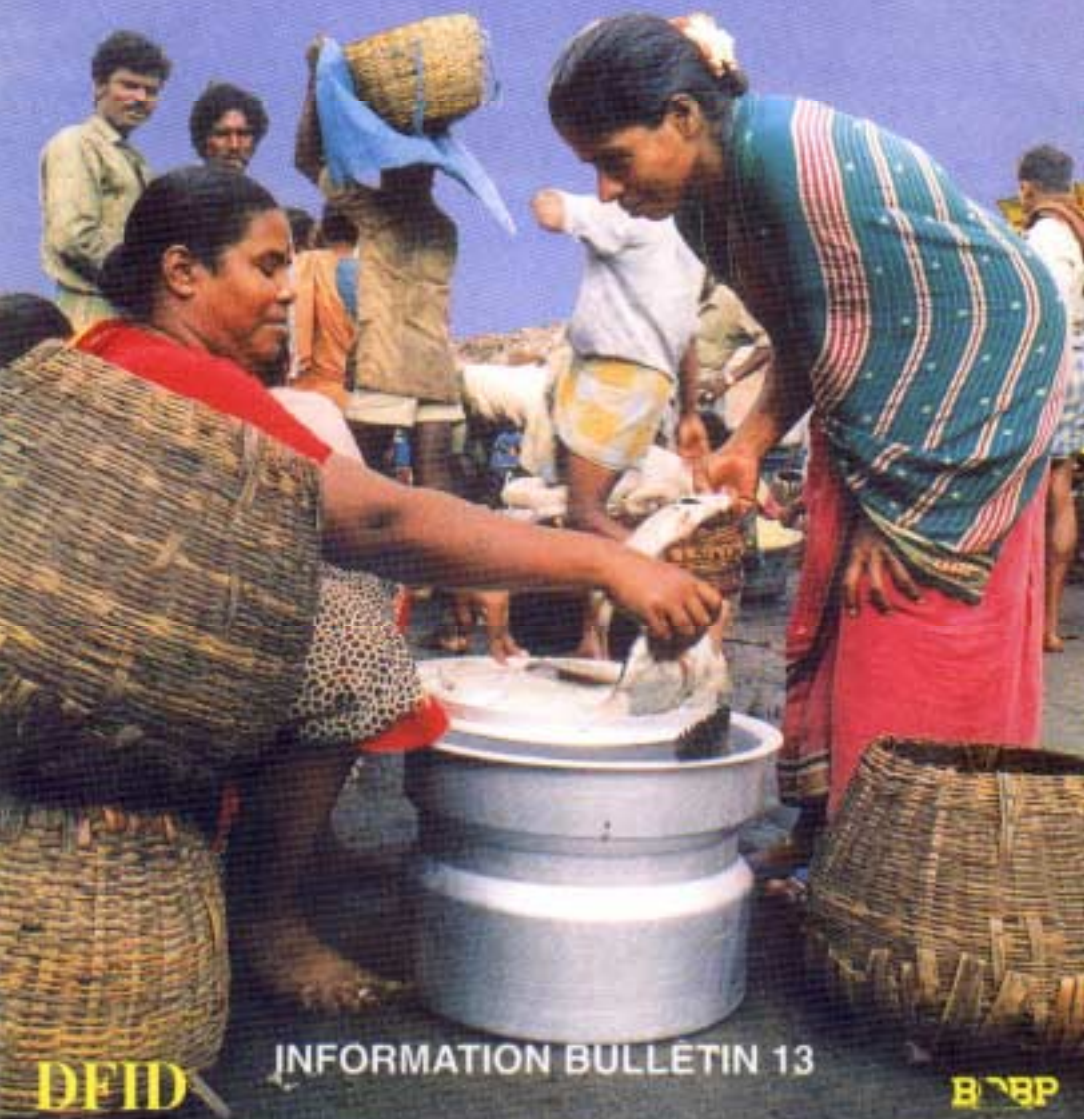


**Small-scale fish marketing
in Tamil Nadu — an alternate
fish container for
women petty fish traders**



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Information Bulletin 13

**Small-Scale Fish Marketing in Tamil Nadu
– An Alternate Fish Container for
Women Petty Fish Traders**

**Post-Harvest Fisheries Project
Department for International Development
Chennai, India**

In recent years, the UK Department for International Development's Bay of Bengal Post-Harvest Fisheries Project (DFID-PHFP) has been helping implement a joint programme of support to itinerant women fish vendors in South India.

The marketing and distribution of low-value fish by women fish vendors carrying headloads is the employment of last resort for a large number of women (at least 10,000 in the project area alone) who operate on very low margins, buying between 20 and 35 kg a day of fish at the beach for resale in local markets which they reach by foot, bus and, increasingly, rickshaw. Despite the modest nature of their tasks and the low status accorded to them by society, the role women play in low-cost fish processing and subsequent distribution to the hinterland is extremely important. The markets supplied by them are often rural areas with strongly traditional demands. More recently, however, peri-urban and urban markets have become more important and have stimulated a diversity of demand.

In common with all small-scale fisherfolk, the women fish vendors get low returns for their labour. This is due to poor fish handling, a lack of processing and preservation facilities, problems in the physical marketing of fish, and the severe nature of market imperfections. These problems are compounded by widespread indebtedness and the fact that the marketing of fish is considered a low-status occupation for both cultural and practical reasons.

The provision of an improved fish marketing container was seen by the project as a practical step which could be taken to assist these women in their daily work, while also helping to improve their status in the community. This report traces the process by which a new container was developed and its impact on the women's marketing practices. During the course of the project, important methodological and socio-economic considerations emerged which are reported in this paper.

The results have been both encouraging and, to some extent, unexpected. Aside from the contribution made to its owner's status by providing her

with a rnarque of the trade and helping to resolve some of the more **obvious** technical problems. the container's availability only through institutional channelshas contributed to making it a coveted item. Thus, it seems to have achieved a status which far surpasses its monetary or novelty value: being divorced from any cultural context, it has become a social marker by virtue of being a symbol of the women's ability to access state funds, particularly because this group had never before henefitted from any state welfare schemes.

This report has been compiled by Ms. Meera Sunderarajan, Officer, Social and Economic Unit. DFID-PHFP. on the basis of project work that was conducted by Ms. Kamila.

The Project is based in Chennai, India, and operates in three countries of the Bay of Bengal region – Bangladesh, India (east coast) and Sri Lanka. The project was started in 1987 by the Overseas Development Administration (U.K.). the predecessor of DFID, and worked with the Bay of Bengal Programme. it is currently in its third phase and is funded by the Government of the United Kingdom.

LIST OF ABBREVIATIONS:

CBO	Commu nity-Based (organi sation
DANIDA	l)aiikh Interna tional Development Agency
DFID-PHFP	Department for International Dev elopment Post-Harvest Fislienes Project
DoF	Department of Fisheries
FWCS	Fislierwomen's Cooperative Society
NA BARE)	National Bank for Agriculture and Rural Dev elopment
NGO	Non-Governmental Organisation
S\VI3	Social Welfare Board

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1. INTRODUCTION

The post-harvest fisheries sector in South India is an extremely complex one, embracing as it does a large network of handlers, auctioneers, processors, petty fish traders, transporters, wholesalers and retailers. Increased commercialisation of the marine fish catch, although benefitting fisherfolk through the higher prices they receive for fish, has tended to displace other income-generating activities derived from the fish resource in traditional fishing communities'. This has affected the women most, as they find themselves less able to afford the purchase of fresh fish at the landing.

A combination of overfishing, rising competition through burgeoning population pressures and increasingly complex market relations have made it more difficult for the women to attain an adequate income. This is exemplified by the increasing levels of poverty much in evidence in certain sections of the coastal fishing communities.

A factor often overlooked is the effect of a changing market on these communities: whereas two decades ago most of the fish was caught using traditional methods and sold locally, today, mechanisation is on the increase and is backed by centralised marketing systems which give the small players only a limited role. Most of the large traders come from outside the communities in question and the market is generally oriented towards export.

Retail fish marketing in many countries is often best achieved through individual, small-scale enterprise. India is no exception; indeed, owing to the lack of an established marketing infrastructure and the demand for cheap fish, women fulfil a niche role as they process and market fish at a very low cost. Processing — principally drying or salting -- is carried out during periods when the fish varieties landed are not favoured by local markets in fresh form or to supply long-established traditional markets or when a particular species is landed in 'glut' quantities which more than meet local demand.

Despite the modest nature of their task, the women's role in low-cost fish processing and subsequent distribution to the hinterland is extremely important. However, the

1 *'Opportunities for fish marketing and handling initiatives that benefit traditional fishing communities in india'*, Ed. by Gordon, A. and Madhu. S.R. Report of a workshop held in Chennai. India. March IX and 19. 1997.

markets accessed by them are largely semi-urban and rural. In the case of dried and processed fish, their clientele is from the lower economic strata. Consequently, the returns from these activities is rather low. The activity is therefore conferred a low status within the fishing community.

This paper documents the efforts made by the Project in designing, developing and introducing an alternate fish container for petty fish traders so as to:

- eliminate the problems connected with traditional fish containers (particularly with regard to travelling on buses) and, thereby, improve access to markets and reduce losses;
- reduce personal discomfort caused by having to wear clothes that smell of fish; and
- └ improve hygiene and sanitation in usage by making the container leak-proof, thereby reducing the contact of the fish with extraneous dust and dirt.

It was envisaged that the longer term benefits of the project might include:

- an increase in women's income by extending their market radius and increasing their awareness of processing and marketing options;
- an increase in the status of fish marketing as a profession through increased recognition by official organisations (the container would provide a convenient marquee to enable this); and
- sensitisation of the state government institutions, Community-Based Organisations (CBOs) and NGOs to the problems of this disenfranchised and marginalised group, thus helping to strengthen their role in addressing the needs of target groups.

An impact study was subsequently carried out in the August - September 1997, to find out whether the long-term benefits of the container had been achieved. The latter portions of the paper deal with the findings of this impact study, the methodology adopted for it, and the lessons learnt from the entire exercise.

2. ROLE AND STATUS OF WOMEN IN FISH MARKETING IN TAMIL NADU

2.1 Background

The Project and the Bay of Bengal Programme were involved from 1989 in implementing a joint programme of support to itinerant women fish vendors in South India.² The marketing and distribution of low-value fish by women fish vendors with headloads is employment of last resort for a large number of women (at least 10,000 in the project area alone) who operate on very low margins, buying between 20 and 35 kg/day of fish at the beach for resale in local markets reached by foot, bus and, increasingly, rickshaw.

In common with all small-scale fisherfolk, these women get low returns for their labour. The main reasons include low investment capacities, problems associated with poor fish handling, lack of adequate preservation and processing facilities and physical problems associated with transporting fish to the markets. Besides, the invisibility of their labour makes it difficult for them to access any kind of governmental support. Most states in India have no laws that cover women fish vendors; neither are there any developmental schemes for them.

As women do not, for cultural reasons, become involved in fishing, their work is not generally assigned a cash value: actually, catching the fish is seen to produce value rather than selling or processing it. However, observation of the social systems of fishing communities during the course of work with them shows that women who are involved in fish marketing play a more dominant economic and domestic role in family affairs as well as in decision-making on the acquisition of fishing gear, such as nets.

It would, however, be incorrect to assume that women petty fish traders form a homogeneous group. They are a heterogeneous mix of individuals coming from different family backgrounds, having different economic and social status and with varying investment capacities. The experiences of the project show that there are broadly speaking, three categories of women petty fish traders:

Category 1: This group consists of women from extremely poor households. They may be either widows or destitute. Many of them are young, in the reproductive age group and have young children. Their investment levels are the lowest and, consequently, the fish sold by them is not of very high value

²The Bay of Bengal Programme is at present concerned with fisheries management.

Their clientele are in inland villages within a radius of 2-5 km from their villages. Most of the women reach these villages by foot or by bus. Even when they take a bus, often they have to walk quite a distance from the bus stops to their destinations.

Category 2: They come from families that are considerably better off compared to the first category. Their investment capacities are, therefore, higher and they are considered more creditworthy by the traders and money-lenders they deal with. These are either middle-aged or old women. Very often, they have female children in the family old enough to take care of the cooking and childcare. They deal mostly in fresh fish, buying fish at shore auctions after the larger traders have departed. They access semi-urban markets located at considerable distances from their villages. They travel to these markets by bus, often in large groups. Sometimes, several of these women would get together and contribute money to hire a private vehicle to reach their markets.

Category 3: This group of women deals exclusively in dried fish. Most of the women are over 60 years old and the processing is usually done by the younger women in their households or by other women employed for the purpose. Fish for processing is procured during 'glut' landings of a particular species and processing is done either close to their homes or on the beach. Unlike the other two categories, women in this group command considerable respect within their family. They have a high level of investment and are in a position to finance purchase of craft and gear for their sons and sons-in-law. These women usually go to weekly or monthly markets in hired private vehicles which carry the processed products. They reach the market sometimes a day in advance and stay in rented accommodation till their products are all disposed of. These women sometimes function as money-lenders too.

These categories it must be noted are not mutually exclusive, there is considerable overlap between them. But whatever be the category that they belong to, they suffer the double burdens of being women in a traditional and highly prescriptive society and of being engaged in a form of employment considered suitable only for older women, widows and destitutes.

2.2 Women's incomes and credit

It has been observed that earning an income seems to be the most important factor in enabling women to influence or control expenditure. But while it may be true that an independent income is a necessary condition to help women participate more fully in decision-making, it is not sufficient to ensure that women may act

independently or have equal access to resources at a family or village, far less a national. level.

The **Attributes Survey** that was a part of this project (see Section 4.3) suggests that other factors. such as ownership of assets, family structure and age, also play a major role in determining a woman's ability to participate in decision-making.

Apart from the question of control over financial resources, the main issues for most fish traders are, to improve their profit margins and to escape from the trap of borrowing money at high rates of interest because of a severe lack of financial liquidity. Although chit funds are widely used in many villages, the credit from this source is not generally used for fish marketing purposes due to the infrequency of fund allocation to each individual. Women's difficulty to access credit on a formal level contributes greatly to their continued economic marginalisation.

Most petty fish traders buy their fish on credit on a daily basis. The credit extended to them is thus extremely limited and the rates of interest are exorbitant: it is not uncommon for fisherwomen to borrow Rs 200 in the morning in order to buy fish and by the afternoon owe Rs 220, that is paying interest at a rate of 10 per cent a day. Clearly, at these rates, it is practical only to buy small quantities of fish daily and this necessarily means that profits are correspondingly low. Discussions with fisherfolk in various project locations reveal that informal sources of credit account for a large chunk of the loans taken. The following are some of the common informal sources of credit:

- Pawn brokers and fish merchants. They are the major source of credit for women involved in petty fish trading. Though loans are usually taken for purposes of trading, consumption needs may also be met through these sources.
- Prawn traders and money-lenders. They usually extend credit only to fishermen. These loans are deducted from the price the traders pay the fishermen for the prawns. Such loans are used for buying boats and gear.
- Friends. They may provide small loans at a lower rate of interest. These funds are used for everyday needs, children's education and in case of illness.
- Relatives. They are a source of credit for expenses connected with marriages and the buying of craft. Such loans may be interest-free or bear a modest rate of interest.

- NGO-facilitated credit groups formed at the village level. These are usually linked to savings and are popular amongst women. Of late, they have been linked to an institutional mechanism through the self-help group scheme of NABARD.

For the average family, borrowing money on credit at high rates of interest through informal credit sources means entering the vicious circle of poverty and debt which is characteristic of fishing villages.

It is a well-documented fact that raising women's income by a certain ratio will have a greater beneficial effect on the family's health and welfare than raising the income of the male head of the family by a corresponding amount. This is because women, particularly when they live just above the subsistence level, tend to spend any extra income they get on nutritional or educational inputs for the family.

However, the control of women over credit is in many cases rather limited. Money borrowed for fish trade is very often used for the purchase of nets and gear. While providing credit at reasonable rates of interest is a basic need for women petty fish traders, what is also essential is to ensure that they are able to exercise some control over the amounts that they borrow.

2.3 The social marginalisation of fisherwomen

Despite socio-economic and structural differences between the villages which participated in this project, the situation of the women involved in marketing fish has certain characteristics which are common to many other settlements along this stretch of coast. A woman's status within the fishing community is more likely to be determined by her husband or male kinfolk's status or role rather than by her position in society or her means of employment. In fact, if a woman is forced to work out of economic necessity, this tends to reflect badly on her male kinfolk as it demonstrates that they are unable to support her.

Fishing is culturally perceived to be the domain of men alone. In the absence of other job opportunities in the village, women wanting some sort of employment are necessarily forced into either fish processing and/or marketing. This brings them into closer contact with agrarian and other inland communities than their menfolk. The prevailing gender relations in such societies govern the interaction between these communities: their women treat women petty fish traders with disapproval.

The problems regarding the status of women in fish marketing appear to be self-perpetuating. There is evidence to suggest that where women have been successful

in marketing fish, they turn to wholesale rather than retail business. This effectively means that the woman's direct interaction with the consumer is reduced. She now begins to operate through networks which afford her control in the market as well as increased economic returns. As a result, her personal standing in the village may increase, and, perhaps, even her ability to influence decisions in the family. But, interestingly, her status in the wider world does not change or improve. with the result that fish trading continues to be seen as only an employment of last resort.

The provision of a hygienic, leak-proof fish container, would, it was hoped, at least allow women access to public transport, although it could not address the factors underlying their social marginalisation.

2.4 The development of women's associations in fishing communities

As in the case with most Indian societies, the low status accorded to women finds reflection in their inadequate representation and poor participation in affairs relating to decision-making within the community . Religious and cultural barriers militate against women actively participating in the community and exacerbate the problems of illiteracy and ill-health which are more frequent among women and girls than among men, on account of differentials in entitlements.

The formation of Fisherwomen's Cooperative Societies (FWCSs) and informal working parties or *sangams* in recent years has given women a forum wherein they could discuss their problems and search for solutions, but the number of women involved in such associations is still extremely small; even in such societies, the representation of the petty fish traders is rather limited. And in societies where they are adequately represented, the leadership of the society is never theirs. It is the wives of the more successful fishermen who occupy leadership positions within the FWCS. These cooperatives are unable to approach the Department of Fisheries directly with their problems. In many cases, the FWCSs do not have access to resources such as training and formal credit systems which are, for the most part, only accessible to fishermen. Political interference with the FWCSs on a party level is also a significant issue which needs to be monitored.

Statistics on the formation of sangams are difficult to come by as these associations are not registered societies but informal groupings established with the help of NGOs. There are five women's NGOs active in Tamil Nadu at present, working, on average, in 15 villages each, so at a rough estimate there would appear to be approximately 75 active sangams in the area. If it is assumed that there is a similar number of fisherwomen as fishermen, it is clear that the majority of women are not yet involved in any kind of association.

This project has to some extent been successful in strengthening these links, as is demonstrated by the Department of Fisheries (DoF) commitment to continuing the distribution of the Project-designed fish container. The container has provided the DoF with a vehicle with which to approach this largely informal sector. In this specific case, interaction between the State Government, the DoF, the Tamil Nadu Social Welfare Board (SWB) and NGOs has been encouraged, so that all these organisations can continue to work catalytically with fisherwomen.



Women fish traders carrying project-designed fish containers.

3. DEVELOPMENT AND DISTRIBUTION OF THE FISH CONTAINER

3.1 Introduction

The implementation of the fish container project can be broadly divided into two phases:

- The design of the fish container with the participation of women's groups; and
- an appraisal of the wider-ranging socio-economic needs of the women within the context of the fish container programme.

3.2 Why a fish container?

During 1988/89, the Project was contacted by Santhidan³ and invited to investigate the problems inherent in the traditional fish basket used by itinerant women fish vendors, or headloaders, who sell in the streets of neighbouring villages and who generally walk to market or take the fish to market by bus.

According to Santhidan members, the traditional basket had several drawbacks:

- Being made of palmyra leaves or bamboo, the baskets were not watertight and had a tendency to leak on the women's heads as they carried them. As a result, both the women and their load looked unpleasant.
- Conductors on the buses, which were used by the women to transport the fish to market, were often reluctant to allow the women on to the buses as the odour was disagreeable to other passengers.
- By the time the women eventually reached the market, many of their potential clients would already have made their purchases and those that remained were put off by the smell and appearance of the fish.

As a result of these factors, the women's low personal status in the community was exacerbated and the volume of their fish sales was minimal.

3.3 The design process

A new fish marketing container was seen as the solution to the problems highlighted above. Accordingly, the Project contracted a company in Mumbai

³ An NGO group based in southern Tamil Nadu

to design a container. The resulting design, however, proved at Rs 400 a unit — too expensive. Subsequently, local manual metal workers in Chennai were commissioned to produce another prototype, this one to resemble the enlarged version of the traditional aluminium pot used for making idlis (rice cakes). It was felt that if the container resembled this widely used cooking utensil it would prove cheaper to manufacture and be more socially acceptable to the women than introducing a completely alien design.

Manufacturers for the new container were sought and bids invited. The Sun Metal Factory Pvt Ltd was chosen and produced 100 containers, of which 70 were of a small size (15 inch diameter) and 30 of a larger size (18 inch diameter). They were made of 18 gauge aluminium and cost Rs 250 each. Although initially expensive to produce (mainly due to the unusual size and the limited number of containers required at this point), the new containers appeared to solve the problems of leakage and lack of hygiene which had plagued the traditional baskets.

For the purposes of testing the concept, the project agreed to subsidise the price by 50 per cent, realising the cost constraint faced by the potential beneficiaries. The containers were thus made available to members of Santhidan's *sangams* for Rs 125 a piece.

Research with Santhidan on the women's response to the new container was carried out by means of a structured questionnaire to which 71 out of the 91 beneficiaries responded. The research revealed that the pots were unacceptable to the women traders, principally because they were unhappy with the idea of being seen carrying around with them what were generally considered to be cooking pots, they felt that they invited ridicule upon themselves and undermined their status as traders. *Idli*-making is considered to be a very low status occupation within the fishing community and the fish marketing women felt demeaned by being associated with this profession. The awkward shape of the new containers also made them difficult to store on the buses.

Another design was then developed which did not suffer from these negative cultural associations and 100 units of this prototype were manufactured: 60 medium size and 40 large size at a cost of Rs 250 and Rs 300 each, respectively. These were distributed by Santhidan again, by DANIDA in Goa and to the FWCSs through the DoF.

Subsequent research, mostly in the form of individual interviews and group discussions with women beneficiaries, demonstrated that this model too had its

shortcomings: it was found to have too thin an upper lid which made it difficult to handle and transport.

From the very beginning it was clear to the project team, however, that no one design of container could possibly satisfy the various whims and desires of the different marketing women; a compromise was inevitable. An early design, for example, was originally manufactured without handles. This made it difficult to lift. Subsequently, handles were requested and added to the design, and a perforated plate was provided to allow fish to drain inside the container. These were both needs expressed by some project participants, but though technically possible, ultimately proved impractical. Adding handles, which were rivetted to the container, reduced the overall strength and, hence, utility of the vessel. The cost of providing the perforated plate (an extra Rs 20 per unit) was felt to outweigh its potential usefulness. Moreover, other participants later suggested the removal of the handles and did not think the plate necessary as the majority of them did not use ice.

A final design, which attempted to address most of the women's comments and observations, was given to the South India Aluminium Company, Chennai. Through the use of a spin moulding process, considerable cost savings were achieved. Two different sizes were produced.



The height and maximum diameter were determined by the normal clearance beneath the seats of public transport buses in Tamil Nadu.

3.4 Sale and promotion of the containers

The main issues that now had to be resolved were to

- minimise the cost of the container,
- provide credit and finance terms attractive to the women, and
- promote the new fish container.

The cost constraint facing the beneficiaries, even after subsidisation, was a very real problem. It was considered important that the price of the basic container should not reach the psychological barrier of Rs 200 a unit.

Subsidised and non-subsidised approaches were used and, as would be expected in this situation, both had their advantages and disadvantages.

3.4.1 With subsidies

When, following demonstrations and discussions with the FWCS, their members proved willing to participate in the project, the Tamil Nadu Social Welfare Board (SWB) was approached with a request to consider a 50 per cent matching grant. The SWB agreed to provide a grant to 50 societies up to a maximum of Rs 5000 per registered society, whereupon 24 FWCS took advantage of the grants.

The financing policy adopted by the SWB, although admirable in many ways (see Section 5.3 on subsidies), tended, in practice, to favour the more vociferous and elite members of the women's groups, because the members of each FWCS selected the prospective beneficiaries from within the group themselves. The requirement to pay the (subsidised) cost of the container immediately also benefitted the better-off FWCS members (see Section 4 for a further discussion).

3.4.2 Without subsidies

As a result of these preliminary findings, alternative means of providing finance for container purchase were sought. Ideas for these were based primarily on the opinions of potential beneficiaries through group and individual interviews and applied mainly to the Santhidan villages which were not included in the state SWB schemes. The fisherwomen in these locations had not been eligible for the 50 per cent subsidy as they were not members of a registered body such as an FWCS — instead, they had been organised into informal sangams.

The women's preference in this case was to apply for credit on a commercial basis (from banks) or pay Santhidan on an instalment basis rather than go through the process of registering their groups. The commercial process was subsequently abandoned due to the financial cost of opening a bank account and paying interest on a loan at commercial rates as well as the opportunity cost for the women of the various trips into the city that such a process would entail. An instalment method was decided upon and the women paid over a period of six to eight months, depending on their financial circumstances.

Santhidan encountered some problems with recovering the money it had advanced. The main causes of this were the women's lack of liquidity, owing to other borrowing commitments to Santhidan, and the cyclical nature of fisheries, which makes any long-term financial commitment problematic.

3.4.3 Promotion using advisory leaflets

As soon as the final container design had been completed, the project produced an extension leaflet to assist in promoting the container among the target groups and grassroots organisations involved. The leaflet has so far been distributed by the project in three main ways:

- Initially, it was extensively and directly used by the project as a training aid during the promotion phase involving the FWCS. It was seen as a convenient way to illustrate the innovations in the container by highlighting some of their perceived advantages as seen by women experienced in their use.
- Leaflets in regional languages and English were also distributed to regional offices of the Fisheries Departments of the four East Coast States as well as to selected NGOs involved in women's activities in fishing communities.
- During the distribution of containers through the State financing schemes, leaflets were slipped inside the containers themselves in order to ensure delivery to the user. An evaluation of the performance of the leaflet as a knowledge dissemination tool is provided in Section 4.2.

3.4.4 Dissemination strategy

In February 1993, the Tamil Nadu DoF agreed to take over the promotion of the container from the Project. Memorandums of Understanding were also finalised with two women's NGOs in Tamil Nadu, who agreed to undertake promotion of the fish container within a broader programme aimed at raising the incomes of fisherwomen. Further efforts were made to identify other target groups and their representative organisations (State-sponsored or NGOs) willing to either



A Tarnil Nadu Minister hands over a fish container to a trader.

place direct orders with the manufacturers or to use in-house credit and State subsidies where available. There was also considerable interest on the part of agents, willing to promote the container on a commercial basis.

The NGOs have, since, been promoting the use of the fish marketing containers by designing small credit schemes, either by way of providing direct revolving funds to groups or by assisting the groups to access institutional group finance (Self Help Group under NABARD). The women's groups are obtaining the containers by making payments in monthly instalments under credit schemes.

The DoF, during 1993-94, delivered 1750 containers to 30 FWCS who received State subsidy from the SSWB. The Project played a catalytic role, liaising with fisherwomen groups and the concerned departments and made arrangements to supply the containers on request. The DoF subsequently undertook to promote the containers by allocating direct funding, in the form of 50 per cent subsidy, for 10,000 containers to be distributed to women's groups from 1994-95.

4. USE PATTERN OF THE FISH CONTAINER

4.1 Introduction

As an ever-increasing number of fish containers were manufactured and distributed satisfactorily to women's groups under the several schemes adopted, the need arose to obtain feedback from the users on their overall reactions after a reasonable period of using the product. Moreover, an earlier assumption of the project had been that simply through adoption of the container many of the stated technical problems such as transport difficulties, would be overcome. The findings of the present study and a subsequent one carried out by the project have revealed a much more complex reaction to the container than had been expected. This led to other studies which focussed on the wider issues, tried to determine the role of the new container within this context, and hoped to learn lessons from the whole process which would be of benefit in the design of future interventions. The studies were:

- **Fish container utility study (4.2)** -A quantitative survey amongst users and non-users of containers in six communities in Tamil Nadu.
- **Attributes survey (4.3)** — A series of semi-qualitative studies of the users' perceptions of the container.

4.2 The fish container utility survey

This comprised a questionnaire-based survey in six villages in Tamil Nadu over two months during the 1992 peak fishing season. Its aims were to:

- assess marketing patterns and practices:
- identify possible problems with transportation in relation to both the traditional fish basket and the new container: and
- characterise the use of the container, assessing potential economic benefits from its use.

The rationale behind the survey was to select at random ten beneficiaries (i.e. an experimental group with containers) and ten *non-beneficiaries* (i.e. a control group without containers) from each of the six villages. An assessment of container use would then be made through a group inter-comparison exercise after a reasonable

period of use and at the peak time of usage. The villages surveyed were Killai and Devanampattinam in South Arcot District, Kilavaipar and Tharavaikulam in VOC District and Kariayur and Yeripurkarai in Thanjavur District.

4.2.1 Survey results

Despite some difficulties in the administration of the questionnaire (see Section 5), the data provided a useful picture of women fish traders' activities over the two-month period. Some of the more salient findings were:

Marketing practices and purchases

The most important species of fish handled by the fisherwomen were seer (Spanish mackerel), silver belly, anchovy, catfish, mullet, ribbonfish, tuna, moustached anchovy, Indian sprats, crab and prawns. Of these, prawns attracted the highest retail price and were of particular importance to the economy of Killai, which benefits from extensive estuarine fishing. On the average, women fish vendors handled prawns on 77 per cent of the days in which they engaged in fish marketing in Killai as compared to an average of 42 per cent of the days for Yeripurkarai and 18 per cent in Devanampattinam.

The petty fish traders usually bought fish from landing sites within their villages, with the exception of Kilavaipar where it was bought more frequently in nearby Mangala or Tuticorin. The fish was purchased at auctions at the landing site, generally on credit, or obtained through the share system if the woman had male relatives who were employed as crew or had their own craft. Rates of interest for credit, which was often supplied by the auctioneer and repaid on the same or next day, were extremely high: from 10 to 36 per cent interest per day. Most women purchased fish to a value of Rs 100-500 on the days when they engaged in trading. In Killai and Kilavaipur, the average price paid for fish by both beneficiaries and non-beneficiaries was between Rs 100 and Rs 300. In Devanampattinam, on the other hand, there appeared to be a striking difference between the purchasing patterns of beneficiaries and non-beneficiaries.

Although it is tempting to believe that this suggested that the new fish marketing container was helping women to move from retail to wholesale business, this may also be explained by the fact that beneficiaries were more likely to be wholesalers (elite group) and engaged in this activity on 36 per cent of the fish marketing days, compared to non-beneficiaries who sold retail 26 per cent of the time. Change from retail to wholesale was, however, not reflected in any of the other locations. Nevertheless, because most wholesalers dealt in prawns, they considered the new container particularly suitable to this purpose owing to its facility for using ice.

Although some women engaged solely in dried fish processing and marketing, many sold dried fish only on days when the supply of fresh fish was too high to be sold in the market. Because of the extreme perishability of fresh fish, and the tendency not to use ice, except perhaps for prawns, drying fish is a necessity if there is a glut on a particular day. There are well-established markets for dried fish in the hinterland, usually held on a weekly basis.

In general, the majority of women sold fish on a retail basis. A relatively small number of women were exclusively fish wholesalers, (i.e. they sell their fish in one 'lot', selling to export agents), but most women decided daily on the basis they wished to market their fish. The determining factors were strictly opportunistic and depended on supply and demand — if supply was low and demand high, it was profitable to sell on a retail basis. If the purchase of fish from the landing site took place early in the morning and transport was immediately available to the marketplace, then the women might have the possibility of selling their fish in bulk by auction and thus save themselves the opportunity cost of sitting in the market for most of the day. The need for liquidity was another important issue in this regard: retail sales were normally paid for at the time of purchase whereas there might be a time lag between wholesale vending and the receipt of payment.

Profitability of fish marketing

In general it would appear that fish trading yielded a positive return, while margins remained very low: a daily profit of less than Rs 25 was the norm, except in the case of Cuddalore District where profits of Rs 25-50 were reported on 77 per cent of the days monitored. Losses were generally due to oversupply of a particular species of fish which caused a glut in the market, the spoiling of fish and the unpopularity of certain species of fish on a given day.

Transport and market access

In the initial stages of the project, transportation issues, such as bus frequency, appeared to be a major problem. The present survey data suggests that this problem was highly location-specific. In 30 per cent of the cases, buses were found to be running frequently enough. Other problems with transport included permission to take fish containers on to the bus, the question of whether the containers could be kept under the seats, and the provision of places exclusively for the containers. Notably, there were very few reports of problems with taking the fish containers on to buses, but neither were there many reports of problems from the non-beneficiaries. Therefore the question of the fish container solving transportation problems remained still unanswered.

Satisfaction in use and economic benefits

In order to achieve a more accurate picture of income-generation from fish marketing, profits were calculated using the women's daily income and expenditure figures. These were then compared to their declared profit/loss. The women's estimates were based on their perception of profits or losses on any given day, rather than on calculations. It was interesting, therefore, to note that their actual profits were greater than those perceived.

It was difficult to elucidate differences between the beneficiary and non-beneficiary groups. As a rule, most of the beneficiaries expressed a high level of satisfaction with their new marketing containers, but non-beneficiaries also seemed content with their traditional fish containers. The latter could be attributable to several factors, including lack of awareness of the advantages of a new container; these would only become clear in use. Undoubtedly, it also reflected the diversity of needs.

However, amongst the beneficiaries, the actual use of the container remained high. Over a period of two months, beneficiaries reported that they used their new container on an average of 70 per cent of the occasions when they were selling fish. The main reason for not using the container on a specific day was lack of capacity. In addition, very few problems were encountered with transporting the container on public transport or with handling it.

4.3 The Attributes survey

The need to determine the significance of socio-economic factors, such as the perception of status as applied to the trade of fish marketing or to the new fish container itself, led to the implementation of an attributes survey intended to complement the findings of the utility survey. This was divided into two differing parts:

- A semi-quantitative **'card' survey** implemented through focussed discussions with individuals and groups and aimed at retrieving important 'snapshot' socio-economic indicators from the target groups already covered in the utility study and which would complement this study; and
- A wholly qualitative **study of the women's perceptions** and feelings about the new fish container, based on participative research.

The perceptions study component focussed on the factors which influenced the women's perceptions of their own status and their opinions about the utility and

social significance of the container. These activities were supported by individual interviews with the women in order to explore the specific problems that they faced. The survey was carried out amongst groups in the six villages where the utility survey had been administered. A total of 113 women were surveyed, of whom 57 each owned a new fish marketing container.

The results of this survey had important consequences for the role of this project in terms of turning attention on the additional pressing needs of this disadvantaged group. These were further explored in the needs assessment workshops (see Section 4.4).

4.3.1 'Card' survey

Differences between beneficiary and non-beneficiary groups

Results showed that the women headloaders who formed a part of the beneficiary group came from slightly more affluent⁴ backgrounds than those in the non-beneficiary group; this was partly reflected in the differing pattern of ownership of assets, i.e. , fishing, housing and consumer durables. Differences between the groups was demonstrated when the differences in possession of consumer durables was examined. About 33 per cent of the target households reported possessing bicycles, as against 45 per cent in the non-beneficiary group, and above 41 per cent of the target households reported possession of transistors as against 36 per cent in the non-beneficiary group.

Headloaders in the beneficiary groups were usually married and had nuclear families. In instances where the women were widows, they usually lived with their children who provided for their subsistence requirements. Only in one instance was the headloader a destitute. Women in the non-beneficiary group came from assorted backgrounds, with the number of widows and destitutes being higher than in the beneficiary group. These factors also had a bearing on the way in which the container is perceived (as discussed in Section 4.3.2).

Savings and loans

Women in both the beneficiary and non-beneficiary groups were reluctant to disclose the extent of their savings: This was primarily due to the popular misconception in fishing villages that the conduct of any survey is aimed at identifying beneficiaries

⁴ The term 'affluent' at this level is relative and would perhaps be better defined in terms of degrees of extreme poverty.

for government loans. In certain villages, such as Killai, Devanampattinam, Kariayur and Yeripurkarai, where the data collectors helped in the writing of such bank documents as remittance slips and cheques. data on individuals' savings were based on the information provided by these enumerators.

Women from the beneficiary groups reported a higher level of loans than those in the non-beneficiary group. Households were much more forthcoming on the extent of loans taken, most of the loans reported had been taken from the informal sector. The amounts reported varied from Rs 100 to Rs 1,15,000, with households in the beneficiary group reporting loans of higher value compared to the non-beneficiary group; possibly a reflection of their greater credit-worthiness.

The formal sector ostensibly provided loans for fish marketing through two programmes: one, the petty trade development department of the Integrated Rural Development Programme, and the other the Small Entrepreneur Development Scheme (now defunct). The women (and indeed anyone in the sector) have yet to benefit from these.

Although most women claimed that they had borrowed money in order to invest in fish marketing, the single largest sum borrowed was for educational purposes: Mrs Thenmozhi took a loan of Rs 1.15 lakh in order to pay for her daughter to go to university so that she would not have to engage in fish marketing and be exposed to abuse from bus conductors and clients, which is a part of everyday life for most women headloaders. Loans taken from the informal sector were usually for trading and for the purchase of clothing during festival seasons. The repayment period for these loans was flexible, and for the most part the interest was paid in kind, although there were considerable variations in the manner of repayment.

Involvement in F WCS

The activities of the FWCS were extremely limited due to the lack of financial inputs. Those in the non-beneficiary group reported a lower level of involvement, which was possibly the result of their lower economic status, and this factor was likely to have played a limiting role in their ability to obtain the container subsidy through the cooperative.

With women in the beneficiary group being squeezed out of their domestic space, the FWCS becomes an arena in which to express themselves and to gain social recognition from individual households in the village society. The acquisition of the fish container was considered by these women a tangible symbol of their participation in the activities of the FWCS.

4.3.2 Study of perceptions related to the fish marketing container

A status symbol

The fish marketing container was perceived favourably by both groups of women, thus confirming earlier indications from the utility survey. From the discussions held with the women, a major consideration appeared to be that the container had acquired a social status in its own right.

Quite apart from the contribution made to its owner's status by providing her with a tool of the trade and thus creating a more professional image, the container's unavailability in the market had contributed to making it a coveted item. Thus, it seemed to have achieved a status which far surpassed its monetary or novelty value; being divorced from any cultural context, it had become a social marker by virtue of being a symbol of the women's ability to access State funds, particularly because this group had never previously benefitted from any State welfare schemes.

The container had also become an indicator of the level of liquidity in a household, since the most commonly stated reason for not buying a container was lack of money. This was important within the village because the women fish traders found it easier to access credit on an informal level when they were considered to have a high level of financial liquidity.

General utility value

Women's perceptions of the container's size, capacity, shape, lid and bottom were investigated.

With respect to size and capacity, opinion varied with species handled. Those head loaders who handled large volumes of low value fish found the size and capacity insufficient, while those who dealt with high value fish and/or prawns found the capacity and size most suitable.

The container was also used as an ice box, especially among the headloaders who dealt with prawns. Mrs Mangalam of Yeripurkarai, Thanjavur, stored prawns overnight in the container, the slowly melting ice keeping the prawns fresh. On the other hand, headloaders who dealt in fish found that the water that collected at the bottom of the container resulted in losses.

The durability of the container was another factor which affected the way in which the container was perceived. As it was made out of low-gauge aluminium it tended to lose shape and got pitted very easily. A number of suggestions were made by the women to improve the quality of the container but any mention of a price increase was rejected out of hand.

The container was viewed by almost all respondents as an ideal gift, but again perception of its form varied with region. In South Arcot, vessels given as gifts are usually made of stainless steel, but Mrs Visai, a headloader from Yeripurkarai, purchased a container from another headloader and gave it to her daughter, indicating a disjunction between stated perceptions and actual practice. In VOC, the container was perceived as an ideal gift in its present form, although there were no reports of it actually being given. The women who believed that the container would not be suitable as a gift were either widows and destitutes who, given the social environment, tend to keep away from 'happy occasions' anyway and had no need to buy presents, or were married women who felt that the container was too closely identified with the degrading job of fish trading to be appreciated as a gift. The alternative uses to which the container could be put, particularly for storing water, also contributed towards its popularity.

Transport

In South Arcot and Thanjavur, women still faced problems on public transport, despite having invested in the new fish container. Whilst the container had eliminated two important problems, those of leaking water and smell, there were still delays in the loading and unloading of containers which led to the women being abused by other passengers. On the other hand, in VOC District, where the transport system catered primarily to the needs of the fishing community, the container was favourably looked upon from the point of view of alleviating transport difficulties.

Indifference

Some women, however, remained unimpressed by both the practical advantages of the container as well as its apparent ability to confer status on those who possess one. For many women it was just not practical to invest Rs 80 in a fish container when the quantities and species of fish that they typically bought varied to the extent that they would need several bamboo baskets of differing capacities. Others felt that the container was difficult to lift or carry and still others were of the view that, as the container was sealed, heat accumulated and the fish spoiled.

Comments from those who were not able, or did not choose, to buy the container ranged from the practical. "It is too small for my needs" and "I don't trade enough fish to make this a worthwhile investment", to the humorous, "I have no social life, so do not yearn for status symbols".

5. THE IMPACT STUDY AND FINDINGS

During the course of work with petty fish traders in the third phase of the project, it was observed that very few of the petty fish traders actually used the fish container that was designed and distributed earlier. Besides the problems that the container sought to address still remaining, it was found that women still had problems accessing public transport and the manner in which others viewed them remained the same. Further, when the project conducted an impact assessment study towards the end of Phase 3, feedback from the women revealed that this intervention did not seem to have met with any success. It was therefore decided that the entire process of design, development and use of the container done earlier needed to be given a closer look.

This study was undertaken during August-September 1997. It was decided to conduct it in the same places as the earlier study so as to obtain an up-to-date picture of a past intervention.

5.1 Objectives of this study

This study took a fresh look at the container along with the communities in question, in order to examine the use pattern of the container and to find out to what extent it had succeeded in altering their lifestyles. It therefore focussed on the following areas:

- The use pattern of the fish container. i.e. whether it was being used for the purpose for which it was originally designed.
- The extent to which the transport problem had been solved after the containers had come into use.
- Improvement in the status of the fish vendor (if any), as perceived by them at the present point in time.
- The reasons behind the purchase of the container (so that the project could understand whether the popularity of the container at that time was due to its use or whether it was due to the subsidy in question).

The study was carried out in the same three districts and six societies as the original one, namely:

Killai and Devanampattinam in South Arcot District.

Tharvaikulam and Kilavaipar in Tuticorin District.

Yeripurkarai and Kariyur Street in Thanjavur District.

As far as possible it was sought to use the same respondents as those in the earlier study.

This study was largely a qualitative one, using group discussions as a methodology for eliciting information from the respondents.

5.2 Findings

The following are the details of the six societies studied:

<i>Name of the society</i>	<i>Number of members</i>	<i>Percentage of petty fish traders among members</i>	<i>Some other details about the society</i>
Devanampattinam - North	168	87 per cent	This society was formed after the original society was divided into North, South and Central Devanamoattinam societies.
Devanampattinam - South	360	48 per cent	This was the original society that was subsequently subdivided.
Killai	450	10 per cent	The society has members from the surrounding hamlets of Murasalody, Mudukuthurai, MGR Thittam, TS Pettai and Chinnavaikal.
Yeripurkarai	163	61 per cent	
Kariyur Street	566	30 per cent	Membership is drawn from the villages of Kanthinagar, Kariyur Street, Therku Theru, Arumugam Kitangi Street, The society runs a fair price shop in the village.
Tharavaikulum	317	30 per cent	The society runs a fair price shop in the village.
Kilavaipar	350	57 per cent	

5.2.1 Use pattern of the container

The use pattern of the container is linked largely to the distance travelled by the petty fish traders and the use of ice. Discussions with the members of the Devanampattinam North society revealed that they bought their fish not from the village but from the fishing harbour in Cuddalore Old Town. Most of them travelled by public buses with their empty containers and after buying the fish hired private vehicles on a shared basis, paying Rs 15-20 each, to get to particular points in the town where they alighted to conduct their door-to-door sales. The improved fish container was found to be too cumbersome by the petty fish traders to carry around empty on the way to the market. The main complaint from the fish traders was the fact that the fish got spoilt very easily in the container when they walked on their door-to-door sales round. The lid accelerated spoilage, they felt. Most of them were used to the *annakoodai*, a light weight aluminium container of conical shape that had been supplied in the early Eighties as a flood relief measure. When compared to the *annakoodai*, the Project designed container was not very useful, they felt. Therefore, most of the women have been using the container for domestic purposes, like storing food grains or water. The lid on the container prevents entry of rodents or other pests.

The women of the Devanampattinam South society sold their fish either at the village itself or hired private vehicles on a shared basis to reach the market in Cuddalore New Town. The women used ice, which, they found, bleached the gills of fish on melting. Therefore, most of the women, like their counterparts in the Devanampathnam North Society, used the improved fish container for storing household articles.

In Killai, the users of the container said that they had bought it initially with the idea of storing fish bought from night landings with the idea of selling it the next morning. However, on icing the fish, they also found that the gills of the fish were bleached by the morning. Therefore, they too had started using the container for domestic purposes alone. Some containers which were damaged were sold by the women at half **the** price or exchanged for another vessel.

At Yeripurkarai and Kariyur Street too the women felt that the container was not of much use for carrying fish. Many of them travelled long distances, and the consequence was that the fish was spoilt by the end of the journey. Besides, they found that the container did not fit easily under the bus seats. They were more in favour of a locally used cylindrical vessel called *kovalai chatti*. However, those who had already procured a container were using it for various other purposes at home.

The members of the Tharavaikulam and Kilavaipar societies were the only ones who found the fish container useful. However, the main use that they were putting it to was to carry fish in from the landing centre to their houses. The women, however, did not use them with the lids. Instead, they used wet cloth to cover the container as the evaporation from the moisture caused cooling. It must be noted here that in case of these two societies, the distance to the markets is not very much; the fish carried in the container, therefore, did not get spoilt en route.

The use pattern of the container is very region-specific. In the South Arcot District the use of the *annakoodai* seems to be very popular, in the Thanjavur District the cylindrical *kovalai* chatti is seen as the ideal container, while it is in the Tuticorin District alone that the project-designed container is used. This raises the question of adaptability of the design to various geographical and cultural settings. It therefore appears that every region has what it considers an ideal design. A standard design therefore does not seem to be a solution to the problem.

5.2.2 Access to public transport

Discussions with the petty fish traders in all the societies revealed that access to public transport was an issue independent of the nature of the fish container. There existed a general bias against these women on account of the nature of their baggage.



Fish traders and containers being transported to the fish market on a tricycle.

Besides, according to the women, anybody entering a bus carrying a large container (which may or may not be leak-proof) invited a lot of unfavourable comments from the co-passengers and hostility from the drivers and conductors. This was mainly because the fish containers and baskets occupied a lot of space inside the bus, leaving very little space for movement of the passengers inside. Therefore, there was a lot of resistance to allowing petty fish traders inside the bus.

The women were of the opinion that they had no special advantage on account of the improved container. The container in most cases did not slide under the bus seats because heights of the seats differed in buses in different districts. The container which was developed in the Kanniyakumari District was designed with the Kanniyakumari buses in mind and therefore could not be used in other district buses. In most of the villages studied, therefore, the problem of access to public transport still remains.

5.2.3 Enhancement of the status of the petty fish trader

Feedback was sought from the women about what they considered to be their status today vis-a-vis what it was prior to introduction of the fish container. The women, however, did not seem to think that there were any linkages here. But they definitely felt that petty fish trading had become more acceptable in the fishing villages. This, they said, was more due to the fact that with fishing resources dwindling rapidly, the men were earning very little from fishing. Consequently, it was now left to the women to bring in additional income through the petty fish trade. Over the last few years, many women from the fishing villages were taking to the petty fish trade as a result of which it was gaining acceptance in the village. However, the manner in which the rest of the society looked at them had not undergone any major changes. Despite the fact that they no longer were drenched in foul smelling liquids coming out of leaky bamboo baskets, they were still not regarded very highly.

5.2.4 The role of the subsidy factor

The subsidy element played a major role in the distribution of the fish container. For most women, this was the main attraction for purchasing a container. It must be noted that many of the women who owned containers were not even involved in petty fish trading. They were housewives who had asked for the container simply because it was subsidised.

When asked if the women would opt for the container if they had to pay its full cost, they said that they would not. The utility of the container when compared to its financial worth was not found favourable by them.

5.2.5 Increased awareness of government organisations as to the needs of petty fish traders

The awareness level of government organisations as to the needs of petty fish traders has not changed dramatically consequent to the introduction of the fish container. It must be noted that all field level functionaries of the government are aware of the kinds of problems faced by petty fish traders, but it is difficult for them to say that these are because of the introduction of the fish container. As officials in charge of Fisherwomen's Cooperative Societies, they have been interacting with several members who are petty fish traders. Therefore many of them are aware of the problems faced by these women.

The representation of petty fish traders in the Fisherwomen's Cooperative Societies is not very much. The membership in most of the FWCSs still continues to be the wives of the most powerful fishermen from the villages. Many of them are in positions of power within the society. The very fact that membership of the FWCS is a prerequisite to entitlement of any kind of government assistance in itself excludes many petty fish traders from the society. Besides, there is also a wastage of resources, as the better-off members of the society are also recipients of subsidies. The government's policies are, therefore, not oriented exclusively to cater to the needs of petty fish traders. They are rather general in nature, intended to benefit all the women in the fishing villages, but unfortunately they are cornered by the better-off women.

5.3 Conclusion

While it is a fact that the fish container has not improved access to public transport or enhanced the status of petty fish trader, what it has done is to introduce the concept of a leak-proof container to women who until then had been using leaky traditional baskets. This has had its effect on personal hygiene levels of the petty fish trader, who no longer appears in clothes dripping with liquid smelling of fish. This has improved her image. However, it would be difficult to say that this has enhanced her social status.

The distribution of the fish container is the only government scheme available for women in fishing communities. But the targeting of the scheme leaves much to be desired. Most of the FWCSs have very few petty fish traders among their members. Therefore, it results in a situation where non-petty fish traders are also benefitting from a subsidy scheme. Besides, there are more pressing problems articulated by petty fish traders which need to be addressed. These are for low-cost credit and better transport linkages.

Regarding the use pattern of the container and its design, there appear to be local variations which have resulted in its relative use and disuse in various places. Though the project had made initial efforts to take **into** account the feedback of the users before designing the container, local variations and preferences have had a strong role to play in this. Therefore, the design has been found acceptable to women in districts other than Kanniyakumari (where it was originally developed) and in Tuticorin (a nearby district). However, the role of the subsidy element has played a vital part in the extension of the container.

5.4 Some lessons learnt

Looking back at the whole exercise that the project had undertaken in 1993, there are several lessons to be learnt. Three of the important lessons to learn are discussed below:

5.4.1 Lesson 1

The user perception study had many loopholes, emerging mainly from a faulty methodological approach to data collection. It had attempted to classify women on the basis of whether or not they possessed a container. This was done in a random manner, which in itself defeated the objectives of a 'control' — 'target' exercise. What therefore happened was that a large number of women from well-off families came into the target group, while the control consisted of relatively poorer women. The conclusions arising out of differing economic statuses were attributed to the container. However, the project has during its five years of existence developed and learnt methodologies which helped it to identify the problems with the earlier approaches. This prevented similar mistakes being made elsewhere.

5.4.2 Lesson 2

The second lesson was in the area of subsidies. In the earlier part of the project phase, there was a strong belief that, unless subsidised, there would be no uptake of technology. Besides, it was also felt that the poor would get marginalised in the process of development if the subsidy element was removed.

Ground realities, however, proved different. While it cannot be disputed that subsidies promoted uptake of the new technology in the form of the container, the adoption was driven by the subsidy element and not by the need. Therefore, women who did not have any felt need also went in for the container which they finally did not use for carrying fish. The subsidy element in itself led to a lot of misleading conclusions with respect to the popularity of the fish container. In most of the FWCSs, the distribution of a fish container was the only governmental assistance that the women received. Most women therefore did not want to be left out of this scheme.

The belief that the poor would get marginalised in the process of development if there were no subsidies also proved to be untrue. In most of the FWCSs, the representation of petty fish traders, for whom this intervention was originally designed, was limited. But the containers were distributed to all the members. It therefore resulted in a situation where well-off housewives from the fishing communities were also being given a fish container at a subsidised rate. The situation today is such that the rich are benefitting out of a scheme meant for the poor.

5.4.3 Lesson 3

The choice of the institutional mechanism for extension of the fish container was not appropriate. Today, after five years of work with NGOs and governmental organisations, it is being felt that what would perhaps have succeeded better was to have used NGOs and NGO networks across the State for extension of the fish container. This would have ensured that targeting of the intervention was right. The subsidy element provided by the State Social Welfare Board could also have been better utilised by the NGO groups. This would also have led to better NGO - GO relationships. Today, none of the NGO groups is able to benefit from the subsidy on account of the fact that the promotion of the container and the subsidy has been routed through the FWCS.

Despite the above mentioned mistakes, the entire exercise has helped the project to understand better the needs of petty fish traders. What began as an effort to address the problem of a leaking traditional fish basket has helped the project to understand the complex nature of needs. This helped the project to structure programmes exclusively for the petty fish traders. It therefore gave the project insights into understanding problems involved in project identification⁵, which helped in designing well-focussed programmes for the women later. Besides, the methodology adopted for gathering data from the grassroots was something that was refined further and used by the project successfully later on.

Credit has been one area that the project has been able to address together with its NGO partners. Technology interventions, like use of onshore ice boxes, have also been tried with groups of women. This body of knowledge has helped bring to light the needs of this largely ignored group of individuals and placed them on the agenda of other development agencies.

⁵ Review of the factors influencing the uptake and impact Of a sample of 21 UK-supported renewable natural resource research projects. Edwards T D and Farrington J. ODI Network Paper 43, December 1993.

APPENDIX :
CASE STUDIES

Fresh Fish Marketing:

Case study of Mayilambal Yeripurkarai, Thanjavur District

Mayilambal is a 45-year-old woman from the village of Yeripurkarai. Her husband Iyappan works as a skilled crew member on a *dhoni* (traditional fishing craft). She has three children, two boys and a girl. Her eldest son, Senthilkumar, is doing his 12th Standard at a school in Thanjavur. Her youngest son, Janakiraman, who is a school dropout, works as an apprentice with his father. Her daughter, Panchsvamam, helps out in the house.

Her day starts at 4.00 a.m. when she gets up to see her husband and son off. She returns to bed for an hour and a half and then sends her son Senthilkumar to fetch breakfast, after which he goes to school and she leaves for the landing site.

She arrives at the bus stop for Pudupattinam at 6.45 a.m., carrying with her a large aluminium vessel. She is not using her new fish container on this particular day as she feels that it is unsuitable for the kind and quantity of fish currently being landed at Pudupattinam. She does, however, use it during the prawn season or when she travels to Pattukottai or Thanjavur to buy fish.

Mayilambal is accompanied by about 20 women from her own and surrounding villages. They miss two buses operated by private operators and await the arrival of the State-owned Cholan Transport Corporation bus, which comes at 7.35 a.m. They each pay Rs 3, which is the price of two tickets; one for themselves and one for their fish containers. When she reaches Pudupattinam, notes are exchanged on the current market situation. Mayilambal heads for the waterfront looking for “her auctioneers”. These are men who are paid Rs 1000 each to provide fish at a concession to Mayilambal. The money is given in advance, usually during the festival and marriage season which falls in January. This money is not repaid but serves as an unwritten contract between Mayilambal and the auctioneers, who will ensure that the lot she buys consists of a favourable mix of fish. Generally these contracts exist only if there are kinship ties between the women and the auctioneers.

Mayilambal spots Ganesan who is auctioning a mix of large and small prawns. She waits as the agents cast their bids. Finally, a lot, which consists of eight large tiger prawns and small white shrimp is sold for Rs 450. Next to come up is a

combination of catfish, pomfret, milkfish, a ray and a few baby shark. The opening bid is Rs 100 and the price goes up to Rs 200 and then Rs 233 when it is sold to Mayilambal and Naya who cast their bid together. News is brought to her that “her auctioneer” Suppaiyan is dealing with prawns and Mayilambal buys a pile of badly iced prawns for Rs 90. She does not use ice as she finds that it puts her customers off: there is a widespread belief that if fish is iced it means that it is not really fresh and, therefore, the price should be lower.

It is now 8.00 a.m. and time for the Cholan bus to arrive on its return journey to Adirampattinam. However Mayilambal discovers that she has missed the bus and so joins a group of 12 women who are hiring a van to take them to Adirampattinam old market. She pays Rs 8 as her share, which is calculated on the basis of the quantity of fish that she has bought. A total of Rs 122 is collected. The women reach the market, which is filled with fish vendors, at 8.45 a.m.

A few of the women with large quantities of fish, hire men to carry their containers into the market. Mayilambal and Naya carry the fish in after paying Rs 3 to the local agent for use of the market place. Though the municipality gets Re 1, the agent charges Rs 3. Mayilambal then proceeds to set up shop: the prawns and small milkfish are laid out in neat piles, the other fish are sorted by size, with the large catfish, **vallam** and sengani being kept to one side to be sold whole. The area in which the market is held is predominantly Muslim and as today is a Friday it is a holiday. Most of her clients are **men**. Trading picks up by 10.00 a.m. and by 10.30 a.m. her stall is a beehive of activity. The entire stock of small milkfish is sold to a hotelier **and** fresh stock, consisting of more milkfish and three baby shark, is bought from one of Mayilambal’s neighbouring vendors. Mayilambal charges a percentage of the total value realised as a service charge. By 11 .00 a.m. she has sold all the milkfish and baby shark, but her own stock of prawns, catfish and pomfret remain. By 12.30 p.m. there is a visible drop in the number of customers and she scales down her prices from Rs 25 to Rs 20 for prawns. She sells all her prawns at that price and then takes a break to talk and chew betelnut.

The cycle traders from Thanjavur begin doing their rounds by 12.30 p.m. and two of them offer to buy Mayilambal’s remaining catfish and pomfret for Rs 50: they eventually settle on Rs 60. She has retained a few pomfret for her own use and now goes to purchase rice, vegetables and oil. She has Rs 430 in her hand, of which Rs 10 will go towards **the** payment of interest for a period of ten days on a loan of Rs 300. She reaches Yeripurkarai at 3.00 p.m. and starts preparing the evening **meal**. Her daughter has washed the clothes and cleaned the vessels and helps Mayilambal with the cooking.

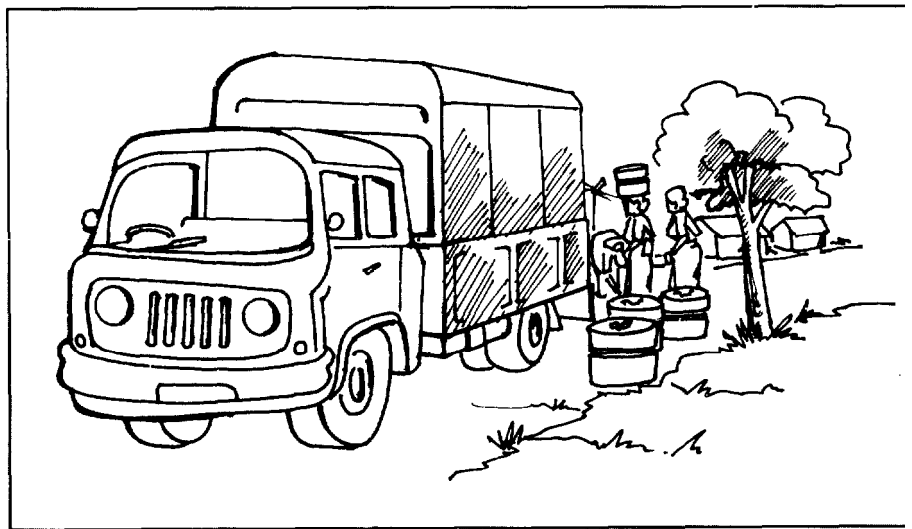
Dried Fish Marketing:

Case study Of Balbeenaamal, Chinnamuttom, Kanniyakumari District

Balbeenaamal is 55-years-old and is the sole income earner for her family. A small contribution is made by her son, who is a crew member on a traditional fishing craft. She is actively involved in dried fish marketing and is considered by her peers to be extremely successful at it. On an average day she will buy Rs 200- 1000 worth of fish at auction in the village and dries her purchase on the beach.

The species she buys most frequently are anchovy and sardines, as she lacks the financial liquidity to invest in high-value fish such as seer (Spanish mackerel). Although she runs the Santhidan thrift society in her village, the funds available from this source are inadequate for her needs, as the society provides a maximum of Rs 200-300 per woman per day. Balbeenaamal borrows funds from a money-lender in the village at 10 per cent daily in order to buy her supplies and repays the money on a daily basis. She occasionally borrows up to Rs 5000 if there is a glut of fish of good quality.

She engages in dried fish marketing six days a week. and travels to weekly markets (*shandies*) throughout Tamil Nadu and Kerala. In general she hires a van with a few other women in order to travel to Kaliakkavilai (60 km from Chinnamuttom), Aralmudu and Marthandam. At these markets she attempts to sell her fish on a



Women fish traders sometimes hire a van to carry fish to the market.

wholesale basis to agents, but failing this, or if she has only a small supply of fish, she sells directly to clients. When she sells on a wholesale basis she reckons to make a profit of approximately Rs 50-80 from a Rs 300 gunny sack of fish, before deducting her expenses. However, fish prices vary enormously, depending on supply and demand: Balbeenamal claims that the price she receives for a 40 kg gunny sack of dried anchovy can be as high as Rs 1000 or as low as Rs 180, and, as a result, her profit/loss margins over a week are difficult to calculate.

Balbeenamal's marketing activities are limited by a lack of liquidity and the need for brine tubs to process fish. When it was suggested that she may benefit from the provision of drying racks so that the fish would dry more quickly, suffer less from insect infestation and be cleaner and, therefore, of a higher quality — which should ensure higher prices for her — she was unenthusiastic. She claims that by drying fish on the sand, which makes it heavier, she obtains a higher price than she would for cleaner fish: she is firmly of the belief that none of the agents she deals with would be prepared to pay a higher price for hygienically prepared fish.