

ROLE OF WOMEN IN FISHERY SECTOR IN TAMIL NADU

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ABSTRACT

This study focuses on role of Women in Fishery sector in Tamil Nadu. Fishermen population constitutes a significant portion in overall population. Particularly, the size of fisher women has increased significantly from fishermen census of 2000 and 2010. Similarly, the role performed by fisherwomen has also differed significantly in pre and post fishing activities. The study evidenced that the major role played by fisher women are fish marketing, Dried fish marketing, fishing, net making and Allied activities major roles for fisherwomen from the Tamil Nadu.

Keywords: Fisherwomen in fishing Activities Handling, Processing, Marketing, Net making

1. THE CONTEXT

Economic growth is the result of overall sectors' development. The backbone of economic growth starts with the development of agriculture sector which provides foods for survival as well as base of development of subsidiary sectors of the economy. As far as agriculture is concerned, India is the second largest in volume of output. Certain related sectors of agriculture have played a crucial role in the development of the Indian economy by providing employment to a number of people in the forestry, fishing and logging industries. In 2009, the agricultural sector contributed 17.5% to the entire GDP, and more than 50% of the total labor force working in India is employed in the agricultural sector. Production volume has gone up in Indian agriculture at a consistent rate since the 1950s. Much of this improvement can be attributed to the five-year plans that were established for the development of Indian agriculture. Developments in irrigation processes, as well as various modern technologies used have contributed to the overall advancement of agricultural processes. Fisheries sector is one of the important food production sectors in the State contributing to the livelihood as well as food security to a large section of the economically under-privileged population.

Tamil Nadu with its 1076 km of coastline, 1.90 lakh sq.km of Exclusive Economic Zone (EEZ) and a continental shelf of about 41,412 sq.km is one of the leading producers of both marine and inland fish and fish products. At present 6,728 mechanised boats and 56,792 traditional crafts (24,160 Vallams and 32,632 catamarans) are engaged in the marine fishing. The marine fish potential in Tamil Nadu is estimated at 7.00 lakh metric tonnes (L.MT.). There are 591 marine fishing villages and 363 marine fish landing centres in the State, with a population of 9.15 lakh fishermen of which, 2.60 lakh are actively engaged in fishing. There are three major fishing harbours and three medium fishing harbours. Apart from these harbours, other infrastructure facilities like jetties, fish landing centers, cold storage, ice plants and link roads have also been created in the State.

Women play an instrumental role in production and trading active ties all over the world. This contribution has further improved through the advent of globalization. Through globalization more opportunities are opening to women as some writers will argue. "Everywhere, women are overcoming traditions, customs, superstitions and prejudices and becoming major contributors in the marketplace. In China, for example, women are responsible for 25% of the businesses established since 1978. In Hungary, women started more than 40% of all businesses since 1990. In Mexico, 32% of women-owned businesses were started less than 5 years ago. In almost every region of the world, the proportion of women in the labor force has grown substantially. In transition countries, women are estimated to comprise 20% to 25% of entrepreneurs". (Kwong 2005)

There are about 0.5 million fisher households located all along the Indian coast and a total of 3 million fisherfolk inhabiting the coastal villages. The average number of sea going fishermen is 282 in a coastal village. Out of the 1.2 million fisherfolk in post harvest sector, women occupy a considerable proportion of more than 0.5 million (Sathiadhas et al., 1998). They play a significant role in the pre and post- harvest operations in capture fisheries while their presence is conspicuous in all the stages of culture fisheries. Their role in household management is far higher than the women of other sectors. Majority of the labour force in the pre-processing and processing plants of shrimp are women. Women also occupy a very good proportion of the workforce in export oriented processing of cuttlefish, lobsters, and finfish varieties.

2. PAST STUDIES

In a study on the Role of Women in Small Scale Fisheries of the Bay of Bengal (1980) Region revealed that in Bangladesh the participation of women in the small-scale fishery was very substantial [1]. It is estimated that about 30 per cent of women in rural coastal areas are directly or indirectly engaged in small-scale fishery activities. In fishing

families all female members are engaged on a part-time or a full-time basis. Women are involved in fish capture. Marketing of fish is predominantly in the hands of women. They also work as fish hawkers or run fish stalls in permanent market places or weekly bazaars. Drying and curing of fish is to a large extent done by women. Net making which is the main income-generating occupation is another important activity. In recent times, women engage themselves to a larger extent in the farming of fresh-water fish.

Daniel Viswasam Samuel (1986) defines fisherwomen as who are engaged in fishing and its related activities [7]. Veeraputhiran defines a fisherwoman as an active adult female decision maker in a fishing family [9]. In the present study, the term fisherwoman means women who belong to the fishing community engaged in fishing and fishing related activities for their livelihood.

According to Nauen (1989) fisherwomen have a dominant role to play in the post-harvest sector. From landing the fish to processing and selling in the market, women are often in charge [4]. They may clean and salt-dry bigger species including shark. Women and youths also play an important role in production. The Nigerian fisherwomen in the village Gabon for example go fishing. The capture and collection of seafood in canals, mangroves, small ponds, fish holes etc. for the family or trade is a familiar practice in most places. Still females often suffer lower social status than males and on the average have inferior access to food, formal education and health care.

Gracy (1998) Women, in a broad sense, in fisheries means women from fishing families or fishing communities, whose socio-economic status and wellbeing are determined by the uncertainties of fishing [5]. In a strict sense, the term woman in fisheries is used to indicate women who are involved in fish related activities like marketing, processing, net making, picking etc.

Yu Xiaogang (2001) has attempted to juxtapose the knowledge level of women and men and come up with sustainable fisheries management in reservoir fisheries [10]. Discussion with the men's group revealed that the highest fish yield is from March to June and the lowest from October to February. Discussions with women's groups revealed that fish prices are lowest from March to September and highest from December to February. Farm work, which is done mainly by women, is heaviest in April to June. This leads to an understanding that the newly introduced fishing ban from April to June can be beneficial if men can help women in agricultural activities during this time. This will protect the fish during the spawning season, and thus higher yields can be expected during winter. Women's knowledge shows that the fish price is highest in winter. Thus, high yields in winter will benefit the fishers. Women have more time to participate in fishing in winter, thus would be able to work together with the men. Men's engagement in agriculture during April to June will decrease women's workload in agriculture. By combining both women's and men's knowledge and by adjusting their activities, higher benefit and more sustainable use of natural resources can be realized.

Chand and Nityananda Das (2002) have given an account of basic requirements for an organised Fish Market [3]. They have specified the essential infrastructure facilities needed for an organised market. It has been suggested that to make the entire fish marketing system successful, apart from having an organised fish market, right marketing strategies are essential. For this, identification of consumers' needs and nature of demand for products and services is necessary.

Sheela Immanuel and G Syda Rao (2009) explained the status of fisherwomen in Andhra Pradesh [8]. The sample of the study was composed of 1180 fisher women and the results reveal that nearly 50 percent of the total female population of village. The study found about 82 percent of the fisher women were illiterate; 62 percent of the women involved in fish marketing and in fish drying activities. It is found that there is existence of high degree of discrimination in getting wages and employment.

3. FISHER WOMEN IN TAMIL NADU

Women participation in marine fisheries has been confined mainly to shore-based activities, such as net making, fish handling (sorting, grading, weighing, gutting and icing), fish trade distribution and processing [2]. A more detailed list of marine fishery activities and the potential participation presently envisaged for women in these areas is discussed below.

In Tamilnadu, women engage themselves in seaweed collection in addition to the traditional jobs of fishing, marketing, net making curing, and prawn seed collection. Salt-pans are another major sector, which employs a lot of women in Tamilnadu, where the ratio of women to men is 4:1. The overall structural changes in the marine fisheries sector has been due to mechanization, extensive use of ice in local markets and export oriented development efforts. Hence, women a good proportion of women has been dislodged from employment sectors like fish drying, curing, dry fish trade and net making. The scope of providing alternate employment for women in the sector and thereby invigorating their socio-economic progress as well as the growth of marine fishery sector remains unexplored on the changed environment.

Table 1: District-wise fisher's population sex ratio 1000 female per males

District	Male (2000 census)	Female (2000 census)	Sex Ratio	Male (2010 census)	Female (2010 census)	Sex Ratio
Thiruvallur	20845	20958	1: 1.5	28051	27466	1:0.97
Chennai	36552	34505	1:0.94	31477	30360	1:0.96

Kancheepuram	13179	12630	1:0.95	14989	14756	1:0.98
Villupuram	7542	7381	1:0.97	7363	7262	1:0.98
Cuddalore	20856	19726	1:0.94	23715	23003	1:0.96
Nagapattinam	40796	38972	1:0.95	48028	46336	1:0.96
Thanjavur	5291	5074	1:0.95	5960	5484	1:0.92
Thiruvarur	12952	12426	1:0.95	15915	15248	1:0.95
Pudukkottai	12944	12083	1:0.93	15972	15011	1:0.93
Ramanathapuram	60234	57057	1:0.94	88631	83283	1:0.93
Thoothukudi	35828	33730	1:0.94	37858	36083	1:0.95
Thirunelveli	10275	9935	1:0.96	11441	10675	1:0.93
Kanniyakumari	71018	66922	1:0.94	73471	69917	1:0.95
Total	348312	331399	1:0.95	402871	384884	1:0.95

Source: Fisheries Census, Department of Fisheries Chennai -6

Note: Sex Ratio is calculated as Number of females per 1000 Males

Table 1 shows district-wise fishermen population according to 2000 and 2010 censuses. overall, the table reveals that the fishermen population has considerably increased during the two census period. A close look at the table reveals that though the fishing population has increased considerably but the fisher women population has not increased as much as the total fishing population.

Table 2: District-wise Employment situation in Fishery Sector

District	Male (2000 census)	Male (2010 census)	Changes in Male Employment	Female (2000 census)	Female (2010 census)	Changes in Female Employment
Thiruvallur	12064	21839	9775	2914	5459	2545
Chennai	19511	23523	4012	5449	7890	2441
Kancheepuram	7815	12248	4433	1361	6059	4698
Villupuram	4225	7337	3112	1790	1662	-128
Cuddalore	11910	16007	4097	2454	4321	1867
Nagapattinam	23753	28804	5051	5416	6974	1558
Thanjavur	5990	8613	2623	839	2230	1391
Thiruvarur	3150	3838	688	1646	1532	-114
Pudukkottai	6813	10510	3697	504	966	462
Ramanathapuram	34574	52321	17747	8441	7750	-691
Thoothukudi	19158	22874	3716	2022	4592	2570
Thirunelveli	5339	6667	1328	815	826	11
Kanniyakumari	40168	45928	5760	3692	5333	1641
Total	194470	260509	66039	37343	55594	18251

Source: Census data 2000 & 2010 Department of Fisheries Chennai -6

Table 2 shows changes in employment situation according to 2000 and 2010 fishery censuses. It is clear from the table that the number of persons who work in the fishery sector both Male and Female have increased considerably. The number of male fishermen has increased almost three times than female. An interesting finding from the table is that number of female in the fishery sector has declined negatively observed in three districts namely Villupuram, Tiruvarur and Ramanathapuram. The reason is obviously, female belongs to fisher community tending to move other non-fishery activities such as working in private companies, housemaid, etc.

Table 3: Role of women in Different fishing activities 2000 & 2010 Table 3: Role of women in Different fishing activities 2000 & 2010

Districts	Fishing Female 2000	Fishing Female 2010	Δ fw	Fresh Fish Trade Female 2000	Fresh Fish Trade Female 2010	Δ ft	Dried Fish Trade Female 2000	Dried Fish Trade Female 2000	Δ dft	Net making Female 2000	Net making Female 2000	Δ Nm	Allied Activities Female 2000	Allied Activities Female 2010	Δ A
Thiruvallure	101	548	447	2498	2896	398	248	1314	1066	2	18	16	14	166	152
Chennai	0	285	285	2967	3085	118	1208	1828	620	7	389	382	97	82	-15
Kancheepuram	0	25	25	963	4329	3366	318	645	327	0	11	11	4	2	-2
Villupuram	0	10	10	1306	614	-692	398	572	174	0	11	11	0	17	17
Cuddalore	243	252	9	1749	1983	234	294	1320	1026	33	19	-14	50	15	-35
Nagapattinam	0	192	192	3242	3301	59	1267	2063	796	9	87	78	379	95	-284
Thanjavur	0	11	11	122	41	-81	597	365	-232	1	27	26	89	1	-88
Thiruvarur	77	105	28	109	617	508	294	771	477	7	56	49	0	99	99
Pudukkottai	152	44	-108	143	96	-47	130	70	-60	2	6	4	42	274	232
Ramanathapuram	1657	398	-1259	1514	644	-870	1849	1424	-425	946	365	-581	1182	1507	325
Thoothukudi	0	115	115	508	750	242	383	2337	1954	731	58	-673	16	165	149
Thirunelveli	7	19	12	156	51	-105	27	76	49	2	12	10	14	5	-9
Kanniyakumari	0	256	256	1513	1038	-475	157	483	326	352	587	235	241	226	-15
Total	2237	2260	23	16790	19445	2655	7170	13268	6098	2092	1646	-446	2128	2654	526

Source: Census data 2000 & 2010 Department of Fisheries Chennai-6

Note: Δ fw – Fishing women Δ ft – Fresh fish Trade Δ dft – Dried fish trade Δ Nm – Net Making Δ A – Allied Activities

Table 3 presents the major roles performed by fisherwomen according to the level of employment and the highest variation is observed in Thiruvallur, Chennai, Kanniyakumari, Thoothukudi, Nagapattinam, Tiruvarur, Kancheepuram, Thirunelveli, Vilupuram, Cuddalore respectively. Negative growth has found in Pudukkottai and Ramanathapuram districts. It is observed from the table that in 2000 census, certain districts such as Chennai, Kanchipuram, Villupuram, Thanjavur, Tiruvarur, Thoothukudi, Nagapattinam, Kanniyakumari, where women are not involved in fishing activity. According to 2010 census, the participation of women in fishing activity has considerably increased than previous years.

The employment status of selling of females for the year 2000 and 2010 is depicted same table among female fresh fish selling is highest in Kancheepuram district followed by Thiruvarure, Thiruvallure, Thoothukudi, Cuddalor, Chennai, Nagapattinam, remaining district are seen in negative growth of Ramanathapuram, Vizhupuram, thanjavur, Pudukotai, Thirunelveli and Kanyakumari.

Among female, the variation of dried fish selling shows highest in Thoothukudi district followed by Thiruvallur, Cudalore, Nagapattinam, Chennai, Thiruvarure, Kancheepuram, Kaniyakumari, Villupuram, thirunelveli, respectively, remaning district are seen in negative growth rate like Thanjaure, Puthukottai, ramanathapuram.

Among female percentage of growth rate in net making the data clearly shows that these has been a highest level in Chennai followed by Kanniyakumari, Nagapattinam, Thiruvarure, Thanjaure, Thiruvallure, Kancheepuram, Villupuram, Thirunelveli, Pthukottai, respectively. The table shows a negative growth in district of Cuddalore, Ramanathapuram and Thirunelveli. It is observed that in net making there were no women who were involved in this work in the year 2000, whereas, the data shows an increase in the number of women who activity participates in net making in the year 2010 in the district of Kanchipuram and Vizhupuram

In the allied activity among female the difference shows in highest Ramanathapuram, followed by Pudhukottai, Thiruvallure, Thirunelveli, Thiruvarur and Vilupuram district. The data also shows a negative growth in the remaining district in the table

4. CONCLUSION

Women are involved in fish handling, processing and marketing, of fish is predominantly in the hands of women. They also work as fish hawkers or run fish stalls in permanent market places or weekly bazaars. Drying and curing of fish is to a large extent done by women. Net making which is the main income-generating occupation is another important activity. In recent times, women engaged, in the marketing of fresh fish, face various problems, such as lack of cold storage facilities and appropriate fish preservation technologies, escalating cost of fish transportation and frequent strikes. They are also engaged in fish net making, raring, processing, washing, cleaning, salting, drying, and also packaging. They also work in some processing plants. The author gives suggestions to improve their condition.

The present involvement of women in predominantly shore-based activities is frequently not a result of deliberate attempts to exclude them from fish capture, though there is some bias against recruiting women for commercial fishing. This bias is partly due to social taboos against having women on board fishing vessels, but more important, it is really a reflection of the choice that women in fisheries have to make when deciding the lines of activity they would assume. Women combine earning activity with their responsibilities at home. Looking after the family, cooking the meals and

raising children are activities not easily relinquished unless the economic returns from taking on other activities are sufficiently high to enable the employment of domestic help, and unless there is no resistance from within the family which are not easy conditions to meet. In view of these difficulties, it is more realistic to concentrate on improving the technical skill in shore-based activities in which women are already engaged, instead of attempting to increase their involvement in fish capture or even to increase the number of women engaged in shore-based activities. This is a more realistic approach and contribution to the development of women's participation in fisheries because the technical and economic problems faced by women already within the industry are many, and needs to be resolved. Fisheries has reached a point of maximum absorption of manpower and it is difficult to increase the participation of women in fisheries. This may be a result of problems of over-fishing, so that the numbers employed in fishing have to be reduced. It could also be due to mechanization and industrialization, which generally make the production process less labour intensive.

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