

## Socio-economic Condition of Fishermen of the “Mail Beel” under Mohanpur Upazila of Rajshahi District in Bangladesh

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**Abstract:** Socio-economic condition of fishermen of Mail beel was conducted during the period of September 2005 to June 2006. Interviews were taken from different intermediaries like aratdars, baparies, farias, retailers and fishermen. The Socio-economic characteristics like age, family size, educational status and daily income of members of fishermen of around the Mail beel area were studied. In this connection earner's dependency was also important aspect. The age structure showed that 31-40 years age groups were mainly engaged in fishing and the percentage was 28.57 in average of total population. The next groups were 41-50 age group (22.85%), 51-60 age group (8.57%), above 60 age group (2.85%), 20-30 age group (22.85%) and below 20 age group (14.28%), respectively. The total population study revealed that there were 55.84% male adult and male children, 44.16% female adult and female children population. The average percentage distribution is 28.57% that show the highest proportion remaining in the income group of Tk. 31-40. Next 20% of Tk. 51-60, 14.28% of Tk. 41-50, 11.42% of Tk. 61-70, 8.57% of Tk. 71-80, 5.71% of Tk. 81-90, 8.57% of Tk. 21-30, 2.85% of Tk. 100 above of the number of fishermen of the Mail beel of Mohanpur. The birth rate was higher than income structure and life standard was too low to maintain their whole family. It is necessary to reduce the role of middlemen to maximize the returns for fishermen. The socio-economic status of the fishermen could be developed through increasing education and giving technical support. Overall, the socio-economic status of the fishermen is very dull and fishermen community in the study area is poorer among the poor.

**Key words:** Socio-economic, fishermen, education, Income, middlemen

### INTRODUCTION

Mohanpur upazila under Rajshahi district in the Northern region of Bangladesh is very important for fisheries sector. Open water captured fisheries in Rajshahi district comprise the major river the Padma, the Baral, the Barnoi and network of lesser rivers and tributaries. This region possesses perennially flooded small beels and a seasonally inundated flood plain, perennial open water and ponds. Fishermen are those who catch fishes from fishery resources such as beels, hoars, cannals, rivulets, rivers etc. by using minimum input and sell their commodity as fresh condition either directly to the consumers or to any intermediaries. Fishermen only sell and thus they get most of the value in marketing cost. Some persons perform both the functions as fishermen and as fish traders. Fishermen and the fish traders socioeconomic condition are still in an early stage of growth. Some workers like Khan (1962) and Westerguard (1975, 1976) have focused on fishermen's occupation in the description of socioeconomic and socio-culture aspects. Ahmed (1957) described some variables like education demonstration and economic uplift programs under the

head economic of fishing industry. The fish market in our country is virtually cluster disorganized activities and always remain in the control of an influential person of the surrounding area depending on wide range social, economic and political factor (Nuruzzaman, 1993).

At present fishermen do not get their actual price due to lack of transportation and malpractice in the marketing system. But the study on this aspect is very scanty and fragmentary. A few workers such as Ahmed (1957), Agarwal (1990) and Hossain (1994) worked on the transportation and marketing system of our country.

### MATERIALS AND METHODS

The present study has been carried on the socioeconomic and demographic condition of fishermen and fish traders of Mail beel. This study has been carried on during the period of September 2005 to June 2006 of Mohanpur (Beel area) at Rajshahi region in Bangladesh.

**Collection of data:** The data were collected from different fishermen and fish traders like baparies, aratdars, whole sellers, retailers and others associates.

**Survey at different fish markets:** Different fish markets of the Mail beel area at Rajshahi have been used for the study.

**During the market visit the following information were collected:** Marketing channel, Transportation system and preservation process of fish, Cost and profit involved and Socioeconomic condition of the fishermen

**The following questionnaires were followed during the investigation:** Sources of fishes (wild or cultured), Problem of fishing or trading, Daily retail price and total amount of landing, Is it your family profession-Yes/No, Are you illiterate-Yes/No, Number of family member and Is there any fishermen co-operative society.

**Major consideration:** During the socioeconomic study major considerations were age structure, sex composition, sex ratios, family type, income pattern, educational status and earner's dependents.

**Analysis of data and calculation:** The collected data have been analyzed to explain the socioeconomic and demographic condition of fishermen of Mohanpur in Rajshahi district.

## RESULTS AND DISCUSSION

**Age structure:** The analysis of the age structure of the fishermen of Mohanpur showed that 31-40 years age groups are mainly engaged in fishing (28.57%) in average of total population. Then 41-50 years of age groups are engaged in fishing (22.85%). After then 51-60 years of age groups are engaged (8.57%). The next groups are 20-30 years of age (22.85%), above 60 years (2.85%) and below 20 years (14.28%) (Table 1). Below 20 years age group may be regarded as occasional working age group. The decrease of percentage distribution for above 60 years age group was due to less work and given off work to their sons but also show interest in the profession.

The average of fishermen samples of Mohanpur fish markets, the highest was 28.57% for 31-40 years age group and the lowest was 2.85% for age group above 60 years.

**Sex composition and sex ratios:** In the sample the average sex ratio of the family members of fishermen of Mail beel area is 80 females per 100 males i.e. male and female ratio is 1: 0.80 (Table 2).

The distribution of sex-composition in samples shows some variations from total 180 population, 100 or 55.84% for male and 80 or 44.16% for female population. The birth rate is higher than income structure and life standard is too low maintain their whole family.

**Family type:** Family- The term refers to all persons who are related to each other and ordinarily live together having a common cooking establishment or the term family commonly means a group of related people who share a home. The family provides economic support for its members. It excludes domestic servants, boarders etc. classified the family types are as follows:

**Nuclear family:** Consisting of two a husband, a wife and their children only.

**Extended family:** Consisting of parents, children and other relatives such as father, mother, brother in law, sister in law, nephew, niece, grandson, grand father, unmarried brother and sister etc.

**Joint family:** Consisting of two more related nuclear or extended families.

It is evident that nuclear family is the most predominant in the study area of the Mail beel landless, low category of housing and capital structure and is directly related to the lower income. Similarly, extended and joint families are positively related to the higher income, capital investment, well housing condition and working population.

Table 1: Distribution of age group of samples of fishermen of the study area of Mail beel at Mohanpur

	Age group of fishermen					
	Below 20	20-30	31-40	41-50	51-60	Above 60
No. of fishermen	5	8	10	8	3	1
Percentage	14.28	22.85	28.57	22.85	8.57	2.85
						Total
						35
						100

Note: Number of the parentheses indicates the percentage

Table 2: Distribution of sex composition and sex ratio of total population of samples of the fishermen of Mail beel

Sex group	Male	Percentage	Female	Percentage	Male: Female
Adult	40	57.14	30	42.86	100:80
Children	60	54.54	50	45.45	1:0.80
Total and average percentage	100	55.84	80	44.16	

Note: Number of the parentheses indicates the percentage

Table 3: Distribution of family size of samples of the fishermen of Mail beel

Category	Family size with number of member				Total
	Small	Medium	Large	Larger above	
	1-3	4-6	7-9	10	
No. of family	8	20	5	2	35
Percentage	22.85	57.14	14.28	5.71	100

Note: Number of the parentheses indicates the percentage

Table 4: Distribution of different income group of number of the fishermen of Mail beel area

Category	Income (per day) group with number of member								Total
	Tk. 21-30	Tk. 31-40	Tk. 41-50	Tk. 51-60	Tk. 61-70	Tk. 71-80	Tk. 81-90	Tk. above 100	
No. of fishermen	1	10	5	7	4	3	2	1	35
Percentage	8.57	28.57	14.28	20.00	11.42	8.57	5.71	2.85	100

Note: Number of the parentheses indicates the percentage

Table 5: Distribution of different education group of sample of the fishermen of study area

Category	Educational group with number of family member					Total
	Illiterate	only sign but illiterate	Class I-V	Class VI-X	Class XI-Degree	
No. of family	6	12	5	2	0	25
Percentage	45.71	34.28	14.28	5.71	0	100

Note: Number of the parentheses indicates the percentage

**Family size:** An analysis of family size i.e. number of persons per family is of great important. We classified the families are shown in the Table 3. Reported family size as i) Small families with 1-3 persons ii) medium families with 4-6 persons iii) large families with 7-9 persons iv) larger families with 10-12 persons v) very large families with above 12 persons.

In case of sample, the medium size family accounts for about 57.14%, respectively. As the highest in respect of total sample unions followed by small, large and larger families, the percentages in respect of sample were 22.85, 14.28 and 85.71, respectively. From the distribution it is evident that 57.14% for medium size family (highest) and 5.71% for larger size family (lowest) in the members of fishermen of Mail beel at Mohanpur (Table 3). The small size families are positively associated with low income, nuclear family and lower capital investment. Medium and large families are due to the more birth rate. It is also associated with the high sex ratios, higher income, extended family and capital investment in different ways and multi income sources. Ignorance about the education and family planning was also a reason for the variation of family size. The family of educated person is small in size but the large family size is made with the illiterate person.

**Income pattern:** Income pattern are describe about, per day income in taka. The average percentage distribution was 28.57% that show the highest proportion remaining in the income group of Tk 31-40 and 2.25% is the lowest proportion remaining in the income group of Tk above 100. Next 14.28% of Tk 41-50, 20% of Tk 51-60, 11.42% of Tk 61-70, 8.57% of Tk 71-80, 5.71% of Tk 81-90, 8.57%

of Tk 21-30 of the member of fishermen of Mail beel (Table 4). When the fish catching rate was increased the fishermen was in the higher income group. However high income depends on high investment, large number of family member etc.

**Educational status:** Education is very important socioeconomic aspects. In the field observation and based on the analysis the educational attainments of the members of fishermen of Mail beel at Mohanpur have been grouped into 5 categories viz. Illiterate, only sign but illiterate, class I-V, class VI-X and class XI to degree level.

In case of study sample, 45.71% occurred in illiterate group, 34.28% in only sign but illiterate, 14.28% in class I to V level, 5.71% in class VI to X level and 0% in class XI to degree level (Table 5).

From the Table 5 it was that the samples 45.71% being the highest occurred for illiterate group and the lowest 5.7% was for class VI-X level. There were no sample found in XI to degree level. Majorities of the members were illiterate and the fishermen's degrees are negligible in percentage. Their tendency is to earn more money. For this reason they are deprived from school in the early age. Except this, illiteracy is positively related with high birth rate and ignorance about the good effect of education. On the other hand, higher income techniques and occupation category are related with literacy.

**Earners dependents:** In the study sample 40(22.22%) out of 180 population were earning members. In the view of the samples in the earning consideration 22.22 and 77.78%

Table 6: Distribution of different earners dependency ratio of total population of samples of member of the fishermen of study area

	Total earners	Total dependent	Earners: Dependent
No. of family member	40	140	1:3.5
Percentage	22.22	77.78	

Note: Number of the parentheses indicates the percentage

were earner and dependent members, respectively and the earner and dependent ratio was 1: 3.5 in average out of 180 population (Table 6). From this results, the dependency ratio indicated the economic insolvency, larger and nuclear family where below 14 years aged children entered as the earning member and illiteracy. The social statues of the fishermen were poor and most of them were illiterate or only can give signature having moderately large family members. Male and female ratio observed was 1:0.80. Most of them earned above TK 40/day. Gupta *et al.* (1992) said a economic study of Tilapia culture in seasonal ponds of Bangladesh indicated that Tilapia culture technology can be under taken by women and children and through income, some farmers could pay for the education of their children. After Bangladesh economic survey (1971-73), the fishermen are the producers of fish but a class they are extremely ignored socially and exploited economically. Baliao *et al.* (1999) described that fishing was a primary occupation in Miagao, Itoilo (Philippines). They also described the demographic characteristics like age, marital status, educational status, second occupation of fishermen. In Bangladesh fishing is the primary occupation. Katiha and Chandra (1990) stated that it is necessary to reduce the role of middlemen to maximize the returns for fishermen.

This research finding information on the socioeconomic condition of fishermen of Mail beel at Mohanpur will be helpful for making and development decision for fisheries sector in Northern region as well as such areas in Bangladesh.

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