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ROLE OF WOMEN IN SMALL SCALE FISHERIES — A CASE STUDY

Krishna Srinath

Central Marine Fisheries Research Institute, Cochin

The studies conducted in India and a few countries abroad on the socio-economic conditions of the fishing communities have highlighted the role played by women in small-scale fisheries. The socio-economic structure of small-scale fisheries in India is very complex and there are many factors which influence the participation of women in fishery related activities. To identify these factors, a case study was carried out in Vypeenkara, one of the important fishing centres in Kerala.

Data base

Data collected through a survey in Vypeenkara forms the basis for this study. A sample of 500 households covering 11 fishing villages coming under the jurisdiction of 6 panchayats were selected. An interview schedule was administered to the female head of the households which gave information on 1,148 women. Observations were also made in landing centres, curing yards and processing units.

In terms of the infrastructure facilities the Island was divided into three regions; Region - I consisting of Elamkunnappuzha Panchayat, Region - II consisting of Narakkal, Nayarambalam, Edavanakkad and Kuzhupilly panchayats and Region - III consisting of Pallipuram Panchayat for the purpose of this study. The

Table 1. Regionwise distribution of villages and number of households

Reg- ion	Pan- chayat	Fishing villages	No. of house- holds selected	Percentage of		
				Male	Female	Child- ren
I	Elam- kunna- puzha	Murikkum- padam, Ochan- thuruthu	35	36	37	27
II	Narakkal Nayaram- balam Eda- vanakkad Kuzhu- pilly	Narakkal	40	37	36	27
		Nayaram- balam	35	34	35	31
		Edava- vanakkad	35	31	34	35
		Kuzhu- pilly	35	34	35	31
		Ayyam- pilli	35	34	35	31
III	Palli- puram	Cherai	40	40	38	22
		Palli- puram	65	35	34	31
		Munam- bam	85	36	36	28
Total			500	36	36	28

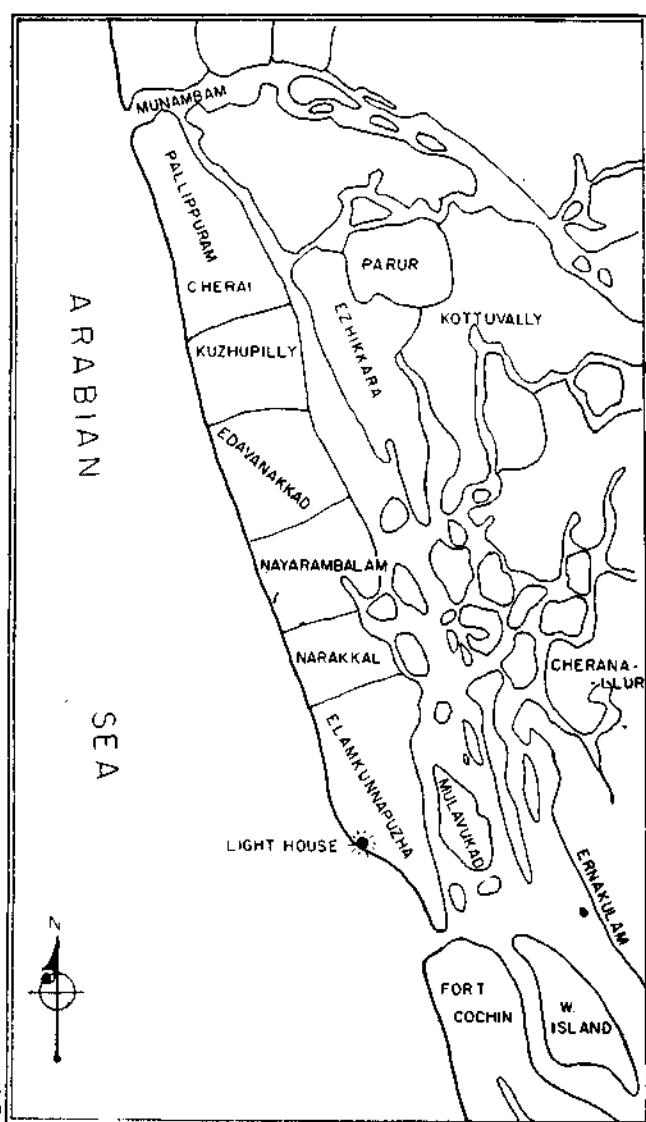


Fig. 1. Vypeenkara the area where the case study was conducted.

households falling along the western side of the Island where most of the marine fishermen lived were mainly considered for the study. (Table I, Figure 1).

Areas of women's participation

Prawn peeling, fish curing, drying and marketing, net making, fishing in the canals and clam shell collection are the major areas of women's participation. About 20% of the women population was estimated to be engaged in the fishery related activities. This figure, however, does not indicate the employment status of the women as none of the activities assure regular employment or income nor a distinct line can be drawn among various groups engaged in different activities as these activities are quite often not mutually exclusive.

Prawn peeling

Peeled prawn is an important item of foreign exchange earner to the country. Prawn peeling is a seasonal activity coinciding with prawn fishery season, the peak being August–November. In prawn peeling two types of activities are observed. They are (i) peeling in the centralised units such as peeling sheds rented in by agents (Fig. 3) and (ii) peeling in decentralised units such as homesteads. Peeling does not require any special skill though some variation is seen in the percentage of meat recovery from person to person. In a peeling shed of 3 x 4m area, about 10–15 women are engaged at a time, and depending on the quantity of prawn available the number of women engaged also varies. Peeling is carried out under the supervision of the agents who distribute weighed quantity of prawn among the women. A woman can peel about one kg of prawn in an hour and can earn a maximum of Rs. 6 per day at the rate of 50–75 paise per kg. During the peak season peeling goes on day and night. Prawns landed by mechanised boats are generally peeled in such units. These peeling sheds are mostly located near the landing centres.

There are about 85 registered peeling sheds according to panchayat records and several others without registration in the Island. Among registered sheds 60 are located in Region - III i.e. Pallipuram Panchayat. There are also sheds where prawns from filtration ponds are peeled. In view of the cost incurred towards rent and difficulties in maintaining the prescribed hygienic standards, there is a tendency among the agents to get the peeling done in decentralised units by distributing the prawns among the households in the vicinity of the landing centres. In decentralised peeling, two systems are followed. In the first, the agents distribute 1 or 2 kg of prawn among the households of the locality and get it peeled at certain rate. In the

other, prawn is sold to the local women and meat is bought back. In the former system the labour charge is paid whereas in the latter the payment is based on meat recovery. Peeling agents do not employ women on regular basis as they should be covered by Minimum Wages Act, if done so. Peeling is also done in households which own crafts and gears where women from neighbourhood are engaged and the meat is sold to the agents or to the processing units. In the sample selected, 25% of the women are found to participate in prawn peeling.

Curing, drying and trading of fish

In the backwater fishing using stake nets and chinese dip nets, once the catch is landed women take over the entire post-harvest operations namely sorting, (Fig. 4) on-the-spot auctioning, gutting and salting (curing), drying, carrying the dried fish to market in the mainland and trading it. These women mostly belong to 'Vaala' community. The fish is processed daily but is taken to the market only twice a week. A woman takes about 30 kg of fish at a time for trading. The processed fish is transported to the mainland (Ernakulam) in canoes and women travel by bus to the boat jetty and then to the mainland by ferry. The fish is sold at both retail and wholesale rates. A net profit of Rs. 15–20 is earned by a woman twice a week. There are also women who buy fresh fish from boat owners and traders, usually on credit, and the money is paid back after disposing the processed commodity.

In fish curing and drying also centralised type of activity is seen (Fig. 5). But out of the 45 curing yards (most of which are available at Pallipuram Panchayat) only a few are functioning regularly. These yards engage one or two women on weekly wage at the rate of Rs. 10–15 per day. Curing of fish is practiced on the sea shore by small traders with the help of a few women. Marine fisherwomen are also found to be engaged in trading of fresh and dry fish as vendors. In icing and other activities in the processing units, participation of women is found to be very rare. The participation of women in curing and drying and in trading is estimated at 19 and 20% respectively.

Net making

Net making is the traditional skill of 'Araya' community though women of other communities also have learnt the job. Women in some part of Elamkunnappuzha, Puthuvaippu and Narakkal engage themselves in hand braiding of fishing nets (Fig. 7). Net making is a leisure time activity. Net mending is done by men during their leisure. The cotton and silk threads have been replaced

by nylon yarn and braiding of nylon net for boats is the most important activity. Agents for net making distribute about 200 kg nylon yarn among 40 households at a time. Normally a period of one month is required to complete the job. A woman can braid a maximum of one kg net a week. The labour charges work out to Rs. 3 per 100 mesh and a woman can earn Rs. 20 per week through net making. Though hand braided nets are considered to last longer, net making for own use is not considered worth the effort as it is a time consuming activity. Moreover the gains do not compensate for the labour put in. The net making by women is reported to be decreasing with the establishment of nylon net factories. Eighteen per cent of women in the sample are estimated to be engaged in net making.

Fishing in the canals

Fishing in the canals and the impounded water areas for prawns and priced fish such as pearl spot during the low tide is one of the important activities of women belonging to 'Pulaya' community in areas where prawn/fish farming activities take place. Women move in water in a line with narrow-mouthed aluminium and earthen

pots in their hands (Fig.2). A bunch of leaves is inserted into the mouth of the pot which prevents the fish collected in the pot from escaping. The fish and prawn are caught by searching with hands. An income of about Rs. 20 per day is earned by women, if she gets a good catch. The 'Pulaya' women also help their husbands in cast-netting and collection of prawn larvae from the surf. During the paddy season they engage themselves in agricultural operations.

Collection of clam shells

During the monsoon due to fresh-water influx marine clams are washed ashore. The women from Pallipuram Panchayat area collect these shells and sell to the clam shell society or the agents at the rate of Rs. 2.50 per basket of 20 kg and earn about Rs. 10 per day. July-September is the main season for clam shell collection, but women and children are found engaged in this activity throughout the year. During certain seasons collection is done during the night. Women stand in knee-deep water and scoop the clams with the help of an iron plate called 'Odu' and collect them in 'vatta vala' (Fig. 6). Clam shells thus collected are heaped



Fig. 2. Hand picking of prawns and pearl spots by women is an age old practice for harvesting prawns from culture farms.

on the beach by the agents and when good quantity is collected the same is loaded in trucks and sent to other states mainly Tamil Nadu to be used in lime industry. The loading of shells in the trucks is also done by women.



Fig. 3. Prawn peeling is an almost exclusive job of women.

A total of 20% of fisher women is estimated to be participating in the above activities together. Table 2 gives the average number of hours a woman engages in the different fishery-related activities and average income per day.

Table 2. Average number of hour of occupation and income earned per hour

Activity	Average hours occupied in a year (No. of days & No. of hours)	Average income per hour (Rs.)
Prawn peeling	1,080 (180 x 6)	0.50
Drying and trading of backwater fish	1,080 (180 x 6)	0.50
Net making	900 (300 x 3)	0.45
Clam shell collection	720 (120 x 6)	1.42

Women's participation in fishery-related activities

Availability of infrastructure facilities

The availability of infrastructure facilities was found to be the major factor influencing women's role in fishery related activities. A significant relation was found between different regions divided in terms of availability

of infrastructure facilities and participation of women in different activities. The households in parts of Elamkunnapuzha in Region -I and Pallipuram Panchayat in Region -III have better infrastructure facilities in terms of landing centres, peeling sheds, bus stand and boat jetty, which facilitate them in processing and transporting the commodity to the market. In Region -I households have access to both backwater and sea fishing. The villages in Region -II in the middle section of the Island are far from the main road and do not have adequate infrastructure facilities for processing and marketing of fish and hence the fish catch is sold off by fishermen in the landing centre. As a result, women in this region do not get enough opportunities to gainfully engaging themselves. In certain parts of these marine fishing villages women have to spend major part of their time in fetching drinking water from road side public hydrants.

Caste

Distribution of different castes in each activity is presented in Table 3. In peeling, the major participation is found to be that of 'Kudumbis' and 'Vaalas' with substantial participation by other communities

Table 3. Caste-wise distribution of women engaged in various activities (%) (participation in each activity is not mutually exclusive)

Caste	Peel- ing	Cur- ing and trad- ing	Dry- ing	Net mak- ing	Fish- ing in canals	Clam shell colle- ction	Oth- ers
Araya	14	16	3	80	—	—	8
Vaala	20	72	77	2	—	—	18
Christian	11	5	11	10	—	—	30
Ezhava	12	—	4	6	—	—	26
Kudumbi	26	5	0	2	—	88	4
Pulaya	12	0	3	—	100	—	—
Others	5	2	2	—	—	12	14
Total	100	100	100	100	100	100	100

also. Drying and trading is dominated by 'Vaalas' whose main household occupation is backwater fishing. In net making 'Arayas' have the major contribution estimated at 60% as the activity is the traditional skill of the community. Fishing in canals is dominated by 'Pulayas' and major participation in clam shell collection comes from 'Kudumbis'.



Fig. 4. Women engaged in sorting of fish into different groups.



Fig. 5. Fish drying in homesteads, another women oriented job.



Fig. 6. Women and children make a living out of clam shells filtered out of sand in the estuaries and backwaters.



Fig. 7. Skilled work like band braiding of fishing nets is also handled by women of coastal areas.

Age group and education

It can be seen from Tables 4 and 5 that most of the women in the sample who participate in peeling are in the age group of 13-40 with education upto secondary (VIII to X standard) level. In net making also women of the same age group have higher participation but the educational level is found to be at primary and below. In the case of curing and trading the major participation is from the age group of 40-49 with education below primary level.

Table 4. Age-wise distribution of women in different activities (%)

Age group (years)	Peeling	Net making	Curing and trading	Drying	Fishing in canals	Clam shell collection	Others
< 13	9	0	0	0	2	9	—
13-24	43	20	0	0	10	15	—
25-39	35	63	22	30	37	17	—
40-49	7	10	60	50	38	38	—
50-60	3	4	18	20	7	13	—
> 60	3	3	0	0	6	18	—
Total	100	100	100	100	100	100	—

Table 5. Education-wise distribution of women in various activities

Educational level	Peeling	Curing and trading	Drying	Net making	Fishing in canals	Clam shell collection	Others
< Primary	20	81	81	51	89	60	58
Primary	28	18	19	37	2	33	26
Secondary	41	1	0	10	9	7	10
>secondary	11	0	0	2	0	0	6
Total	100	100	100	100	100	100	100

Among the women who participate in peeling, a good percentage can be accounted for those who go to the peeling sheds to do the job. The income thus earned is mainly used for buying personal requirements like clothes and cosmetics. In the case of other activities where women of higher age group participate the earning is added to the household income.

Remarks

Out of the sample selected for the study, a total of 20% is estimated to be participating in fishery-related activities, the major areas of participation being prawn peeling, curing, drying and trading of fish, net making, fishing in canals and clam shell collection. In prawn peeling and net making women of younger age groups have better participation. The participation is also, to certain extent governed by caste, though caste structure does not bar any section from engaging in the above activities. Availability of infrastructure is found to be the major factor influencing women's participation in fishery-related activities.

Women in general are hopeful of improving their lives through the development of fisheries activities in the Island and show readiness to acquire new skills and undergo training for the same. But poverty and to certain extent ignorance have hampered their progress. The inhabitants of the Island in general felt that the Island has been witnessing a transformation in fishery sector over the years and opportunities for women to engage in gainful activities have been declining. This is mainly due to the construction of fisheries harbour at Cochin and subsequent landing of mechanised crafts there, thereby resulting in considerable reduction in the volume of business coming to the Island. Improvement in the situation could be brought about by hastening the process of establishment of the village societies by the State Government for supply of improved fishing implements and improvement of landing facilities for mechanised crafts at Munambam. Co-operatives may be organised for women engaged in processing and trading of fish and training may be given in improved handling and processing techniques. In similar way, women can also organise themselves for net making on a co-operative basis. Aquaculture will be another useful enterprise for women as the Island has good potential for it. Development of the same may be accomplished through the concerted effort of centres like Krishi Vigyan Kendra.

