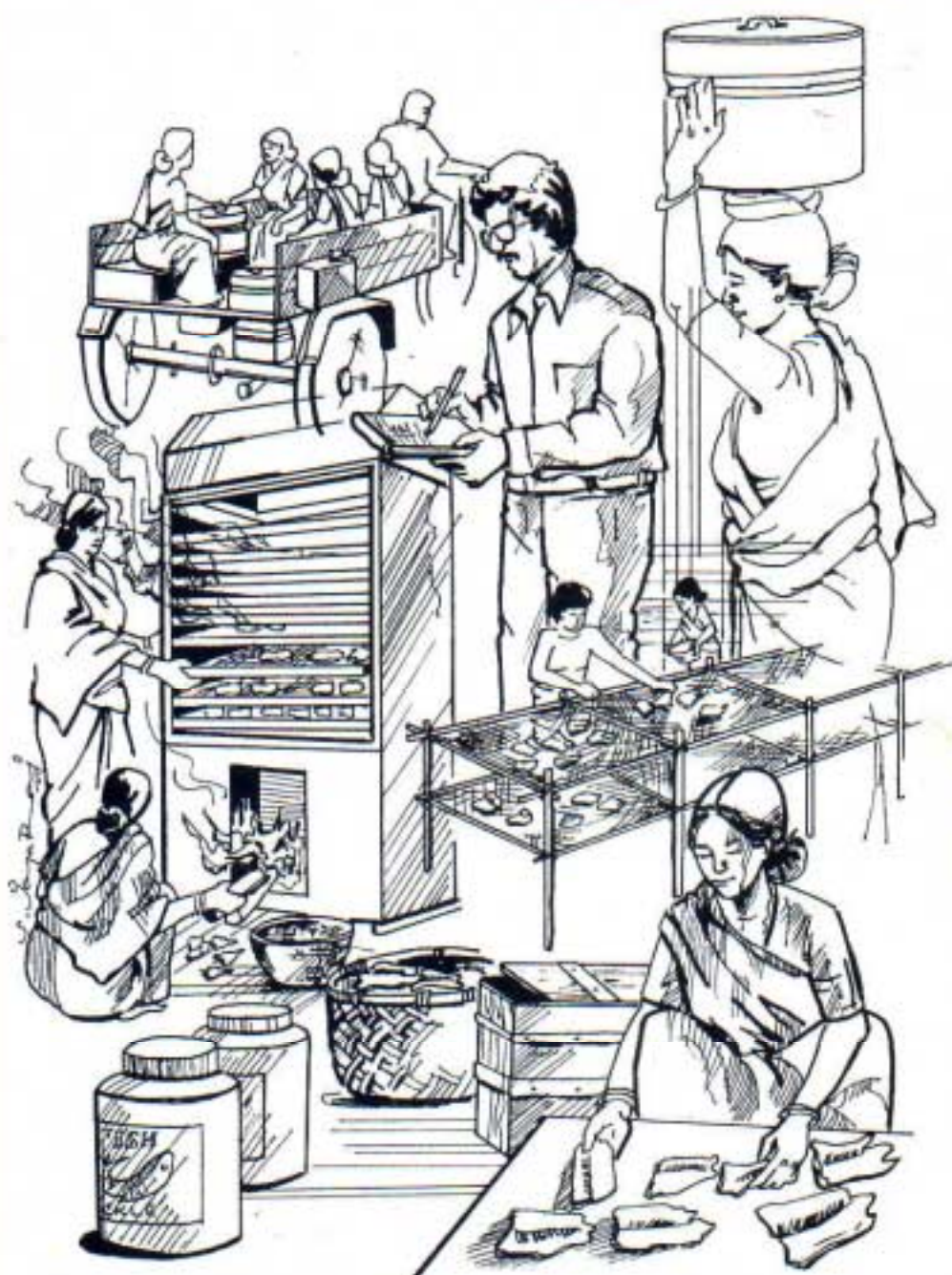


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OVERSEAS DEVELOPMENT ADMINISTRATION
POST-HARVEST FISHERIES PROJECT

A STUDY OF MARKETING PRACTICES
AND CHANNELS FOR TRADITIONALLY
PROCESSED FISH PRODUCTS

ANDHRA PRADESH AND ORISSA



INFORMATION BULLETIN - 7

Information Bulletin 7

**A Study of Marketing
Practices and Channels for
Traditionally Processed
Fish Products in
Andhra Pradesh and Orissa**

*Carried out by
Catalyst Management Consultants
Bangalore, India*

**Post-Harvest Fisheries Project
Overseas Development
Administration**

Madras, India

This information bulletin, produced by the UK Overseas Development Administration's Bay of Bengal Post-Harvest Fisheries Project (ODA-PHFP), is based on a study undertaken by Catalyst Management Services (CMS), Bangalore, India.

The Study is an outcome of a 2-day workshop held by the ODA-PHFP in Madras in 1995 which enabled agencies engaged in post-harvest fisheries to interact and share their experiences in the marketing of fish and fish products. One point that emerged from the workshop was the need for information on marketing and marketing systems. The project consequently commissioned CMS to conduct such a study.

The bulletin assesses the market for traditionally processed fish products in Andhra Pradesh and Orissa by identifying the marketing channels for these products from the landing sites to the end-user. The bulletin highlights the market dynamics and the marketing strategies that are being followed and gives some indication of the volumes of fish that are being traded.

The ODA-PHFP works with small-scale artisanal fishing communities in reducing post-harvest losses of fish; develops low-cost improvements in handling, processing and marketing fish; and provides technical support, advice and training to government and non-government organizations, fisherfolk associations and women's groups.

The ODA-PHFP is funded by the Government of the United Kingdom. It is based in Madras, India, and covers three countries within the Bay of Bengal region - India, Bangladesh and Sri Lanka. The project started in 1987 and is presently in its third phase.

This information bulletin has not been cleared by the Governments concerned or by the ODA.

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EXECUTIVE SUMMARY

1. INTRODUCTION

The Post-Harvest Fisheries Project (PHFP), funded by the Overseas Development Administration, United Kingdom (ODA), functions under the umbrella of the Bay of Bengal Programme (BOBP). Socio-economic betterment of small fishing communities in the region, through development of technology and better methods of handling, processing and marketing their produce, is the main thrust of the project.

Available information on the trade (in fish) is extremely nebulous. There is very little on varieties and quantities of fish landed at the numerous fishing villages that dot the coastline. There is even less on channels followed by the produce onward to consumers, who are often located some hundreds of kilometres away in the hinterland or elsewhere along the coast. Accurate information on market practices, economics, and dynamics, is vital for any decisions to be made by PHFP. There is some limited information available on traditional processes for preserving fish, like drying, salting and smoking. A large proportion of fish harvested from the sea is processed by these methods.

A number of NGOs in the area are said to be interested in marketing processed fish, but are constrained by the lack of authentic information, apart from their lack of expertise in marketing. PHFP is as yet undecided on the course of its future strategy, given the paucity of information.

A study of the market for traditionally processed fish in Andhra Pradesh and Orissa was therefore commissioned by PHFP, to enable them to better advise, train, and support NGOs engaged in improving the quality of life of fisherfolk in the region.

Catalyst Management Consultants of Bangalore (India) carried out the study. The study report is largely descriptive, given the nature of the assignment. Here is a summary of the report's findings.

2. OBJECTIVE OF THE STUDY

To explore and explain:

Marketing channels

Market dynamics

Marketing strategies currently followed and volumes traded

Entry barriers to new traders

in respect of traditionally processed marine fish in coastal districts of Andhra Pradesh (AP) and Orissa.

3. METHODOLOGY

The coastline of AP & Orissa is about 1500 km long. A certain number of landing centres were selected for study, to obtain in the first instance, information on production and processing systems. The channel followed by the produce thereafter was then traced from landing centres to centres of consumption. Simultaneously, information on market practices, and barriers to new entrants was collected through interviews with a cross-section of persons. Consumer surveys fell outside the scope of the present study, the focus being on production, processing and trading.

4. NATURE OF INFORMATION COLLECTED

The study has yielded a large volume of data, too large to summaries here. That includes:

Information on craft, gear, fishing practices, varieties of catch, seasonality, first sale ashore, quality norms, processing techniques, storage, packing, transport, barriers to new entrants, economics and credit arrangements.

Channels of marketing: The flow of fish from landing centres to a consumption centre, with details of varieties, margins for traders, buying and selling practices, value addition and further processing, storage, preservation, and transportation.

Processed fish markets: Types of such markets, numbers of traders operating in each, market timings, important varieties traded, prices, storage, packing, and transport.

All this information has been compiled in the main body of this report in the form of flowcharts, maps, indexed directories, and field impressions. The report is essentially a description of practices and processes as they exist.

5. SOME IMPORTANT RESULTS AND OBSERVATIONS

The main wholesale markets for processed fish in AP and Orissa are:

Andhra Pradesh	Salt dried	Nakkapalli
	Wet salted	Kakinada
	Dried	Davaleshwaram Tadepalligudam Renigunta
	Smoked fish	Amalapuram Ambajipeta
Orissa	Wet salted	Humma
	Salt dried	Rajshunakalla
	Dried	Bhadrak
		Remuna

The processes generally used for preservation are:

Salt drying for	Ribbon fish, Cluepid, Mackerel, Sardine, Croaker; and other economically valuable varieties when they are spoiling
Drying for	Anchovy, Bombay Duck
Wet salting for	Ribbon fish, Cluepid, Sardine, Mackerel, Croaker.

It is generally assumed by traders that fish which is dried is old if not actually spoilt. Economically valuable varieties like pomfret, seer, and the like, go for processing only when they cannot be sold in the fresh or iced condition. Cheaper varieties like small pelagics are the ones usually preferred for preservative processes.

Fresh fish is the form most preferred by consumers, and it constitutes about 70% of sales of all types of fish to end consumers. Salt-form dried and dried fish are consumed mainly by tribals in the hinterland of AP and North Orissa. These markets accept lower quality products, and provide profitable outlets for produce that cannot be sold elsewhere. Smoked fish is consumed in the Godavari area of AP; and wet salted fish in South Orissa (tribal markets) where it is a substitute for fresh fish.

Margins retained by the trade: Landing centres to nearby markets (within 100 km) - 10-35%, Landing centres to distant consumption centres (more than 100 km) - 30-60%. Quality is not of major importance to the trade. Better quality products do not necessarily command a premium. However, as the product nears the consumer, quality assumes greater importance. Any intervention in marketing to increase returns to fisher-folk must take into account credit, flexibility of operations available to traders in the present system, logistics, economics of transportation, storage, packing and preservation. The margins are thin, the product highly perishable, and the risks high. The trade is highly unorganised; there are no standard weights and measures, no regulation of transactions, and the market is full of unethical practices.

There is very little predictability of landings on the coastline in terms of variety and quantity from year to year and season to season. Available information is unreliable and scanty. Likewise, there is no reliable information on quantities handled in the channels.

Packaging of fish is restricted to the wholesale and retail levels; the end consumers do not get packed fish. However, in certain urban markets, processed products are sold in plastic packs.

Local transportation around landing centres is generally on bicycles. Buses are frequently used for longer distances, but traders rarely pay full fares, managing to get by with small bribes to conductors. Lorries and railway trains are used for larger quantities and longer distances.

Storage of processed fish in appreciable quantities along the trade channel is rare. Near tribal consumption centres like Bhadrak, Jeypore and Raygada (all in Orissa) however, dried and dry salted fish are stored in godowns (with capacities around 20 tons) for up to six months to obtain higher margins.

Credit is usually in the form of advances to fishermen for economically valuable varieties like seer and pomfret. The credit is used mainly for purchase and maintenance of fishing gear and craft. Such advances are usually for a year, and the credit period can be extended. There is no interest; the creditor has the right to purchase the entire catch of specified varieties immediately on landing. The creditor also often manages to depress the price at which he buys the catch, to add to his margins.

Existing credit and marketing systems are not viewed negatively by fisher-folk, who regard the arrangements as a convenient division of labour, with each participant getting his (or her) due. Intervenors who question this assumption could face hostility. Traders are secretive about information, which has to be obtained indirectly.

Barriers to entry of intervenors would mainly take the following forms:

- a. Withholding of information or distortion of facts
- b. Propaganda aimed at generating suspicion about the motives of intervenors.
- c. Fears of fisher-folk about the intention and ability of intervenors to deal with opposition of existing stake holders in the marketing channel
- d. Boycotts and similar sanctions against intervenors
- e. General inertia of the existing system to change, including traditional linkages based on patronage, communal solidarity and trans-economic linkages
- f. Awareness of previous failures experienced by intervenors

6. HOW THE INFORMATION IN THIS REPORT COULD BE USED

Information gathered is presented in this report as organised data, which could be put to a number of uses. Some of them are described below:

To establish, say, the economic viability of a particular process for preservation of a certain variety of fish, given the costs, time, transportation facilities, market practices, and margins available.

To determine the nature of credit which an intervenor could offer, which would be acceptable and beneficial to fisher-folk.

To identify markets, marketing information and expertise that would be useful to fisherfolk in a given area.

To identify the most profitable processes for preservation, to determine routes for transportation, and the end consumer who should be targeted, for the products of a particular landing centre.

To evolve broad intervention strategies for PHFP and its family of collaborating NGOs.

To identify areas for intervention through government and regulatory agencies, for example; prevention of restrictive and unfair trade practices in the trade.

The foregoing is obviously only an indicative list, by no means exhaustive

7. STRATEGIC INTERVENTION OPTIONS AVAILABLE TO PHFP

The aim of PHFP in commissioning this study was to obtain greater clarity on possibilities with regard to intervention.

In the main, PHFP may consider the following options:

Broadly speaking, there exist two models or two approaches to intervention. The first is 'direct' intervention. Such intervention is easy to start, but difficult to sustain and make a success of, mainly because it is often a transplantation of external ideas and approaches into local soil; apart from other issues.

The second may be called 'facilitative' intervention for our purposes. Simply put, it seeks to create and promote THE CONDITIONS required for emergence of organic institutions from within the soil; it makes either no attempt at direct intervention, or at least postpones such intervention till the time is appropriate. Facilitative intervention may take the form of education, training, dissemination of relevant information, promotion of growth of grass-roots organisations (which may involve setting up of self-help groups or affinity groups); identification of and fostering potential leadership material, technical and management consultancy. and development of general infrastructure of various kinds.

Should PHFP consider direct intervention, however, we suggest that the co-operative or society models be avoided. and replaced by another model which is available under existing Indian law. Section 25 of the Companies Act, 1956, envisages 'private limited companies' for charitable purposes, in which the directors do not draw any remuneration or have a share in the profits; they merely act as trustees.

The role of the private sector as a possible co-intervenor is one that has great potential, but which has largely been ignored by intervenors in the past.

8. SUGGESTED FOLLOW-UP TO THE PRESENT STUDY

In case PHFP decides on intervention, the authors of the study suggest:

A detailed market study of consumer preferences, prices realizable, and perceptions of end consumers with regard to quality: to include urban and other centres of consumption identified in this study.

A study of the information needs of fisherfolk, which could enable them to realise the best prices for their catch.

A study of different models for delivery of credit to fisherfolk, at fair rates, with a minimum risk of default on loans

Strategies to facilitate growth of structures and institutions at the grassroots level. to absorb and reduce market risks. particularly with regard to preservation and transportation.

9. LIMITATIONS OF THE STUDY:

The geographical area to be surveyed was extremely large, over 1500 km of coastline. Time being a constraint, only a limited survey was possible, covering a few landing centres in each of the five study areas. The total period available for field study was 50 days, including time for travel, within which the information contained in this report has been gathered. The information obtained can therefore be regarded as valid only for the specific areas covered; and indicative for adjacent regions. Further information needs to be obtained separately for landing centres and channels not covered in the present survey, if a higher degree of reliability is required.

The information presented here is valid only for a limited period of time: and will require revalidation and (updating).

1. INTRODUCTION

1.1 The Bay of Bengal Post-Harvest Fisheries Project & PHFP

The Bay of Bengal Programme (BOBP) is a regional fisheries programme with FAO as leading agency. It covers seven littoral states of the Bay of Bengal: India, Bangladesh, Indonesia, Malaysia, Sri Lanka, Maldives and Thailand. The Post-Harvest Fisheries Project (PHFP), funded by the Overseas Development Administration, United Kingdom (ODA), functions under the umbrella of the BOBP. The BOBP's main thrust is socio-economic betterment of small-scale fishing communities of the region. PHFP aims at increasing the incomes of artisanal fisher-folk and petty fish traders through reduction in post-harvest losses.

1.2 PHFP and its activities

Improvements in handling, processing and marketing of fish in the Bay of Bengal region is the aim of the PHFP. The operational objectives are:

- a. To reduce post-harvest losses
- b. To enhance fish utilisation
- c. To increase the value added to fish and fishery products.

To this end, PHFP has developed and demonstrated the following technologies for fishing, processing and handling harvest in coastal regions of the Bay of Bengal:

- a. Insulated ice boxes - Permanent shore-based models & aboard craft
- b. Aluminium containers for fish transport
- c. Drying racks

1.3 The present study

PHFP seeks to advise, train, fund and generally support measures aimed at improving the quality of life of fisher-folk. A number of alternatives suggest themselves in terms of intervention strategies. PHFP may, for instance, intervene in marketing, or in processing, preservation, harvesting, credit, finance, organisational development, or in a number of other ways. The available information, however, on existing production and marketing practices, the channels followed by produce, the economics, trade practices, risks preferences, credit arrangements and so on, is extremely scanty. In the absence of sufficient reliable background information, it would be imprudent to embark upon any intervention, however tentative. PHFP therefore decided to commission a study of these aspects by external professionals. Catalyst Management Consultants of Bangalore were engaged for this purpose.

This study aims to describe practices and processes as they exist, at a particular time of the year, in a particular year, in the areas of Andhra Pradesh and Orissa.

2. OBJECTIVES OF THE STUDY

To explore and explain:

Marketing channels;

Market dynamics;

Marketing strategies currently followed and volumes traded;

Entry barriers to new traders;

in respect of traditionally processed marine fish, in coastal districts of Andhra Pradesh (AP) and Orissa.

3. METHODOLOGY

3.1 The study was divided into four stages:

Stage I : Orientation

- (a) Discussions with PHFP
- (b) Visits to the field: fishing villages and markets
- (c) Consultations/discussions with NGOs involved
- (d) Collection of secondary data/information
- (e) Development of a research plan

Stage II: Survey of Landing Centres to understand production and processing systems

- (a) Harvesting, preservation and storage systems and technology
- (b) Economics, particularly credit and returns
- (c) Seasonal and other trends in production

Stage III: Identification of Marketing Channels

A survey of the area to identify channels followed by traditionally processed fish from the production stage to end user. This would identify/analyze

- (a) Markets involved
- (b) Methods of operation and dynamics
- (c) Identification of value added to the product en route
- (d) Economics, including distribution of margins, sources of credit/finance and other practices.

The area to be covered by the study was defined as the existing market for traditionally processed marine fish in the coastal districts of Andhra Pradesh and Orissa:

Andhra Pradesh Nellore, Prakasam, Guntur, Krishna, East Godavari,
West Godavari, Vishakhapatnam, Vijayanagaram and Srikakulam

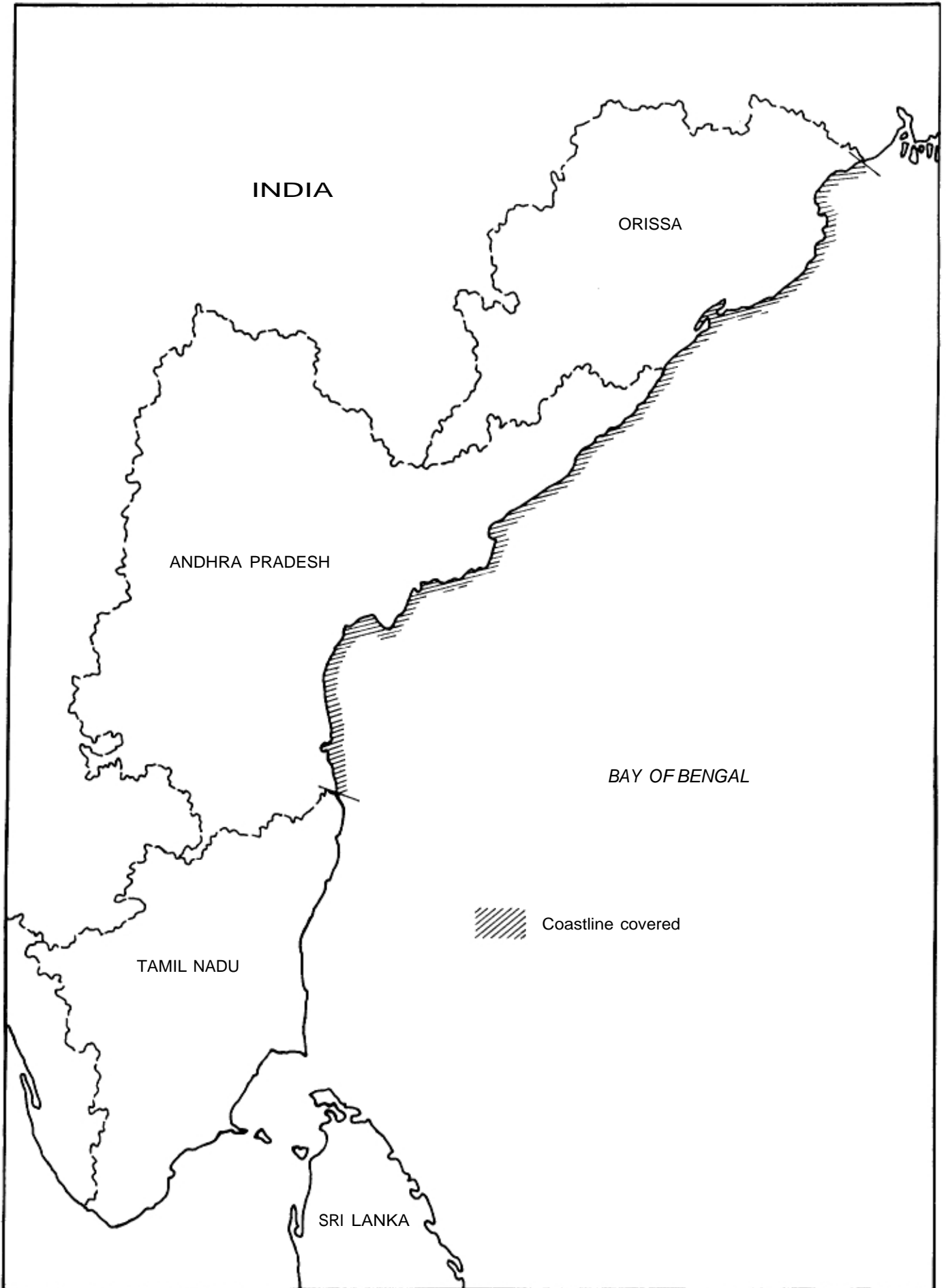
Orissa Ganjam, Puri, Cuttack and Balasore

3.2 Classification of study areas for the survey:

The coastline to be surveyed was about 1500 km long. It was necessary to restrict the survey to a few select areas and points to select landing centres, markets, and routes for the study, the coastline was divided into five study areas, based on the following factors:

- Fishing systems
- Craft used
- Gear used
- Depth of fishing
- Landing pattern
- Continental shelf area
- Market conditions
- Proximity and accessibility of local and other markets to landing centres

Map 1 Area covered under the study in Andhra Pradesh and Orissa



This division into study areas took place after a preliminary survey of randomly selected fishing villages on the coastline, discussions with a cross section of interviewees, and a study of secondary data. For a better understanding of the coastline covered, refer Map 1. The study areas thus defined were:

Study Area I : Whitekuppam to Chinna Ganjam

Study Area II : Chinna Ganjam to Uppada

Study Area III : Uppada to Gopalpur-on-sea

Study Area IV : Gopalpur-on-sea to Paradeep

Study Area V : Paradeep to Chandipur

Two landing centres per study area were selected at approximately uniform distances, keeping in view accessibility of fisher-folk through NGOs or Government agencies. Landing centres and markets studied in each of the study areas are listed in **Annexure A**. For geographic demarcation of study areas, refer Map 2.

Marketing channels were tracked from landing centre towards local wholesale and retail markets, and onwards to markets further afield, for each type of processed fish. Processors and traders were interviewed through these channels to obtain the information required.

3.3 Data collection

Given the nature of production systems in use-unmechanised fishing craft, the traditional processing techniques that poorer fisher-folk employ, and the amorphous, unorganised nature of the marketing/distribution network that usually exists in rural areas-it was decided that standard market survey techniques alone might not suffice. A number of group interviews using the Participative Rural Appraisal (PRA) family of techniques were conducted. PRA has the advantage of enabling the interviewer to cross-check the spot information offered, and to facilitate generation of relevant collateral information which may not emerge in a structured interview.

Surveys conducted at landing centres (for fishermen and processors) employed the Rapid Rural Appraisal technique. A copy of the checklist used for the survey is at **Annexure B**.

For processors, traders and agents at landing centres and markets, individual interviews were conducted. The questionnaire used is at **Annexure B**.

Observational research also formed an important part of the study; to obtain information on market dynamics and certain other aspects that do not lend themselves easily to formal techniques.

The survey was conducted during January-March 1995, by a team of well-trained field investigators. It was led by the Manager (Research) of Catalyst Management Consultants (CMC). The team consisted of field surveyors directly controlled and supervised by CMC.

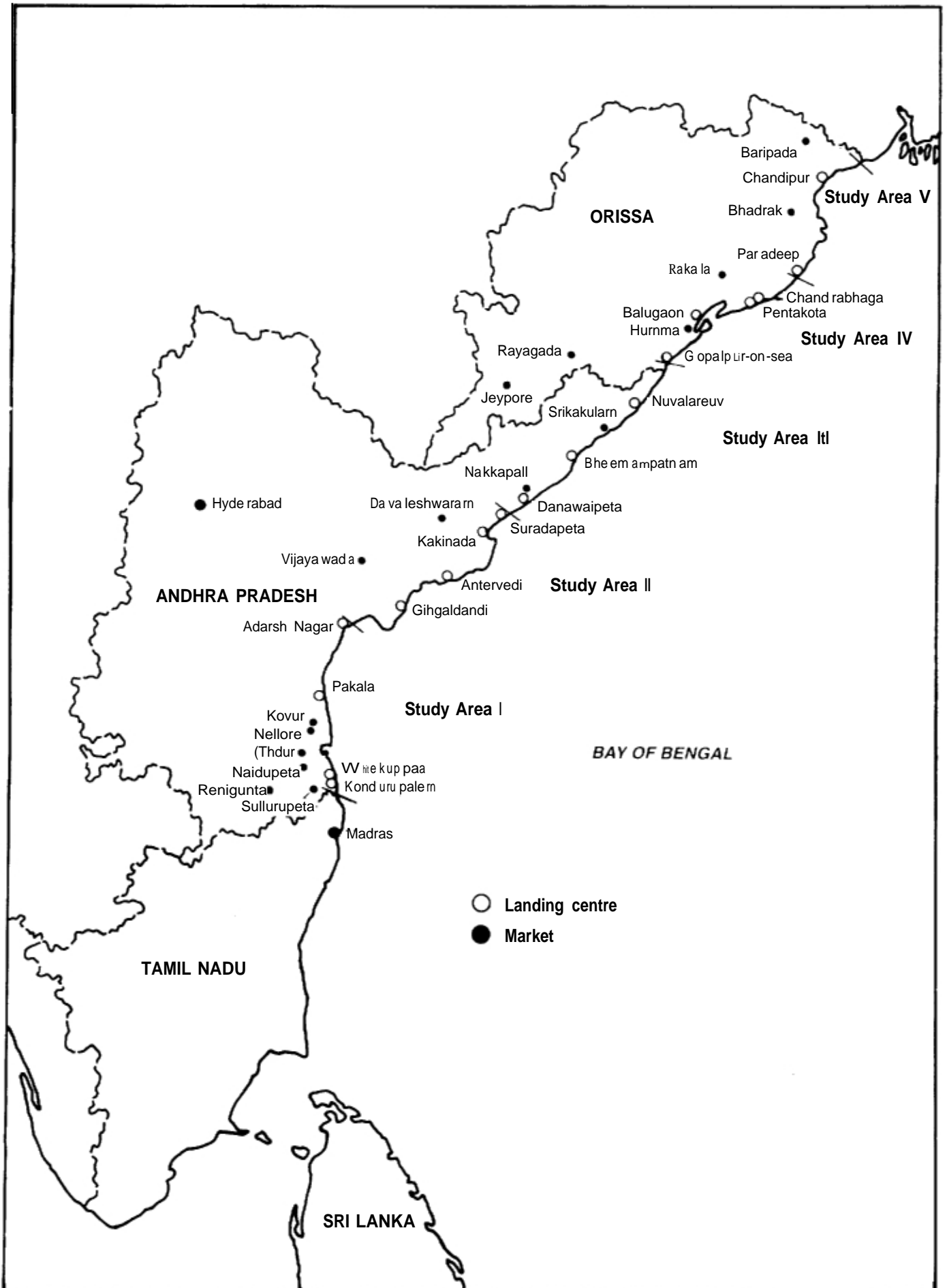
3.4 Limitations of the study

The geographical area to be surveyed was extremely large. Time being a constraint, only a limited survey was possible, covering a few landing centres in each of the five study areas. The time available for field study was 50 days, including time for travel, within which the information contained in this report was obtained. The information can therefore be regarded as valid only for the specific areas covered; and indicative for adjacent regions. Further information needs to be collected separately for landing centres and channels not covered in the present survey, if a higher degree of reliability is required.

3.5 Presentation of information

The information generated by the study contains many interwoven strands. Although not easy to separate, the data has been presented in different sections, each with a separate focus. In order to maintain coherence and readability in each section, some repetition of information has become inevitable.

Map 2 Five study areas in Andhra Pradesh and Orissa



4. GENERAL INFORMATION

The range of information gathered is large and complex. A number of local expressions and processes have found their way into this report, which need to be explained first.

This section contains such general explanations,

4.1 Description of fishing practices

4.1.1 Fishing craft

The craft or boats used in the coastline are of various types: Catamarans (motorised and non-motorised), plank boats-small, medium and large (mechanised, motorised and non-motorised), beach landing crafts and trawlers.

Catamaran: A primitive raft, constructed by tying together several logs, which are curved and shaped like a canoe. Five or six fishermen operate each raft. One end of the craft is shaped like a cone which rises above the water level and forms the point from where the rudder is controlled. In Andhra Pradesh, these crafts are made of large and heavy logs. The length of the craft is less than 18 feet. The planks used on the sides are strong. In Orissa, catamarans are usually made of five logs of wood, tied together with rope, pegged with wood.

Plank boat: Small, medium and large plank boats are used in Andhra Pradesh. Small boats are less than 18 feet long; medium boats are between 18 to 30 feet in length; large boats exceed 30 feet. Wooden planks are joined together to form the craft.

Beach Landing Craft: These crafts are alternatives to the catamaran. They are on the lines of traditional boats but made of fibreglass material.

Trawlers: Large mechanised fishing crafts used in deeper waters. They are equipped with ice boxes and have large holds with storage space for fish and decks for drying fish. They may also be equipped with fish finders, radio telephones, etc. Trawlers mainly use trawl nets. They fish for economically valuable varieties of fish.

4.1.2 Gear

Fishing gear mainly consists of nets of various sizes and designs. They vary depending on the type of species to be caught, the depth of fishing, and the craft used. The main types of nets are: Stationary nets (like gill and trammel nets), bag nets, shore seines and trawl nets. Lines and hooks are used for catching large fish.

Fixed or stationary nets are widely used. These nets are fixed in tidal inshore waters during low tide. To keep the nets in position, wooden stakes, floats or sinkers are used. **Nets** are usually rectangular or conical in shape. With the high tide, fish enter the net and are trapped when the water recedes. The size of the mesh varies from place to place, and their names vary.

Bag nets are conical in shape, without flanks or wings. They are called "Iraga vala" in Andhra Pradesh. These nets are used from catamarans or small and medium plank boats.

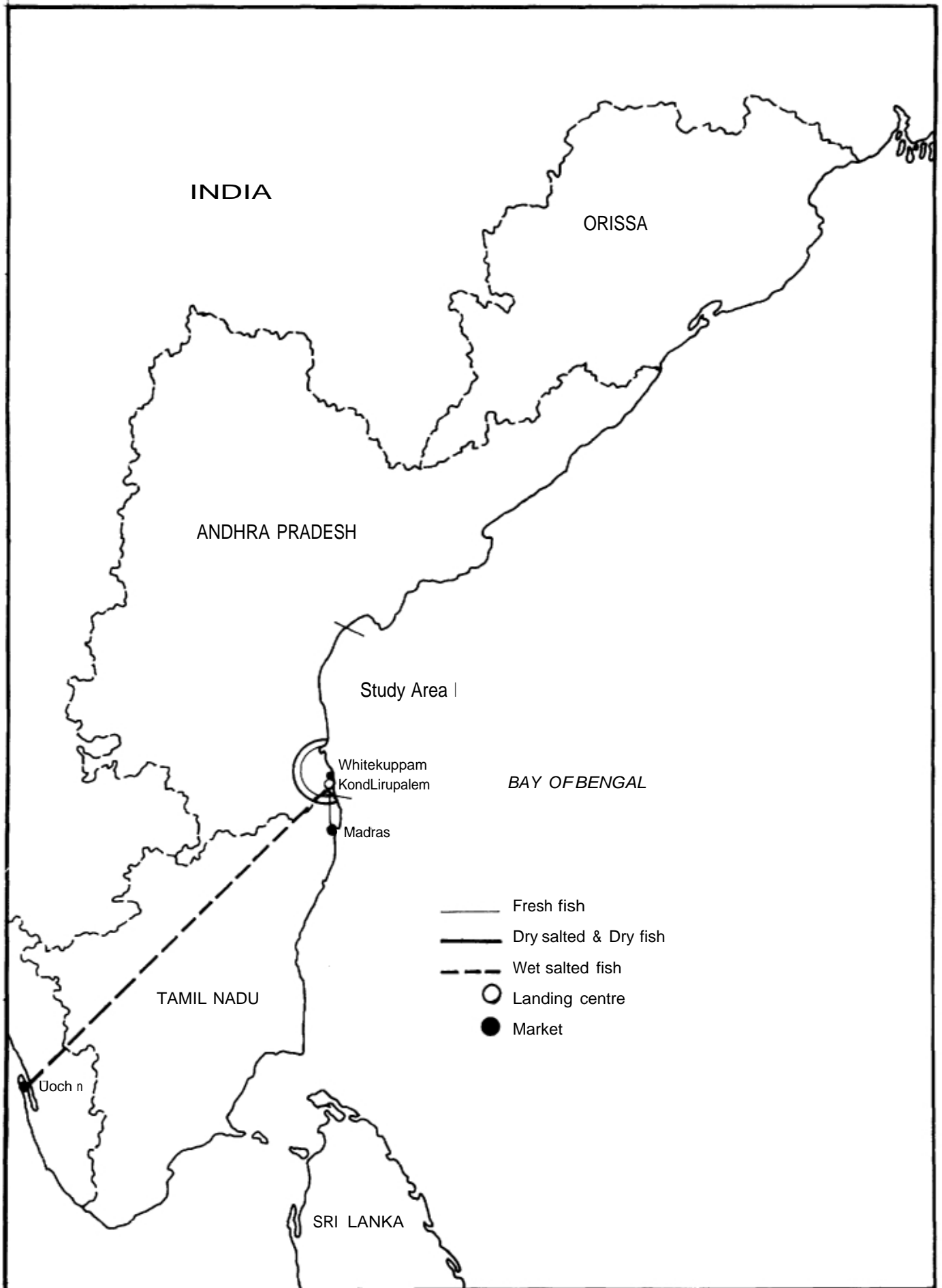
Shore seines are called "Pedda or Alivi vala" in Andhra Pradesh and "Berjal" in Orissa. They are shaped like a conical bag with two wings. One end of the net is tied to a heavy stake on the shore, while a boat takes the other arm into the sea, making a semi-circular sweep and back to the shore. When the net fills up with fish, it is dragged to the shore by groups of men, hauling at both ends.

Drift nets and gill nets are wall-like nets of various sizes and mesh. The yarn is of cotton/synthetic/hemp; sinkers and floats are attached to keep them in position.

Lines and hooks are age-old devices, in which hooks are suspended from nylon lines or cotton ropes. Baits are attached to the hooks. For large fish, chain hooks are used. The lines are operated from boats.

Trawl nets are used in mechanised trawlers. The net is dragged behind the craft and sweeps the sea floor. Fish at the bottom are thus trapped.

Map 3 Study area I : Whitekuppam to Chinna Ganjam
Flow of fish from landing centre to markets



4.2 Processing / Preservation practices

The processes generally used for preservation in the area are salt drying, wet salting, drying and smoking. They are described below:

Salt drying: In this process the fish is cured with salt, losing moisture and absorbing salt in the process. The quantity of salt used and duration of salting depends on:

- type and quality of fish
- consumer preference
- quality of salt
- degree of preservation required

Salting is usually carried out in cement tanks; fresh cleaned fish and salt are arranged in the tank layer by layer. The top is closed with a wooden plank. Water oozing out of the fish is contained inside the tank, to keep the fish immersed in brine. Usual duration of salting is two days.

After salting, the fish is sun-dried on a hard surface, or on palm leaf mats, for about two or three days, depending on the intensity of sunlight. Depending on the extent of drying and salting, the product is 40 to 60% of its original weight.

Wet salting: This process differs from the one just described only with regard to the period of drying after salting. The drying is usually for just a couple of hours, and the moisture content in the product is therefore relatively higher. The product is 80 to 90% of its original weight.

Drying: Natural drying using sun-light and wind is the usual method. Drying is carried out on the sand or a raised platform.

Smoking: The fish is washed, scaled and gutted and but not salted. Medium sized fish are split open. Smoking is carried out in thatched huts. Fish is spread on bamboo mats on raised platforms. Locally available firewood is used as fuel. The process takes 18 to 24 hours depending on the weather. During smoking, the heat generated dries the fish and the smoke impregnates the flesh, giving the fish a distinctive flavour. The product is 40 to 45% of its original weight.

5. PRODUCTION AND PROCESSING SYSTEMS

Study Area I: WHITE KUPPAM (GUDUR) TO CHINNA GANJAM

Approximate coastline length 275 km

1. Landing centres surveyed

Whitekuppam	Nellore district
Kondurupalem	Nellore district
Pakala	Prakasam district

2. Craft and gear used

About 90% of the craft used in this study area are catamarans, both mechanised and non-mechanised. In the fishing harbour of Krishnapatnam, trawlers and large plank boats are in use. In the landing centres studied however, the only craft used were catamarans, mechanised and non-mechanised.

3. Seasonality

Major fishing season	End September to March
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4. Channel

For economically valuable varieties, e.g. large demersals, the catch is sold to local agents and traders, who in turn despatch or sell it to markets further away in iced condition. Varieties such as tuna and mackerel are

bought by local traders (headloaders) at landing centres, for transportation to local retail markets in fresh condition. In cases where varieties mackerel cannot be sold fresh condition, it is wet salted and sent to the state of Kerala (Cochin) through local agents and traders.

The catch of small pelagic varieties is not large. The proportion of such varieties to the total catch is less than 15%. It is also small when compared to other study areas. The catch is generally sold to local processors. The processed fish is finally sold both in local retail markets and distant markets like Hyderabad and Vijayawada (refer Map 3). In northern parts of this study area, when landings are large, processed fish is taken to wholesale markets like Davaleshwaram and Tadepalligudam, since local markets can absorb only limited quantities.

5. Type of sale

Rates are decided by bargaining, using the prevailing market rates as reference. No interest is paid by fishermen against advances. The advance is returnable after one year, but may be renewed for the next year. On the part of the trader/local agent, he makes a concomitant promise to buy all the catch of the specified varieties from fishermen who accept his advance, irrespective of the size of the catch. Further, the fisherman is not penalised if the catch is small or if there is no catch. In effect, therefore, trader/local agent shares the risks of the fisherman.

For small varieties of fish, which are not contracted for against advances, rates of first sale are decided by bargaining, depending on market conditions of demand and availability of particular varieties.

6. Unit of measurement

"Vesa"	equivalent of 1.5 kgs
"Managu"	equivalent of 12 kgs
'Chikkam"	a small lot, quantity varies from place to place

7. Storage

Fresh fish In iced condition, sent immediately to the market. In Whitekuppam and Pakala, 'static' or 'permanent' ice boxes were available on the beach for temporary storage.

Processed fish On palm leaf mats or old nets covered with plastic sheets, old gunny bags, etc. Sometimes left in the open also.

8. Packing

Fresh fish Packed with ice, in bamboo baskets of varying sizes (usually 40 kg and 60 kg capacity) with palm leaves spread on bottom and fish laid on ice, layer by layer fish to ice, in a ratio 1 : 1 by weight, for sending to Madras markets.

Processed fish Packed in old gunny bags, of varying sizes, or in reusable bamboo baskets. Wet salted fish packed in palm leaf baskets of capacity 35-40 kg.

9. Transport

Fresh fish Local agents/traders despatch consignments to Madras through buses, lorries or trains, depending on quantity. In well developed and connected landing centres like Krishnapatnam, refrigerated vans come to the landing centres for fish varieties such as prawns, seer, pomfret. For local markets, transportation is via bicycle, bus and on foot (headloaders).

Processed fish Carried by small and large lorries or buses to wholesale markets. For local markets, the transport is by bus or on foot (headloaders).

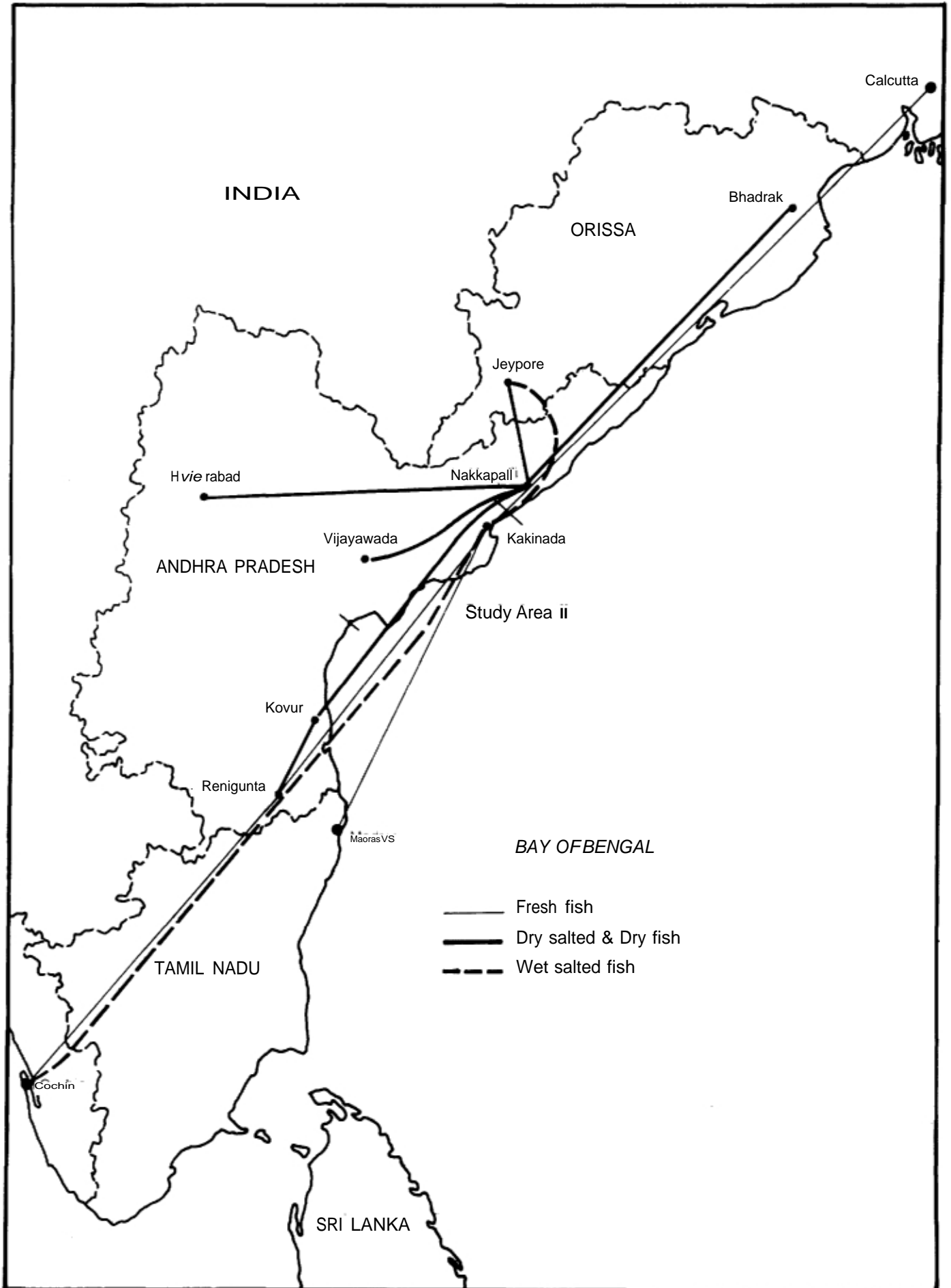
10. Contracts

Advances of Rs. 1500-5000 are made by local agents and traders to fishermen against their promise to supply (at prevailing market rates), economically valuable varieties of fish. The advances are used for purchase of gear, maintenance of craft, and sometimes for weddings and festivals.

11. Other random observations

- A very large fresh fish market (Madras), is available nearby. Most of the catch of this study area goes there in fresh condition. Only small quantities of small pelagics are processed.

Map 4 Study area II: Chinna Ganjam to Uppada
 Flow of fish from landing centre to markets



- When there are problems of transportation, fresh fish is taken directly to Madras by sea in fishing craft.
- Local agents at landing centres are appointed by Madras-based wholesalers. Advances to fishermen are made on behalf of wholesalers by these agents, who are members of the local fishing community. The arrangement is viewed as a division of labour, not as exploitative.
- In some cases, if mackerel cannot be iced, they are wet salted and sent to Kerala.

Study Area II: CHINNA GANJAM TO UPPADA

1. Landing centres surveyed

Adarsh Nagar	Guntur district
Gilligaldandi	Krishna district
Antarvedi	East Godavari district
Kakinada	East Godavari district
Uppada	East Godavari district

2. Craft and gear used

In this study area, trawlers operate from Machilipatanam and Kakinada. The area has the highest density of trawlers in the coastline of Andhra Pradesh. Apart from trawlers, large numbers of beach landing craft, large plank boats and catamarans (mechanised and non mechanised) also operate.

3. Seasonality

Main fishing season January to June

4. Channel

For economically valuable varieties, i.e. large demersals, catch is sold to local agents and traders, who in turn despatch it to markets in other states in iced condition. Varieties like tuna and mackerel are bought by local traders for sale in fresh condition in local retail markets.

Small pelagics are either taken by fisherwomen of the same family as the fishermen (gratis or for a price) or sold to others for processing. There are large wholesale markets like Nakkapalli and Kakinada which cater to the requirements of tribal areas in AP and Orissa, which absorb such processed fish. For the market locations, refer Map 4. In some landing centres, agents buy wet-salted and dried fish for markets in Kerala and Orissa. Some quantities are sold in local retail markets. Trawler by-catch after drying is sent to poultry feed manufacturers through wholesale agents operating from landing centres.

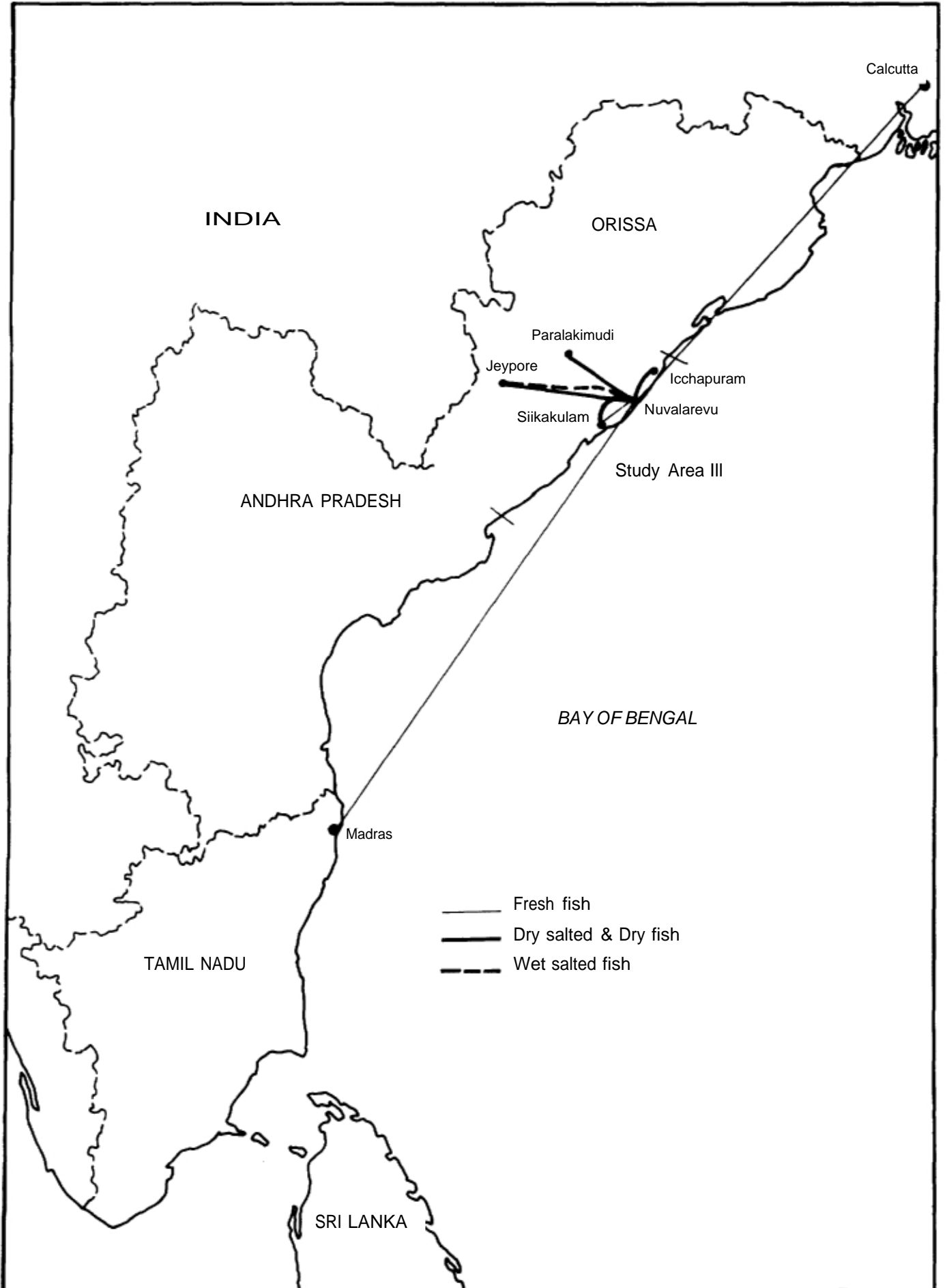
5. Type of sale

The catch is sold to traders immediately on landing. Rates are decided by bargaining, using the prevailing market rates as reference. No interest is paid by fishermen against advances. The advance is returnable after one year. but may be renewed for the next year. On the part of the trader/local agent, he makes a concomitant promise to buy all the catch of the specified varieties from fishermen who accept his advance, irrespective of the size of the catch. Further, the fishermen is not penalised if the catch is small or if there is no catch. In effect, therefore, the trader/local agent shares the fisherman's risks.

In cases where such advances are not involved, the catch is auctioned at the landing centre through an agent. The usual method of auction is 'top-down' and the commission payable to the agent is around Rs 5 - 50/- per auction depending on the size of the lot. Sometimes the commission is a part of the catch itself.

Similar auctions are also held to dispose of small pelagics which go for processing. A discount of 5-15 % is often demanded by the buyer after the auction, and frequently conceded by the fisherman, to cover shortages in weight, or spoilage, or to compensate for other shortcomings.

Map 5 Study area III : Uppada to Gopalpur-on-sea
Flow of fish from landing centres to markets



6. Unit of measurement

“Panam”	equivalent of 80 fish
“Chikkam”	a small lot, quantity varies from place to place
“Kg”	for varieties like seer & shark

7. Storage

Fresh fish In iced condition, sent immediately to the market. In Kakinada, ice boxes were also available for temporary storage.

Processed fish On palm leaf mats or old nets covered with plastic sheets, old gunny bags, etc.

8. Packing

Fresh fish Packed with ice, in bamboo baskets of varying sizes (usually 40kgs, 60 kgs capacity) with palm leaves spread on bottom and fish laid on ice, layer by layer, fish to ice ratio 1:1 by weight, for sending to Madras markets, For Kerala, fish to ice ratio 1:2. In some landing centres (Antarvedi, Vodulrevu) high density poly ethylene crates are also used packing prawn, seer, etc.

Processed fish Packed in old gunny bags, of varying sizes or in reusable bamboo baskets. Wet-salted fish packed in palm leaf baskets of capacity varying from 5-40 kg.

9. Transport

Fresh fish Local agents/traders despatch consignments to Madras through buses, lorries or trains, depending on quantity. In well-developed and connected landing centres such as Antervedi and Kakinada, refrigerated vans come to the landing centres for varieties like shrimp, seer, pomfret, etc. For local markets, the fish is carried on bicycle, motorcycle, buses and on foot (headloaders).

Processed fish Carried by small and big lorries or buses to wholesale markets. For local markets, the fish is transported on buses or on foot (headloaders).

10. Contracts

Advances of Rs. 3000-30000 are made by local agents and traders to fishermen against their promise to supply (at prevailing market rates), economically valuable varieties of fish. The advances are used to purchase gear and maintain craft, and sometimes for weddings and festivals.

11. Other random observations

- Large processed fish markets like Nakkapalli and Kakinada are available, which supply to tribal areas.
- Wet-salting of certain varieties like ribbon fish, sardines, etc., undertaken especially to feed tribal markets in South Orissa (Jeypore, Raygada, etc).
- Salted and dried fish mainly sent to AP markets and Madras.
- Smoking of fish is undertaken in landing centres like Boddu Peda Venkatapalem, Ramanapalem and adjacent areas. Mulletts, catfish, etc are usually smoked. The wholesale and retail markets for smoked fish are Amalapuram, Mallickpuram, Kakinada and Nakkapalli. Markets for smoked fish are confined to these areas.

Study Area III: UPPADA TO GOPALPUR-ON-SEA

Approximate coastline length 365 km

1. Landing centres surveyed

Danawaipetta	East Godavari district
Bhimunipatnam	Vishakapatnam district
Nuvalarevu	Srikakulam district
Gopalpur-on-sea	Ganjam district

2. Craft and gear used

About 90% of the crafts used in this study area are catamarans, both mechanised and non-mechanised. In the fishing harbour of Vishakapatnam, trawlers and large plank boats are in use. In the landing centres studied, the craft used were catamarans, mechanised and non-mechanised.

The craft-gear combination used and varieties of fish generally landed are given below:

3. Seasonality

Main fishing season	January to June
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4. Channel

For economically valuable varieties, i.e. large demersals, catch is sold to local agents and traders, who in turn despatch to markets in other states in iced condition. Varieties such as tuna and mackerel are bought by traders for local retail markets in fresh condition.

Small pelagics are either taken by fisherwomen of the same family as the fishermen (gratis or for a price) or sold to others for processing. There are large wholesale markets at Nakkapalli and Kakinada which cater to the requirements of tribal areas of AP and Orissa. In some landing centres, agents buy wet-salted and dried fish for markets in Kerala & Orissa (refer Map 5). Some quantities are sold in local retail markets.

In some villages, agents/traders from Orissa camp during the season and buy wet-salted fish directly from local processors. Trawler by-catch, after drying, is sold to poultry feed manufacturers through wholesale agents, who buy directly from processing villages.

5. Type of sale

Same as in study area II

6. Unit of measurement

"Panam"	equivalent of 80 fish
"Chikkam"	a small lot, quantity varies from place to place
"Kgs"	for varieties like seer & shark, and processed fish

7. Storage

Fresh fish In iced condition, sent immediately to the market. In Vishakapatnam and Nuvalarevu, ice boxes were also available for temporary storage.

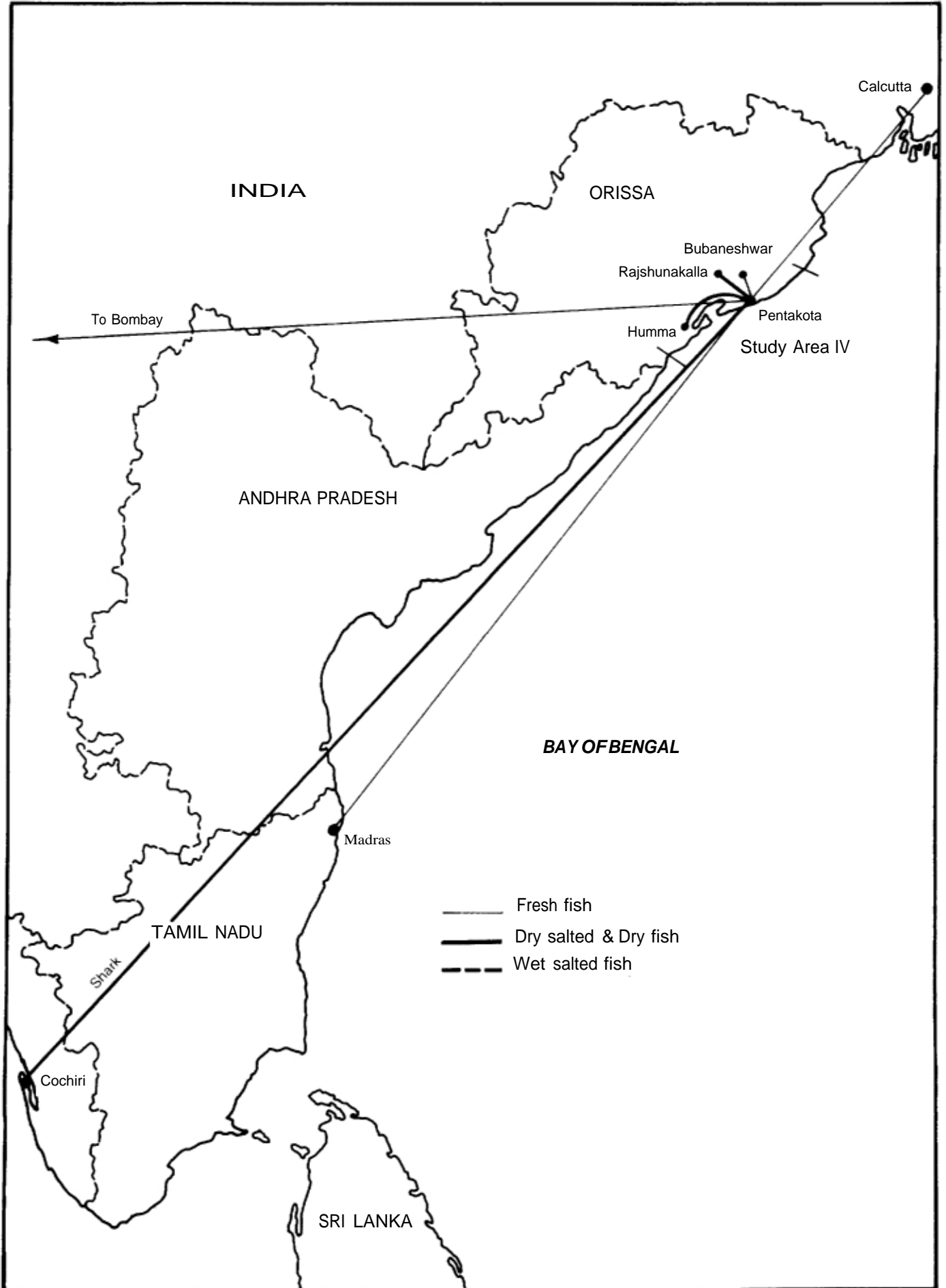
Processed fish On palm leaf mats or old nets covered with plastic sheets, old gunny bags, etc.

8. Packing

Fresh fish Packed with ice, fish to ice ratio 1:1 by weight, for sending to Madras markets. For Kerala, fish to ice ratio 1:2.

Processed fish Packed in old gunny bags, of varying sizes or in reusable bamboo baskets. Wet-salted fish packed in palm leaf baskets, capacities varying from 5-40 kg.

Map 6 Study area IV: Gopalpur-on-sea to Paradeep
Flow of fish from landing centres to Markets



9. Transport

Fresh fish Local agents/traders despatch consignments to Madras/Calcutta by lorry or train, depending on quantity. In well developed and connected landing centres like Vishakapatnam and Nuvalareva, refrigerated vans come to landing centres for varieties such as shrimp, seer, pomfret, etc. For local markets, the fish is transported on bicycle, bus and on foot (headloaders).

Processed fish By small and big lorries or buses to wholesale markets. For local markets, the fish is transported on buses or on foot (headloaders).

10. Contracts

Same as in study area II

11. Other random observations

- Wet salting of certain varieties like ribbon-fish and sardine undertaken especially to feed tribal markets in South Orissa (Jeypore, Raygada, etc).
- Salted and dried fish sent mainly to AP markets and Madras, and sometimes to Kerala.
- Large quantities of trawler by-catch are being processed to cater to demands of poultry feed manufacturers. Traders buy directly from processing centres. A price of Rs. 5-6 per kg is assured.

Study Area IV: GOPALPUR-ON-SEA TO PARADEEP

Approximate coastline length 205 km

1. Landing centres surveyed

Balugaon	Puri district
Pentakota	Puri district
Chandrabhaga	Puri district

2. Craft and gear used

About 90% of the crafts used in this study area are catamarans, both mechanised and non-mechanised. In certain areas of the Chilka lake, plank (stitched) boats are also in use. In the landing centres studied, craft used were only catamarans, mechanised and non-mechanised.

3. Seasonality

Main fishing season November to January

4. Channel

Same as in study area III

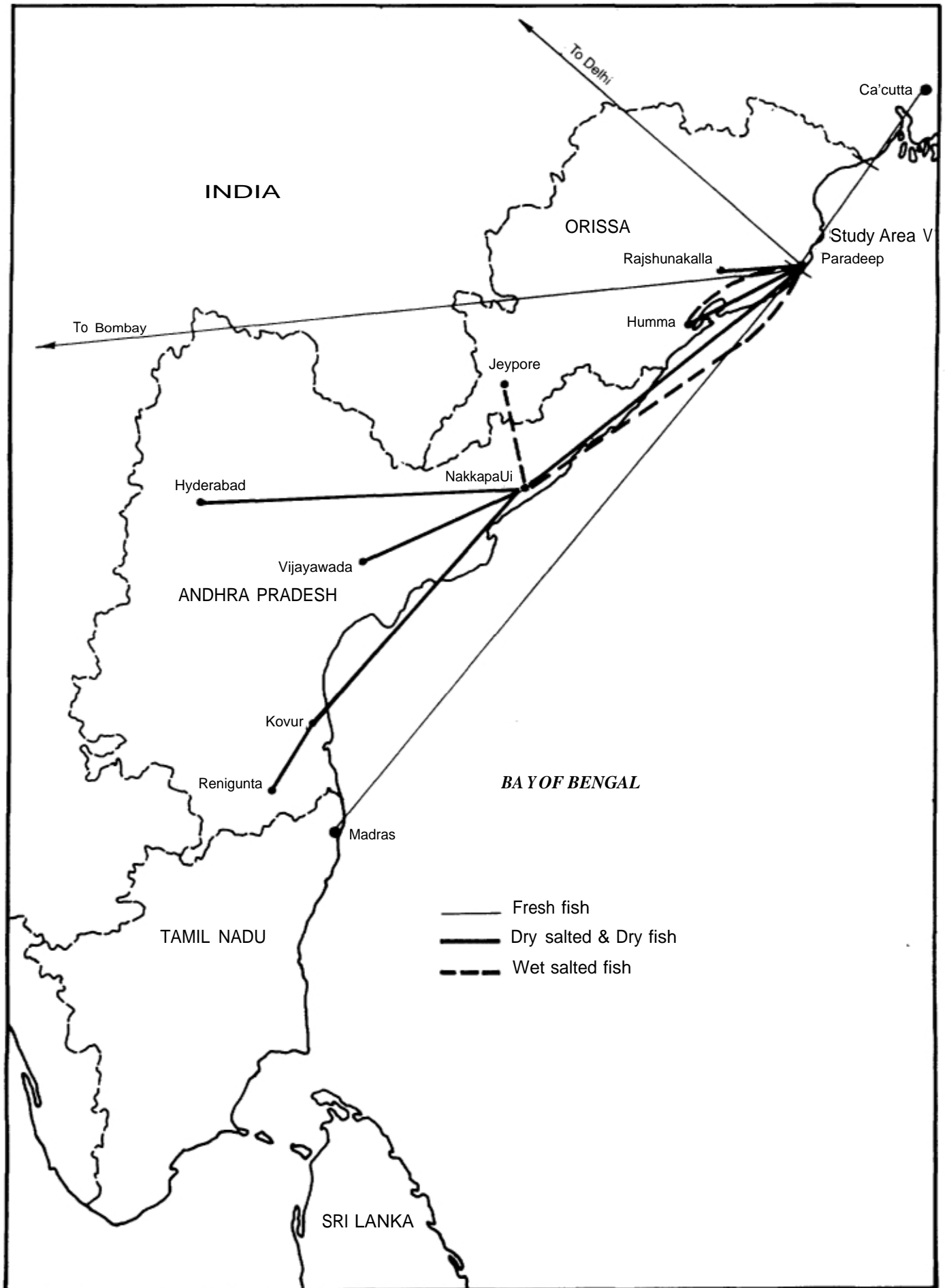
5. Type of sale

As in the case of the other study areas, sales are usually done against advances. However, where such advances are not involved, the catch is auctioned at the landing centre through an agent. The auctioneer's commission is around Rs 5 per auction or a part of the catch. The conventional method of auction is used, with bidding in the ascending order.

6. Unit of measurement

"Panam"	equivalent of 80 fish
"Chikkam"	a small lot, quantity varies from place to place
"Kgs"	for varieties like seer & shark

Map 7 Study area V: Paradeep to Chandipur
Flow of fish from landing centres to markets



7. Storage

Fresh fish In iced condition, sent immediately to the market. In Pentakota (Puri) and Chandrabhaga, ice boxes were also available for temporary storage.

Processed fish On palm leaf mats or old nets covered with plastic sheets, old gunny bags, etc.

8. Packing

Fresh fish Packed with ice, fish to ice ratio 1:1 by weight, for sending to Madras markets. For Kerala, fish to ice' ratio 1:2.

Processed fish Packed in old gunny bags, of varying sizes or in reusable bamboo baskets. Wet-salted fish packed in palm leaf baskets, capacities varying from 5-40 kg.

9. Transport

Fresh fish Local agents/traders despatch consignments to Madras/Calcutta by lorry or train, depending on quantity. In well developed and connected landing centres like Vishakapatnam and Nuvalarevu, refrigerated vans come to landing centres for varieties such as shrimp, seer, pomfret, etc. For local markets, the fish is transported on bicycle, bus and on foot (headloaders).

Processed fish The fish is carried by small and big lorries, or buses, to wholesale markets. For local markets, transport is on buses or on foot (headloaders).

10. Contracts

Same as in study area II

11. Other random observations

- Shark catches are said to be very high. Separate agents for sharks operate at landing centres. Salt dried shark is sent to Kerala
- Traders from wholesale dry fish markets like Rajshunakalla buy processed fish directly from landing centres.

Study Area V: PARADEEP TO CHANDIPUR

Approximate coastline length 240 km

1. Landing centres surveyed

Paradeep	Cuttack district
Chandipur	Balasore district

2. Craft and gear used

At both the landing centres studied, trawlers, large plank boats and beach landing craft were in operation. Very few catamarans were active. Some of the other (traditional) craft of Orissa like, "Dingi", "Patia" and "Choat" were also in operation along this coast.

3. Seasonality

Main fishing season January to June

4. Channel

For economically valuable varieties, i.e. large demersals, catch is sold to local agents and traders, who in turn despatch it to markets in other states in iced condition. Varieties such as tuna and mackerel are bought by traders for local retail markets in fresh condition.

Small pelagics are either taken by fisherwomen of the same family as the fishermen (gratis or for a price) or sold to others for processing. There are large processed fish markets like Baripada, Digha and Remuna which cater to requirements of tribal areas (refer Map 7). In Paradeep port agents buy salt-dried sharks for markets in Kerala. Some quantities are sold in local retail markets. From the southern part of this study area, processed fish is taken to wholesale markets, Nakkapalli and Kakinada.

Trawler by-catch after drying is sent to poultry feed manufacturers through wholesale agents operating from landing centres.

5. Type of sale

Sales as in other study areas are usually against an advance. However, where an advance is not involved, the catch is auctioned at godowns of wholesale agents. The catch is sorted according to variety and size, and the auction takes place. Bidding is in ascending order, with the quotes being called "per kg" for a particular variety. The catch is then weighed and sold at the rate arrived through auction. No discounts are allowed. For small varieties, similar auctioning is the method of disposal.

6. Unit of measurement

"Kgs"

7. Storage

Fresh fish In iced condition, sent immediately to the market. In Chandipur and Paradeep, ice boxes were also available for temporary storage.

Processed fish On palm leaf mats or old nets covered with plastic sheets, old gunny bags, etc.

8. Packing

Fresh fish Same as in Study Area I.

Processed fish Same as in Study Area I.

9. Transport

Fresh fish Local agents/traders despatch consignments to Madras/Calcutta by lorry or train, depending on quantity. In well developed and connected landing centres like Paradeep and Chandipur, refrigerated vans come to landing centres for varieties such as shrimp, seer, pomfret, etc. For local markets, the fish transported on bicycle, bus and on foot (headloaders).

Processed fish Carried by small and big lorries, or buses, to wholesale markets. For local markets, the fish is carried on buses or on foot (headloaders).

10. Contracts

Same as in study area II

11. Other random observations

- Even pelagic varieties like ribbon fish go in fresh condition (iced) to Calcutta. It is reported that the fresh fish market in Calcutta has been expanding and the supply of demersals is not sufficient to meet the demand. Hence this phenomenon.
- Salted and dried fish are mainly consumed in tribal areas of Orissa
- Large quantities of trawler by-catch are processed for poultry feed manufacturers. Traders for poultry feed manufacturers buy directly from processing centres. A price of Fis. 5-6 per kg is assured.
- White and black pomfret are sent in fresh condition to Bombay and Delhi.

6. MARKETING CHANNELS

A major part of this study involved tracing the flow of various types of processed fish from landing centre to consumption point. The nature of the channel is most often determined by the type, i.e., fresh or processed, the distance covered to reach the consumer and the volumes handled. The nature of the marketing channels found in the study areas identified earlier were broadly similar, save for the distance from the ultimate consumer and the sets of markets accessed. It must be noted that what is described are certain broad characteristics of the players in each channel/study area studied.

Fresh fish The market channels used for the sale of fresh fish could be divided into two. The first is that of the local agent or local trader, both of whom access distant markets—usually some major metropolis or consuming state such as Kerala. The difference between the agent and the trader is that while the agent usually has a set of fixed wholesalers located in major markets to whom he sells his fish, the traders usually sell in those markets where the prices are the highest. The risk taken by the trader is rather high, with the returns also being higher. The agent on the other hand, enters into a long term arrangement with wholesalers in major markets who assure him returns albeit at a much lower level. In both cases the species handled are high-value species such as prawns, seer and pomfrets. It needs to be noted that marine export companies prefer using local agents rather than traders as their suppliers.

The second channel consists of headloaders and cycle traders. Both these groups supply local markets with usually low-value species in relatively low volumes. The profit margins of the two groups are consequently fairly low and most often trading is done using borrowed capital. However, it needs to be noted that the cycle traders deal in relatively higher value species and volumes than that of the headloaders. Most often cycle traders also cover longer distances than the headloaders. For example, cycle traders may go up to 60 - 70 km as against 35 - 40 km by the headloaders; the margins made by the cycle trader are consequently higher.

Processed fish The market channels for processed fish could be divided into two. The first is the local trader who collects fish from small processors located in a group of contiguous fishing villages. The product got is assembled and then sent to wholesalers located in major markets for processed fish. The distance from the assembler to the ultimate consumer ranges from 100 to 800 km depending on the markets accessed. These traders usually have their own storage facility and also make their own arrangements to transport their produce. It needs to be noted that there is a distinct group of traders from Kerala who deal in wet salted shark. They directly procure from the processors or use local agents. The area of operation extends over study areas 3.4 and 5.

In the second channel, the processor also trades his/her own product. They usually use the weekly shandies conducted in the major towns on specific days of the week. The volumes handled by these women are rather low and hence in most cases they reserve a portion of their households for storing the product. In most cases these processors/traders use the public transport system for transporting their produce to the market.

7. OBSERVATIONS OF MARKETS VISITED

In this section, we bring out certain common factors that were observed in the markets visited for the study. However there are variations in the manner in which each market functions. Details of individual markets have been provided in **Annexure D**.

Supply

There is very little predictability of landings on the coastline, in terms of variety and quantity, from year to year, because no reliable information is available. The varieties and quantities themselves vary widely each season in a given landing centre. For example, at the Nuvalarevu landing centre, there were no catches at all during the usual fishing season this year (Jan-Apr 1995). Usually the quantities landed are said to be very high.

Credit is usually in the form of advances to fishermen for economically valuable varieties like seer and pomfret. Advances are usually for a year, and this period is extendable. No interest is charged, but the creditor has the right as well as obligation to purchase the entire catch for the specified varieties immediately on landing. (There are many variations to this basic system) The creditor often manages to depress the price at which he buys the catch, to below prevailing market rates, adding to his margins. Local traders in a landing centre usually belong to the fishing community and act as the agent of a city-based wholesaler. The trader loses money if there is either a glut of fish or a very small landing, and therefore shares financial risk with the fishermen.

For small pelagics, which are mostly processed, the mode of purchase is mainly through auction. The auction is by two methods (a) "top-down - Dutch method" and (b) the common method of ascending bids. The fish is

mostly sold in 'lots' or 'heaps'. The time available for concluding a transaction is rarely more than a minute. An estimate of the quantity, size, water content, variety of fish and the price has to be made and decisions taken within this short period at the landing centre. Any intervenor will have to consider this aspect and build in the necessary flexibility into his decision-making.

The average fisherman on landing ashore gives priority to disposing of his catch as soon he can. The fish is highly perishable, particularly in hot weather. There is great pressure therefore on the part of fishermen to sell their catch as soon as possible, preferably within minutes of landing.

Traders flock to the landing site at landing time to take advantage of prevailing circumstances and quickly buy the produce. They have to make all their decisions -quality judgment, purchase etc.- in minutes. Fisher-women's activities include retail trading of fresh fish in local markets, processing of fish and local marketing of processed fish.

Processing and value addition

Economically valuable varieties such as pomfret and seer, go for processing only when they cannot be sold in the fresh or iced condition. Cheaper varieties like small pelagics are usually processed for preservation. Processing, which usually means salting, is therefore only for inferior varieties.

The difference between wet salted and salt-dried fish lies in the extent of drying the fish undergoes after salting. The differentiation exists because of demands by the market; tribals of South Orissa prefer wet salted to salt-dried fish for certain varieties like ribbon fish, croaker, and mackerel. Similarly, mackerel landed in study area I, and mackerel for Kerala, is wet salted-The percentage of salt in salt-dried fish varies from area to area. In study area I & study area V the percentage is low. Consumer preference is said to be the main reason for these variations.

Wholesale agents do not make any value addition to the product. In fact most of them do not even open gunny bags to check quality. Retail traders sometimes undertake sorting and cleaning to remove sand and other foreign material, before selling to customers. It is said that in some places, the loss due to this operation is in the range of 1 O-1 5%.

Storage, Packing and Transport

Storage of processed fish in appreciable quantities along the channel is rare. Near tribal consumption centres like Bhadrak, Jeypore and Raygada (all in Orissa), however, dried and salt-dried fish is stored in godowns (with capacities around 20 tons) for up to six months to obtain higher margins. Details of workings are found in **Annexure C**.

Packaging is mainly for distribution, not for consumers. In certain markets, Hyderabad and Machlipattinam in particular, fish products are sold in plastic bags.

Local transportation around landing centres is generally on bicycles. Buses are frequently used for longer distances, but traders rarely pay full fares, managing to get by with small bribes to conductors. Lorries and trains are used for larger quantities and longer distances. The average cost of transportation in the region is estimated at Rs. 0.01/kg/km.

Marketing

The major wholesale markets for processed fish in AP and Orissa are:

AP	Salt-dried, wet salted and dried fish Smoked fish	Nakkapalli Kakinada. Davaleshwaram, Tadepalligudam, Renigunta Amalapuram, Ambajipeta
Orissa	Wet salted, salt dried and dried	Humma Rajshunakalla, Bhadrak, Remuna

The varieties of fish that are processed for preservation and the techniques used for processing are:

Salt drying	Ribbon fish, cluepid, mackerel, sardine, croaker Other economically valuable varieties when spoiled
Drying	Anchovy, bombay duck, by-catch
Wet salting	Ribbon fish, cluepid, sardine, mackerel, croaker
Smoking	Mullet, mudskipper, eel, shrimp

Fresh fish is the form most preferred by consumers, and constitutes about 70% of sales.

Salt-dried fish and dried fish are mainly consumed by tribals in the hinterland of AP and North Orissa. These markets accept lower quality products, and provide profitable outlets for produce that cannot be sold elsewhere. (Example: even spoiled ribbon fish from Jeypore is taken to interior tribal villages where it fetches a price of Rs. 13-15/kg. The same fish would be rejected by consumers in markets like Hyderabad or Madras)

Smoked fish is mainly consumed in the Godavari area of AP; and wet salted fish in South Orissa (tribal markets) where it is considered a substitute for fresh fish. Smoked fish is preferred only in certain areas, for its distinct taste and flavour. The market is restricted to the Godavari area. The varieties preferred in the smoked condition are mullet, mud skipper, shrimp, croaker and eel.

Most wholesale-cum-retail markets are scheduled on weekly market days along with other commodities like vegetable and spices. In distant markets like Jeypore and Raygada, processed fish is sold in daily markets. Well established shops display a wide variety of fish. Small godowns are attached to these retail outlets. At Hyderabad, dry fish is sold along with "ready to eat" and "fry and eat" items like "papads". Displays on racks, glass boxes, and bottles are to be seen. Only fully dried, cleaned and low salted varieties are found here.

Traders obtain information on a day-to-day basis through their agents and other contacts, on prevailing prices at various landing centres and markets in which they are interested. They fix their purchase rates accordingly. They concentrate on economically valuable varieties. Processors of fish and fishermen have no access to such information. Local market rates (both wholesale and retail) are totally dependent on the catch in a particular week in and around the market. Processors do not have information on catches in other landing centres. It is only when the produce is brought to the market, that they come to know whether the quantity of a particular variety landed is large or small. The risk for processors is high.

For example, in the Humma wholesale and retail market, during the third week of February, huge quantities of wet salted ribbon fish were brought, bringing down the market rate by Rs. 4-5 per kg. Processors who sold their produce in that period had no foreknowledge of the glut when they bought fish at landing centre, and were compelled to sell it at the prevailing low prices, incurring losses. Margins generally retained by the trade: Landing centre to nearby markets (within 100 km) 10-35%, Landing centre to distant consumption centre (more than 100 km) 30-60%.

There is no reliable information on quantities handled by the channels. Government departments and corporations presently involved in fish marketing, do not have reliable data on quantities traded in various markets. The trade is highly unorganised; there are no standard weights and measures, no regulation of transactions, and the market is full of unethical practices. In Nakkapalli market, fish is sold in heaps, lots and baskets. Traders make a guesstimate of the quantity and size of the fish and decide on a purchase price. Traders also lose some quantities due to theft in the market-place. Wholesale buyers sometimes do not pay the full amount to traders, and renege on commitments. Traders are secretive about information, which has to be obtained indirectly. There is a very good demand for 'by-catch' from poultry feed manufacturers. Such purchases are usually made by buyers from A.P. A price of about Rs. 6-7/kg is assured.

Quality

It is generally assumed by traders that fish which is dried is old if not actually spoilt. Thus, even if good fish is dried, and offered in the market for sale, it is perceived as sub-standard, stale, and low-grade.

Quality is not of major importance to the trade. Better quality products do not necessarily command a premium. However, as the product nears the consumer, quality assumes greater importance. At the retail market, fish is often cleaned to remove sand and other foreign material and also graded.

Traders in Hyderabad feel that the quality of fish processed from AP is very poor. Processing in the Bombay and Kutch areas is on clean surfaces or cement yards, and the quality is said to be the better for that.

Barriers to new entrants

Barriers to entry of intervenors would mainly take the following forms:

Withholding of information or distortion of facts, designed to mislead or divert. We have earlier in this report referred to the difficulty of eliciting information at all points in the channel and the prevailing atmosphere of suspicion and even hostility to be encountered by an "outsider".

Propaganda aimed *at generating* suspicion about the motives of intervenors. The experience of a number of NGOs, and others who have sought to initiate change, and the damage they have sustained in the process is witness to this kind of barrier.

Fears of fisherfolk concerning the ability of intervenors to deal with opposition of existing stake-holders in the marketing channel. There have been instances of intervenors abandoning their efforts in the face of losses, hostility, and non-cooperation, rendering the work of future intervenors all the more difficult.

Boycotts and *similar sanctions* against *intervenors*. These and similar tactics such as obstructions and intimidation, some of which are in transgression of the law. are not uncommon occurrences.

General/ *inertia* of the *existing* system to change, including traditional linkages based on patronage, communal solidarity and trans-economic linkages.

8. HOW THE INFORMATION IN THIS REPORT COULD BE USED

Information collected is presented in this report as organised data, which could be put to a number of uses. Some uses are described below:

To establish, say, the economic viability of a particular process for preservation of a certain variety of fish, given the costs, time, transportation facilities, market practices, and margins available. **See Annexure C** for the procedure to work out marketing strategy for a particular case.

To determine the nature of credit which an intervenor could offer, which would be acceptable and beneficial to fisherfolk.

To identify markets, marketing information and expertise that would be useful to fisher-folk in a given area.

To identify the most profitable processes for preservation, to determine routes for transportation, and the end consumer who should be targeted, for the products of a particular landing centre.

To evolve broad intervention strategies for PHFP and its family of collaborating NGOs

To identify areas for intervention through government and regulatory agencies. For example; prevention of restrictive and unfair trade practices in the trade.

The foregoing is obviously only an indicative list, by no means exhaustive.

9. STRATEGIC INTERVENTION OPTIONS AVAILABLE TO PHFP: AN EVALUATION

The aim of PHFP in commissioning this study was to obtain greater clarity on possibilities for intervention.

The experience of intervenors has not been one of undiluted success; quite the reverse, in fact. An intervenor assumes that his intervention is necessary. He also assumes that he is equipped for it. On this basis, he enters the lives of poor people, bringing in such resources-material, moral and mental-as he happens to command.

Using whatever powers of persuasion (and sometimes coercion) lie at his disposal, he goes about the business of improving, according to his light, the lot of the poor. The result sometimes is great and truly spectacular success; but more *often*, failure, leading to personal embitterment, and leaving the poor in a much worse state than they were in.

Every Government in independent India has attempted to intervene on behalf of weaker sections of society. Such interventions have taken many forms-from direct delivery of benefits, to development of infrastructure. In recent decades, NGOs have become increasingly active and visible. A very large number of NGOs, foreign agencies, missionaries and other groups with varying ideologies and agenda, are attempting to change the course of life of poor people in this country. The BOBP and PHF are examples of such attempts.

It is well known that only a very small proportion of such interventions has resulted in any degree of success, even allowing for latitude in defining success. It is not our present purpose to debate the semantics of such definitions. The various ways of looking at success are no doubt important, but fall outside the scope of the present study. For our purposes, it is far more practical to try to understand some of the common causes of failure of initiatives and intervention in development.

Such failure can of course, occur for a wide variety of reasons. too numerous to list here. In the experience of the authors of this report, the most common causes are those listed below. (The analysis is restricted to non-governmental interventions. since that's what is relevant for us. We shall refer to organisations engaged in such interventions collectively as 'Intervention Organisations'. or IOs in the discussion to follow.)

A word of caution. Much of what is said below may appear quite obvious, but it is amazing how often IOs continue to make the same mistakes over and over again. And if the language used below appears to favour the hyperbole. it may be borne in mind that the case is, if anything, understated.

Common Causes of Failure of Interventions

Interference by legal and statutory authorities

A very large number of interventions take place through organisations registered under laws that govern Co-operative or other types of Societies. These laws empower petty government officials to interfere at will in the affairs of such organisations. The rationale of such laws dates from colonial times when any association or group of common people was viewed as potentially subversive. It was therefore the intention of the colonial power to exercise close supervision and control over such groups. There are many such pieces of legislation remaining to this day on the statute books, without much modification. The result is that petty officials, who may have no stake or interest in development of poor people, and are bound only by bureaucratic procedures, have the power to interfere with, change the course, or otherwise control the affairs of any organisation falling within their ambit; i.e. those registered under Co-operative or Society laws. The record shows that exercise of power by such officials is extremely arbitrary, and has resulted in the suffocation or death of many institutions. The number of cases in which higher courts and tribunals have intervened to reverse or nullify orders issued by such officials should be sufficient testimony in support of this view. Any organisation therefore, that registers itself under these laws runs the risk of being arbitrarily derailed.

Lack of Adequate Control by Boards of Directors

The board of directors of any organisation is the final authority, the source of all policy. It is charged with the responsibility of ensuring that the organisation fulfils its purpose. It is however an observed fact that with a good number of IOs, there is little unity of purpose. and there is conflict of ideology and doctrine; with results only too predictable. In many others (many more in fact), members of the board privately view their positions as sinecures, and are therefore quiescent, and tolerant of inefficiencies (or worse) in the management. Such boards tend to avoid any involvement in the affairs of management, even in the face of evidence that demands it. The interest that each member of the board represents also often dictates the line he takes during board meetings. Narrow considerations all too often override the main objective of bettering the lot of the poor. Another phenomenon of board-room politics to be observed is the attitude of the representative of funding or financing agencies. All too often, he is an employee of the latter, and his main concern is the latest fashion in development strategy that happens for the moment to be in vogue in the higher circles of his organisation. The last thing on his mind is the good of the poor whom the IO was set up to serve. And when retired bureaucrats or officials are nominated to the board, the final nail in the coffin of the IO has been driven. The composition of the board of directors of any IO is therefore extremely crucial for its future success. It is easy to fall into the trap of trying to represent every section or every interest on the governing body. This often results in the board becoming an arena for conflict rather than one for making policy. In the opinion of the authors of this report, professionals, both technical and management professionals, with a clear mandate, and accountability for results, are an essential component of any board.

The cost of intervention

Economic subsystems at the grassroots levels are by their very nature, extremely low cost and cannot be compared to markets and systems that exist at higher levels of the economy. IOs tend to model themselves on the latter. They adopt styles, procedures and systems more appropriate to higher levels of economic activity than to the grassroots levels at which they seek to intervene. They come with their offices, their cars, their telephones, their electronics, their hotel bills and a host of other expenses which grassroots level economic subsystems are incapable of sustaining, and which must therefore be subsidised by someone else. typically a donor who is all too ready to deal with someone who speaks his language and shows familiarity with the ways and gadgets of the modern world. This condemns the IO to be forever dependent on external support. The IO is unlikely ever to rise to levels of profit where it can support such an expensive superstructure. Employees of the IO are usually the first to perceive this, and soon lose all motivation to make operations viable. Cynicism is soon institutionalised, which turns into corruption. The funding agency or donor is usually among the last to know. By then it is usually a matter of prestige for someone somewhere to keep the IO alive, which is what keeps the IO

going long after it has lost every justification for existence. While planning an intervention, therefore, these aspects must be given careful consideration. Infrastructure, capital investment, staffing, and systems must be appropriate, and modelled on what a prudent businessman with an eye always on profit, would have chosen. The only difference between an IO and a businessman should be on the question of who takes the profit.

Attitudinal issues related to the intervenor

The intervenor in certain cases falls into the error of acting as 'big brother', or a know-all. Education in management or technical matters alone is not enough. A thorough understanding of the social and cultural dimensions of the processes involved in a particular intervention are just as important. To achieve this, there must first be a willingness to learn. The attitudinal orientation of the intervenor is often responsible for inhibiting communication with the people. Sometimes this develops into antagonism which severely affects the project.

Professional training and knowledge base

In many other cases, it is lack of knowledge of management principles and/or technical matters that have contributed to failure of intervention. Many well-intentioned but ill-informed intervenors have floundered on these rocks. Production may for instance, be undertaken without reference to availability of markets; or selling may be taken to constitute marketing; consumer preferences may be ignored; or quality parameters of a product may suffer neglect. Many such mistakes have occurred and continue to occur.

Information

The importance of information and intelligence with regard to markets, production systems, environmental conditions and other factors that have a direct bearing on any trade or activity, is too well known to bear repetition here. Intervenors, particularly non-professionals, however often ignore the importance of such information, or fail to act on such information when available. They may also fail to take into account the cost and time required to gather such information. As a result, decisions are either based on erroneous or inadequate information, or are taken too late.

Risks

Any commercial activity, by its very nature, involves risk. An organisation engaged in business or commerce must do so on terms set by the market. The ability to absorb risk gives the organisation resilience and the ability to survive; and this implies a reserve of capital or funds to cushion the effects of mistakes or the vagaries of the market. IOs frequently ignore or gloss over this aspect. The result is an organisation inherently lacking strength to survive in the market.

Rigidity of organisation

IOs are, more often than not, hierarchical, and headed by bureaucrats or by people with bureaucratic tendencies. Their decision-making processes are rigid: power and authority are concentrated in a few pockets, if not at the top; and as often as not, exclude the beneficiaries of the intervention. There is rarely any meaningful delegation or diffusion of authority. This inherent rigidity inhibits and constrains functionaries of the organisation who have to deal with market realities in the field. Even minor decisions are referred to headquarters or higher authorities. Attempts at delegation are often resisted on the ground that people in the field are not capable or are not to be trusted which may well be true in many cases. The result is an unresponsive and slow mammoth, unable to react to fluid situations quickly enough to make the organisation profitable.

Lack of leadership

It is all too well known that IOs, like Cooperatives and NGOs, do not attract the best technical and managerial talent, mainly because of their inability to pay what the market can pay them. The inability to pay comes from the very nature of grassroots level economics which cannot generate profits on the same scale as organised industry or commerce. Few good leaders or professionals therefore venture into IOs. Hence the dearth of leadership, and the low rate of success of IOs.

The 'top down' approach

The best intervention models in existence are those which have evolved organically from the grass-roots as an articulation of the aspirations and urges of the people. The process is slow, but sure. Also, it need not necessarily be slow. The AMUL example from Gujarat is a classic example of success. Equally classic are the failures of the

AMUL model when transplanted 'top down' across the country. It is important to realise and admit that no grassroots organisation can grow unless it has its roots in the soil. This is not to say that external intervention has no role, but more on that later.

Source of funds

The source of funds for any intervention is all-important in governing the direction of the organisation. The ideology, concepts and intentions of the funding agency always get reflected in the organisation supported. This could have a synergetic effect. On the other hand, its effect can be quite the opposite.

We now proceed to a discussion of certain other issues that an intervenor must address before deciding on his pattern of Operations. There will always be the usual issues relating to economics, sociology, production systems, and the like, that must be considered. Listed below, however, are only those issues that tend to be overlooked.

Criteria, Indicators, Targets

The criteria for success of the intervention must be defined and spelt out in advance, the indicators identified, and targets laid down; and these must be reviewed and revised from time to time. In the absence of this, the management tends to lose focus and direction. Frequent review of these parameters is recommended to ensure that criteria, indicators, and targets remain relevant and realistic.

Risks

The risk that the organisation can take and the limitations thereon, must be clearly recognised and provided for in the form of reserve funds on whose use and expenditure, effective controls need to be placed.

Suitability of NGOs for commercial activity

All too frequently, NGOs rush into commercial activity without the necessary training, knowledge and expertise. Unless a thorough reorientation, which must include attitudinal reorientation, precedes such intervention, the chances of success are remote.

The Paradigm for Intervention

Intervention may take place in many different ways and follow different paradigms. It is important to evaluate all possible alternatives before deciding on a course of action. Indirect intervention frequently has certain distinct advantages over direct intervention. More on that presently.

Initial Losses

Some losses may be inevitable in the initial stages. They must be anticipated and provided for, and treated as part of setting-up costs. The responsibility to provide for this reserve, which must be distinct from operational reserves, needs to be specified before commencing operations.

Technical and managerial expertise required for intervention

It is extremely important to bring technical and managerial expertise into the intervention right from the conceptual stage—either in the form of consultants or better still as employees. The latter course however, may not always be practical, given the dearth of talent in the field.

Organisational Structure

Once an organisation is created and put in place, the effort required to make changes is usually very large. It is necessary therefore to build into organisations ab initio, the capacity to adjust, change and modify as the situation demands. It is usually advisable to start with the 'team' approach, taking a more formal shape as the programme gathers momentum.

Attitudes to Credit, Recovery of Loans, and Promotion of Healthy Financial Practices

IOs, unlike business organisations, need to constantly remind themselves and their beneficiaries that all credit has a cost, that commerce is impossible in an environment where loans are not serviced or repaid regularly,

and that management of funds is as important as management of material or any other resource. It is important to build these attitudes into IOs from the very beginning.

Credit to beneficiaries

Credit is one of the many agents of change available to an intervenor if used intelligently and imaginatively. Its role must be understood clearly in the intervention, appropriate norms developed in consultation with all the people involved, and enforced.

Management information systems

The kind of information required for decision-making, the time by which it is required, the method of collection and dissemination, together with the costs thereof, are issues that are frequently overlooked by IOs.

Avoiding reinventing the wheel

There is such an abundance of intervention experience in so many areas, that it is inexcusable to repeat mistakes made by others. Before commencing any intervention it is necessary, indeed imperative, to study the past-the successes and failures of previous interventions.

In the main, PHFP may consider the following options:

Broadly speaking, there exist two models or two approaches to intervention. The first is 'direct' intervention. Such intervention is easy to start, but difficult to sustain and make a success of mainly because it is often a transplantation of external ideas and approaches into local soil. The history of such direct intervention is not encouraging. Success, where it has been achieved, can largely be attributed to the organic growth of institutions from the soil. Such growth is promoted by a number of factors; like the macro- economic environment, the social and political conditions, availability of appropriate leadership, and a host of other issues. In sum it is observed that when intervention takes place as a result of transplantation of a foreign model into local soil, the results have generally been unsatisfactory.

There is another type of intervention, which may be called 'facilitative' intervention for our purposes. Simply put, it seeks to create and promote THE CONDITIONS required for emergence of organic institutions from within the soil; it makes either no attempt at direct intervention, or at least postpones such intervention till the time is appropriate. Facilitative intervention may take the form of education, training, dissemination of relevant information, promotion of growth of grassroots organisations (which may involve setting up of self-help groups or affinity groups), identification of and fostering potential leadership material, technical and management consultancy, and development of general infrastructure of various kinds. One of the main differences between the direct and facilitative forms of intervention is that while direct intervention seeks specific benefits for a clearly defined set of beneficiaries, facilitative intervention targets a community or an area in which it seeks to improve conditions for the emergence of economically self-sustaining and socially equitable systems and institutions. In our view, this latter type of intervention is not only more appropriate but more likely to produce good results in the long run: results that are socially beneficial.

PHFP could therefore choose to set up, for instance, an information/data collection and dissemination network on radio, so that fishermen on the sea may be informed of prevailing market rates, to put them in a better bargaining position when they come ashore with their catch. Again, PHFP might consider organisational development in collaboration with NGOs, to facilitate growth of strong grassroots groups of fisher-folk.

Or

Fisherfolk could be trained in techniques of harvesting and fishing which are superior and more efficient. Yet again, fishing communities could be trained to absorb and manage credit from banks and similar institutions. And **as** people's organisations grow and extend their fields of activity deeper into existing marketing channels, PHFP could step in with more sophisticated but appropriate consultancy in say, management, preservation and transport. At all times the effort will be not to hand out subsidies, or to deliver benefits, but to enable people to become self-reliant within the existing economic framework. It is beyond the mandate or power of an agency like PHFP to attempt to change the overall economic situation in an area.

Should PHFP consider direct intervention, however, we suggest that the Co-operative or Society models be avoided, and replaced by another model which is available under existing Indian law. Section 25 of the Companies Act, 1956 envisages 'private limited companies' for charitable purposes in which the directors do not draw any

remuneration or have a share in the profits; they merely act as trustees. Such a company would have all the advantages of a commercial organisation and be free from unwarranted interference from government officials. It could be completely insulated from political, bureaucratic, and other extraneous influences. It would be subject only to regulations and norms applicable to commercial and trading establishments in general. It would have the added advantage of exemption from income tax, if a suitable case could be made out. It is not the purpose here to further elaborate on other advantages, or details of laws applicable. Suffice it to say that a company under Section 25 of the Companies Act offers a viable and practical alternative, which has not often been taken advantage of. It should be possible to give representation on the board of directors of such a company, to the interest represented by the funding agency, NGOs, technical experts, as well as management practitioners; who together should be able to exercise the necessary control to keep the organisation 'on track'. As time passes and the people who are intended to benefit from the intervention become educated and empowered, they could also be co-opted into the board.

A final word: The role of the private sector as a possible co-intervenor is one that has great potential, but which has largely been ignored by intervenors in the past. A detailed examination of the possibilities falls outside the scope of the present study, but is a line of enquiry that could be pursued.

Annexure A

LANDING CENTRES AND MARKETS STUDIED

1. Landing centres:

Study Area I	Whitekuppam to Chinna Ganjam	Whitekuppam Kondurupalem Pakala
Study Area II	Chinna Ganjam to Uppada	Adarsh Nagar Giligaldandi Antervedi Kakinada Suradapeta Danawaipeta
Study Area III	Uppada to Gopalpur-on-sea	Bheemunipatnam Nuvalarevu Gopalpur-on-sea
Study Area IV	Gopalpur-on-sea to Paradeep	Balugaon Pentakota Chandrabhaga
Study Area V	Paradeep to Chandipur	Paradeep Chandipur

2. Markets:

Madras-Walltax Road, Renigunta, Naidupeta, Sullurupeta, Gudur, Nellore, Kovvuru, Vijayawada, Hyderabad-Mir Alam Mandi, Begum Bazar, Pot market, Machilipatnam, Davaleshwaram, Amalapuram, Mallickpuram, Kakinada, Nakkapalli, Srikakulam, Devunalthadu, Paralakimudi, Raygada, Jeypore, Humma, Rajshunakalla, Bhadrak, Baripada

Annexure B

CHECKLIST USED FOR SURVEY

Target Group : **Fishermen**
Place : Landing Centre
Survey method : Participative Rural Appraisal

Name of the landing centre :

No. of Participants

Date

Names of Participants

Time

Survey
conducted
by

(1) Details about crafts and gears used:-

Sl. No.	Crafts	Nos.	Gears used	Depth	Season	Varieties
1.	Catamaran					
2.	Navas (medium)					
3.	Navas (large)					
4.	Trawlers					
5.	Shore seines					
6.	Others					

(2) No. of fishing days during season months:

No. of fishing days during lean months :

(3) Variety-wise details of first sale:-

(a) Type of sale:- (explain in detail)

(b) Unit of Measurement

(c) Price offered

(d) Sold to

(e) Other details (if any)

(4) Details of Quality parameters:- (variety-wise)

Sl. No.	Variety	Fresh		Processed	
		Parameters	Standard	Parameters	Standard

(5) Details of processing:-

Sl. No.	Variety	Method	cost	Processing	Reason for processing
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(6) Channel used for selling processed fish?

(7) Details on packing, storage and transport?
(Type and the cost)

(8) Markets for processed fish and the prices offered?

(9) Other details

Practices
Protective mechanism
Interesting anecdotes

CHECKLIST FOR SURVEY

Target Group : **Processors/traders(retail/wholesale)**
Place : Landing centre/wholesale market/retail market
Survey method : Individual interviews/groups-PRA

Name of the LC/Market

Number of participants

Date :

Names

Time :

Survey conducted by :

(1) Details on varieties handled and purchase:-							
Fresh				Processed			
Sl. No.	Varieties	From	Type of Purchase	Price	From	Type of Purchase	Price

(2) If processing undertaken by the trader/processor:-

Type of processing :

Varieties

Method

Cost Component :

- (a) Salt:
- (b) Fuel:
- (c) Labour:
- (d) Wastage:
- (e) Others:

(3) Storage, packing & transportation details :

	Material/ method	cost	Quantity	Cost/kg
a	Storage			
b	Packing			
c	Transport (Rs./kg/km)			

(4) Details of Sales:-

Sl. No	Varieties	Sold to	Place	Qty	Type	Price
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(5) Details on quality checks : (explain)

(6) Other details :

- (a) Practices
- (b) Protective mechanism
- (c) Interesting anecdotes

CHECK LIST FOR SURVEY

Target segment : **Processed fish market (traders)**
Survey method : individual interview with traders &
observational research

Name of the Market:

Date:

Time:

Survey
Conducted by:

1. Type of market:-
 - Retail/wholesale/both
 - Daily/weekly/fortnightly
 - Separate market/combined with others
 - Individual shops/wheel barrows/other types
 - Type of traders(women/men)
2. Number of traders and quantity per each trader
3. Market day and timings
4. Major fish varieties and the approximate rates
(in retail & wholesale)
5. Supply details
 - Purchased from
 - Quantity
 - Rate
 - Unit of measurement
6. Transport in:
7. Quality parameters
8. Storage details (if any)
9. Sale measurements
10. Other information

Annexure C

PROCEDURE FOR WORKING OUT MARGINS IN A MARKETING CHANNEL

1. Fresh fish bought at landing centre @ 7.50/kg, directly purchased by the processor
2. Transportation to processing village:
Rs.2 per 40 kg basket, equivalent to Rs. 0.05 per kg of fresh fish
3. Packing for fresh fish:
In bamboo baskets costing Rs.25 per basket, which can hold about 40 kgs per trip
Unit packing cost calculated based on 3 trips/week, and for a life time 3 months for the basket, Rs.0.02/kg
4. Salt:- Usual ratio for wet salting 1: 0.50 i.e, 1 kg of fish and 0.5 kg of salt. Salt costs Rs. 1/kg and hence cost of salt for wet salting is Rs.0.50/kg of fish.
5. Labour:- Rs.30/day/person (local prevailing rate): For wet salting, two days of salting and half a day of drying is required. For about 40 kgs of fresh fish (one basket), totally half a labour day is taken (as estimated by the processors), works out to be Rs. 0.38/kg of fresh fish.
6. Quantity of wet salted fish obtained from one kg of fresh fish is approximately 900 gms. For further calculations. the rates are taken for 900 gms of processed fish.
7. Packing: Usually packed in palm leaf baskets, costing Rs.6/no, to hold 35 kgs of wet salted fish, equivalent to Rs. 0.15 for 900 gms of processed fish.
8. Transport: By bus to Nakkapalli market, approximately 70km, cost Rs.20/- for 35kg basket and a person worked out to be Rs. 0.51 per 900 gms of processed fish.
9. Market rate at Nakkapalli (in wholesale) is Rs. 12/kg of wetsalted fish, hence realisation for 900 gms of processed fish is Rs. 10.80/-
10. Purchase at Nakkapalli by a WS agent from Jeypore.
11. Transport to Jeypore, approximately 300kms, @ Rs. 0.0087 per km/kg, worked out to be Rs.2.35/- for 900 gms of processed fish
12. Usually sold within 2 weeks, moisture loss in storage @ 1% per week for two weeks is, 0.018 gms. The quantity of processed fish is 0.882 gms
13. Wholesale agent sells to retail traders at Jeypore market at the market rate of Rs.16.50/kg, and hence for 882 gms, Rs. 14.55/-
14. Transportation from godown to market Rs.5 per 90 kg basket, worked out to be Rs.0.05/- for 882 gms
15. Retail rate at Jeypore market is Rs. 18/kg, realisation for 882 gms is Rs. 15.88/-

Case: Glut landing of a particular fish, say ribbon fish, at Uppada hamlets. The landing centre rate is very low. Better return has to be obtained:

Steps:

- 1 Find the market for ribbon fish (both fresh and processed form)

Local wholesale market	Nakkapalli Kakinada
Local retail market	Tuni Chintapalli
Outside state wholesale mkt	Jeypore Raygada
Outside state retail market	Jeypore Koraput Raygada

2. Find the details on type of processing used, quality parameters, unit of measure, quantity handled: price offered, and other related information for each of the markets identified
3. Find the channel the product takes before it reach the end consumer
4. Workout the channel margins and other costs, and the realisation, as per the procedure given earlier
5. Compare the realisation and associated risks for each of the markets
6. Decide on where to sell

Annexure D

INFORMATION ON MARKETS

Details of wholesale and retail markets visited

Market: 1

1. Name	Walltax Road, Madras
2. Type of Market	Wholesale and retail, Daily market, Exclusive godowns and retail shops
3. No. of traders	Wholesale - 20, Retail - 15
4. Market timings	10.00 hrs to 18.00 hrs
5. Major varieties	Ribbon fish, Anchovy, Seer, Sardine, Silver belly, Bombay duck, Mullet, Shark
6. Supply Source	Andhra Pradesh, Maharashtra, Gujarat and Karnataka
Mode	Through commission agents at various landing centres and markets.
Unit of measure	Kgs
Packing	Baskets and gunny bags
7. Storage	Wholesale traders - well established godowns to store upto 4 to 5 truck loads of fish.
8. Transport	Lorries & railways
9. Sales Type	Wholesale to traders from other retail markets in Madras and nearby villages Retail sales to consumers
Unit of measure	Mainly in kgs. Sometimes in numbers of fish
Packing	No consumer packaging.
10. Quality checks	No specific checks. Based on faith and confidence. In rare circumstances, malpractices like stuffing to increase weight are reported.
11. Other information	

- Unsold stocks are chemically treated to remove salt and for preservation and sent to Kerala for use as manure for coconut trees.
- Processed tuna is exported to Sri Lanka.

Market: 2

1. Name	Renigunta
2. Type of market	Wholesale & Retail Weekly market (Saturday) along with vegetable market. Considered to be the largest dry fish market in this study area Traders are allotted individual stalls Common market place for local villagers
3. No. of traders	100 (both wholesale & retail) (Retail traders approx. 70%)
4. Market timings	06.00 hrs to 18.00 hrs
5. Major varieties	Ribbon fish, Anchovy, Seer piece, Acetes shrimp, Shark piece, Mackerel, Croaker, Sea perch

6. Supply

Source	Nakapalli, Kowuru and Nagari Coastal villages of Nellore district
Mode	Bargaining or market rate
Unit of measure	Heaps, baskets, lots & kgs
Packing	Old gunny bags with capacity of 40 kgs and bamboo baskets

7. **Storage** No storage at the market place. Material brought to the market on Friday and sold on Saturday.

8. **Transport** By lorries for wholesale traders. Buses and carts for retail.

9. Sales

Type Both wholesale and retail sales.
Wholesale to small and petty traders, for village markets. No material goes to distant markets. Retail sales directly to consumers.

Unit of measure kgs and numbers of fish

Packing Sold in loose

10. **Quality checks** Usually no checks. Some consumers check the dryness of fish by pressing the belly.

11. Other information

- Predominantly ribbon fish traded. The salt percentage is low, 20 to 3046

Market: 3

1. Name	Naidupeta
2. Type of market	Retail- dry fish Daily market, Shops and push carts positioned near the bus stand constitute the market
3. No. of traders	2
4. Market timings	10.00 hrs to 18.00 hrs
5. Major varieties	Ribbon-fish, Anchovy, Acetes shrimp
6. Supply	
Source	Nellore bus stand (from Madras), Sullurupeta
Mode	Bargaining or market rate
Unit of measure	Heaps, lots, vesa (equivalent of 1.5 kg)
Packing	Old gunny bags, costing Rs. 6 per bag with a capacity of 40 kgs
7. Storage	Within the house itself, packed in baskets or old gunny bags
8. Transport	By bus or train
9. Sales	
Type	Local retail and nearby villages
Unit of measure	kgs & nos
Packing	Sold in loose
10. Quality checks	No checks are done
11. Other information	
	<ul style="list-style-type: none">• Buyers mainly from Gudur and nearby villages• Very small retail market, with a daily sales of around 100-150 kgs.

Market: 4

1.	Name	Sullurupetta
2.	Type of market	Within the grocery market. Wholesale & retail Daily market
3.	No. of traders	8. Each trader has a small shop inside the market Wholesalers have their godowns and also retail outlets in the same market area
4.	Market timings	06.00 hrs to 18.00 hrs
5.	Major varieties	Ribbon-fish, Anchovy, Mackerel, Acetes shrimp
6.	Supply Source	Nearby local villages, Kondurpalam, Whitekuppam
	Mode	Bargaining or market rate
	Unit of measure	"Vesa" (equivalent of 1.5 kgs)
	Packing	Bamboo baskets costing Rs. 40 per number, with a capacity of 30 kgs
7.	Storage	Stored in loose condition or packed in baskets and old gunny bags in godowns attached to traders' houses and/ or retail outlets.
8.	Transport	By bus mainly, as the quantities are small
9.	Sales Type	Retail sales to local consumers and wholesale to other small markets
	Unit of measure	Kgs and number of fish
	Packing	No specific packing. Sold in loose condition. Sometimes wrapped in newspapers.
10.	Quality checks	Checked for dryness by examining hardness
11.	Other information	<ul style="list-style-type: none"> • Buyers are mainly from nearby villages. • It is weekly fair site for nearby villages. • Stocks per trader is approximately 300 kgs at any time

Market: 5

1.	Name	Gudur
2.	Type of market	Retail sales only Daily market along with vegetables, fresh fish & mutton
3.	No. of traders	10 Each trader has a small shop inside the market
4.	Market timings	06.00 hrs to 18.00 hrs
5.	Major varieties	Ribbon-fish, Anchovy Sardine (small) Acetes shrimp
6.	Supply Source	Nellore bus stand (from Madras), Kowuru, Chirala Kawali (Railway station-south cabin, Renigunta
	Mode	From wholesale traders, by bargaining or market rate
	Unit of measure	Heaps and lots
	Packing	Old gunny bags, costing approx. Rs. 6 per bag and with a capacity of 40 kg
7.	Storage	Stored in shop, in baskets and old gunny bags

8. **Transport** By lorries, bus and train, depending on the quantities purchased
9. **Sales**
- Type** Only retail sales to consumers
- Unit of measure** Kgs & nos
- Packing** Sold in "loose"
Sometimes wrapped in newspapers
10. **Quality checks** No checkings done usually. Pressing of belly to check done occasionally
11. **Other information**
- Value addition by traders are drying in case of improperly dried fish removal of sand
 - Buyers mainly from Gudur and nearby villages
 - Each trader has about 500-750 kgs of fish in stock

Market: 6

1. **Name** **Nellore-Madras (bus stand market)**
2. **Type of market** Mainly wholesale/transit market with some Retail trade, Daily market
3. **No. of traders** Numbers vary everyday
4. **Market timings** **06.00** hrs to 18.00 hrs
5. **Major varieties** Ribbon-fish, Anchovy, Acetes shrimp, Sea perch
6. **Supply**
- Source** Tuni, Kakinada, Kovvuru & Madras.
- Mode** Bargaining or market rate
- Unit of measure** Heaps, lots, baskets
- Packing** Old gunny bags costing Rs. 6 per bag, with a capacity of 40 kgs
7. **Storage** No storage at the market place. Material is sold immediately.
8. **Transport** By bus or train
9. **Sale**
- Type** Wholesale to nearby town markets Local retail-consumption
- Unit of measure** Heaps, kgs & number of fish
- Packing** Old gunny bags and bamboo baskets
10. **Quality checks** Checked for dryness by examining hardness
11. **Other information**
- Buyers within 100-l 50 kms from local towns and village markets.

Market: 7

1. **Name** **Kovvuru**
2. **Type of market** Wholesale & Retail
Daily market Two markets exist; one near the bus stand-mainly for retail sales and the other near a "nala"-mainly for wholesale
3. **No. of traders** Retail- About 10 - 15 , Wholesale - 15
4. **Market timings** 10.00 hrs to 18.30 hrs

- | | | |
|-----|--------------------------|---|
| 5. | Major varieties | Ribbon-fish, Anchovy, Acetes shrimp, Mackerel |
| 6. | Supply Source | Nakkapalli, Kakinada and Tuni |
| | Mode | Bargaining or market rate |
| | Unit of measure | Heaps, baskets, number of fish |
| | Packing | Old gunny bags costing Rs. 6 per bag, with a capacity of 40 kgs and bamboo baskets |
| 7. | Storage | Good godowns for storage. The produce is packed in gunny bags and stacked in the godown. Each godown can stack about one truck load of processed fish. |
| 8. | Transport | By bus, train, small and big lorries |
| 9. | Sales Type | Wholesale to town and village markets like Naidupeta, Renigunta, etc. from the market situated near "nala". Retail sales to consumers from the market near bus stand. |
| | Unit of measure | kgs and number of fish |
| | Packing | For wholesale, in old gunny bags and for retail, in loose |
| 10. | Quality checks | Dryness of the fish is checked by its hardness |
| 11. | Other information | <ul style="list-style-type: none"> • Traders from distances upto 150 km buy from here to sell in their areas. • The market near the 'nala' is mainly a transit market, no stocks held for long. It is a source of supply for Renigunta. |

Market: 8

- | | | |
|----|---------------------------|---|
| 1. | Name | Vijayawada - Kothapet. |
| 2. | Type of market | Wholesale market Daily market |
| 3. | Market timings | 10.00 hrs to 18.00 hrs |
| 4. | Major varieties | Anchovy, Ribbon, Bombay duck, Shark pieces, Seer fish, By catch |
| 5. | Supply Source | Bombay duck, Anchovy — Gujarat & Bombay
Ribbon-fish, Acetes shrimp
Dry salted Ribbon, Shark, Seer- Kakinada, Nakkapalli, Vishakhapatnam
By-catch for poultry feed -Vishakhapatnam, Machilipatnam, Kakinada |
| | Mode | Through their agents, for purchases from wholesale market like Nakkapalli and Kakinada. From wholesale traders, for Bombay and Gujarat. |
| | Unit of measure | Heaps, lots and kgs. |
| | Packing | In old gunny bags, costing |
| 6. | Storage | Big and well constructed godowns. |
| 7. | Transport | By lorry |
| 8. | Sales details Type | Mainly sales to poultry feed manufacturers within AP . |
| | Unit of measure | Kgs |
| | Packing | As the material is sold wholesale, same gunny bags are used. No repacking. |

9. **Quality checks** For poultry, no quality checks. For human consumption, dryness and the sand percentage are sometimes checked.

10. **Other information**

- Traders say that dry salted and dried fish are sold in East Godavari, West Godavari, Iccchapuram and North Orissa areas.
- Krishna district and areas near Hyderabad, unsalted fish is preferred.
- Sales to Orissa also made, by commission agents operating from Vijayawada.
- Some of the traders extend advances to processors & fishermen for purchase of small varieties for poultry feed.
- Varieties like seer fish, sent to Assam and Tripura also.
- Drying in Maharashtra and Gujarat areas, undertaken on cement yards and hence are of better quality in terms of uniformity in drying and percentage of salt in final products.

Market: 9

1. **Name** **Begum Bazar, Hyderabad.**
2. **Type of Market** Retail - dry fish daily market
3. **No. of traders** Total 7 shops, Only four were operational during the survey
4. **Market timings** 10.30 hrs to 18.00 hrs
5. **Major varieties** Bombay duck, Anchovy, Shark piece, Ribbon-fish, Acetes shrimp
6. **Supply details**
 - Source** Bombay duck, anchovy, ribbon fish, acetes shrimp Gujarat & Bombay Shark pieces Madras, Vijayawada & Kakinada
 - Mode** From wholesale traders — bargaining (market rates)
 - Unit of measure** Lorry loads — 8 tons per load usually
 - Packing** Old gunny bags
7. **Storage** Well constructed godowns, attached to retail shops.
 - a. **Transport** By lorry.
9. **Sales**
 - Type** Mainly retail sales. A discount of Rs. 1 or 2/- per kg offered on large transactions.
 - Unit of measure** Mainly in kgs. Sometimes in small heaps or numbers of fish
 - Packing** No consumer packaging. Sold in either in newspapers or in plastic covers.
10. **Quality checks** No specific checks by consumers. They buy based on reputation of the dealer. Wholesalers check salt and sand percentages
11. **Other information**
 - Purchases preferred from Gujarat and Maharashtra as quality and prices are better.
 - Dried bombay duck is preferred in these markets
 - Fresh fish from inland sources are preferred by consumers, Only low and medium income customers consume dry fish.
 - Usual shelf life for fully dried products is said to be 6-7 months.
 - All varieties displayed at point of purchase.

Market: 10

1. Name	Hyderabad-Mir Alam Mandi
2. Type of market	Retail sales, Daily market
3. No.of traders	8
4. Market timings	10.30 hrs to 6.30 hrs
5. Major varieties	Ribbon fish, Anchovy, Mackerel, Sardine, Croaker, Goat fish
6. Supply details	
Source	Bombay duck, anchovy, Gujarat & ribbon fish, acetes Bombay shrimp
Mode	Shark pieces Madras, Vijayawada & Kakinada
Unit of measure	From wholesale traders - bargaining (market rates)
Packing	Lorry loads - 8 tons usually
7. Storage	Old gunny bags costing approx. Rs.4-6 per bag, with a capacity to hold about 40 kgs of dry fish
8. Transport	Well constructed godowns, attached to retail shops, to stock about 2-3 truck loads at any point in time.
9. Sales	By lorries, about Rs.7500-8000 per load of 7-8 tons fish (from Bombay to Hyderabad).
Type	Mainly retail sales. Some cases, 5-10 kgs sold to local petty traders. A discount of Re. 1 or Rs. 2/- per kg is offered on these sales.
Unit of measure	Mainly in kgs. Sometimes in small heaps and numbers of fish
Packing	No consumer packaging. Sold in loose condition, either rolled in newspapers and tied with thread or in plastic covers.
10. Quality checks	No specific checks by consumers. They buy on the basis of the reputation of the dealer.
	Wholesalers check the salt and sand percentages in the lot before purchase, and accordingly bargain over the price.
11. Other information	
	• Purchases made from Gujarat and Maharashtra because quality and prices are better

Market: 11

1. Name	Pot market, Secunderabad
2. Type of market	Mainly retail sales, along with vegetables, meat, fresh fish and kirna shops. Daily market
3. Number of traders	10. (Well established individual shops. Only 4 were operational on the day of our study)
4. Market timings	10.30 hrs to 18.30 hrs.
5. Major varieties	Shark pieces, Anchovy, Ribbon-fish, Seer fish, Bombay duck, Acetes shrimp, Mackerel, Shrimp
6. Supply details	
Source	Salted varieties Vijayawada Unsalted dried Gujarat & varieties Bombay

Mode	From wholesale traders, at market rates
Unit of measure	In lorry loads, once in a month purchased. One lorry load is about 8 tons.
Packing	Old gunny bags
7. Storage	In godown, along with the retail counter. Can stock upto about 2 lorry loads.
8. Transport	By lorry, about Rs. 4500/-and about Rs. 8000/per load from Vijayawada and Bombay.
9. Sales details	
Type	Mainly retail sales.
Unit of measure	Kgs and numbers of fish
Packing	No specific packaging. Sold to consumers in loose.
10. Quality checks	Mainly hardness of fish checked for dryness
11. Other information	
	<ul style="list-style-type: none"> ● Some traders claimed that there is some value addition by them to the product: <ul style="list-style-type: none"> - drying, in case of improperly dried fish - removal of sand and foreign material - grading in large or small varieties ● Product displays in glass boxes, bottles and on bamboo plates

Market: 12

1. Name	Machillpatnam
2. Type of Market	Retail Daily market Located besides vegetable, meat and grocery market
3. No. of traders	25
4. Market timings	09.00 hrs to 18.00 hrs
5. Major varieties	Ribbon-fish, Anchovy, Shrimp, Croaker, Sea perch, Cat fish
6. Supply	
Source	Giligaldhandi, Bhandar, Vijayawada, Bombay
Mode	Directly from processors at landing centres or through wholesale agents from Vijayawada and Bombay
Unit of measure	Heaps, lots, kgs and numbers of fish
Packing	Gunny bags
7. Storage	Stored in retail outlets. Small trader do not store at the market-place.
8. Transport	Lorries and buses
9. Sales	
Type	Retail sales to villagers like Royavaram, Kalingapeta and Kattibajaru
Unit of measure	Mainly in kgs. Sometimes in numbers of fish
Packing	Sold loose. Catfish, cluepid and croaker are sold in packed form
10. Quality checks	No checks.
11. Other information	Nil

Market: 13

1.	Name	Davaleshwaram (6 km from Rajmundry)
2.	Type of market	Both Wholesale and retail trade. Weekly market on Sundays. Only dry fish
3.	No of traders	Totally about 250.100 and 150 Wholesale and retail traders respectively.
4.	Market timings	05.30 hrs to 18.00 hrs
5.	Major varieties	Ribbon fish, Anchovy, Eel, Prawns, Croaker, Sea perch
6.	Supply	
	Source	Processors from Kakinada, Rajmundry and Amalapuram areas Wholesale traders from Vijayawada and Machilipatanam.
	Unit of measure	Heaps, lots and numbers of fish
	Packing	Bamboo baskets and old gunny bags
7.	Storage	No storage at the market place.
8.	Transport	Retail traders and processors use buses or lorries, by pooling together the quantities. Wholesale traders bring their material through mini-lorries
9.	Sales	
	Type	Both wholesale and retail trade. Wholesale trade takes place during morning hours.
	Unit of measure	In kgs and numbers of fish for retail In kgs and lots or baskets for wholesale
	Packing	Sold in "loose", no packing
10.	Quality checks	Mainly the quality of drying is tested by checking the stomach hardness
11.	Other information	
		<ul style="list-style-type: none"> • Traders and processors at Davaleshwaram visit Tadepalligudam also, which is about 60 km from Rajmundry, depending on the prices offered during previous weeks. • Products are mainly salt dried and dried. No wet salted or smoked fish-sold here. It is informed that sometimes small quantities of smoked prawns also brought to the market.

Market: 14

1.	Name	Amalapuram
2.	Type of market	Wholesale & Retail Weekly market-Sunday
3.	No. of traders	Wholesale & Retail traders - 100 Traders from Ramanapalem
4.	Market timings	05.30 hrs to 18.00 hrs
5.	Major varieties	Ribbon-fish, Anchovy, Mackerel, Cluepid. Prawns and Mulletts (smoked)
6.	Supply	
	Source	Local landing centres and processing villages like Ramnapalem, etc.
	Mode	Auction for fresh fish and processing (smoking, drying and salt drying)
	Unit of measure	Heaps and lots
	Packing	Bamboo baskets
7.	Storage	No storage at market-place
8.	Transport	By bus and lorries

6. Supply details	
Source	Local landing centres and processing hamlets of Uppada, Kakinada, etc.
Mode	Processors bring the material directly to the market
Unit of measure	Heaps and lots
Packing	Old gunny bags and bamboo baskets
7. Storage	No storage at the market place
8. Transport	By bus, lorries and fishing craft
9. Sales	
Type	Wholesale to towns and village markets. Wholesale to outside states-Orissa
Unit of measure	Heaps, lots, baskets and bags
Packing	Old gunny bags
10. Quality checks	Belly hardness checked for dryness
11. Other information	
	<ul style="list-style-type: none"> • Sellers: mainly women processors from local landing and processing centres • Local agents for dry fish operate from their respective godowns, near the market. The produce is often taken to them directly. Advances are also paid by these traders. • Small quantities of smoked fish also available for local retail sales

Market: 17

1. Name	Nakkapaili
2. Type of market	Wholesale & Retail, Weekly market-Friday
3. No. of traders	Wholesale & Retail traders - 500
4. Market timings	05.30 hrs to 11.30 hrs
5. Major varieties	Ribbon-fish, Anchovy, Mackerel, Sardine, Croaker, Goat fish
6. Supply	
Source	Local landing centres and processing villages like Suradapeta & Jagarajupeta
Mode	Auction for fresh fish and processing
Unit of measure	Heaps and lots
Packing	Old gunny bags, bamboo baskets
7. Storage	No storage at the market-place
8. Transport	By bus, small and big lorries
9. Sales	
Type	Wholesale to Nellore, Kovvuru and other state ie Orissa & West Bengal (Calcutta)
Unit of measure	Heaps, lots, baskets and bags
Packing	Old gunny bags and baskets
10. Quality checks	Belly hardness checked for dryness
11. Other information	
	<ul style="list-style-type: none"> • Sellers: mainly women processors from local landing and processing centres • Buyers for local markets mainly women traders and wholesale agents. Mainly men from other states • Wet salted fish purchased by traders from Orissa (Raygada, Jeypore, etc.) • Smoked fish is preferred for its flavour, taste and texture

Market: 18

1. Name	Srikakulam
2. Type of market	Retail sales, Daily market
3. Market timings	07.00 hrs to 18.00 hrs
4. Major varieties	Anchovy, Shark piece, Sardine
5. Supply details	
Source	Brought by processors from nearby landing centres
Unit of measure	“heaps” and “lots”
Packing	bamboo baskets, covered with gunny piece
6. Storage	No storage at the market place.
7. Transport	By bus
8. Sales	
Type	Retail sales to consumers
Unit of measure	Number of fish, small lots and kg
Packing	No consumer packing, sold loose
9. Quality checks	No checks by consumers.
10. Other information	
	<ul style="list-style-type: none">• Sold to villagers/tribals from nearby areas, low income group.• Fresh fish is available both from marine and inland sources; low demand for dry fish.• Only 3 traders, with each displaying about 30-40 kg of dry fish

Market: 19

1. Name	Devunalthadu
2. Type	Wholesale. A processing centre cum market.
3. Major varieties	Sardine, Mackerel, Ribbon fish, Tuna, Mullet, Anchovy
4. Supply details	
Source	Landing centres of Kothapeta, Devunelthadu, Bhavanapadu
Mode	By auction
Unit of measure	Numbers of fish, kg and heap
Packing	Bamboo baskets
5. Sales details	
Type	Sold to wholesale agents from Orissa.
Unit of measure	Kgs
Packing	In palm leaf baskets
6. Quality checks	No quality checks.
7. Other information	
	<ul style="list-style-type: none">• If quantity of catch is so low that it attracts no wholesale buyers, processors go to nearby markets of Lcchapuram, Sompeta, Tekkali.• Drying yards constructed by Government in the village are not used, since processors/ buyers are insensitive to quality and do not wish to take the extra trouble of carting the produce to and from the drying yards.

Market: 20

1. Name	Paralakhimudi
2. Type of Market	Retail sales, Daily market
3. No. of traders	50
4. Market timings	06.00 hrs to 13.00 hrs
5. Major varieties	Anchovy, Ribbon fish
6. Supply	
Source	Althadu, Nuvalarevu, Tekkali areas
Mode	Wholesale purchase
Unit of measure	Kgs and numbers of fish
Packing	Baskets and gunny bags
7. Storage	No storage at the market place
8. Transport	Bus, small lorries
9. Sales	
Type	Retail sales - to local consumers from Paralakhimudi town and nearby villages
Unit of measure	Mainly in kgs. Sometimes in small heaps and numbers
Packing	No consumer packaging. Sold loose
10. Quality checks	No checks.
11. Other information	

- Sometimes, processors bring fish to this market from the Tekkali area and sell to retail traders.

Market: 21

1. Name	Rayghada
2. Type of Market	Wholesale and retail, Daily market
3. No. of traders	Wholesale traders - 3, Retail traders - 10
4. Market timings	06.00 hrs to 18.00 hrs
5. Major varieties	Anchovy, Mackerel, Ribbon fish, Sardine, Shrimp
6. Supply	
Source	Kakinada, Nakkapalli, Manapuram, Devunalthadu and Nuvalarevu markets
Mode	Wholesale purchases from markets by bargaining.
Unit of measure	Kgs and numbers of fish
Packing	Baskets and gunny bags
7. Storage	Wholesale traders have well established godowns. No storage at the market for retailers.
8. Transport	Lorries
9. Sales	
Type	Wholesale and retail sales.
Unit of measure	Mainly in kgs. Sometimes in small heaps and numbers of fish
Packing	No consumer packaging. Sold loose

10. **Quality checks** No checks.

11. **Other information**

- Godowns are owned by wholesalers of Jeypore.

Market: 22

1. **Name** **Jeypore**
2. **Type of Market** Wholesale and retail, Daily market
3. **No. of traders** Wholesale traders - 5, Retail traders - 20
4. **Market timings** **06.00** hrs to 18.00 hrs
5. **Major varieties** Anchovy, Mullet, Mackerel, Ribbon, Sardine, Shrimp
6. **Supply**
 - Source** Kakinada, Nakkapalli, Manapuram, Devunalthadu and Nuvalarevu markets
 - Mode** Wholesale purchases from aforementioned markets.
 - Unit of measure** Kgs and numbers of fish
 - Packing** Baskets and gunny bags
7. **Storage** Wholesale traders have well established godowns.
8. **Transport** Lorries
9. **Sales**
 - Type** Wholesale and retail sales
 - Unit of measure** Mainly in kgs. Sometimes in small heaps and numbers of fish
 - Packing** No consumer packaging. Sold loose
10. **Quality checks** No checks. Spoilt products sold to tribals
11. **Other information**
 - Wet salted fish is preferred by consumers. It is considered a substitute for fresh fish.
 - Maximum retail sale takes place on Tuesdays, the market day for local villages.
 - Material from Humma market is not brought as transportation is difficult (hill roads). This market get supplies from wholesale markets in study area II.
 - Material is sold to village traders on credit, Usually one month credit is extended. Wholesale traders collect cash once in a fortnight.

Market: 23

1. **Name** **Humma**
2. **Type of Market** Wholesale and retail, Weekly market - Sunday
3. **No. of traders** About 500 traders
4. **Market timings** **06.00** hrs to 13.00 hrs
5. **Major varieties** Anchovy, Croaker, Mackerel, Ribbon, Sardine, Shrimp
6. **Supply details**
 - Source (location)** Processors from Parvathipuram, Puri, Paradeep, Gopalpur-on-sea
 - Mode** Processors buy fresh fish from landing centres by auction or bargaining
 - Unit of measure** Heaps, lots, numbers of fish
 - Packing** Bamboo baskets

- | | | |
|-----|--------------------------|--|
| 7. | Storage | No storage at the market place |
| 8. | Transport | Small and big lorries, bus, train |
| 9. | Sales | |
| | Type | Wholesale and retail sales |
| | Unit of measure | Mainly in kgs. Sometimes in small heaps and numbers of fish |
| | Packing | No consumer packaging. Sold loose. |
| 10. | Quality checks | No checks. Any quality of product is sold in Humma as it supplies tribal areas. |
| 11. | Other information | |
| | | <ul style="list-style-type: none"> ● Second largest processed fish market, next to Nakkapalli in this region. |

Market: 24

- | | | |
|-----|--------------------------|--|
| 1. | Name | Rajshunakalla |
| 2. | Type of Market | Wholesale and retail, Daily market, Exclusive godowns and retail shops |
| 3. | No. of traders | Wholesale - 3 Retail - 12 |
| 4. | Market timings | 09.00 hrs to 18.00 hrs |
| 5. | Major varieties | Sardines, Anchovy, Seer, Shrimp, Mackerel, Pomfret |
| 6. | Supply | |
| | Source | Ashtarang, Paradeep, Chandrabhaga and Balugaon |
| | Mode | Directly from processors at landing centres |
| | Unit of measure | kgs |
| | Packing | Gunny bags |
| 7. | Storage | Wholesale traders have well established godowns |
| 8. | Transport | Lorries |
| 9. | Sales | |
| | Type | Wholesale to traders from nearby village markets, Retail sales to tribal areas |
| | Unit of measure | Mainly in kgs. Sometimes in numbers of fish |
| | Packing | No consumer packaging. |
| 10. | Quality checks | No checks. |
| 11. | Other information | Nil |

Market: 25

- | | | |
|----|------------------------|--|
| 1. | Name | Bhadrak |
| 2. | Type of Market | Wholesale and retail, Daily market |
| 3. | No. of traders | Wholesale and retail traders - 8 |
| 4. | Market timings | 10.00 hrs to 18.00 hrs |
| 5. | Major varieties | Croaker, Mackerel, Ribbon fish, Sardine, Cluepid |
| 6. | Supply | |
| | Source | Croaker, Bombay duck Gujarat & Bombay |
| | Other varieties | Nakkapalli & Kakinada |

Mode	Wholesale purchases from markets as well as through commission agents
Unit of measure	Kgs, numbers of fish and bags
Packing	Baskets and gunny bags
7. Storage	Wholesale traders have well established godowns.
8. Transport	Lorries
9. Sales	
Type	Wholesale to small traders from nearby villages and town markets.
Unit of measure	Mainly in kgs. Sometimes in numbers of fish and baskets
Packing	No consumer packaging. Sold loose
10. Quality checks	No checks.
11. Other information	
	<ul style="list-style-type: none"> • Margins are said to be greater if fish is purchased from processing villages through commission agents. • Only salt dried and dried fish is preferred in this region. Wet salted fish is not sold. • Traders stock products for upto 6 months, to obtain better returns during lean season. They have different sources to keep up supply.

Market: 26

1. Name	Baripada
2. Type of Market	Wholesale and retail, Weekly twice - Thursday & Saturday
3. No. of traders	Wholesale traders - 20 nos, Retail traders - 10 nos.
4. Market timings	06.00 hrs to 18.00 hrs
5. Major varieties	Acetes shrimp, Silver belly, Ribbon fish, Sardine, Croaker
6. Supply	
Source	Chandipur & Balramgadi villages Remuna & Jhorpokaria markets.
Mode	Wholesale purchases from markets
Unit of measure	Kgs and numbers of fish
Packing	Baskets and gunny bags
7. Storage	Wholesale traders have well established godowns
8. Transport	Small lorries and bus
9. Sales	
Type	Wholesale and retail sales,
Unit of measure	Mainly in kgs. Sometimes in small heaps and numbers of fish
Packing	No consumer packaging. Sold loose
10. Quality checks	No checks
11. Other information	Nil

