

Women in Fisheries on the East Coast of India

A Review



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by

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Abstract

The Women in Fisheries Programme has been designed to assess the needs and status of women in fishing communities with regard to their livelihood security, food and nutrition, and community development. This field study evaluates the impacts of the past interventions made by the Bay of Bengal Programme (BOBP) and other agencies and also determines the level of empowerment at the grassroots. Over 30 villages were visited across Tamil Nadu, Pondicherry, Andhra Pradesh, Orissa, and West Bengal. Participatory Rural Appraisals (PRAs) were conducted with women in fishing communities to assess their situation. An information networking programme was also conducted to establish contacts with NGOs working among women in the fisheries sector. Alternative livelihood strategies were explored and recorded to pave the way for meaningful future interventions by the BOBP-IGO. Self Help Groups (SHGs) were found to be catalysts in transforming the lives of fishers through viable micro-enterprise development.

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Preface

This document is the Report of a field study conducted by the Bay of Bengal Programme – Inter-Governmental Organisation (BOBP-IGO) under the Women in Fisheries Programme (WFP) during the period October 2003 to March 2004. The study covered more than 30 villages and project sites of the erstwhile BOBP in the coastal areas of the States of Tamil Nadu, Andhra Pradesh, Orissa, West Bengal and the Union Territory of Pondicherry. Networks were established with more than 40 governmental and non-governmental organisations through a detailed questionnaire outlining their involvement with women in coastal communities and a checklist prepared to assess interventions. This was done to establish the status of women in fishing communities; their involvement and contribution to the local economy; the impacts of changes in the local and global market and environment on their lifestyle and the interventions made by the government, NGOs and the BOBP to alleviate marginalization.

The report *inter alia* lists scientific interventions that have been made to enhance the living conditions of the marginalized fishing community and provides an assessment of the challenges involved in enhancing the status of women and possible alternatives that could be introduced to secure their livelihood and income.

The BOBP-IGO is a regional fisheries body, which presently covers four countries around the Bay of Bengal – Bangladesh, India, Maldives and Sri Lanka. The BOBP-IGO plays a catalytic and consultative role in developing coastal fisheries management in the Bay of Bengal to help improve the conditions of small-scale fisherfolk in the member countries.

Foreword

Women in most countries account for the majority of informal sector activity. In the fisheries sector, they play a vital role in post-harvest activities, which provide income and protein for the communities. However, the paradox is that despite strong resourcefulness and capacity, women's contributions are hardly recognised by the government, industry, and banks.

Dr Merryl J Williams, the former Director General of the WorldFish Centre in Penang, Malaysia has rightly said "lack of analytical, gender-specific information has worked to inhibit development opportunities for women in fisheries sector, and this has resulted in economic planners not viewing women as stakeholders. Part of the reason for this is that much of the work done by women is not remunerated or is poorly remunerated and, therefore, little valued in financial terms".

The Bay of Bengal Programme's developmental efforts in the region have shown that sustained improvements in productivity and the sustainable use of fisheries and other natural resources can be achieved if women's crucial role is acknowledged. It has also recognised that women are important resource users and managers who, along with men, need education, training, and inputs that will enable them to use coastal resources more sustainably.

The Women in Fisheries Programme (WFP), initiated by the BOBP – IGO in September 2003 is a response to low-income fisherwomen's need for improved livelihood opportunities and a way to enrich the fields of human services and community development. To enable better understanding of the needs of the fisherwomen, a Review was conducted during October 2003 to March 2004 in the coastal areas of Tamil Nadu, Pondicherry, Andhra Pradesh, Orissa and West Bengal. Networks were established with government and non-government organisations working with fishing communities in these areas through a detailed questionnaire followed by extensive field visits to about 30 villages and PRA exercises.

The Review brings to light the problems of women from fishing communities who have become marginalised due to various changes that have taken place within and outside the fisheries sector during the last 2-3 decades. Their participation in the workforce has been reduced and the general lack of awareness on alternate livelihood opportunities and access to credit have contributed to an intergenerational cycle of poverty and deprivation. Further, fisherwomen entering the self-help groups are ill-prepared for facing the challenges of market forces and mostly end up in unsuitable and un-remunerative activities.

The Review also emphasises that fisherwomen can succeed in increased livelihood opportunities, if they are trained in a market-oriented business approach, which will lead to enterprise development, capacity building, and significantly increase their earnings and self-confidence. It recognises the need for increased collaboration, outreach and advocacy with community organisations and government agencies to enhance fisherwomen's access to technology, marketing avenues and financial assistance. Most of all, the Review lays the groundwork for future gender-specific activities.

The credits for this informative publication go to Ms Gitanjali Chaturvedi who was our Consultant for the WFP and to Messrs Jonathan Davidar and S Jayaraj for the editorial and the layout. We hope this Review along with its companion publication – Working Together: A Manual on Self Help Groups (BOBP/MAG/26) will lead to more fruitful interventions that improve the livelihood and income of poor fisherwomen on the east coast of India and other parts of the country where fisherwomen face similar challenges.



Yugraj Singh Yadava
Director

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A) Introduction

It has often been said that women are marginalized despite their constituting one half of the world's population; one-third of the labour force, accounting for nearly two-thirds of the hours worked. According to some estimates, women receive only one-tenth of the world's income and possess one-hundredth of the world's property. It has also been said that most statistics are given more importance than they rightly deserve and any estimation (and indeed evaluation) of communities must be corroborated with findings on the field.

As part of the field study conducted under the Women in Fisheries Programme¹, more than 30 villages and project sites were visited and networks with over 40 governmental and non-governmental organisations established in four east coast States (Tamil Nadu, Andhra Pradesh, Orissa, West Bengal) and one Union Territory (Pondicherry) during the period October 2003 to March 2004. This was done to establish the status of women in fishing communities; their involvement and contribution to the local economy; impacts of changes in the local and global market and environment on their lifestyle; and interventions made by the government, NGOs, and the Bay of Bengal Programme (BOBP) to alleviate marginalization. These interventions included the formation of Self Help Groups (SHGs), introduction of appropriate technologies, and training in different fisheries-related skills and non-fisheries activities.

Here is an account of the findings of the study. Before outlining the activities of women in fishing communities, it must be highlighted that the status of women and the activities they perform is primarily contingent upon the environment: natural, physical, and social. A discussion on the overall status of women along the east coast is followed by interventions made by NGOs, the government, and the BOBP. In addition, the problems of people are highlighted to enable a better understanding of livelihood opportunities in specific regions. The report also lists scientific interventions that have been made to enhance the living conditions of the marginalized fishing community. Finally, the report concludes with an assessment of the challenges involved in enhancing the status of women and possible alternatives that could be introduced to secure their livelihoods and income.

The report is the outcome of extensive field visits and discussions with the community in the coastal areas of Tamil Nadu, Andhra Pradesh, Orissa, West Bengal, and Pondicherry. Networks were established with NGOs and research organisations working with fishing communities/women in these States and Union Territory and a checklist prepared to assess interventions. Further, a detailed questionnaire (see page 65) was circulated to determine their involvement with women in coastal communities. These now form part of the BOBP-IGO databank.

Projects selected for site visits were based on two criteria: a) areas where BOBP had a presence and b) areas where NGOs and research institutions such as the MS Swaminathan Research Foundation (MSSRF) have been involved in community development; encouraging SHGs and creating income-generating opportunities.

B) Status of Women in Fishing Communities

Twenty years ago, an assessment of the status of women in fishing communities was made at the behest of the BOBP. This was done to ensure that projects aimed at improving the livelihood of fisherfolk included a gender component. Over the years, although regional variations exist, there has been little improvement in the status of women in fishing communities.

Throughout the east coast, women are found to be uniformly poorly educated (if not altogether illiterate), highly superstitious, conservative, and averse to change. In Tamil Nadu, Andhra, and Pondicherry, they perform a significant part of post-harvest activity which includes marketing and processing fish and sometimes net mending. Their control over finances varies and often depends on the income-earning capacity of their spouses. However, in these States, women have significant control over family finances. Nutrition standards in all villages are low, except for few sites in Tuticorin and Chennai where urbanization

¹ Programme initiated by the BOBP-IGO during September 2003 (WFP/2003/IND)

and awareness have offered different dietary options. They have large families (note: family planning operations have been performed on most women in Orissa) and do not have basic sanitary facilities. In this regard, Bengal is a refreshing exception where individual latrines (toilet units) have been recently constructed in some coastal villages.

The involvement of women in the public sphere such as political organisations (Panchayats) varies. In Mandapam, Tuticorin, and south Tamil Nadu, women have been actively involved as Ward Members and even Councillors. However, in urban areas of Chennai and Pondicherry, such involvement is rare. In Andhra Pradesh, women are not encouraged to participate in public life aside from conducting business.

In Orissa and Bengal, women rarely participate in the public sphere and their participation in decision-making is minimal. Women in Bengal talk about family preferences for a male child over a female child. Instances of malnutrition among women and girl children are high. Women do not control finances, even though the women in Bengal claim that things are slowly changing. Wife beating is common and alcoholism is rampant. While women in Tamil Nadu, Andhra Pradesh, and Pondicherry, justify their husbands' alcoholism as a means to combat tough conditions at sea, women in Orissa believe that it is an unnecessary evil. Significantly, when the government solicited their participation in curbing the menace, women played a vital role as informers. On one occasion, they even beat up some drunken men in their village and had them imprisoned.

Over time, the role of women in marketing fish has been greatly reduced. The advent of middlemen and resource depletion due to unsustainable fishing practices and increased fishing capacity has almost eliminated their role in marketing fish in some areas (such as Vellapatti village in Tuticorin and Meenavarkuppam in Ramanathapuram, Tamil Nadu). Women have sufficient time on their hands to diversify their livelihood strategies, but their conservative attitude and scepticism about government projects makes training difficult. It has also been noted that women are no longer actively involved in net mending. A few net mending units in Kanniyakumari District, Tamil Nadu, employ young girls from agricultural communities. Occasionally, women assist their husbands in cleaning nets but this activity does not provide them with any income. Also, net mending has become a male-dominated activity and men spend the afternoon and early part of the evening engaged in the activity.

In Orissa and Bengal, women have a limited role in marketing and processing fish. Orissa has a complex fishing community: there are ethnic Oriyas who possess small land-holdings and have diversified their livelihood strategies to include activities such as small-scale farming, handicrafts, running petty shops, and providing labour in agricultural fields and cashew plantations. This community fishes in estuaries and does not venture into the open sea. Women are involved in dairying, poultry, and similar income-generating activities. The migrant Andhra community on the other hand, fishes in the waters of the Bay of Bengal, south of Paradwip. They have no rights to land or other property and have not diversified their livelihood strategies. Women are involved in drying fish and selling fresh fish in the markets. Since they do not possess property, they mostly work as labourers in agricultural fields, construction sites, and cashew plantations. The two communities are often in conflict with one another. A third community, north of Paradwip, is the Bengali-speaking Muslim community. It is believed that this community originated from Bangladesh and has now occupied the beaches around Balasore, Bhadrak, and Jagatsinghpur. Women from this community dry fish on a small-scale in addition to being involved in marketing.

Women in Bengal have similar opportunities to diversify their livelihood strategies. This is primarily because the large Gangetic delta offers ample opportunities to combine small-scale fishing, pen culture, animal husbandry, and farming. In fact, women in the State are looking for niches where they can be economically productive.

C) BOBP and Women in Fisheries (1979 – 2000)

The BOBP is often criticised for not including women adequately in the participatory management process². However, some important research was conducted to assess the status of women in fishing communities and their needs. The BOBP also focussed on practical ways to improve marketing and credit requirements. Capacity building, facilitating effective links between fishing communities and the government, and introduction of appropriate post-harvest technology marked the role of the BOBP among its participating States in India. While the introduction of post-harvest technology will be discussed in

Fact file: Coastal Fishing Communities on the East Coast of India

- Average family size: 6 members
- Average household income per annum: Rs. 15 000 (approximately US \$ 330)
- Role of women: marketing fish, processing dry and smoked fish
- Articles of consumption: rice and trash fish
- Literacy: minimal
- Linguistic groups: Tamil, Telugu, Oriya, Bengali

Indicators determining the status of women in fishing communities

- Literacy
- Nutritional standards
- Family size and infant mortality
- Post-harvest activity resulting in income generation
- Involvement in household activities: fuel and water collection
- Superstition
- Participation in public sphere

Section D, training programmes for fisheries officials and the constitution of the Fisherwomen's Extension Service³ (FWES), created in 1981 by the Department of Fisheries (DOF), Government of Tamil Nadu marked a watershed in empowering fisherwomen.

Significantly, in 1982, the BOBP trained fisherwomen to act as link workers⁴ in Tamil Nadu to liaison between the villages and the government. It was hoped that they would act as catalysts by ensuring the speedy adoption of development and welfare schemes to which their villages were entitled. The programme was facilitated by the FWES. BOBP organised a ten-week residential course in 1982 for 21 link workers from seven villages near Madras (now Chennai). Highlights of the course included field trips to banks and various governmental departments and meetings with resource persons from several institutions. Subsequently, another course lasting two weeks was held to help link workers improve their skills.

With guidance from the FWES, trained link workers helped fisherwomen set up cooperative societies in their villages to channel welfare and subsidy schemes from various agencies: government and private. A number of schemes for fisherwomen were introduced: low interest credit, subsidies for motorised tricycles for fish transport, medical centres, daycare centres, and primary schools. In general, welfare schemes implemented by NGOs were found to be easier to access than government-funded subsidy schemes. In cooperation with the State government, Cooperative Training College, Chennai, and the FWES, a training course was organised for link workers on the management of cooperatives. It was suggested that the college could conduct such courses for fisherwomen link workers from the entire State in the future.

The response to the link worker scheme from the government and fisherfolk was positive and the BOBP assisted the expansion of the scheme throughout the State. The formation of cooperative societies among fisherwomen resulted in the enhancement of the status of fisherwomen and their standard of living. For instance, cooperative societies encouraged the following activities: promotion of savings; non-formal education for women; pre-school and primary school education; vocational training; and employment for society members. These training programmes facilitated better cooperation among coastal communities and the government, the formation of several SHGs, and enhancement of community life through the construction of community halls, regular supply of water, and improved sanitation.

² See BOBP/REP/85

³ See BOBP/REP/7

⁴ See BOBP/REP/27, BOBN: March, 1983

Income generation and provision of credit facilities was another important concern of BOBP projects. Two agencies were identified to organise loans for fisherwomen in Adirampattinam⁵ (Tamil Nadu): the Working Women's Fund (WWF) and FWES. Canara Bank provided the WWF loans and the Fisherwomen's Cooperative Society provided the FWES loans. By the end of 1981, under the WWF scheme, 227 women were organised into 25 groups (of about 7 to 11 members each) and obtained bank loans of Rs. 100 to 300 each at 4 percent interest for fish marketing operations. While reviewing the scheme in 1982, suggestions were made to:

- operate a savings scheme with the loan scheme;
- assess the amount a woman could save and the number of loans she could take without increasing her liability; and
- give recurring loans to fewer borrowers rather than first-time customers.

Depending on the distance to the market, the profit was about Rs. 10 for every Rs. 100 invested; the majority lost money in the operation about once a month. However, a single loan could not determine whether the process of capital formation had been achieved.

According to a study conducted in three villages of Visakhapatnam⁶, obtaining credit was the most pressing concern of fisherwomen who were ignorant about how to approach banking institutions. The BOBP offered to facilitate by organising workshops with bank personnel and fisheries officers to explain the Grameen Bank approach and adopt it locally.

Over the years, although the savings habit has been encouraged among women in fishing communities, it has not served to create wealth. This is because fishing communities in many parts of the east coast contribute generously towards annual festivals in their villages. This expenditure burns a big hole in their savings and women who note this as a major hindrance towards augmenting savings are too scared to protest.

D) Self Help Groups and Income Generating Activity

Self Help Groups (SHGs) are best defined as voluntary support agencies formed to solve immediate psychological, financial, or any other needs. In India, they have become associated with rural micro-savings institutions. Prior to SHGs becoming the mantra for social and economic upliftment, cooperatives were seen to be the only solution to the problem of marketing and creation of savings. However, with time, cooperatives became redundant since they did not promote profit-inducing income-generating activity and were used as organisations through which loans could be facilitated to members. In fishing communities, cooperatives have ceased to function as fora determining standards of fish marketing and prices. Cooperatives have also become increasingly corrupt⁷. Membership to SHGs and cooperatives may overlap. Often, cooperatives form the registered (formal) umbrella encompassing several SHGs. SHGs have limited membership and are thus easier to manage unlike unwieldy cooperative societies. It must not be surmised that the cooperative movement in fishing communities has been a complete failure. Though they are not strong on the east coast, there have been successes on the west coast.

The concept of SHGs has been introduced to wean the fishing community from the trap of dependency on the moneylender, bank loans and government subsidies but the success of these ventures has been limited. While SHGs are easy to organise and operate, it is difficult to channelise their savings into income-generating activities. When income-generating activities are identified, training, technology transfer, credit facilities, and capacity building are relatively simple exercises. The inability to effectively market finished products is a major impediment towards generating profits and often dampens the enthusiasm of the group. This gap has not been addressed by any of the agencies involved in providing livelihood interventions and alternatives to the fishing community. Bridging the gulf between the community, institutions, and markets is critical to the success of any project. However, income-generating activities are limited since people are wary of the risk involved in individual enterprise. Marketing finished products poses a challenge and unless well planned, even well-established businesses suffer losses.

⁵ See BOBP/REP/25, BOBP/WP/38

⁶ See BOBP/REP/26, BOBP/WP/57, BOBN: September 1985 (19)

⁷ By way of an illustration: in the fishing village of Timapuram near Visakhapatnam, a cooperative society of 164 women was formed to market fish in the wholesale market at Nakapalli. A van was provided to them 8 years ago which was misused by the President and reduced to scrap.

SHG Trivia

- The SHG-Bank linkage programme was launched in 1992 by NABARD.
- Over 7.8 million families have been linked by the programme.
- 266 banks have been linked with the SHG network. These include 27 public, 13 private, 165 regional/rural and 61 cooperative banks.
- 362 districts in 24 States and Union Territories have been networked.
- Over 461 478 groups have been linked with banks.
- 90 percent of SHG members are women.
- 66 percent of the SHGs are in the southern districts of Tamil Nadu and Andhra Pradesh.
- The repayment rate of loans issued to SHGs is 95 percent.
- Over 2 155 NGO partners are involved in liaising between banks and SHGs.
- Punnakkayal in Tamil Nadu has the largest number of SHGs in an Indian village with over 50 groups consisting exclusively of fisherwomen with no governmental, NGO, or bank support.

SHGs are still seen as alternatives to cooperatives and avenues for accessing government subsidies and bank loans. In some cases, they have also become instruments of political control of grassroots. SHGs are informal groups unlike cooperatives that need to be registered. State governments see them as organisations facilitating rural development and have included a policy component to the effect. As a result, these groups are no longer spontaneous associations formed to address the problems of poverty and employment. For instance, in Andhra Pradesh, incentives such as the allocation of funds to SHG members and mobile phones for presidents of government-initiated SHGs, threaten such organisations with corruption and render their initial objective redundant.

Stages of SHG Formation

- Women form groups on the basis of their needs and attempt to address them. This could be facilitated by an NGO.
- Members of the group initiate savings on a weekly/monthly basis.
- Individual members can borrow money from a revolving fund to meet their requirements at a nominal rate of interest.
- In case larger funds are required for investment in business, banks are approached for credit.
- The group may also identify an income generating activity that will enhance savings and credit formation.

The Debt Trap

Since SHGs are informal organisations there are no rules determining constitution of the group, number of members, and activities conducted by the group. The initial objective of SHGs is to promote savings for income generation and reduce dependence on bank loans and government subsidies. There is no limit to the amount a member can save each month. Savings thus encouraged do not teach group members how to manage money: often money is saved by compromising on nutritional standards. In addition, women tend to take loans from the revolving fund to meet expenses for marriages, illnesses, and similar exigencies. SHG savings are also utilised as collateral to get loans for individual business. Loan repayment is slow and women are still uncomfortable with the idea of conducting group business, perpetuating the debt trap to which they are accustomed.

Nevertheless, there have been successful SHG experiences in some project sites visited. Some examples are highlighted below:

- The dalit (community of people who are traditionally believed to be untouchables/outcastes) village of Thirukanchipet, Pondicherry, is an example of a marginalized community that has changed their lives through SHGs. Though a well-maintained road runs through the village, there is no public transport for five kilometres. The United Nations Development Programme (UNDP), District Rural Development Agency (DRDA), and MSSRF have assisted the people to invest in a sixteen-seat auto rickshaw to ferry people from the village to the nearest bus stand. The auto rickshaw makes 70 trips a day and is powered by batteries. The charge for availing this service is nominal and the enterprise makes good profit.
- Two years ago, women from the fishing community of Neelankarai on the outskirts of Chennai, Tamil Nadu, were organised into 12 SHGs by the Rural Welfare Officer and the Women's Development Council (WDC). Today, in addition to increasing their savings, they have also taken over the management of a newly constructed (by the DOF) fish market in the area. Their responsibilities include: maintenance, upkeep, watch and ward. They admit that ever since the market came into existence, they have succeeded in enhancing their social status and have forged friendships.
- In Rameswaram Island, Tamil Nadu, a group of physically-challenged people began a centre (Nesakarangal) to impart training in shell and palmyra leaf craft to others with similar disabilities to enable them to earn a livelihood. Today, fisherwomen are included in the training programme, which includes tailoring. Since Rameswaram is a popular tourist and pilgrim destination, these products find a ready local market. The tailoring unit has also obtained a contract for stitching school uniforms. In addition, Nesakarangal serves as a Village Information Centre where local news is broadcast, computers are available for members, and updates are given on the weather/price of fish.
- Fisherwomen of Nallavadu (Pondicherry) debated the need for a lentil-grinding machine in their village. Two of the 10 SHGs in the village took on the responsibility of starting a business with the grinding machine.
- SHGs formed in Vellapatty village in Tuticorin, Tamil Nadu, help women to conduct individual businesses. Women have established petty shops, fulfilled household needs, and have also joined the fish pickle unit established by MSSRF and UNDP. Another group fattens crabs to fetch a better market price.
- An SHG in Sandeshkhali, South 24 Parganas, West Bengal, successfully breeds and markets prawns and fish. A representative of the group undergoes training conducted by the Ramakrishna Mission Krishi Vigyan Kendra (RKM KVK) to update herself on technological innovations.
- Women in Gobindrampur, North 24 Parganas, West Bengal, played an important role in facilitating sanitation in their village by constructing low-cost latrines.
- An SHG of 16 women in Gadimoga village of East Godavari district, Andhra Pradesh, provide mid-day meals to the village school. Since the scheme had to be undertaken with minimal cost, each woman earns about Rs. 225 per month.

E) Appropriate Technology Interventions

Appropriate technology was introduced by the BOBP in a few project areas to reduce post-harvest losses and decrease the burden on women involved in marketing and processing. Such initiatives included the introduction of:

- ice boxes to ensure freshness of fish;
- alternate fish containers for itinerant fish vendors; and
- drying racks and smoking bins.

Of all these interventions, some have been successful and others unsustainable. Though women in some areas have discovered multiple uses for ice boxes, most people are reluctant to use them since many

consumers believe that fish kept in ice boxes is not fresh. The alternate fish container introduced for itinerant fish vendors was found unacceptable in some areas since it was believed that a closed container did not facilitate circulation of air necessary to ensure freshness⁸. Drying racks and smoking bins were found popular and useful but fisherfolk were unable to maintain them and evolve management practices to deal with large quantities of fish.

A solar dryer (introduced by District Fishermen's Youth Welfare Association, Visakhapatnam) aimed at reducing post-harvest losses and hygienic processing of fish was not popular since women were reluctant to abandon traditional albeit wasteful methods of fish processing. Another noteworthy intervention made by an NGO with a view to encouraging hygienic preparation of dry fish among women in Paradwip met with failure. This method entailed gutting and cleaning the fish before stringing it across poles to dry. Women said the method was abandoned since it was time-consuming and labour-intensive and also reduced the weight of the fish. The mindset of small-scale fisherfolk defies classical economics, as they live on daily wages without the foresight to plan and act towards a sustainable tomorrow.

The Besant Nagar fish market in Chennai that sought to rehabilitate fish vendors in an organised market rather than hawking fish in unhygienic conditions on the streets has proved to be a failure⁹. It was discovered that neither the fish vendors nor purchasers were concerned with standards of hygiene that the BOBP and Municipal Corporation of Chennai apparently tried to impose. Instead, fisherwomen who had been organised into forming a marketing cooperative found competition from roadside fish vendors. Efforts to relocate women vendors into the fish market have been resisted and the fish market continues to present a sorry picture of unoccupied stalls¹⁰.

Market Myths

- Fish sold on the streets tastes better than fish sold in organised stalls
- Fish stored in ice is not fresh
- Smoking bins need not be maintained
- Solar drying units have a limited capacity even though they are faster
- Fish breathe better when transported in wicker/bamboo baskets



⁸ See BOBP/DFID/INF/13; Bay of Bengal News: June 1993 (50)

⁹ See BOBP/WP/66; Bay of Bengal News: September 1989 (35), September 1990 (39)

¹⁰ Most causes for failure of the fish market pale before the inability of the fish vendors to retain their cohesiveness as a group. When the site for the market was selected, the area was considered suitable since it was beside the bus station. See BOBN: December 1992 (48)

Here is a list of projects/activities carried out by the BOBP between the years 1975 and 1990:

Andhra Pradesh

District/ village(s)	Activity	Collaborations	Year
Kakinada	Fishing gear unit	Andhra Pradesh Fisheries Corporation	1975
Srikakulam	Cooperative societies, socio-economic survey	Cooperative Central Bank, Women and Child Welfare Department	1980 1984
Visakhapatnam (Bheemunipatnam, Chokkavanipalem, Mangamaripeta and Peda Jalaripeta)	Extension (study)	—	1985

Tamil Nadu and Pondicherry

District/ village(s)	Activity	Collaborations	Year
Tuticorin	Shrimp processing, fish containers	Government of Tamil Nadu, DFID	1980 1993
Cuddalore	Shrimp processing		1980
Chennai	Shrimp processing		
Kanniyakumari	Net making unit, fish containers	DFID	1980 1993
Chingleput	Fisherwomen's cooperatives, training link workers	FWES	1982
Adirampattinam	Credit facilities, link worker training	FWES	1983
St Thomas Mount (10 villages) Chengai Anna Dist (Tiruporur, Tirukazhidundran blocks)	Improving living conditions of fisherwomen – awareness, inculcating managerial skills, mobilisation of savings, health, nutrition, etc.	Health Department, NGOs	1991
Near Chennai (Peraineelaankarai, Chemmencheri, Pattipulam)	Socio-economic study of fisherwomen (working paper)	—	—
Thiruchinakuppam, Panaiyurkuppam, Chemmencheri	Study on factors influencing the status of fisherwomen (working paper)	—	1984
Chennai fishing harbour	Women in marketing study	—	—
Besant Nagar (Oorur and Olcott)	Fish market	Assisted by DFID-PHFP	1989-1990
Thanjavur Tirunelveli Pondicherry (Chettinagar)	Cooperative societies, credit and savings scheme, fair price shops, child care, adult education Purchase of a van to enable easy access to market	— Chettinagar Fisherwomen's Cooperative Society	— 1989

F) Alternate Livelihood Strategies

With resource depletion, women often resort to alternate sources of income generation. Alternate livelihood strategies include occupations that do not directly relate to fisheries or resources of the sea. These include different skills (such as tailoring and handicrafts) and services (such as transport and communication). Traditional fishermen seldom consider diversifying their livelihood strategies. They continue to work as fishermen either on their own crafts or as labour in trawlers and other resource-specific fishing vessels. As a result, there is seasonal migration in some areas of Andhra Pradesh and Tamil Nadu.

As mentioned in Section A, women have opted to work in agricultural fields. In Tuticorin, some people work in neighbouring saltpans, while in Rameswaram, shell collection and shell craft are viable options. Palmyra craft is popular among fishing communities near Keelakarai. In Andhra Pradesh, most women work in shrimp farms. In Orissa, there is a difference in the livelihood strategies adopted by Oriya and Andhra women. While the former also work in their agricultural fields, the latter work as labour in construction sites and cashew plantations. In Bengal, animal husbandry and pisciculture provide profitable alternatives. However, these alternatives do not assure livelihood security and fail to prevent male migration to other areas. Field visits revealed viable alternate income generating options in certain areas. However, some of these options need to be further explored with the assistance of various government departments, NGOs and community mobilisation towards income generation. Some of the suggested alternatives are listed here:

- **Coastal/Marine Ecotourism:** The east coast offers many scenic beaches that can be developed as tourist attractions. Each area has its own natural and geographical peculiarities. In all administrative regions visited, the potential for tourism and ecotourism is high. Tamil Nadu has beautiful coastal churches and forts that could be developed as tourist attractions. Pulicat Lake is a bird sanctuary and Pulicat town has beautiful Dutch relics. It is also easily accessible from Chennai and has modern amenities of communication, transport, and lodging. The Gulf of Mannar region has a mix of religious, educational, leisure, and adventure tourism features. In addition, being designated a marine biosphere reserve, the potential for tourism and income generation may increase. Pondicherry has the advantage of being popular among foreign tourists and has an ashram promoting an alternate lifestyle. It is also well connected by road and rail, has access to modern internet facilities and urban markets.

Visakhapatnam is a popular port and Bheemunipatnam has a beautiful beach and some Dutch monuments. The Orissa coast is dotted with tourist attractions: Gopalpur-on-sea, Chilika Lake (popular among ornithologists and turtle watchers), Konark (a UNESCO world heritage site), Puri (a popular pilgrim destination), and Chandipur-on-sea. The Gangetic delta of West Bengal provides the opportunity for fishing communities to diversify their livelihood strategies. The Sundarbans are a popular tourist destination. However, most opportunities offered by the tourist industry are availed by resorts and multinational companies. The local elite gets a small fraction of the benefits and fisherfolk are left out of the entire scheme; often displaced by developmental projects or relegated to the margins. The fact that most fishing villages do not have sanitation and other facilities results in their frequent displacement. It is possible that SHGs can be organised among the fishing community to provide facilities for the tourist industry. This could be in the form of beach shacks and restaurants, running public call centres (STD booths), managing beaches, and boat rides for tourists. To this effect, the attractive features of all sites should be assessed. Efforts should be made to incorporate the fishing community in these plans. Examples of places where fishing communities are actively involved in the tourist industry (such as Goa, Kerala, Sri Lanka) could be studied and replicated where possible. Women can play an important role in managing coastal ecotourism if they are appropriately trained.

- **Medicinal Herbs:** Veerampattinam village in coastal Pondicherry offers the opportunity of growing medicinal plants for commercial purposes. It is possible to train women in this activity if suitable markets are identified.
- **Tailoring and other services:** Women in many parts of the east coast expressed a desire to be trained in tailoring. Fisherwomen of Rameswaram in Tamil Nadu, Nallavadu village in Pondicherry, and Bheemunipatnam in Andhra Pradesh have been trained in tailoring. However, they have to be encouraged to start businesses, offering their skills on a commercial scale.

- **Handicrafts:** Throughout the coast, opportunities for conducting business in shell craft and palmyra leaf craft exist. Where shell craft is not popular, fisherfolk supply shells to factories that require lime. Handicrafts as a small-scale industry would be particularly successful in areas that are frequented by tourists.

G) Environmental Threats and Ecosystem People

Many fishing villages are susceptible to the vagaries of the weather. Cyclones and sea erosion are frequent but their intensity varies. The 1999 super cyclone in Orissa destroyed thousands of houses and uprooted fisher families. Their rehabilitation is still incomplete. In the Gulf of Mannar Biosphere Reserve, the threat is significant since cyclones wipe out entire villages where communication systems are inadequate. In Andhra Pradesh, sea erosion results in annual relocation of certain villages and creates uncertainty about their future.

Marine pollution is a source of environmental concern in many areas along the east coast and specific urban pockets¹¹. In the Gulf of Mannar, chemical discharges are emptied into the sea and cyanide fishing is prevalent; while in Chennai, industrial effluents are a major cause for concern. These issues affect the health of fisherfolk and need to be addressed.

Alteration of land use has also affected the livelihood options of fisherfolk. For instance, in Tuticorin, agricultural villages bordering fishing villages have been converted to saltpans, changing the economic system that encouraged barter of produce among villages. As a result, the groundwater (which is in short supply) has been contaminated, making agriculture in the future difficult if not altogether impossible. Due to this change in land use, fisherfolk have to travel to Tuticorin to procure vegetables and have to rely on water supply from the town for which they pay Rs. 1.50 per pot. Since salt is not taxed by the government, saltpans provide a lucrative source of income.

Displacement and relocation of fisherfolk by the Paradwip Port Trust and the expansion of industry in the city has resulted in acute water scarcity. Even though a bore well was installed for the fisherfolk at Sandhkud, it is insufficient for the village. Water procured regularly for domestic consumption costs Rs. 5 per pot.

A major conflict in the Gulf of Mannar arises from the proposed Biosphere Reserve that will limit the fisheries activities of artisanal fishing villages in the area. Alternate livelihood strategies have been offered to many of these villages, some have accepted them but many still offer resistance. A notable example is Chinnapalem village where women used to collect seaweed around Krusadai Island¹². The Gulf of Mannar Biosphere Reserve prohibits fishers from visiting the island to collect seaweed. People have been arguing against such prohibition on the plea that they will be deprived of a traditional livelihood. While the debate continues, it has been suggested that a Fisheries Census be undertaken to determine the number of fisherfolk who depend on the marine resources of the Gulf of Mannar. This will aid the process of sustainable ecosystem management of the proposed biosphere reserve.

Pulicat Lake provides a classic example of traditional natural resource management practises resulting in catch depletion. The Padu system practised in the area circumscribes the use of fishery resources to members of a certain community. However, over the years, the number of villages practicing this unique form of fishing has increased, resulting in serious resource management conflicts. Reduced catch has resulted in impoverishment of the fishing community that once thrived on bumper harvests of prawn.

In Orissa, conflicts between trawlers and government fisheries and forest personnel are common. Ever since it became known that a small percentage of the endangered Olive Ridley (*Lepidochelys olivacea*) turtles are killed by trawlers, the government has banned trawlers from operating in the region. This has resulted in a heated debate between the fishing community and the government as the latter argue that their livelihoods are under threat. While this study was being conducted, matters were kept in abeyance, trawlers confiscated, and most fishing activities were put on hold.

¹¹ See BOBP/REP/67

¹² The BOBP documented the seaweed gathering activities of women in Chinnapalem. A seaweed-farming project was also undertaken by the BOBP which did not prove to be economically viable, and had to be abandoned. Pepsi Foods Limited is now initiating seaweed farming off Krusadai Island involving local fisherfolk.

Ecowatch

- Decline in marine resources due to coral reef mining and dynamite fishing
- Marine pollution due to discharge of industrial effluents
- Biosphere reserves demarcating limited exploitation of marine resources
- Loss of biodiversity and endangered species such as Olive Ridley turtles
- Changes in land use in areas surrounding coastal villages
- Coastal management issues and over-fishing
- Land erosion, cyclones, floods, and other natural disasters

H) Market Oriented Training

Alternate livelihood strategies and appropriate training form a major component of governmental and NGO interventions. However, many of these interventions lack imagination and do not consider exigencies of the market. Government organisations such as State Institute of Fisheries Technology (SIFT), Kakinada (AP); Central Marine Fisheries Research Institute (CMFRI), Cochin (Kerala); Marine Products Export Development Authority (MPEDA), Cochin (Kerala) and the College of Fisheries (at Tuticorin, Tamil Nadu) have restricted training fisherwomen to prepare value-added fishery products. The STEP Programme (see box on next page) initiated by the DOF, Government of Orissa is a perfect example of good intentions going wrong. Almost every village has women trained in pickle making and the preparation of fish *bhajji*¹³, cutlets, and fish fingers. Similarly, NGOs train women to make products that they are unable to market beyond their own peer group. Examples of these products are: phenyls, soaps, candles, curry powder, pickles, sweets/savoury items, and tonic water.

An effort by the Directorate of Fisheries and Fishermen's Welfare in Pondicherry to train women in ornamental fish culture did not result in income generating activity. It soon became evident that their participation in the course was to secure the honorarium given by the Department to the students. The Department also preferred engaging fisherwomen to commercial contractors to run a canteen in the fishing harbour. As a result, the Senkalu Neeramman Canteen was inaugurated in October 2003 providing a good business opportunity to nine women from Veerampattinam village.

The women have not been trained in basic management skills and are greatly dependent on the DOF for infrastructure and guidance. Since their project is barely two months old, it is too early to comment on the enterprise. The women are motivated, but it is important to sustain their interest. They complain about the high costs of transport while travelling to their village from the harbour and back. It has been suggested that they engage an autorickshaw to minimise transport costs. Since this review took place during the lean period, women have yet to deal with the pressures of excessive demand. The DOF also plans to provide them with refrigeration facilities, a grinder, and glass windows to hygienically display the products.

Women are not trained to conduct market research and detect opportunities to use their skills and widen their markets. In urban areas, value-added skills are of little use to women who are interested in marketing fish. NGOs also fail to become links between the people and market. Instead, they perform the task of 'social activism'. For livelihood enhancement and diversification, appropriate market assessment methods are essential. It is important that women are taken to the market and taught simple methods of market research. It is also essential that women understand market fluctuations and fall in prices due to competition. The fishing community is faced with a situation where fishing and aquaculture have become incredibly commercial with outsiders increasingly profiting by the trade. Training should take into account such changes in the fisheries industry that have resulted in the marginalisation of traditional fisherfolk. Teaching skills that do not result in income generation will only serve to dampen enthusiasm and increase the dependence of fisherfolk on the government.

¹³ Deep fried fish rolled in batter

The **Support Training Employment Programme (STEP)** introduced by the DOF, Government of Orissa, aims at training representatives from women SHGs in a few value-added fisheries products. These include fish and prawn pickle, hygienic and cost-effective methods of dry fish preparation, prawn powder, and fish cutlets. Women are also taught to weigh and pack their products in polythene bags. In addition to the training, participants are given equipment such as polythene sealers, knives, and weighing scales. However, the programme has flaws that make it difficult for such women to sustain a business. Here is a critique of the programme:

- Training has been imparted without adequately considering the target market.
- Skills imparted are neither catch nor location specific. The Department has ignored the important consideration that product identification and specialisation must be emphasised prior to training. Thus, in areas where dry fish is a good business option, women are trained to prepare fish pickles, prawn powder, and similar items.
- Packaging small quantities in polythene bags is painstaking and illogical considering the preferences of low-income groups.
- Women prefer to sell in bulk to middlemen rather than keep the stock in anticipation of a better price.
- Training has been conducted on the naïve belief that women will take the initiative to market value-added products at local fairs and festivals.
- Most villages are inaccessible, resulting in increased transportation costs and reduced profitability of selling value-added products. The Department has also overlooked the basic requirements of water and sanitation, which are essential for meeting hygienic standards.

Market Savvy

Fisherwomen in some areas are inherently market savvy. Lakshmi Senapati of Pat Sundarpur village in Orissa was trained in pickle making. Not content with her skills, she formed an SHG with 15 members and they prepared free samples for distribution in the village. They then collected information about the popularity of the pickle and preferences in taste. Armed with this knowledge, they are now about to embark on business with a modest investment.

In Sandeshkhali in North 24 Parganas, West Bengal women practicing commercial pisciculture have trained themselves to profitably respond to the market and changing climatic conditions. They raise shrimp and freshwater prawn based on the salinity conditions of the water. Similarly, they decrease harvests when goat meat is preferred. They do not suffer major setbacks in their business and are assured of a steady income.

Market Mantras:

- Identify strategies to expand the market
- Explore market potentialities before training the target group
- Focus on perfecting one skill rather than cross-skill training

Many training initiatives have been launched by government departments, NGOs, and research institutions. The interests of fishers have been brought into focus and a variety of training programmes have been started to give the community a clear pathway to a sustainable tomorrow. The box on the next page gives a sample of such training programmes and the utilisations involved.

Training	Institutions Involved
Value added fishery by-products (prawn and fish cutlets, pickle, pakora, fish fingers, dry fish)	SIFT, CMFRI, College of Fisheries MPEDA, NGOs CMFRI, CIFA, Department of Fisheries
Pisciculture	Krishi Vigyan Kendra, NRCWA CIFA, Department of Fisheries
Ornamental fish culture	Department of Fisheries, Krishi Vigyan Kendra MPEDA, Universities
Seaweed culture	CMFRI, MSSRF, CMSCRI, PepsiCo
Handicrafts	NGOs
Household consumables (curry powder, sweets, tonic water, phenyl, soap powder)	NGOs, WDC
Management, stock assessment, capacity building	NGOs, WDC, Department of Fisheries, MSSRF, BOBP
Credit and Savings SHGs Financial inputs	NABARD, RRB, Velugu, VGB, DWCRA, WDC, DHAN Foundation, MSSRF, UNDP, NGOs
Alternate Livelihood Strategies (extraction of agar, pearl culture, tailoring, mechanics)	NGOs, MSSRF, CMFRI, DRDA, College of Fisheries Department of Fisheries
Information technology	MSSRF, UNDP, AISECT
Legal awareness and education	National Literacy Mission, NGOs
Post-harvest technology (smoking bins, drying racks, solar dryer)	CIFT, BOBP, DFID, ICM, NGOs, DFWA Department of Fisheries
Marketing*	?

* Overlapping mandates? Table shows the gap in marketing strategies and absence of market oriented training for fishing communities.

I) The Interface between Science and Society

Research institutions such as the MSSRF and CMFRI use scientific breakthroughs to provide viable alternatives to fisherfolk. Examples of such interventions include the rejuvenation of fish stock through artificial reefs and the introduction of pearl and seaweed culture among fishing communities. In the Gulf of Mannar region, all three interventions have been explored with varying results. Marketing pearls poses a big problem for fishing communities who are unfamiliar with marketing any product apart from fish. Further, most jewellery stores already have established suppliers and are reluctant to give contracts to newcomers with no prior experience in the trade. Hence, embarking on pearl culture without an appropriate market network is proving to be futile.

Information and Communication Technology Centres organised by the MSSRF in different villages attempt to bridge the gulf between science and society. These centres provide information through satellite on wave heights, tides, weather, price of agricultural commodities in addition to being storehouses of indigenous knowledge. Women SHGs have also been formed through MSSRF staff to encourage savings and income generation. However, since these centres are managed by volunteers, their sustainability is being questioned. As experiments in bringing the marginalized in contact with technology, these centres are a laudable effort and are worthy of replication.

Scientific Interventions:

- Assisting in pearl culture by supplying fishing communities with embedded oysters
- Promoting mangrove plantations to check soil erosion
- Installing artificial reefs to increase fish stocks
- Using information technology to gain knowledge on fisheries-related activities and weather reports

J) The Role of NGOs

NGOs working with fisherwomen are involved in (a) generating awareness on issues such as domestic violence, alcoholism, and legal issues regarding gender rights; (b) capacity building through leadership training and practical training such as tailoring and preparation of items of domestic consumption; (c) formation of SHGs to promote group savings and credit enhancement; and (d) education: including literacy programmes and inculcating sanitation, hygiene and health awareness (see table on page 75).

Some laudable NGO efforts are listed here:

- The **Tuticorin Multipurpose Social Service Society** (TMSSS) trains extension workers to act as links between the government and fisherfolk. Women have also been trained in income generating activities: pickle making, running petty shops, and manufacturing items for domestic consumption. Women have been trained to make pickles by the College of Fisheries (at Tuticorin, Tamil Nadu) and the National Union of Fishermen (NUF). They have also been taught crab culture by the DRDA and stock assessment, small-scale business, and financial management by the MSSRF.
- **East Coast** is a Tuticorin based NGO involved in activism and imparting employment generating skills to women in fishing communities. These skills are candle and soap making. The NGO spreads health and environmental awareness, motivates children to pursue a formal education, and organises youth forums for marine conservation. It has formed 700 SHGs (each group with a membership of 20) initiating savings of up to Rs. 20 million and loans up to Rs. 50 million.
- **Integrated Coastal Management** (ICM) has trained fisherwomen in coastal Andhra Pradesh to reduce post-harvest losses due to blowfly infestation. Women are now aware that post-harvest losses occur due to unsanitary methods of processing fish. Previously post-harvest losses amounted to almost 90 percent of the total catch. With hygienic methods of processing, this has been greatly minimised. The ICM has also initiated the formation of Mahila Sangams, funded by the Visakhapatnam Nava Nirman Samiti to improve fish marketing.
- The **DHAN Foundation** aims at increasing the saving potential of marginalised communities subsisting on agriculture and fishing. By conducting cluster meetings every week (to generate savings), women are trained to organise meetings, form SHGs, and imbibe leadership and management skills. DHAN networks also stress the importance of education, health, and hygiene. Of late, DHAN is initiating a customised insurance scheme for fisherfolk.
- **Vikasa** has organised SHGs in Bheemunipatnam, Andhra Pradesh. Women save Rs. 30 a month and loans are advanced to meet daily expenses. The NGO has also familiarised them with the Marine Fishing Regulation Act, disaster preparedness, and the advantages and disadvantages of tourism. They have been trained to prepare value-added fishery products such as fish cutlet and pickles. In addition, the NGO along with the Mahila Prangana of the Technical Training Development Centre (TTDC) has arranged for 25 women of Egupeta, Bodevidi, and Totuvidi villages in Bheemunipatnam to be trained in tailoring.
- **Rural Educational and Economic Development Association** (REEDA) explores additional livelihood opportunities for fisherwomen in Royapuram (Chennai). About 120 women have been organised into six SHGs of 20 members each. They meet weekly and save Rs. 50 per month. Apart from imparting skills such as preparing food items, candles, incense sticks, dry fish, garlic pickle, fish cutlets, cleaning/washing powder, phenyl, and fabric whitener, they are encouraged to run small businesses such as provision stores and agencies. Significantly, the NGO has helped them explore practical possibilities of enhancing their income by operating telephone booths and supplying fish/ fish products to hotels.
- **People's Empowerment and Need Based Community Development** (PENCODE), in Pentakota village of Puri, Orissa has undertaken projects aiming at spreading awareness about HIV/AIDS.
- The **United Artists' Association** (UAA) has organised SHGs to wean women from the clutches of landlords and make them self-sufficient. Women are trained to enhance their domestic savings through SHGs. Capacity building, sanitation and education are also promoted through the NGO.

K) Conclusion

In the 1980s, the BOBP assessment of the status of women in fishing communities concluded that it was difficult to specifically orient development programmes towards fisherwomen for these reasons:

- Paucity of available data made it impossible to assess the extent and magnitude of their participation in fishery activities;
- Very few gender specific projects and training programmes were designed to develop their skills;
- Responsibilities and functions of women officers in fisheries administration did not specifically relate to women in fishing communities; and
- Modernisation of the fishery industry often resulted in relegating women to lower-paid jobs.

The situation is slowly showing signs of progress. Today, various training programmes have been initiated to enhance the skills of women in fisheries. In addition, saving schemes are being launched in areas where fishing communities fall below the poverty line (people who earn less than Rs. 45 per day). These have not necessarily resulted in income-generating activities, but have prompted individual businesses to flourish in marginalized communities. However, neither training agencies (NGOs/government) nor target beneficiaries are able to aptly comprehend market requirements.

A major threat continues to be that posed by non-fishing communities that have garnered government subsidies aimed at enhancing small-scale fisheries. Modernisation has thus resulted in marginalizing not only fisherwomen but also the entire fishing community. On a smaller scale, many artisanal fishers have abandoned their traditional profession and are now working as labourers on trawlers. This has resulted in a large rate of migration among fisherfolk. In coastal Tamil Nadu, migration is restricted to neighbouring districts, and in southern Tamil Nadu, problems have arisen due to fisherfolk fishing in Sri Lankan waters. In Bengal and Orissa, conflicts between migrants from Bangladesh and local fisherfolk are common. In coastal Andhra Pradesh, migration to different coastal States across the country is common. Migration has not necessarily improved the living conditions of artisanal fisherfolk. It has merely served to assure them a regular source of income. It has also increased the incidence of HIV/AIDS and other STIs.

While interacting with women in fishing communities, a few of their problems and needs became apparent (see tables 1 & 3). Some key issues are the need to legalise property and demarcate common land to conduct SHG activities. Appropriate technology was also repeatedly cited as a crucial requirement as was the need to improve transport and communication, and infrastructure such as water, sanitation, community centres, and banking. Education continues to be of prime importance to women in Orissa and West Bengal. Empowering fisherwomen thus becomes a multi-pronged exercise of inculcating awareness, finding sustainable alternatives, and assuring livelihood security.



Awareness



Alternatives



Assuring Livelihood Security

The establishment of a gender focal point in the Department of Fisheries is also essential as it will create awareness and provide alternative income-generating options to assure livelihood security. Such an entity would enable relevant interventions and provide a sensitised fora where women from the community could share their insights and experiences.

L) BOBP-IGO: The Way Ahead

As in the past, the BOBP has been an important catalyst, influencing and effecting change. In its new avatar as the BOBP-IGO, this role would continue. The Women in Fisheries Programme attempts to identify the needs of women in fishing communities, finds alternative and additional sources of income generation, and ways in which problems can be addressed. To this effect, the problem of marketing can be addressed by appropriate training in making market-oriented, value-added products. Collaborations with the private sector could be solicited in marketing products manufactured by SHGs. Apart from spreading awareness and exploring avenues by which the SHG movement could be strengthened, the BOBP-IGO will play a proactive role in advocating the needs of women in fishing communities.

M) References:

➤ Reports:

BOBP/REP/4: *Role of Women in Small-scale Fisheries of the Bay of Bengal*

BOBP/REP/5: *Report of the Workshop on the Social Feasibility in Small-scale Fisheries Development*

BOBP/REP/16: *Report of the Seventh Meeting of the Advisory Committee*

BOBP/REP/25: *Attempts to Stimulate Developmental Activities in Fishing Communities in Adirampattinam, India*

BOBP/REP/26: *Fisherwomen Extension Activities in Andhra Pradesh*

BOBP/REP/27: *Activating Fisherwomen for Development through Trained Link Workers in Tamil Nadu*

BOBP/REP/67: *The Impact of the Environment on the Fisheries of the Bay of Bengal*

BOBP/REP/85: *Learnings of the Third Phase of the BOBP for Coastal Fisheries Management*

➤ Working Papers:

BOBP/WP/33: *Factors that Influence the Role and Status of Fisherwomen*

BOBP/WP/38: *Credit for Fisherfolk: The Experience in Adirampattinam, Tamil Nadu, India*

BOBP/WP/57: *Identifying Extension Activities for Fisherwomen in Visakhapatnam District, India*

BOBP/WP/66: *Improving Marketing Conditions for Women Fish Vendors in Besant Nagar, Madras*

➤ Information Sources:

BOBP/DFID: *Small-scale Fish marketing in Tamil Nadu – An Alternate Fish Container for Women Petty Fish Traders*

BOBP/MAG/26: *Working Together: A Manual on Self Help Groups*

➤ Bay of Bengal News:

June 1982, Issue 6: *Glimpses into BOBP Projects – Training Course for Fisherwomen*

March 1983, Issue 9: *Training fisherwomen to tap Government Services*

September 1989, Issue 35: *We want a Fish market*

September 1990, Issue 39: *Besant Nagar Fish Market Opens*

December 1992, Issue 48: *What's the Answer to the Problems of the Besant Nagar Fish Market?*

N) Acknowledgements:

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INDEX TO FIELD VISITS

Here is an index to the places visited during this investigation. You can easily access specific districts or villages using the page numbers shown here. The companion guide to this report “Working Together: A Manual on Self Help Groups” (BOBP/MAG/26) provides more information on organisations with a mandate to empower women in fisheries.

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2. Gobindrampur village	62



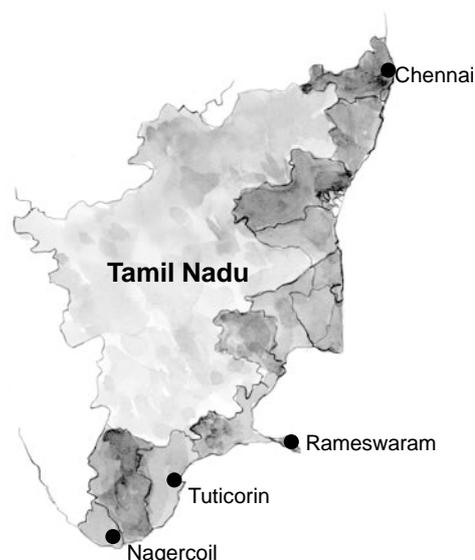
TAMIL NADU

Kanniyakumari and the Gulf of Mannar

Nagercoil, Kanniyakumari District

1. National Unison of Fishermen, Nagercoil

The NGO started in 1975, offering alternative employment to fisherwomen in activities such as net making, palm leaf and shell-craft making, and is currently training fisherwomen in pickle making. Production is carried out on demand. Five women are employed on a regular basis and as demands increase, a maximum of 50 women can be employed. Basic standards of sanitation and hygiene are available. Absence of appropriate marketing strategies has resulted in high cost of production, low-income generation for the women regularly employed, low quantities of production, and wastage. Women earn up to Rs. 600 per month. Additional money is disbursed for travel expenses.



2. TAC Floor Company, Ammandivillai village

This unit employs 40 women from nearby fishing villages. It has also distributed equipment for making coir mats to four locations where women can produce mats for the company. About 25 – 60 girls find employment in such village units. Women employed in the company earn between Rs. 1 000 – 1 500 per month for making ropes. The rope-making units are sheds; the women wear surgical masks and aprons to prevent fine particles of coir from irritating them. Most of the girls are aged between 19 – 25 years. They have no prior experience with fish processing or marketing. Their mothers are involved in the activity (as headloaders or in processing and marketing dry fish). They have not contemplated working in that field since it is an activity carried out by married, middle-aged, or widowed women. They work to supplement their family income.

3. Muttom fishing village

The village has 1 680 families, all from Roman Catholic backgrounds. Fisherwomen have been organised under the Head Load Women's Association under the Diocese. They have also formed Credit Unions that facilitate loans and enable them to purchase fish at cheaper rates and process them. Between 40 – 50 SHGs have been formed in the village and these SHGs encourage saving schemes.

Nutrition is restricted to the consumption of fish and rice. Sanitation standards are poor; public toilets are not used due to water scarcity in the village. The municipal toilets constructed by the government have been kept locked.

Since the soil is sandy, coconut trees grow as easily as banana. While banana is sold and consumed by the village, coconut is neither sold nor consumed. The village is extremely scenic and has a grand 16th/ 17th century church of European architectural design built on a rocky outcrop from the sea. The beach is a popular location for Tamil cinema thus offering the potential to generate alternate livelihood for fisherfolk in the form of coastal ecotourism.

St. Rock's Convent in the village is one of the four locations offering premises to coir mat making equipment provided by the TAC Floor Company based in Ammandivillai village. It employs 10 women who earn Rs. 2 per completed mat. The activity is not popular among women since the returns are not proportionate to the labour and time involved. Depending on the number of mats made, women can earn between Rs. 300 – 1 000 a month. Net making is a more attractive option since it requires less effort and skill and greater income.

4. Royal Nylon Net making unit, Konam village

The unit is one of 250 net making enterprises in Nagercoil. All 35 employees in the unit are women from different villages: agricultural and fishing. They work eight hours per day and earn Rs. 600 per month. They are also given additional travel expenses.

Tuticorin

1. Tuticorin Multipurpose Social Service Society (TMSSS)

a) Vellapatti village

Background: This fishing village has 600 families where fishermen once sought additional income by coral reef mining. As a result, catch started to diminish and the government, assisted by TMSSS, encouraged them to switch to crab fattening and marketing. The catch is 1 ton per day which is shared among three export companies (John Aqua Company and Baby Marine Export to name two). The entire village is involved in the activity. Crab is processed in two ways: (i) crab claws are clipped, shelled, and finally packed in ice (ii) crabs are shelled, boiled in boilers provided by the company and packed. All processing units are in Palmyra huts beside the landing centre. The first processing unit employs 40 women who earn up to Rs. 1 500 a month. Crab fattening and culture has been financed by the DRDA and facilitated by TMSSS though the venture is yet to commence. This enterprise is entirely run by women who would prefer an outdoor crab fattening unit and are yet to work out a strategy to market fattened crabs. TMSSS has a strong base in the village since it has a Roman Catholic majority. It offers credit and savings schemes, encourages SHGs among women to start enterprises such as petty shops, craft making, and selling edible items.

Social organisations: Apart from the regular church organisations, the village also has active Cine Fan Clubs. Women are extremely active and many have been ward members in the Panchayat.

Resources: Due to sandy soil, natural resources are few. Women however want to explore dairying as a viable employment-generating alternative. Other alternatives suggested were: tailoring, bidi-making, matchbox sticker making (an activity that has been explored before), shell trade, agencies for ration shops, and palmyra leaf handicrafts. Currently, the Annai Theresa Pickle Making Unit is the only other alternative employment generating activity initiated by the MSSRF and the UNDP (facilitated by TMSSS) that uses fish by-products as a resource for income generation.

Nutrition, health and population: Nutritional standards are low, with rice and fish forming the staple diet of most people in the village. The quality of fish/crab consumed by the people is also not the best since better quality catch is processed for export. Awareness about family planning exists but is not practiced and the average family comprises six members. There are no hospitals or clinics in the village. The nearest government hospital is in Tuticorin town (8 km away) and the nearest Public Health Clinic is 20 km away. Although the village only has a primary school, educational standards are high and the literacy rate is over 90 percent. The number of graduates is also significant with a large number of women obtaining a graduate degree.

Public amenities: Electricity and telephones are available, but the village lacks basic sanitation facilities and toilets. No local banks or post offices are available. Since there is no local gas agency, firewood is alternated with gas and kerosene as fuel alternatives, depending on availability.

Traditional fishery activities of women: Women are involved in sorting catch and providing assistance with net making, net cleaning, and net mending. They are also involved in cleaning crabs and crab culture. Fish marketing has completely been taken over by middlemen who purchase the catch at the landing site. Women however, are not threatened by the intrusion of middlemen into their traditional role as head loaders. This attitude towards middlemen is perhaps due to the fact that women are now gainfully employed in other income-generating activities. However, women say that they would like to collectively market dry fish, an activity that they were once involved in but are now doing individually.

Credit: Family income in the village is high compared to other fishing villages. In the low season, the average family income is between Rs. 1 500 – 2 000 while in the high season, it ranges between Rs. 2 000 – 5 000. Credit is obtained for starting petty businesses, construction of houses, marriages, and purchase of fishing gear – boats and nets. Women want more mechanised boats which they believe would enable deep sea fishing since their current fishing methods restrict them to the shore.

Training: The TMSSS has trained extension workers who act as links between the government and fisherfolk. Women have also been trained in income-generating activities. Women have been trained in pickle making by the College of Fisheries at Tuticorin and the National Union of Fishermen (NUF), in crab culture by the DRDA, and stock assessment, small-scale business and financial management by the MSSRF.

Additional income-generating activity: Annai Theresa Fish Pickle Unit was established under the auspices of the MSSRF, Department of Rural Development and the UNDP in 2001 and employs 11 women (representing 20 women's SHGs consisting of ten women each) who have been trained by the NUF. The process of pickle-making is done hygienically and gloves, aprons, and surgical masks are used to maintain a high standard. However, despite producing good quality pickle, marketing is a major problem since the initial project survey overlooked the need for marketing channels. Until buyers are identified, the product will be produced in small quantities and expected profits will continue to be compromised.

Problems: (i) Neighbouring fishing villages, envious of the apparent prosperity in Vellapatti village have taken to sabotaging fishing equipment and nets. (ii) Environmental problems abound. Neighbouring agricultural villages have been converted to salt pans. This has not only resulted in contaminating the groundwater (which is in short supply) but will also make agriculture difficult or altogether impossible in the future. Some fisherfolk who sought employment in these salt pans suffered from skin diseases. Due to this change in land use, fisherfolk have to travel to Tuticorin to procure vegetables and have to rely on water from the town for which they pay Rs. 1.50 per pot.

b) Pazhaiyakayal village (Mother Teresa Women's Group)

This village is home to estuarine fisherfolk. Their activity is seasonal since they are dependent on the monsoons and floods in the river for their boats to reach the sea. Women are involved in fish drying and marketing. The dry fish is sold in the local market or to villages in the interior that do not have access to the sea. Men are involved in mending nets. Since the high season is between January to June, men are idle for the rest of the year. The village has access to electricity, water, toilets, and sanitation facilities. A combination of firewood and gas is used as fuel. Dietary habits of the people have improved over the years due to the proximity of agricultural villages and awareness of diseases such as diabetes and blood pressure. Five years ago, rice and fish formed the staple diet. Today, the diet has been supplemented with ragi, idlies, bananas, apples, and oranges.

Women have been trained in alternate livelihood strategies such as pickle making and aquaculture by the College of Fisheries at Tuticorin. They engage in income-generating activities such as running petty shops (through SHGs organised by TMSSS), preparing and selling medicinal water (like milk of magnesia), phenyl, vinegar (made of palm sap), balms, readymade clothes, spices, and sweets. These activities are seasonal and depend on local demands.

Changes noticed in the past ten years:

- a) Increase in the number of factories
- b) Decreased catch
- c) Less rainfall – reduced breeding of fish
- d) More diseases
- e) Reduction in the number of mechanised boats (due to less rain and a decline in water level in the river making it difficult for boats to access the sea) from 60 to 10 boats
- f) Change in occupational patterns – fishermen have begun to work as labourers in trawlers
- g) High migration rate

The TMSSS has initiated SHGs and has offered church property for rent at nominal rates, facilitates bank loans and offers awareness on literacy, population, health and similar issues through animators who regularly visit villages where the diocese has a presence.

2. CJLP Roche Society

An NGO that is involved in spreading awareness on health issues, especially HIV/AIDS and in training paramedics and nursing assistants. It also checks on dropouts from schools. Environmentally, it spreads awareness among fisherfolk on coral mining and dynamite fishing. It has initiated 35 SHGs with the assistance of the TMSSS. It is also involved in facilitating credit through banks and other institutions and providing extension services to fisherfolk.

3. East Coast

An NGO involved in activism and imparting employment generating skills to women in fishing communities. These skills are candle and soap making. It spreads health and environmental awareness,

rehabilitates child workers and inducts them into education, and organises youth forums for marine conservation. Thus far, it has formed 700 SHGs (each group with a membership of 20), initiating savings of about Rs. 20 million and loans up to Rs. 50 million.

Keelakarai, Mandapam and Rameswaram, Ramanathapuram District

1. MSSRF/CMFRI/UNDP/Department of Rural Development

Mundalmunai Pearl Culture Society, Mundalmunai village, Rameswaram Island

Objective: Pearl culture was seen as an ideal activity to provide additional income to marginalized fishing communities in the Gulf of Mannar region. The society consists of 106 members: 50 women and 56 men. They were trained in pearl culture by CMFRI, embedded oysters were procured, and a site not too far from their village selected for culture. The society provides labour and offers watch and ward at the site. The proceeds from the sale of pearls also go to the society, furthering pearl culture as an income-generating activity.

Background and resources: The entire village is below poverty line. Resources are restricted to what is available from the sea. Only 20 mechanised boats belong to the village (individual ownership). The rest of the fishermen work as wage labourers and earn up to Rs. 1 500 a month. (Fish must be sold at least once a week for the family to meet its basic requirements). Some women also fish with their husbands to economise on labour costs. Each household consumes about 1 kg of the catch each day. This is usually wasted catch consisting of juvenile species and poor quality fish. Some households keep goats (that are sold in the market after being fattened) and hens. Basic amenities such as hospitals, banks, electricity and water are scarce. There is a private clinic in Pamban but the government hospital in Rameswaram is 20 km away. Water is available from tankers at the cost of Rs. 2 per pot. Firewood is used as fuel and is easily available at a distance of about 3 km from the village. An interesting feature of the village is the absence of private property. All land belongs to the temple hence electricity cannot be legally installed in the village. Nor is it possible to construct roads and similar civic amenities without the consent of the temple authorities. The only electricity available to the village is in the form of streetlights.

Fishery activities of women: A large portion of the time is used in procuring resources (fuel and water) and cooking. However, women have a considerable amount of spare time. Men too, have enough spare time since fishing takes place in the early hours of the morning and all landings are over by 10 a.m. Women are involved in net mending and drying fish. The method of dry fish making called patrakaduvada is very crude and does not require either skill or equipment. A hole is dug in the sand where the fish is buried for a day or two. About 20 women are involved in collecting shellfish. A few women also sell fish in the neighbouring markets of Ramanathapuram, Paramakudi, and Chattrakudi. The catch is transported in bamboo baskets and aluminium buckets. However, with middlemen and marketing agencies buying most of the catch each day, the traditional role of women in marketing fish has now altered.

Non-fishery activities: Fuelwood is procured from neighbouring mangrove forests and the alternative of preparing and selling charcoal could be explored. Women have been given demonstrations in preparing and selling masala curry powder, palmyra leaf/shell crafts, phenyl, shampoo, soaps, and incense, all of which could be explored as additional income-generating activities.

Nutrition, health and population: The average family consists of eight members. Nutritional standards are low since only rice and fish are consumed on a regular basis. The outbreak of malaria is a regular feature. There are however, no deaths resulting from the epidemic. Infant mortality is absent though malnutrition among infants is high.

Participation in social, cultural and community activities: Women in the village are extremely motivated and have become members of several organisations. Some of them are office bearers of trade unions, Panchayats, and local wings of the Tamil Nadu Rural Reconstruction Movement (TRRM), an issue-based NGO that mobilises and educates women on their rights. Men spend their free time playing board games and dice. Women control family finances and are extremely vociferous. They admit that these changes in their status are recent. Life is better than it was 10 years ago. Education, health, and hygiene facilities are available to them. Women can talk, organise themselves into groups, and voice their opinions. Technological innovations have also worked to improve their quality of life.

Problems: (a) Training in pearl culture was offered by CMFRI. If the village were not supported in the future, it would be difficult to sustain the activity both in terms of procuring embedded oysters and supervising the activity.

(b) Marketing continues to be a problem as most jewellery concerns already have well-established suppliers. Hence, it will be some time before the enterprise is profitable.

(c) Since poverty among the fishing community is high, theft is also extremely high. The project lost 10 000 oysters when it commenced.

Projects proposed: With a view to improving nutritional standards and enhancing savings, it has been suggested that the village (or members of the pearl culture society to begin with) form SHGs (with 8/10 members per group) that would produce items of daily household consumption. These items could be sold among the members of the groups. The two basic principles guiding these groups would be that (a) no two groups produce the same item and (b) no member of the groups procures the item from the market.

The advantage of such an exercise would not only train the groups in management and marketing skills but also increase the nutritive value of products consumed. It would also encourage savings as the cost of producing these items would be cheaper than procuring them from the market. Moreover, as opposed to fishing that provides the community with a daily source of income and pearl culture that is a long-term investment, this exercise ensures that income and food security is maintained in the medium term. Over the course of time, it is hoped that these groups will evolve practices and methods of effective management and income generation.

2. Tamil Nadu Rural Reconstruction Movement (TRRM)

a) Meenavarkuppam village, Keelakarai block

Background and resources: A traditional coastal fishing village consisting of 200 households. Fishing is the only source of livelihood though the catch fluctuates with the season; the average catch being about 10 kg per day. There are 40 non-mechanised boats in the village that are individually owned. Male migration is also high (though seasonal). Approximately 80 men migrated to Ciniyappatharga where the catch is better. In such a situation, families buy fish for subsistence. Agriculture is not practised and few houses keep some poultry. Since Keelakarai is close to the village, basic facilities such as water and fuel are available. However, water costs Rs. 2 per pot and fuelwood is available for Rs. 20 a bundle. Most families are therefore tempted to resort to collecting the same from a nearby forest. The nearest ration shop is a kilometre away and schools/hospitals are absent in the village.

Traditional fishery activities of women: Women are involved in shell and seaweed collection, net mending, transporting fish to the market, and processing and selling dry fish. A crude, unhygienic method is used to process dry fish. In addition to the method followed in Mundalmunai village, fish are treated with salt and then dried in the sun. Seaweed collection takes 12 hours of their time (5 a.m. to 5 p.m.). The average household income does not exceed Rs. 1 500. Women have however lost their traditional role of marketing fish to men who have now completely taken over the job. They are resentful of the fact that they have been reduced to head loaders.

Nutrition, health and population: The food consumed by the village is basic and poor in nutritive content. Rice and fish is consumed on a regular basis and vegetables are consumed every Tuesday and Friday. The catch kept for consumption consists of juveniles and stale fish (fish that has not been sold the previous day). The best catch is always sold. Fruits are only consumed when a person falls ill. As in other villages, the family size is large (average of eight members per family). Health nurses and workers are not known to visit the village. Although women have sufficient knowledge of family planning methods, they are not practised. Malarial fever is common and although no deaths occur, the resultant weakness renders an individual incapable of productive labour for many days.

Non-fishery activities: TRRM has trained women in health, leadership, capacity building, problem identification, gender, social analysis, Panchayati Raj Institutions, marine resource conservation, MFRA, and Human Rights. As a result, the women have identified palmyra and coconut as viable income-generating resources.

Credit: Indebtedness is high. The village is still under the influence of moneylenders although TRRM also facilitates credit through banks and formal institutions.

Social, cultural and community activities: The village organises a community (Sangam) meeting where all the members meet at least once a month. TRRM has a strong network in the village.

Problems: (a) Among the men, drinking is a common problem that affects both the family and community. (b) With the declaration of the Gulf of Mannar as a biosphere reserve and a marine national park, the activity of women to exploit seaweed around the islands has been severely restricted. The TRRM has mobilised the women to protest against this governmental policy and reject alternative livelihood options that may be offered to them.

b) Chinnapalam village

Background and resources: A traditional fishing village in Rameswaram island consisting of 350 households (1 550 individuals, 800 men, 750 women). About 400 women engage in seaweed collection for 15 days of the month around Krusadai Island. The village falls below the poverty line, and lacks basic amenities of water, sanitation, and electricity. The nearest hospital is in Rameswaram, 20 km away. Banks and post offices are also located in Rameswaram. Nearly 15 years ago, the BOBP had initiated a seaweed culture unit where 20 participants from the village were paid Rs. 600 per month by way of remuneration. However, after three years, women abandoned seaweed culture and resumed visiting the island for collecting seaweed.

Fishery activities of women: The practise of seaweed collection first started in 1960 but became regular only in the 70's when there was a market for the same. Women spend 3 hours every day for seaweed collection starting at about 6 a.m. The seaweed is sold to local traders and agents from Madurai, Ramanathapuram, and Kerala. The average quantity of seaweed collected is 15 - 20 kg per woman. The income earned varies according to the type of seaweed and can fetch up to a maximum of Rs. 6 per kg. Women use underwater goggles and carry a pouch for collecting seaweed. The activity is seasonal in nature and during the rainy season, harvesting does not take place. Though fishing is an activity dominated by men, women assist men in net mending.

Non-fishery activities: An agar plant was proposed by the MSSRF to assist the fisherwomen affected by the Forest Department's regulation/ban on exploiting seaweed around the islands. The project however, had to be shifted to another village since Chinnapalam lacks clean water essential for agar preparation.

Problems: (a) Drinking (b) High rate of indebtedness (c) Conflict with the Forest Department: The village is extremely upset with the restrictions imposed by the Forest Department with regard to seaweed collection. They have filed petitions and claim that the department harasses the women when they visit the island. As a mode of protest, they have refused to consider any alternate livelihood strategy. When told that an alternate livelihood strategy would employ women for the entire month and would only enhance their income opportunities (the average family income has dropped to Rs. 1 000 a month), they said that they would rather fight for their rights. Their struggle has been organised by the TRRM that has strong networks in the village. The village refuses to look at local resources to enhance their income and prefers to look to the sea for sustenance. They half-heartedly suggested fish-culture as an alternative if the government/donors would give them enough land.

3. DHAN Foundation (MKMVS, Uchipuli, Ramanathapuram District)

The DHAN foundation aims at increasing the saving potential of marginalized communities subsisting on agriculture and fishing. As a result, all the women interviewed had in the past five years, settled their debts with traditional money lenders, increased their personal savings (between Rs. 4 800 – 8 300), acquired property, built their own pucca house, and acquired electricity connections. Because of the DHAN practice of having cluster meetings every week (to generate savings), women had been trained to organise meetings, form SHGs, and perform leadership and management activities. However, the savings scheme does not necessarily ensure income-generating activity. Women are not geared towards finding employment or using their savings for employment generation. Instead, savings are used for educating children, acquiring and maintaining property, and meeting emergency needs. DHAN networks also stress the importance of education, health, and hygiene. Of late, DHAN is initiating an insurance scheme for fisherfolk. The DOF has trained fisherfolk on safety at sea and also implements the Savings-cum-Relief Scheme (a centrally sponsored scheme implemented by the Government of India).

Traditional fishery activities of women: Women are involved in both processing and marketing fish. Their processing methods are extremely simple and require neither skill nor equipment. The amount of fish consumed by the family and fish sold varies according to the catch. Traditional roles of women in fishing have considerably altered with middlemen entering the market and reducing their importance in marketing. Women now walk to the nearest local market as larger markets have been monopolised by middlemen.

Alternate livelihood strategies: Some women from fishing communities work as labourers in fields, salt pans, and tailoring units. However, based on the available resources, they suggested pickle making, thatch making, jasmine cultivation, goat rearing, masala making, coir (rope, mats) making, selling tender and ripe coconut, and palmyra leaf craft as possible alternatives. Some women already run repair shops (bicycle, small machine, and electrical repairs) from where they obtain a modest profit. The only problem with most of these activities is that there is stiff competition from other fishing villages that also possess similar resources.

Health, nutrition and population: Family size is large (average of six members per family). Rice and fish form the staple diet and vegetables are consumed occasionally. Few houses keep goats and almost every house has 1 or 2 hens. The prospect of growing vegetables or fruits has not been explored and food security has theoretically still not been assured.

Projects proposed: Mobilise clusters to initiate income-generating activities. Thus far, income-generating activities are limited since people are wary of the risk involved in individual enterprise. Many DHAN cluster handicrafts (for example, palmyra leaf products) have a marketing problem. With the DHAN network getting stronger, it is proposed that these products are made available for sale to different clusters/federations. Also, it would be more profitable for DHAN to look at urban markets for their products. The new marketing strategy would therefore involve improving their products to suit urban requirements (so far products have been designed only for the rural market). Appropriate training could form part of the strategy.

4. Nesakarangal, Rameswaram Island (Village Information Centre and income-generating activities for the handicapped and fisherwomen)

Nesakarangal began as a centre imparting training to handicapped people in Rameswaram Island in shell craft and palmyra leaf craft. Over the years, it has expanded its activities to train fisherwomen in tailoring and shell craft making as alternate sources of livelihood. Given the importance of Rameswaram as a tourist and pilgrim destination, these products find a ready local market. People earn between Rs. 600 – 1 000 per month depending on the orders. Marketing is done by an agent who organises procurement of raw material for the manufacture of products. The tailoring unit has also obtained a contract for stitching school uniforms. In addition, Nesakarangal serves as a Village Information Centre where village news is distributed, computers are available for use by the members, and local fishermen can obtain information on the weather and the price of fish.

5. Santhanam Foundation SHG, Therkuvadi village, Rameswaram Island

The foundation has been in existence for a year and gives demonstrations to its members in shell craft making, phenyl making, soap powder making, incense, and dhoop making. It encourages savings (on similar lines as the DHAN foundation) and gives loans for repairing/constructing houses and fisheries activities. The group has saved Rs. 800. However, there is no unity among the members and they have yet to be effectively motivated.

6. Shore Seine Villages of Moonramchattiram and Pareidi, Rameswaram Island

Both villages are inhabited by artisanal fisherfolk and have 30 families each. Traditional kattumarans are used for fishing and shore seine fishing is also practiced. These villages have only recently been inhabited by migrants from Tuticorin, Mandapam, and Chennai who believe that income-generating opportunities are greater in this area. They are involved in fishing, collecting seashells and in processing and marketing fresh and dried fish. Fish is sun-dried on a net after being treated with salt.

Some traders come to procure dried fish - otherwise women market the same in big markets such as Ramanathapuram, Rameswaram, and Paramakodi. Since the villages have easy access to the Gulf of Mannar and the Palk Bay, both waters are exploited for fishing (although the catch is better in the Gulf of Mannar). In the summer months, fisherfolk access the Palk Bay and during the monsoons they prefer the Gulf of Mannar. Other significant features of these villages are:

- Low levels of nutrition: shore seine fishing results in poor quality catch and mostly juveniles are caught and retained for consumption by the families. Approximately 1 kg of the catch (consisting mostly of discards and juveniles) is shared by 5 families. Rice and fish form the main articles of consumption; fruits and vegetables are seldom consumed.

- Although the entire village (men, women, and children) are involved in shore seine fishing, women earn exactly half of what men earn. Thus, a woman can earn between Rs. 200 – 500 a month from the activity while men earn between Rs. 400 – 1 000. The average family income is extremely low.
- Children are involved in fishing and earn little from the activity. They also collect seashells.
- Apart from a health worker visiting every Wednesday until a year ago, the only other representatives of a government department to have visited these villages were volunteers from the Election Commission.
- The villages are prone to natural disasters such as cyclones, and erosion by wind and sea as they are exposed to the sea from both sides. While the Forest Department has planted a casuarina forest to check erosion, with increasing settlements, these forests are exploited for fuel. Hence, erosion continues along the coast.

A project aimed at rehabilitating fisherfolk (especially women and children) practicing shore seine fishing would be worthwhile, but the natural limitations of these villages would prove to be a major impediment in effectively altering their standard of living. It has been suggested that a Fisheries Census could be undertaken to determine the number of fisherfolk who are dependent on the marine resources of the Gulf of Mannar to aid the process of sustainable ecosystem management of the proposed Gulf of Mannar Biosphere Reserve.

SHGs in Royapuram, Chennai

1. Rural Educational and Economic Development Association (REEDA)

REEDA is an NGO working with fisherwomen in Royapuram (Chennai) to provide them with additional livelihood opportunities. About 120 fisherwomen have been organised into six SHGs of 20 members each. They meet weekly and save Rs. 50 per month. They have been imparted skills to make sweets, candles, incense sticks, dry fish, garlic pickle, fish cutlets, cleaning powder, washing powder, phenyl, and fabric whitener. They also supply textiles (sarees and readymade items). They have also been initiated into small businesses such as ration stores and agencies. Many of them are educated and aware of their environment: social and physical.

Within a year of being organised into SHGs, they have become aware of the necessity to augment their household income (that does not exceed Rs. 2 500). The NGO has helped them explore possibilities of earning more money by running public telephone booths (Tata Indicom has offered subsidised rates to individuals willing to provide premises to install their equipment) and supplying fish items to hotels. During a discussion with 60 members of the SHGs, it became obvious that the women were willing to work hard and undertake ventures that involved a considerable amount of risk, but they were unable to market themselves. The NGO is not equipped to look for avenues where their produce can be supplied.

The exercise conducted with the members of SHGs was to identify the most profitable products, which required maximum skill and also added maximum value. It was agreed that candle making was the one skill they had perfected; that dry fish was the best product they could market (since their methods of dry fish preparation are elaborate and hygienic); and that selling fresh fish was the most profitable. They are trained to fillet the fish, pack, refrigerate, and sell to suppliers. They expressed a desire to supply crabs, prawns, seer fish, and pomfret to hotels in the city. While they consume most items produced within their groups, they are keen to take up candle making and dry/fresh fish selling as a collective large-scale business venture. They have explored the possibility of supplying candles to churches in the vicinity that already have established suppliers; they have also approached the Taj Coromandel Hotel (a local five star hotel) for the supply of fresh fish. The former attempt did not work in their favour; the hotel offered them a contract to supply fish but changed it in favour of another SHG in a neighbouring area.

It was suggested that the NGO carry out these activities:

- design promotional leaflets about the SHG;
- prepare a list of hotels and restaurants with varieties of fish preferred; and
- approach hotels (with references from the DOF) directly.

It was also suggested that candles could be supplied to hotels since there is reasonable demand in restaurants in Chennai. Since women are willing to undertake training in value-added fish products, it was suggested that they explore the possibility of differentiating their product from others in the market.

2. Presentation Community Service Centre (PCSC)

PCSC is an NGO affiliated to the church and has organised 10 groups over the last 5 years in the fishing community of Royapuram, Chennai. Of these, six groups were formed a year ago. The NGO offers training in leadership, problem identification, education, community service, savings generation, gender, and legal awareness. It also imparts training in preparing sweets, snacks, chilli powder, phenyl, and washing powder. These products are marketed among the members of the SHGs and petty shops run by women in the locality. Regular supplies of snacks are also made to hospitals; catering is undertaken from time to time; and sweets are prepared for seasonal occasions. Catering for hospitals and functions provides the SHGs with an income of Rs. 4 000 – 6 000 per month. Currently, group savings amount to Rs. 1 000 per group; each woman is encouraged to save Rs. 50 per month.

A few women are head loaders and procure their fish from auctions at the landing site in Royapuram. They usually have a good sale and earn between Rs. 50 - 100 per day by way of profit. Their roles have remained unaltered over the years and they are not threatened with the entry of middlemen. Almost all families retain low-value fish for household consumption. Vegetables form an important part of their diet.

There are complaints about the declining environment quality; the prevalence of coal and steel dust in the atmosphere has led to severe allergies and wheezing among the fisherfolk. In addition, public health care centres are at a distance, forcing them to spend money on private health clinics for medical problems.

The SHGs face a problem common to other SHGs in the area: that of marketing their products. A provision shop that they opened, recently shut down. The NGO has now identified four groups that will start shops offering different services: canteen, stationary, ration and general provision. It is hoped that these shops will be functional by January 2004. Women also complain about the paucity of funds that prevents them from investing in more ambitious ventures. PCSC admits that since it largely deals with women in agriculture, it is not equipped to address the unique needs of the women in Royapuram. Also, training is imparted to empower women through education and awareness (about health, sanitation, legal matters) rather than helping them find employment alternatives. Since all NGOs impart the same training to women: soap and phenyl preparation, manufacturing and selling masala powder; all groups face the problem of marketing their products and competition from other groups selling the same products.

In a city like Chennai, marketing the articles manufactured by SHGs is not profitable. NGOs also fail to notice that the biggest asset of women in fishing communities lies in the fact that they are ideal for the work they are traditionally suited to: marketing fish (as discovered in our interaction with the REEDA groups). Training in value-added fish products could be facilitated by NGOs who should be sensitised to the traditional socio-economic background of the communities with which they work.

Ornamental Fish Culture & Besant Nagar Fish Market, Chennai

1. Ornamental Fish Culture in Kolathur

Kolathur (a suburb in Chennai) is synonymous with ornamental fish culture, an activity that started thirty years ago. Today, every house in the locality breeds and rears ornamental fish of every description. Commonly bred varieties are: goldfish, guppies, zebra fish, angelfish, and Siamese fighting fish. The community that breeds the fish is said to belong to the caste of well diggers that have successfully altered their livelihood options. Many people have prospered through ornamental fish breeding since vastu shastra pundits proclaimed that it is auspicious to have fish in the house, creating a great demand for the same. Rearing fish is not too expensive: Mr. Ashok who has been in the business for over 35 years claims that an investment of Rs. 5 000 is sufficient. Some low-income group families admitted that the only investment required for fish breeding was in the form of procuring feed and installing concrete tanks. The fish are fed blood worms that are procured from local worm collectors who forage swampy areas near sewers for worms and earn as much as Rs. 200 per day (each collector can harvest 2 kg of worms in a day). Blood worms however, have not been cultured. There are 10 worm collectors in the area who have a fixed clientele of 10 - 15 customers. Thus, regular income is assured. Kolathur prospered in ornamental fish trade since it provided adequate water and sufficient land for the construction of tanks where fish could breed. However, today there are allegations that ornamental fish culture has depleted the water table and also contaminated groundwater.

Since the DOF is keen to promote ornamental fish culture as a possible livelihood alternative among fisherwomen, it has been suggested that a few women could be selected from some SHGs to undergo training in ornamental fish culture. These women must belong to fishing communities close to Chennai where a market for ornamental fish exists, as do provisions such as regular water and transport. Ornamental fish culture can provide a suitable alternative to women seeking to augment their income. The training programme could be undertaken in Kolathur where women would be exposed to the way in which the poorest of households has enhanced its income through ornamental fish breeding. Fish breeders in Kolathur express interest in cooperating with the DOF and the BOBP and are willing to become resource persons to facilitate such training.

2. Besant Nagar Fish Market

The Besant Nagar market was inaugurated fourteen years ago at the behest of the BOBP and the Corporation of Madras (now Chennai) to prevent fisherwomen from selling their fish in unhygienic conditions. The market was opened amid much fanfare but within a few years, certain problems became apparent. It was difficult to attract clients and the presence of other women fish sellers at a popular junction took potential business away from them.

A visit to the fish market in Besant Nagar revealed that of the 44 members of the Oorur Olcott Fisherwomen's Cooperative Society, only 15 women sold fish in the market. The others had large families to support and were therefore forced to sell fish by head load in neighbouring localities. The fish was procured from Royapuram, Qasimed, and Vellankini beach, and was sold fresh. When asked to list their problems, the fish vendors said that women fish vendors from Odaimahanagar village were selling fish on Seventh Avenue and taking away all the customers.

What had initially started as twenty women selling fish on the street had risen to forty. Attempts to remove them were met with resistance and the women acquired a stay order from the court preventing them from being evicted from the street. The women of Odaimahanagar also petitioned the Corporation of Chennai for new fish market premises. However, this request was not entertained since the Corporation had already earmarked the Besant Nagar fish market as the established market for selling fish. The women of Odaimahanagar were told to occupy the empty stalls in the market but they refused. The Oorur and Olcott fish vendors have also pleaded with the women to occupy the empty stalls in the Besant Nagar fish market, to no avail. They believe that fish sales will plummet if they moved to the fish market.

The market is well designed and constructed. However, minor repairs need to be carried out. The women pay the Corporation for electricity used. Alternatives such as renting the vacant stalls to vegetable vendors or meat/poultry shops, do not find much enthusiasm since people in the neighbouring areas will not buy vegetables in the proximity of the fish market. We offered to meet the women fish vendors from Odaimahanagar to understand their reluctance to occupy the empty stalls in the market and revive it.

Royapuram Fishing Harbour & Seventh Avenue Fish Market, Chennai

1. Madras Fishing Harbour, Royapuram

Women play a key role in auctioning and selling fish in the Madras Fishing Harbour (BOBP/WP/39). Women are involved in auctioning, retailing, and selling fish. In addition, there are women who collect trash fish from the shore. Small quantities of catch are also sold to exporters and restaurants for little sums of money. The average fish retailer claims to earn between Rs. 50 to 100 per day. The women live from day to day and do not save anything.

The harbour is in dire need of cleaning and maintenance. Fish is cleaned in seawater that is polluted with diesel and garbage. Boats are also cleaned with seawater. Pavilions have been constructed at regular intervals for people to dry fish, an activity conducted by many women. The harbour suffers from severe sea erosion since the breakwater constructed impedes the movement and deposition of sand in the north, leading to rough sea and erosion.

2. Seventh Avenue Fish Market, Besant Nagar

This fish market has over 40 women vendors from Odaimahanagar kuppam, Thiruvanmiyur, and Neelankarai who provide stiff competition to the women fish vendors from Oorur and Olcott kuppam selling fish in BOBP-constructed stalls near the Besant Nagar bus stand. The fish market functions between

9 a.m. to 2 p.m. and from 6 p.m. to 9 p.m. each day. Residents complain that these women have taken over a large section of the pavement that once had a garden. The overpowering stench and accumulated garbage give the market a reputation. However, the market is very popular and people travel great distances to buy fish at Seventh Avenue. Complaints have been made to the authorities but the fish vendors return to their stalls each time they have been evicted. However, convincing the women to share stalls in a constructed fish market near the bus stand might require serious patience, diplomatic skills, and perseverance.

Pulicat Lake, Tamil Nadu

Background Information: Pulicat Lake is India's second largest brackish water lake that falls on the border between Andhra Pradesh and Tamil Nadu. It supports over 52 000 people in 16 island villages and 30 villages that surround the lake. In addition, it has been demarcated as a bird sanctuary. The lake has rich fisheries resources, notably prawns that are exported worldwide. Since the lake is a coastal lagoon, it provides shelter from cyclones and other natural disasters and offers tremendous opportunity for fisheries development, aquaculture, and tourism.

The unique lake ecosystem has led people to evolve fisheries management practises that have been the focus of much anthropological and natural resource management research. The Padu system of fisheries management has been described as “a traditional system of granting entitlements to members of a particular community for undertaking specified fishing activities in designated fishing grounds of the Pulicat Lake” (Mathew, 1991). Village Panchayats determine fishing rights, methods, gear and craft, and the area/time of fishing. The system was aimed at reducing conflict between villages that subsisted on the resources of the lake.

Over time, however, the number of villages observing the Padu system has increased. This is due to the relocation of marine fishing communities from Sriharikota Island to Pulicat Lake by the government. The popularity of shrimp has led non-traditional fishing villages to take up fishing as a means of livelihood. Also, there are some tribal villages (with no Padu rights) that practice fishing. Conflicts between these communities are frequent especially since there has been steady catch depletion. Catch depletion has been attributed to several interrelated problems. Chief of these reasons is increased sedimentation of the sandbar that provides an inlet for seawater into the lagoon. Other reasons include: over exploitation of marine resources, increase in population, sewage pollution, lack of rain, shrinkage of the lake, and the absence of alternatives to fishing.

Fisherfolk find it hard to diversify their livelihood strategies. Lake fisherfolk (belonging to traditional Padu villages) jealously guard their rights to fish in the lake. As more people stake a claim to the resources of this water body, there is the increased need to look for alternatives and indeed, conservation. Over the years, the lake has been steadily shrinking in size; in the Andhra Pradesh part of the lake, the water diminishes drastically in the summer months.

Due to its proximity to Chennai and its unique biodiversity, Pulicat Lake has been the focus of much attention from the government, research organisations, and NGOs. There have been efforts to rehabilitate fisherfolk — to give them appropriate training in information technology and mechanics. Women are also trained in various crafts and the creation of value-added fishery products. Pulicat town has schools, hospitals, retail shops, dispensaries, and postal services. Remote villages in and around the lake have been electrified. Due to the popularity of Pulicat's marine resources, the town also has an ice plant and efficient means of transport and communication.

1. Pasiavaram village (Integrated Fisherfolk Development Project - IFDP)

The village consists of marine fisherfolk who were relocated in Pulicat town from Sriharikota Island. The village enjoys facilities such as banks, postal services, schools, and hospitals. In addition, the lake is also quite accessible, though people claim that they do not fish in the lake. Jellyfish processing has recently become a popular source of employment for the people at Pulicat. Marine fishermen capture jellyfish which is processed in shacks on the beach. Although seasonal, this provides employment to many fishing communities.

Fishery activities of women: Women market fish. In addition, they assist their husbands with fishing in the lake, mending nets, and gathering catch. The chief catch consists of prawns, pomfret, seer fish, tuna,

mackerel, silver belly, and sardine. Selling fresh fish fetches a profit of Rs. 50 per day. Dry fish is prepared only if the catch is not sold. This is either consumed at home or sold @ Rs. 10 per kg.

Nutrition, health and population: Family size is large. Education is minimal. Only one of the women interviewed was literate. Children often drop out of school and assist in fishing. Nutrition includes rice and fish. On religious occasions and holidays, vegetables are cooked.

Credit and savings: Women have been organised into SHGs. Of the three groups interviewed, women claim to have saved Rs. 10 per member per week. The oldest SHG was formed 7 years ago. Loans have been given (@ 2 percent interest per annum) to the groups for marketing fish, investing in fishing gear and accessories, and meeting household expenses. Women exhibit a changed attitude towards handling money ever since the formation of SHGs. They do not compromise on nutrition while saving money. Instead, they have stopped visiting the cinema and travelling to visit friends and relatives in neighbouring villages. They now spend more time in their village and participate in association meetings.

They have not indulged in any income-generating activity. This is largely because they are frightened of the risk involved in conducting business. Also, they are reluctant to trust other members of the group for fear that they might be cheated. Since women are the main breadwinners, they are reluctant to attend training courses that will take them away from marketing fish, their chief source of income. They have not understood the concept of value addition since they feel that it is more profitable to sell fish rather than prepare pickle. They believe that fresh fish is bound to fetch a higher price than pickled fish.

Many women are still confused about the role of SHGs. They believe that SHGs facilitate loans and believe that loans are meant to be written off. A few SHGs were told that apart from the revolving fund, they would not be granted further loans until their husbands/families repaid outstanding dues. Women are very upset with this rule and believe that all outstanding debts should be waived and that their SHG should be seen independently of their husbands. Women also believe that the government should intervene and grant them loans.

Training and NGOs: Women have recently been trained in value addition and hygienic handling and processing of fish. This training was conducted by the Staff Training Institute of the DOF and Aquaculture Foundation, Chennai between 2nd to 7th February, 2004. The NGO has trained women in Entrepreneurship Development and organised them in SHGs. It is commonly felt that women in fishing communities are not as responsive as women in agrarian communities since the onus of winning their daily bread lies with them. They are also reluctant to get involved in new ventures without subsidies.

IFDP has also initiated a scheme with the All India Society for Electronics and Computer Technology (AISECT), where members of the fishing community are given computer education at subsidised rates. However, this scheme is not too popular since it is felt that training should be imparted free of cost. The institute counters that all people who were trained, have been gainfully employed.

Alternatives suggested: The District Administration has been supporting crab fattening as a viable income-generating alternative for women in fishing communities. However, women are reluctant to venture into any such activity unless they are allotted loans to meet their domestic and fish marketing needs.

2. Kottaikuppam village (Madras Social Service Society)

Background: Kottaikuppam village is one of the few villages that originally practised Padu. It is situated on the edge of the lake and has access to the same facilities as Pasiavaram village.

Fishery activities of women: Women are head loaders and sell their catch locally. They claim to earn Rs. 1 500 per month. Prawns are the main items sold at the market. Women admit that they capture juveniles despite instructions against the practice.

Credit and savings: SHGs were first formed in the village four years ago. As of now, there are 27 groups in the village, each comprising 13 – 15 members. In addition to saving money on a regular basis, women are also encouraged to engage in petty businesses. As a result, they run retail shops, sell plastics, clothes, and other commodities. They have obtained loans from the banks and are in the process of repaying them.

NGOs and training: The Madras Social Service Society has given them training in value-added fishery products and hygienic handling of fish. This training programme took place in 2001. Women admit that they do not follow any standards of hygiene that were imparted during the training.

Alternate livelihoods: Women identify poverty as their biggest problem and are keen to remedy their situations. Many wish to start export businesses without prior experience. Contracts from exporting agencies require large initial investments, professionalism, and discipline; terms that are unfamiliar to these women. They have been advised to undertake crab fattening as a possible alternative but they are reluctant to undertake any activity in the SHG. This is because they mistrust one another and would prefer to benefit individually rather than collectively. This is also because they are yet to understand the importance of identifying with a group through common life experiences, economic, and social problems, and currently view the group as a tool to procure loans.

Social and Cultural Activities: Families of fishing communities are required to compulsorily contribute towards an annual festival. Women understand that the contributions are extremely high and only pander to the indulgence of men but are unable to speak against the practice.

The problems at Pulicat arise largely due to (a) unsustainable management practices; (b) resource depletion; (c) conservative attitude of fisherfolk; (d) lack of enterprise and alternatives; (e) hesitation on the part of fisherfolk to explore viable business alternatives; (f) lack of motivation; (g) dependence on government subsidies and bank loans (that are often generously written off); and (h) unrealistic expectations and outcomes of the people from NGOs, developmental schemes, and the government.

Neelankarai Fish Market, Chennai, Tamil Nadu

1. Meeting with representatives of 12 fisherwomen SHGs who manage the fish market

The fish market at Neelankarai was constructed by the DOF two years ago. Today, it is managed by fisherwomen belonging to 12 SHGs. The management practices established by the group demonstrate their efficiency and unity. Here are some notable highlights of group management initiatives:

- a) Twelve SHGs (consisting of 16 - 20 members each) elect a representative to manage the market;
- b) The elected group manages the market for a month. This includes cleaning, security, maintenance, pricing;
- c) The Panchayat has appointed a cleaner. Two watchmen have also been employed: one is paid by the SHG (Rs. 500 per month) and the other by the Panchayat;
- d) The market is well-ventilated, has stalls for 60 women, and a cold storage room with a capacity of 2 tonnes. The SHG pays electricity bills that amount to a maximum of Rs. 2 000 per month;
- e) Each fisherwoman pays Rs. 5 per day to use the market. An average of 15 - 20 women sell fish regularly. Hence, the daily income of the market is about Rs. 100;
- f) Women also maintain the market: the property was whitewashed recently with the daily earnings. Some generous donors also paid towards maintenance and celebrations of the market anniversary;
- g) Women from neighbouring areas: Chemmencheri, Injambakkam, Mahabalipuram, Chinnadikuppam, and Kovalamkuppam also sell fish in the market;
- h) Uniform prices are ensured through pricing at the time of auction; and
- i) The DOF is now constructing a drying platform behind the market.

Women managing the market have noticed an improvement in their status. Prior to their rehabilitation in the market, they would vend fish on the roadside. They maintain that they have had more customers since the market was inaugurated. They plan to spend some of their earnings on advertising their market on hoardings and by constructing an arch before the market to attract more customers. Prior to managing the market, the WDC organised them into groups and instructed them on hygienic handling of fish. They have also been trained to save money and give loans to people within and outside the group at a nominal rate of two percent per annum. Some groups have been saving up to Rs. 100 per month, but the average savings amount to Rs. 50 per month.

Apart from saving money and marketing fish, SHGs have also enabled women to meet their daily household requirements. They procure food, grain, and other commodities wholesale from Parry's Corner, Chennai, and sell it among each other. They also run petty businesses such as tailoring to augment their

income. Though the SHG consists of women from fishing communities, many families are moving away from fishing and have taken up jobs in the city. Proximity to Chennai has enabled social mobility. The location of the market on East Coast Road has also served to make the market both accessible and visible to consumers. Women are educated, practise family planning, and send their children to school. Their village is neat: most houses have toilets and electricity. Ever since they have been initiated into SHGs, they have minimised their expenditure. They identify expenses on entertainment (cable TV and films) and festivals as unnecessary and wasteful. However, they realistically admit that while the former can be minimised and even eliminated, the latter is unavoidable.

SHGs have also enabled women to forge friendships and improve their social life. There is seldom any conflict among the members and in case of any dissatisfaction, problem-solving is done by discussion within the group. This eases tension and brings about group harmony.

2. Meeting with Seventh Avenue fish vendors at Besant Nagar, Chennai

Since the visit to Seventh Avenue on December 11, 2003 did not include interaction with the vendors but with people living in the neighbourhood (who consider fish vending a menace), an interaction with fisherwomen was considered necessary. The women belong to Odaimahanagar and despite their social contact with Oorur and Olcott Kuppam, refuse to sell fish in the market that was constructed for them fifteen years ago. Instead, they want the pavement to be converted into a market.

While their demands seem unrealistic and unjustified (since shops can never be legally constructed on pavements), there are some women who are willing to shift to the market. However, they fear that other squatters will take over the space they vacate and that the market at Besant Nagar bus stand is not large enough to accommodate the hundred fisherwomen who sell fish on a regular basis.

Obstinate fisherwomen apart, it is interesting that hygiene standards are not a consideration for buyers who come from all classes. Women do not have any storage facilities, the catch is exposed to dust and fumes from the road, there is no fresh water or electricity, and mounds of refuse collect beside each vendor.

Nearly 100 women from the village have been organised into 5 SHGs of 20 members each. Their savings amount to Rs. 110 a month. This can perhaps be attributed to the fact that they do not have overheads such as paying electricity bills and rent. Some of these women sell fish while others have petty businesses in the village. It is possible that as the SHG movement gets stronger, efforts at reconciling the women of the warring villages will be successful, and the Besant Nagar market will be revived.

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PONDICHERRY

1. Veerampattinam Information Village

Background and resources: The fishing village has a large population of 7 000 people living in 1 650 households. The family size is large with an average of 4/5 children per couple. The housing pattern is mixed: many are made of cement and mortar, but poorer families living near the beach have palmyra houses. There is no water shortage, groundwater is sweet and can be used for agriculture. However, this is not practiced. Since the village is large, facilities have to be provided to enable access to the entire community. A hall constructed for fish drying by the DOF is several kilometres away and is used by only one-third of the households. The village is well-connected by roads and has electricity, telephones, and internet facilities.



Social and political organisations: Community cohesiveness is missing since the village is large. The village has been divided into four blocks with their own leaders and representatives to the Gram Panchayats. Due to political problems in Pondicherry, Panchayati Raj Institutions (PRIs) have yet to be introduced. Hence, traditional Panchayats perform the role of local self government in the village. These Panchayats are also very strong and channel village funds for religious rather than developmental programmes. By way of an example, each family contributes Rs. 100 for a month long village festival in the local temple. Contributions are compulsory since people believe that their village will be cursed if costs are curbed or the festival discontinued. They do not believe in contributing to any other social or community activities. Some SHGs (five in number, although village members claim that more exist) have been initiated by the MSSRF and the DOF has formed several fishermen and fisherwomen's cooperatives. Despite universal membership, participation is limited and motivation levels are low.

Nutrition, health and population: Proximity to agricultural villages in Pondicherry makes it easier for people to supplement their diet with vegetables and fruits. Family planning is becoming popular. Hospitals and medical facilities are also within easy access. Literacy rates are moderate and almost all children go to school.

Traditional fishery activities of women: Women are involved in fish drying and fish marketing. The method of drying fish depends on the kind of species caught. Before sun drying, fish is soaked in saltwater; immersed in ice; or strung in ropes across poles and dried. Fish drying is an individual and not a group enterprise and existing methods are crude and unhygienic. If women are organised to improve drying methods, the activity could become more profitable. The average family income ranges from Rs. 2 000 to 2 500 and women are uncertain as to what proportion of income they contribute to the family. However, since transport and communication facilities are accessible, there are potential ways of value addition to fisheries activities:

- a) A certain variety of low-value fish is sold to agents from Andhra Pradesh who process the fish as chicken feed. It has been suggested that women could process the fish locally and gain more profits.
- b) Women also expressed interest in procuring an icebox that could be put to multiple uses. They said they would rent it to fishermen in the harbour, sell ice to fishermen and also store their own fish, thereby reducing post-harvest losses. They were advised to procure the same by forming an SHG to obtain a bank loan.
- c) It was suggested that fish by-products could be used and value-added products such as pickle could be prepared and sold. Women agreed that this was a good idea but stated that it would be more profitable to market pickle in polythene rather than bottles.

Alternative livelihood activities suggested: The size of the village makes it difficult for group activity to take place in a coordinated manner. Women were asked to form SHGs to provide services such as ration outlets and telephone booths. Women also expressed an interest in starting a textile shop. Another group was trained in tailoring and plans to start providing services in the month of January, 2004. Other activities

that proved to be popular alternatives were papad and pickle making, running a gas agency, and providing transport services. The village also has some people who have been trained to grow medicinal plants. It is possible to promote the cultivation of medicinal plants and herbs as a group activity on Panchayat lands where casaurina trees are also cultivated for fuel. In addition, a few plots of wasteland were given to the village for cultivation by the government but remain unused. However, the persons trained in medicinal plant rearing are reluctant to train women and wants to monopolise the skill and the profits. On the whole, the inclination of people to engage in group activity was poor and they have still to be motivated in that direction.

Additional income generating activities: The DOF has provided premises to nine members of the Fisherwomen's Cooperative in Veerampattinam to run a canteen in the harbour. The canteen has been operational since October 2003 and women are yet to be initiated in catering and time/money management.

Technological inputs and infrastructure: The MSSRF has developed a Village Information Centre (VIC) where computers with internet facility have been installed. Data is regularly updated in the local language and information about agricultural practices, wave heights, fish prices, and weather forecasts are made accessible. In addition, a bi-monthly newsletter is circulated among the villages thus linked, giving information on the villages, loans, and employment. The content generated is based on the needs of the people in these villages who communicate the same via internet. In the absence of regular employees, information centres are managed by volunteers from 9 a.m. to 5 p.m.

Problems: The village is extremely large and populous which makes it difficult for any NGO or government department to engage in community building exercises. Also, since Pondicherry is a small Union Territory, people have become accustomed to relying on doles from the government for welfare, loans, and relief. Impediments to progress include poor loan repayment records, high rate of alcoholism, and superstitions. The VIC stops short of providing people with a common platform where community development could be initiated.

2. Nallavadu village

Background and resources: The fishing village has an Information Centre provided by the MSSRF and run by village volunteers. The village has a population of 3 000 distributed among 500 families. Both catamarans and mechanised boats are used for fishing. The fish is dried on concrete pavilions erected by the government. Provisions for electricity and telephone facilities exist in the village. Public toilets and sanitation facilities are minimal.

Social and cultural organisations: The MSSRF has organised 10 SHGs in the village. Savings schemes and income-generation activities have been proposed to these SHGs. Livelihood opportunities are also available through the Information Centre that provides resources on training, sea-shell craft making, and similar handicrafts. The Motilal Nehru Polytechnic recently organised a month-long tailoring workshop in the village. It will enable the fisherfolk to generate additional income.

Traditional fishery activities of women: As in Veerampattinam, the women of Nallavadu are involved in marketing both fresh and dried fish in neighbouring villages. However, they maintain that the absence of direct public transport forces them to spend almost Rs. 15 per day on alternative transport. Dried fish is marketed less in neighbouring villages since most of it is consumed in the local market. The method of drying is the same as that adopted by the women in Veerampattinam.

Additional livelihood activities suggested: Women are inclined to provide tailoring services on contract upon completion of their course. They are also interested in conducting income-generating activities through SHGs and providing services such as public telephone facilities, grocery shops, and a flour mill. They have sufficient capital to install a grinding machine. In the long-term, they hope to generate sufficient capital to procure a loan for a van that will transport children to school, women to the fish market, and families for public functions. The van will be managed by members of the SHGs who plan to generate additional income by renting the vehicle to neighbouring villages. However, these women lack the skills to maintain log books, apportion a salary for the driver, procure fuel, and meet maintenance costs.

Nutrition, health and population: Families are large and people have recently begun to realise the importance of smaller families. Women complain that the nearest hospital is 4 km away and transport facilities are inadequate. This leads to many illnesses being neglected until the condition becomes severe. Nutrition levels are adequate due to regular intake of vegetables and milk.

Technological inputs and infrastructure: The VIC provides information on wave heights, fish prices, and the weather. Since the village is small, it has also played an important role in facilitating the formation of women's SHGs. Unlike Veerampattinam where the sustainability of the VIC is doubtful due to lack of cohesiveness, the VIC in Nallavadu holds more promise.

3. Thirukanchipet village

Electric auto rickshaw: Thirukanchipet is a dalit village and provides an example of how a marginalized community have changed their destiny. Though a well-maintained road runs through the village, there is no public transport for five kilometres. People have organised (through loans and assistance by the UNDP) a sixteen-seat auto rickshaw to ferry people from the village to the nearest bus stand. The auto rickshaw makes about 70 trips a day and runs on battery. The charge for availing the service is also nominal and the enterprise makes good profit. Though not a coastal fishing village, the example has been cited as an illustration to prove that women SHGs in fishing communities can adopt similar methods to better their living conditions.

4. Harbour Canteen, Pondicherry

In order to provide alternate livelihood to women in fishing communities, the DOF and Fishermen Welfare, Government of Pondicherry, chose fisherwomen to run a canteen in the fishing harbour as opposed to external contractors. As a result, the Senkalu Neeramman Canteen was inaugurated in October 2003, providing a good business opportunity to nine women from Veerampattinam village. However, the women have not been trained in basic management skills such as accounting and are greatly dependent on the DOF for infrastructure and guidance.

Since their project is barely two months old, it is too early to comment on the enterprise. The women are motivated, but it is important that this initiative is sustained. They complain of the high costs of transport that they have to incur while travelling to their village from the harbour and back. They complain that their profits are eaten by travel costs. It has been suggested that they engage a regular autorickshaw to bring down transportation costs. Since this review took place during the lean period, women have yet to deal with the pressures of excessive demand. The DOF also plans to provide them with refrigeration facilities, a grinder, and glass windows to hygienically display/store products.

5. Ornamental Fish Breeding, Nonankuppam village

In August 2003, the DOF conducted a training programme in ornamental fish culture for 30 women belonging to different fishing communities. The course was conducted to provide an alternative mode of income-generation for women in fishing communities. In addition to training in fish breeding, preparing fish feed, and identifying fish diseases; women were also instructed on how to begin cooperative ventures. It was expected that women thus trained would form cooperatives in their own villages and train other women thereby embarking on a profitable enterprise. The DOF paid each woman an honorarium of Rs. 100 a day for the ten-day course. The programme also received wide coverage in the press (The Hindu, August 23, 2003).

Nonankuppam is one such village where two women were trained in ornamental fish culture. Of the 200 families in the village, 25 are from the fishing community. Suguna Devi who was trained still maintains her aquarium, but has yet to commence on a business venture in ornamental fish culture. Despite assurances from the DOF that they will help her procure fish and even buy the fish she breeds, she is reluctant to engage in any such enterprise. The reasons she cites are: lack of land for fish breeding; household responsibilities; and lack of capital. The other woman trained from the village has not maintained the aquarium she was given during the course. It is clear that most women demonstrated an interest in ornamental fish culture since they were being paid an honorarium. The DOF is often faced with such a situation and is contemplating replacing cash incentives with inputs such as fish and fish feed thereby inducing the women to embark on cooperative ventures.

Conclusions:

- Pondicherry has the advantage of having a small territory, easy to administer and govern. The proximity of most villages to the city centre also renders the notion of a 'village' a myth since access to modern means of transport and communication are available. Compared to fishing villages in the neighbouring state of Tamil Nadu, there is relative prosperity and higher nutritional standards.

- Panchayati Raj Institutions are non-existent; traditional Gram Panchayats exist and villages are greatly controlled by them.
- Fishing villages are also heavily dependent on governmental patronage. The concept of SHGs as income-generating units is yet to be understood.
- Livelihood options exist though they are yet to be seriously undertaken. Considering the importance of Pondicherry as a tourist destination, handicrafts, local produce, and similar items can easily be marketed.

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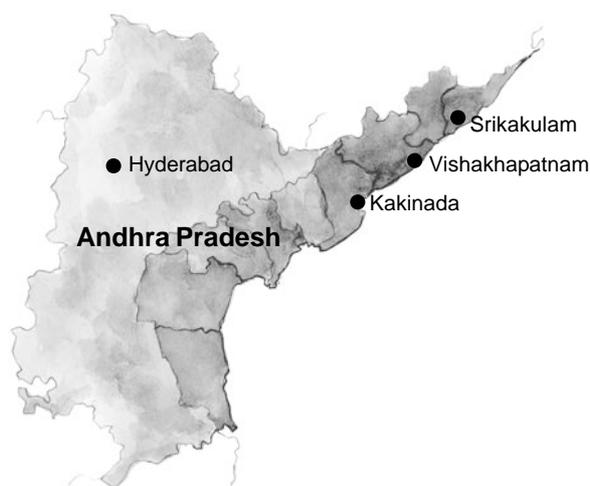
Kakinada, East Godavari District

1. Uppada village (Soradapeta hamlet)

(ICM, DWCRA, Sravanti, Velugu¹⁴ Project)

Background and resources: A fishing village with 500 families, classified as below poverty line. Most people own catamarans, navas, and motorised fibre reinforced plastic (FRP) teppas. The village is prone to constant sea erosion and people are relocated each year. People are landless, the concept of property ownership does not exist, and resources available in the sea are looked upon as potential sources of wealth. Some families own ducks and poultry; markets are accessible to the fisherfolk and the village is well connected by road. The fishing harbour is also fairly close, enabling women to procure fish for marketing with relative ease. The village however lacks basic sanitation facilities such as toilets and drainage. Fuel requirements are met by casuarina groves adjoining the village even though the option of utilising LPG and kerosene is available. Bore wells fulfil all the water requirements in the village.

Nutrition, health and population: Though sufficient knowledge of family planning exists, it is seldom practised and families are large. Nutrition is restricted to rice and fish. Vegetables are consumed three days a week. There is a tendency to compromise on nutrition since better quality fish is sold in the markets. Approximately one-tenth of the catch, mainly consisting of trash fish, is retained for household consumption. A Public Health Centre in Uppada provides the basic health care needs of the people; private clinics are also available within easy reach.



¹⁴ Velugu Project: An initiative of the State Government of Andhra Pradesh to encourage savings and micro-credit in rural areas.

Traditional fisheries activities of women: Women are mostly head loaders and perform the task of transporting fish to the market after procuring it from the harbour. Marketing fish is a daily activity, and fish must be sold every two days to adequately meet basic household requirements. Seasonal fluctuations in catch, render the activity less profitable during monsoons and the breeding period, resulting in reduced income. On an average, an investment of Rs. 100 - 200 fetches a profit of about Rs. 20 - 100 per day. The village has a large number of widows who are responsible for marketing fish (there are traditional taboos that discourage young unmarried women from pursuing the activity). Women are also involved in processing and marketing dry fish. Every day, about four hours are spent in fulfilling biomass needs: fuel, water collection, and cooking. Although they are not directly engaged in fishing, women often accompany their husbands on long fishing expeditions, especially during the low season when catch is procured from Orissa and southern Andhra Pradesh. Women also assist in mending nets, which is a non-commercial activity. Although women do not own boats, nets, and other means of production, they are actively involved in managing household finances.

Training and NGO interventions: The village has been the focus of much development activity for many reasons. Since the village is constantly under threat of cyclones and sea erosion, rehabilitation and relief form an important part of governmental interventions. In addition, there have been efforts on the part of Integrated Coastal Management (ICM), a Kakinada based NGO to reduce post-harvest losses due to blowfly infestation. Women are now aware that post-harvest losses occur due to unsanitary methods of processing fish. While previous post-harvest losses amounted to almost 90 percent of the total catch, hygienic methods of processing have greatly minimised losses. Women now wash the fish, clean and gut it before spreading it out on plastic sheets. They also apply salt to prevent the catch from being infested with blowfly and maggots. Although these methods are time consuming, the reduction of post-harvest losses more than makes up for the effort involved. Also, the use of ice to preserve fresh fish has enhanced the ability of women to market fish.

The ICM has also initiated the formation of Mahila Sangams, funded by the Visakhapatnam Nava Nirman Samiti to improve fish marketing. SIFT has trained some of the women in the village in reducing post-harvest losses through blowfly infestation and in value-added fishery products. This training includes preparation of fish and prawn pickle, fish cutlets, fish pakora, and bhajji. Similar training was imparted by CMFRI in November 2003 where 35 women were trained for three days in the preparation of fish wafers, pickles, cutlets, and in methods by which blowfly infestation could be reduced. However, this training has not been optimally utilised as women lack the motivation to use the knowledge for commercial purposes. In addition, there is a gap between market requirements and training imparted to fisherwomen, the actual needs of fisherwomen, and exigencies of the market. Most institutions that impart training are unable to effectively fill the gap.

Credit and savings: SHGs have been initiated under the Development of Women and Child in Rural Areas (DWCRA) scheme where women are encouraged to save as little as Rs. 1 per day (Rs. 30 per month). The Velugu Project introduced by the World Bank and currently under the Government of Andhra Pradesh also initiates savings on similar lines through the formation of SHGs. However, these groups have only resulted in enhancing savings rather than promoting income-generating activity.

2. Pedavalasala village (DWCRA, Sravanti and Velugu Project)

Background and resources: A fishing village (population ~ 2000) in Tallarevu mandal surrounded by creeks where crabs are harvested in plenty. The sea is 8 km away but sea fishing is also popular. The village has access to electricity, water, telephones, schools, and hospitals in Kakinada. Toilets were also available until they were swept away in a cyclone. The State government has initiated the Individual Toilet Scheme where people can apply for government aid to construct toilets in their homes. The government would identify beneficiaries in each village and grant them 200 kg of rice and Rs. 700 to aid in toilet construction. The Byrraju Foundation of Secunderabad has offered Rs. 500 in addition to this amount to improve sanitation and hygiene in the villages of Andhra Pradesh. Thus far, nine toilets have been sanctioned in the village. The village also has a cyclone shelter and resource map that marks all important locations in the village, including concrete and thatched houses.

Nutrition, health and population: Fish and rice form the staple diet of the population. Vegetables are consumed thrice a week. A Public Health Centre is within easy access. Women also display sufficient knowledge of family planning methods although they are not always practiced.

Traditional fishery activities of women: Women are involved in marketing fresh and dry fish. Fish is processed by smoking, brining, and sun drying. Women are also involved in selling crabs and prawns. To meet basic necessities, prawns and fish must be sold daily and crabs - four days a week. If stocks are not exhausted, they are stored in ice. Competition from other fish vending women is high; markets are accessible and most stocks are sold fairly easily. Women are also involved in non-fishery activities such as running general stores, selling milk, pickle making, and tailoring. Men migrate during the low season to Nagailanka in the Krishna district to catch crabs.

Training and NGO interventions: The Velugu and DWCRA projects have initiated SHGs that focus on enhancing savings among fisherfolk. In addition, women have knowledge about methods to reduce post-harvest losses. Sravanti, an NGO working in the area trained 20 women of Chinnaganjam village, Prakasam District, in pickle making, dry fish processing, and mangrove plantation. SIFT has also imparted training in value-added fishery products.

Credit: SHGs are being largely used to advance credit facilities for conducting individual businesses and to meet emergencies such as natural disasters, house repairs, and weddings. Moneylenders are accessed for short-term loans. Thus far, several groups have received loans from banks to conduct business. However, these could be put to more profitable use if they were used for collective enterprise, an option that women do not wish to consider since they have few management skills and do not favour group activity.

3. Gadimoga village (DWCRA and Velugu Project)

Background and resources: This village has the same resources as Pedavalasala village. Women perceive their area to be drought prone. Rainwater harvesting can be undertaken to ameliorate this situation. Neighbouring shrimp farms provide women with employment. Women also work as agricultural labourers during the low season. However, with shrimp farming on the dip, few women are being recruited, thereby reducing alternate sources of income.

Traditional fishery activity of women: About three-quarter of the women in the village are involved in processing and marketing fish. Processing involves smoking, brining, and sun drying. Trash fish is also dried as poultry feed. Their activity suffers during the monsoon period due to reduction of catch and due to blowfly and maggot infestation. Fish is marketed in neighbouring villages or in Kakinada town, which is close to the village.

Community activities: Sixteen women of an SHG are involved in providing midday meals to the village school that has classes up to Grade Seven. Sponsored by the Government, the scheme offers no profit to the women and has to be undertaken with minimal cost: Rs. 1.50 is allotted for each child (the school has 400 students). Of this, Rs. 0.20 is spent on fuel, Rs. 0.30 on wages, and the rest on ingredients. Each woman from the SHG earns Rs. 225 per month from catering.

Credit and savings: Cooperatives and SHGs have been formed under the Velugu Project that aim to enhance savings among fisherfolk and endorse loans for conducting business. The sum of Rs. 160 000 was issued for fish processing facilities. Women are reluctant to form groups for processing or marketing since they feel that there is no space for group activity. Also, they prefer conducting business within family circles.

4. Fish smoking units in Ramanapalem village

The DFID-PHFP had provided smoking units to select villages in Andhra Pradesh and Orissa to reduce post-harvest losses. These smoking bins were introduced over ten years ago and were based on a design suggested by the intended beneficiaries. However, today over half the units have been reduced to scrap or have rusted for lack of maintenance. Most units are exposed to the elements since fishing houses are not large enough to accommodate them. Fisherfolk find the bins useful and efficient but complain that during the high season, the container is not sufficient for smoking large quantities. Other villages where these bins had been introduced tell the same story: gross neglect of technology that is meant to enhance livelihood capacity.

Visakhapatnam

1. Bodevidi (Bheemunipatnam) (Vikasa)

Background and resources: Situated in Visakhapatnam district, Bodevidi is easily accessible by road. In fact, the coastal road is now being broadened and the beach beautified to attract tourists. A Dutch cemetery

dating to the colonial times is of interest to tourists. The fishing village is a haphazard cluster of huts and concrete structures. Many fear that the process of beautification would result in their displacement. The village lacks toilets but has access to electricity, water, childcare facilities, schools, and a health centre.

Traditional fishery activities of women: Fish is consumed by the people, sold in the markets, and is also processed for poultry feed. Sun drying is the most common form of processing fish. Fish is also smoked and dried after brining. Fish is sold daily; it is usual for better quality table fish to be sold and trash fish to be retained for domestic consumption. During the low season, men migrate to other areas (namely Paradwip and Puri in Orissa) for fishing. Women's role in fish marketing and processing suffers during the period and they often borrow from moneylenders to meet their daily requirements.

NGO interventions and training: Vikasa, a local NGO has organised SHGs in Bheemunipatnam. Women of Bodevidi (about 105) form part of one SHG. They save Rs. 30 a month and loans are advanced to meet daily expenditure. The NGO has also familiarised them with the MFRA, disaster preparedness, and the advantages and disadvantages of tourism. In addition, they have been trained in preparing value-added fishery products such as fish cutlet and pickles. Leadership training has been imparted and they have been trained on the benefits of budgeted expenditure. In addition, the NGO along with the Mahila Prangana of the Technical Training Development Centre (TTDC) has arranged for 25 women to be trained in tailoring. These women belong to three villages in Bheemunipatnam: Egupeta, Bodevidi, and Totuvidi.

Alternate livelihood strategies suggested: Considering the fact that Bheemunipatnam is being developed to attract tourists, it was suggested that fisherfolk see this development as an advantage rather than a disadvantage. Fisherwomen could form groups that offer services required by the tourist industry such as petty shops, canteens (where their knowledge on value added fishery products could be put to good use), and telephone booths. It was suggested that men could pool their resources and offer paid boat rides in the backwaters nearby. The men were reluctant to indulge in such activity on the plea that they spend evenings to mend their nets. It was suggested that management practices be evolved by which both activities could be pursued.

2. Timapuram

Background and resources: The village of Timapuram is famous for women who indulge in fish drying and marketing. A cooperative society consisting of 164 members who market and process dry fish has been formed to facilitate advancement of loans and transportation. Since the women have large amounts of capital, their standard of living is relatively high. Almost all houses have access to electricity, water and toilets.

Traditional fishery activity of women: Women are actively involved in marketing dry fish. Indian mackerel, sardine, and ribbonfish are sun dried and cured in brine. Trash fish is sun dried and sold as poultry feed. Women perceive that trash fish dried for poultry feed is the most lucrative business they have indulged in since it does not require added costs of transporting the finished product to the market. Dealers who supply the feed to poultry farms visit Timapuram and buy the fish in bulk. In order to market dry fish for human consumption; women have to travel as far as Nakapalli (near Tuni) almost 80 km away, Vizainagaram, and Manapuram. The buyers for their produce come from Kolkata, Kerala, and Chennai.

The daily investment in procuring fish for drying is an average of Rs. 1 000 and fish is procured from the fishing harbour about 16 km away. Women claim to earn between Rs. 5 000 – 10 000 per month. During the monsoon, their business suffers a setback. Women from neighbouring villages also market dry fish. This results in decreased fish prices during the peak season. Their estimation of post-harvest losses is also limited: they consider blowfly and maggot infestation as important factors contributing to post-harvest losses. Scavenging by dogs and birds are not seen as factors that contribute to post-harvest losses. During the monsoon, their catch is depleted by as much as 90 percent and despite being trained in controlling blowfly infestation, they are reluctant to practice hygienic methods of drying fish.

Technological interventions: A solar drying unit has been set up by Arjilli Dasu, Secretary and Project Director, District Fishermen's Youth Welfare Association to reduce post-harvest losses and introduce hygienic methods of fish processing. However, these interventions have not been popular among the women of Timapuram who believe that the dryer processes small quantities of fish at any given time. Although an average of 2 - 3 days is required to process the fish (the time taken is greatly reduced if solar fish dryers are used), women labour under the illusion that the drying method practiced by them is far more efficient. They

also feel that solar drying will serve to bring down the price of dried fish since the reduced time taken to process fish will increase the volume of dried fish in the market. The shore near Timapuram is used extensively to dry fish in the open. The activity results in an unbearable stench along the highway. Their reluctance to adopt odourless solar drying methods to process fish has prompted the government to consider relocating the village. Plans to construct platforms for sun-drying by the DOF have thus been put on hold.

Women believe that a van would enable them to market fish more effectively and facilitate easy access to the harbour. It has been argued that the van provided 8 years ago was misused by the president of their cooperative society and is now reduced to scrap. They have offered to pay Rs. 100 per member and solicit the aid of the government to procure a van that is estimated to cost Rs. 600 000. Considering the fact that their investment in fish processing is Rs. 1 000 per day, DOF officials have urged them to increase their proposed investment before they consider their demand.

NGO interventions and training: There are 13 DWCRA groups which encourage savings among women. Their savings amount to Rs. 30 per month. Training has been imparted by the DOF in preparing value-added fishery products such as pickles, bhajjis, and pakoras. They have also been trained to use solar dryers.

Credit and savings: DWCRA groups encourage women to save money. Loans have also been advanced by the United Bank of India through these groups for conducting individual businesses. Officials claim that the fisherwomen promptly repay their loans.

3. Visakhapatnam Fishing Harbour

The fishing harbour has been recently renovated and provides facilities for over 500 trawlers and several navas and teppas (both mechanised and unmechanised). Women are involved in buying fish at the auction once the catch is landed at the harbour. Depending on the specialisation, women procure sardines, mackerels, and trash fish. The latter finds many buyers since processing fish as poultry feed is highly lucrative and requires less investment. With poultry farming becoming a growing industry, there is always consistent demand for the same.

4. Representatives of five NGOs in Visakhapatnam

Issues discussed were: (a) problems of fisherwomen in the region, their status in society and their changing role in the fisheries sector; (b) technological interventions made to reduce post-harvest losses, their limitations, and causes for rejection; (c) the role of SHGs and ways in which their scope can be extended beyond credit enhancement; (d) identifying fishery and resource-related alternate employment opportunities for fisherwomen; and (e) the skills to sustain motivation and participation among fisherwomen (managerial, cooperative) and the role of NGOs in sustaining the same.

It was agreed that though the common perception of fishing communities was that they were extremely marginalized and impoverished, this fact was not entirely true. Capital accumulation in fishing communities is not in the form of ready cash, but by investment in gold and foodgrain. Expenditure on entertainment and alcohol drain about 60 percent of the income. Women lack management skills required to handle money and conduct business which is why most attempts at introducing group activity have failed. Individual businesses do not result in high profit, but are preferred since accounting, auditing and managing of finances is not their forte and NGOs have not been known to impart such training.

Cooperatives and SHGs in Andhra Pradesh were limited to enhancing credit and savings rather than promoting income-generating activities. This is because most women (and indeed fishing communities) were sceptical of change in profession and reluctant to diversify their activities beyond marketing. Women are highly conservative and fishing communities react slowly to change. They also have extremely fixed notions of profit, loss, and technology. They prefer traditional modes to technological innovations. They are also unable to assess market patterns and demands, competition, and ways in which they can meet such challenges. It was agreed that NGO interventions lack strategies to deal with market fluctuations.

It was commonly held that NGOs should enable fishing communities to look at locally available resources/opportunities and ways to diversify their livelihood strategies. Women should be organised in groups and encouraged to undertake ventures that are market-related (such as setting up telephone booths, canteens) rather than restrict themselves to marketing fish that does not assure a stable income. Since most problems faced by fisherwomen are interrelated, interventions and capacity building should be done in a holistic

manner to address basic needs. Given the fact that such capacity building is time consuming, it was suggested that NGOs spread their funds over a longer period to achieve lasting results.

Srikakulam

Tekkali

Background and resources: Situated close to the border of Orissa about 50 km from the district headquarters, there are cultural similarities among the people of Tekkali with the people of Orissa. Tekkali is an estuarine village and women market both fresh and saltwater fish. Male migration to western coastal states (approximately six months of the year) is common since their fishing crafts are artisanal and with resource depletion, their catch has been poor. The village therefore falls below the poverty line with the average household income being Rs. 1 500 per month. The fishing community forms part of the diverse mix of communities that dwell in Tekkali. There are potters, smiths, farmers, and merchants among the many diverse occupational categories in the village. Fisherfolk are thus extremely marginalized due to their occupational specialisation.

Nutrition, health and population: Nutritional standards are very poor. Since access to resources is restricted to fish, consumption of vegetables is limited to three days a week. Fish consumed by the people consists of trash and stale fish (from the previous day's unsold catch). Sanitation levels among the fishing community are also extremely poor: they all lack toilets and their huts are constructed in clusters. Family size is large due to myths about family planning practices. Due to the high rate of male migration to the west coast, many women/men resort to illicit relationships. This situation has resulted in almost 30 percent of the population being potentially infected with the HIV/AIDS virus (although official sources put the figure at a conservative 7 percent). Ignorance and fear have led people to ignore practices of safe sex and the threat of HIV looms large over the population. It is also believed that men contract the virus during their visits away from home. Mortality rates are high and the community has many widows. Whether this is a result of the HIV/AIDS virus or alcoholism is yet to be determined.

Traditional fishery activities of women: Women are involved in selling both fresh and saltwater fish. On an average, almost ten hours of the day are spent in the activity (7 a.m. – 12 noon and 3 p.m. – 8 p.m. each day). The fish is bought from landing centres between 3 a.m. and 6 a.m. Freshwater fish is less profitable than saltwater fish and an average woman earns a profit of Rs. 30 every two days. Dried fish is prepared in an extremely crude manner: fish is wrapped and preserved in the sand and dried. This process is not done on a large-scale and is resorted to only if saltwater fish has not been sold for over two days. Freshwater fish is not processed. With the DOF distributing iceboxes to 50 women, it is hoped that fish will be preserved for longer periods.

Marketing of fish is conducted in the local village market that has facilities for over 50 fisherwomen or in neighbouring shandies that can be accessed by bus. Women face severe competition from fisherfolk in other villages who sell fish at low rates in their market. The women want outsiders to be banned from selling fish in their market. However, the local Panchayat has permitted these fish vendors to conduct their activity in the market and the local fisherwomen have been overruled. It has been suggested that women utilise their cooperative to conduct their marketing in a group but the idea does not appeal to them.

Community activities: Participation in religious functions is high as is financial contribution to conduct religious ceremonies. Each year, poojas and religious functions such as Ganesh Puja, Jagganath Puja, Lakshmi Puja, Shivratri, Gauri Purnima, Kartik Purnima, Dusshera and Janamashtami are celebrated and between Rs. 10 – 20 collected as contribution from each family.

Credit and savings: The Fisherwomen's Cooperative Society has 225 members. Seven DWCRA groups with a membership of 15 per group have been formed to enhance savings and facilitate loans to women for conducting fish trade. However, not much activity has been undertaken. Iceboxes have recently been provided by the DOF and their impact on improving fish trade and reducing post-harvest losses is yet to be assessed. The community is burdened with debts and approaches traditional sources of credit such as moneylenders.

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ORISSA

Puri District

1. Support Training Employment Programme (STEP) Project at Ashtaranga, Konark

Meeting with participating women SHGs from Sahana, Pat Sundarpur and Chandrabhaga villages (Coastal People's Development Association)

Although they are from the same geographical and administrative area, these villages consist of different ethnic groups and practice different methods of fishing.

Background, resources, ethnic composition:

Pat Sundarpur and Sahana villages consist of an Oriya speaking population that has diversified its livelihood strategy by combining fishery with agriculture, livestock, and poultry rearing. Notably, Pat Sundarpur village has a dairy and both villages have paddy fields that employ most men and women. As a result, nutritional standards are high, milk and fruits form a regular part of their diet, and vegetables are also occasionally consumed along with rice, the staple food grain. Lentils are occasionally consumed.

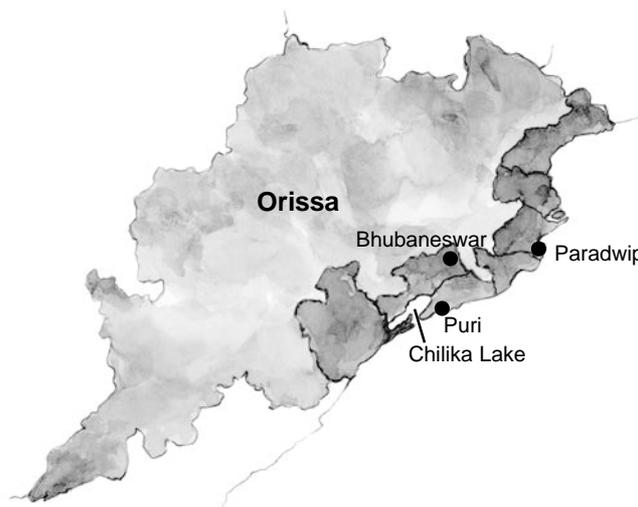
On the other hand, Chandrabhaga village consists of settlers from Andhra Pradesh belonging to the fishing community. Unlike their counterparts in the other two villages, the people of Chandrabhaga do not have patta¹⁵ lands and are therefore not able to build permanent brick houses or diversify their livelihood strategies. The community is also intrinsically attached to the sea and the men migrate to Andhra Pradesh during the low season for better catch. The practice of drying fish is also common among this community unlike the Oriya community that consumes fresh fish and occasionally dries it. All three villages were affected by the super cyclone of 1999. Since then, Coastal People's Development Association (CPDA) has been assisting the villagers in capacity building and rejuvenating their resource base. The women of Chandrabhaga have recently started working as construction workers and as agricultural labourers in neighbouring fields and cashew plantations.

Multiple modes of fuel consumption exist in all three villages. There is access to solar electricity. In addition, casuarina groves provide wood for fuel. Dried cow dung is also used in villages that maintain cattle.

Literacy, nutrition, health: Women of all three villages are sufficiently empowered: they have access and control over the family income and are responsible for decision-making within the household. While education levels are not high, many women are able to sign their names. Basic medical facilities are 10 km away. Family planning operations have been undertaken in all three villages (300 out of 500 women have been sterilised in Chandrabhaga; 400 out of 500 women in Pat Sundarpur and 125 out of 300 in Sahana), women health workers visit them regularly and there is sufficient awareness about polio vaccinations and other childcare programmes. There is also an anganvadi within easy access where consultation on childcare is given free of cost.

Community activities: Alcoholism is a major problem among the fishing communities in Orissa. Apart from mobilising women to control household finances, Mahila Samitis have been formed to perform the task of social policing to curb the menace caused by excessive consumption of alcohol. Women are encouraged to report incidences of excessive drunkenness to the local police, who then arrest the offenders. On one occasion, women got together and beat up some men who had been violent after consuming alcohol. It is estimated that about 500 men have reduced their intake of alcohol and many have stopped drinking.

Fishery activities of women: Women in Pat Sundarpur and Sahana sell fresh fish in a market 10 km away. The income thus earned works to an average of Rs. 40 – 50 per day. Income is known to fluctuate with



¹⁵ Patta: legal document to denote ownership of land/property

seasonal variations in the catch. Women of Chandrabhaga village specialise in processing dry fish. The activity consists of treating fish with salt after gutting and cleaning, and spreading it to dry on bamboo platforms or beds of dry casaurina needles covered with nets. This is an individual activity and each woman dries approximately 2 000 fish. Every two days, the income earned is between Rs. 100 – 200 and the average monthly income from selling dry fish is Rs. 500. Though local markets are available, women find it more profitable to sell the fish in bulk to middlemen in the markets of Andhra, Nakapalli, and Ganjam (the last two are in Orissa).

Credit and savings: Since traditional institutions are strong, women prefer approaching landlords and headmen to invest in business (marketing fish) and meet personal expenses (weddings, education). Loans thus disbursed have to be repaid at the rate of five percent per month. However, women feel that traditional institutions are extremely flexible on issues of loan repayment. To initiate women into the formal credit sector and make them more self sufficient, CPDA has organised: eight SHGs in Chandrabhaga (each group saves Rs. 1 500 per month); six groups in Pat Sundarpur (the groups consist of 20 members each and save Rs. 60 per member per month); and three groups in Sahana (10 members per group - savings per head amount to Rs. 40 a month).

Needs: Women from Pat Sundarpur and Sahana have expressed the need for gas connections and community halls. Women of Chandrabhaga want a local hospital, school, and pattas/titles legalising their possession of property. Interestingly, though community toilets do not exist in these villages, women do not consider sanitation a priority.

Training through the STEP project: The project initiated by the DOF, Government of Orissa, aims at training women in fishing communities in value-added fishery products. It is hoped that women (through SHGs) will utilise their skills in income-generating activities. Representatives of SHGs are trained in hygienic methods of dry fish preparation, preparation of fish and prawn pickle, and prawn powder used as flavouring. In addition, they are trained in weighing and packaging the product for the market. It is hoped that such women will impart their learning to other group members. The DOF has also invested in equipment such as polythene sealers for participating SHGs when the programme finishes. Women participating in the STEP programme in Konark belong to eight SHGs organised by CPDA in the three villages with large fishing communities. Since resources in all three villages differ, women have varying notions of how the programme will benefit them.

2. Pentakota village (PENCODE)

Background, resources, economy: The village has the unique advantage of being close to the temple at Puri. It is well connected by road and has communication infrastructure, a modern harbour, storage facilities, and a perennial market. These factors contribute to the relative prosperity of the fisherfolk as compared to their counterparts in other parts of the State. This is amply demonstrated by the fact that the village has 1 000 catamarans, 350 Beach Landing Craft and about 200 mechanised boats. The population consists of a mix of Oriya fisherfolk and migrants from Andhra Pradesh. It is also common for fishermen to migrate to Gujarat as labourers on trawlers. Tourism and pilgrimage have brought fishing communities into contact with the urban population, but have not increased their livelihood options. Tea stalls, petty shops, telephone booths, and other businesses are run by non-fishing communities living in and around Puri. Participation of the fishing community in tourism-related activities is absent. This is because (a) businesses are monopolised by traditional Brahmin and upper caste elite and (b) the nature of tourism (pilgrimage) discourages participation by lower castes to which fishing communities belong. Tourism and migration have made the population susceptible to HIV/AIDS and other STIs. PENCODE, an NGO run by a member of the fishing community has undertaken projects aimed at spreading awareness about the disease. Among the 3 000 households (with an average size of 6 members per family), there are over 30 full-blown cases of HIV/AIDS. A major stumbling block in addressing health issues is the low level of literacy among the population and high dropout rate from school.

Women in fisheries: Fishery activities of women include the marketing of fresh and dry fish. The former is gradually on the decline since middlemen have taken over the market. Fish drying on the other hand, is conducted on a large scale and the village has large godowns with concrete tanks for brining and pans for drying and storing the fish. Fish dried for human consumption consists of varieties such as ribbonfish, mackerel, and sardine. Trash fish is dried for poultry feed. Storage facilities such as ice plants and refrigerating units are available and used by the fisherfolk. Participation of women in marketing has

diminished considerably since men have started negotiating and marketing. Their role is restricted to processing.

NGOs, proposed projects: Alternate livelihood strategies through SHGs have been suggested but there is lack of enthusiasm among the women since competition is high and people outside the fishing community have already exploited most niche areas for business. The National Research Centre for Women in Agriculture (NRCWA) suggested that alternate/additional income for women could be generated if they were trained to compost refuse along with fish waste and culture worms. The NRCWA also suggested that the product could be marketed through the DOF as organic fertiliser/compost.

Ganjam District

1. Chilika Lake

a) Gajapatnagar village

Background and resources: The village has 400 fisherfolk households who are settled around the Chilka Lake and practice brackishwater fishing. Women are involved in marketing fish in headloads to neighbouring villages. Fish is dried if it is not sold for three days. In the high season, middlemen procure the catch directly from fishermen thereby reducing women's participation in marketing. NGOs are not involved in community development or capacity building activities. Women are however, being encouraged to save and one SHG of 20 members has recently been formed. Every eight days, women save Rs. 5 hence the group saves Rs. 100 per month on which the interest is Rs. 4 per month.

Needs: The local needs are: an ice plant/cold storage for reducing post-harvest losses; toilets and sanitation facilities; a high school for girls who cannot travel to neighbouring districts; adequate means of transport to enable women to commute from the village to the highway and a local branch of the bank.

Credit and savings: Since there is no NGO involvement in the village, fisherwomen in particular have not been trained in income-generating activities or post-harvest fisheries technology. Women express the need to acquire skills such as tailoring so that additional income can be secured for the family. Fishing and marketing provide an average of Rs. 1 500 per month. Families are forced to borrow money from landlords and money lenders and women are particularly hesitant to approach banks and non-institutional agencies for credit.

Health and nutrition: Nutrition levels are low: fish and rice are consumed on a daily basis and vegetables occasionally supplement their diet. Scrap fish and juveniles are kept for domestic consumption while high value varieties are sold in the market. The average family size in the village is five members; family planning operations are carried out on all women with two children or more and information on HIV/AIDS is also imparted to the people on a regular basis. However, health standards are not good: people are prone to diarrhoea and malnutrition.

b) Kalarabadi village

The village consists of 35 families all of whom are seasonal migrants from Andhra Pradesh who unlike their Oriya counterparts, fish in the open sea. Oriya fisherfolk do not permit migrant fishers to operate in the Chilika Lake. Siltation of the Palur canal has affected these fisherfolk as access to the sea has become difficult. Conflicts with neighbouring Oriya fishing villages over resources are common. Basic facilities such as water and sanitation are absent. The borewell constructed in the village gives saline water and fresh water has to be procured from a neighbouring village 1 km away. Firewood is used as fuel. Living conditions are harsh and people believe that they are treated poorly by the government.

Women are not directly involved in marketing fish; men market fresh fish. Once a week, women sell dry fish that they process by brining. On other days, women work as labourers in agricultural fields and construction sites. The income earned from this activity is Rs. 40 – 50 per day and the income earned from selling dry fish varies from Rs. 100 – 200, every 10 days.

2. STEP project at Badanala village (United Artists' Association - UAA)

Background and resources: Situated in the Ganjam district of Southern Orissa, this village is inhabited by Andhra fisherfolk. The village can be accessed through a dirt path that is 7 km from the nearest metalled road. About 185 families with an average family size of seven members live in the village. People do not have regular assets of either property (patta lands) or fishing craft. There are 120 traditional crafts and four

mechanised boats. The village does not have a local school or hospital. There is a public health clinic in the village. Land holdings are small and unproductive, forcing women to diversify their livelihood strategies. They have started working in cashew plantations, paddy fields, and construction sites where they earn daily wages.

Health and nutrition: Nutritional standards are low. Kanji, fish curry, and ragi malt are consumed on a daily basis. Government enthusiasm at family planning is evident in the fact that the village is frequented by a Primary Health Worker every two months and that all women with two or more children have been sterilised.

Fishery activities of women: During the season, fish marketing is the major source of income. Fresh fish, especially big catch is sold to godowns, medium size fish is sold in the local markets, and trash fish is kept for domestic consumption. Since local markets are not connected by roads, women are forced to transport the catch in bamboo baskets on foot.

Dry fish also has a popular market. Fish is dried on sand after it is cleaned and treated with brine. Fish species popularly processed and sold are sardines, mackerels, anchovies, and ribbonfish. Middlemen have taken over a large share of the market and women prefer selling bulk quantities of dry fish to them. Small quantities are sold from door-to-door. Huma, Chattarpur and Behrampur have popular wholesale markets for dry fish. Income earned from marketing dry fish fluctuates from Rs. 20 per day during the low season to as much as Rs. 100 per day during the peak season. Women are aware of post-harvest losses: almost a fifth of their catch is reduced due to fish rot.

NGO interventions: The UAA has organised four SHGs consisting of 20 members each in the village with a view to weaning women from the clutches of landlords and making them self-sufficient. Women control family income. Low rates of interest (three percent) prompt them to approach non-formal institutions for credit. Women are trained to enhance their domestic savings through SHGs. Capacity building, sanitation, and education are also promoted through the NGO. It is hoped that given appropriate training, these SHGs will evolve into self-sufficient income-generating units.

The NGO has also facilitated the DOF to conduct the STEP programme within its premises. The programme highlights: (a) sanitary methods of processing dry fish and (b) value addition of fishery products such as pickles, prawn powder, and fish cutlets. Although women are enthusiastic about training and assure the utilisation of their skills for commercial purposes, the absence of transport and fresh water may prove to be major hindrances.

Needs: The needs of the women are quite different from expanding the market. Women have identified the need for a freezing plant, community hall, fresh water, and pattas as crucial in furthering economic development.

3. Badaaryapalli village in Chattarpur (United Artists' Association and Samudra)

The village (comprising 1 500 families) has recently been connected by a National Highway that links it to Raipur, Behrampur, Chattarpur, and several important towns. The village is also close to the fishing harbour (now defunct) and Indian Rare Earth, a company of national importance that extracts helium and thorium from local earth/soil.

The most common catch is anchovy that is sun dried on used nets. Hygienic standards do not apply to this method of fish processing. Each family (two women per family) dries about 120 kg of anchovy every week. The fish thus processed is transported to the market by a Trekker (a large jeep) that accommodates 6 – 7 women and their catch. Hiring charges for one trekker amount to Rs. 300 which is the only monetary investment made by the people. Depending on the frequency of the catch and post-harvest losses (birds, dogs, and rotting during the monsoon), each sack of dried fish weighing 120 kg fetches Rs. 1 500. During the peak season, as much as Rs. 9 000 can be earned. However, this income is not necessarily assured and there is stiff competition from neighbouring villages that also specialise in anchovy drying. The only advantage that the people of Badaaryapalli have over their competitors is the presence of a stable road and efficient means of transport.

Local NGOs: The UAA and Samudra have organised SHGs (Mahila Sanghas) among fisherwomen and encouraged savings. Women save a rupee a day (Rs. 30 a month) from which credit can be issued to them. The NGOs have also trained fisherfolk in matters related to medical aid, hygiene, and sanitation. Men have been trained to mend small machinery and cycles, and women have been imparted instruction in sewing. However, these skills are not used to generate additional income.

4. Gopalpur-on-Sea

Gopalpur-on-sea is a popular tourist destination. Beach hotels and holiday homes crowd the town and modern facilities such as roads, electricity, water, and markets are easily available. However, these facilities have not reached the 20 000 fisherfolk living by the beach. Business people and corporate houses reap the benefits of tourism and the condition of these fisherfolk is no different from that of their counterparts in relatively less developed parts of the State. In addition, tourism has brought them into contact with the dangers of HIV/AIDS infections and similar health problems. The literacy rate of the fishing community is minimal. Property is not assured and few families have pattas.

Women are involved in marketing fish. Fish is never sold directly to owners of restaurants and hotels. Women have not been able to calculate the difference in sale during the high tourist season. They are aware of a marginal increase in price during the time. Fish drying is not common. If fish is dried at all, it is only if there has been no sale for a few days. As in other villages, trash fish forms a major component of domestic food consumption. Prawn, tuna, sardine, and mackerel are among the varieties sold in the market.

Family planning programmes have efficiently curbed the family size to five members per family. However, women complain that they have to bribe doctors with Rs. 1 000 to get operated.

Mahila Sangams run by local NGOs and Christian missionaries have organised SHGs that encourage saving. About 24 such groups have been formed, each consisting of 15 – 20 members. Each woman saves between Rs. 20 – 30 per month. SHGs have yet to evolve as income generating organisations.

Local demands include: a platform for drying fish, cold storage (for storing surplus fish), money (loans) for conducting business, and toilets to improve sanitation and hygiene standards.

Paradwip District

Sandhkud village (Spandan)

Background and resources: The village consists of a mix of Andhra and Oriya communities. While the former occupied lands that now house the harbour, the latter are settlers who came to the village with the growth of industrialisation. The village has been in the present location for the past 25 years and has a population of about 15 000. The presence of several heavy industries has increased the livelihood options of the people who have often contracted their labour. Among the many industries are Paradwip Phosphates Limited, Oswal Fertilisers, HPCL, Paradwip Port Trust, and an oil refinery. The village also has ration shops, provision stores, tea stalls, facilities such as tailors and barbers, provision for fuel, and medical facilities. Water for household use can be procured from a borewell 1 km away and 100 gas connections have been installed. Firewood is also used as a fuel alternative. People forage neighbouring forests or buy wood from local shops. The Oriya community in the village practises animal husbandry and keeps milch cattle. Most families also have about 2 – 3 hens. The fishing community has 300 motorised boats.

Nutrition, health and population: Since resources are plenty, the average fisher family consumes rice, fish, and eggs on a regular basis. Vegetables are occasionally consumed. Trash fish is preferred over table fish. Sufficient knowledge and awareness about HIV/AIDS exists among the people and women with two or more children have been sterilised. The average family size does not exceed five members.

Credit and savings: Non-formal credit institutions are still popular; moneylenders from Tuni and Huma give petty cash to the fisherfolk at nominal rates of interest. Women however, do not approach moneylenders for loans.

Fishery activities of women: Women are involved in marketing dry fish. About 100 women dry fish in the following manner: fish is salted and dried on nets or mats. Post-harvest losses occur because the fish is neither cleaned nor gutted but it is felt that since the catch is sold by weight, gutting lightens the weight and reduces the income earned. Dry fish is sold in the markets of Huma, Nakapalli, and Keyanagar and Rs. 1 000 can be earned from the activity.

Women transport fresh fish by headload from trawlers to the markets and are not involved in marketing the catch.

Training and interventions: About five years ago, women were trained in hygienic methods of fish processing such as gutting, cleaning, and drying. They claim to have followed the method for a few years but abandoned the practice since they felt that the method was time-consuming and labour intensive and also reduced the weight. The mindset of small-scale fisherfolk defies conventional norms of

classical economics, as they are more concerned with eking out a daily income rather than speculating for a foreseeable future. SHGs among the Andhra fishing community have not been formed although one SHG for women has been formed among the Oriya population. Women are unclear about the role of cooperatives and SHGs. Recently, 60 women were inducted into a Fisherwomen's Cooperative Society.

Problems and needs: Women complain that the catch has greatly reduced since gate number 5 (a landing site in the fishing harbour) has been made inaccessible to them. Fisherfolk spend more money accessing the landing jetty in the harbour assigned to them. Siltation has also resulted in diminishing catch. The absence of pattas, government schools, drinking water (they pay Rs. 5 per pot), electricity and toilets are problems that need to be addressed.

Balasore District

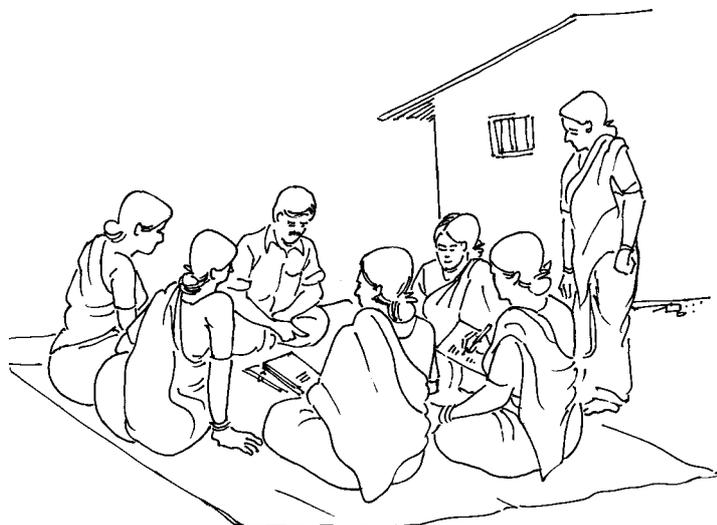
Panchubisa village (Panchubisa Fishermen's Association)

Background and resources: The village has over 1 500 households that are segregated on the basis of religion, caste, and occupation. Muslims live closer to the coast and Hindu families live in the interior where they also have marginal land holdings. The latter have thus diversified their livelihood strategies to include activities such as agriculture (paddy plantations and mustard crops are fairly common), providing labour in neighbouring cashew plantations, and preparing thatch for roofing. Almost every family has coconut and banana trees; a few families have cattle and earn through dairying. Goat rearing is also common. Some prosperous agricultural families have also invested in a tractor that is often rented by other members of the village. The village lands are quite fertile and fruit trees and similar resources are available. The village however, is prone to natural calamities such as cyclones and much life and property is lost due to heavy rainfall. The beach is clayey and waters recede over a mile with each low tide. Most fisherfolk possess motorised FRP boats. Other resources include a Public Health Centre half a kilometre away, a hospital at a distance of four kilometres, and a tube well (though it only gives saline water). Fuel necessities are fulfilled by casuarina groves in the neighbourhood. Wood is also bought at the rate of Rs. 3 per kg. Cow dung is also used as fuel. Sanitation facilities are absent.

Nutrition, health and population: Despite the evident abundance of food resources, there is malnutrition among women and children. This is due to the consumption of only one proper meal per day and the quality of food consumed. Vegetables are consumed once a day and fish and rice form part of the staple diet. Trash fish is always preferred over other commercial varieties. Milk is not consumed on a regular basis; lentils are also not consumed. Family planning however, is popular and almost all women have been sterilised.

Fishery activities of women: Women are involved in marketing fresh and dry fish. Dry fish is processed by cutting, brining, and drying for two days on mats. Women are not aware of post-harvest losses. Popular varieties of fish that are dried include mullets and ribbonfish. Fish thus dried fetch Rs. 10 per week/kg. Dried prawns fetch Rs. 100 per week (the rate varies between Rs. 25 – 30 per kg). Marketing such fish is not a problem since local markets absorb the catch adequately. Fish is also sold wholesale to middlemen. However, men control the income thus earned and women have little role to play in decision-making with regard to household finance. In addition, landlords and moneylenders continue to be the primary institutions forwarding credit to the people.

NGO interventions and needs: Two SHGs consisting of 10 and 15 women have been formed and each member saves Rs. 20 per month. Women have not been able to engage in any income-generating activity. They express a need to be trained in skills such as tailoring, but a larger number of women express the need for education and sanitation.



WEST BENGAL

24 Parganas Districts

The Gangetic delta of West Bengal offers multiple livelihood options to the people. Although there are traditional occupational groups, people switch vocations according to seasonal variations and possession of property (agricultural land, boats, traps, and nets). Women in the Gangetic delta of Sundarbans similarly diversify their livelihood strategies and are constantly exploring niches where they can be productive. Women interviewed belonged to different communities and practice a combination of activities. Examples of such diversification include: animal husbandry, pisciculture, and small-scale farming.

Nimpith

Ramakrishna Mission Krishi Vigyan Kendra

(Meeting with Women SHGs from Dhusnekhali, Hingalganj and Sandeshkhali villages in North 24 Parganas)

The District Rural Development Cell (DRDC) has sponsored the training of some representatives of women SHGs in North 24 Parganas in animal husbandry and fisheries. It is hoped that such training will translate into income generation among the different SHGs. Participating villages included Dhusnekhali, Hingalganj, and Sandeshkhali.

The women of Dhusnekhali have identified goatery as the possible income-generating alternative; Hingalganj also has the advantage of raising livestock and Sandeshkhali women are keen on pursuing aquaculture as a livelihood alternative. The SHG of Dhusnekhali was formed 17 months ago, 11 women save Rs. 20 per month and the cumulative savings amount to Rs. 4 500. The Hingalganj SHG is five years old and consists of 15 people who save Rs. 10 each month. Three years ago, the women of Sandeshkhali formed an SHG of 14 members and took a loan of Rs. 25 000 to invest in aquaculture. Of the money, Rs. 15 000 has been spent to enhance their business and Rs. 10 000 remains in the bank. The net profit expected from the activity is Rs. 5 000.

The women belong to diverse agrarian backgrounds though most of them are agricultural labourers with minor holdings. The SHGs have been organised by the Youth Development Centre (YDC), an NGO that works in North 24 Parganas. They have been trained to assess market fluctuations. All their products have a reasonably good demand within the village. For the moment, they do not plan to market their products in other villages and have decided to reinvest profits in furthering their business. In the village of Sandeshkhali where prawn culture is the niche identified by the women, it has been decided that depending on the weather and demands, women will alternate between fresh and saltwater aquaculture. In the event of surplus supply, women have envisaged marketing their products in neighbouring villages. The transport and communication system in all these villages is reasonably good.

Despite the advantages in conducting business in these villages, there are drawbacks that hinder social and economic growth. These are: seasonal markets, the need for seeds, inputs, and regular training, and an NGO for community and capacity building.

Sandeshkhali in particular, is a Scheduled Tribe village where women are not given due importance in social and economic spheres. In addition, in all the villages, education levels are low and women lack initiative. Further, there is jealousy and disunity which hinder effective business groups.

Women believe that the joint family system coupled with the conservative nature of rural folk is largely responsible for the preference of male children over female children. Also, malnutrition among mothers and infants is common. Dropout rates in all three villages after primary education are high, as is ignorance about medical aid.



Kakdwip (South 24 Parganas)

(Sundarbans Kalpataru)

1. Bhubannagar village

The SHG visited (Matangini Nari Kalyan Swarojgari Dal) consists of 15 women who have undergone training by the RKM KVK in goaterly and dairying. The latter has been identified as a possible income-generating activity. Women are also involved in individual businesses. These include: rice processing, petty shops, poultry, commercial vans, goaterly, and dairying. The average income earned from such activities amounts to Rs. 1 500 per family. Women have also been encouraged to set up low-cost latrines in the village. Fuel requirements are met by wood, straw, and occasionally cow dung.

Women state that the village has only one women's SHG (the others are only for men) since unity among women is poor. Very often, husbands discourage them from forming groups. Some women note that household chores keep them far too occupied to indulge in group activity. In addition, there is plenty of scepticism about the success of SHGs leading to reluctance on the part of women to join them.

It was observed that dairying would not be a profitable group activity since there is insufficient land to support cattle. It was also noted that most women are already involved in domestic chores and traditional businesses with their husbands. Group activity should therefore decrease the burden of women rather than prove to be an added chore. Women expressed a desire to provide a service that would not require too much labour. They found the idea of running an STD booth very appealing but are afraid that men from their village will not allow them to run it successfully since it would give them increased hours of leisure.

2. Gobindrampur village

Unlike Bhubannagar which is situated on a metalled road, Gobindrampur can only be accessed by a brick footpath that runs 1 ½ km from the road. This village has two SHGs: Ma Saradmoni Swrojar Dal and Nibedita Swarojgar Dal that encourage women to save Rs. 1 per day. These groups were formed in January 2003. The groups have not identified any activities that they would like to conduct commercially. Women are currently involved in family businesses such as rice processing, rearing betel leaf farms, paddy fields, and dairying. They express the desire to run a school in the village and obtain training in embroidery and tailoring which would fetch them an income. The village also has large ponds that can be profitably used for pisciculture. Women admit that they have been harvesting freshwater fish in their private ponds but have not considered doing the same on a commercial scale. The village has not been trained in income-generating activities and it was suggested that pisciculture could be a possible avenue for income generation.

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Information Networking Programme Questionnaire for NGOs

A. CONTACT DETAILS

Full Name of Organisation :
Mailing Address :
Telephone/s :
Fax :
Email :
Primary Contact Person :

B. BACKGROUND

1. What is the main focus of your organisation?
2. What are the aims, objectives and goals of your organisation?
3. What activities, programmes and projects are your organisation involved in?
4. Who are your target groups?
5. How long has your organisation been in operation?
6. Who are the members of your organisation?
7. What is your major funding source?
8. Other sources of funding?

C. MAJOR ACHIEVEMENTS OF YOUR ORGANISATION

9. What are the major achievements of your organisation?
10. What projects have you conducted at community level (with dates)?
11. What achievements have resulted from these projects?
12. What impacts resulted from these projects?
13. What follow-up did you conduct with these projects?
14. What are the major project priority areas for your organisation?
 - (a) Long-term:
 - (b) Immediate:
15. Was your organisation associated with the Bay of Bengal Programme or the FAO in the past?
If so, what were:
 - i. The details of the activities conducted:
 - ii. Duration of the association:
 - iii. Funds/ technical assistance received from the BOBP/FAO:

D. PROBLEMS AND NEEDS OF THE COMMUNITIES WITH WHOM YOU DEAL

16. From your organisation's point of view, what are the major problems faced by coastal communities?
 - (a) Housing facilities/
Living standards Why?

- (b) Economic activities? Why?
- (c) Social/cultural activities? Why?
- (d) Environmental? Why?
- (e) Resources? Why?
- (f) Communication? Why?
- (g) Health/Nutrition? Why?
- (h) Education? Why?
- (i) Other? Why?

17. What does your organisation perceive to be the needs of coastal communities which would raise awareness in achieving sustainable livelihoods?

- (a) Information needs?
- (b) Technology needs?
- (c) Skills/expertise?
- (d) Attitude?
- (e) Knowledge?

18. Other than budgetary levels, what are the other problems faced by your organisation when carrying out its normal activities?

E. SKILLS & EXPERTISE

19. What skills and expertise of your organisation could be used in community projects?

20. Name a contact person from your organisation who could liaise with our group in the implementation of projects.

* * *

Information Networking Programme Checklist for Project Sites

A. Food Security and Nutrition

- To what extent is household food security achieved in the community?
- Do traditional dietary customs make the best possible use of available nutritional food?
- Are any food and nutrition survey data available?
- What percentage of catches is consumed by the household and what percentage is sold?
- To what extent are fisheries the primary or sole source of food?
- What other sources, actual or potential, of food exist in the community?
 - farming/ home gardens
 - raising livestock or poultry
 - raising fruit-trees

B. Income

- To what extent are fisheries the primary or sole source of income for men? for women?
- What other sources of income actual or potential, exist in the community?
 - non-fisheries cottage industries
 - trade
 - services
 - other
- Are fisheries activities year round or seasonal?
- Who controls the family's cash income?
- Who owns the means of production: boats, nets, traps, ovens, ponds, land, etc?

C. Community Services

- To what extent are basic community services available directly related to women's domestic role?
 - child-care facilities
 - water for household use
 - fuel for household use
- Are basic educational facilities available and used by women?
- Are population education, family planning programmes available?
- Are basic medical facilities available?
- Are basic financial services available (savings and credit)? Are they available to/used by women?
- Do women have access to cooperatives and community organisations?

D. Division of Labour

- To what extent are there clear, traditional distinctions between the roles of men and women?
 - in fisheries activities
 - in other productive activities
 - in handling and control of finances
 - in social/community activities
 - in political/decision making activities
- What percentage of women's labour is devoted to domestic tasks, including collection of water and fuel?

- Are there traditional restraints on women working or associating with men outside prescribed limits?
- Are there traditional taboos that prevent women from engaging in certain types of activities on their own?

E. Overview

- What are the major local resources available for development?
 - sources of food
 - cash-crop production
 - sources of income from fishing, agriculture, crafts, services, earnings sent by migrant workers
 - community services
 - cooperatives
 - other economic, social and political organisations or patterns
- Are they used to their fullest potential?
- What are the major obstacles or constraints to local development?
 - lack of basic natural resources
 - climate and climatic disasters
 - lack of income-earning opportunities
 - lack of community facilities: medical, educational, credit, extension, transportation, markets, etc.
 - seasonal migration
 - inefficient or destructive work patterns and methods
 - poor dietary habits, including child feeding
 - inhibiting social patterns and taboos
 - governmental policies, priorities, laws and regulations
- Can these, realistically, be modified or eliminated?
- What base-line data is available on the economic and social life of the community, including the position of women? Is it accurate and up to date?
- Have other programmes or projects been launched in the area? If so, with what success?
- Have local inhabitants, including women, been effectively consulted on their priorities and needs?

F. Fish Production

- Are women fishers in their own right?
 - as crew on fishermen's craft
 - in their own craft
 - from the shore
 - collecting shellfish, molluscs, seaweed, etc.
- If women serve as crew, do they get an equitable share of the catch?
- Are women engaged in small-scale aquaculture?
- Is aquaculture an individual or a collective enterprise?
- Do women control the activity and any income they might earn?
- How is their catch used?
 - for human consumption
 - by the family
 - sold at the market
 - as bait for fishermen
 - other

- Is fishing a normal part of their work or only in emergencies?
- Is fishing seasonal or year round?
- In the case of seasonal migration, do women participate in migration or do they stay back? What are their duties and special problems during migration?
- What percentage of their work time is devoted to fishing or aquaculture?
- Do women make nets, sails, traps, fishing craft, etc? Do they earn from this activity?
- Are institutional credit facilities available to women to invest in fishing craft/gear or aquaculture? What are the non-institutional credit arrangements?
- Do women repair fishing gear? Do they earn from this activity?
- Are women's traditional fishing activities reflected in the project?
- Are new fishing activities for women being introduced?
- Does the project recognize women's supportive activities (making and repairing fishing gear)?
- Does the introduction of new materials or technology assist women in these supportive activities or does it threaten to make them redundant?
- Does the project actively support women's production roles?
 - by introducing improved, appropriate technologies
 - by training in appropriate skills
 - by providing credit facilities for women
- Does the project ensure that women receive a fair share of benefits?
- Does the increase in production increase women's workload in handling, processing and marketing?

G. Fish Processing

- Are women engaged in fish processing?
- How is the processed fish used?
 - for family consumption
 - for sale
 - other
- What are the major causes of post-harvest losses?
- What processing techniques are used? Are they effective? Could they be improved?
 - in terms of reducing losses
 - in terms of improving the nutritional value of the processed product
- What equipment is used? Could it be improved? Can improved equipment be manufactured locally?
- Do women own the processing equipment they use?
- Does the processing impose a significant burden of ancillary work: collecting fuel, salt, water, etc?
- Do women have access to credit for fish processing facilities?
- Is processing done on an individual household basis or on a joint cooperative basis?
- Are there adequate storage facilities for fish?
- Does the role of women in fish processing suffer from the effects of seasonal migration?
- Do women control whatever income that may come from fish processing?
- Are institutional credit facilities available to women to invest in fish marketing?
- What are the non-institutional credit arrangements?
- Does the project include a specific component for fish processing?
- Does the project create new forms of processing that conflict with the traditional types or methods used by women?

- Are the new processing technologies appropriate for local conditions, needs and skills?
- Does the project include training women in the new technologies?
- What type of processing tools and equipment do women want?
- What type of tools, equipment and methods do they need to reduce post-harvest losses?
- Does the project, either in its production or its processing component, increase the workload of women?
- Does the processing component take into account the possibility of increasing the nutritional value of the processed fish?
- Does the project ensure that the women get a fair share of the benefits from improved processing techniques?
- Does the project provide for access to credit for women for purchasing processing materials and equipment?
- Does the project encourage women to form cooperative ventures for processing?

H. Fish Marketing

- To what extent must catches be sold in order to purchase food or other basic necessities?
- To what extent are the more valuable or nutritious species sold and the less valuable or nutritious retained for home consumption?
- Are women responsible for fish marketing?
 - all fishery products
 - only some
- Does the role of women in marketing suffer from seasonal migration?
- Do women manage their earnings from marketing?
- Do women face significant competition in marketing fish?
 - from large-scale sellers
 - from men
 - from other women
- If there are government price policies on fish, are they favourable to the small-scale seller?
- Are there government or self-imposed quality controls?
- Are adequate markets available?
- How do women transport the fish to market?
- Are transportation facilities adequate and reasonably priced?
- What type of equipment do women need for marketing?
 - baskets or tubs
 - stands/ stalls
 - storage facilities
- Does this equipment require a significant outlay of capital?
- Are there middlemen/ wholesalers between the women and the consumer market? If so, are they necessary?
- Are women knowledgeable about appropriate marketing and bookkeeping techniques?
- Are there women cooperatives for fish marketing?
- Do women have access to institutional credit for fish marketing? What are the non-institutional credit arrangements?
- What do women perceive as their most critical marketing needs?
- Does the project reflect the traditional position of women in fish marketing?

- Does the project threaten this traditional position?
- Does the project increase women's marketing workload/ opportunities?
- Does the project ensure that women get a fair share of the benefits from improved marketing activities?
- Does the project directly address women's marketing needs?
 - transportation
 - equipment
 - facilities
- Does the project train women in marketing and bookkeeping skills?
- Does the project provide women with access to credit for marketing activities?
- Does the project encourage women to engage in cooperative fish marketing ventures?

I. Non-Fisheries Activities

- What physical resources are available for non-fisheries activities?
 - arable land for home gardens, fruit-trees, etc
 - forests, mangrove stands for fuelwood or charcoal
 - livestock or poultry
 - raw materials suitable for manufacture
 - cane or bamboo
 - wood
 - reeds for matting
 - wool or cotton
 - other
- Are these resources being fully exploited?
 - by fisherfolk
 - by others
- Are any imported materials for manufacture easily available at reasonable cost?
- Is the local economy able to absorb more or new non-fisheries activities?
 - manufacture of consumer goods
 - trade
 - services
- What are the major needs/ demands in these areas?
 - locally
 - nationally
- Do local moneylenders, merchants, etc control the market and credit? If so, will they create obstacles for women who try to enter the market independently?
- Are institutional credit facilities available for women?
- Do government price policies favour or inhibit manufacturing activities?
- How much time or energy do women have to engage in non-fisheries activities?
- Do women manage/ control whatever income they earn?
- Are there social constraints that prevent women from engaging in some/ all non-fisheries income-generating activities?
- Are women by custom or habit restricted in their movements or activities beyond the household?
- Do local traditions assign low status to certain occupations or activities?

- Do women engage in traditional manufacturing enterprises? If so, can the economy absorb increased production?
- Are there manufacturing activities that are traditionally for men but in which women could also be involved?
- Are women engaged in non-fisheries trade or services?
- What marketing/ distribution services are available? Do women have access to them?
- Do women possess traditional skills that are not being fully utilised?
- What activities, food or income producing, appeal to women?
- Are women involved in non-fisheries cooperative activities?
- Does the project make full use of available physical resources?
- Do proposed activities depend on imported materials that are expensive or difficult to obtain?
- Do proposed activities take into account local economic patterns, structures and facilities?
- Do proposed activities address local or national consumer needs?
- Have women been actively involved in project planning and in setting project priorities?
- Is credit available to women for these activities?
- Do proposed activities take into account women's traditional work patterns, skills and interests?
- Do these activities require special training? If so, is the training being provided?
- Does the project include assistance in the formation of cooperative enterprises for women?

J. Community Activities and Social Services

- Are there community structures that permit or encourage women to express their ideas and opinions?
- Do women play an active part in community decision-making processes? Are their views listened to, respected?
- Do women ever assume leadership roles?
 - within women's groups
 - within mixed groups
- Do women feel that they have a meaningful role in community activities and decisions?
- What to women see as their most pressing social needs?
- Do they have ideas about how these could best be met?
- What do women see as their most important social/ community contributions?
- What changes in their social status would women most prefer?
- Do they have ideas how these changes could be made?
- What social services exist in the community?
 - schools
 - medical centres
 - public sanitation facilities
 - child-care centres
 - community water and fuel
 - markets for food and other basic essentials
- Are these services easily accessible and do they adequately serve the people's needs?
- Are these services equally available to women?
- Are girls encouraged to enroll in formal education/ literacy programmes?

K. Organisational, Technical and Financial Support

- Are extension services and banking services available in the community?
- Do they include direct support for women's activities?
 - fisheries activities
 - non-fisheries income-generating activities
 - domestic activities
 - credit, savings, investment
- Is the staffing adequate in size and professional training?
- Are women included in the extension staff?
- Are extension services provided in locations, at times and in settings that encourage women to take part?
- Are the technologies available to women adequate?
- Is research being conducted on ways to improve these technologies?
- Are training programmes being offered to women?
 - fisheries activities
 - fisheries management
 - stock assessment
 - fishery statistics
 - new fishing technology
 - aquaculture
 - boat building
 - making/ repairing fishing gear
 - fish handling
 - fish processing
 - marketing
 - in non-fisheries activities
 - in small-scale business and financial management, credit/savings
- Are there extension or training services designed for men in which women could be included?
- Are there any self-help groups/organisations/cooperatives for women already in place?
- Are they registered as formal organisations, viz. cooperatives, associations, etc or are they of an informal nature?
- Are these groups/organisations/cooperatives supported by larger organisations/institutions, such as churches, political parties, administrations, trade unions, cooperative federations, etc?
- Is the membership exclusively reserved for women or are men members too, or could they become members?
- What are the main areas of activities/purposes of women's groups/organisations?
- To what extent is the group/organisation/cooperative succeeding in achieving its goals? What are the major obstacles in achieving the goals?
- What is the membership of the group/organisation/cooperative in relation to the size of fishing community? How many members are women?
- Are there any special criteria for membership? Are certain sections/social strata of fisherwomen more prominent among members of the group/organisation/ cooperative than others?
- How often do all members meet and for what purpose?
- Does the group/organisation/cooperative have any executive bodies/management bodies/committees? How are they elected? How often do they meet, and for what purpose? How many members are women?

- Has any outside agency provided managerial training or assistance?
- Does the group/ organisation/ cooperative make a surplus of income over expenditure and/or does the group/organisation/cooperative depend on subsidies?
- What do women see as their most urgent or practical organizational and technical support needs?
- Does the project involve strengthening existing organizational and technical support?
 - government extension services
 - non-government services
 - research
 - banking services for women
- Will this strengthening directly benefit women?
- Does the project involve initiating new organizational and technical support services for women?
 - governmental
 - non-government services
 - project
 - research
- Is adequate staff available? Is appropriate training provided?
- Does the staff include women? Are local women included?
- Are local women trained as trainers or training assistants?
- Are the staff – men and women – sensitive to the needs and interests of fisherwomen?
- Does the project provide training in courses for women or which include women?
 - fisheries
 - fisheries management
 - fishery statistics
 - stock assessment
 - new fishing technology
 - aquaculture
 - boat building
 - making/repairing fishing gear
 - fish handling
 - processing
 - marketing
 - non-fisheries
 - cottage industries
 - home gardening
 - livestock or poultry raising
 - marketing, bookkeeping, business management
 - use of credit and savings
- Does the project make adequate provisions for the continuation of support after the project per se ends?
- Does the project include the formation of self-help groups/organisations/cooperatives for women and/or support to already existing groups/organisations/cooperatives in the form of :
 - membership training regarding general socio-political awareness, literacy, responsibilities and privileges of members
 - vocational training of members
 - managerial assistance to the group/organisation/cooperative and related training, including further development/transformation of informal groups into registered organisations/cooperatives.
 - implementation of project activities through self-help groups/ organisations/cooperatives.
 - conduct of studies/workshops through self-help groups/organisations/cooperatives
 - funding support (fixed assets, working capital, credit, etc)

L. Household Food Security

- Does the project contain a specific component aimed at improving women's contribution to household food security?
- Does the project take into account ways by which women can contribute to household food security during fishery off-seasons?
- Does the project encourage giving women a greater say in allocating family income to food purchase?
- Does the project include training women to make the best possible use of available nutritional food?
 - modification of traditional dietary customs
 - use of neglected local foods
 - improved methods of food preparation
 - improved methods of family food storage
 - courses in basic nutrition
- Does the project include a component to introduce women to the production of non-fisheries sources of food?
 - farming home gardens
 - raising livestock and poultry
 - growing fruit-trees
- Does the project promote or limit women's ownership of the means of food production; boats, nets, traps, ovens, ponds, land, etc?

M. Population Activities

- Is there any data available on family sizes, population growth, birth rates, etc in fishing villages situated in the project area? Summarize information with regard to family sizes, population growth and birth rates, as well as factors influencing the same. How do the figures compare with neighbouring villages not inhabited by fisherfolk?
- Have any population education/information and/or family planning programmes been carried out in the fishing villages of the project area? What were the results and experiences?
- Have any population education/information and/or family planning programmes been carried out in neighbouring villages not inhabited by fisherfolk? In which way did the results differ from the results achieved in the fishing villages of the project area?
- Are there any ongoing and planned national and regional population education programmes? What are the programmes and what institutions/agencies are involved?
- Does the project envisage studies generating data on family sizes, population education efforts? If not, could these topics be incorporated into studies planned by the project?
- Does the project link its activities to ongoing population education programmes or facilitate fisherfolk's access to these programmes?
- What might be the project's impact on population growth and population planning?
- Is there any monitoring mechanism set up within the project with which this impact could be measured?

N. Impact of New Technologies and Economic and Social Structures

- Have new technologies or economic and social structures recently been introduced which have changed or are changing women's traditional roles?
- Are these changes positive or negative?
 - from the project planners' point of view
 - from the women's point of view
 - from the men's point of view
- Are men receptive to the possibility of women increasing their economic power and experience?

- Are men receptive to the possibility of greater social status for women?
- Is the project introducing new technologies?
 - for fish production
 - for fish processing
 - for non-fisheries activities
- Are these technologies primarily in fields, which are traditionally dominated by men? If so, will they have an impact on women?
 - positive
 - open up new employment opportunities for women
 - provide additional sources of income for women
 - negative
 - unduly increase women's workload
 - eliminate or reduce women's traditional work
 - deprive women of traditional sources of income
- Are new technologies in fields traditionally occupied by women being introduced?
 - in fisheries activities
 - in non-fisheries activities
- Are these technologies appropriate for women's level of education and skills?
- Have women been consulted before introducing these innovations?
- Is there a danger that newly introduced technologies aimed at women will become appropriated/ monopolized by men?
- Does the project involve large-scale fisheries operations? Will the effects of these be positive or negative for women?
- Are changes in marketing patterns or systems part of the project design?
- Is there a danger that these will reduce or eliminate women's traditional role in marketing? If so, what steps are being taken to prevent this?
- If the project includes credit for women, what measures have been taken to protect them from retaliation from the informal credit market?
- What steps have been taken to lessen possible male resentment against improved economic and social conditions and independence for women?
- Do special projects for women help to integrate women more fully into the community/development process or do they isolate them further?

Table 1: Needs of the surveyed SHGs on the east coast of India

State	District	Village/ region	NGOs/Organisations	Needs	
Tamil Nadu	Chennai	Royapuram/Kasimedu	PCSC, Asha Nivas, REEDA, Sangamam	Better fish marketing facilities, better links with transport	
		Oorur & Olcott	None	Revive the fish market at Besant Nagar	
		Odaimahanagar	None	Convert Seventh Avenue pavement into a fish market	
		Neelankarai	None	None	
	Tuticorin	Vellapatti	TMSSS, MSSRF, CJLP	Sanitation, water, more avenues for income generation, markets for pickle	
	Ramanathapuram	Pazhayaikayal	Roche, East Coast	Sanitation, more avenues for employment	
		Meenavarkuppam	TRRM	Right to exploit seaweed in Krusadai island, more alternatives, abolish middlemen, sanitation	
		Chinnapalem	TRRM	Sanitation, alternate employment, right to exploit seaweed in Krusadai island	
		Moonramchattiram	DHAN Foundation	Income, sanitation, public health, nutrition	
		Therkuvadi	Santhanam Foundation	Unity, greater income, more sources of employment, property	
		Uchipuli	DHAN Foundation	Income augmentation, markets, confidence building	
		Mundalmunai	MSSRF	Property, employment alternatives, sanitation, electricity, markets for cultured pearl	
		Pareidi	DHAN Foundation	Income, sanitation	
		Kanniyakumari	Muttom	St. Rock's Convent	Sanitation, livelihood options
			Nagarcoil	NUF	Appropriate post-harvest technology
	Thiruvallur (Pulicat)	Pasiavaram	IFDP	Loans, alternate employment	
Kottaikuppam		MSSS	Loans, poverty eradication, alternate employment		
Pondicherry	Pondicherry	Veerampattinam	MSSRF	More employment opportunities, textile shop, ice boxes, transport, property	
		Nallavadu	MSSRF	Transport, grinding machine, regular jobs, property	
		Nonankuppam	None	Loans	
Andhra Pradesh	East Godavari	Uppada	ICM, DWCRA	Market, sanitation, employment generation, property	
		Gadimoga	DWCRA, Velugu	Water, sanitation	
		Pedavalasala	Sravanti, Velugu	Sanitation, markets, pucca houses	
		Ramanapalem	ICM	Sanitation, water	
	Visakhapatnam	Boyevidi	Vikasa	Toilets, alternate sources of income	
		Timapuram	None	Transport, appropriate post harvest technology	
	Srikakulam	Tekkali	None	Health interventions, reduce competition in fish market, sanitation, hygiene	

contd...

State	District	Village/ region	NGOs	Needs
Orissa	Puri (Konark)	Pat Sundarpur	Coastal People's Development Association	Community hall, gas connections, education
		Chandrabhaga		Legalise property, more livelihood options, drinking water
		Sahana		Education, boats, gas connection, community hall
	Puri	Pentakota	PENCODE	Health interventions
	Ganjam (Chilika Lake)	Gajapatinaragar	None	Bank within accessible distance, girls high school, ice plant, sanitation, roads
		Kalarabadi	None	Dredge the canal for easy access to the sea, market
	Ganjam	Badanala	UAA	School, hospital, roads, market, property, community hall, ice plant, fresh water
	Ganjam (Chatrapur)	Badaaryapalli	UAA, Samudra	Appropriate technology for fish drying, education
		Gopalpur-on-sea	UAA, Samudra	Platform for drying fish, cold storage facilities, loans, sanitation and hygiene
	Paradwip	Sandhkud	Spandan	Education, sanitation, livelihood options, property, electricity, water
Balasore	Panchubisa	PFA	Education, livelihood options	
West Bengal	North 24 Parganas	Dhusnekhali	Youth Development Centre	More NGOs and SHGs, more training in specialised income generating fields, more capacity building exercises, gender awareness
		Hingalganj		
		Sandeshkhali		
	South 24 Parganas	Bhubannagar	Sundarban Kalpataru	Electricity, capacity building, gender awareness
Gobindrampur			Electricity, roads, capacity building, gender awareness	

Table 2: NGOs and their interventions with fisherwomen on the east coast of India

State	District	NGOs	Collaborations	Interventions with fisherwomen
Tamil Nadu	Chennai	REEDA	TNWDC, TN AIDS Control Board, GOI	Forming SHGs, EDP, skill training, computer technology, marketing
		PCSC	TNWDC	Forming SHGs, gender awareness, capacity building, skill training
	Tuticorin	TMSSS	GoTN, DRDA, MSSRF, UNDP	Forming SHGs, gender awareness, capacity building, vocational training, health awareness
		CJLP Roche	Department of Health (TN), Alliance (UK), National Child Labour Project (GOI), MSSRF	Health awareness, capacity building, vocational training
		East Coast	Project Aware (Australia)	Activism, gender awareness, training, formation of SHGs
	Kanniyakumari	NUF		Provide expertise in pickle making
		St Anne's Society	TAC Floor Co	Provide employment opportunities for women through local industry
	Tiruvallur	IFDP (CReNIEO)	AISECT	Formation of SHGs, skill transfer, computer technology, EDP
	Ramanathapuram	TRRM		Capacity building, gender, awareness, activism
DHAN Foundation		DRDA, Canara Bank, NABARD	Rural banking, formation of SHGs, gender awareness	
Andhra Pradesh	East Godavari	ICM	DFID, UK	Formation of SHGs, post-harvest technology, hygienic handling of fish
	Hyderabad	AFPRO	BOBP, DFID-PHFP, Government of India, UNDP	Income generation programmes for fisherwomen, disaster preparedness, marketing strategies, sustainable aquaculture
	Tenali	NVNS	—	Capacity building, activism, environmental awareness
	Visakhapatnam	Vikasa	Action Aid (India), Water Aid (USA), Indo-German Bilateral Project	SHG formation, community organisation, skill training, gender and legal awareness, disaster mitigation, value-added fishery products
		REEDS	AFPRO, CBR Forum, ILO, Department of Social Welfare, HRD Ministry	Community development, appropriate technology, SHG formation, micro credit
		DFYWA	Department of Fisheries	Solar fish-drying technology, literacy
		PWM	Government Polytechnic College	SHG formation, gender awareness, income generation, micro finance, skill training
		SMVS	CAPART, DRDA, Deccan Development Society	SHG formation, health awareness, literacy, vocational skill training, micro credit, capacity building
	Srikakulam	PREPARE	—	SHG formation, micro credit
		ARTIC	—	Appropriate technology interventions, SHG formation, activism, health awareness, family planning, disaster preparedness

contd...

State	District	NGOs	Collaborations	Interventions with fisherwomen
Orissa	Ganjam	UAA	Action Aid, Oxfam, Government of Orissa, SEEDS (USA), AICF (New York)	Skill training, SHG formation, education, health awareness, sanitation, gender awareness, human resource development and capacity building
		Prem PLAN	PLAN International	SHG formation, gender awareness, micro credit
	Balasore	PFA	—	SHG formation, disaster preparedness
	Puri	CPDA	CAPART, NABARD, DOF Ministry of HRD, GOI	SHG formation, skill training, disaster preparedness
		PENCODE		Health awareness
West Bengal	North 24 Parganas	YDC	KVK, DRDC	Vocational training, gender awareness, SHG formation, marketing, literacy, health
	South 24 Parganas	Sundarban Kalpataru	KVK, DRDC	Vocational training, SHG formation, sanitation, micro credit

Table 3: Profile of areas surveyed under the Women in Fisheries Programme

State/ Union Territory	District/ village	Rural/ urban	Additional livelihood options ¹⁶	Problems	Facilities available
Tamil Nadu	Chennai	Urban	Fish marketing, export, ornamental fish culture	Organisation, marketing, pollution	Transport, harbour, NGOs, water, communication, electricity, banks, SHGs
	Tuticorin (Sites visited: Vellapatty, Mapanad, Pazhaiyakalay)	Semi-urban	Fish marketing, shell and palmyra craft, crab fattening, value-added fishery by-products, pearl culture, coastal tourism	Marketing, sanitation, water, marine pollution	Fish pickle unit, crab export units, NGOs, transport, electricity, communication, harbour, organised SHGs, banks
	Ramanathapuram (Meenavarkuppam, Mundalmunai, Chinnapalem, Moonramchattiram, Pareidi, Therkuvadi, Uchipuli)	Rural, Gulf of Mannar Biosphere Reserve	Jasmine cultivation, ecotourism, fish marketing, shell and palmyra craft, petty shops, pearl culture, ecotourism, adventure tourism, seaweed farm	Organisational problems, marketing, restrictions on the use of marine resources, property, sanitation, low levels of nutrition, water scarcity, natural disasters	Transport, communication, pearl culture farm, seaweed farming by PepsiCo, some organised SHGs, banks, information technology, agar plant, wind energy
	Kanniyakumari (Muttom, Nagercoil)	Semi-urban	Ecotourism, pickle making, shell craft, net making, coir industry	Sanitation, marketing	Harbour, transport, communication, banks, wind energy
	Pulicat (Pasiavaram, Kottakuppam)	Rural, Pulicat Bird Sanctuary	Crab fattening, prawn marketing, tourism, jellyfish processing, net mending, shell crushing for poultry feed, organic shrimp farming, vermi-composting	Sanitation, conflict over access to marine resources, catch depletion, pollution, low nutrition, indebtedness, lack of cohesiveness, markets	NGOs, SHGs, banks, electricity, transport, communication, information technology, training in value addition and post-harvest technology, ice plant, auction centre
Pondicherry	Pondicherry (Veerampattinam, Nallavadu, Nonankuppam, Thirukanchipet)	Urban and Semi-urban	Tourism, fish marketing, medicinal herbs, agencies for gas and telephones, tailoring, petty shops, canteen, ornamental fish culture	Lack of cohesiveness, organisational problems, sanitation, property, housing	Harbour, transport, communication, electricity, education, banking services, SHGs, information technology
Andhra Pradesh	East Godavari District (Uppada, Gadimoga, Pedavalasala, Ramanapalem)	Semi-urban	Value added fishery by-products, crab fattening, dry and smoked fish preparation	Natural disasters, sanitation, hygiene, property, lack of cohesiveness	Post-harvest technology, transport, communication, markets, banks, SHGs
	Visakhapatnam (Bodevidi, Timapuram)	Urban	Dry fish marketing, services: restaurants and telephone booths, ecotourism	Sanitation, organisational cohesiveness	Post-harvest technology, transport, communication, harbour, banks, SHGs
	Srikakulam (Tekkali)	Rural	Fish marketing	Sanitation, poor health, illiteracy, migration, competition in local markets, absence of SHGs	Post-harvest technology, transport, communication, banks

contd...

State/ Union Territory	District/ village	Rural/ urban	Additional livelihood options ¹⁶	Problems	Facilities available
Orissa	Konark (Chandrabhaga, Pat Sundarpur, Sahana)	Rural	Value-added fishery by products, dairying, agriculture	Property, illiteracy, lack of cohesiveness	Training in value-added fish products, local markets, transport, communication, banks
	Puri (Pentakota)	Semi-urban	Dry fish and value-added fishery by-products, composting, services and provision stores	Health, sanitation, migration	Training, NGOs, SHGs, cold storage, banking facilities, markets, transport and communication
	Ganjam (Badaaryapalli, Badanala, Gajapatnagar, Gopalpur-on-sea, Kalarabadi)	Rural	Dry fish marketing, services and provision stores, tourism	Sanitation, education, transport, health	Banks, training in value-added products, NGOs, transport and communication
	Paradwip (Sandhkud)	Semi-urban	Fish marketing, petty shops	Lack of cohesiveness, absence of NGOs/SHGs, sanitation, property, illiteracy	Transport, communication, harbour, electricity, banks, alternate employment in township
	Balasore (Panchubisa)	Rural	Fish marketing, crab fattening, small/marginal land holdings, dairying, orchard farming	Lack of cohesiveness, illiteracy, sanitation, transport, communication, electricity	Agricultural holdings, fish landing centre, banks
West Bengal	North 24 Parganas (Dhusnekhali, Hingalganj, Sandeshkhali)	Rural	Prawn farming, goatery, dairying, agriculture, petty shops	Lack of cohesiveness, illiteracy	Banks, SHGs, NGOs, training, local markets, transport, sanitation, communication, electricity
	South 24 Parganas (Bhubannagar, Gobindrampur)	Rural	Dairying, poultry farming, petty shops, services, agriculture, pisciculture	Lack of cohesiveness, illiteracy	Banks, SHGs, NGOs, local markets, transport, sanitation

¹⁶ Includes opportunities that can be realistically explored by women in fishing communities

Terms

Anganvadi	:	childcare centre
Bhajji	:	deep fried fish/ vegetables rolled in batter
Dhoni	:	houseboat common to Orissa
Kattumaram	:	catamaran, a basic craft made of logs lashed together
Mahila Samiti	:	women's committee
Masala powder	:	blend of various Indian spices
Nava	:	country boat in Andhra Pradesh
Padu	:	traditional rights of fishing and coastal management peculiar to Pulicat Lake
Papad	:	a thin circular crisp made from rice flour and fried before eating
Patta	:	legal documents to denote ownership of land/property
Sabada, chhoat	:	country craft of Orissa
Sangam	:	association or union of different vocational groups
Saree	:	an outer garment worn by women of India, Sri Lanka,
Teppa	:	small country craft
Vallam	:	country boat in Tamil Nadu
Vastu Shastra	:	a practice similar to Feng Shui which is believed to better the living environment
Velugu Project	:	an initiative of the State Government of Andhra Pradesh to encourage savings and micro-credit in rural areas

Acronyms

AFPRO	:	Action for Food Production
AISECT	:	All India Society for Electronics and Computer Technology
ARTIC	:	Appropriate Reconstruction Training & Information Centre
BPL	:	Below Poverty Line
BOBP-IGO	:	Bay of Bengal Programme – Inter Governmental Organisation
CAPART	:	Council for Advancement of People's Action and Rural Technology
CMFRI	:	Central Marine Fisheries Research Institute
CPDA	:	Coastal People's Development Association
CRenIEO	:	Centre for Research on New International Economic Order
CSMCRI	:	Central Salt and Marine Chemicals Research Institute
DOF	:	Department of Fisheries
DFID	:	Department for International Development
DFYWA	:	District Fishermen's Youth Welfare Association
DRDA	:	District Rural Development Authority
DRDC	:	District Rural Development Cell
DWCRA	:	Development of Women and Children in Rural Areas
EDP	:	Entrepreneur Development Training
FRP	:	Fibre-reinforced Plastic
FWES	:	Fisherwomen's Extension Service
GOI	:	Government of India
GoTN	:	Government of Tamil Nadu
HRD	:	Human Resources Development
ICM	:	Integrated Coastal Management

IFDP	: Integrated Fisherfolk Development Programme
ILO	: International Labour Organisation
IWW	: Institute for Women's Welfare
KVK	: Krishi Vigyan Kendra
LPG	: Liquefied Petroleum Gas
MSSS	: Madras Social Service Society
MSSRF	: MS Swaminathan Research Foundation
NABARD	: National Bank for Agriculture and Rural Development
NGO	: Non-Governmental Organisation
NRCWA	: National Research Centre for Women in Agriculture
NUF	: National Union of Fishermen
NVNS	: Nava Vikas Nirman Samiti
PCSC	: Presentation Community Service Centre
PENCODE	: People's Empowerment and Need Based Community Development
PFA	: Panchubisa Fishermen's Association
PHFP	: Post Harvest Fisheries Programme
PRI	: Panchayati Raj Institution
PWM	: People's Welfare Mission
REEDA	: Rural Educational and Economic Development Association
REEDS	: Rural Energy for Environment Development Society
RKM	: Ramakrishna Mission
SGSY	: Swarnajayanti Gram Swarozgar Yojana
SHG	: Self Help Group
SIFT	: State Institute of Fisheries Technology
SMVS	: Sri Mahila Vikasa Samstha
STD	: Standard Trunk Dialling
STEP	: Support Training Employment Programme
STI	: Sexually Transmitted Infection
TMSSS	: Tuticorin Multipurpose Social Service Society
TNWDC	: Tamil Nadu Women's Development Corporation
TRRM	: Tamil Nadu Rural Reconstruction Movement
TTDC	: Technical Training Development Centre
UAA	: United Artists' Association
UNDP	: United Nations Development Programme
VIC	: Village Information Centre
WDC	: Women's Development Council
WWF	: Working Women's Fund
YDC	: Youth Development Centre



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