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Fisherwomen of Coastal Kerala: A Socio-economic Perspective

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ABSTRACT

The coastal fishing communities solely depend on marine resources for their livelihood and the role fisherwoman plays are integral for the maintenance and economic prosperity of the family. The contribution of women in fisheries is substantial, especially in various subsidiary activities of capture fisheries such as sorting, grading, peeling, processing, value addition, trading and aquaculture practices ranging from breeding and rearing of fish to marketing. Although women contribute significantly for the economy as well as disposable household income, their socio-economic status is lagging far behind the men. The high degree of wage disparity between men and women for the same job clearly indicates the extent of gender inequalities. Women play a dominant role in certain on-shore activities such as processing and trading. Many of the occupations in this sector-such as head-load workers, sorters and petty traders of different categories are not often recognized or their roles clearly understood, with the result that development process bypass them. A major proportion of these groups are mostly live in poverty. In order to understand this aspect, a socio-economic survey was conducted in four representative fishing villages predominantly depending on indigenous or non-mechanized, motorized, mechanized fisheries for their livelihood in the primary sector and processing /exporting centers in the secondary sector during 2001-2003. The activities and role of women differ between the centers mainly revolving around the type or predominant of economic activity prevalent there. The study focuses on the role of women in fishery operations along coastal Kerala, socio-economic status of fisherwomen involved in fisheries, occupational health hazards and gives suggestions for empowerment of womenfolk involved in fisheries.

INTRODUCTION

Fisheries sector plays a predominant role and occupies a very important place in the socio-economic development of the most backward sections of the population. Fisheries is a powerful income and employment generator as it stimulates growth of a number of subsidiary

industries and is a source of cheap and nutritious food. Fisheries sector has been recognised as one of the major contributors of foreign exchange earnings. Women play a key role in the development of fisheries sector and contribute significantly for the coastal economy.

The contribution of women in fisheries is substantial, especially in various subsidiary activities of capture fisheries such as sorting, grading, peeling, processing, value addition, trading and aquaculture practices ranging from breeding and rearing of fish to marketing. (Femeena Hassan and Sathiadhas, 2005) Many of the occupations in this sector-such as head-load workers, sorters and petty traders of different categories are not often recognized or their roles clearly understood, with the result that development process bypass them. Hence economic status of women is lagging far behind the men. The high degree of wage disparity between men and women for the same job clearly indicates the extent of general gender inequalities. Majority of fisherwomen mostly live in poverty, which is related to income, quality and quantity of food consumed, material possessions and sense of well being. In post-harvest fishery sector, women play a dominant role in certain on-shore activities such as processing and trading. Artisanal fishing community consists of a diverse range of people who are mostly living in poverty, which is related to income, quality and quantity of food consumed, material possessions and sense of well being.

MATERIALS AND METHODS

A preliminary survey was conducted along the Kerala coast from Ernakulam to Thiruvananthapuram to identify predominantly mechanized, motorized and non-mechanized representative sample centres in which fisherwomen are actively involved in sorting and grading of fish catch, fish trading, fish processing and aquaculture activities. On the basis of the survey, four sites were selected as sample centres. i) Aroor in Alappuzha

district, is an important centre for fish processing/peeling industry where the bulk of the prawn peeling is undertaken in the state, ii) Neendakara is the biggest fishing harbour in the country where substantial number of women are involved in fish marketing, sorting and grading as well as other subsidiary activities and iii) Thekkumbhagam in Kollam district and iv) Poovar in Thiruvananthapuram district is a predominantly non-mechanized fishing centre where majority of the fisherwomen are involved in fish marketing and the preparation of value added products. To analyse the socio-economic aspects of fisherwomen engaged in different sectors these villages were classified under 4 categories. i) Predominantly depending on indigenous or non mechanized ii) motorized, iii) mechanized fisheries and iv) processing/exporting centres in secondary sector. The villages selected were Anjilickad and Thekkumbhagam for category (i) Poovar, for category (ii) Neendakara for category (iii) and Aroor for category (iv).

The participatory rural appraisal (PRA) techniques were followed to identify different types of stakeholders in the selected villages. Based on the socio-economic survey conducted, some steps were also taken to empower the fisherwomen of the study area in terms of socio-economics, nutrition, health and hygiene, which ultimately leads to provide sustainable livelihood. A detailed socio-economic survey was carried out with a pre-tested schedule.

RESULTS AND DISCUSSIONS

Socio-economic status of fisherwomen involved in fisheries

The details of the number of households surveyed and population details are given in **Table.1**.

Table.1:- Population details of households surveyed

Category	No. of households	Total population	Men	Women
1	433	1912	928	984
2	348	1514	759	755
3	130	568	272	296
4	344	1434	735	699
Total	1255	5428	2694	2734

A total of 1255 households with total population of 5428 were surveyed, out of which 2734 were women. The average family size was found to be 4.41. On an average, families had equal number of male and female population. In all villages under study, the age group of 19-35 years dominated. The overall literacy rate was 81% in the study area. In area where backwaters are more and indigenous fishing is practiced (**category 1**), highest literacy rate was observed as compared to other villages (**Table 2**). But percentage of people going for college education was more at Poovar (**category 2**). This is in correlation with their occupational structure. Here 20% of fisherfolk were engaged in non-fishery activities.

Table.2:-Literacy level (Percentage)

Category	Primary		Secondary		Collegiate	
	Male	Female	Male	Female	Male	Female
1	22	24	27	20	4	3
2	22	23	26	26	12	2
3	16	16	24	27	5	3
4	18	15	28	29	5	5

Housing is one of the most important yardsticks to measure socio-economic status of any community. As a whole, 42% are living in pucca houses and 40% in kutcha houses. At Poovar 24% respondents are having reinforced concrete (RCC) houses, while at Neendakara, it was only 13% (**Table 3**).

Table 3: Proportion of different type of houses (%)

Category	Pucca	Kutcha	RCC
1	63	20	17
2	40	36	24
3	43	44	13
4	61	24	15

It was observed that 77% of fisher households had electric power. Of the households (16%) in category (iv) have LPG connection. But in category (ii) villages 95% households were using firewood as fuel.

Table 4: Type of fuel used (%)

Category	Firewood	Kerosene	Biogas	LPG
1	80	13	0	7
2	95	2	0	3
3	88	6	1	5
4	78	6	0	16

Seventy five percent of fisher folk surveyed did not have fishing equipments, indicating they are actually wage earners. Ownership pattern of the means of production revealed that 25% of fisherfolk in the area do not possess any fishing equipments. Of fisher folks in category 1 (60%) are owner operators- they are having their own fishing craft. This is because since they are depending on indigenous crafts and gear, its expense is comparatively less.

Table 5: Ownership of fishing equipments (%)

Category	YES	NO
1	60	40
2	22	78
3	8	92
4	43	57

Annual income of households surveyed varied from less than Rs. 6,000 to 50,000 (Table 6).

Table.6:- Annual income of the respondents (%)

Category	<6,000	6,000-	12000-	25,000-	36,000-
1	5	42	30	18	5
2	8	32	46	13	1
3	16	40	40	4	0
4	0	38	35	7	2

Table.7:-Distribution of households based on major occupation (%)

Category activities	Fishing	Fishery	Other
1	58	25	17
2	75	15	10
3	70	20	10
4	20	50	30

Percentage of households having indebtedness in one or other way under category 1,2,3, and 4 are 33%,25%, 48% and 25% respectively. At Poovar 92% of credit requirements are met by private money lenders. In category 4, fisherfolk depended on banks for availing loans was 35%.

The survey revealed that 58% of household expenditure of category 3 is for food, while Category 1,2 and 4 spend 50%,45% and 40% respectively. In all fishing villages it was observed that expenditure for health and education was meagre.

Role of women in fishery operations along Kerala coast

1. Aquaculture

Clam picking and processing provides livelihood for substantial number of women inhabiting along the banks of *Vembanadu* and *Ashtamudi* lakes (*Sathiadhas and Femeena Hassan, 2005.*).

Unlike other parts of the country, women themselves are engaged in clam picking and processing. For picking clam, they go to backwaters in their own canoes at about 3 am in early morning and return at about 2 pm in the afternoon. They wash clams and boil them with a little quantity of saline water either on the banks of the backwaters or in the backyards of their house. Boiling helps to open up the shell valves, and then they pick out the meat. The meat is either supplied to traders or taken by themselves to some local market at Aroor or Edakochi for selling. On an average they earn about Rs.200/- per day. The shells also sold once in a while and fetch them some income. 'A' Grade shells fetch about Rs. 700/- per tonne. Now the shells are sold only to the approved societies as per the Govt. order. One such society in *Anjilikkad* is *Lime-shell Vyavasaya Co-operative Society Ltd.* This monopoly right always deprives a fair price to the real collectors of clam. Although the shell

collectors are also members of this society, the merchants' alone dominate in decision-making, as these people will be mostly in the committee. Only the shell collector will be the member and lack of education among these people also is exploited. The societies procure shells at the rate of 50 paise per Kilogram. The shells are used as raw material in cement factory and pharmaceutical-manufacturing units.

At Thekkumbhagam, only men collect clams from backwaters with the help of hand scoop nets or a scoop nets attached to a long wooden pole. Here women are involved only in post harvest operations.

2. Fish vendors

They are the major source of supply of fish for the communities dwelling within and close to the coastal areas. Where there is predominance of artisanal fishery and decentralised nature of landing, women fish vendors have a role. There exists variations in working capital levels, source of fish supply levels and point of disposal.

Earlier, landings were in small and women could easily buy the fish. Motorisation and mechanisation of crafts coupled with centralisation of landings, made them to compete with big traders and increase in the distance travelled for procurement. Now fish auctions are conducted on a ready-cash basis and this leads to marginalisation of women, as they are not able to participate in the auction when landings are large. For want of working capital they borrow money from private money-lender at high interest rates and lose a significant amount of earnings in the prevalent repayment system. Recently a number of persons have also entered into this trade at various levels and competition has increased widening the supply-demand gap.

The vending pattern also varies. Some women sell in big markets, some in roadside markets and some engage in house-to house vending. Women fish vendors walk, go by bus or hire a mini truck. In the markets they have to face stiff competition from male vendors. The vendors selling fresh fish from nearby coast are affected by those selling iced and chemically preserved fish from distant markets. Women do this difficult profession as they are usually the main bread winner for the family and in need for making significant contribution to the family's income.

3. Fish Processors

In post harvest sector small-scale dry fish processors and women working as labours in dry fish trade are very poor. The small scale dry fish processors buy low and medium value fish from the auction at landing centres or from the wholesale fish market. Due to the infrastructure development in fisheries sector there is predominant use of ice, refrigeration facilities, improved transport facilities and centralisation in landings. The main problems faced by the women are scarcity of fish, escalating prices, high cost of capital borrowed from informal sources, stiff competition from fellow processors. In spite of this, most of them remain in this occupation, as they do not have a viable alternative. During survey it was noted that younger generation is not taking up this occupation. Age wise classification of women engaged in different post harvest activities is given in **Table.8**

Table.8:- Age wise distribution of women in different post-harvest activities

Age group	peeling	curing	drying	sorting	Value addition
<20	8	—	—	—	5
20-40	57	75	40	25	80
40-60	30	25	55	70	10
>60	5	—	5	5	5

Some fisherwomen are exclusively engaged in fishmeal trade. They are mostly located in trawl landing areas. From Neendakara the supply mainly goes to poultry feed factories in Kerala and Tamil Nadu. In Neendakara a woman can earn Rs. 100 to 125/- Day. At Neendakara, there are women engaged in sorting catches from the trawlers.

There are women who peel prawn for export companies. There are two kinds: those that offer their skilled labour and those procure prawn at auction, peel the same and sell the end product to an export company. Peeling sheds are pre-processing plants supplying to export processing plants. Peeling as such is a difficult job, as the peeler has to be in a bent position with their hands wet in ice cold water for quite a long time.

Occupational health hazards

Long hours of monotonous work cause specific health hazards to fisherwomen depending on the type of work. At Anjilikkad area 33% of women engaged in clam fisheries are suffering with backache. As they are exposed to smoke, they are also suffering with headache (19%). Because of hard work, 21% of women engaged were having myalgia. During their hard work, they are not caring about the diet. Hence it was observed that 17% of women engaged in clam fisheries are anaemic. On prolonged working, those who are going for clam picking suffer problems with sight and hearing.

Modernisation of fisheries and women

The modernisation of fisheries over the last four decades has essentially reduced women's role in the fishing industry in many ways. The modernisation has led to the concentration of fish landings in the harbours, the displacement of women from fish vending and the trade was taken over by fishermen. Some women who have no option other than fish vending to sustain their families now face many hardships. At the same time the large seafood export processing industry has provided many opportunities for women's employment, but only women from certain pockets can make use of these avenues. Moreover this export-oriented production cum processing sector has effectively transformed women from an independent self-employed status to that of wage earners.

Improved transportation and infrastructure have reduced the opportunities of women engaged in drying and curing activities. With the coming up of net making factories, women have now almost vanished from the scene of net making.

Policy implications

There is immense need to create better opportunities for women in coastal fishing communities to enhance their social and economic status and enable them to participate in development efforts, rehabilitation and conservation of the coastal and aquatic environment.

The special features of fisheries and aquaculture make it necessary to link micro finance with appropriate technology development and transfer to women clients. Both capture fisheries and aquaculture require upgraded vocational training programmes and technical advice crucial for the success of women's micro enterprises.

There is enormous scope to adopt and expand ornamental fish culture in rural and urban centres. Women could significantly contribute to this sector if trained and oriented in the right direction.

Pearl culture could be suggested as an alternative and lucrative micro-venture, especially to women, both in the marine and freshwater segments. Although indigenously developed technologies for marine and freshwater pearl culture are available, few commercial ventures have come up (Narasimham 2001). Freshwater pearl culture is fast picking up and there are moves to integrate it with the carp culture to generate additional revenue to the farmer. Women could take up pearl culture as a productive income-earning venture on account of the vast unutilised potential.

Development of backyard hatcheries to cope with the local demand patterns of quality seeds of fish / shrimps could be taken up by women. House-based ventures are more preferred by women and found suitable to their present social fabric. Aqua-feed making by using the indigenous resources, as a cottage industry may be developed to suit the needs of the aquaculture industry.

Appropriate training programmes, including the possible linkages of necessary credit facilities in liaison with scientific institutes and formal financial institutions respectively should be imparted to the primary stakeholders.

Promote "men and women partnership firms" instead of exclusively women-oriented

enterprises. It is seen that husband-wife enterprises with one or two helpers in fish processing / marketing and other fishery related activities yield better prospects.

Location-specific and need based training programmes for fisherwomen should be organised to enhance the awareness and technical know-how enabling them to start self-generating gainful employment ventures in aquaculture and post harvest sector of fisheries.

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