

A STUDY ON PROFILE OF FISHING COMMUNITY OF THE RIVER SIDE VILLAGES OF RIVER CHURNI, NADIA, WEST BENGAL WITH SPECIAL REFERENCE TO SOCIO-ECONOMIC AND TECHNOLOGICAL APPRAISAL OF FISHERMEN

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ABSTRACT

A profilistic study on the socio-economic status of the fishermen community of the river-side villages of River Churni was conducted during 2012. A total sample of respondents was 240 families and only the main earning member was considered as respondents. Pre-tested interview schedule was used for the collection of information after conducting a preliminary survey to construct a clear idea about the status of fishermen on river side areas. The result of the study revealed that most of the responded were belonging to the Hindu community (58.75%) besides Muslims (37.91%) and others. About 50.83% of total respondents were found to belong under the age group above 19yrs and below 40 yrs. About 36.25% were belonging to the Scheduled caste category. Illiteracy was found one of the major problems of the studied area as about 34.16% respondents were found to be illiterate.

Though major occupation was fishing but many of the respondents affirmed about presence of their part time works (*viz.*, rickshaw pulling, contract labouring etc) in their lively hood to increase the income a little bit. On further interrogations it was confirmed that smoking, chewing of beetle nut, consumption of alcoholic liquor, addiction to tobacco leaves and other injurious habits were very common in the fishermen community. Using of very simple equipments or gears for fishing were found among the fishermen. Monthly income of most of the families (49.16%) was found between Rs. 2500 to Rs. 5000. The investigation revealed that the basic problem of the socio-economic degradation is due to the increasing pollution in to and gradual decrease in the productivity of the river. The study was also confirmed that general socio-economic status of the fishermen community of the river side areas could be improved by the proper interference of government and planned development of infrastructural condition related to fishing.

KEYWORDS: Socio-Economic Status, River Churni, Fishermen Community, Pollution

INTRODUCTION

Fish and fisheries is an important sector of most of the developing and developed countries of the World from the stand point of income and employment generation. Like any other countries of the world, rivers, reservoirs and aquaculture are the main sources of inland fisheries in India also. The role of fisheries in Indian economy is gaining momentum as a result of introduction of advanced techniques to increase the yield per unit area of water and due to its role in earning foreign exchange. But without proper infrastructural development, introduction of advanced techniques in fisheries may not be completely fruitful.

In river side areas, generally a large number of people depend on fishing in the river and other related activities like fish marketing and trading, craft and gear maintenance etc for their livelihood. Likewise, people of the river-side villages of River Churni are also depending on the aforesaid options for their live.

River Churni is a very important river of district Nadia of West Bengal, India. It originates as a distributary of River Mathabhanga near Krishnaganj, Nadia and after about 54 km stretch, it joins with Bhagirathi-Hooghly near Payradanga of Nadia. It is one of the major sources of the surface water of the district and plays an important role as thousands of fishermen from the river side areas depend on the productivity of this river.

According to Ghosh and Konar (1991), the river has been suffering a loss of fish species due to the pollution and ecological degradation since last 20 to 30 years [1]. Various reasons of this ecological degradation are identified and most of them are anthropogenic in nature mainly due to the untreated or semi treated efflux of some small scale industries (Dye factory, Bucket factory etc.) and some large scale industries (Brick factory, Sugarcane Mill Complex, Wine Factory) into the river. Apart from these, several other sources of pollution such as Jute retting process, efflux of municipal wastes, burning ghat effluent etc are also affecting the river condition exerting a synergistic effect on the process of ecological degradation. A study of the fish fauna for two annual years (Jan, 2003-Dec2005) revealed that 63.6% of fish species appeared to have been eliminated from Churni river since 1983 [2].

Due to the aforesaid consequences, changes in social composition, occupational options and gradual economical constrains are very common evident.

METHOD

Study Area

The survey was conducted in the 3 study areas (stations) of River Churni during January, 2012 to Dec, 2012. River Churni, one of the important distributaries of River Mathabhanga, emerges at Krishnaganj, Nadia (West Bengal). Flowing about at 54 kms, it finally confluences to River Bhagirathi- Hooghly near Mangaldeep, Payradanga of district Nadia. Latitude and longitude of three sites of the sampling are listed below (Table 1).

Data Collection Method

Pre-tested interview schedule was used for the collection of information after conducting a preliminary survey to construct a clear idea about the rate of occupational squirms among the fishermen families. The data were collected directly from the fishermen families through personal discussions and interviews regarding the various aspects of the socio-economic conditions like religious composition, caste structure, age composition, education and income structure. The study was also conducted to draw comparisons between the past and present socio-economic condition. In the first part of the preliminary survey, a general interviews of the old aged persons helps to understand the rate of the occupational twitching. In the later phase extensive survey were done among 282 families though 240 was the actual number of respondents. Other 42 families refused to entertain the interview.

RESULTS AND DISCUSSIONS

The profilistic study on the socio-economic status of the fishermen community of river-side villages of River Churni revealed a sharp distinction between previous and present condition. Religious structure of the fishermen community was studied because information related with the fishing is also discussed and flowed through religious

gathering. During the survey, it was found that about 58.75% of respondents were belonged to Hindu, 37.91% were Muslims and about 3.33% were of others communities (Table 2).

It was estimated that the majority of fishermen belonging to scheduled caste in villages of West Bengal [3]. But here due to presence of people belonging to Muslim community, they were included in OBC group. Thus the result of caste distribution showed that about 40.83% belonged to other backward communities (OBC-A&B), 36.25% were scheduled caste (SC), 15.42% were of Scheduled tribe (ST) and only 7.50% were general (Table 2). It was found that fishermen community is mainly distressed, mostly lacking in education with low income level [4]. But here, the study revealed that 31.16% were illiterate, 47.08% were middle educated or drop-outs, 16.25% were Madhyamik passed and only 2.08% were educated till higher secondary level (Table 2). Respondents were divided into APL (Above poverty level) and BPL (Below poverty level) on the basis of ration card ranking. Here, only 89.17% were found to be BPL card holder. But the actual condition was somewhat different as monthly incomes of most of the fishermen were between Rs. 2500-5000 whereas 32.91% earned below Rs.2500 per month (Table 4).

It was reported that fishermen cannot understand fishing round the year owing to observation of conservation measures for which they engaged themselves for alternate jobs for their livelihood [5]. In the survey, we found that 45.41% fishermen were depending up on other occupations unrelated to fishing. Pulling rikshaw or working as labour was found to be the most common alternative option among them. Only 17.50% respondents were found to depend on fishing only throughout the year. Age of the people was also recorded because according to several studies age structure is also an important criterion of socio-economic structure of any community. Bhaumik and Pandit (1994) studied on age of fishermen at some beels of West Bengal and reported that age of most of the fishermen were between 18-62 years [5]. Here, 8.75% were between 12-18 years, 50.83% were between 19-40 years, 26.25% were between 41-60 years and only 14.16% were above 60 years of age.

The investigation revealed that smoking, betel-nut chewing, chewing of tobacco products and uses of liquor were common habits among all adult fishermen and in some young also. Females of the family are also addicted with betel-nut chewing or others. Chewing of Betel Leaves along with betel-nut was also found very common to both men and women. Although, sociological and economical constrains were also imposed on the use of liquor, 65.41 percent of the fishermen take liquor regularly and most of the remaining population take it occasionally along with smoking and other habits.

The attitude of the fishermen community towards the social and cultural activities was also investigated by the help of some pre-tested parameters *viz.*, reading of news paper, listening to radio, watching television programmes, participating and attending socio-cultural gatherings etc. The study revealed that about one third of total respondents (36.25%) found to be regular listener to TV or radio programmes but major of the respondents were occasional in this manner. In case of news paper reading, maximum number of respondents (45%) was found to be not interested at all. Though active participation in socio-cultural gatherings was found to be rare in case of major respondents (42.08%) but they often attend the gatherings (Table 3). During the seminars and discussion, it was found that social gatherings may be an important issue for the actual awareness of the fishermen. Since all the families are very close residents to each other so sweeping of information regarding to the agriculture and fisheries programmes are very common incidence.

Economic condition of the fishermen is not so good that they can afford modern technical gadgets for the fishing and other purposes. Cast nets, hand nets and gill nets are usually used to catch the fishes in these areas. Large nets are also

used to construct traps with the help of bamboo which are also used for the catchment purposes. Most of them make their own nets. Boats are manually driven by the fishermen. Beside this, mosquito nets are also used to catch the fishes generally after heavy rainfalls or after mass fish mortality (locally called "Gaba") due to the efflux of Keru wine factory and sugarcane mill factories of Darsana (Bangladesh).

Transportation system is moderately good for proper transportation of harvested fish to different markets. But due to low productivity, only the river side fish markets are partially supplied with the harvested fish.

The total value of all the property owned by the fishermen was taken into consideration for calculating the asset value. Most of the families have houses with tiled roofs and mud walls. In some cases two to three families are housed under a single roof. Several fishermen families are found to live in the bamboo-made houses with tiled roof. Average income of the families was found to be very low in most cases. Respondents were divided into APL (Above poverty level) and BPL (Below poverty level) on the basis of ration card ranking. Here, only 89.17% were found to be BPL card holder. But the actual condition was somewhat different as monthly incomes of most of the fishermen were between Rs. 2500-5000 whereas 32.91% earned below Rs.2500 per month (Table 4).

The above interpretations stated about the present socio-economic condition of the river-side villages. But degradation of the socio-economic structure was revealed when the data showed a continuous declination in number of fishermen families in the villages. Most of the fishermen were showing their tendencies to twitch their occupation due to the retarding productivity of the river. Data obtained from the interviews of old-aged respondents showed that about 62% people of the total villagers were fishermen in 1980s. In 1990s the percentage became 44% and now ultimately declined to 27%.

It was found that increasing pollution in the river stream is the main cause of the ecological degradation of the river [6]. During the study, availability of fish fauna was also measured. Result showed the existence of only 28 species of fishes which was very low in comparison with other local riverine conditions. Presence of 156 species of fishes was recorded by Ghosh (2008) in River Bhagirathy-Hoghly in lower stretch [7] and 44 species were recorded in Jalangi River by Das and Chakroborty (2006) [2]. Thus it can be said that the pollution from diffused sources in River Churni is responsible for gradual degradation of the river biota.

The fish caught by the fisherman are bought and sold in river-side fish market. The marketing strategy is like any other agricultural commodities i.e., the fisherman sell fish to wholesalers when fish is caught in abundance. It is observed that the fisher folk move in group to dispose off their catch in the local market. The fisherman don't get exact price for their catch due to reluctance of transporters to carry fish to the distant large markets as a result the quality of the fish would have been deteriorated by the time the fish reaches the fish markets and the fish is sold at throwaway prices.

CONCLUSIONS

The present study indicates that there is ample scope to increase the income of fishermen society and intern the income of fisher folk provided they adopt improved fishing and fish culture practices on scientific basis. The social and educational status of the fisher folk could also be improved by educating them in various aspects. But the basic problem of the area is gradual degradation in river productivity. Thus only prevention of pollution and protective measures for the ecological diversity of the river only can be fruitful to the problem.

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APPENDICES

Table 1: Sampling Sites and Positions

Sites	Latitude	Longitude
Mamjoan, Nadia	23°30'E	88°58'N
Gajantala, Nadia	23°15'E	88°53'N
Kayet Para, Nadia	23°19'E	88.56'N

Table 2: Social Status of River Side Villages of River Churni

Parameters	Measures
• Total respondents	240
• Religion distribution (%)	
Hindu	58.75
Muslims	37.91
Others	3.33
• Caste composition (%)	
SC	36.25
ST	15.42
OBC (A & B)	40.83
General	7.50
• Age Composition (%)	
12-18 yrs	8.75
19-40 yrs	50.83
41-60 yrs	26.25

Table 2: Contd.,

Above 60 yrs	14.16
• Literacy composition (%)	
Illiterate	31.16
Middle school educated	47.08
Madhyamik	16.25
Higher Secondary	2.08
• Occupational composition (%)	
Only Fishing	17.50
Fishing and retailing	37.08
Fishing and other occupation	45.41
• Addictions (%)	
Smoking	100
Alcohol consumption(regular)	67.41

Table 3: Social Participations and Knowledge Dispersal Status

Parameters	Regular	Occasional	Never
• Listening of Radio/ Watching TV (%)	36.25	52.25	11.5
• Read Newspaper	16.25	38.75	45.0
• Actively participate in Social gathering	21.66	36.25	42.08
• Attend the social gatherings	10.83	73.75	15.41

Table 4: Economical Status of Fishermen

Parameter	Measure
Monthly income	
below Rs.2500	32.91%
Rs. 2500-5000	49.16%
Above Rs. 5000	17.91%