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ORIGINAL ARTICLE

Socio-Economic Condition of Fishers of Chandakhola Wetland, Dhubri, Assam, India

Samuel Sheikh¹, Dr. M.M. Goswami²

¹ Research scholar, Department of Zoology, Gauhati University, Guwahati, Assam, India. E-mail: samuel_sheikh@rediffmail.com ² Professor, Department of Zoology, Gauhati University, Guwahati, Assam, India.

ABSTRACT

The study relates to the socio – economic condition of the fisher community of Chandakhola wetland of Dhubri District, Assam, India. The result suggests a very miserable condition. The literacy among the respondents is very poor. Among the literates, none has been found to have education above the Xth standard. Their families represent both extended and nuclear type. Statistically the family size is independent of family type. Of the capable family members 53% are adhering to fishing and the rest opts for other ways of livelihood. Statistical 'Z – test' shows significant difference between the two ways of livelihood, the 'fishing' and 'other' at 5% level of significance.

Keywords: Fisher, Chandakhola, Dhubri, Extended, Nuclear.

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INTRODUCTION

The wetlands of Assam are, by and large, the flood plain water bodies of two major river systems namely the Brahmaputra and Barak river systems that contribute a considerable share in the state's capture fishery. These flood plain wetlands constitute important fisheries resources of Assam and possess the potentiality not only to fulfil the state's domestic demand for fish but to provide the scope of exporting fish to other states of India. Thus, apart from providing cheap human nutrition, the wetland resources can also generate the state economy of Assam. However, the important role that can be played by it is yet to be perceived. The wetlands render multifarious other direct and indirect benefits to the society particularly the livelihood of the fishers. In India, development of fishermen is often restricted to the traditional fishing communities near the coastal areas in maritime states while the interest of those associated with inland fishery is relatively neglected [1]. The demand for fish in Assam is about 0.22 million ton per year and the production is only 0.14 million ton per year from both culture and capture fisheries [2]. The state is importing fish from other states of India like Andhra Pradesh and Bihar to cater the demand. The fisher community plays an important role not only in utilisation of the wetlands but the conservation of the same too. The research related to the socio - economic condition of the fisher community of flood plain wetlands in India is very meager. Thus the lack of information on this area poses as serious impediment for implementation of developmental programmes for them. The present study has been conducted with an aim to investigate the ground state and analyse the information regarding the socio - economy of the fisher community, a marginalized, Scheduled Caste community of Chandakhola wetland (26° 02' 06" North and 89° 55' 00" East) of Dhubri district of Assam in India.

MATERIALS AND METHODS

It is an analytical study based on the data regarding various aspects of socio – economic conditions of the fisher community. A door to door interview was conducted with the help of a pre constructed data sheet of Interview Schedule. The data sheet was prepared in the line of the 'Primary Data Sheet' employed for WFP Project No. 2750.01 with some of its minute modifications to suit the local conditions of the present study area. There are mainly two villages comprising about 100 fisher families. From each village 20 families were randomly selected and thus a total of 40 (sample size) fisher families were visited randomly to interview their family bread earner. From the data collected, simple percentages were calculated and

tabular analysis was done. Further, the data so collected and generated are statistically analyzed using Graph Pad Instat (Demo) statistical package, PAST statistical package and M.S. Excel.

RESULTS AND DISCUSSIONS

Age and literacy:

The study entails the findings of 25% respondents within the age group of 18 – 30 years, 52.5% falling within the age group 31 – 50 years and the rest is above 50 years of age (Table: 1). It means that only $1/4^{th}$ of the sample is young and potent group engaged in fishing occupation. It has been observed that 63% of the respondents are illiterate and 37% literate (Table: 2). Dhubri district has lowest literacy rate in the state and the literacy found among the fishers in this study is far below the average literacy rate of the district. The literacy is much lower than that found by Goswami et al [3], Bordoloi et al [4]. Education of fisher plays a crucial part for better conceiving the technical and economic information regarding the occupation. The investigation with regard to the extent of education among the literate respondents (37%; 15 Nos.) shows that none has got the opportunity for education beyond X^{th} standard. 53.33% of the respondents are educated below IV^{th} standard and only 46.66% has been found within the class interval of $(IV^{th} - X^{th})$ standard (Table: 3).

Family type and size:

The study shows 53% of respondents' family is extended type, while 47% is nuclear type (Table: 4). Here Nuclear family means family with or without dependants and Extended family includes lineally/collaterally/ lineally and collaterally extended family with dependants. 77.5% of the respondents is having a family size of 5 to 9 members, while 15% is having < 5 members and a lowest, 7.5% is having \ge 10 members in their family (Table: 5). The result is consistent with the findings of Goswami et al 3 and Bhattacharyya et al[5]. They found most of the families with a family size of more than four members. In the present study, the hypothesis that 'the family size is independent of family type' is accepted in the 'chi – square' test at 5% level of significance and 2 degrees of freedom. The family size parameter is an important socio economic indicator as much as it has effects on family savings, education of children, health, nutrition, households and living standards etc. The result implies that the family planning concept is not imbibed by the community.

Occupations among family members:

It has been found that 53.1 % of the capable family members of the respondents' family are adhering to their traditional profession while 33.7 % are attracted by MGNREGS (Mahatma Gandhi National Rural Employment Guarantee Scheme) of work and 13.3 % is opting for other way of livelihood like rickshaw puller, labourer etc. (Table: 6). Further, from the 'Z – test' result at 5% level , it can be inferred that there is significant difference between the two ways of livelihood, 'the fishing' and 'other including MGNREGS of work' and thus the null hypothesis (H $^{\rm 0}$) that there is no significant difference between the two ways of livelihood, is to be rejected. Moreover, the 'chi – square' test for testing the hypothesis whether the selection of profession (fishing / other) among the capable family members in the respondents' family is dependent on two different age groups (<35 years and \geq 35 years) gives extremely significant result at 5% level of significance and 1 degree of freedom. It reveals that there persists a selection of profession and drift between the above two age groups.

Family income and saving:

The study shows 35% respondents having an average family monthly income not more than Rs. 3000, 20% within the income group of Rs. 3001 – Rs. 4500, 30% within the income group of Rs. 4501 – Rs. 6000 and only 15% of the respondents are having average family income more than Rs. 6000 (Table: 7). The result shows a little increase in income as compared to 0 the result obtained by Goswami et al 3 . It may be due to the price rise of food fishes in the region.

It has been found that 67.5% of the respondents are having monthly saving within Re. 1 – Rs. 500 and 15% of the study sample is having no monthly saving. While only 5% and 12.5% of the study sample is having monthly savings of more than Rs. 1000 and within Rs. 500 – Rs. 1000 respectively (Table: 8). The income as well as the saving is found to be very poor. Further when correlation between the family size and family saving is carried out the two tailed P value is found to be 0.0008, considered extremely significant.

Dwelling house types and sanitation:

It has been observed that 85 % of the respondents' house is of katcha type and 15% semi pucca type (Table: 9). None of the respondents is having sanitary latrine in their house. Many of them are without latrine in their house and they use open field in the bank of the wetland for the purpose. Despite awareness programmes for sanitation under rural development scheme and provision of subsidized installation of sanitary latrine, sanitation is found to be seldom realized by the fisher community.

Household electricity:

It has been observed that 77.5% of the respondents are enjoying the household electricity connection under the BPL (Below Poverty Line) subsidized connection scheme (Table: 10).

Poverty level:

It has been found that 100% of the respondents are possessors of BPL card issued by the District Administration signifying them as in below poverty line (Table: 11).

Fishing vessel and gear:

Different types of fishing nets of various mesh sizes are used by the fishers as fishing gears and small sized country boats are used as fishing vessel. The fishing gears and vessel is almost same with those found used in the study of Goswami et al [6]. Only 10% of the respondent fishers are having their own boat for fishing and 90% are having no boat of their own (Table: 12). They take resort to hire boat for fishing purpose with high hire rate or with equivalent fish catch share. It has been found that 77.5% of the respondent fishers are fishing with hired net while only 22.5% of respondent fishers are having their own net for fishing (Table: 12). That means more than 3/4th of the respondents are to pay for fishing vessel and gear in terms of money or fish catch share. The 'chi – square' values at 5% level of significance and 1 degree of freedom let to accept the hypotheses that income is independent of presence / absence of own net as well as own boat in fishing. This may be due to the reason that fishers without having own fishing vessel and gear use to over fish in the wetland in order to pay the hiring charge of vessel and gear.

Insurance to the life of fisher:

Only 20% of the respondent fishers are having life insurance while 80% of them are without any insurance (Table: 13). Despite having various risk factors to their lives in the fishing occupation, 80% of the fisher respondents are continuing the profession without being insured. The condition bears threat to the future of the fishers and their family as well.

Conclusion:

In view of aforesaid result and discussions, it may be concluded that the socio economic condition of the fisher community of the study area is very poor and miserable. The fisher community of the study area is marginalized community being recognized as scheduled caste by the state. In these days of global economic changes, the fishers are found not having the basic necessities to elevate their living conditions. Instead they are facing a lot in their struggle for existence. They are still in the primitive stage with limited or no scientific and technical guidance to use the wetland more economically and sustainably.

Table 1. Age wise distribution of the respondent fishers

Age Bands (years)	Numbers In sample	Sample Number	Percentage
18 - 30	10	40	25.0%
31 - 50	21	40	52.5%
51 - 60	06	40	15.0%
>61	03	40	7.5%

Table 1: Literacy wise distribution of respondent fishers

Literacy	Numbers In sample	Sample number	Percentage
literate	15	40	37.5%
Illiterate	25	40	62.5%

Table: 3: Extent of education among the literate fisher				
Standard Numbers Sample Percentage				
In sample Number				
Below Class-IV	08	15	53.33%	
Class-V to X 07 15 46.66%				
> Class-X	Nil	15	0%	

Table 4. Distribution of respondents as per family type

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TaFamily type	Numbers	Sample	Percentage	
	In sample	Number		
Nuclear	19	40	47.5%	
Extended	21	40	52.5%	

Table: 5 Distribution of respondents as per family size				
Family size	Numbers	Sample	Percentage	
In sample Number				
<5	6	40	15%	
5-9	31	40	77.5%	
10 and above	3	40	7.5%	

Table 2: Distribution of able family members according to the type of occupation

Occupation	Number	Total Number	Percentage
Fishing			53%
MGNREGS			34%
Other			13%

Table7: Distribution of respondents' families according to average monthly income

Family Income	Numbers	Sample	%age
(in Rs.)	In sample	Number	
Up to Rs. 3000	14	40	35%
Rs. 3001-4500	8	40	20%
Rs. 4501-6000	12	40	30%
Rs. 6001 <	6	40	15%

Table 3: Distribution of respondents' families according to average monthly saving

Savings (in Rs.)	Numbers In sample	Sample Number	%age
> Rs. 1000	2	40	5%
Rs. 500 - 1000	5	40	12.5%
< Rs. 500	33	40	82.5%

Table 4: Distribution of respondents' families according to type of house

House type	Numbers In sample	Sample number	%age
Pucca	Nil	40	0%
Semi pucca	6	40	15%
Katcha	34	40	85%

Table 10: Distribution of respondents' families according to availability of domestic electricity connection

Domestic electricity connection	Numbers In sample	Sample Number	%age
Available	31	40	77.5%
Not available	9	40	22.5%

Table 11: Distribution of respondents families according to poverty level

Poverty level	Numbers	Sample	%age		
	In sample	Number			
APL*	Nil	40	0%		
BPL**	40	40	100%		

^{*} Above Poverty Level; ** Below Poverty Level

Table: 12 Distribution of fishers with or without fishing vessels and gears of their own				
Fishing vessel Fishing gear				
Available Not available		Available	Not available	
10 % 90% 22.5% 77.5%				

Table: 13. Distribution of respondents with or without insurance			
Insurance status	Numbers In sample	Sample Number	Percentage
Insured	8	40	20%
Not insured	32	40	80%

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