Bay of Bengal Programme

Development of Small-Scale Fisheries

THE ORGANIZATION OF FISH MARKETING IN MADRAS FISHING HARBOUR

BOBP/WP/39



SWEDISH INTERNATIONAL DEVELOPMENT AUTHORITY



FOOD AND AGRICULTURE ORGANISATION OF THE UNITED NATIONS

BAY OF BENGAL PROGRAMME

BOBO/WP/39

Development of Small-Scale Fisheries

THE ORGANIZATION OF FISH MARKETING IN

MADRAS FISHING HARBOUR

by M H Kalavathy

Executing Agency:

Food and Agriculture Organization of the United Nations

Funding Agency:

Swedish International Development Authority

Development of Small-Scale Fisheries in the Bay of Bengal. Madras, India, September 1985. Mailing Address: Post Bag No.1054, Madras 600 018, India. Street Address: 91, St. Marys Road, Abhiramapuram, Madras 600 018, India. Cables: FOODAGRI; Telex: MS-311 FISH. Phones: 71294, 71296, 71587, 77760

BOBP/WP/ 39

CCP/RAS/040/SWE

This paper describes the marketing organization of a large fish landing centre (Madras fishing harbour) and describes in particular the role of women in the marketing business. Previous studies conducted by BOBP dealt with the role of women in marketing of fish at small village landing centres (see BOBP/WP/14 "Three fishing villages in Tamil NaduT' and BOBP/WP/33 -- "Factors that influence the role and status of fisherwomen").

The present study, carried out mid - 1984, indicates that while the modernization of fishing technology and fish transport noticed at a large landing centre has benefited some women by way of higher earnings or new earning opportunities, it has aggravated income disparities among fisherwomen.

The paper, and the study on which it is based, are activities of the smallscale fisheries project of the Bay of Bengal Programme. The project is funded by SIDA (Swedish International Development Authority) and executed by FAO (Food and Agriculture Organization of the United Nations). It covers five countries bordering the Bay of Bengal – Bangladesh, India, Malaysia, Sri Lanka and Thailand. It is a multi-disciplinary project, active in craft and gear, aquaculture, extension, information and development support. The projects main goals are to develop, demonstrate and promote appropriate technologies and methodologies to improve the conditions of small-scale fisherfolk and boost supplies of fish from the small-scale sector in the BOBPs member countries.

This document is a working paper and has not been cleared by the FAO or by the government concerned.

CONTENTS

1.	Organization of marketing at Madras Fish Harbour	1	
2.	The role of women in marketing at Madras Fish Harbour	3	
2.1	Women auctioneers	3	
2.2	Retailers	4	
Women and	fish marketing (pictures)	5	
2.3	Trash fish wholesalers	8	
2.4	Export marketing	8	
2.5	Fish wholesaling	9	
3.	Conclusions	10	
Publications of the Bay of Bengal Programme 11			

*** ***

ORGANIZATION OF MARKETING AT MADRAS FISHING HARBOUR

1. There are about 500 mechanized boats operating from the Madras fishing harbour. Except for 30 to 40 gilinetters, all are trawlers. Besides mechanized boats, traditional craft and nets are operated from the harbour by traditional fishermen. The local auctioning area attracts several such traditional craft. As ther are no jetties a few boats, some mechanized, come close to the auctioning place. The peak auctioning hours, when most of the boats land, are between 6.30 a.m. and 8.30 a.m. and again between 2.30 p.m. and 5.30 p.m. A few boats, however, do arrive in between.

Except for a few vessels belonging to CMFRI, Fishery Survey of India, and TNFDC, all boats are privately owned. How many vessels are owned by non-fishermen is not clear, but the bulk of the mechanized boats are owned by fishermen.

At the auctioning place, there are 50 or more sheds for processing exportable species, for packing, and for icing the fish. Nearly 100 more sheds are scattered around the harbour. People engaged in these activities live near the harbour, the main exception being some women fish traders.

Before the fishing harbour was built, a traditional fishing village, Kasimedu, was the centre of activities in the area. Kasimedu's village council still exerts authority over the auctioning place. Members collect Re.0.25 per basket of fish bought here. The council has appointed six assistants to help in the collection. It indirectly ensures that there are no feuds.

Every boat has an auctioneer to dispose of the catch. One woman may auction for two or three boats. All the catch, except the large fish and exportable species, is auctioned. At times large fish may also be sold this way. Usually, boat owners take an advance from wholesale agents to supply large species for export. Boats belonging to the government and big companies call for tenders yearly, half yearly, monthly and weekly to dispose of their catch. The bids for these tenders are mostly awarded to regular traders who supply wholesale to markets and restaurants.

On a boat's return trip, the crew members separate the fish species according to their value. To certain extent, the type of species determines the marketing channel through which it passes. Marketing channels can be described according to the following criteria:

Species: The major marine species of commercial importance are big prawn, lobsters, quality fish like seer and pomfret, small fish like sardines, mackerels, cuttle fish, mussels, and trash fish (all the smaller varieties).

Market outlets: Retail and wholesale city markets, suburban markets, other town and city markets in Tamil Nadu, other Indian town and city markets and foreign markets.

Parties and persons involved in marketing: Auctioneers with contract, auctioneers without contract, prawn dealers -- middlemen, agents, tenderers, wholesalers, ice shop owners and vendors.

Means of transport: Headload, bicycles, tricycle carriers, vans, buses, trucks, trains and ship.

The following marketing channels were identified, taking the species landed at Madras fishing harbour as starting point.

Species	Type of processing	Market outlet	Means of transport	Purchasers/ intermediaries
Big prawns and lobsters	Deheading, cleaning, icing.	Export to U.S., Japan, etc.	Train, truck.	Prawn dealers, middlemen, processors, agents.
Quality fish seer, pomfret etc.	Icing	Retail & wholesale markets in the city; Hotels.	Vans, tricycles, bicycles, trucks, buses.	Auctioners, dealers, tenderers, retailers.
Small fish mackerel, sardines, etc.	Icing, drying.	Retail & wholesale fresh/ dry fish markets in Tamil Nadu & outside.	Headload, vans, bicycles, tricycles, trucks & buses.	Auctioners, retailers, wholesalers, vendors, parcelling agents.
Trash fish/ crabs	Icing drying	Wholesalers in Tamil Nadu and outside	Headload, trucks, trains.	
Cuttle fish, mussel, other shell fish.	No icing	Retail, wholesale markets in Kerala.	Trucks, headload	Auctioners, dealers

Marketing channels are also determined by financial ties.

ORGANIZATION OF MARKETING AT MADRAS FISHING HARBOUR

1. There are about 500 mechanized boats operating from the Madras fishing harbour. Except for 30 to 40 gillnetters, all are trawlers. Besides mechanized boats, traditional craft and nets are operated from the harbour by traditional fishermen. The local auctioning area attracts several such traditional craft. As ther are no jetties a few boats, some mechanized, come close to the auctioning place. The peak auctioning hours, when most of the boats land, are between 6.30 a.m. and 8.30 a.m. and again between 2.30 p.m. and 5.30 p.m. A few boats, however, do arrive in between.

Except for a few vessels belonging to CMFRI, Fishery Survey of India, and TNFDC, all boats are privately owned. How many vessels are owned by non-fishermen is not clear, but the bulk of the mechanized boats are owned by fishermen.

At the auctioning place, there are 50 or more sheds for processing exportable species, for packing, and for icing the fish. Nearly 100 more sheds are scattered around the harbour. People engaged in these activities live near the harbour, the main exception being some women fish traders,

Before the fishing harbour was built, a traditional fishing village, Kasimedu, was the centre of activities in the area. Kasimedu's village council still exerts authority over the auctioning place. Members collect Re.0.25 per basket of fish bought here. The council has appointed six assistants to help in the collection. It indirectly ensures that there are no feuds.

Every boat has an auctioneer to dispose of the catch. One woman may auction for two or three boats. All the catch, except the large fish and exportable species, is auctioned. At times large fish may also be sold this way. Usually, boat owners take an advance from wholesale agents to supply large species for export. Boats belonging to the government and big companies call for tenders yearly, half yearly, monthly and weekly to dispose of their catch. The bids for these tenders are mostly awarded to regular traders who supply wholesale to markets and restaurants.

On a boat's return trip, the crew members separate the fish species according to their value. To certain extent, the type of species determines the marketing channel through which it passes. Marketing channels can be described according to the following criteria:

Species: The major marine species of commercial importance are big prawn, lobsters, quality fish like seer and pomfret, small fish like sardines, mackerels, cuttle fish, mussels, and trash fish (all the smaller varieties).

After ordering for a boat and paying an advance, boat owners usually apply for loans from different dealers. A prawn dealer may be approached for a loan in return for the supply of prawn. He gives advances ranging from Rs.5,000 to Rs.20,000. A wholesale supplier to hotels may give a loan of Rs.5,000 to Rs.10,000 in return for the sale of valuable fish like small seer fish or pomfret. Then a boat owner approaches or is approached by fisherwomen who give loans from Rs.5,000 to Rs.20,000 in return for auctioning rights. However, there are also boat owners who do not borrow and sell directly to an agent.

2. THE ROLE OF WOMEN IN MARKETING AT MADRAS FISHING IIARBOUR

2.1 Women auctioneers:

The majority of the auctioning women give loans to boat owners to obtain the auctioning rights for boat catches. Only a few — less than 20 per cent — auction on a fixed wage basis or act as auctioneers of the catch from their own boats. Fish auctioning is a highly profitable business and rarely generates loss. An auctioning woman takes a share of the fish from every basket she auctions — from the owner as well as from the purchaser. So she is sure of an income evey time a catch comes in. A few hundred auction women are seen in action during the peak hours of landing at the fishing harbour.

These women are not directly involved in marketing; they keep their distance from the women fish traders and stress their identity as auctioneers. They are usually well-dressed, wait for their boats to arrive, auction the fish which crew members get as their share of the catch. This sometimes works out to 3 to 5 baskets of trash fish a boat. The auction women usually lend the crew members money to ensure supply of their fish for auctioning. They also give long-term loans to women who regularly buy fish from them. In this case the auctioneer takes a larger share from the basket after the fish is bought.

There is another set of auctioneers who quickly spot a good collection of fish, bid for it and auction it at the next peak hour. They also bid when boats arrive in between peak hours, ice the fish and auction it again during peak hours. These women do not want to engage in marketing.Some are not as well off as the first auctioneers, yet make enough profit to meet their expenses and are satisfied,

Case study of an auction woman:

Janaki is 45 years old. Her husband is a driver at the Ashok Leyland factory. Her mother used to market fish at Pallakadai market behind the Custom House. She was running her family with her husband's income and some financial help from her only sister, a well-to-do fisherwoman. When the latter bought a boat 12 years ago she decided to help Janaki by giving her the auctioning rights. Janaki gets a share ('Alandu meen') from each basket from the owner before auctioning and from the purchaser after auctioning. She says 30 to 36 merchants bid at her auction when the boat returns after a two-day trip. If it returns after a day the merchants usually number 20 to 25.

Seven years ago Janaki financed a fishing boat with Rs.18,000 in order to obtain the auctioning rights. Her sister advanced the money. Janaki auctions mainly for these two boats, but now and then is also called on to auction fish from other boats when no one else is available.

Even though Janaki manages the home budget, her husband charts out major expenditure plans with herO He arranged for the purchase of their one-storey house, though it was Janaki who got the loan for it through chits and through her sisters assistance, Janaki deals with the rent, etc., but consults her husband if any problem crops up. Her children are at school or college--she wants them to become graduates and get jobs. She has told her husband that by next year they should buy a small boat of their own or in partnership with her sister, but her husband is not interested. Janaki has no problem dealing with retailers, merchants and crewmen--she is quite popular.

Janaki is a fairly typical auction woman. Her finances are secure, thanks to her husbands job and her sisters assistance. She says she is not capable of marketing fish -- she can't survive all the quarrels that it entails. Further, her husband will not allow her to go marketing. Her elder sister used to market fish once, she hasn't done it for the past 20 years.

2.2 Retailers:

Apart from conducting auctions, fisherwomen are mostly retailers. There are wholesalers too, but only at a low level of investment. The retailers live in nearby areas and depend on marketing the catch brought in by mechanized boats. There are also women who come from Madras city's traditional fishing hamlets. Usually they buy fish from traditional craft but sometimes they come to the harbour to get more.

retailing fisherwoman from Madras fish harbour:

Muthamma is 60. Her husband used to operate his own nets. Then he started to work with mechanized boats, but two years ago switched to kattumarams.

In the days before mechanized boats were introduced, Muthammas mother used to buy fish from Kasimedu, She carried fish to the markets at Kalmandapam near Royapuram, Kondithoppu, Puttalam, Choolai, etc., all in different parts of Madras and in the suburbs. She would ride hand-drawn rickshaws with other women. When Muthamma was eight, she accompanied her mother to markets now and then, and learnt the tricks of the trade from her.

When her mother-in-law fell sick, Muthamma took over marketing of the family's produce along with the wives of other crew members and all shared the money. At Kasimedu, when auction was introduced, every net owners wife or mother auctioned the fish, In case the net owner had borrowed money, the person who lent the money -- mostly a housewife -- would auction the catch. The auctioners also sold the fish in nearby areas.

Through a stroke of misfortune, Muthamma lost her nets and raft, and she had to buy fish at auctions and dispose it of. She would leave her child with the neighbours and go marketing, investing less than Rs.50. In earlier days she went marketing in a rickshaw and the rickshawman took her to new markets. Now she goes by bus: the busmen do not take any tips but charge for the basket alone. She has to ice her fish because qualitywise the fish caught by mechanized craft is inferior to those caught by traditional craft. On mechanized trawlers the fish is often damaged, since it is dumped on the deck or kept too long in the open or improperly stored. Such fish spoil faster. On the other hand, the fish caught by traditional craft are in better condition. Since Muthamma procures fish only from mechanized boats, she cannot afford to take it to distant places because of fear of spoilage.

She and two more women of her area do business jointly. They invest Rs.5 to Rs.100 each to get good varieties, after which they sort out the species and divide them and share the investment. This way it is profitable. Moreover market and travel expenses are reduced to less than Rs.5.

From the time her mother-in-law died, lluthamma has been managing her home budget. Her husband is addicted to drink and borrows heavily, and she is burdened with his debts. But her son works hard as a keeper of a government fish stall. He gives her his salary of Rs.250 and takes Rs.50 for his expenses. With her income she cannot invest more and expand her business. She received a loan for marketing but used a good part of it to pay back debts. She feels that though she has better facilities now than before, the rise in the cost of living coupled with her husband's drinking make saving almost impossible. She joined a chit fund recently but withdrew her share in four months, She needed the money to buy medici.nes for her husband. Now she has to repay the balance of the chit amount.

2.3 Trash fish wholesalers:

Besides being auctioneers and retailers, women also function as trash fish merchants at the Madras fish harbour.

Case study of a trash fish merchant:

Nagamma is aged 50. She is a wholesale merchant buying trash fish, drying it and selling it at different markets. She is known as <u>Kasaar vyabari</u> -- trash fish vendor. Trash fish usually sells at around Rs.1.50 a kg. She buys from 10 to 200 kg. a day. A widow helps her in drying the fish.

Nagamma and nine other women and three men usually book a truck, each contributing 2 to 7 bags of dry fish. Others may bring dry trash fish or other dry fish. They go to villages or towns where a sandai* is on. The sandais held in Tindivanam on Sundays, in Thirukazhukundram on Tuesdays and at Nagari on Fridays are noteworthy; several merchants from different parts of Tamil Nadu come here.

* 'Sandai - village shandy



Top right: Auctioning offish. Top left and above: Petty traders carry fish from Royapuram landing centre to their market place.



Above and below: Fish traders, male and female, wait for boats to land. Below right: One of the few women wholesalers at Royapuram.



Nagamma says that he turnover is Rs.50 to 100 more than her investment. This money is rotated without the investment being increased.

Nagammas husband works in a timber shop and keeps his earnings to himself, and Nagamma provides him food. Earlier he was a labourer for a traditional fisherman, but had to give up fishing because of poor eyesight. Nagamma has no complaint about his not contributing to the household expenditure as her children are all married and settled. She feels what she earns is enough and can even support her children; in fact, she actually helps her daughter's family. Her sons are independent, but borrow from her now and then for household expenses.

2.4 Export marketing:

Men dominate the export sector. The companies which process exportable items like prawn, crabs and squids appoint agents who are given a 5 to 10% commission on the value of the amount they supply. Some get a salary plus incentives. The agents are given loans to conduct their business and they make a marginal profit. The agents have a number of assistants, to whom they give loans to procure prawns.

There are also independent prawn dealers whose investment is higher. They employ salaried staff, mostly their kin, These persons have to be on the look out for prawns which come in for auctioning. The assistants of a prawn dealer bid for auctioned prawns and get them shelled by poor women and children who are paid Rs.0.10 - 0.15 per kg. for their labour.

The dealers also get prawns from boat owners to whom they have lent money. A few women dealers too are active at the fishing harbour. One of them operates on a large scale, getting prawns through her assistants from coastal villages in south Tamil Nadu. Since she is politically active, she gets prawns from a number of small suppliers. Being a fish wholesale dealer, she manages her investments successfully. Many resent her tactics for obtaining supplies of prawns or fish.

Other women prawn dealers come from different fishing hamlets; they collect a few kilograms of prawns for supply to other dealers. Their profit is not large but enough for them to meet their daily expenses and save a little. If they earn a little extra, they lend roney to net owners to ensure continuous supply. But they cannot expand as they are unable to face the stiff competition.

Another category of women buys squids, crabs or mussels. They prefer to act as intermediaries because they face less hardship and competition than retailers do.

Those who deal with exportable items like crude shark liver oil and shark fins buy sharks at the auctions. They gut the shark to remove the liver and **prepare** the oil in sheds with simple equipment. The fins are cut, separated by variety, dried and packed. Even though Muslims abstain from eating sharks, a few Muslim traders deal with exportable shark products. Packing also is done at the sheds. Dealers in Kerala receive the packages, assess quality, process the fins further and export the lot.

2.5 Fish wholesaling:

Wholesale fish trade is carried out at two levels. Large amounts of fish are auctioned, accumulated, iced and supplied to local markets and restaurants. Or, the fish is bought in large quantities to be iced, packed and exported to other towns within Tamil Nadu or other states like Kerala, Karnataka and Andhra Pradesh. Five or six merchants supply fish in large quantities within the city. They are the large-scale investors. They take up tenders called for by government and non-government agencies and first supply the large species to restaurants. The rest of the fish is iced and sent to Saidapet, Chinthadripet and Zambazar wholesale markets in the city. Here baskets of fish are auctioned. Other wholesalers, operating on a smaller scale, buy the fish here and sell them wholesale at smaller markets to which they supply and where they monopolize the trade. Except for two, these wholesalers are all fishermen by caste. The difference in caste influences the competition. Their assistants also belong to the same caste.

A few women wholesalers supply fish to small restaurants, small markets and distant areas, operating at a low level of investment. They are fairly elderly women, and are able to withstand competition from men dealers.

Those who export to other states or to other towns within Tamil Nadu send parcels by train or truck. Usually after the package reaches its destination they receive a cable quoting the price and receive the payment in a week. If the payment is delayed, it has to be collected personally. For transport of fish to neighbouring states, the wholesalers work through agents who charge a few rupees a basket for packing and booking. There are four to six packing agents operating from Egmore, Central and Beach railway stations in Madras city.

Next come the dry fish merchants. This trade is probably fully controlled by Muslim merchants hailing from Kerala and Andhra Pradesh. They operate with assistants who procure fish, process it and get it packed. They also personally take the fish by truck to various areas for wholesaling. These assistants may be Muslims -- or Hindus, Christians, Malayalis, Nadars. The assistants cannot operate on a large scale without help from the big merchants. One or two did try but suffered heavy losses. This again is due to the monopoly exercised by big merchants. Moolakothalam in North Madras is the city's dry fish godown where several merchants dry fish and store them while waiting for orders.

Trash fish is also bought by many small wholesale merchants for supply as fertilizer. For a long time, a Muslim merchant at the harbour controlled supply to Kerala. But there are merchants operating from Karnataka and Tamil Nadu districts. The trash fish dealers are themselves wholesale merchants; they buy at an auction, appoint one or two women to dry the fish in areas around the harbour and pack them. Twenty-eight wholesale merchants operate the trash fish trade.

One interesting feature of the dealers is their socio-political background. Identification with a political party, friendship with the police and few assistants to prevent or even create disturbances - these are a must for any dealer, especially for the non-fishermen who dominate this area.

3. CONCLUSIONS

There are several types of fish marketing women in a large landing centre like the Madras fish harbour. Some of them have benefited from recent trends and developments like mechanization of fishing and motorization of transport.

Auction women: Auctioning is a profitable business, and a few hundred, who operate during peak landing hours, are perhaps the highest earners among fisherwomen. Incomes and profits are higher here than at small landing centres because of the volume of business.

Fish retailers: Most varieties caught by trawlers -- apart from shrimp -are inferior in quality to that captured by traditional craft, because of dumping on deck and improper storage in the trawlers. As a result, women fish retailers cannot take this fish to distant places for fear of spoilage. However, some fish retailers have joined hands and pooled resources to buy only the good varieties of fish and make a tidy profit.

Trash fish merchants: The 400-odd trawlers at the Madras fishing harbour catch large quantities of trash fish, and this enables some women to make a living as trash fish vendors. This would not be possible at small landing centres.

Export marketing: While men dominate the export sector, a few enterprising women have been able to enter the market and tap its opportunities. Their scale of operation varies; one woman who is politically active operates on a large scale, getting prawns from several small suppliers in coastal villages. Some others function as sub-dealers - they collect a few kilograms for supply to regular dealers; some other women buy and sell squids, crabs and mussels.

Fish wholesalers: A few women wholesalers supply fish to small restaurants, small markets and distant areas, operating at a low level of investment. They are fairly elderly women and are able to withstand competition from men dealers.

Thus mechanization has benefited some categories of fish marketing women operating at Madras harbour by way of higher incomes or new earning opportunities. It has also perhaps aggravated income disparities among fisherwomen. How? In a small landing centre, the marketing of fish is fairly decentralized and a high percentage of women take to fish marketing. In a large landing centre, marketing is more centralized, offering fewer employment opportunities but higher profits for those women who have managed to stay in the business. Publications of the Bay of Bengal Programme

The BOBP brings out six types of publications:

deports (BOBP/REP.....) escribe and analyze completed activities such as seminars, annual meetings of BOBP's Advisory Committee, and projects in member-countries for which BOBP inputs have ended.

Working Papers (BOBP/WP.....) are progress reports that discuss the findings of ongoing BOBP work.

Miscellaneous Papers (BOBP/MIS....) concern work not originated by BOBP staff or consultants -- but which is relevant to the Programme's objectives.

Newsletters (Bay of Bengal News), issued quarterly, contain illustrated articles and features in non-technical style on BOBP work and related subjects.

Information Documents (BOBP/INF/....) are bibliographies and descriptive documents on the fisheries of member-countries in the region.

Manuals and Guides (BOBP/MAG/....) are instructional documents for specific audiences.

A list of publications follows:

Reports BOBP/REP/....)

- Report of the First Meeting of the Advisory Committee. Colombo, Sri Lanka, 28-29 October, 1976. (Published as Appendix I of IOFC/DEV/78/44.1, FAO, Rome, 1978)
- Report of the Second Meeting of the Advisory Committee. Madras, India, 29-30 June 1977. (Published as Appendix 2 of IOFC/DV/78/44.1, FAO, Rome, 1978)
- Report of the Third Meeting of the Advisory Committee. Chittagong, Bangladesh, 1-10 November 1978. Colombo, Sri Lanka, 1978. (Reissued Madras, India, September 1980)
- Role of Women in Small-Scale Fisheries of the Bay of Bengal. Madras, India, October 1980.
- 5. Report of the Workshop on Social Feasibility in Small-Scale Fisheries Development. Madras, India, 3-8 September 1979. Madras, India, April 1980.
- Report of the Workshop on Extension Service Requirements in Small-Scale Fisheries. Colombo, Sri Lanka, 8-12 October 1979. Madras, India, June 1980.
- Report of the Fourth Meeting of the Advisory Committee. Phuket, Thailand, 27-30 November 1979. Madras, India, February 1980.
- Pre-Feasibility Study of a Floating Fish Receiving and Distribution Unit for Dubla Char, Bangladesh. G. Eddie, M.T. Nathan. Madras, India, April 1980.

- Report of the Training Course for Fish Marketing Personnel of Tamil Nadu. Madras, India, 3-14 December 1979. Madras, India, September 1980.
- 10.1 Report of the Consultation on Stock Assessment for Small-Scale Fisheries in the Bay of Bengal. Chittagong, Bangladesh, 16-21 June 1980. Volume 1: Proceedings. Madras, India, September 1980.
- 10.2 Report of the Consultation on Stock Assessment for Small-Scale Fisheries in the Bay of Bengal. Chittagong, Bangladesh, 16-21 June 1980. Volume 2: Papers. Madras, India, October 1980.
- Report of the Fifth Meeting of the Advisory Committee. Penang, Malaysia,
 4-7 November 1980. Madras, India, January 1981.
- Report of the Training Course for Fish Marketing Personnel of Andhra Pradesh. Hyderabad, India, 11-26 November 1980. Madras, India, September 1981.
- Report of the Sixth Meeting of the Advisory Committee. Colombo, Sri Lanka, 1-5 December 1981. Madras, India, February 1982.
- Report of the First Phase of the "Aquaculture Demonstration for Small-Scale Fisheries Development Project" in Phang NgaProvince, Thailand. Madras, India, March 1982.
- Report of the Consultation-cum-Workshop on Development of Activities for Improvement of Coastal Fishing Families. Dacca, Bangladesh, October 27-November 6, 1981. Madras, India, May 1982.
- Report of the Seventh Meeting of the Advisory Committee. New Delhi, India, January 17-21, 1983. Madras, India, March 1983.
- 17. Report of Investigations to Improve the Kattumaram of Indias East Coast. Madras, India, July 1984.
- 18. Motorization of Country Craft, Bangladesh. Madras, India, July 1984.
- Report of the Eighth Meeting of the Advisory Committee. Dhaka, Bangladesh, january 16-19, 1984. Madras, India, May 1984.
- Coastal Aquaculture Project for Shrimp and Finish in Ban Merbok, Kedah, Malaysia. Madras, India, December 1984.
- Income-Earning Activities for Women from Fishing Communities in Sri Lanka. Edeltraud Drewes. Madras, India, September 1985.
- Report of the Ninth Meeting of the Advisory Committee. Bangkok, Thailand, February 25-26, 1985. Madras, India, May 1985.

Working Papers (BOBP/WP/

- Investment Reduction and Increase in Service Life of Kattumaram Logs. R.Balan. Madras, India, February 1980.
- 2. Inventory of Kattumarams and their Fishing Gear in Andhra Pradesh and Tamil Nadu. T.R. Menon. Madras, India, October 1980.
- 3. Improvement of Large-Mesh Driftnets for Small-Scale Fisheries in Sri Lanka. C. Pajot. Madras, India, June 1980.
- Inboard Motorisation of Small G.R.P. Boats in SriLanka. Madras, India, September 1980.

)

- 5. Improvement of large-Mesh Driftnets for Small-Scale Fisheries in Bangladesh. G.Pajot. Madras, India, September 1980.
- Fishing Trials with Bottom-Set Longlines in Sri Lanka. G.Pajot, K.T. Weerasooriya. Madras, India, September 1980.
- 7. Technical Trials of Beachcraft Prototypes in India. O.Gulbrandsen, G.P.Gowing, R.Ravikumar. Madras, India, October 1980.
- 8. Current Knowledge of Fisheries Resources in the Shelf Area of the Bay of Bengal. B.T. Antony Raja. Madras, India, September, 1980.
- 9. Boatbuilding Materials for Small-Scale Fisheries in India. Madras, India, October 1980.
- Fishing Trials with High-Opening Bottom Trawls in Tamil Nadu, India. C.Pajot, John Crockett. Madras, India, October 1980.
- 11. The Possibilities for Technical Cooperation between Developing Countries (TCDC) in Fisheries. E.H. Nichols. Madras, India, August 1981.
- Trials in Bangladesh of Large-Mesh Driftnets of Light Construction. G.Pajot, T.K.Das. Madras, India, October 1981.
- Trials of Two-Boat Bottom Trawling in Bangladesh. C.Pajot, J. Crockett. Madras, India, October 1981.
- Three Fishing Villages in Tamil Nadu. Edeltraud Drewes. Madras, India, February 1982.
- 15. Pilot Survey of Driftnet Fisheries in Bangladesh. M. Bergstrom. Madras, India, May 1982.
- Further Trials with Bottom Longlines in Sri Lanka. Madras, India, July 1982.
- 17. Exploration of the Possibilities of Coastal Aquaculture Development in Andhra Pradesh. Soleh Samsi, Sihar Siregar and Martono of the Directorate General of Fisheries, Jakarta, Indonesia. Madras, India, August 1982.

- 36. Marine Fishery Resources of the Bay of Bengal. K.Sivasubramaniam. (In preparation)
- 37. A Review of the Biology and Fisheries of Hilsa ilisha in the Upper Bay of Bengal. B.T.Antony Raja (In preparation).
- 38. Credit for Fisherfolk. R.S.Anbarasan and Ossie Fernandez. (In preparation)
- 39. The Organization of Fish Marketing in Madras Fishing Harbour. M.H.Kalavathy. Madras, India, September 1985.
- 40. Promotion of Bottom Set Longlining in Sri Lanka. K.T.Weerasooriya, S S C Pieris, M.Fonseka. Madras, India, August 1985.

Miscellaneous Papers (BOBP/MIS/....)

1. Fishermen's Cooperatives in Kerala: A Critique. John Kurien. Madras, India, October 1980.

)

Manuals and Guides (BOBP/MAC/

- Towards Shared Learning. Non-formal Adult Education for Marine Fisherfolk. Trainers' Manual. Madras, India, June 1985.
- 2. Towards Shared Learning. Non-formal Adult Education for Marine Fisherfolk. Animators' Guide. Madras, India, June 1985.

Newsletters (Bay of Bengal News)

19 quarterly issues from January 1981 to September 1985.

Information Documents (BOBP/INF/)

- 1. Women and Rural Development in the Bay of Bengal Region: Information Sources. Madras, India, February 1982.
- 2. Fish Aggregation Devices: Information Sources. Madras, India, February 1982.
- Marine Small-Scale Fisheries of India: A General Description. Madras, India, March 1983.

- 4. Marine Small-Scale Fisheries of Andhra Pradesh: A General Description. Madras, India, June 1983.
- 5. Marine Small-Scale Fisheries of Tamil Nadu: A General Description. Madras, India, December 1983.
- Marine Small-Scale Fisheries of Sri Lanka: A General Description. Madras, India, December 1983.
- Marine Small-Scale Fisheries of Orissa: A General Description. Madras, India, December 1984.
- Marine Small-Scale Fisheries of Bangladesh: A General Description. Madras, India, September 1985.

Published by the Bay of Bengal Programme, FAO, 91, St. Mary's Road, Madras 600 018. Printed by Instant Printers, Madras 600 017.