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Part Three

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NATIONAL SYMPOSIUM ON RESEARCH AND DEVELOPMENT IN MARINE FISHERIES

MANDAPAM CAMP

16-18 September 1987

Papers Presented
Sessions V, VI & VII

CENTRAL MARINE FISHERIES RESEARCH INSTITUTE
(Indian Council of Agricultural Research)
P. B. No. 2704, E. R. G. Road, Cochin-682 031, India

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STATUS REPORT ON MARINE FISHERIES DEVELOPMENT IN TAMIL NADU

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ABSTRACT

The declaration of Exclusive Economic Zone extending up to 200 miles from the coastline has provided a great opportunity to exploit the fishery resources. The fishery resources, the number of traditional craft, mechanised fishing boats and other shore facilities available are indicated. The various schemes implemented by the Department to increase marine fish production in Tamil Nadu are narrated. Future plans of the Department for maintaining and improving the fishery is also discussed.

INTRODUCTION

Tamil Nadu has a coast line of about 1000 km. and a continental shelf area of 41,412 sq.km. With India's declaration of 200 miles (320km) Exclusive Economic Zone additional 74,947 million sq. m. are available for exploitation. The continental shelf are the most productive part of the ocean and this area represents about 20.6% of the area of Exclusive Economic Zone. The estimates of potential catch from Exclusive Eco-

nomie Zone of Tamil Nadu vary from 400,000 to 800,000 tonnes.

The sea is at present exploited by more than 38,000 traditional crafts and 2500 mechanised fishing boats of 30' and 32' which operate mainly in the inshore areas. The present level of marine fish production is 2.45 lakh tonnes and rank 3rd among maritime states. Tamil Nadu is also 3rd largest fish exporting State earning foreign exchange to the tune of Rs.50 crores every year.

TRADITIONAL CRAFTS

The fishing fleet of Tamil Nadu consists of about 40,500 crafts of which 94% are traditional crafts and non-mechanised and these crafts contribute to nearly 70% of the marine fish landings. Of the total number of 38,000 country crafts 29,000 are catamarans and 9,000 are vallams and canoes. When compared to the fishing fleet in 1978, the number of traditional crafts mainly catamarans has shown a decrease from 37,084 to 36,571. The reason for the shortfall is due to the change in the attitude of the fishermen to go in for vallams and canoes as against the traditional catamarans. Of the total fishermen families, only about 42% families own their crafts.

MECHANISED FISHING BOATS

Wooden mechanised fishing boats were introduced from the year 1955 and upto 1985-86, 2502 boats have been supplied under various Schemes. Fisheries Department had supplied 1721 boats under hire purchase system to groups of fishermen with varying degrees of subsidy. 112 boats have been supplied to fishermen through District Cooperative Federation. Tamil Nadu Fisheries Development Corporation have supplied 602 boats with the loan assistance from Commercial Banks. National Cooperative Development Corporation has supplied 51 boats to Fisherman Co-operative Societies with 25% subsidy. It could be seen that fish production increased considerably due to the operation of mechanised fishing boats and this was the single major factor responsible for increasing fish production from the year 1956-57 to 1980-81.

FIBREGLASS REINFORCED PLASTIC BOATS

On the recommendations of the working group for Fisheries, Fibreglass Reinforced boats of 25' were introduced for gill netting. Various sizes of Fibre glass Reinforced Plastic boats 18', 20' and 25' were supplied to fisherman under various schemes and since the operation of these boats are intended for a limited purpose, these boats have not become popular. With a view to supplement the traditional catamarans, Beach Landing Crafts were introduced recently with the design furnished by BOBP/FAO as well as by Danish experts. These are expensive compared to the traditional crafts both in captial cost as well as maintenance since these boats are

powered and heavy subsidies offered by Government under various schemes are gradually finding acceptance from the fishermen. Large scale introduction of these boats is on the anvil and with the operation of these boats in large number the traditional fishermen can get better catches and consequently higher income.

MECHANISATION OF TRADITIONAL CRAFTS

In addition to reduce the capital investment on the traditional crafts and at the same time to increase the operational efficiency of the existing crafts, a Scheme of mechanisation of traditional crafts has been introduced with a suitable subsidy. This Scheme is proving quite popular among fishermen of Tirunelveli and Kanayakumari Districts and more than 800 boats have been mechanised by providing outboard motors to catamarans and inboard engines to vallams.

INFRASTRUCTURE FACILITIES

With the increasing number of mechanised crafts along the coast, these boats need berthing facilities, larger boats will need fishing harbours and other infrastructure facilities that go with it, such as supply of ice, repair facilities for hulls and engines etc. Under Plan Schemes, major fishing harbours at Madras and Tuticorin and minor harbours at Cuddalore, Nagapattinam, Pashayar and Thondi were commissioned. Landing jetties are provided at Malipattinam, Koddikarai, Rameswaram and Mandapam. Major fishing harbours at Chinnamuttom and minor harbour at Valinokkam and landing jetty at Kottai pattinam are under construction.

There are 6 Fisheries Training Centres located in Madras, Cuddalore, Nagapattinam, Mandapam and Colachel with a capacity to train 310 fishermen in a year in modern methods of fishing. Junior Mechanic Courses are being conducted in Nagapattinam, Tuticorin and Colachel for 60 fishermen candidates in a year for imparting extensive engineering in repairing and overhauling of marine diesel engines.

There are 5 Inshore Fishing Stations located at Madras, Cuddalore, Mallipattinam, Remeswaram and Kanyakumari for demonstrating to the fishermen in modern methods of fishing and in locating fishing grounds. They have done pioneering work in educating this fishermen in the use of trawl nets.

EXPORT OF MARINE FISH PRODUCTS

Frozen shrimps, lobster tails, cuttle fish, shark fins, dried fish are the items exported from Tamil Nadu. The export earnings of Tamil Nadu which was Rs.50.00 lakhs in 60's increased to Rs.30 crores in 70's and it was 51.28 crores in 1984-85. There is scope for further improvement in export performance of marine products through better exploitation of exportable varieties.

DEEP SEA FISHING

In order to exploit the offshore area, Government of India have permitted fishing companies to operate 21 chartered fishing vessels with base at Madras and Tuticorin. The initial investment in Deep Sea Fishing is considerable and hence private investment is not attached to this profession. As a policy, Government have been recommending Industrial licence for 100% export oriented projects. Likewise, Tamil Nadu Government also recommend for acquisition of deep sea fishing vessels with the loans from Government of India.

FISH PRODUCTION

The total landings of marine fish production for the year 1985-86 is 2,44,759 tonnes comprising demersal varieties 1,33,687 tonnes (54.62%) and pelagic varieties 1,11,072 tonnes (45.38%). The marine fish production which was 50,000 t in 1950-51 has increased tremendously during the next two decades and reached 2.3 lakh tonnes in 1981-82. However, marine fish production is more or less static during the last six years. The total marine fish production and the number of mechanised fishing boats distributed by various schemes are shown in Table-1. It could be seen that the number of mechanised boats supplied has been mainly responsible for the increase in fish production. The important fishes that are

landed are anchovies, silver bellies, lesser sardines, ribbon fish and elasmobranchs.

Table 1. *Number of Boats in Operation and the Fish Landing*

Year	No. of Boats	Fish landings (Lakh tonnes)
1956-57	11	0.61
1961-62	95	0.93
1966-67	456	1.75
1971-72	1053	2.13
1976-77	2245	2.01
1981-82	2437	2.35
1985-86	2502	2.44

CONCLUSION

It will be seen from the Table-1 that the fish production has a direct relation to the number of mechanised fishing boats in operation. The fish production has been more or less stagnant during the last few years mainly because there is no appreciable increases in the mechanised fishing fleet. It will be possible to step up the marine fish production considerably by increasing the inputs in the form of mechanisation of country crafts, introduction of mechanised boats and deep sea fishing vessels and popularisation of new fishing gears and with additional infrastructure facilities like fishing harbours, jetties, ice plants, freezing plants and cold storages. Such a package of scheme is to be introduced from the year 1987-88 and these schemes when implemented are expected to usher in Blue Revolution in Tamil nadu.