Social Status of Hook and Line Fishermen in Visakhapatnam

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Abstract

This study aims to document the socio economic profile of the fisherfolk involved in hook and line fishing. The study was conducted among a sample of 100 fishermen involved in hook and line fishing in Pedajalaripeta village in Visakhapatnam district of Andhra Pradesh. Field survey method was adopted for data collection. Forty three percent of the fishermen were between the age group of 36-45 years, and all of them belonged to Hindu religion and *Jalari* caste. Nearly 72% of the male population above the age of fifteen was also involved in hook and line fishing. The daily income of the fisherfolk was dependent on fish catch and it varied from Rs.150 to Rs.1 000. Regarding the ownership pattern, 32% owned fibre catamaran and 9% owned wooden catamaran. The important types of hook and line operated in the area were long line and hand line. Only single day fishing trips were operated in the study area. In 28% of the families, the fisherwomen were involved in fish marketing and their monthly income ranged from Rs. 3 000 to Rs. 7 500. Poor implementation of regulations and excess fishing capacity were reported as major constraints. The study also suggests ways to improve the socio economic status of hook and line fishermen.

Keywords: Hook and line, fishers, social status

Introduction

Artisanal fisheries is an important sector in the state of Andhra Pradesh. Within this, hook and line fishing is a traditional fishing activity which is being done for decades along the coast of Andhra Pradesh. Socio-economic indicators form a base for social or technological interventions by the government or any developmental organisations. Factual variations in the social status of a community clearly indicate the level of growth and development. In general, the fishermen groups are considered to be encoded with low economic status because of their social and economic backwardness. Since they are fully occupied with fishing activities, their migration to other fields of work is rather difficult. Limited access to land based activities also hinders their economic progress. In addition, they also face complex interplay of a number of factors such as inadequate infrastructure facilities, low profitability and other factors which ultimately affect their performance and involvement. Moreover, the socio economic status of the fishermen play an important role in their day-to-day activities and it also influences their involvement in their occupation. Therefore, it is important to examine the socio-economic conditions, living status and constraints faced by them and suggest suitable strategies for improving their socio-economic status.

Materials and Methods

Pedajalaripeta is one of the largest coastal villages of Visakhapatnam district in Andhra Pradesh, which is dominated by artisanal fishermen. For the present study, this fishing village was purposely selected due to its strategic importance in hook and line fishing. A total of 335 non motorised craft and 199 motorised craft were operating in this region. The total population of the village is about 6500, among which 1400 fishermen are involved in full time fishing. The fishermen owned a total of 3139 hooks and line units (Marine Fisheries Census, 2005). From the total active fisher folk population, a sample of 100 fishermen involved in hook and line fishing

were selected randomly from the village. Field survey method was adopted for data collection. The scale developed by Trivedi (1963) was used to assess the socio economic status. The scale consists of seven statements with different scores. The socio-economic status was assessed by adding the scores obtained by an individual. Using mean and standard deviation, the respondents were classified under different categories. A structured and pre-tested interview schedule was used for data collection. The data were collected from the selected individuals by conducting interview during the period May to September 2006.

Results and Discussion

The socio economic analysis was carried out on different parameters such as age, education, family type and other related parameters.

The study area consisted of relatively high proportion of middle aged fishermen (43%) between the age group of 36-45years, and only 29% was above 46 years (Table 1). All of them belonged to Hindu religion and *Jalari* caste. The *Jalari* caste people are peasant fishermen as defined by Firth (1966) with the adoption of simple technologies and small scale production dependent upon market exchange subsistence. Only 49% of the respondents were literates and this value is below the state average of 60.50% (All India Census, 2001). Since fishing is their traditional occupation, they preferred fishing to other income generating activities. The average number of children living in the household with their parents was 2.9. Regarding the education of children in the family, only 2% of male children were illiterate whereas 12% of the female children were illiterates. This reveals gender discrimination in literacy among fishing communities. The school

Table 1. Socio economic profile of artisanal fishermen of Visakhapatnam

Parameters	Social profile	Percentage
Age	Young (< 35 years)	28
	Middle (36 to 45 Years)	43
	Old (> 45 years)	29
Education (Male)	Illiterate	51
	Literate	49
Children's Education (Male)	Primary	81
	Secondary	17
	Illiterate	2
Children's education (Female)	Primary	88
	Secondary	12
Type of family	Nuclear	66
	Joint	34
Size of family	< Five members	52
	> Five members	48
Type of house	Thatched	14
	Tiled	38
	Concrete	48
Ownership pattern of craft	Fibre *teppa*	32
	Wooden *teppa*	9
	No ownership	59
Monthly Income (Rs.)	Upto 3 000	33
	3 001-4 500	32
	4 501-6 000	26
	6 001-7 500	6
	7 501-9 000	3

drop-out was more in the case of female children (48%) because the girls were made to take care of household activities and younger children. Nearly 72% of the adults above the age of fifteen were involved in hook and line fishing. The monthly income of the fisherfolk were dependent on the fish catch and it varied from Rs. 3 000 to Rs. 9 000. More than half of the respondents belonged to nuclear family type. The nuclear families has influence on the role of women as they had to take part in fisheries activities as well as to take care of their toddlers and household chores due to lack of support from elders or other family members. According to Suryanarayana (1977), personal and economic conflicts of coastal Andhra fisherfolk led to a partial separation of extended families.

The average family size in the study area was 5.5 and all of them had their own house with 48% concrete, 38% tiled and 14% thatched houses (Table 1). A study conducted by Kasim et al. (2003) revealed that the average family size was 3.9 and 98.2% had own house of which 41% were thatched. As far as fishing was concerned, 60% of them had medium level of experience (15.24 ± 4.9 years) and only 19% had high level of experience. Sixty percent had medium level of socio economic status (14.4 ± 3.30). Toilet facilities were not available in any of the houses. The source of water was public taps and municipal tankers. Kerosene was used as cooking fuel only by 12% of the families while 39% were using LPG and 49% fire wood. The usage of LPG by the fisher community was an indication of better economic status. All the sample households were electrified and 79% possessed television and 36% have radio. Among the southern states, Tamil Nadu had maximum households (86.20%) having electricity followed by Andhra Pradesh (85.06%), Karnataka (81.05%) and Kerala (77%) as reported by Narayana Kumar et al. (2003).

Assets owned by an individual are one of the indicators for their socio economic status. Only two types of ownership patterns existed among the fishermen. They are individual ownership and ownership among family members. No ownership was shared among friends. Among the total respondents, 32% owned fibre catamarans and 9% owned wooden catamarans. In Andhra Pradesh, as the coast is surf beaten, surf landing craft are dominant (SreeKrishna, 2002). Catamarans were the mostly prevailing traditional crafts in Andhra Pradesh which accounted to 64% among the non motorised traditional craft (Marine Fisheries Census, 2005).

Non motorised catamarans viz., wooden teppa and fibre teppa were operated by the fishermen of the study area. Cost of the wooden teppa ranged between Rs. 7 000 and Rs. 12 000 whereas the cost of fibre teppa, ranged between Rs. 20 000 and Rs.50 000. No speed difference was reported between wooden and fibre teppa. The crew size in wooden teppa was 4 to 6 and in fibre teppa it was 6 to 8. The frequency of repair was less in fibre teppa viz., once in three or four months when compared to wooden teppa. All fishermen reported that fibre teppa was economically viable and technologically feasible compared to wooden teppa.

The important types of hook and line operated in the area were long line and hand line. The long line had 500-600 hooks and hand line had 6 to 10 hooks. In long line, there were 2-3 hauls in 5 h duration while in hand lines, there were an average of 20 hauls in 5 h duration. Hook and lines were operated at depths ranging from 20 to 500 m. Sardines and Stolephorus spp were used as bait and sometimes plastic thread of rice or cement packing bags were also used as baits. The peak fishing season was from August to February during which wind condition was also favourable. The catch comprised of yellow fin tuna, sharks, seer fish, bill fishes and marlins. The size of the yellow fin tuna ranges from 30 to 180 cm with weight ranging from 0.5 to 85 kg. The average price per kg of fish ranged between Rs. 30 and Rs. 90 depending on the size of the fish and market demand.

Sharing pattern of the catch income differs from place to place. Crew leader gets an additional share from the owner. The expenditure for bait was deducted and the remaining amount was shared among the crew and one share goes to the boat owner. No other wages or changes were observed in the sharing pattern within the study area. Norr (1972) reported that the distribution of income from the catch was so made that it ensured equal share for all crew plus additional share for craft and gear.

All the respondents preferred to remain at home and be with family during leisure time. About 30% reported playing cards with fellow fishermen as a time pass. Occasionally, the fishermen were involved in religious activities and watched television or films.

About 70% fishermen have availed loan from private financiers and the amount ranged between Rs. 10 000 to Rs. 20 000. Apart from fish merchants and financiers, credits were provided by friends, relatives and professional money lenders (Norr, 1972; Firth, 1966). Regarding the purpose of loan, 82% reported that the loan was taken for domestic purposes such as marriage, house maintenance and other household activities. The interest rate was 10% per month. Most of them struggle to repay the amount. When a loan was taken as reported by Alka (2002), women were forced to work harder. A family in debt is forced to sell fish at half the market price or pre-fixed price to the money lender, apart from paying back the loan at a high interest.

Decision making is heavily influenced by the power structure of the group, communication patterns and rules that have been enacted. The decision making pattern of the family is depicted in Fig. 1.
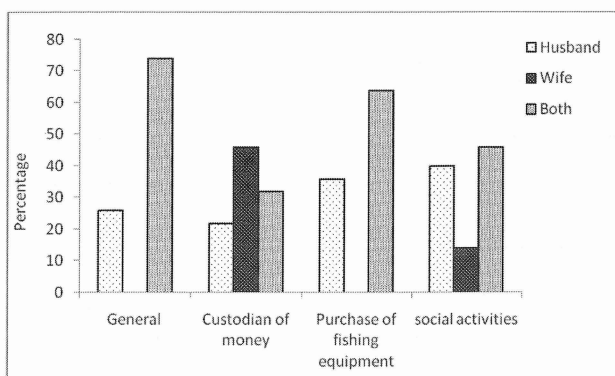

Fig. 1. Decision making pattern among fishers

In 74% of the families, decision generally was taken by men and women together. But in financial matters, women were taking decision in 46% of the families. Since women were involved in income generation by selling fish, they have economic empowerment and liberty. Women managed the family and day-to-day affairs of the family and the spending for household expenditure was within her purview. Since more than 50% of the families were nuclear, it would have influenced the role of women in decision making as there were no elders to intervene. Women predominantly managed the financial affairs of the family. A study conducted in coastal Karnataka by Bhatta (2003) suggested that only 18% of the women were fully involved in decision making although their contribution to the family income and household work was substantial.

Regarding investment in fishing, men alone were taking decision in 36% of the families as they were the ones mainly involved in fishing. It has been reported by Kalavathy & Tietze (2004) that in small owner group (owing one craft and one or more gears) 48% male were involved in taking decision on purchase of craft and gear whereas in the case of big owners with several crafts and gears, 54% male were involved in decision making.

The relationship between socio economic status with variables such as age, experience in fishing, family pattern, decision making and media exposure was worked out (Table 2).

Table 2. Relationship of socio economic status with other variables

(n=100)

Characteristics	Socio economic status (Correlation Values)
Age	- 0.5482 **
Experience in fishing	- 0.0290
Family pattern	- 0.2968 **
Decision making	0.2320 *
Media exposure	0.4497 **

*Significant at 5 per cent level
** Significant at 1 per cent level

The age was negatively correlated with socio economic status (Table 2). As age of fishers increased, their socio economic status decreased. This may be due to the fact that as the fishermen become older they may not be in good health to go for fishing. Since they fully depend on fishing, this would result in a reduction of their income. Other indicators namely decision making by women and media exposure had strong correlation with socio economic status. When the socio economic status of the family was high, women would have an equal say in the decision making because of their higher social background and income earning capacity. It was quite evident that when a person possessed higher economic status, it would naturally reflect on his media exposure. It was also found that family pattern was negatively correlated with socio-economic status indicating that if the family had more members, their socio economic status was in the decreasing trend. This may be due to the fact that the number of earning members in the family may be less and also the expenditure may be more than income.

Once the fish was landed, it was taken to the market for sales. In 28% of the families, the fisherwomen were involved in fish marketing and their monthly income ranged from Rs. 3 000 to Rs. 4 000. In peak season, they got an income of Rs. 5 000 to Rs. 7 500 by selling seerfish, tuna and other commercial fishes. Mostly, women purchased fish from fishermen, landing in Lawson's Bay and sold it in nearby areas namely Pedawaltair, Chinna Waltair and MVP market which was within 3 to 5 km. The fish was carried by them as head load to market places. Six days in a week, they were engaged in fish marketing and only 8% was involved in house vending. Good quality commercial fishes like seerfish and yellowfin tuna were transported from the fishing harbour by autorickshaw. The transport cost of Rs. 50 per trip was shared. Women auctioneers in the fisheries harbour were involved in auctioning and they were not allowed to sell fish directly to the end users in the harbour. The auctioneers take 10% of the total value of the fish as auctioning charges while the remaining amount was paid immediately to the fisherwomen.

Fishermen faced lot of constraints that hinder their development and had to struggle hard to overcome the stumbling blocks. Some constraints could not be solved at their level as they were beyond their control, influenced by influential group. Certain areas could be probed only by government or other policy making institutions. The constraints faced by the fishermen are given in Fig. 2.

Poor implementation of regulations was ranked as the major constraint followed by excess fishing capacity. There existed conflicts in the area of fishing
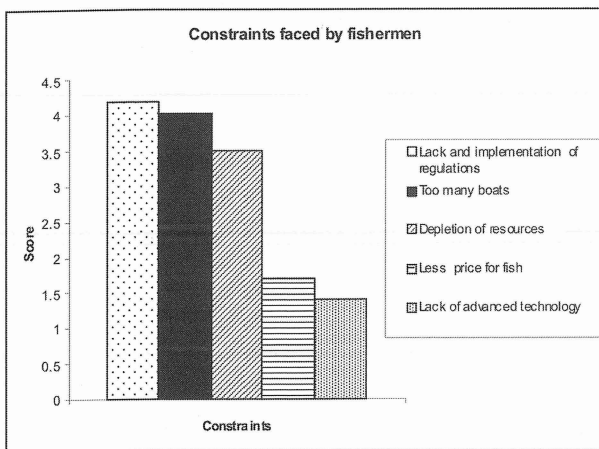
and they reported that since motorised boats were fishing in their area, their catch was getting reduced. The reason, though valid was uni-dimensional. They also reported that the number of boats operating in their area was increasing and hence per capita availability was diminishing. 'Less price for fish' was reported as the fourth problem. Once the fish was landed, it was taken to harbour and handed over to auctioneer who did the auctioning. The auctioneers fixed the price and they took a commission of 10%, which was affecting the fishermen's profit. This confirmed the general hypothesis of the existence of monopsony and oligopsony in the fish marketing structure in India at various stages and hence fishermen do not get the high price prevalent in the consumer markets as reported by Sathiadhas et al. (1994). Commercial fishes realize good export price depending upon its quality. Injury of fish reduces its market preference and value. In the case of tuna and bill fish, fishermen beat the fish while catching, and its skins are damaged and hence the market price also gets affected. So they need to have a technology to catch fish without causing any injury to the fish.

Even though the area of operation of motorized and non motorised craft are demarcated, it should be strictly implemented by the government. Regulations should be brought out in registration of boats in a particular area to avoid overcrowding of boats leading to reduction in per capita availability of fish and area of operation. Government should implement developmental programmes in the village so that the women could organize group activities and start small scale production units for value addition. Hook and line fishermen of Andhra Pradesh are from traditional sector and fishing is their only way of livelihood. The constraints faced by the fishermen should be minimized to improve their standard of living by implementing developmental schemes.

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Fig. 2. Constraints faced by fishermen

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