

# CONSTRAINTS FACED BY FISHERY COOPERATIVE SOCIETIES, SELF HELP GROUPS AND FISHERMEN GROUPS REGARDING FISH PRODUCTION IN BASTAR DISTRICT OF CHHATTISGARH

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**Abstract:** The study was undertaken in Bastar district of Chhattisgarh state to know the constraints perceived by the respondents of fishery cooperatives societies, SHGs and fishermen groups in various aspects of fish production. Six purposively selected blocks namely Jagdalpur, Bastar, Lohandiguda, Tokapal, Bakawand and Darbha located in Bastar district were selected and interviewed personally. The important constraints perceived by the respondents were heavy weed infestation, conflicts due to multipurpose use of ponds, involvement of middlemen, high netting charges as well as unavailability of transport facility.

**Keywords:** Fishery cooperatives societies, SHGs, Fishermen groups, Constraints, Fish production

## INTRODUCTION

Fisheries sector occupies a very important place in the socio-economic development of the country, as it contribute to economic growth and human welfare. Fisheries sector has been recognized as the powerful income and employment generator for the poor people of rural area.

Despite the technological breakthrough in fisheries sector and strengthening of extension programmes the yield of fish production in Chhattisgarh as well as in Bastar district are far below the yield potential and the target level of production and marketing. The problem is to increase the production of fish culture and how to break the constant trend of lower yield per unit of water area in Bastar district of Chhattisgarh. One of the greatest problems is the production gap between the existing production and the production based on scientific technology. With the prevailing production gap, the fish producers of Bastar district are not only losing every year their earning capacity but their standard of living is also going down. Looking towards increase in area under fish production in Bastar District, present study was carried out to know the constraints faced by the respondents in fish production.

## MATERIAL AND METHOD

Interview schedule was developed according to the objectives of research study. The data were collected through the personal interview schedule from six purposively selected blocks namely Jagdalpur, Bastar, Lohandiguda, Tokapal, Bakawand and Darbha located in Bastar district of Chhattisgarh. The

sample size was comprised of numbers 10, 21 and 43 members from the fishery cooperative societies, SHGs and fishermen groups respectively, with overall respondents being 74. The data were tabulated and analysis on the basis of frequency and percentage.

## RESULT AND DISCUSSION

### (a) Constraints faced by Fishery co-operative Societies, SHGs and Fishermen Groups related to production and marketing of fish

It is observed from (Table 1) in case of fishery co-operative societies, natural calamities like viral diseases swim bladder infection and flood had been faced by 10.00 % while 90.00 % did not face any of the natural calamity like disease, flood etc. 100.00 % respondents of fishery co-operative societies did not face the problem of heavy weeds in the ponds. Ponds under fishery co-operative societies reported 100.00 % of multipurpose use of ponds like, human bathing, cattle bathing, washing clothes, utensils etc. Due to multipurpose use of ponds productivity was greatly affected and conflicts were also raised between the owners and non-owners, these non-owners due to multipurpose use restricted the medicine and disinfectants application in the ponds. Usufruct rights of non-owners for multipurpose use hampered the management of pond which leads to reduction in production levels. Conflicts intense during dry or summer season due to reduction in water level of pond, villagers resort to unfair means *i.e.* poaching due to which fish farmers are forced for netting while fish growth is greatly affected by the same. This was the main conflict reported by 100.00 % of fishery co-

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operative societies. 100.00 % of fishery co-operative societies reported to receive regular information of market prices, as well as reported that a small proportion of fish production is mandatory to sell in village market at a predetermined price mostly by each fishery co-operative society. 100.00 % of respondents disagree regarding the heavy price paid for acquisition of net. 100.00 % of respondents agree regarding receiving uniform price irrespective of species and size. Only 10.00 % have unavailability of transport facilities while 90.00 % of respondents have good transportation facilities. 100.00 % respondents had no issues of middlemen.

In case of SHGs, (Table 1) it was observed that natural calamities like viral diseases swim bladder infection and flood had been faced by 4.76 % while 95.23 % did not face any of the natural calamities like disease, flood etc. 100.00 % respondents of SHGs did not face problem of heavy weeds in the ponds. Ponds under SHGs reported of 100.00 % multipurpose use of ponds like, human bathing, cattle bathing, washing of clothes, utensils etc. Due to multipurpose use of ponds, productivity was greatly affected and conflicts were also raised between the owners and non-owners, these non-owners due to multipurpose use restricted the medicine and disinfectants application in the ponds. Usufruct rights of non-owners for multipurpose use hampered the management of pond which leads to reduction in production levels. Conflicts intense during dry or summer season due to reduction in water level of pond, villagers resort to unfair means *i.e.* poaching due to which fish farmers are forced for netting while fish growth is greatly affected by the same. This was the main conflict reported by 100.00 % of SHGs. 100.00 % of SHGs reported to receive regular information of market prices as well as reported that a small proportion of fish production is mandatory to sell in village market at a predetermined price mostly by each SHGs. 100.00 % of respondents disagree regarding the heavy price paid for acquisition of net. 100.00% of respondents agree regarding receiving uniform price irrespective of species and size. Only 4.76 % have unavailability of transport facilities while 95.23 % of respondents have good transportation facilities. 100 % respondents had no issues of middlemen.

In case of fishermen groups (Table 1) it was observed that natural calamity like viral diseases, swim bladder infection and flood had been face by 11.62 % while 88.37 % did not face any natural calamity like disease, flood etc. 88.37 % respondents of fishermen groups did not faced the problem of heavy weeds in the ponds while 11.62 % faced in the heavy weeds in the ponds. Ponds under fishermen groups reported of 69.76 % multipurpose use of ponds like, human bathing, cattle bathing, washing of clothes, utensils etc while 30.23 % reported on such activities. Due to multipurpose use of ponds, productivity was greatly affected and conflicts were

also raised between the owners and non-owners, these non-owners due to multipurpose use restricted the medicine and disinfectants application in the ponds. Usufruct rights of non-owners for multipurpose use hampered the management of pond which leads to reduction in production levels. Conflicts intensified during dry or summer season due to reduction in water level of pond, villagers resorted to unfair means *i.e.* poaching due to which fish farmers are forced for netting while fish growth is greatly affected by the same. 90.69 % of fishermen groups, reported to receive regular information of market prices while 9.30 % had no regular information of market prices. 100.00 % respondents reported that a small proportion of fish production is mandatory to sell in village market at a predetermined price. 100.00 % of respondents disagree regarding the heavy price paid for acquisition of net. 100.00 % of respondents agree regarding receiving uniform price irrespective of species and size. Only 18.60 % have unavailability of transport facilities while 81.39 % of respondents have good transportation facilities. About 95.34 % respondents had issues of middlemen while only 4.65 % had no issues regarding middlemen.

All the groups faced constraints of heavy weed infestation, conflicts due to multipurpose use of ponds, involvement of middlemen, high netting charges as well as unavailability of transport facility. These constraints need special attention from government sector, so that the overall fish production of the state may be enhanced to optimum level. The findings of this study are similar in the case of fishery co-operative societies and fishermen groups with Halder (2011) in case of fishermen groups with Mohanty *et al.* (2011), in case of SHGs with Singh *et al.* (2012) and in the case of fishery co-operative societies with Nair *et al.* (2007).

#### **(b) Suggestions given by respondents to overcome the constraints**

Data presented in (Table 2) depict that majority of the respondents (100.00 %) of fishery co-operative societies gave suggestion that, the executive members of fishery cooperative groups should be changed in every two years by routine, skill training should be organized on regular basis, more educated members may be included in group as well as there should be uniform prices irrespective of species and size. 80.00 % of the respondents submitted their suggestion that loaning procedure should be simple. About 60.00 % respondents suggested improvement of general awareness among the members as well as provision of low cost transport facility.

Among the SHGs, the data presented in Table 2 depict that majority of the respondents (100.00%) of SHGs gave suggestion that, skill training should be organized on regular basis. 95.23 % of respondents suggested that more educated members may be included in group as well as there should be uniform

prices irrespective of species and size. About 90.47 % suggested that loaning procedure should be simple same percentage of the respondents reported that improving general awareness among the members. About 76.19 % of respondents suggested for provision of low cost transport facility while only 61.90 % suggested that executive members of fishery cooperative groups should be changed in every two years by routine.

Among the fishermen groups, data presented in Table 2 depict that majority of the respondents (100.00 %) gave suggestion that timely supply of fingerling/fish seed should be done from co-operative societies and state fisheries development agencies. About 97.67 % of the respondents submitted their suggestion for receiving uniform prices irrespective of species and size. 95.34 % of respondents suggested conducting demonstrations especially on fish production technology same percentage of the respondents reported that fishery department should provide training on fish production technology in the village as well as for prohibition of middlemen from marketing channels should be done. About 90.69 % of respondents suggested provision of low cost transport facility. About 88.37 % of respondents suggested government should provide money for pond cleaning where as 83.72 % of respondents suggested government should provide money “in terms of loan, subsidy etc” for integrated fish farming.

As far as suggestions given by the respondents are concerned, it was noticed that the fishery cooperative societies were interested in regular skill training, change in members in every 2 years, inclusion of educated members and receiving uniform prices of irrespective of shape and size. The SHGs were keen for skill training, inclusion of educated members and simplified loaning procedure. Fishermen groups

asked for timely information and training from government, money for pond cleaning, prohibition of middlemen, receiving uniform prices of irrespective of shape and size and timely availability of seed. The findings of this study are similar in the case of fishery co-operative societies and fishermen groups with Halder (2011) in case of fishermen groups with Mohanty *et al.* (2011), in case of SHGs with Singh *et al.* (2012) and in the case of fishery co-operative societies with Nair *et al.* (2007).

## CONCLUSION

The important constraints perceived by the respondents were heavy weed infestation, conflicts due to multipurpose use of ponds, involvement of middlemen, high netting charges as well as unavailability of transport facility. The major suggestions given by the respondents to overcome constraints in case of fishery cooperative societies were requirements of regular skill training, change of members in every 2 years, inclusion of educated members and receiving uniform prices of irrespective of shape and size. The SHGs were keen for skill training, inclusion of educated members and simplified loaning procedure, while, fishermen groups asked for timely information and training from government, money for pond cleaning, prohibition of middlemen, receiving uniform prices irrespective of shape and size and timely availability of seed. All the groups faced constraints of heavy weed infestation, conflicts due to multipurpose use of ponds, involvement of middlemen, high netting charges as well as unavailability of transport facility. These constraints need special attention from government sector, so that the overall fish production of the state may be enhanced to optimum level.

**Table 1.** Constraints faced by Fishery co-operative Societies, Self Help Groups and Fishermen Groups related to production and marketing of fish

S.No.	Particulars		Fishery Co-operative Societies (N=10)	Self Help Groups (N=21)	Fishermen Groups (N=43)
1	Natural calamities like diseases flood etc faced	Yes	1 (10.00)	1 (4.76)	5 (11.62)
		No	9 (90.00)	20 (95.23)	38 (88.37)
2	Heavy infestation of weeds in the ponds	Yes	-	-	5 (11.62)
		No	10 (100.00)	21 (100.00)	38 (88.37)
3	Ponds put to multipurpose use	Yes	10 (100.00)	21 (100.00)	30 (69.76)
		No	-	-	13 (30.23)
4	Multipurpose use of ponds brings out conflicts between owners and non owners	Yes	10 (100.00)	21 (100.00)	-
		No	-	-	43 (100.00)
5	Conflicts hampers the management of pond	Yes	10 (100.00)	21 (100.00)	-
		No	-	-	43 (100.00)
6	Conflicts are intense during dry/summer season	Yes	10 (100.00)	21 (100.00)	-
		No	-	-	43 (100.00)

7	Receivable of regular information regarding prevailing market prices	Yes	10 (100.00)	21 (100.00)	39 (90.69)
		No	-	-	4 (9.30)
8	Proportion of fish production mandatory to sell in village at a predetermined price	Yes	10 (100.00)	21 (100.00)	43 (100.00)
		No	-	-	-
9	Heavy price paid for acquisition of net	Yes	-	-	-
		No	10 (100.00)	21 (100.00)	43 (100.00)
10	Received uniform price irrespective of species and size	Yes	10 (100.00)	21 (100.00)	43 (100.00)
		No	-	-	-
11	Unavailability of transport facilities	Yes	1 (10.00)	1 (4.76)	35 (81.39)
		No	9 (90.00)	20 (95.23)	8 (18.60)
12	Involvement of Middlemen	Yes	-	-	41 (95.34)
		No	10 (100)	21 (100)	2 (4.65)

Note: Figures in parentheses indicate percentage of total number of respondents.

**Table 2.** Suggestions given by respondents to overcome the constraints

S. No.	Suggestions	Frequency/ %	Rank
<b>I. Fishery Cooperative Societies (N=10)</b>			
1	Executive members of fishery cooperative groups should be change in every two years by routine	10(100)	I
2	Skill training should be organized on regular basis	10(100)	I
3	Loaning procedure should be simple	8 (80)	II
4	Inclusion of more educated members in group	10(100)	I
5	Improving general awareness among the members	6(60)	III
6	Provision of low cost transport facility	6(60)	III
7	Receiving uniform prices irrespective of species and size	10(100)	I
<b>II. Self Help Groups (N=21)</b>			
1	Executive members of SHGs should be change in every two years by routine	13(61.90)	V
2	Skill training should be organized on regular basis	21(100)	I
3	Loaning procedure should be simple	19(90.47)	III
4	Inclusion of more educated members in group	20 (95.23)	II
5	Improving general awareness among the members	19(90.47)	III
6	Provision of low cost transport facility	16(76.19)	IV
7	Receiving uniform prices irrespective of species and size	20 (95.23)	II
<b>III. Fishermen Groups(N=43)</b>			
1	Co-operative societies and state fisheries development agencies should provide improved seeds timely	43(100)	I
2	Government should provide money for pond cleaning	38 (88.37)	V
3	Fishery department Should conduct demonstration especially on fish production technology.	41 (95.34)	III
4	Government should provide money “in terms of loan, subsidy etc” for integrated fish farming.	36(83.72)	VI
5	Fishery department Should provide training on fish production technology in the village.	41 (95.34)	III
6	Provision of low cost transport facility	39(90.69)	IV
7	Prohibition of Middlemen from marketing channels	41 (95.34)	III
8	Receiving uniform prices irrespective of species and size	42(97.67)	II

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