



Relationship between Gender and Opinion Leadership among the Fish Farmers of Chhattisgarh

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ABSTRACT

The ratio of fish farmers to fisheries extension professionals was 1:1000 which is too low. Para-extension functionaries can fill up this gap in the fisheries sector to improve the production and productivity of fishers. The opinion leaders from the local fish farmers community will help identify fish farmers who can further transfer the knowledge concerning how to fish to others through their diffusion network. This study was undertaken to analyze gender roles in fish farming and their relation with opinion leaders. It was observed that 90% of male fish farmers had control of fisheries/family resources, and 97 per cent of fish farmers were found to have contact with male opinion leaders. At the same time, 33% of female fish farmers were contacted by shelf help groups and local progressive farmers. The study shows that the opinion leaders influenced the fish farmers' diffusion network and their knowledge about how to fish. To involve women in the fisheries sector, empower women, there is also a need to select opinion leaders preferred by women fish farmers.

INTRODUCTION

The fish production of India reached up to 13.7 million metric tons in 2018-19 from captured as well as cultured fisheries (DADF, 2019). The fish production level depends on the nature of the resources and production technology followed (Chandra and Sharma, 2014). Chhattisgarh is the 6th largest fish producer of inland fisheries in the country. Its annual fish production has reached 3.42 lakh tons. The fisheries sector contributed 3,422 crores to the GSDP of the state during 2015-16, which was 13.10 per cent in the agriculture sector in Chhattisgarh. The fisheries sector is recognized as a potent income and employment-generating activity, plays an essential role in the rural economy, and a cheap, nutritious food source. More than 2.10 lakh fishermen in the state depend on fisheries and aquaculture for their livelihood. The fisheries sector occupies an important place in the socio-economic development of the state. It caters primarily to the need of socio-economically weaker and backward communities of fishermen, Schedule Caste, and Scheduled Tribes (DoF, Chhattisgarh, 2016-17).

Transfer of the fisheries technologies and information to fishers mainly done by extension of state line department personnel. As there was a 10 number of extension personnel, there was a need to manage the extension system by introducing the Para-extension person, which could be the opinion leaders at the grassroots level. Opinion leadership is how an individual can informally influence other individuals attitudes or overt behavior in the desired way with relative frequency. Opinion leaders are the individuals who lead in influencing others opinions (Ramakrishna and Chandra, 2010). Shaleesa and Stanley (2000) were reported gender bias in many aquaculture activities. It ensures that women utilize their full potential in profitable activities like aquaculture, necessary to provide capacity-building support to rural women. Lack of fiscal sustainability, inadequate coverage and performance, changing contexts and opportunities, and pressures towards participation and good governance argue for Para-extension role on different (public, private, and market-led extension) sectors of extension (Singh et al., 2016). De-Silva et al., (2012) reported that the modern fisheries and aquaculture value chains are diverse, often complex, and

dynamic, with men and women undertaking different and changing roles depending on culture, values, attitudes, and norms concerning resource access and control, mobility, type of technology involved, the extent of commercialization, and the product involved. There was a high degree of specialization or division of labor in the fisheries sector. Other related factors include differential access to resources, technology, family roles, decision-making, political participation, etc. All these factors result in differential vulnerability, requiring specific coping and adaptation strategies for men and women. Therefore, to facilitate the gender perspective of para-extension in fisheries in the tribal areas of Chhattisgarh, this study will help to understand gender role, activity, access, and control over fisheries resources and fish farmers network with opinion leaders.

METHODOLOGY

The study was conducted in the Jashpure district of Chhattisgarh because the tribal population in that district was high. According to the 2011 census, the Scheduled Tribe (ST) population of Chhattisgarh State is 6,61,6596 constituting 31.8 per cent of the state’s total population. In Chhattisgarh, the primarily rural tribal reside in the Dantewada (82%), Bastar (71%), and the Jashpure (64%). A more number of female fish farmer involvement has been observed in Jashpure. Chhattisgarh is an inland State having opportunities for inland aquaculture. The proposed study area of Jashpure is endowed with a pond area of 1,128 hectares providing more scope for local people to take up aquaculture. This study was based on primary data was collected from different blocks of the Jashpure district. A semi-structured interview schedule was employed for data collection. A personal interview was conducted with the fisheries department, government officials, officials from the fisheries co-operative society, and key informants at Gram Panchayat and block level. The Jashpure district has eight blocks classified as high, medium, and low fish production blocks. Six fishing villages were selected in each of the high, medium, and low fish production blocks. A total of 120 fishers were selected randomly from 60 households, of whom 60 were fisherwomen. The sociometric method was used to select the opinion leaders. In this method, every respondent was asked to name three opinion leaders, as per their choices, from whom they sought advice on fisheries/aquaculture regularly. Total 28 opinion leaders were identified by fish farmers, of which 21 were male and 7 were female opinion leaders. The Harvard analytical framework or gender analysis framework (March et al., 1999) was employed and customized according to activities in the fisheries value chain. The Harvard analytical framework a grid (also known as a matrix) for collecting data at the micro-level (i.e., at the community and household level). Their components were used from Harvard Analytical Framework, as shown in Table 1.

RESULTS AND DISCUSSION

Activity Profile of Fish Farmers

Among the different sectors of the Indian economy where women contribute significantly, the fisheries sector occupies a prime place (Mahesh et al., 2016). The fishing community is

Table 1. Harvard analytical framework

Tool 1: Activity profile		
Activities	Women/girls	Men/boys
Productive Activities Agriculture: activity 1 activity 2, etc. Income generating: activity 1 activity 2, etc. Employment: activity 1 activity 2, etc. Other:		
Tool 2: Access and control profile	Access	Control
<i>Resources</i> Land Equipment Labor Cash Education/training, etc. Other <i>Benefits</i> Outside income Asset ownership Basic needs (food, clothing, shelter etc.) Education Political power/prestige Other		

dependent mainly on the fishery resources for their livelihood, and the role that fisherwomen play in this is of great importance for the maintenance of the family (Yahaya, 1988). The activities like stocking, feeding, fertilization and harvesting are activities done by male and female fish farmers. Similar results reported by Harper et al., (2017) both men and women in Mexico, Peru, Senegal, South Africa, and Vietnam are involved in the fisheries sector. Male and female engaged in the selling of fish was 48.33 per cent. Male participation in the selling of fish was high (40%) compared to females (11.67%). The significant roles played by the women are in processing (52%) and fish marketing and distribution (42%) (Obande et al., 2005). Some SHG member has gained knowledge on marketing. Therefore, they alone can manage the selling of fish. Harper et al., (2017a), reported participation by women was concentrated in post-harvest activities, e.g., extensive and small-scale processing and marketing (Table 2).

Regarding money management, it was observed that both male and female were engaged in 73.33 per cent of the respondent households. In a similar study conducted by Mahesh (2014), 80 per cent of fisherwomen decide to invest their savings. In comparison, the decision-making behavior of fisherwomen was involved in a medium level of decision-making behavior (84.16%), respectively. Fish vending offers the best opportunity to earn higher income in terms of average annual working hours provided (Khader and Sathiadhas, 2006). Frocklin et al., (2013) noted that the men and women traders spent an equal amount of time (about 8h per day) on the fish trade, women responsibility for household duties and childcare resulted in much longer workdays. The farmer performed the half early and early harvesting. Therefore, no such net repairing activities were seen in that place. Kwok et al., (2019) also observed inequalities in fishing communities regarding access

Table 1. Activity Profile of Fish Farmers (n=120)

Activity Profile	Category	Frequency	Share
Aquaculture (Stocking, Feeding, Fertilization, Harvesting)	Male	28	23.33
	Female	4	3.33
	Both	88	73.33
Fish selling	Male	48	40.00
	Female	14	11.67
	Both	58	48.33
Money management	Male	20	16.67
	Female	12	10.00
	Both	88	73.33
Loading and unloading	Male	26	21.67
	Female	6	5.00
	Both	88	73.33

to and control and the recognition of women opinions, which may shoot from deeper causal socio-cultural ideas of men and women roles. It was also found that both males and females did 73.33 per cent of loading and unloading activities. It was found that 21.67 per cent of loading and unloading activities were performed only by males and female fish farmers carried out only 5 per cent of activities. Due to the heaviness of this activity female activity was very less. Girel et al., (2018) observed that fisherwomen engaged in fishing (98%), fish processing (100%), and fish marketing (100%) generate income. The contribution of women to fisheries economics, active involvement in direct and indirect fishing activates, more number of women engaged in incidental activities, dimensions of gender in fisheries such as processing, marketing, decision making, etc. (Khader et al., 2015).

Control over Resources

Majority of the land hold by the male fish farmer, which was 88.3 per cent. The female landholding of cultural activities was 6.7 per cent and 5 per cent of both male and female fish farmers have control on land. Anil and Tanuja (2014) observed that nearly three-fourth (72.24%) had their land. Control on equipment, the majority (90%) of the male fish farmers control fishing equipment. Less than 7 per cent of females have control of fishing equipment, and only 3 per cent both male and female. It was also observed that 78 per cent of both male and female fish farmers have equal responsibility in handling cash. Concerning the control of cash handling, 13.33 per cent of male fish farmers have access to cash, and only 8.33 per cent of females alone have control over cash handling. Regarding labor management, 61.67 per cent of both male and female fish farmers had control over family/fishing labor. Whereas 43.33 per cent of males and 6.67 per cent of females are having control over labor. Regarding the control on training, 61.67 per cent of both male and female fish farmers control training programs. Medard et al., (2000) and De Siliva (2011) emphasized that generally, women who are more involved in the post-harvest activity or industry sector of the fishery value chains have less access to fisheries resources/equipment, excluded from decision making and leadership positions. Whereas 31.67 per cent of the males have control of training programmed and less than 7 per cent females had control of training. Concerning control on children's education, 25% male fish farmer has control on education and only 6.67 per cent female alone have control on education. Shyam (2013) reported that the fisherwomen were discriminated against on accessing the KVK / Village resource

centers and market associations, knowledge about capacity building programs, credit, financial institutions, and Govt. programs/subsidies. It was observed that 68.33 per cent of male and female fish farmers have an equal role in controlling children's education. Shyam (2013a) reported that the fish markets are traditionally dominated by males, who have more control and monitoring over the price and quantities of fish and fishery products handled in the fish markets.

Influencing factors for fish farmers

Regarding the benefit of resources, it was observed that males had dominated over the female, and 90 per cent of females were having all the benefit from clothing and cooking. From Table 3, it could be explained that 78.33 per cent male fish farmers and 66.66 per cent female opinion seekers were contacting male opinion leaders and had a 1st preference toward the male opinion leaders. Regarding the female fish farmers, 33.33 per cent and 21.66 per cent female and male opinion seekers had female opinion leaders as 1st preference. The availability of opinion leaders was one of the major factors to follow by other opinion seekers. The female opinion seekers were following female opinion leaders, whereas the involvement of females is more. It has been observed that female involvement is more in the high and medium productive blocks than the low productive blocks. In the place where female involvement less, they were following male opinion leaders as their availability.

Table 3. Relations of opinion leaders with opinion seekers

Opinion leaders	Male opinion seekers (n=60) (%)	Female opinion seekers (n=60) (%)
Opinion leadership preferences	1 st preference	1 st preference
Male opinion leaders	Male 78.33	Female 66.66
Female opinion leaders	Male 21.66	Female 33.33

CONCLUSION

The activities like stocking, feeding, fertilization and harvesting are activities done by both male and female fish farmers, major roles played by the women are in processing, fish marketing and distribution. 88.3 per cent land hold by the male fish farmer. In 5 per cent of households, males and females have control over landholding. The control on family and fisheries equipment, 7 per cent female are having control of fishing equipment. It was also observed that 78 per cent of male and female fish farmers have equal responsibility for handling cash. It was observed that male and female opinion seekers contacted male opinion leaders. Both male and female opinion seekers had contact with female opinion leaders, but less with compare to male opinion leaders. The availability of opinion leaders was one of the major factors in the fish farmers' community. To empower women, need to select opinion leaders that women prefer. In the long run, through such opinion leaders, fisheries entrepreneurship can be promoted to increase seed production, feed preparation, fish marketing, and fish processing.

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