



SOCIO-ECONOMIC CHARACTERISTICS OF MEMBERS OF FISHERIES COOPERATIVES AND BENEFITS DERIVED FROM COOPERATIVES

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ABSTRACT

The present study was conducted in Gulbarga district of Karnataka state during the year 2014. Gulbarga district has 22 fisheries cooperatives of which 17 are working and five are defunct. To accomplish the objective of the study, a random sample of six societies spread across four Taluks were selected. Further, a sample of 120 fishermen/fisherwomen was randomly selected choosing 20 fishermen/fisherwomen members from each of the six fisheries cooperatives. The present study used both primary and secondary data. The primary data was collected both from fishermen/ fisherwomen and the secretaries of selected fisheries cooperative societies. The results of the study revealed that, majority of the fishermen (47%) were in the age group of more than 40 years. Majority (56.00 %) of the sample fishermen didn't have any education qualification. The families of 66.00 per cent of the fishermen were medium sized possessing five to seven members. Interestingly more than 75.00 per cent of the sample fishermen had fisheries as their main occupation. The land holdings of as many as 95.00 per cent of fishermen were dry. The important kharif crop grown by the respondents was red gram followed by cotton and green gram. Rabi crops were grown by only a small number of respondents. The annual income of the members of fisheries cooperatives are revealed that 32.50 per cent of the respondents had an annual family income of less than ₹ 1,00,000. The societies were engaged in the distribution of free house, net, life jacket, ice box and bicycles to the members. The number of fingerlings distributed increased over years from 2,50,000 in 2010-11 to 10,60,000 fingerlings in 2013-14. On an average the four societies distributed 7,32,500 fingerlings each year.

KEYWORDS: Fingerlings, Fisheries, Members and Socio-economic characteristics.

INTRODUCTION

Fishery is an important sector in most of the developed and developing countries of the world from the stand point of income and employment generation. The experience in these countries indicates that the growth of the fishing sector stimulates the development and employment in related industries which contribute significantly to the total economic growth of the country. Besides providing direct employment, the industry is also an income generator as it supports canneries, processing establishments, gear and equipment manufacturer, boat yards, refrigeration and ice making plants, and transport services. Fisheries play an important role in augmenting food supply and raising nutritional levels of the population. Indian fisheries are an important component of the global fisheries and the sector has been recognized as a powerful income and employment generator. The contribution of this sector to foreign exchange earnings is substantial and forms 1.40 per cent of GDP. More than 6 million fishermen in the country depend on fisheries for their livelihood. The fishery co-operative movement in India began in 1913 when the first fishermen's society was organised under the name of 'Karla Machhimar (Fishermen) Co-operative Society' in Maharashtra. The state of West Bengal was the next to organise co-operative societies in the fishery sector in 1918. In the same year, Tamil Nadu also organised one co-operative society. The structure continued to grow over years into multi-functional units at the primary level, federations at district/regional, state and national levels. In

Karnataka, an independent Department of Fisheries was set up in 1957. Since then, the Department of Fisheries has been consistently striving hard for overall development of fisheries and of fishermen by implementing several developmental schemes both in Marine and Inland sectors. In the state, there are 548 Fisheries Cooperative societies out of which 483 are working as on 31.03.2013. In Northern Karnataka, there are 13 districts. Fisheries Cooperative Societies are promoting fisheries activities in all these districts in various ways such as provision of required equipments, fingerling and training facilities etc. There have not been systematic studies concerning the looking of Fisheries Cooperatives in Northern Karnataka emphasizing the characteristics of members of fisheries cooperatives, benefits derived by the members from cooperatives and problems faced by them. With this background the present study was conducted to know the socio-economic characteristics of members of fisheries cooperatives, benefits derived and problems faced by them.

METHODOLOGY

The present study was undertaken in Gulbarga district of Karnataka state. Gulbarga district was chosen for study purposively as Gulbarga district in the state is one of the important districts, where we find a lot of fisheries cooperative. The district ranks fourth in terms of the number of fisheries cooperative societies. There are totally 22 fisheries cooperative in the district of which 17 are

properly working. To accomplish the objective of the study, a random sample of six societies spread across four Taluks was selected. Further, a sample of 120 fishermen/fisherwomen was randomly selected choosing 20 fishermen/fisherwomen members from each of the six fisheries cooperatives considered. The primary data collected from the member fishermen/fisherwomen related to their socio-economic characters such as age, education, income, land holding etc; The benefits received from the society such as nets, bicycles, home, jacket, ice box etc; costs and returns from fishing activity; problems encountered in carrying out fisheries operations and their suggestions for improving the functioning of societies and thereby helping members to enjoy more earnings from their operations. The collected data was analyzed using appropriate statistical tools.

RESULTS & DISCUSSION

Socio-economic characteristics of the members of fisheries cooperatives

Table 1 presents socio-economic characteristics of the members of fisheries cooperative societies. It can be seen from the table that a majority of the fishermen (46.66 %)

were aged more than 40 years followed by 35.00 per cent of them in the age group of 30-40 years. Only around 18.00 per cent of the fishermen were in the age group of 18-30 years. Bhumik and Saha (1994) reported that age group of the sample varied between 20 years and 70 years. With regard to educational level, a majority (around 56 %) of the fishermen were illiterate. Around one third of the sample fishermen had primary education. The population of the fishermen having secondary education (8th to 10th standard) was only around 11.00 per cent. The table reveals that none of the respondents had college education. Jha *et al.* (2000) reported that majority of the respondents were illiterates. Pandey and Upadhayay (2012) reported that, majority of the fish farmers were literates.

In respect of family size, as many as 66.00 per cent respondents belonged to the families of medium size (5-7 members). While around 18.00 per cent fishermen had the families of four members or less, around 17.00 per cent had the big size families of more than seven members each. The results of the study conducted by Pandey and Upadhayay (2012) revealed that, majority of the respondents (70 %) of the model village had larger family size i.e. more than five members.

TABLE 1: Socio-economic characteristics of the members of fisheries cooperatives n = 120

Sl. No.	Particulars	Frequency	Percentage
1	Age (Years)		
	Age group of 18-30 years	22	18.33
	Age group of 30-40 years	42	35.00
	Age group of >40 years	56	46.66
2	Educational level		
	Illiterates	67	55.83
	Primary education (1-7 standard)	40	33.33
	Secondary education (8-10 standard)	13	10.83
	College education (11 and above)	00	00.00
3	Family size		
	Small (<4 members)	21	17.5
	Medium (5-7 members)	79	65.83
	Large (> 7 members)	20	16.66
4	Main Occupation		
	Agriculture	23	19.16
	Business	06	05.00
	Fisheries	91	75.83
	Other allied activities	00	00.00
5	Subsidiary Occupation		
	Agriculture	36	30.00
	Business	33	27.50
	Fisheries	29	24.16
	Other allied activities	03	02.50
6	Land Holding		
	Dry	114	95.00
	Irrigated	06	05.00
7	Annual Income		
	Low (< ₹ 1,00,000/annum)	39	32.50
	Medium (₹ 1,00,000-1,50,000/annum)	45	37.50
	High (> ₹ 2,00,000/annum)	36	30.00
8 a.	Crop Grown		
	Kharif		
	Redgram	34	28.33

	Cotton	05	04.16
	Sugarcane	01	00.83
	Green gram	03	02.50
	Sunflower	01	00.83
	Sorghum	01	00.83
b.	Rabi		
	Sugarcane	03	02.50
	Chickpea	07	05.83
	Green gram	01	00.83
	Paddy	02	01.60
	Sorghum	03	02.50
	Banana	01	00.83

The table also shows the main and subsidiary occupations of the respondents. It is clear from the table that fishing was the main occupation for more than 75.00 per cent respondents and a subsidiary occupation for rest. For around 19.00 per cent of the respondents agriculture was the main occupation, whereas it was a subsidiary occupation for 30.00 per cent. While five per cent of the respondents practised business as the main occupation, while around 28.00 per cent were involved in business as subsidiary occupation. None of the respondents were involved in allied activities such as dairy, poultry etc as the main occupation. However, 2.50 per cent of the interviewed fishermen were involved in subsidiary occupation relating to allied agricultural activities. Bhunik and Saha (1994) reported that, about 24.00 per cent of the fisherman undertook fishing operation for 241-260 days. The table reveals that all the 120 respondents had land holdings. However, a very large proportion of them (95 %) possessed dry land and a meagre five per cent had irrigated lands. It was revealed by the results that around 37.00 per cent of them grew crops in kharif season. Among the kharif crops, red gram was the one which was grown by a maximum proportion of the respondents (around 28 %). Cotton and green gram were grown by 4.16 per cent and 2.50 per cent of the respondents respectively. The crops such as sugarcane, sunflower and sorghum were grown by 0.83 per cent respondents each of the total respondents, 14.00 per cent grew rabi crops. Chick pea was the rabi crop grown by a maximum proportion of respondents (around 6.00 %) followed by sugarcane and sorghum (2.50 %), paddy (1.60 %), green gram and banana (0.83 %) each.

With regard to annual income, it can be seen from the table that 32.50 per cent of the respondents had an annual family income of less than ₹ 1,00,000 and 37.50 per cent had an family income ranging from ₹ 1,00,000-1,50,000 per annum. 30.00 per cent had family income of more than ₹ 2,00,000 per annum. Pandey and Upadhyay (2012) revealed that, The majority of the respondents, *i.e.*, 77.50 per cent had monthly income level above Rs 3, 000, whereas 12.50 per cent had income level Rs 2,000-3,000. Only 7.50 per cent fish farmers had monthly income of Rs 1,000-2000.

Benefits extended under government schemes to the fishermen

Distribution of free materials to members

Table 2 presents the facilities of free house and other fishing materials received by the members from their societies over eight years from 2006-07 to 2013-14. The free facilities received by the members included house, net, life jacket, ice box and bicycles. It can be seen from the table that out of 120 respondents 80 respondents (66.66%) received free house during the year of 2006-07 to 2012-13. Specifically, 11 members received free houses each in 2006-07, 2007-08 and 2011-12. Similarly twelve members received houses each in 2008-09 and 2010-11. In the year 2009-10 and 2012-13, the number of respondents who received houses was 14 and 09 respectively. No free houses were distributed during 2013-14.

With regard to net, the table shows that all the 120 respondents received them free of cost during the above period. The number of beneficiaries of net varied over years. For example, it was 20 during 2008-09 and 2009-10. A maximum proportion of the respondents (18.33 %) received free net in 2007-08. The proportion of beneficiaries of net was 5.83 per cent, 13.33 per cent, 12.50 per cent, 10 per cent and 6.60 per cent during 2006-07, 2010-11, 2011-12, 2012-13 and 2013-14 respectively. In respect of life jackets, the number of beneficiaries among sample respondents was 65. These respondents were given free life jacket only from 2010-11 onwards. A maximum number of respondents (25) received free life jacket in 2010-11 followed by 16 in 2011-12 and 12 each in 2012-13 and 2013-14.

The number of beneficiaries of free ice box was 67 (around 56 %). These respondents were given free ice box only from 2012-13 onwards. The proportion of ice box beneficiaries was 26.66 per cent in 2012-13 and 29.16 per cent in 2013-14. In respect of bicycles, the number of beneficiaries of free bicycles was 71 (59.16 %). A maximum proportion of beneficiaries (13.33 %) received free bicycles in 2011-12 followed by 10.00 per cent in 2007-08, 09.16 per cent each in 2009-10 and 2012-13, 07.50 per cent in 2010-11, 06.60 per cent in 2006-07 and 03.33 per cent in 2008-09. None of the respondents were given 2013-14.

TABLE 2: Free home and other fishing materials received by members (n=120)

Particulars	Years								Total
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	
House	11 (09.16)	11 (09.16)	12 (10.00)	14 (11.66)	12 (10.00)	11 (09.16)	09 (07.50)	-	80 (66.66)
Net	07 (05.83)	22 (18.33)	20 (16.66)	20 (16.66)	16 (13.33)	15 (12.50)	12 (10.00)	08 (06.60)	120 (100)
Life Jacket	-	-	-	-	25 (20.83)	16 (13.33)	12 (10.00)	12 (10.00)	65 (54.16)
Ice Box	-	-	-	-	-	-	32 (26.66)	35 (29.16)	67 (55.83)
Bicycle	08 (06.60)	12 (10.00)	04 (03.33)	11 (09.16)	09 (07.50)	16 (13.33)	11 (09.16)	-	71 (59.16)

Note: Figures in parentheses are percentages to the total

TABLE 3: Distribution of fingerlings by societies

Year	Number of fingerlings per society	Number of fingerlings per member
2010-11	2,50,000	2,450
2011-12	6,00,000	5,882
2012-13	10,00,000	9,803
2013-14	10,60,000	10,588
Total	29,30,000	28,723
Average	7,32,500	7,180

Note: The above result pertain to only four societies where tank fishing is prevalent

TABLE 4: Problems faced by members of fisheries cooperatives (n=120)

Sl. No.	Problems	Very Severe		Severe		Moderately severe	
		Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
1	Water	51	42.50	48	40.00	21	17.50
2	Insufficient	15	12.50	55	45.83	50	41.66
3	Inability to	16	13.33	46	38.33	58	48.33
4	Inadequate	15	12.50	45	37.50	60	50.00
5	Non-	19	15.83	40	33.33	61	50.83
6	Low price	30	25.00	46	38.33	44	36.66
7	Spoilage	20	16.66	47	39.16	53	44.16
8	Storage	12	10.00	25	20.83	83	69.16
9	Lack of	14	11.66	34	28.33	72	60.00
10	Lack of	50	41.66	53	44.16	17	14.16

Distribution of fingerlings by societies

Table 3 presents the number of fingerlings distributed by the societies to members for four years from 2010-11 to 2013-14. The total number of fingerlings distributed was 2.5 lacks in 2010-11, 6.0 lacks in 2011-12, 10 lacks in 2012-13, 10.6 lacks in 2013-14. The yearly average for four years was 7,32,500 fingerlings per society. The table also shows the number of fingerlings distributed per member by the societies over years. This number was 2,450 during 2010-11 which increases to 10,588 during 2013-14. On an average, the number of fingerlings distributed per member per year was 7,180.

Problems faced by members of fisheries cooperatives

Table 4 shows the problems faced by members of fisheries cooperatives. Problems faced by members of fisheries cooperatives were identified in consultation with them as water scarcity, insufficient catch, and inability to supply required species, inadequate technical assistance, and non-availability of ice, low price, spoilage, storage constraints, lack of consumer and lack of market space. The table shows that water scarcity problem was a very severe for 42.50 per cent of the respondents, severe for 40.00 per

cent and moderately severe for 17.50 per cent. Insufficient catch was a very severe problem for 12.50 per cent respondents, severe for 45.83 per cent and moderately severe for 41.66 per cent respondents. Inability to supply required species was a moderately severe problem for a majority of the respondents (48.33 %). Similarly, a majority of the respondents expressed that the problem of inadequate technical assistance and non-availability of ice was only a moderately severe problem (50.00 % and 50.83 %) respectively. Low price was a very severe problem for 25.00 per cent respondents and severe for 38.33 per cent respondents. For a good majority of the respondents, storage constraints (69.16 %) and lack of consumer demand (60.00 %) were only moderately severe problems. They were very severe problems only for 10.00 per cent and 11.66 per cent respondents respectively. The problem of lack of market space was a very severe for 41.66 per cent and severe for 44.16 respectively.

CONCLUSION

It can be concluded from the results of the study that, majority of the fishermen were in the age group of more

than 40 years with no formal education. Majority of them were having medium sized land holdings and majority of them were engaged themselves in fisheries as a main occupation. Majority of them were having dry lands and growing variety of crops in both kharif and rabi seasons. Majority of them were getting benefit from the fisheries cooperatives. Water scarcity, insufficient catch, and inability to supply required species, inadequate technical assistance, and non-availability of ice, low price, spoilage, storage constraints, lack of consumer and lack of market space. Were the major constraints faced by the respondents. It was clear from the results that still a significant proportion of the members of fisheries cooperatives were not provided free materials such as net, life jacket, ice box, bicycles etc. Thus, steps have to be taken to ensure that such materials are distributed to every member to improve the efficiency of fishermen. Thus,

there is a need for ear making a separate place for marketing of fish with basic infrastructure.

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