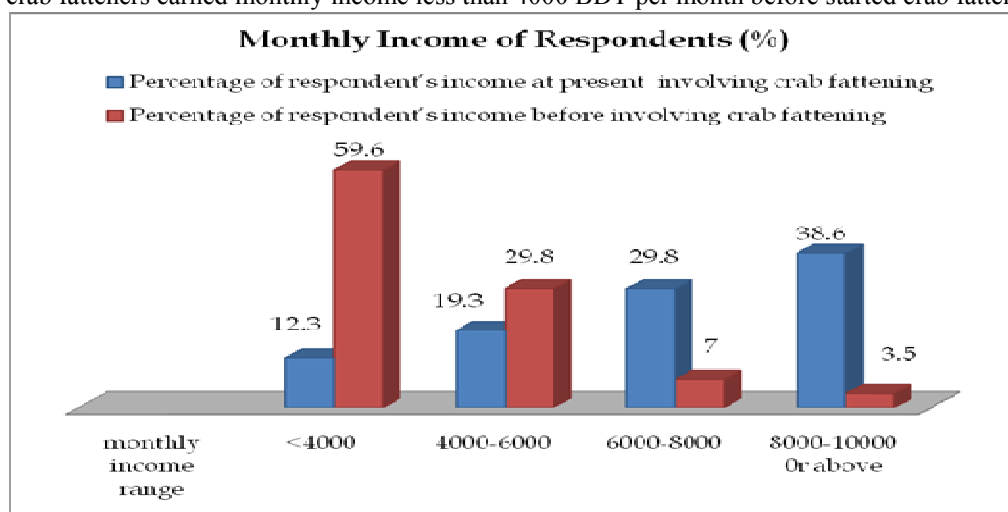
Savings Percentage

From the observation it was found that before started crab fattening the amount of respondents had their savings were 26.4%, but after started crab fattening their savings percentage increased 91.4%.



Monthly Income of Crab Fatteners

In paikgachaupazila, during the study period it was observed that monthly income was increased by crab fattening (Figure 24). Mostly (38.6%) crab fatteners earned a range from 8000 to 10000 BDT while about 60% crab fatteners earned monthly income less than 4000 BDT per month before started crab fattening.



Age Structure

In Paikgachaupazila, it was found that 57.9% of crab fatteners belonged in the age group of 38-46 years while Molla *et al.* (2009) reported that 40% of crab fatteners belonged to the age range of 29-37 years in his study area Khulna and Satkhira districts and Farid (2013) found that 36% of crab fatteners were belong to the age group of

33-41 years in Shyamnagarupazila of Satkhira district which was not similar to the findings of present study, because it was found that for successful crab fattening, experience is essential. Sandika AL and Hirimuthugoda NY (2012) reported that 42% crab collectors were of middle aged in Koggala lagoon in Galle, Srilanka.

Educational Status

In the study area it was found that 64.9% of crab fatteners were up to SSC and 19.3%, 8.8% and 7% were up to primary, HSC, illiterate, respectively. Molla *et al.* (2009) reported that in Khulna and Satkhira district the literacy rate of crab fatteners was 70% up to SSC and there was no person who can't sign which is nearly similar to the present study. But Farid (2013) observed that only 4% crab fatteners were up to SSC and maximum 48% crab fatteners were up to primary level in Shyamnagarupazila of Satkhira district which is not similar to present study because may be people are not conscious about the importance of education. Sandika AL and Hirimuthugoda NY (2012) reported that 56% crab collectors were up to primary level which was not alike to present findings.

Family Size

In the study area, it was observed that 57.9% of crab fatteners had 6-10 members in their family, whereas 38.6% were 2-5 members in their family and 3.5% was 11-15 members in their family. Molla *et al.* (2009) reported that in Khulna and Satkhira district the highest percentage of family size of crab fatteners was 80% in the range of 6-10 members in Khulna region which is not similar to the present study due to social change, the pattern of nuclear family is increasing day by day. Farid (2013) found 48% crab fatteners had 4-5 members' family in Shyamnagarupazila of Satkhira district which was nearly similar to the present study.

Housing Condition

It was observed that most of the crab fatteners (37%) in the study area lived in tin shed house, whereas 32%, 24%, 7% were lived in kacha, semi concrete and concrete houses respectively. Ahmed (2003) found 62% of kacha housing structure of prawn farmers in Mymensingh area which is not similar due to economic development of crab fatteners in Paikgachaupazila because livelihood status of Paikgachaupazila was better than Mymensingh area.

Sanitation Facility

The crab fatteners used two types of toilet such as 1) concrete toilet and 2) semi concrete toilet- made of bamboo fence, ring slave with good drainage system. In the study area, 34% of respondents used concrete toilet and rest 66% fatteners used semi concrete toilet. Molla *et al.* (2009) reported that in Khulna and Satkhira district 10% of crab fatteners used concrete toilet and rest 90% used semi concrete toilet which was not similar to the present study because people are becoming conscious more about their sanitation and health from the last couple of years.

Savings and Monthly Income

The percentage of savings was increased from 26.4 to 91.4% among the crab fatteners. The monthly income of the crab fatteners were also increased by the crab fattening. Before crab fattening 59.6% earned less than 4000 BDT per month but the percentage reduced at 12.3%. 38.6% people earn at range of 8000-10000 BDT or above. Molla *et al.* (2009) observed that in Khulna and Satkhira districts, 45% crab fatteners earned monthly a range of 7500-12500 BDT which is nearly similar to the present study because people were not interested in talking about their real income. But Farid (2013) reported that 52% crab fatteners' monthly income were 10000-15000 BDT in his study area Shyamnagarupazila of Satkhira district which was not nearly similar to the present study because may be income range was different among the study areas.

Loan Facility

Due to several conditions the crab fatteners were not interested in taking loan. 54.4% fatteners did not take loan while 19.3% took loan from NGO's and 10.5% took loan from money lenders. Molla *et al.* (2009) found that in Khulna and Satkhira districts, 52.5% of the crab fatteners did not take loan which is similar to the present study. Khayruzzaman (2007) stated that 46% fish retailers in Jamalpur took loan from Mohajon (Money lenders) which was not similar to the present study because in Paikgachaupazila people were not interested in taking loan from Mohajon for high interest rate.

Entertainment Facility

Due to having electricity in rural areas and economic power they are introducing television as a part of entertainment at home. It increases their family bonding. People like to facilitate entertainment while they get rid of poverty. It was found that 89.5% people had television and/or radio at their home.

Conclusion

In the study area the crab fatteners were dominantly Hindus. The housing condition and sanitation condition were in developing stage among maximum respondents. There was lack of loan facility for crab fatteners. They are deprived of getting loan facility at easy condition though they are involved in a large amount of earning foreign currency for the motherland. As they are now economically viable, they are conscious about the complete development of their family members. So, they are now sending their children to school, introducing television as a source of well entertainment. Monthly income is increasing year after year as a result their economic condition is improving. In the present study, it revealed that Paikgacha was a leading area of crab fattening. Physical, chemical and biological parameters are suitable for crab fattening. But natural disasters like 'aila', 'sidre' are terrific risk for the coastal people. This type of natural calamity is the cause of environmental degradation and loss of resources from last 5-6 year consequently. Moreover, theft problem, aggression of musclemen was also found as the potential threat against crab fatteners. According to the information, it may be said that the crab production in the study area has increased. The statistics shows that the export volume of crab is increasing day by day. The social and economical condition of crab fatteners has improved.

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