

Workshop Report



*Opportunities for Fish
Marketing and Handling Initiatives
that Benefit Traditional
Fishing Communities in India*

Chennai, India, 18-19 March, 1997



***Report of a Workshop on
Opportunities for Fish Marketing and
Handling Initiatives that
Benefit Traditional Fishing Communities
in India***

Chennai, India, 18-19 March, 1997

Edited by

**Ann Gordon
and
S.R. Madhu**

Organized by

**Natural Resources Institute, UK for DFID Post-Harvest
Fisheries Research Programme, UK
in co-operation with the DFID Post-Harvest Fisheries Project, Chennai, India**

How can traditional fishing communities in India improve their fish marketing and processing practices to earn higher incomes? Can they adopt any new practices or initiatives, learning from past experiences and success stories in India or neighbouring Sri Lanka? What are the issues that need to be addressed?

These questions were discussed at a workshop held in Chennai, India, on 18-19 March, 1997. As preparation for the workshop, a number of studies had been carried out by various organizations in India. These were funded by the Post-Harvest Fisheries Research Programme of the Renewable Natural Resources Research Strategy of the UK's Department for International Development (DFID). The project was managed by the UK's Natural Resources Institute (NRI).

The workshop discussed preliminary conclusions from these studies, also the related experiences of some other organizations in India and Sri Lanka. It was attended by representatives of NGOs and fishing community organizations, government bodies, development agencies and research institutes as well as by private traders and market researchers.

This document reports on the workshop's proceedings, the technical papers presented, and the discussions they led to. It also presents the findings of three Working Groups of workshop participants that discussed (a) fish marketing issues and their implications for fishing communities in South India; (b) dried fish processing and marketing on India's east coast; and (c) actions government organizations must take with respect to strategic policy and research issues on fish marketing.

It is hoped that this workshop report will lead to wider awareness of the case-studies and issues discussed at the workshop, and to informed debate and discussion on them. And more importantly, to new and successful initiatives, and more widespread use of currently successful initiatives, concerning marketing and handling activities by traditional fishing communities.

This publication is an output from a research project funded by the Department for International Development of the United Kingdom. However, the Department for International Development can accept no responsibility for any information provided or views expressed. R64467. Post-Harvest Fisheries Research Programme.

CONTENTS

	Page
1. Workshop proceedings	1
2. List of Participants	21
3. Workshop Programme	27
4. <i>Paper 1</i> : Market potential for superior-quality dried-fish products in the north-east states of India. (<i>Report of a study by Catalyst Management Services, Bangalore</i>)	29
5. <i>Paper 2</i> : Fresh fish marketing by a fishermen's group : a case-study from Tamil Nadu, <i>by Ann Gordon</i>	32
6. <i>Paper 3</i> : Better fish marketing containers for women <i>by A. Kamila</i>	41
7. <i>Paper 4</i> : Activities of the Visakhapatnam Fisherwomen Dry Fishing Co-operative Society, Timmapuram, Bheemunipatnam Mandal, Visakhapatnam district.	44
8. <i>Paper 5</i> : Production and marketing of value-added items in dried fish by Oriental Dry Fish Industries, Sandhakud, Paradip Port, Orissa : <i>by B.C. Pattnaik</i>	46
9. <i>Paper 6</i> : Ice distribution to the artisanal fishery sector : A study of Kanyakumari, Trivandrum and Quilon districts. (<i>Sponsored by NRI Research Project R 64467</i>)	53
10. <i>Paper 7</i> : Deevara Navodaya - Some observations on a radio programme for fishing communities in Sri Lanka (<i>compiled by Chamindra Weerackody, Executive Director INASIA, on the basis of study findings of J. Lucas of Santidhan and INASIA field staff</i>)	56
11. <i>Paper 8</i> : Issues and concerns on the long-term sustainability of the retail fish traders' project in Sri Lanka. <i>Implemented by IRED Asia in collaboration with ODA-PHFP. Prepared by Chamindra Weerackody, Regional Director, IRED Asia.</i>	61

REPORT OF THE WORKSHOP

The workshop¹ began 18 March, 1997, with an introduction by Ms A Gordon, Natural Resources Institute, UK. Dr. K Balachandran, Principal Scientist, Central Institute of Fisheries Technology (CIFT), Cochin, was the Chairperson of the first session.

Ms Gordon welcomed the participants. She introduced the chairperson, as well as Mr Duncan King of the DFID Post-Harvest Fisheries Project, headquartered in Chennai (formerly Madras). All the participants were invited to introduce themselves. Mr King then gave a brief overview of the activities of the DFID Post-Harvest Fisheries Project.

Dr Balachandran spoke about the long-established collaboration between CIFT and NRI, and how the focus of fisheries research had shifted over time. He stressed the need to understand the marketing chain, and the fact that technology uptake depends ultimately on price incentives. He noted that the workshop participants were drawn from a wide range of organizations. This would make for worthwhile discussions and useful recommendations.

Explaining the background to the workshop, Ms Ann Gordon said that pressure on fish resources in India is increasing because of strong export demand and growing markets in India. Although fisherfolk may benefit from higher prices paid for fish, fishing communities may reap an even greater benefit from changes in fish marketing – be it through marketing initiatives or different handling or processing practices. They should be very selective, focusing on activities that are really feasible, and for which there is strong demand.

The U.K.-based Natural Resources Institute has been working with a number of Indian organizations on a research project concerned with identifying fish marketing and handling opportunities that benefit traditional fishing communities². The project seeks to combine market analysis and feasibility studies to identify potential opportunities. A deliberate attempt has been made to consider a number of quite contrasting possibilities, which were identified through consultation with a number of organizations working closely with the fish sector in India.

¹ This report of the workshop summarizes the presentations by participants as well as the discussions. Papers presented at the workshop appear on pages 29 to 66.

² This work on market opportunities is funded by the Post-Harvest Fisheries Research Programme of the Department for International Development (UK). In this work, the Natural Resources Institute works closely with another DFID project – the DFID Post-Harvest Fisheries Project, based in Chennai – and with other organizations such as SIFFS.

Hence, topics covered by the studies include: dried fish markets in India's North Eastern states; market information provided by a fishermen's radio programme in Sri Lanka; supply of ice to artisanal fishing communities in Kerala; and fresh fish marketing by fishermen's sangams in Tamil Nadu.

Purpose of Workshop

The workshop, conducted in Chennai 18-19 March 1997, aimed at presenting preliminary conclusions from these studies, and the related experiences of other organizations in India, to an audience drawn from NGOs, organizations of fishing communities, private traders, market researchers, government organizations, development projects and research institutes. The intention was to draw on the experience and expertise of the participants to identify opportunities that offered the greatest potential for the fishing communities, but which do not require significant external resourcing.

The Natural Resources Institute is not a funding agency – hence the importance of developing realistic proposals that do not require external funding.

Presentation : Market potential for superior-quality dried-fish products in the north-east states of India.

Mr. Shiv Kumar and Mr M S Ashok, of Catalyst Management Services (CMS), Bangalore, made a presentation on markets for dried fish in India's northeastern states.

Dried and preserved fish is very popular in the northeast, particularly among tribal populations who eat it almost every day. The CMS study shows that almost any variety of fish, including anchovies, clupeids, sardines etc., if hygienically processed and preserved, is worth trying out in the northeast. It has a large market that is willing to pay well for high quality. The basic processes recommended are drying, smoking and pickling — relatively low in technology, well within the capabilities of artisanal fisherfolk.

Issues to be studied in tapping this marketing opportunity are finance, expertise, transport bottlenecks and organizational problems.

But the current quality of dried/processed fish, particularly from the Bay of Bengal, is unlikely to find acceptance in the northeast. Quality will have to be improved; further, specific consumer preferences, like low salt content, will also have to be addressed.

Another strategic alternative is packing and distribution of high-value products to the high-income segment of the population through the consumer marketing

network. Such products would be ready-to-eat snacks or easy-to-cook foods. These could bypass existing wholesale and retail market chains and reach out directly to the consumer, using alternative distribution channels.

Discussion

During the discussion on this paper it was noted that despite the growing importance of fresh fish marketing, the dried fish sector remains significant. For example, in Kerala where coastal communities consume fresh fish, dried fish is an important consumption item in inland areas.

Two important markets were noted for tinned fish: the armed forces and the NE states. The latter was considered by CIFT as a potential market for fish packed in retortable pouches.

The importance of retail packaging was discussed. Divergent views were expressed. Some felt that there is increasing demand for packaged products, partly to reduce the smell; others pointed out that consumers often prefer a loose product so that they can touch and smell it. There was also discussion on the feasibility of small-scale processors producing a packaged product.

It was pointed out that urban and rural markets may have different preferences for quality and packaging.

The feasibility and desirability of small-scale processors from the east coast producing dried fish for northeastern markets was discussed. A number of problems in producing a quality dried product in tradeable quantities were noted; also the diversion of fish to the more profitable fresh fish market, where this is an option. The absence of markets for dried sardines from Andhra Pradesh was pointed out. It was noted that dried anchovy produced in Tamil Nadu suffered from infestation during transit.

There was considerable interest in the apparent supply/demand gap for dried fish in the north-east, and the relatively large premium obtainable for good quality fish marketed there. Possible trade barriers included: the poor security situation; delays in payment and high commission charges by Jagi Road merchants; the need to reload dried fish onto smaller trucks (3-6 tonnes) for the final part of the journey to Jagi Road; high protection costs; and retail licenses being issued only to indigenous peoples. CMS felt there was potential to by-pass Jagi Road and set up direct trade links with retailers — although they recognised that this would be a risky strategy. The low cost of airfreight on account of government subsidies was noted.

***Presentation: Fresh Fish Marketing by a Fishermen's Group:
a case study from Tamil Nadu***

Ms Ann Gordon presented this case study, on successful fresh fish marketing by a fishermen's group in Manapad, Tamil Nadu.

Fishermen often feel themselves to be exploited – believing that the prices they receive for their catch do not adequately reflect the prices paid for such fish in the wholesale or retail markets where they are subsequently sold. This is particularly true when there are few buyers at the beach or when there are glut landings.

Some fishermen's groups have tried to market their own fish. Few such initiatives have been successful. But the fishermen's sangams at Manapad, south of Tuticorin, have been remarkably successful in marketing fresh fish in Tamil Nadu and Kerala. Initially these sangams concentrated on the marketing of prawns for the export market. Two years later, they expanded into domestic marketing. Whenever there was a very good catch, they would purchase ice and rent a truck to sell fish in wholesale markets in Kerala and Tamil Nadu. A year later they organized a loan and bought a new truck.

The Manapad sangams have succeeded where many similar organizations have failed. A number of factors appear important: strength of purpose and cohesion within the group; sound business management; thorough training — at the outset and later “topped-up”; renting trucks before buying a truck enabled them to learn the process prior to any significant investment; commencing loan repayments to coincide with the season when income is highest; being able to benefit from the experience of a member who had already been involved in fish marketing; access to telephone communications; and contact with other organizations working with fishing communities which facilitated access to ice boxes and technical information. In addition the Manapad experience highlights the importance of perseverance – and the dynamic nature of the marketing process. The challenge will be to consolidate their achievements and stay financially solvent, whilst retaining strength of purpose and unity within the sangams.

***Presentation: Nellai Kattabomman Chidambaranar District Fish Workers
Development Society: future challenges***

The work of this society was discussed by Mr P. Ramesh (secretary of the society), and Prothima Krishnan (of OM Consultants, Bangalore), who reported on a recent two-day workshop facilitated by OM Consultants (Ms Krishnan and her colleague Mr. Varadan).

The society started in 1992 as the initiative of the parish priest. By February 1996, a federation of 42 sangams with a total membership of 2500 had been set up. The society conducts training workshops, promotes credit, organizes fish marketing, and carries out social security and community welfare activities. The society's goal is integrated development and welfare of the fisherfolk communities which comprise the society. The Manapad sangams described above are part of the same society.

The objective of the two-day workshop was to clarify the future direction of the society—given its rapid growth in membership and expansion of activities. Participants spelt out the society's concerns, discussed organizational matters and outlined a future plan of action.

The society's concerns included: strengthening of the Federation; organizing credit; marketing; technology; training; and promoting self-reliance among women. Ways to strengthen the federation were discussed, including formation of a marketing committee and a coordination committee; and appointment of staff to maintain accounts; also to conduct meetings and strengthen groups.

The manager of the Canara Bank was invited to address the workshop and explain procedures for obtaining bank credit through the Self-Help Savings Groups Scheme.

The participants found that the workshop helped them draw up a realistic plan and discuss certain essential organizational matters.

Discussion

Participants were keen to know whether sangam members represented all socio-economic groups within the fishing community, and were assured that the sangam membership does include a cross-section.

The representative from SIFFS pointed out that a number of factors made Manapad a special case in terms of fresh fish marketing. These factors include:

- (a) the relative proximity to markets in Kerala where there is a significant price differential over local markets in Tamil Nadu;
- (b) the fact that having 60% of the eligible community as members guarantees a viable minimal level of operation;
- (c) strong leadership; harmony within the group;
- (d) willingness to take risks; and acceptance of the fact that the fish trade necessarily involves losses as well as profits.

He also pointed out that as sangam membership expands, other fish traders are obliged to compete for fish supplies at the landing centre by offering better prices for fish. This in turn would reduce the benefits from membership, and 60% may in fact represent a ceiling on membership. He also underlined the importance of maintaining a viable scale of operation if the Society were to “cluster” operations.

Women’s participation in the Society was queried. It was felt that that while a women’s organization was important, it should function separately from fishermen’s groups.

There was considerable discussion about marketing networks and about how a number of low-volume supply sources might be linked to markets. It was felt that this worked better for dried fish than for fresh fish — and particular problems arise with unexpectedly large landings of fresh fish, especially if these are atypical species for that area. Commercial networking already exists. There were mixed views on any potential role for NGOs or producer organizations. NGOs often have difficulty pricing risk and transactions costs — although it was pointed out that the private sector also has difficulty pricing risk.

This led to further discussion on fishing community perceptions of price:

- (a) producer groups usually demand transparency and are often uneasy with a large spread between the price at the landing and the price in the market—even if this is necessary to cover losses on other occasions;
- (b) this means that it may be better to appoint a semi-autonomous and neutral business manager.

There was also discussion concerning the poor price incentives for producing good quality fish.

Presentation: Better fish marketing containers for women

Ms A Kamila, formerly Women-in-Development officer with DFID- PHFP, presented a paper on the above subject. She described the fish transport problems of women fish vendors and the project’s effort to help them by designing a more acceptable container to carry fish.

Traditional fish baskets were leaky and foul-smelling. Bus conductors complained that other passengers objected to the foul odour, also to delays caused by the loading and unloading of fish baskets. In 1989, Santhidan, an NGO based in Kanyakumari district, Tamil Nadu, requested the DFID (then Overseas Development Administration or ODA) Post-Harvest Fisheries Project to examine the problem.

The project field-tested in 16 villagers a container that resembled the “idly kundan”. Several modifications were made. The final product, an aluminium container, was comfortable to use, durable and attractive. The Social Welfare Board in Tamil Nadu offered a 50% subsidy to promote this container.

The fish container activity brought about a close project interaction with women fish vendors, and led to many other project activities concerning credit, awareness building, training etc.

Discussion

It was suggested that one solution for women fish traders is a dedicated bus service (and in fact this already exists in some parts of Kerala), or having a separate part of the bus allocated to fish containers (as happens with some buses in Kanyakumari).

Presentation: The activities of Vizag Fisherwomen Dry Fish Cooperative Society

The activities of this society, based in Timmapuram, Bheemunipatnam, Andhra Pradesh, were discussed by two members of the society—Ms Boddu Yellayamma and Ms Marupilli Parvathamma.

Timmapuram village has 200 fisherfolk, of whom 164 were members of the society. Most of them are poor and illiterate, and try to earn a living through the dry fish business. They find the going tough. The society’s activities include purchase of raw fish at the Visakhapatnam harbour, and transport of the fish to Timmapuram where they cure and process the fish — for human consumption and for use as poultry feed. Poultry farmers who buy the dried fish expect credit; the fisherwomen have to wait for payment.

The problems identified by the fisherwomen related to fish transport, fish handling and finance. To cite a few: the fish bought by the fisherwomen at the fishing harbour or landing centre got crushed and damaged in the traditional bamboo baskets or gunny bags they used; the van funded by the District Rural Development Agency (DRDA) which they had used from 1985 to transport fish was under repair. The women had to use cargo buses or hired vans — which meant delays and fish losses. The women were short of funds for their day-to-day business.

Discussion

One participant enquired into the future plans of the co-operative, given the depressing prospects presented. The Vizag women confirmed that their numbers had fallen from 160 to 64, because of members switching to agriculture. They felt they had few options for gainful employment, but recognised that fish they previously purchased for drying is increasingly destined for export or fresh fish markets in India. More fish is now frozen on-board trawlers too.

Presentation: Production and marketing of value-added items in dried fish by Oriental Dry Fish Industries, Orissa.

Mr B C Pattnaik of Oriental Dry Fish Industries which is based in Sandakud, Paradip, Orissa, described the company's experiences producing and marketing value-added dried fish.

The DFID-PHFP had been promoting in Orissa the idea of preparing and marketing value-added dried fish. The project said it had excellent potential.

Responding to this suggestion, Oriental Dry Fish Industries, a small-scale unit of Orissa, established a fish drying yard at Sandhakud, Paradip port in 1996. A market survey revealed that the wholesale market at Jagi Road near Guwahati, Assam, is perhaps the country's biggest market for dried fish. Dried fish from all over India goes to rural and hill areas of all northeast states through wholesale traders. High-quality dried-fish varieties commanded attractive prices.

The company started production in January 1996, concentrating on a single item, ribbon fish in value-added form. (The ribbon fish is processed under hygienic drying conditions, resulting in an improved product). Till the end of March 1996, 18 tons of ribbon fishes, small medium and large, were processed. Three tons were sold to a buyer from Assam, the rest to a society in Kakinada and to another buyer from Assam. The company made a profit of about Rs.35,000.

Encouraged by this result, the company tried to substantially increase production of dried fish from different varieties in value-added form. But the company ran into several problems: unseasonal weather that hampered drying, stiff competition for fish, terrorist disturbances in Assam that kept buyers away, long delays in payment.

However, the company is still hopeful about the dried fish business. It wants to identify reputable buyers in southern states who can take bulk quantities of value-added dried fish at decent prices and pay cash against delivery.

Presentation: Ice Distribution to the Artisanal Fishery Sector

Ice — its availability and accessibility — can make a crucial difference to the viability of artisanal fisheries. But ice is often available only to large-scale operators such as traders and processors. SIFFS, the South Indian Federation of Fishermen Societies, based in Trivandrum, is trying to change this situation. It proposes to set up ice plants in Trivandrum, Quilon and Kanyakumari districts to help small-scale communities. The NRI fisheries research project recently sponsored a study on ice distribution patterns and problems in the three districts.

SIFFS Chief Executive Satish Babu made a presentation on the study at the workshop. The study shows that while women vendors do use ice in Quilon and Trivandrum, their access to ice is very poor in Kanyakumari.

In two of the three districts (Quilon and Trivandrum), ice manufacturing capacity is enough to meet peak season requirements; yet small-scale fisherfolk can't get the ice they want during peak seasons because most of it is bought up by traders in bulk from ice plants. In Kanyakumari even the installed capacity is insufficient, so the shortage of ice is more severe.

The study shows that new ice plants would need heavy capital investment translating into high overheads. The proposed three ice plants of SIFFS should be implemented in phases so that it can learn from the experience of implementing the first one. Kanyakumari offers the best chances of success.

The SIFFS ice plants will give artisanal fishermen greater control over the marketing of their produce (by icing of fish, and eliminating the pressure to sell instantly when glut landings occur). They will also make ice available at reasonable prices to fish vendors, most of whom are women.

The study makes some recommendations about the ice distributions system of the first SIFFS plant—the area and distance it should cover, the target groups, the price of ice, the benefits envisaged for fishermen and fish vendors from the ice plant.

Discussion

It was pointed out that the most difficult time for the ice plants would be during the first two years while the loan was being repaid.

There was considerable debate surrounding the plan to wholesale ice through women's groups and whether this would ultimately ensure that women fish traders had access to ice at reasonable prices. Many people were sceptical and felt that the women would simply sell the ice to the highest bidders. Mr Babu cautiously estimated that perhaps 60% of the ice would end up with small-scale vendors

The representative from KDFS (Kanyakumari District Fishermen Sangams Federation) underlined the benefits of ice availability within the fishing communities:

- (a) icing reduces the imperative to sell immediately at whatever price;
- (b) it enables fish to be supplied to more distant markets; and
- (c) the availability of ice encourages more merchants and hence more competition for landings.

Introduction of Working Group topics by Ms Ann Gordon

Participants were invited to join one of three groups to discuss:

- (a) issues affecting fish marketing in southern India and implications for fishing communities;
- (b) issues affecting east coast dried fish processing and marketing, and implications for fishing communities; and
- (c) actions required by government organizations, with respect to strategic, policy and research issues affecting fish marketing.

Participants were asked to focus, wherever possible, on actions that could be taken without the need for significant external financing, and also to consider the potential roles of the organizations they represented.

The remainder of the afternoon session was spent in working group discussions.

Morning 19 March. Chairperson: Ms M H Kalavathy

Video: Security in the NE States (courtesy of Catalyst Management Services)

This film was shown to illustrate some of the practical day-to-day difficulties of work in the north east.

Presentation: Observations on a radio programme for fishing communities in Sri Lanka.

Mr J Lucas of Santhidan, Nagercoil, presented the findings of a study on the radio programme for fisherfolk communities in Sri Lanka (the programme is broadcast over the government-run Sri Lankan radio.) Mr. Lucas was part of the research team that conducted the study.

A number of fishing communities, fish landing sites and fish trading centres were visited for the study. These included Negombo, Thoduwawa, Sinnapaduwa, Chilaw and Udappuwa on the west coast; and St. John's fish market in Colombo.

Data for the study were collected both through individual interviews and informal group discussions.

Some interesting facts that emerged: Almost all respondents were aware of the radio programme, but a majority of them did not make a conscious attempt to listen. The main reason was unsuitable broadcast time. Further, television drew audiences away from radio. But even those who did not listen to a radio programme got to know what it was about from others.

Most programme listeners appreciated the information it provided in two areas — the weather forecast which cautioned them about occasional cyclonic weather; and daily fish prices at St John's Fish Market. The programme also made it possible for fishermen out at sea to learn about any emergency concerning their family on the shore.

Discussion

Organisation of fishermen was considered a prerequisite if fishing communities themselves were to benefit from market information given on the radio. The usefulness of information on market prices in planning and organizing marketing was recognised, but there was considerable debate about the merit of information that was one day old.

In Sri Lanka the Colombo wholesale market is central to most of the fish trade. In India there are more markets, and a similar programme would need a regional focus — though some participants felt that it was precisely the information on more distant markets which would be of most use. There was some discussion on the cost of collecting price information, and whether there was scope to involve NGOs in this.

There was also discussion of the potential to publish prices in daily newspapers, in much the same way as agricultural prices are reported. It was reported that All India Radio already has time slots that could be used for programmes on fisheries, and in Karnataka there is a regular AIR programme.

The representative from SIFFS reported that the Federation is planning to start collecting market information, and requested help from anyone who had experience of this. The plan is to monitor prices and availability at key markets and landings, for forecasting rather than day-to-day decisions. MATSYAFED in Kerala are thought to be active in this area.

Presentation: The organization of cycle fish traders in Sri Lanka

Mr Chamindra Weerackody, Regional Director of IRED Asia, presented a paper on the sustainability of the retail fish traders project in Sri Lanka, which is implemented by IRED with support from the DFID's Post-Harvest Fisheries Project.

Mr Weerackody said that the project could be divided into three phases. The introductory phase began in 1991, with a baseline survey by IRED of retail fish traders operating from St. John's Fish Market, and in-depth case studies of selected traders. This was followed by introduction of an insulated fish box among a few fish traders, the idea being to improve the quality of fish distributed by them and thereby improve their earnings.

The second phase, one of learning and exploration, was from 1991 to mid-1993. The project tried to understand the traders and their life-patterns and to popularize the insulated box among the traders. The experience and knowledge acquired during this time is documented in a number of study reports and working documents.

During the third phase of the project, between mid-1993 and end-1995, co-operative associations of fish traders were set up in both Colombo and Negombo. The associations brought out two important facts: first, that development interventions could be carried out only through groups or associations, not individuals. Second, technology development could not take place in a vacuum. It had to be part of a more holistic approach that took into consideration social and economic concerns as well.

Mr Weerackody listed the achievements of the project, particularly those obtained through the associations, such as savings and credit schemes, and the sense of identity they fostered among the fish traders, who previously lacked it.

In 1996, IRED and DFID agreed on an exercise of critical self-reflection about the project and related activities to assess its long-term sustainability. Dr. Ivan Silva prepared a working paper that analyzed quantitative data on the associations' activities. The paper said in effect that the active participation of traders in the associations was limited, the number of members who contributed to the associations' savings fund had declined, the project appeared to be only marginally significant to the trader community despite its achievements and all the time and money invested by the project.

The presentation raised some questions and issues on the basis of this paper and the exercise of self-reflection about the project.

Discussion

Mr King pointed out that conceptually the Sri Lanka project could be divided into two phases:

- (a) the initial identification of beneficiaries and helping them to access bank finance; and
- (b) sustainability and strengthening management within the group itself.

GROUP PRESENTATIONS

Presentation of Working Group 1:

Issues affecting fish marketing in southern India

Group 1 (S Kesavan, Isaac Rajendran, Anthony Adimai, P. Ramesh, Ms. M H Kalavathy, Ms. A. Kamila, J. Lucas, Satish Babu and Shiv Kumar)

discussed issues in marketing in South India. Ms A Kamila presented the findings of the group.

- 1. Over-harvesting - glut landings : (Nethili/Chalai):**
 - Education of fishermen on fishing restraint
 - Market development options for glut landings
- 2. Problem species - Cloothi, Squid, Nethilli, Sardines:**
 - Suitable PHF methods to be developed and disseminated (including traditional methods that already exist)
 - Market development
- 3. Cultural and religious functions and effects :**

Market planning
- 4. Replicability of Manapad model – co-operation, similar situation, market, information, etc**

Key factors identified to be used to evaluate case-by-case replication models
- 5. Market intelligence & information – price, volumes – near and distant market:**

Centralised information gathering and dissemination to primary level groups using various channels (radio, telephone, traditional methods, etc)
- 6. Preservation through Ice**

Ensure availability of ice
- 7. Storage**

Approach all agencies that have local infrastructure for lease/ownership
- 8. Other infrastructure concerning transport, processing and handling, Permanent Ice Box (PIB)**
 - Hiring better than owning
 - Use new insulated boxes (tricycle & other appropriate methods, to help mainly women)
- 9. Pest problems - loss of weight**
 - Training in quality control
 - Develop or identify preservatives and practices for various species
- 10. Irregular supply (landings)**

Pray to God

11. Costing — financial & risk aspects

Training

12. Market development

- Managerial skills to be developed
- Network and seek assistance

13. Working capital

- Self-supporting systems (like SHG)
- Local resource mobilisation
- Network (with organizations like SIFFS)

14. Resource management

- Awareness-building for participatory management communities
- Training

15. Scale of operations for viability:

- Clustering
- Networking

16. Reliable contacts in markets (especially dry fish)

Training

17. Skills, knowledge, credibility & transparency of Sangam office bearers

Ongoing training / choice of right persons

18. Organizational structures and effect on decision-making

Decentralisation

Discussion

A question was raised about women's access to ice, insulated boxes and transport. Women traders often market low volumes of fish, and have poor access to ice, so do not generally use insulated boxes. An attempt to introduce a tricycle in Kanyakumari for transporting fish traded by women had not been successful — women would not drive the tricycle, and it proved difficult to recruit a man to do so. It was felt that women's groups were often weak and required considerable strengthening and training before they would be able to take on co-operative activities. Working capital and access to credit is also a key issue for them.

With respect to working capital requirements, it was felt that an organization such as SIFFS can play a key role in helping smaller organizations achieve credibility with banks.

The desirability of replicating the Manapad marketing model was queried. The importance of the operational scale and the strength of the sangams in Manapad was noted. It was felt that external organizations sometimes fund groups too quickly, whereas it might be more appropriate to focus on creating the conditions which encourage and strengthen group formation.

Presentation of Working Group 2:

Issues affecting dried fish processing on the east coast

Group 2 (B C Pattnaik, A Chowdary, R Chakravarty, C M Muralidharan, M S Ashok, Ms Boddu Yellayamma, Ms Marupilli Parvathamma, W Stoffer and George Mathew) discussed the above subject. The findings were presented by Venkatesh Salagrama.

1. Minimize delays in transportation of catch to processing and marketing centres
2. Employ proper preservation methods from capture to sale: emphasis on pre-processing stage.
3. Choice of preservation method determined by general inaccessibility of landing centre and local consumer preferences
4. Establish linkages with distant market centres to improve marketability of glut landings (which are presently converted to fish meal)
5. Improve the processing potential of fish-like lesser sardines (presently converted to fish meal)
6. Choose packaging material on the basis of duration of storage and market targeted
7. Avoid insect infestation of dried fish during storage by following the right processing practices and choosing proper packaging materials.
8. (a) Develop local markets before venturing into distant markets for value-added products (b) Develop multiple market channels
9. Working capital requirements must take account of risks, uncertain market conditions and delayed payments.
10. Identify quality requirements for both existing markets and new markets.

11. Ensure coordinated effort toward promotion, advertising and marketing of fish products, by bringing together small entrepreneurs, GOs and NGOs, and research institutes.
12. Evolve a common approach on questions relating to quality control, legal and statutory requirements, the mechanics of managing a new agency etc.
13. Upgrade existing practices to improve quality and marketability - new technology is not always needed,
14. Improving marketing infrastructure could add value to traditional products,
15. Explore scope for diversifying into production of value - added products, such as wafers, pickles etc.

Discussion

It was noted that although insect infestation may occur during storage, the eggs are often laid during drying. The insecticide Minawet or Actellic, produced by ICI, was mentioned, since it can be used on sun-drying fish. Some participants suggested that it might not be available in India. Beetle infestation during storage can be very persistent, requiring strong packaging to avoid penetration and prevent water absorption. Blowfly infestation is generally a problem on the east coast only when fish is dried without salt.

There was considerable discussion on standards, enforcement, branding and certification of dried fish in India — and mixed views on whether this would increase marketability or not. Group 2 strongly emphasized a promotion strategy, involving all relevant actors, seeking to better co-ordinate supply and demand.

The importance of fish drying for women was also noted and many participants felt that women had been adversely affected by the trend towards increased marketing of iced fresh fish. This was certainly true of the women's co-operative near Vizag, and some participants thought that women in this position should be helped to find alternative employment. However, despite the demand for fresh fish on the east coast, there are some places where afternoon landings cannot be marketed fresh, so drying remains important. One participant suggested that 5% of east coast landings are now dried by women, compared with 40-45% some 15 years ago. Some participants noted that the changes in marketing led to a net improvement in household income, although female-headed households were likely to be excluded from this. It was felt that women in the south had managed to take on a more dynamic role in fresh fish marketing than their counterparts in the east — who had not apparently shifted into fresh fish marketing.

Improvements in product quality often meant less fish available for consumption by the poor.

Presentation of Working Group 3:

Actions required by government organizations with respect to strategic policy and research issues affecting fish marketing

Group members: Chamindra Weerackody, A. Natarajan, K Balachandran, Ramachandra Bhatta, Ms R Veronica, Ms B. Gomathi, Ms D Valli, Ms S Vimala and Ms Prathima Krishnan. The `group's findings were presented by Dr. Ramachandra Bhatta.

Technology/Research:

- Thorough market research needed before advocating any policy change
- Prepare a directory of fish traders by product and region
- Establish networking of fisheries research institutions
- NGOs should play a key role in technology change. Research institutions should provide technology support; funding agencies should assist with market information and promotion
- Pilot market promotion projects should be organized to create consumer awareness.
- Research institutions should focus on developing need-based technologies. A system of feedback should be developed.
- Approach institutions like NABARD (National Bank for Agriculture and Rural Development) for financing new technologies.
- Set up a forum for exchange of ideas between fishers, NGOs, research institutions, funding agencies and finance institutions
- A forum for networking NGOs is necessary.
- Develop and assess pilot radio programs that purvey market information.
- Prepare a directory of relevant experts and research institutes.
- Collate and publish information on regional market preferences for different species and products, etc.

Organizational issues:

- Examine needs and capacities of NGOs to market value-added fish products on a small scale.

- Explore tie-up with organizations such as Tamil Nadu Fisheries Development Corporation for sale of value-added products
- How does government policy help or hinder fish marketing? Conduct in-depth review.
- Examine legal framework of various types of fisheries organizations that exist today (sangams, societies, NGOs, co-operatives, companies)
- Organize intensive training in technical and managerial aspects for key persons in senior positions of various federations
- Host an annual seafood fair in India.

Financing issues:

- Establish links with banks to support new marketing initiatives
- Funding agencies to play key facilitating role in developing a market information system and market promotion mechanisms
- Funding needed to strengthen and train grassroots organizations

Discussion

There was some discussion about the merit of readily available price information on export varieties. There is apparently no such thing as a daily reference price for export varieties in India, and it was felt that it would be potentially inflammatory to quote international prices.

The impact of policy on fish marketing and women was discussed at length, along with the role of various state marketing corporations. The effectiveness of the latter was considered to vary considerably by state.

The success of the DFID Post-Harvest Fisheries Project's promotion day in Hyderabad was noted, and it was felt that there was scope for greater promotion of fish products using similar events.

One participant noted a need for a resource centre which would not only include relevant documentation on the sector but also keep a database of experts.

CONCLUDING SESSION:

19 March afternoon. Chairperson: Chamindra Weerackody

Mr Weerackody opened the session by listing key issues arising from discussion of the group presentations, which participants were invited to elaborate as necessary:

- (a) women's participation in fish marketing
- (b) marketing information and the need for a resource centre;
- (c) insect infestation, packaging and the need for appropriate technology for dried fish;
- (d) the need for an integrated approach to the development of new markets;
- (e) quality control and certification;
- (f) the role of NGOs in the transfer of appropriate technology, stressing the importance of viability and sustainability;
- (g) institutional considerations in the production and marketing of value-added products;
- (h) the need for a review of policy (as stated and as implemented) impacts on fish marketing and on women; and
- (i) the scope for trade fairs — as a networking and promotion tool.

With respect to women's participation, it was felt that there was a need for an apex organization for women's groups at the state level. Such an organization might provide information on markets and landings, along with technical information relating to fish drying, for example. Some participants felt that there might be scope for such an organization to work with state-level women's development corporations. Mr. J. Lucas of Santidhan was urged to consider establishing such an apex organization.

The need for extension material in different languages was noted.

There was keen discussion about the merits of a radio programme targeted at fishing communities. Some participants felt that newspapers and TV were also important media which have potential to reach fisherfolk. Mr Lucas said he would raise the issue of radio coverage at the East Coast Fisherfolk Forum.

Concluding comments by Ms Ann Gordon

Ms Gordon highlighted not only the issues which had been discussed most prominently over the two day workshop — but also some of the underlying themes and concerns.

She noted in particular that the participants had all shown an appreciation of the realities of the market (even if this meant that certain activities might eventually be sidelined) and were concerned with the viability of any recommendations they might make. There had been much mention of needs-based intervention, gender

issues and the role of NGOs. Additionally, all the discussions had underlined the need for strong organizations — and that marketing or technical interventions would fail if these were absent.

The workshop had highlighted a number of areas where follow-up was required — not all of which would have been obvious without the discussions over the two days. She welcomed the fact that some participants had indicated that they would pursue some of these issues, and hoped that NRI or DFID might be able to pursue others. She noted the following areas (in no particular order):

- (a) research on standards and certification — to consider their likely impact and appropriate form;
- (b) market research to determine the demand for and scope of a radio programme targeted at men and women in fishing communities;
- (c) an investigation of restrictive practices in fish marketing in the NE states, and the scope to limit these;
- (d) policy research — to explore impacts on the post-harvest fisheries sector and women;
- (e) the need for an apex organization for women's groups;
- (f) research into the feasibility of alternative mechanisms for bulking up dried fish to tradeable volumes, when produced by multiple small-scale processors; and
- (g) public events aimed at promoting fish products and networking.

Finally, Ms Gordon thanked all the participants for their enthusiastic participation and the lively discussions over the past two days. She thanked especially those who had delivered presentations and agreed to chair the sessions. The invaluable assistance of the staff of the DFID Post-Harvest Fisheries Project was noted, as was the effort and enthusiasm devoted to the organization of the workshop by Mr. Isaac Rajendran. The staff of Mowbrays Inn were thanked for their help and the excellent catering provided to the workshop.

List of Participants

Name/Designation	Address
1. Ms Ann Gordon Head, Marketing System Economics & Social Sciences Department	Natural Resources Institute Central Avenue, Chatham University of Greenwich Kent ME4 4TB. UK Tel: 00-44-1634- 883071 (D-line) Fax: 00-44-1634-883706 E-Mail: Ann. Gordon@nri.org
2. Mr J Lucas Director	Santhidan 1-D West Lutheran Street Nagercoil - 629 001 Tel: (04652) 33710, (04652) 23310
3. Ms S Vimala	Santhidan 1-D West Lutheran Street Nagercoil - 629 001 Tel: (04652) 33710
4. Ms R Veronica Managing Trustee	ROSA-Rural Organization for Social Action 33A, Thenral Nagar Poraiyar - 609 307 Tranquebar, Quaid-E-Millet Dist Nagapattinam Tel: 04364-89706
5. Ms D Valli	ROSA-Rural Organization for Social Action, 33A, Thenral Nagar Poraiyar - 609 307 Tranquebar Quaid-E-Millet Dist Nagapattinam Tel: 04364-89706
6. Mr P Ramesh Secretary	NKC District - Fish Workers Development Society, 1/18, D Medona Street, Veerapandian Pattinam, Tiruchendur - 628 216 Tel: (0461) 325174, (04639) 26201 Fax: (0461) 322094

Name/Designation	Address
7. Mr S Antonyswamy	NKC District - Fish Workers Development Society, 1/18, D Medona Street, Veerapandian Pattinam, Tiruchendur - 628 216 Tel: (0461) 325174 Fax: (0461) 322094
8. Mr B C Pattnaik Associate	Oriental Dry Fish Industry Aparna Nagar Chaulia Ganj Post Nayabazaar, Cuttack - 753 004 Tel: (0671) 30213
9. Mr A Chowdary Managing Partner	Oriental Dry Fish Industry Aparna Nagar Chaulia Ganj Post Nayabazaar, Cuttack-753 004 Tel: (0671) 614283
10. Dr K Balachandran Principal Scientist	CIFT-Central Institute of Fisheries Technology (Indian Council of Agricultural Research), Willingdon Island Matsyapuri P O Cochin - 682 029 Tel:(0484) 666845 Fax:(0484) 668212
11. Dr R Chakravarthy Senior Scientist	CIFT- Central Institute of Fisheries Technology (Indian Council of Fisheries Technology) Ocean View Layout, Pandurangapuram, Andhra University (PO) Vizag - 530 003 Tel :(0891) 567856 Fax :(0891) 567040

Name/Designation	Address
12. Mr S Kesavan	Tamil Nadu Fisheries Development Corporation Ltd., Murugesu Naicken Complex Greems Road Chennai - 600 006. Off: 827 7305, 827 7114, 827 7012 Res: 234 9668 Fax: (044) 827 7321
13. Mr Satish Babu Chief Executive	South Indian Federation of Fishermen Societies TC.20/816-1 Karamana Melaranoor Road Trivandraum - 685 002 Tel :343711, 343178 Fax :342053 E-Mail: Satish@fishnet.frhlt.ernet.in Siffs@hotmail.com
14. Mr C.M. Muralidharan	Action for Food Production - AFPRO Field Unit. VI, 12-13-483/39 Street No.1, Lane Opp. Wesley School, Taranaka Secundrabad - 500 017 Tel : (040) 7150413
15. Ms A Kamila Managing Trustee	Women's Integrated National Development Trust (WIND) Plot No.39, Door No. 76 Rajaram Salai, K K Nagar Tiruchirapalli - 620 021. Tel : Off: 458 726 Res : 458 778
16. Dr Ramachandra Batta	College of Fisheries & Research Institute Mangalore - 575 002 Tel: Off: (0824) 439 256 Res: 41 3066 Fax : (0824) 438366

Name/Designation	Address
17. Mr. M S Ashok Executive Director	Catalyst Management Services 179, 6th Main, KEB Layout 1st Stage, Geddalahalli Bangalore - 560 094. Tel: 91-80 3419616 Fax: 3419616 E-Mail: Cms@giasbg01.vsnl.net.in
18. Mr N Shiv Kumar	Catalyst Managment Services 179, 6th Main, KEB Layout 1st Stage, Geddalahalli Bangalore - 560 094. Tel: 91-80-3419616 Fax: 3419616 E-Mail: Cms@giasbg01.vsnl.net.in
19. Ms Boddu Yellayamma	Red Nam Garden Jai Road, Visakhapatnam
20. Ms Marupilli Parvathamma	Red Nam Garden Jai Road, Visakhapatnam
21. Mr W Stoffer Director	Tamil Nadu Rural Reconstruction Movement (TRRM) Ambedkar Nagar Pamban - 623 521 Ramnad District.
22. Mr Antony Adimai President	Kanyakumari District Fishermen Sangams Federation (KDFSF) 24/9-16, Parkar Street Nagercoil - 629 001 Tel: 04652-33230
23. Ms Prathima Krishnan Senior Consultant	OM Consultants (India) Pvt Ltd 84 Kalpataru, 9th Cross 6th Main , Malleswaram Bangalorre - 560 003 Tel: 080-3349540, 080-3347228 Fax: 080-3347209 E-Mail: omci@giasbg01.vsnl.net.in

Name/Designation	Address
24. Ms M H Kalavathy	H 42 A Twin Type House Cauvery Street Kalakshetra Colony Besant Nagar Chennai - 600 090 Tel: 91-44-491 9292 Fax: 91-44-491 3903
25. Mr Chamindra Weerackody Executive Director	INASIA, Institute in Research and Education for Development in Asia 64, Horton Place, Colombo - 7 Sri Lanka Tel: 941-695481 Fax: 941-688368 E-Mail: inasia@sri.lanka.net
26. Mr Duncan King Project Field Manager	DFID-PHFP 91. St. Mary's Road Abhiramapuram, Chennai - 18 Tel: 044-4951811 (Direct Line) 044-4936294, 044-4936096 Fax: 044-4936839 E-Mail: duncan@odamas.globemail.com
27. Mr George Mathew Officer-SEU	DFID-PHFP 91. St . Mary's Road Abhiramapuram, Chennai - 18 Tel: 044-4951811, 044-4936294 044-4936096 Fax: 044-4936839 E-Mail: duncan@odamas.globemail.com
28. Mr A D Issac Rajendran National Consultant	BOBP 91, St. Mary's Road Abhiramapuram, Chennai - 18 Tel: 044 -4936096, 044-4936294 044-618584(R) Fax: 044-4936102

Name/Designation	Address
29. Mr. A Natarajan Technical Officer	DFID-PHFP 91. St. Mary's Road Abhiramapuram, Chennai - 18 Tel: 044-4951811, 044-4936294 044-4936096 Fax: 044-4936 839 E-Mail: dunçan@ odamas.globemail.com
30. Ms B Gomathi Officer - WID	DFID-PHFP 91. St. Mary's Road Abhiramapuram, Chennai , 18 Tel: 044-4951811, 044-4936294 044-4936096 Fax: 044-4936839 E-Mail: duncan@odamas. globemail.com
31. Mr Venkatesh Salagrama Field Liaison & Extension Officer	Regional Office; DFID-PHFP Door No. 8-10-6 Kamala Devi Street Gandhinagar, Kakinada - 533 004, AP. Tel: 0884-64003 Fax: 0884-64851

WORKSHOP PROGRAMME

Tuesday 18 March, 1997

Morning session (Chairman: Dr. K. Balachandran)

- 0900-0930 Registration
- 0930-1030 ● Welcome address and introduction to the workshop by Ms Ann Gordon
- Overview of DFID Post-Harvest Fisheries Project by Duncan King
- Self-introduction by participants
- 1100-1300 ● *Market potential for superior-quality dried fish products in the north-east states of India: a presentation by N. Shiv Kumar & M.S. Ashok*
- *Fresh fish marketing by a fishermen's group: a case-study from Tamil Nadu by Ann Gordon*

Afternoon session (Chairman: M.S. Ashok)

- 1400-1530 ● *Better fish containers for women traders by A. Kamila*
- *Activities of the Visakhapatnam fisherwomen dry fish co-operative society, Timmapuram, Bheemunipatnam mandal, Visakhapatnam district by Ms B. Yellayamma & Ms M. Parvathamma*
- *Production and marketing of value-added items in dried fish by Oriental Dry Fish Industries, Sandhakud, Paradip port, Orissa: by B.C. Pattnaik*
- 1600-1800 ● *Ice distribution to the artisanal fishery sector: a study of Kanyakumari, Trivandram & Quilon districts presented by Satish Babu, SIFFS*
- Introduction of three Working Group topics and discussion

Wednesday 19 March, 1997

Morning session: Chairperson, Ms M.H. Kalavathy

- 0900-1030
- Video film on security situation in Northeastern States of India
 - *Deevara Navodaya: Some observations on a radio programme for fishing communities in Sri Lanka* (Study findings of Mr. J. Lucas of Santidhan and INASIA field staff)
 - *Issues and concerns on the long-term sustainability of the retail fish traders' project in Sri Lanka.* By Chamindra Weerackody, Regional Director, IRED Asia
- 1100-1200
- Working Groups hold discussions
- 1200-1300
- Working Groups present conclusions

Afternoon session: Chairman, Mr Chamindra Weerackody

- 1400-1530
- Discussion on Working Group presentations
- 1600-1700
- Development of Recommendations and Final Address by Ann Gordon

***Market Potential for Superior Quality Dried Fish Products
in the North Eastern States of India: Report of a Study***

*by Catalyst Management Services**

Executive Summary

North Eastern food habits, unlike the rest of India, favour to an unusual degree meat and fish, particularly dried/ preserved fish. About 88% of the entire population is non-vegetarian. Of these 94% consume fish and 60% consume dried/ processed fish. The preference is strongly in favour of high quality (hygienic) products, with the urban consumer predictably demanding higher standards than his rural counterpart. Dried and processed fish is traditional food, eaten almost every day by tribal populations, who constitute a major portion of the entire North East population.

Strategic intervention in marketing (as the Bay of Bengal experience shows) must focus on relieving pressure on artisanal fisherfolk and petty traders to sell the produce immediately or very shortly after landing, in markets controlled by their creditors.

Drying or processing fish, including high-value fish as a first choice alternative rather than as a last resort to salvage spoiling fish, is one way of relieving this pressure. Hitherto, the problem has been the absence of markets for dried/ processed fish, which would pay good prices for such fish.

The present study clearly shows the existence of a large and relatively untapped market in the North East. This market is characterised by:

- a large supply-demand gap
- high quality consciousness

* A Division of Fusion Management Services Pvt. Ltd., Bangalore. India
Ph/fax +91-80-341 9616. 341 1687. 334 4580
Email: cms@giabg01.usul.net.in

- acceptability of almost all kinds and varieties of fish and meats, particularly dried and processed fish
- willingness to pay for higher quality

This presents an opportunity for entering the region with almost any variety of dried/processed fish. We recommend that the following marine varieties which are already in demand or in use be test marketed.

English/common names	Form in which fish is sold
Bombay duck	Dry, unsalted
Ribbon fish/Trichiurus sp.	Dry, unsalted
Illish	Dry, unsalted
Croaker	Dry, unsalted, gill cut
Croaker	Dry, unsalted - body cut

However, it should be borne in mind that the current quality of dried/ processed fish coming from peninsular India, particularly the Bay of Bengal area, is unlikely to find acceptance in the North East. Not only will the quality have to be improved, but it will be necessary to address specific consumer preferences like low salt content, in order to gain acceptability in the North East.

It is also recommended that a few varieties of high-value fish like seer, pomfret, etc. be tried and tested as high quality premium products on a small scale, in packed and loose forms.

This study shows that in fact, almost any variety of fish, including anchovies, cluepids, sardines, etc. if hygienically processed and preserved, is worth trying out in the North East.

The basic processes recommended are drying, smoking, and pickling, all of which would find acceptability in the North East, and are relatively low in technology, well within the capabilities of artisanal fisherfolk.

The issue of margins and profits needs to be examined separately for each species, each location, each process.

There will be, of course, limitations to the number of varieties or products that can be so test marketed — finance, expertise, linkages, law and order situations, transport bottlenecks, organizational issues, and the like. (A list of such issues needing attention is to be found in Information Bulletin No. 9 of the DFID-PHFP 1997)

There are other strategic alternatives also worth exploring, like packing and distributing high-value products to the premium segment, through the consumer marketing network. Such products would typically be positioned as 'ready-to-eat' snacks or 'easy-to-cook' foods. These could bypass existing dried fish wholesale and retail market chains, reaching out directly to the consumer, using alternative distribution channels. Such an option would be both high risk and capital intensive, requiring much external support, but not unthinkable in view of the success of similar initiatives; the 'Amul' brand of milk products is a case in point.

As for demand estimates, everything in this study shows that there is a large supply-demand gap, the size of which is very large indeed. Given the nature of data available at the moment, it is not possible to make accurate estimates of the actual demand, and the price elasticity of such demand. In fact, this not necessary, given the totality of the scenario. For a single group of entrepreneurs, however large they may be, the existing information fully justifies, in our opinion, a venture to test the market.

***Fresh Fish Marketing by a
Fishermen's Group:
A Case Study From Tamil Nadu***

*by Ann Gordon*¹

INTRODUCTION

Background: Commercialisation and Traditional Fishing Communities in India

Increased commercialisation of the marine fish catch in India, although benefiting fisherfolk through the higher prices paid for fish, has tended to displace other income-generating activities derived from the fish resource in traditional fishing communities. Thus many women, who depend on the marketing and processing of dried fish as a source of income, have found themselves less able to afford to buy fresh fish at the landing. Many local small-scale traders (men or women, selling fresh fish on foot, by bicycle, or by use of the local buses) have also been adversely affected.

This study was undertaken in November 1996 as part of a research project concerned with the development of fish handling and marketing strategies that would benefit traditional fishing communities in India. A number of studies have been undertaken as part of the project, with the common objective of identifying post-harvest handling or marketing activities which might be accessible to traditional fishing communities, and enable them to benefit more from the changes in fish marketing currently occurring in India.

The project is managed by the Natural Resources Institute (UK) and funded by the Post-Harvest Fisheries Research Programme of the Renewable Natural Resources Research Strategy of the Department for International Development (UK). The work in India has been carried out in collaboration with a number of organizations familiar with the sector, including the South Indian Federation of Fishermen's Societies and the DFID Post-Harvest Fisheries Project. Consultation with these

¹ The author is grateful to Ms B Gomathi of the DFID Post-Harvest Fisheries Project, Satish Babu of the South Indian Federation of Fishermen Societies, and P Ramesh of the Nellai Kattabomman and Chidambaranar District Fish Workers Development Society, for comments made on an earlier draft. However, the author bears the sole responsibility for any remaining inaccuracies in the text.

organizations and others led to the identification of a number of candidate case studies — a process which has evolved during the course of further work.

Fresh Fish Marketing: A Risky Business

Fishermen often feel themselves to be exploited — believing that the prices they receive for their catch do not adequately reflect the prices paid for such fish in the wholesale or retail markets where they are subsequently sold. For much of the year they may have little choice of whom to sell to — being locked into price and sales agreements with merchants who have advanced them credit, or their fishing village may be served by only one merchant (because of its remoteness, small catch size, or possibly because the merchant has taken steps to restrict the activities of other merchants).

Although there has been considerable success in increasing fishing incomes derived from export varieties (particularly shrimp and cuttlefish), this appears to be a special case. For such products, information on prices and standards is transparent, accessible and understood — and there is, in addition, considerable competition amongst merchants to obtain supply for the under-utilised processing plants. Moreover, the high value of such produce justifies expenditure on the use of ice, which by reducing perishability also reduces pressure to sell to the first buyer. As a consequence, well-organized and motivated fishermen's groups in southern India have been very successful in obtaining a larger share of the export price for their membership.

This contrasts sharply with fresh fish destined for domestic markets. For the fishermen, although the unit value is less, the volume of catch and aggregate income derived from these fish is much more significant. Yet fishermen frequently feel that they receive unfair prices for their catch — particularly when there are few buyers, or when there are glut landings. Catches of course vary seasonally, but even within seasons, catch size and content may vary significantly from one day to the next, without warning.

Some fishermen's groups have reacted to this by attempting to market their own fish. Yet few such initiatives have been successful. The reasons for this are many, including the following: existing merchants have temporarily bid up fish price to attract sales away from the group; fishermen's groups have found it difficult to manage the erratic demand for ice and transport associated with variable catches; the need to show benefits to the membership has led to an attempt to operate on

Note : A sangam is a co-operative society

unrealistically low margins; the working capital requirements have exceeded the resources of such groups; some groups have found it difficult to gain acceptance amongst wholesalers; or divisions within the group have emerged and led to disagreement over marketing strategies. These experiences underscore the risky nature of fresh fish trade and the tendency to underestimate the costs involved in managing that risk, including flexible access to transport, ice and working capital.

Yet the fishermen's sangams at Manapad, just south of Tuticorin in Tamil Nadu, had reportedly been very successful in their fresh fish marketing activities in Kerala and Tamil Nadu. As such they were an obvious candidate for a case study.

Approach to the case study

The author, an economist from the Natural Resources Institute, together with a social development specialist of the DFID Post-Harvest Fisheries Project, spent one week working with members of the sangams in an attempt to understand what had led to their success where others had failed. During this time, a number of open meetings were held with the members, and with their leaders, as well as discussions with selected individuals. Observations were made at the fish landing, when fish were being auctioned, packed and transported, at the same time permitting interviews with a wider group of people. In addition, views were sought from other fisheries sector personnel familiar with the group, and from the priest who had been instrumental in their initial formation.

THE MANAPAD SANGAMS

Establishment and Organisation

The Nellai Kattabomman and Chidambaranar (NKC) District Fish Workers Development Society was registered in 1995, bringing together 42 sangams in the surrounding area. By 1996 it comprised 43 fishermen's sangams from different villages in the district, with a total membership of 2,500. Fourteen of these are located in the village of Manapad, and it is this group of sangams, with a total membership of about 600, which is involved in fresh fish marketing.

The initial impetus to establish sangams in Manapad was partly a response to the efforts made by a charismatic and respected priest³. As director of the Diocesan Social Service Society he sought to sensitise the fishing community to their situation, and the steps they could take to influence their lives and livelihoods. For many years, fish purchases at the Manapad landing centre had been dominated by one

³ Father Anthony Swamy

local merchant, and there was widespread dissatisfaction with the prices received. This perhaps helps explain the rapid process by which the sangams were formed and grew.

Initially the sangams, and the priest who had striven so hard for their formation, had the official backing of the church. However, this was subsequently withdrawn, when the sangams began to be viewed as a challenge to local powerful elites (including particularly, fish merchants).

When the Manapad sangams were first formed in 1992, with an initial membership of less than 50, their objectives were threefold:

- (a) to increase fish prices paid to fishermen;
- (b) to break the cycle of indebtedness amongst fishermen; and
- (c) establish a savings mechanism.

Their status as sangams eases access to bank loans, which can be used to repay former loans with merchants, purchase outboard motors, replace kattumarans and nets, and make other repairs to their boats. All fourteen sangams operate along similar lines — the reason for their numbers is simply to prevent any one becoming too large. New members are admitted once per year, and the board which governs all the Manapad sangams decides which sangam should receive new members. Members of the various committees are democratically elected and each committee is represented on each higher level committee. 60% of the eligible male population of Manapad are members of a sangam.

The Manapad sangams have a few rules, which can be summarised as follows:

- (a) no member should drink liquor before coming to a meeting;
- (b) politics should not be discussed at meetings;
- (c) each member should save with the sangam (initially at a rate of roughly US\$0.025)⁴;
- (d) regular meetings should be held according to an agreed schedule; and
- (e) if a member dies, members should miss work and the Society will pay death compensation of Rs 50,000 to the member's family from a death benefit fund to which all members contribute.

⁴ When a fisherman seeks to join a sangam he must clear his debts with the merchants. The sangam assists him with a loan to do this — but first requires the new member to serve a six month probation period, during which time he must save R1/day. Once a regular member, savings continue on a percentage of catch value basis (say, 2% per day).

Fresh Fish Marketing

The sangams' initial venture into marketing concerned prawns for the export market, and simply involved making telephone calls to get quotes — which meant that they knew if they were being offered unfair prices, and it also alerted traders to their catch, thereby increasing the competition. They were pleased with the results of this initiative and after two years wanted to expand into fish marketing within India, believing that they could improve prices there too.

They did this by intervening whenever there was a particularly good catch (when previously they would have been obliged to accept low prices offered for glut landings by the local merchant). If there was a large catch, the sangams would order ice and rent a truck, to take the fish to wholesale markets in Kerala and Tamil Nadu. Fishermen's names, along with varieties and quantities, would be logged, and the revenues distributed accordingly once the marketing costs had been deducted. Recognising that the hire of the truck was eating into their profits, after one year they took out a loan to purchase a new truck. They had been operating their own truck for one year at the time of the author's visit.

Although this sounds quite straightforward, they appear to have succeeded where many similar organizations have failed. Some of the factors in their success are discussed below, along with an assessment of potential threats to the sangams. Key factors are discussed under two headings: tangible factors and intangible factors (or perhaps more accurately, less tangible factors).

Tangible Factors Affecting the Success of Fish Marketing by the Sangams

The sangams have undoubtedly had strong charismatic leaders, whose hard work and imagination have commanded the trust and confidence of the fishing community. The first such leader was the Diocesan Social Service Society director whose vision led to the establishment of the sangams in Manapad. The present secretary of the NKC District Fish Workers Development Society was also a key figure in the sangams' leadership. First-hand accounts emphasise the importance of such leaders. It was very difficult for the members when the priest left the community in 1995, since he gave leadership, moral support and was also able to help the sangams logistically (acquiring office space etc). But they survived this — and certainly give the impression of being a strong and relatively united organization under their new leadership.

At the same time, the sangams must be careful of becoming too dependent on certain individuals — lest they cannot continue when, or if, those individuals leave the community. There seems to be considerable awareness of this though — with

the members keen to quote their priest and friend: “but there will always be other Father Anthonys”. It is also true that a core group of 6-10 members are most active in decision-making. This may reduce any tendency towards over-dependence on a single individual.

Both the members and the priest emphasised the importance of a very thorough approach to training — both initially and subsequently. As far as could be gauged, it appeared that the sangams’ accounts were in good order — and the people responsible were able to clearly explain the source and use of the various amounts indicated. They had learnt these skills in training programmes mounted by the sangams with the support of the Diocesan Social Service Society. They were relatively poorly paid for the skills they had — but adequately paid by standards in Manapad, where there are few opportunities to practice such skills. The sangams would be wise to maintain vigilance in training and accountability, since this is often an area of weakness for other superficially similar organizations.

An unusual feature of the marketing team is that one of members who takes the fish to the market had previous experience in this area, and in fact had previously worked for the rival merchant. The members play down the significance of this in their success — but it is certainly unusual and must have given them a head-start in confidently commencing marketing activities. For many such organizations, often based in fairly isolated coastal communities, fish marketing represents a venture into a new and different world — and this in itself, can be a barrier. Also, the fact that this person was known to traders in the wholesale markets, undoubtedly added to the credibility of their operation, in the eyes of the merchants.

A further enabling factor for the sangams in Manapad is that Manapad is connected by telephone. Again, the members played down the significance of this, saying that if the phone were not there they would travel to the next village or town. But this undoubtedly eases communication, which is the key to their activities (finding out about prices and supply in different markets and using the information to plan that day’s marketing strategy, locating and reserving ice when needed, or hiring an additional truck). Many remote fishing villages in India do not have access to telephone communication — although the telephone network is now expanding very rapidly.

The sangams have also had some outside support — initially from the Diocesan Social Service Society (mostly focusing on training and self-help rather than financial assistance, although help was given with the provision of office accommodation), and subsequently in the form of two large ice boxes loaned by SIFFS, which permits the storage of ice. Yet it is also true that the sangams would probably have purchased these boxes if they had not been loaned to them — since

they are an important component in their marketing strategy, which they would have had sufficient funds to purchase. When the sangams first started marketing fish, it was often difficult to obtain ice — since the local plants were operated by the same merchant with whom they were competing for fish purchases. The ice boxes are critical to fish marketing, and are considered particularly effective for high-valued finfish destined for domestic markets.

Intangible or Less Tangible Factors Affecting the Success of Fish Marketing by the Sangams

During discussions and meetings held with the members it was clear that there is considerable co-operation and trust amongst the membership, and little current evidence of the internal rivalries which sometimes destroy such organizations (and indeed are quite prevalent in village co-operative societies in India). At the same time, there is clearly active participation and interest in the sangams — so it is not a question of oppression by an elite group within the sangam, or apathy on the part of the general membership. It is very difficult to identify any particular reason for this unusual display of unity, and it may well be simply fortuitous “chance”. The members perhaps unite in their shared fight against the merchant who previously dominated fish purchases in Manapad — whose mention still engenders very strong reactions — but this cannot fully explain the cohesiveness of the group.

Although the importance of training has been emphasised above, the degree of organization and management is still notable, and difficult to fully explain. The sangams have demonstrated considerable business “nouse” and perseverance in their activities — initially hiring trucks as required; making the necessary enquiries in order to plan that day’s marketing campaign; monitoring the marketability of the sangams’ fish purchases to ensure that what they buy can command prices which will more than cover their marketing costs, and resisting the pressure to pay at least a fixed minimum price to the fishermen; shopping around when ice was not available locally, and subsequently buying ice in Kerala, where it is cheaper, on the return trip from the wholesale markets.

Yet some of the potential threats to the sangams will test these management skills. They have had such success in their marketing activities, that the local merchant has been obliged to offer higher prices in order to secure fish supplies. This means that there is less reason or opportunity for the sangams to intervene in fish marketing, and the members therefore see less direct benefit from the sangam. The sangams are a victim of their own success. They have now made certain investments (the most significant being the purchase of the truck) which require regular payments, and income. One year after the purchase of the truck, they were purchasing less fish at the landing than they had the previous year (because there was less need to

intervene on account of low prices), and when they did purchase fish, they were making less profit for their membership because the purchase price was higher.

At the same time they were under pressure to operate on very low margins (scarcely allowing for any contingency) in order to return as much profit as possible to their membership. Notably, at the time of the author's visit, loan repayments were two months behind, although there was little concern about this given that the most lucrative fishing season had yet to come⁵, and the private corporation that had loaned the money was apparently confident of their ability to repay. In their defence, the sangams pointed to unexpected and costly modifications to the truck's bodywork — yet such expenditure might possibly have been foreseen. Moreover, the members readily admitted that they could rent out the truck, and thus improve the sangams' income — but they were reluctant to do this, feeling that it was a question of pride that the truck should be dedicated to fish marketing. Hopefully, they will nonetheless be able to sustain loan payments on the truck — but might have been warned off purchasing a truck so soon, had they sought advice from other organizations such as SIFFS, on this matter.

Although it is hard to see how this might directly affect the performance of the sangams, Manapad itself is a rather unusual fishing community. Fishing communities in this part of India are often remote and generally very poor. Work opportunities are few, yet fisherfolk have little access to farming land (and if they do, it is often of poor quality). In contrast to this, Manapad has imposing churches, public buildings and brick-built houses. Historically the village has had trading, entrepreneurial and migrant labour links with Sri Lanka, and some families still benefit from remittances from relatives in Sri Lanka. Villagers claim that although many of their houses give an impression of higher incomes (compared to the low standard of housing in many fishing villages), they no longer have incomes to match this. However, it is possible that these circumstances combine to give fisherfolk from Manapad more confidence in their trading activities, business ventures, and outside contact than might otherwise be expected of a relatively poor fishing community.

Lessons for other organizations interested in fish marketing

The Manapad experience highlights the importance of a number of factors:

- (a) strength of purpose and cohesion within the group, including strong leadership — but not over-dependent on an individual;

⁵ The loan was sensibly taken out just before the start of the main fishing season, so the commencement of loan payments coincided with the period of highest revenues from fish marketing.

- (b) sound business management — to protect the group’s income, and ensure that the group’s investments give an adequate return (including, for instance, the hiring out of the truck for other use, if it becomes under-utilised in fish marketing);
- (c) thorough training activities — at the outset, and subsequent “top-up” training, to cover management, accounting and administrative issues, as well as general awareness raising;
- (d) learning the marketing process before large investments have been made (in Manapad they rented trucks initially);
- (e) when a large investment is made, planning the commencement of loan repayments to coincide with the season when their income is likely to be greatest — this will enable them to build a contingency fund for the rest of the year when income is lower;
- (f) being able to benefit from the experience of a member who had already been involved in fish marketing (which raises the possibility of acquiring such experience through apprenticeship with sangams already active in fish marketing);
- (g) access to telephone communications; and
- (h) contact with other organizations working with fishing communities which enabled access to ice boxes and other relevant information.

Other groups considering fish marketing activities are recommended to give careful consideration to their own circumstances and whether they can match the performance of the Manapad sangams. The Manapad experience also highlights the importance of perseverance. Some of the factors listed above undoubtedly gave the Manapad community the confidence to continue despite significant obstacles which arose from time to time.

Finally, however, the dynamic nature of this process should be emphasised. At the time of this study, the groups had only been operating their own truck for one year, and already the marketing pattern was changing to lower “profits” than in the first. The challenge will be to consolidate their achievements and stay financially solvent, whilst retaining strength of purpose and unity within the sangams. This may involve new initiatives or direction.

Better Fish Marketing Containers for Women

by **A Kamila**

An aluminium fish container is making life easier for many women fish vendors in Tamil Nadu. The success of these containers developed by DFID-PHFP offers hope to thousands of women in Tamil Nadu engaged in fish retailing.

These women face innumerable problems in transporting their fish to market places. Most buses do not allow women carrying fish baskets to get in because of the foul odour, leakage of water and dirt. Bus drivers and conductors complain that other passengers, especially school children and officegoers, object to the smell from the baskets, the mess it creates which spoils their clothes and the delays caused by the slow loading and unloading process.

With no other transport available in the districts and stiff competition for a place in the market, fighting often breaks out at bus stands. Apart from all these hassles, the women stand to lose money if they can't reach markets in time.

Santhidan, an NGO in Kanniyakumari District, Tamil Nadu invited the DFID-PHFP in 1989 to study this problem and suggest a solution. It was found that the problem lies in the nature of the traditional containers and the transport systems. The problem of drip from the fish, especially if ice is used, could not be remedied by simply introducing a better quality basket. Several women had tried out other traditional vessels such as *anna koodai* and drums, all of which found as little acceptance from the bus crew as traditional bamboo/palm leaf baskets.

The pilot project started with field-testing of a container that resembled the *idli kundan* in 16 villages where Santhidan works. But the women rejected it because it looked like a common cookery utensil; they did not want to be regarded as *idli* sellers but as fish sellers. On the basis of recommendations from the women, several modifications were made to the *idli kundan*, and it was redesigned. The key features of the new containers are:

- a maximum height of 30 cms, allowing it to be pushed beneath the seats.
- a tight-fitting lid, reversible for fish vending purposes;

- easily borne on the head or hips;
- a 25/35 kg capacity for easy carrying;
- totally leak - proof;

The final product is extremely durable, and has an estimated 3-year life span. It costs Rs. 160/- per container in 1991 against the one designed by IIT in 1989 which costs Rs. 400.

The container still costs somewhat more than a commercial utensil, because of the special design and the low volume of production.

To promote the use of these successfully tested containers, it was decided to approach co-operative societies which function under the Department of Fisheries, Tamil Nadu. The DFID-PHFP also located possible funding support to these women from Government institutions. The State Social Welfare Board volunteered to provide 50% subsidy in the form of matching grant. Thus these containers were promoted in a phased manner coordinating with DOF and SSWB. From 1992, it has been incorporated into the five year plans of the DOF to continue its promotion in a phased manner to meet the requirements of all members of co-operative societies in Tamil Nadu.

A series of studies was also conducted among the fish vendors to assess the impact of these containers. Six of the 24 societies which availed the containers in 1991-92 were selected for the study. These six societies were located in three districts — VOC, Nagai Quaid-e Milleth, and South Arcot.

The study was quantitative in nature. It covered users and non-users of containers in six communities, followed by an attributes study on the perceptions of these women about the container use.

The rationale behind the survey was to select at random 10 beneficiaries and 10 non-beneficiaries in each of the six villages. Container impact was assessed over a period of two months by retaining local women. It was found that the container was regularly used by 95% of beneficiary groups. It helped to solve social issues associated with transportation. The women found it easier to carry and transport and also store fish in these containers.

The study also threw light on the existing marketing practices of fish vendors. Most of the fish vendors dealt with fish worth Rs. 100 to 300 per day — and were able to make a profit of Rs. 25-50 per day. The study showed that the women

regarded the new fish marketing container as a status-enhancer. It alleviated the problems of moisture, dirt and leakage when transporting fish through the public transport system.

During 1996, a further pilot study to introduce these containers among the fish vendors of Andhra Pradesh was undertaken by the project. The results were quite positive. The DOF, Andhra Pradesh, expressed its willingness to consider introduction of the fish containers under the DWCRA scheme (project programme).

The design, development and promotion of the container enabled close project interaction with women fish traders. This process led to a series of needs assessment workshops with various women's groups. The groups believed that some other issues are more important for women — to improve their livelihood — than that of a new for container. Therefore the DFID-PHFP identified the following issues and priorities for action among the women fish vendors in working with community-based organizations, NGOs, and DOF/ other Government Organizations.

- Credit facilities
- Training and awareness building
- Transport facilities
- Fish storage and handling facilities
- Need for additional income-generation activities
- Need for strengthening NGOs to address the issues of women fish traders;

Since 1993-94, the project has started addressing the problems and needs of fisherfolk communities in a holistic manner, working with NGOs and GOs.

Activities of the Visakhapatnam Fisherwomen Dry Fish Co-operative Society, Timmapuram

The Visakhapatnam Fisherwomen Co-operative Society, in Timmapuram hamlet of Mangamaripeta, is located on the beach road from Visakhapatnam to Bhimili, about 17 km from Visakhapatnam. The fisherfolk population of Timmapuram (village) is 200. The Department of Fisheries has provided them with 100 *pucca* houses, while the District Collector, Visakhapatnam, has allotted 100 houses under the “weaker sections housing programme.”

The society has 164 members. Share capital amounts to Rs. 1,640. The fisherwomen are illiterate and poor, the dry fish business being their sole source of livelihood.

The society’s activities include purchase of raw fish at the fishing harbour in Visakhapatnam and transport to Timmapuram, where they cure and process the fish for human consumption and for use as poultry feed. The dry fish is generally carried to shandies for sale. The dry fish intended for poultry feed will be purchased by poultry farmers at the site, but usually on credit basis. Fisherwomen have to wait for payment.

The Government of Andhra Pradesh, through the Fisheries Department, has provided financial assistance of Rs. 30,000 to the society to help the fisherwomen, through a revolving fund.

The problems faced by the fisherwomen in their day-to-day activities are as follows:

- (1) Fish Transport.
- (2) Fish Handling.
- (3) Finance.

(1) **Fish Transport** : The fish purchased at the fishing harbour or the landing centre is generally loaded in traditional bamboo baskets. About 40 kg. of fish is loaded in a basket. But the fish get crushed and damaged. Sometimes fish is loaded in gunny bags, this causes more losses due to pressure.

The Fisherwomen Society was provided with a van financed by D.R.D.A., Visakhapatnam, in 1985. This van does not work at present because of major

repairs and is now back with the Fisheries Department. Fish is transported either by cargo buses or by hired vans. Result : Delay and losses due to spoilage of fish.

Remedy:- Financial assistance needed to purchase two vans and plastic baskets for transport of fish in good condition.

Fish Handling :- Raw fish collected from the fishing harbour is carried to the drying site, where it is processed. Salt curing is also done.

The fish is dried after curing directly on land above grass, and for some time on cement platforms. The bottom layers get overheated on account of the cement platforms. This causes spoilage during transport.

Remedy:- (1) Modern or improved fish drying racks needed, as suggested by DFID-PHFP, Kakinada.

(2) Two storage godowns

- (3) **Financial problems :** Being poor, fisherwomen could not afford to buy fish from the fishing harbour. Each woman requires a capital investment of at least Rs. 20000 to carry out collection, transport, drying, and marketing activities.

The fisherwoman do their best to reduce spoilage of fish by following curing and drying methods, and making it fit for human consumption and for poultry feed. Therefore, the activities of the Women's Society deserve to be encouraged. At present the women handle five tonnes of fish daily, but if assistance is provided to them, they can handle 20 tonnes per day.

Apart from the Fisherwomen Cooperative Society, Timmapuram, there are six other Fisherwomen Coop. Societies in Visakhapatnam district as mentioned below. The Fisheries Department has provided financial assistance of Rs.28,000 each for their routine business.

- (1) Fisherwomen Coop. Society, Rajayyapeta
- (2) Fisherwomen Coop. Society, Pedateenarla
- (3) Fisherwomen Coop. Society, Revupolavaram
- (4) Fisherwomen Coop. Society, Bangarampalem
- (5) Fisherwomen Coop. Society, Vadanarsapuram
- (6) Fisherwomen Coop. Society, Pedajalaripeta

***Production and Marketing
of Value - Added items in Dried Fish
by Oriental Dry Fish Industries,
Sandhakud, Paradip Port
Orissa***

by **B.C. Pattnaik**, Associate
Oriental Dry Fish Industries

1. Introduction

It has been realised for a long time that preparation of dried fish in value-added form would generate additional earnings for small-scale fishers. Recently the DFID-PHFP in Kakinada took the initiative to encourage small-scale fishermen/fisherwomen in Orissa to prepare and market value-added items in dried fish.

Till recently the fishermen/fisherwomen were preparing dried fish unhygienically on the sandy beach and roadside pavements. Result: low value. In order to create awareness among the fishermen/fisherwomen about preparation of dried fish in hygienic conditions in value-added form, the DFID Post-Harvest Fisheries Project formulated and implemented innovative programmes by introducing fish drying racks.

2. Background

Encouraged by the local fishery officer, Oriental Dry Fish Industries (a small-scale unit) established a fish drying yard at Sandhakud, Paradip Port in the district of Jagatsinghpur (Orissa) in 1996 in an effort to produce and market dried fish in value-added form through a manual sun-drying process.

The main objective of the unit was to prepare dried-fish from different varieties of fishes hygienically and process it in value-added form for urban consumers. It would also be marketed in semi-urban and urban areas within and outside the state in the form of small consumer packs.

The company took up the venture with technical support from the Asst. Director of Fisheries (Marine), Kujang. It also received encouragement from Mr. Venkatesh Salagrama, Field Liaison and Extension Officer of DFID-PHFP, Kakinada. During his visit to the yard, he assured project assistance for technology introduction and marketing.

3. Market Survey

Before deciding on production, the company conducted a market survey in West Bengal and Assam. It was observed that the wholesale market at Jaggi Road (about 50 km from Guwahati) is the biggest market for dried fish and the only one in the North Eastern Region where dried fish comes from all over India. From this market, dried fish goes to interior rural and hill areas of Assam, Tripura, Manipur, Meghalaya and Nagaland etc. through wholesale traders. It was also observed that the wholesale prices of different varieties of dried fish prepared from small fishes vary from Rs. 800 to Rs. 1600 per 40 kg bag, whereas bigger varieties of dried fish including Bombay Duck in value-added form commanded higher prices, varying from Rs. 1200 to Rs 2500 per 40 kg bag.

Considering the market demand and price structure for different varieties of dried fish, Oriental Dry Fish Industries started trial production from 18th January 1996, concentrating on a single item, ribbon fish in value added form. This variety commanded a good price in comparison with other varieties of small dried fishes in the wholesale market at Jaggi Road.

4. Production and Marketing

During the first year of production, only ribbon fishes were dried. Production continued till the end of March '96. During this period 18 tons of ribbon fishes, small, medium and large, were processed and dried, yielding 4.5 tons of value-added products. Out of 4.5 tons of dried fishes, 3 tons were sold on the spot (drying yard) to a buyer from Assam at 35 Rs/kg. Of the remaining 1.5 tons, 250 kg were sold to Andhra Fishermen's Central Co-operative Society, Kakinada on consignment basis at 40 Rs/kg. The remaining 1.25 tons were sent to a dry fish merchant at Jaggi Road who offered Rs. 1900 per 40 kg.

Thus, the total sale proceeds amounted Rs. 1,71,250 against an expenditure of Rs. 1,36,450 on production and marketing. A broad outline of the economics of production and marketing of 4.5 M/T value - added dried ribbon fish follows:

**Broad outline of the economics of production and marketing of 4.5 M/T
dried ribbon fish in value-added form during 1995-96.**

1. Cost of raw-material (fish) - 18 M/T @ Rs. 5500/- per M/T	-	Rs.	99,000.00
2. Labour cost @ Rs. 1/- per kg. of raw material (18000 x 1)	-	Rs.	18,000.00
3. Packing materials @ Rs. 0.50 p/kg. of finished products. (4500 x 0.50 p.)	-	Rs.	2,250.00
4. Forwarding i.e. transportation freight etc. @ Rs. 6/- per kg. of finished products (1500 x 6)	-	Rs.	9,000.00
5. Loading and unloading charges @ Rs. 0.20 p per kg. of finished product (4500 x 0.20)	-	Rs.	900.00
6. Miscellaneous expenditure	-	Rs.	7,300.00
			Rs. 1,36,450.00

**Total production and sale of 4500 kg of dried
ribbon fish (un-salted):**

Sales

3000 kg x Rs. 35/- kg	-	Rs.	1,05,000.00
250 kg x Rs. 40/- kg	-	Rs.	10,000.00
1250 kg x Rs. 45/- kg	-	Rs.	56,250.00
TOTAL 4500 kgs	-	Rs.	1,71,250.00
INCOME		Rs.	1,71,250.00
EXPENDITURE		Rs.	1,36,450.00
		Rs.	34,800.00
SURPLUS : Say		Rs.	35,000.00

The result of the first year of operation encouraged the company to substantially increase production of dried fish from different varieties in value-added form. No problems were encountered in sale of the products at the wholesale market at Jagi Road (Assam) it could absorb any quantity of dried fish of all varieties.

But to the company's ill luck, the 1996-97 season turned out to be very unfavourable. The plan for intensified production and marketing suffered setbacks from all directions. Production was started from 1st Nov. '96 soon after the commencement of fishing operations at Paradip. But damp conditions and frequent rain hampered drying. Secondly, there was stiff competition for procurement of raw materials, as the prices of fish shot up. Against the production target of 6 tonnes by the middle of December '96 (for carrying one truckload) only 4 tonnes could be produced.

A consignment of 6116 kgs of un-salted dried ribbon fish was sent in a truckload to Jaggi Road, Assam. But the goods could not be sold immediately after arrival; the market was closed on account of an "Assam bandh". Terrorist disturbances kept away buyers from the interior and from hilly areas of Assam, Tripura, Manipur etc. Money invested in procurement remained locked up for months. For producing 6116 kgs of value-added dried fish, a sum of Rs. 2.10 lakhs was spent. Sale proceeds of Rs. 2.70 lakhs were expected after deduction of 7% commission. If the money had been received within 15 days from receipt of the goods by the party, production would have continued and another truckload of dried fish could have been despatched. But because of non receipt of full payment, production was stopped on 15th February. "So far they have sent only Rs. 1,00,000 and have assured the remainder by the end of this month. By that time the fishing season at Paradip will be over and it will be difficult to get fish in large quantities for preparation of dried fish. The production thereafter will continue on a limited scale, and a small consignment of dried fish will be sent by rail every fortnight till end of May. The production will be totally stopped from June to September."

A broad outline of the economics of production and sale of 6116 kgs dried fish during the period from November to mid-January is given below:

Broad outline on the economics of production and sale of 6116 kg dried fish in value-added form during the period November 1996 - January 1997

- | | |
|--|------------------|
| 1. Cost of raw-materials (fish). kg. 22,750.00 | |
| @ Rs. 6/50 kg | - Rs. 1,47,875/- |
| 2. Labour cost and staff wages @ Rs. 1.25 per kg of fish | - Rs. 28,438/- |

3. Packing materials (gunny bags) @ Rs. 0.30 per kg. of finished products (6116 x 0.30)	-	Rs.	1,835/-
4. Loading charges to truck @ Rs. 0-20 per kg. of dried fish (6116 x 0.20)	-	Rs.	1,223/-
5. Truck-hire charges from Paradip to Jaggi Road, Assam.	-	Rs.	21,000/-
6. Marketing tax, Check gate etc.	-	Rs.	1,500/-
7. Other miscellaneous expenses	-	Rs.	2,575/-
TOTAL			Rs. 2,10,446/-

Sales:

ANTICIPATED SALE VALUE TO BE RECEIVED

6116 kg @ Rs. 1900/- per 40 kgs.	-	Rs.	2,90,510/-
Less : sales commission @ 7%	-	Rs.	20,336/-
SALE PROCEEDS	-	Rs.	2,70,174/-
Total sale proceeds to be received		Rs.	2,70,174/-
Less : expenditure incurred as 1 to 7 above		Rs.	2,10,446/-
SURPLUS	-	Rs.	59,728/-

5. Problems

(i) Processing:

(a) Enhancement of Shelf-life:

The preparation of value-added dried fish by the company aims at improving quality and shelf-life of the fish for better earnings. Proper handling of raw materials and finished products are ensured by the company at all stages of processing. Selected quality fish are purchased at a premium price. The fishes are first sorted out properly as small, medium and large. The small fishes are properly cleaned in fresh water and dried. The medium-size fishes are split open and gutted, the larger ones are cut open and eviscerated, and cleaned

thoroughly in fresh water. Drying is done on bamboo racks 3 ft. above ground level in three layers in the upward direction. In order to reduce the moisture to a minimum level, hard drying is done. The shelf-life of the products is four and half months. It then starts deteriorating. The shelf-life has to be enhanced to generate sustainable income, as good-quality value-added dried fish may be stored for long periods and fetch far better prices, especially during the off season when fish is in short supply and market demand is heavy.

(b) Insect Infestation:

Normally, insect infestation does not occur if the fish is properly dried. But during cloudy weather drying is not good enough, and insect infestation results. To eradicate insect infestation in dried fish, Trebon - 10 (an insecticide manufactured by Coromandel Indag Products India Ltd., Madras - 600 019) is applied on the fish; it is effective. Certain other fumigants are also need in the industry. But approved and permissible insecticides and fumigants are advisable not only to eliminate insect infestation in dried fish but also to make the products odourless and colourless and impart a flavour accepted by consumers.

(c) Marketing:

There is no difficulty in marketing any quantity of value-added dried fish in the North Eastern markets of Assam, Tripura, Manipur etc. but there is a long delay in payments. This puts small producers who directly market their products to these states by eliminating middlemen to serious inconvenience. Hence it is desirable to establish markets in southern states by identifying reputed buyers who can take bulk quantities of value-added dried fish at decent prices. The buyers should be prepared to offer cash against delivery. This would enable small-scale producers to go in for more production with a small revolving fund as working capital.

NRI/DFID is requested to take the initiative to sort out such problems and help small-scale producers.

6. Prospects

In spite of so many difficulties in carrying out the trade, Oriental Dry Fish Industries are still hopeful about the success of the project, since its product is more acceptable and commands a better price than value-added dried fish produced by local fishers at Paradip. Dried ribbon fish prepared in value-added form by Oriental Dry Fish Industries sells for 35-45 Rs/kg, while dried ribbon fish produced by local fishermen at Paradip sells only for 17-21 Rs/kg.

The usual practice of local fishermen/fisherwomen at Paradip is to dispose of dried fish prepared by them to middlemen and traders at a pre-fixed price, since the middlemen offer them an advance to start production and send the consignment to Assam and Tripura. The Oriental Dry Fish Industries can claim to be the first small-scale producer at Paradip who sent their products directly to Assam by eliminating middlemen.

The company for the first time in Orissa introduced hygienically prepared value-added items of dried fish in 50 and 100 gm consumer packs for sale at reasonable prices in urban and semi-urban markets as well as in principal towns and cities inside the state. Steps were also taken to market the products in principal towns and cities of West Bengal, Assam and Tripura where there is good demand for dried fish in consumer packs.

The company also started preparation of prawn/fish pickle to be sold in the market in 50 gm pouches and 100 gm stand-up polypacks at reasonable prices.

The company finds it difficult to carry out these activities for want of funds. The entrepreneurs behind the company put up Rs. 2.50 lakhs as working capital. They would like to generate their own funds without looking for financial assistance from a bank. But progress has been retarded. There is need for more working capital to generate a higher turnover and increase profitability in the years to come.

7. Conclusion

It has been found that a good many value-added dried fish, such as ribbon fish, anchovies, small shrimps, croakers, Bombay duck etc. can be marketed at a better price than ordinary dry fish as their acceptability in the domestic market has been established. The company should be encouraged to go ahead with its activities but it needs financial assistance to meet initial capital, operative and market development costs. This would enable utilisation of different varieties of fishes profitably, giving Oriental Dry Fish Industries a better return.

***Ice Distribution to Artisanal Fishery Sector:
A study of Kanyakumari, Trivandrum and Quilon
Districts sponsored by NRI Research Project R 64467
(Study conducted by Impetus Management
Services, February, 1997)***

Executive Summary

1. The artisanal fishery in the study area has undergone substantial changes during the last couple of decades in response to the threat from the mechanised sector. NGOs like SIFFS have played a major role in this transition. While the activities of these agencies have mostly been directed at technological upgradation of production inputs, the need for fishermen to exercise better control over the disposal of their produce is increasingly felt in a new system of high capital and operating costs.
2. The SIFFS intervention of supplying ice to the artisanal sector is an initial step in this direction. It stems from the recognition that the present supply of ice is heavily in favour of large operators like traders and processors, while artisanal fishermen and women vendors enjoy only limited access to ice particularly during seasons when it is needed the most.
3. Current usage pattern of ice indicates that on-board use of ice is limited, due mainly to low availability and high prices. However, with iced fish gaining consumer acceptance, and international markets setting higher standards for marine products, ice usage in the future is bound to increase. Among women vendors, there is high incidence of ice usage in Quilon and Trivandrum while in Kanyakumari, usage is comparatively less due mainly to poor access. The operations of these vendors are affected when ice is in short supply, leading to price slumps of fish on the beach. As the quantity of ice required by an individual vendor is both limited and unpredictable, organized efforts to ensure regular supply have been minimal.
4. Though installed capacities for ice manufacture are enough to meet peak season requirements in Quilon and Trivandrum, small operators at artisanal landing centres still suffer from ice shortage during peak seasons mainly because traders

purchase the bulk of the ice from the plants. In Kanyakumari, current production capacities are insufficient to meet peak season requirements. Shortage of ice is therefore even more severe.

5. At present, ice reaches small operators at the artisanal landing centres through retailers at substantially higher prices than the ex-factory rates (Rs. 8 to 35 ex-factory vs Rs. 40 to 60 on the beach for a 50 kg. block). On days of excess landings during peak fishing seasons, beach prices go up as high as Rs. 120 a block. Prices are comparatively lower in Kerala, as power tariffs in the State are about 60% of those in Tamil Nadu.
6. Existing ice plants managed by entrepreneur-owners have the advantage of almost unlimited operational flexibility; this has telling implications on their viability. Speaking of viability, new entrants may be disadvantaged by significantly larger capital investments and therefore, the burden of huge overheads. It is therefore recommended that the proposed three ice plants be implemented in phases so that SIFFS will have the benefit of lessons learnt from implementing the first one. Kanyakumari offers the best chance of success.
7. None of the existing plants has an ice distribution system. Their mainstay are bulk customers including fish merchants or their buying agents and ice intermediaries who pick up ice from the plant. Artisanal fishermen and women vendors exist on the fringes; they are charged extortionate prices by middlemen who see in the fishers' lack of direct access to ice supplies, an opportunity to make huge profits.
8. In contrast, the stated objectives of the SIFFS plant will be to further the process of giving artisanal fishermen greater control over the marketing of their produce and to make ice available at reasonable prices to vulnerable groups such as fish vendors, most of whom are women. To achieve these objectives the proposed plant will have a distribution system designed to reach ice to target groups at the place of consumption, namely the fish landing sites. The salient features of the recommended distribution structure are:
 - Ice distribution will focus on eight fishing villages with Enayam in the middle. The distance to be covered on either side of Enayam will be approximately 12 km. More extensive coverage is likely to dilute the plant's impact.
 - At the local level, the fishermen's Sangams (or women's organizations) will have the overall responsibility for ice retailing. Each landing site will have a team of two/three ice retailers who should preferably be women from the

respective communities. Expected earnings of each retailer will be about Rs. 150 a day in the four months of peak landing, but during the rest of the year earnings will be significantly less.

- The main thrust of the strategy is to give women vendors direct access to ice right on the beach and also to meet contingent demand for large quantities of ice arising out of unexpected fish landings at any one or more landing centres.
- It is proposed that ice be retailed at Rs. 45 for a block of 50 kg as against the current price of Rs. 80-120 in the peak season and Rs. 50-60 in the slack season. Once the SIFFS' distribution system is in place the inflated margins of the middlemen will no longer be sustainable and beach prices of ice will stabilise at a level very close to the SIFFS price. A lower price in the slack season, though logical, is not recommended until the plant has had an opportunity to assess its impact on viability. In any case, this is not considered critical because vendors' operating margins are higher in the slack season. With the recommended pricing, the plant's realisation will be Rs. 23 per block.
- The distribution plan does not visualise a role for permanent ice boxes, Portable ones, however, will be useful especially in the slack season.

The significant benefits that will flow from the SIFFS ice plant and its distribution system will be:

- Higher price realisation by fishermen. The prospect of distress sales by fishermen will be significantly reduced.
- Availability of ice at substantially lower prices will provide fish vendors with greater operational flexibility, enhance their reach and improve earnings.

“Deevara Navodaya” - Some Observations on a Radio Programme for Fishing Communities in Sri Lanka

Compiled by Chamindra Weerackody, Executive Director INASIA, on the basis of study findings and observations of Mr. J. Lucas from Santidhan and INASIA Field Staff.

Background

News about fisherfolk communities and the fishing industry is broadcast over the Sri Lankan radio every day through a programme called “Deevara Navodaya” (formerly Deevara Udanaya). The programme is broadcast from 6.15 p.m. to 6.20 p.m. from Monday through Saturday and at 11.45 a.m. on Sundays. The programme was originally initiated and supported by the BOBP and is now being continued by the Ministry of Fisheries and Aquatic Resources Development.

In 1990, IRED (Development Innovations and Networks) was commissioned by the Bay of Bengal Programme (BOBP) to monitor the response patterns of fishing communities to the radio programme. Monitoring was done in six major fishing locations: Thoduwawa, Sinnapaduwa, Chilaw and Negombo along the western coast and Galle and Mirissa along the southern coast. The responses to the programme were expected to cover (1) the need to extend the duration of the broadcasting time (2) the need to provide additional information such as prices of fishing gear (3) the need to entertain questions from listeners and (4) the need to present fish prices prevailing in regional locations such as Negombo, Galle, Tangalle, Kalpitiya etc.

In March 1997, NRI requested one of DFID’s partner organizations in Sri Lanka, INASIA (Initiative in Research and Education for Development in Asia) to undertake a short study with a view to (a) identifying the response patterns of fishing communities (fishermen as well as those engaged in related activities such as traders, fish processors, ice-sellers etc.) to this radio programme (b) assessing the benefits of this programme for target groups and particularly its impact on fish marketing in Sri Lanka and (c) finding out its potential for replication in a country such as India.

Mr. J. Lucas from Santidhan, an NGO of Kanyakumari district, Tamil Nadu, India, and also a partner organization of NRI, was commissioned by the NRI to participate in the study.

The study had to be completed within less than a week. Therefore it was neither possible to apply rigorous research methodologies nor to conduct a comprehensive investigation.

Methodology

A number of fishing communities, fish landing sites and trading centres were visited to collect information for the study. Field Officers of INASIA visited Negombo, Thoduwawa and Sinnapaduwa — all located in the Western Coast of Sri Lanka. Mr. Lucas visited three west coast villages (Negombo, Chilaw, Udappuwa) and the St. John's Fish Market in Colombo. Further, information pertaining to the production of the radio programme was obtained from officers in the Ministry of Fisheries.

Negombo, located in an urban area, is one of the largest fish landing sites in the country. It is estimated that the number of families engaged in the fisheries industry in this area is 15,000. Trawlers and other mechanized craft are extensively used by Negombo fishermen. The fish production in Negombo is directly transported to various parts of the country through wholesale and retail traders.

Thoduwawa, located in a semi-urban area, consists of approximately 1000 families engaged in the fishing industry and related activities. The fish production in Thoduwawa is primarily disposed of through a chain of retail traders.

Sinnapaduwa, a rural locality, consists of about 350 families engaged in the fishing industry and related activities. From Sinnapaduwa fish is transported to St. John's Fish Market through a set of pre-arranged wholesale dealers.

Both in Sinnapaduwa and Thoduwawa, fishermen use 18 to 22 ft long mechanized craft for fishing. The fishermen's cooperative societies in Negombo and Thoduwawa are well organized and active compared to those in Sinnapaduwa.

Data for the study were collected through both personal interviews and informal group discussions. Respondents to the personal interviews included 13 18-22 ft. craft operators from Sinnapaduwa and Thoduwawa; a trawler operator, a teppan operator, a beach seine operator and a retail trader, all from Thoduwawa; 3 retail traders, 3 wholesale traders, an ice supplier, a sand supplier, 2 fisherwomen and a lagoon fisherman — all from Negombo. The respondents were selected at random; however, comprehensive conclusions were not possible. The information gathered was primarily qualitative in nature and was adequate only for a few insights into the questions at hand.

The findings and observations of both the INASIA staff and Mr. Lucas are documented in this report.

Responses to the Radio Programme

1. **Awareness** : Almost all the persons to whom the research team spoke were aware of the radio programme *Deevara Navodaya* but most of them did not listen to it. One reason was the insuitable broadcasting time (6.15 p.m.) Most fishermen by that time had either set out to sea or were getting ready to leave. Many felt that the programme timing should be changed. Some said the number of radio listeners has come down — people prefer to watch television.

Although most respondents did not listen to the programme, the programme information was usually communicated to most of them, through a family member, a friend or a fellow fishworker.

Of the persons interviewed, 17% listened to the programme regularly. Another 72% listened to it occasionally. Of the 46 persons interviewed personally by the team, 5 listened to the Sunday programme regularly. Trawler fishermen are the most regular listeners as they carry radios with them to the sea. They have found the programme information strategically important. However, the disadvantage is that this radio transmission is effective only within a range of 22 miles.

2. **Likes and Dislikes** : A majority of the persons studied appreciated the information concerning two subject areas. The most valued piece of information was the weather forecast which cautioned them wherever necessary to take disaster prevention measures. The second piece of information related to the daily fish prices at St. John's Fish Market. The programme was also used to tell fishermen at sea about any emergency in their families.

3. **Benefits** : Trawler fishermen found the information about fish prices very important for their profession. Those who had planned long sea trips to catch large quantities of fish would cut trips short if fish prices had gone up. This way they would obtain almost the same income from a short trip out to sea as a long trip.

The information on fish prices also improved the bargaining position of fishermen vis-a-vis traders. The radio information enabled them to seek higher prices from traders.

However, doubts have been expressed about the effective use of price information by the fisherman for his own benefit. In a context where fish prices are largely determined by the availability of fish and the socio-economic dependence of the fishermen on traders, it would be interesting to find out whether information given to these fishermen affected the prices they charged.

We have also seen that information on fish prices was useful to fish processors such as dry-fish makers as it helped them determine the prices of their products in relation to the prevailing fish prices. For example, dry fish producers could increase the prices of their products at times when fish prices rose. However, such information did not confer any remarkable benefit on ice and sand sellers.

Fish traders, particularly wholesale dealers, found the information on fish prices extremely beneficial. They always quoted those prices or prices below those when purchasing fish from landing sites.

4. Negative Consequences : Fish prices quoted in the radio programme were said to be based on fish prices prevailing at St. John's Fish Market in Colombo. Traders tend to quote these Colombo - based fish prices when they buy fish in regions outside Colombo such as Tangalle, Kalpitiya etc. But fishermen in those regions point out that it is not fair to them to apply Colombo prices unilaterally regardless of local conditions of supply and demand and local circumstances. They say that the radio information on fish prices does not really benefit them.

Similarly, many retail traders we interviewed said their customers demanded the bargain prices cited on the radio. Traders had the tough job of convincing those customers that local factors affected local prices.

5. Future Needs : Many respondents felt the programme broadcast time must be changed. They also said that the programme duration should be increased; five minutes was too short. Activities of the private business sector and NGOs should also be disseminated through this programme. The programme should also transmit information on fish prices outside Colombo.

Respondents said the programme should discuss women's participation in fisheries, the fisheries sector in other Asian countries and legislation on fisheries subjects.

Programme producers in the Ministry of Fisheries believe that this programme is very useful for fishing communities and that it could be made even more effective. They feel that the programme should be participatory rather than top-down; it could present educational information on fishery resource management and the advantages and disadvantages of the use of modern fishing technology. However, the Ministry of Fisheries does not at present have either the finance or the infrastructure facilities for such a task.

6. Replication : What aspects must be taken into account if a radio programme of this kind were to be produced in India? The research team spoke to officers in the

Ministry of Fisheries who helped produce this programme. Their advice was that we should first clearly identify our target group and the socio-cultural differences within the target group in terms of language, attitudes etc. This understanding is important to produce an effective programme for the target group identified. For example, in Sri Lanka, fishermen at different geographical locations use different words for the same phenomenon. A radio programme must take into account these linguistic differences in order to reach its target group.

Second, one has to clearly define the problems, issues and concerns of the target group. A radio programme should help people to understand their problems and concerns and find solutions. Third, it is important to work out a clear set of objectives for the programme. Fourth, a programme concept has to be evolved followed by production of the programme based on those concepts.

A radio programme like Deevara Navodaya should aim at developing the skills of its target group and improving its professional circumstances; it should also aim at changing the attitudes and life patterns of the target group, say the programme's producers.

***Issues and Concerns about the Long-Term Sustainability
of the Retail Fish Traders' Project in Sri Lanka***

Prepared by

Chamindra Weerackody

Regional Director, IRED Asia

Introduction

The history of the retail fish traders' project in Sri Lanka goes back to the latter part of 1991 when the DFID-PHFP wanted IRED to conduct a baseline survey of the retail fish traders operating from St. John's fish market in Colombo. This was followed by in-depth case studies of selected retail fish traders to understand their life-patterns, coupled with an attempt to introduce an insulated fish box for their use. The idea was to improve the post-harvest quality of the fish distributed and sold by the retailers to households, and thereby improve the socio-economic standards of the retail fish traders.

The post-harvest fishery aspect through the introduction of the insulated fish box was perceived as the main focus of the project. A few boxes were constructed and distributed among a select group of traders. A continuous monitoring programme was conducted for approximately six months to assess the impact of the insulated fish box on the daily income levels of the traders who previously used wooden or galvanized boxes to carry their fish. Besides the above exercise, a number of needs assessment workshops were conducted in different parts of the country, not only to identify the preference of traders for an insulated fish box but also to popularize the box. Meanwhile, attempts were made to facilitate credit for fish traders through state banks, enabling them to buy insulated fish boxes, which were then priced at Rs. 3,900 per box.

The period from 1991 to the middle of 1993 was considered as a "period of learning and exploration". The project's main focus during this period was to better understand the traders, their life-patterns etc. and to look for opportunities to popularize the box among the traders. The experience and the knowledge gained during this period is documented in a number of reports and documents submitted to DFID-PHFP.

The second phase of the project was the period between mid - 1993 to end - 1995. During this time the project encouraged the formation of a co-operative association of retail fish traders in Colombo. Another significant development was the attempt to set up a similiar association of retail fish traders in Negombo.

The fish trader associations in Colombo and Negombo were an outcome of experiences and lessons learnt during the project's first phase. The first lesson was the ineffectiveness of relating development interventions to individuals and the need to build up a common base for such interventions. The second lesson was that interventions in technological development cannot take place in a vacuum and must be an integral part of other social and economic concerns. For example, an insulated fish box for traders will be of no use if the trader is unable to buy the fish box. So a scheme to facilitate credit on easy terms for the traders is directly linked to the success of the fish box. Thus, the project's second phase helped create an environment conducive for development intervention through an integrated approach.

Achievements of the Fish Trader Project

The "positive achievements" of the project's second phase were as follows:

- * Associations of retail fish traders replaced a group of scattered traders, facilitating development interventions.
- * Trader associations would be accountable not only to their membership but also to the external organizations supporting the associations.
- * A distinct social identity for the retail fish traders when acting collectively, and recognition of this identity by external agencies such as banks etc.
- * The associations provided a platform for common interaction and dialogue.
- * A savings and credit scheme based on the strength of the traders and not dependent on outside resources.
- * Different types of credit schemes on easy terms and conditions which reduced the traders' dependency on private money lenders.
- * Enrolment in an Insurance Scheme.
- * An opportunity to link with commercial banks and access bank credit for investment.
- * Access to bank credit on easy terms and conditions to buy insulated fish boxes, an opportunity not available to the traders two years earlier.

The above is a list of some of the quantifiable achievements of the project. A detailed study will no doubt show how these activities affected the living conditions of individual traders. For example, the associations' mobile loan scheme offered low-interest credit to traders. They could thereby save a reasonable sum of money and use it to improve their enterprises or live better.

Current Scenario

The positive achievements of the retail fish trader project have been listed above. In 1996, both IRED and DFID agreed on a critical and open self-reflection on the project and its related activities to assess its sustainability in the long run. The process of reflection began with the preparation of a Working Document based on an analysis of quantitative data available on the different activities of the trader associations (paper prepared by Dr. Ivan Silva). This was followed by extensive discussions with the staff of the DFID-PHFP as well as with office-bearers of trader associations on five days during January and February, 1996.

Dr. Ivan Silva's paper made the following observations:

1. The active participation of traders in the life of the association is limited. Only around one thirds of the membership are active.
2. The number of members who contribute to the association's Savings Fund has gradually declined, particularly with the introduction of different types of credit schemes. The number fell by almost 50% during 1995.
3. The number of members who obtain loans offered by the association has also decreased by almost two-thirds during 1995.
4. The membership of the association either remained static or grew slowly. Attempts to increase membership through awareness-building programmes have not been effective.
5. Loan repayment by traders has a direct bearing on the amount of money they save.
6. Most traders contribute little to either planning or implementation. Their role in the association is restricted to telling IRED what they want.
7. The money, time and labour invested by the project to facilitate the two associations' activities were high, compared to the number of persons benefiting from such activities. A cost-effective strategy needs to be worked out.

8. In spite of all the positive achievements of the project, it appeared to hold only 'marginal significance' for the retail fish trader community in general and for the overall membership of the two associations in particular.
9. Providing office space to the Colombo Association has not improved results.

Assumptions and Questions

The above observations have led to the following assumptions.

1. The current office-bearers of the two associations are neither active nor have the capacity to gear up the association and make it dynamic.
2. Information on the benefits the associations offer its members does not reach all its members.
3. The benefits are enjoyed only by the office-bearers and those close to them.
4. The rules set up by the associations, particularly relating to loans, do not distinguish between those who have accrued good savings and those who have saved less. Therefore, rules and procedures should be changed when granting benefits to members.

Three Fundamental Issues

On the basis of the current state of affairs of the project, we have also raised and reflected on three fundamental questions. They are;

1. Is the relatively static condition of the associations and its non-progressive nature a result of (i) a wrongly identified development intervention and (ii) a failure to understand the real 'nature' of the retail fish traders? In other words, development interventions can fail if knowledge of the inner workings of the target community as incorrect.

This question has led us to ask: have we understood the real 'life' and 'spirit' of the retail fish traders? Our earlier studies gave us adequate information to describe the 'external appearance' of a retail fish trader in terms of his age, family background, marketing patterns etc. but it is now important to reflect on his inner life or spirit. We have again reflected on the information known to us and could make the following observation.

The employment and income levels of a retail fish trader are affected by a number of forces, most of which are beyond his own control. These include the price of fish at the market, climatic conditions, consumer preferences, the availability of money with the consumers, seasonal variations, availability of

fish etc. Though our earlier studies showed that a trader's daily earnings remain between Rs. 250 - 300, everybody will agree these earnings are subject to many fluctuations. His income is primarily used for consumption. This leads one to the conclusion that traders rank among the 'poorest of the poor'.

Categorization of the fish traders as 'poor' leads one to raise a series of other inter-related questions. They are;

- * Can savings, credit and reinvestment, which are part of a market-oriented culture, work effectively with the poorest of the poor-whose primary concern is to earn enough for daily subsistence?
 - * Should not the poorest of the poor receive a social welfare package instead of a credit package at market rates of interest? (The present mobile loans offered by the traders' associations charge an annual interest rate of 48% although this is lower than the rate charged by private money lenders). Isn't it the 'not-so-poor' who could effectively deal with a credit package?
 - * Is the quantum of credit offered to traders by the associations (Rs. 500 - 750) enough for a profit that will enable the the traders to both save and repayloans? There is no doubt that small amounts of credit to the poor can generate only small incomes. Is this why traders do not participate in the credit programmes of the associations?
 - * If the above is true, how can one explain the participation of one-third of the traders in the activities of the association? One thing is clear. Those who have obtained credit have seen their savings decline rapidly. Is it only at a certain point that both savings and credit among the poor become viable? This aspect needs further investigation.
2. Does the non-participation of the traders in the associations' activities emerge from their own perception? Traders do participate actively to 'make proposals'. Do they perceive a project that has links with foreign organizations such as IRED and DFID merely as one that 'delivers the goods' to meet their needs—hence they participate only to communicate their needs?
 3. Do the traders perceive the paid staff of the project as 'doers' of activities rather as 'facilitators' — hence their non-participation?

Some of these issues and questions are quite fundamental and require deep reflection and serious thinking, and a carefully worked out strategy. We have also analyzed the fish trader project in the context of the general structure of People's Organizations (POs). The current status of traders' associations does not differ much from that of POs. But the traders' associations need substantive

improvement if we are to ensure the long-term sustainability of the project and justify any resource inputs. It was also considered necessary that appropriate strategies be worked out before the insulated fish box programme takes off the ground. If not we will be imposing another package which will further worsen the current situation.

A few suggestions have been put forth to improve the associations, but require careful analysis before any decision. Some of the suggestions made are;

- (1) Lobby the membership to identify dynamic and capable traders who could be elected as office-bearers at their next Annual General Meeting.
- (2) Identify and mobilize a small team selected from the traders (a grassroots group) with well-defined tasks such as (i) increase membership (ii) increase credit disbursement (iii) increase savings etc. and with an incentive payment for a fixed period of time. Their performance should be subjected to rigorous monitoring on a monthly basis.
- (3) Enlarge the present Revolving Fund with funds injected from outside and facilitate relatively bigger loans for traders (without a strict emphasis on savings) which they could use not only for trade-related activities but also for other consumption needs such as repairing houses, building latrines etc. Loans for trade-related activities such as purchase of fish boxes or the purchase of raw fish could also be integrated into the loan package.
- (4) Strengthen and carry out capacity-building training programmes and information dissemination programmes.

We are in the process of assessing the pros and cons of such strategies. We would appreciate a joint discussion with DFID-PHFP and their advice and guidance.

