

40 YEARS
OF
RESEARCH AND DEVELOPMENT
IN
MARINE FISHERIES IN INDIA



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Integrated Fisheries Project

The Integrated Fisheries Project, formerly known as Indo-Norwegian Project, came into being in 1952 as a result of the tripartite agreement signed between the Governments of Norway and India and the United Nations Organisation. The Project started as an area development programme in the Sakthikulangara-Neendakara region with certain specific objectives. It has established organised facilities for hygienic handling, processing and marketing of fish.

In 1963, the Project shifted its headquarters from Sakthikulangara-Neendakara to Cochin. The administration of the Project was taken over by the Government of India. The activities of the Project thereafter expanded. Integrated Fishery Complexes were started not only at Cochin, but also at Cannanore and in the nearby States of Tamilnadu and Karnataka. Boatbuilding and berthing facilities were also established. In 1972, the agreement with the Govt. of Norway was terminated and the Indo-Norwegian Project at Cochin was renamed as Integrated Fisheries Project and the administration was completely taken over by the Government of India. All the three sub-stations of the Project were handed over to the respective State Fisheries Departments.

OBJECTIVES

(1) To study the operational efficiency/commercial feasibility of different types of fishing craft and gear, (2) Demonstration of fishing methods by employing suitable craft and gear for the benefit of the industry, (3) propagation of diversified fishing methods for the optimum exploitation of known fishery resources, (4) introduction and popularisation of diversified fishery products for rural and urban markets, to study the reaction of consumers and to create an awareness on the part of the processors and consumers to utilise the hitherto unexploited and unconventional items of fishes and other marine life, (5) training of personnel in diversified fishing methods, processing technology and also

refrigeration techniques and (6) to provide technical consultancy services in the field of fishing, fish processing and marketing.

ACTIVITIES AND FACILITIES

The Integrated Fisheries Project at Cochin consists of a modern fisheries complex with various sections dealing with fishing, gear, processing, marketing, ship repair, life raft servicing, scientific data processing and training.

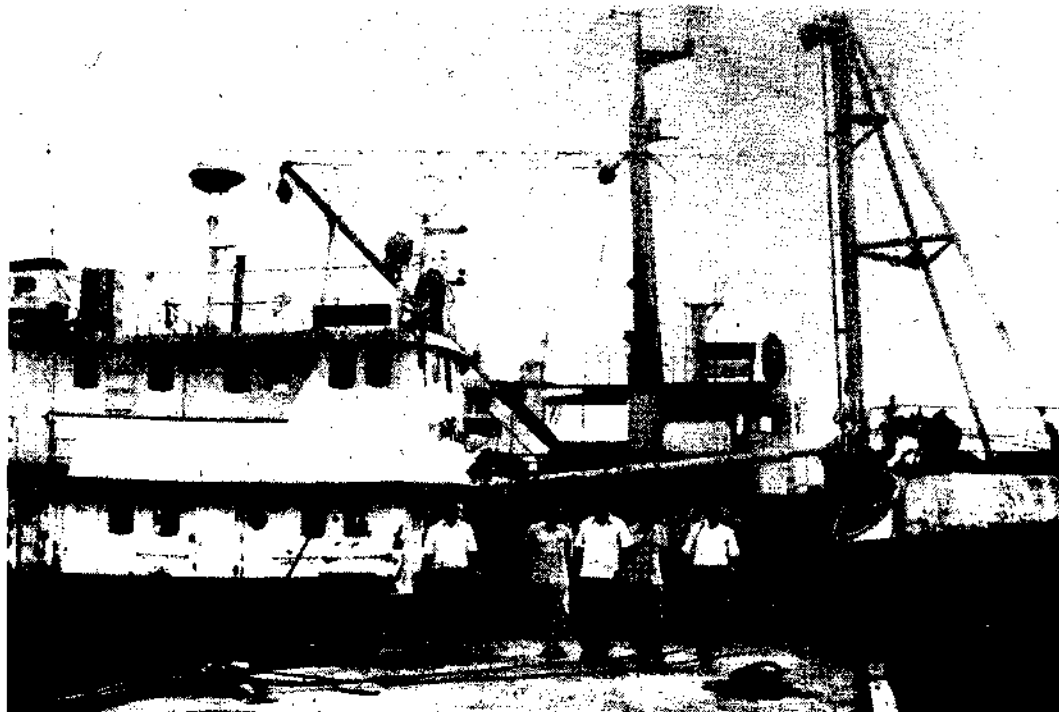
The Project conducts experimental/commercial fishing operations with a fleet of 5 vessels ranging in size from 17.5 m to 28 m. The operational efficiency of the different types of boats and gear, different vessel-gear combinations and diversification of fishing operations to study the economics and commercial feasibility of such operations form part of the objectives of the Project.

The gear section carries out all types of repairs and maintenance of nets of the different vessels. Design and fabrication of different types of nets for different vessels of the Project to carry out experimental and diversified fishing and servicing of self-inflatable life rafts are also done by the section. Supply of design of fishing gear to fishermen is another developmental plan of this Project.

The ice plant complex commissioned in 1965 has a production capacity of 25 tonnes of ice per day in three shifts and an ice storage capacity of 25 tonnes. The capacity of the tunnel freezer is 8-10 tonnes while that of the contact freezer is 4 tonnes. Frozen storage capacity of 125 tonnes is also provided besides a chilled room of 25 tonnes capacity.

The Project has set up a modern processing section with different machineries for production of diversified fish products. The important equipment are the mincing machine, skinning machine, filleting machine, slicing machine, smoking unit, an artificial drying unit and a most modern and

IFP Jetty



Slipway





Kalava traps

sophisticated canning line where aluminium cans are used instead of the conventional tin cans. The various machinery and equipment serve as a model for adaptation by the industry to develop diversified marine products.

With these facilities over the years, the Project had developed necessary technology for product diversification, ventured on pilot production, entered in internal and external markets to study consumer reaction and established acceptance of the newly developed products, so that the industry may take it up.

During the past two decades more than hundred different fishery products were developed and introduced by the Project for domestic as well as for export market.

Marketing of diversified products is done through modern fish stalls at Ernakulam, Alwaye, Palai and New Delhi to popularise the diversified products and to study customer reactions and trends of marketability of these new products. The Project has introduced several diversified fish products and various types of packings through the fish stalls. The stalls are run on no-profit-no-loss basis as the entire processing and marketing activities serve more as promotional work for easier adoption by the industry.

In addition to the routine marketing of various fish and fish products through the established channels it was found necessary to conduct special seafood drives in cities and towns to popularise fish and fishery products. Publicity through newspapers forms part of the special seafood drives. This approach creates an awareness among the consumers in a given locality comprising a cross section of fish-consuming public and others. It was planned to implement this programme in the major cities of north India.

The Project workshop and slipway serve as servicing centre for all the vessels of the Project and other sister organisations and private entrepreneurs around Cochin. The workshop is provided with modern equipment, machineries and tools to take up repairs of wooden and steel fishing vessels up to 250 tonnes displacement.

Repairs and maintenance of sophisticated electronic equipment fitted on board the vessels are carried out through a modern electronic workshop forming part of the servicing facilities meant for fishing vessel repairs. The Electronic workshop is provided with modern equipment like oscilloscope, oscillators, automatic coil winding machine etc.

Making available data on the economics of operation of vessels, fish resources at different grounds, efficiency of different fishing gear, suitability etc. of different equipment for processing, fishing etc. and collecting biological and statistical data are attended to by the Scientific and Statistical sections which also attend to consultancy services for the fishing industry.

The Project conducts training courses for the manpower requirement of the fisheries and fishing industry in refrigeration, processing, invessel training for fishing second hands and engine drivers.

ACHIEVEMENTS

Located rich fishing grounds and new potential resources like deepsea lobsters, prawn, kalava, velameen, pink

perch, crabs, squids etc. as the result of extensive exploratory and experimental fishing operations carried out along the continental shelf and continental slope up to 250 fathoms on the south-west and south-east coasts.

Developed different types of fishing gear like trawls, purse-seines, handlines and traps for different types of vessels.

Introduced diversified fishing techniques like single boat and two-boat midwater trawling, purse seining, handlining, longlining, light attracted purse seining and trap fishing.

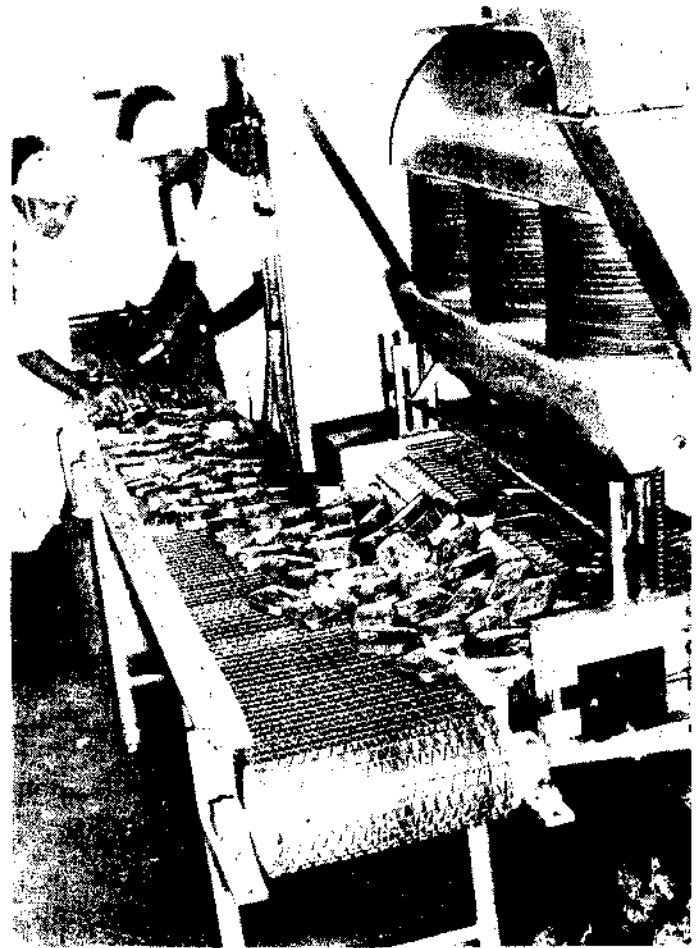
Conducted practical workshops in the States of Karnataka, Kerala, Tamilnadu and Pondicherry to help the fishermen to take up these new types of fishing methods and a seminar on fish canning industry in India at Cochin. As a result, a number of purse-seiners were introduced in the fishing fleet of Karnataka and Kerala.

Imparted training to deck and engineside apprentices of fishing vessels, service mechanics, master fishermen in purse-seining, fishing boat designers, refrigeration technicians, processing technicians etc.

Developed diversified marine products like deepsea prawns, frozen deepsea lobster tails, lobster meat, cuttle fish and squid, fillets, fish fillets, slices, kheema, fish fritters, different types of dried products and canned products like sardine, mackerel, tuna, marlin, oysters, smoked oysters in different packing media of vegetable oil, tomato sauce and curry and fish spreads of anchovies and sardine which are excellent for making sandwiches. Aluminium as a packing material had been introduced for the first time in India for seafood canning and this had led to the development of Aluminium Alloy indigenously. Commissioned a 125 tonne frozen storage to expand the processing and marketing activities.

FUTURE PLANS

(a) Evolving newly designed fishing gear and employing new methodologies for effective exploitation of new resources



Cleaning filled fish cans



Many very distinguished visitors like President of the Republic of Maldives (below) and Prime Minister of Vanuatu Island visited the Project

(pelagic, midwater and demersal) within the extended area of EEZ.

(b) Introduce semi-commercial fishing for domestic marketing and feasibility study on commercial fishing.

(c) Develop exploitation methods for squid resources.

(d) Conduct deep water and slope trawling.

(e) Conduct market surveys for diversified products in major cities of India, develop rural markets for diversified products and also organise an integrated fish marketing system in India.

(f) Operate full-fledged canning line for utilisation of pelagic resources.

(g) Introduce I.Q.F. products

(h) Expand workshop and slipway facilities.

(i) Canning of non-conventional varieties of fish.

(j) Chalk out and implement programmes as approved in the Plan from time to time for the development of Indian fishing industry.

(k) Opening a new unit of the Project in the east coast.

Communicated by Shri R. Sathiarajan, Director, IFP.