# math

### NATIONAL AGRICULTURAL TECHNOLOGY PROJECT

**Proceedings of the Workshop on** 

### **Empowerment of Fisher Women**

in Coastal Ecosystem of Andhra Pradesh, Karnataka, Kerala and Tamilnadu





ANGRAU Auditorium, Rajendranagar, Hyderabad 13th & 14th October 2003

#### **CHAPTER 9**

## PARTICIPATION OF WOMEN IN POST HARVEST FISHERIES SECTOR

N. S. Sudhakara , Vijaya Khader , R. Sathiadas , H. Mohamad Kasim , R. Narayana Kumar , K. Dhanpal , J.Lakshmi , & Fameena Hassan

#### Introduction

Women in India are traditionally involved in agriculture, dairying, animal husbandry and fisheries. The fisheries sector makes an important contribution to the national economy with a share of 2.5% of the GDP providing food and employment.

An overview of the fish utilization trend in India reveals the importance of women's participation in post harvest fisheries sector. Out of the total marine fish landings of about 2.2 million metric tones (Gopal Kumar and Ravindran 2000), nearly 65% are marketed as fresh fish for direct human consumption with women dominating the retail fresh fish trade in all most all the maritime states of India (BOBP, 2000). providing a link between the producer and the consumer. As much as 20% of the catches are processed by traditional methods mainly by salting and drying, which is an important livelihood activity for a significant number of women, throughout the coastal India. The demand for traditional products is strong and hence offers an opportunity for income generation with relatively low investment for the poor in fishing communities. The fish reduction industry utilizes about 9% of the fish landing: mostly the smaller low priced fish species, which are not preferred for human consumption and are sun dried to be used in poultry feeds or as manure. A significant proportion of women either independently process fish meal by sun drying or work as labour in by product units. The sea food export sector utilizes 6% of the marine fish catch and employs large number of women workers for grading, packing and freezing sea foods for export. Thus the contribution of women in every aspect of post harvest handling, preservation and processing of fish is substantial in the overall development of fisheries sector. Srinath (1987) has given an account on the role of women in small scale fisheries. Dubey and Kohli (2001) have presented an overview on the contribution of women in Asian fisheries. Ashalatha et. al. (2002) have depicted the changing role of fisher women in India. Sathiadas et. al, (2003) have given an account in the socioeconomic profile of the women workers in the post harvest marine fisheries sector in Kerala. But the information on socio economic issues and nutritional status of fisherwomen in India is inadequate to suggest appropriate intervention to improve income generation, the standards of sanitation and hygiene, product quality and address the specific problems confronting women in post harvest fisheries.

#### Methodology

The present study attempts to generate information on the activities, constraints, priorities and need of fisherwomen, in selected coastal villages of Andhra Pradesh, Tamil Nadu, Karnataka and Kerala (Table 1). The interventions which can significantly improve the situation of women especially in aspects of nutritional well being, improvement of product quality and significantly reduce losses rising in the income of fisherwomen are suggested. The data was collected using a questionnaire and discussions with the communities on the issues confronting women in post harvest fisheries.

<sup>\*</sup> College of Fisheries, Mangalore - 575002

<sup>\*\*</sup> Acharya N. G. Ranga Agricultural University, Hyderabad - 500030

<sup>\*\*\*</sup> Central Marine Fisheries Research Institute, Cochin, Chennai, Kakinada

#### Results and Discussion

A large majority of women are involved in the fisheries related activity. It is clear that the fresh fish marketing and traditional fish processing are the more preferred activity of most fisherwomen (Fig 1). As much as 50 to 70 % of the fisherwomen are dependent on fresh fish marketing and traditional fish processing (Table 2). The other activities are specific to the region such as, the clam collection and processing, fish processing plants and aquaculture in Kerala. The prawn seed collection, fish and shrimp farms and hatcheries and salt loading in Andhra Pradesh. Labour at landing centres, by products units and surimi plants in Karnataka provide work and income for large number of poor people especially women.

The marketing of fresh fish is relatively easy with access to fish for women, facilitating flexibility of operation, financial security and occupational sustainability. But the venders have range of problems (Fig 2 – raw material) with fish supplies becoming increasingly scarce, due to depletion of fish catches, increased competition from processing and export sector. Most women prefer this activity mainly due to the high demand for fresh fish and quick return of the investment.

The small scale women processors in the traditional sectors have more problems (Fig 3 – traditional processing). The profit margins are low, fluctuations in the product supply, lack of storage facilities, insect infestation present them with risks and uncertainties.

The frequently occurring occupational health hazards of women are mainly related to physical exhaustion due to long standing / long sitting / working in hot sun / untimely food / long working hours / long distance working with head load. Back ache, headache, chest pain, shoulder / joint / muscular pain / skin infection, burning sensation of eyes. Breathlessness are the common problems of fisher women, associated with post harvest fisheries activity in all the centres.

Researchers have demonstrated that by adopting systematic cost effective approach, it is possible to bring improvement in the traditional fish processing sector.

There are several general problems (Fig. 2 general) confronting fisherwomen. The advantages and preference of women to be in post harvest and the socio-economic conditions need to be analyzed before planning any intervention. The intervention need to be of participative approach determining the willingness of women to adopt the interventions.

#### Conclusion

Based on the understanding from the field research, it is clear that there is a need to improve the general situation of women on a long term basis. But as a priority, interventions in creating awareness among women on food, health, sanitation and child care, to educate women formally as well as informally in improvement of the quality of the product. Effort is to be made to have trained female extension workers. Women friendly technologies need to tested, evaluated and proper techno economic reports prepared to facilitate their use through entrepreneurship development programmes.

Table 1: Participation of Women in Post Harvest Fisheries in selected villages

Andhra Pradesh		Karnataka		Kerala			Tamil Nadu	
East and West Godhavari District	Prakasham and Nellore District	Dakshina Kannada	Udupi	Alappuzha	Kollam	Thiruvanthpuram	North Tamil Nadu Chennai	South TamilNadu Tutlcorin
Dummulupetta (200)	Vadarevu (250)	Bengre (160)	Hejmadi (87)	Aroor (433)	Theckumbhagam (83)	Poovar (344)	Kaslmedu (298)	Therespuram (278)
Uppada (200)	Pallepalem (250)	Boloor (86)	Malpe (240)		Neendakara (348)		Pulicut (239)	Tharuvaikulam (281)
Bhairavapalem (200)	Mypadu (330)	Mulki (75)	Thottam (223)				Kovalam (300)	Punnakayal (285)
Pathapadu (100)	Krishnapatnam (170)		Gangolli (137)				IH()	
Perupalem (100)	1800	1008		1208			1681	

- Total number of house hold surveyed: 5697
- The figures in the parenthesis denote number of house holds surveyed

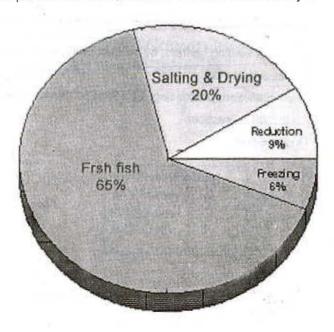


Fig. 1: Fish utilization trend in India

Table 2: Major Post Harvest Activities of Fisherwomen (Percentage)

Activities	Andhra Pradesh	Karnataka	Tamilnadu	Kerala	
Fresh fish Marketing	32	33	35	35	
Traditional fish processing	25	38	30	25	
Others*	43	29	35	40	

**Andhra Pradesh** 

: Prawn seed collection, Fish farm, Shrimp farms and hatcheries

salt loader

Karnataka ·

: Labour at landing centers, by product units, surimi plants and fish

processing plants

Kerala

Clam collection, processing, Sea food processing plants,

Aquaculture practices

Tamil Nadu

: House wives

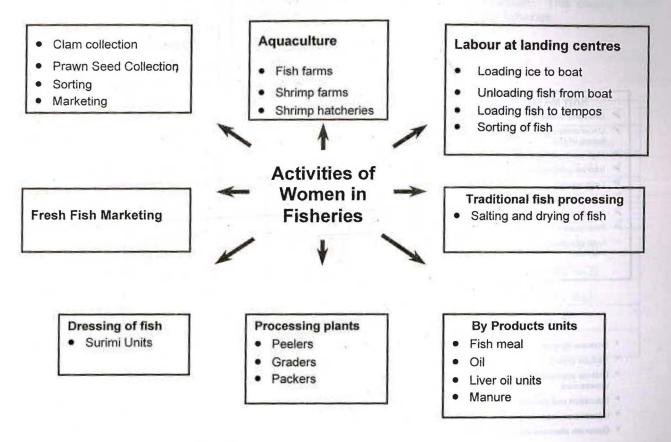


Fig. 2: Activities in Fisheries

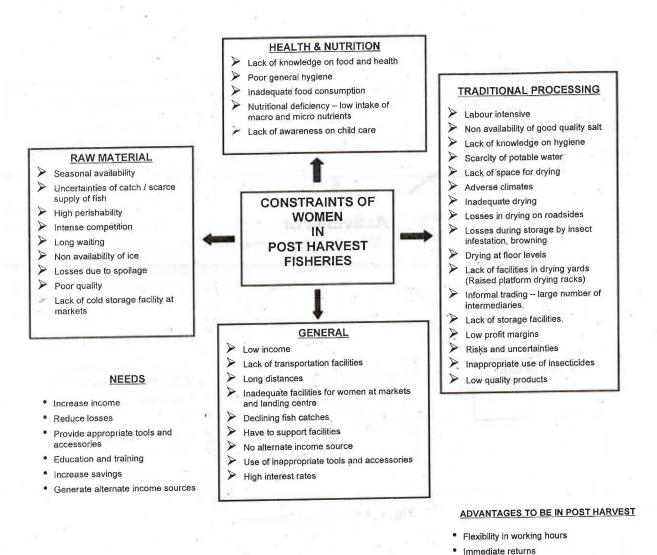


Fig. 3: Constrains of women in post harvest fisheries

Skill and expertise

Low investment
Low working costs
Support from the family

Strong demand for fresh and dry/salted fish

#### Assessment of general situation of women in small scale fisheries

Six parameters namely Food Security and Nutrition, Income, Community Services, Division of labour, Fish processing and marketing were used to assess the position of general situation of women in small scale fisheries. The data obtain is provided in table 1. When we compare states, Karnataka occupies first rank is food security and nutrition, community services and fish processing. Kerala occupies 1st rank in division of labour and marketing. Andhra Pradesh occupies 1st rank in income where as Tamilnadu occupies 3rd rank in almost all the parameters when we observe the mean of the relative ranks Kerala ranks 1st followed by Karnataka, Tamil Nadu and Andhra Pradesh. This clearly Kerala occupies first place in the position of general situation of women in small scale fisheries.

Table 1: Position of general situation of women in small scale fisheries

Parameters studies	States studies						
	Andhra Pradesh	Karnataka	Kerala	Tamilnadu			
Food security and nutrition	60 %(4)	72 %(1)	70 %(2)	65 %(3)			
Income	60 %(1)	40 %(4)	50 %(2)	46 %(3)			
Community services	66 %(3)	97 %(1)	64 %(4)	96 %(2)			
Division of labour	50 %(2)	40 %(4)	52 %(1)	45 %(3)			
Fish processing	40 %(4)	80 %(1)	70 %(2)	50 %(3)			
Marketing	50 %(4)	70 %(2)	80 %(1)	60 %(3)			
Total ranks	18	13	12	17			
$\overline{\chi}$	3	2.17	2.0	2.8			

Values in the parenthesis are ranks among the states;  $\bar{\chi}$  mean of the relative ranks