

KADALEKUM KANIVUKAL

(Bounties of the Sea)

Farm School Series on marine fisheries
broadcast by All India Radio, Thrissur

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Published by



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Matsyapuri P.O., Cochin - 682 029

&



ALL INDIA RADIO
Ramavarmapuram, Thrissur - 680 631

ECONOMIC ANALYSIS OF MARINE FISHERY OF KERALA

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Introduction

Marine fishery has a very prominent place in the economy of Kerala. It is the only source of livelihood for a population of about 8 lakh fishermen inhabiting 304 coastal villages stretched along 590 km coastline. The State contributes 5% of the country's total marine fish production and 6% of the fish exports. The marine fisheries sector contributes 10% to the GDP of Kerala and the average annual per capita consumption of fish in the State is estimated as 13.5 kg as against 3.5 kg in India.

Fishing units and occupational pattern

Marine fishing units presently under operation along Kerala coast can be classified as (1) traditional craft which include small plank built boats, dug out canoes and catamarans operating traditional gears such as boat seines, gill nets and hook and line (2) craft fitted with 9 to 40 hp out board engines operating mostly ring seines and trawl nets and (3) mechanised boats with 50 to 120 hp inboard engines. As per the latest available information, marine fishing along Kerala coast is shared by about 10,000 country craft with a contribution of only 3% of total annual fish landings of Kerala, and 15000 motorised units with 47% and 4200 mechanised units with 49% contribution.

Among the active fishermen or those who are engaged in sea fishing, 40% are only workers without having any means of production, 36% are having ownership in motorised units, 23% in non-motorised traditional units and 1% in mechanised units. About 60% of the mechanised boat owners do not work in their boats. Of the 2.2 lakh active fishermen 60,000 are engaged in non-motorised traditional fishing, 1.25 lakh work in motorised units and 35,000 in mechanised fishing units.

Production trend

The total fish landings of the State during 1973 was 4.5 lakh tonnes which showed a continuous declining trend and in 1980 it was only 2.8 lakh tonnes. Thereafter the trend was reversed and in 1988 it reached a level of 4.7 lakh tonnes only marginally surpassing that of 1973. This period of 15 years witnessed tremendous increase in the pace of mechanisation and initiation of motorisation of country craft which could not make considerable impact on marine fish production of Kerala. This revival could be attributed to the introduction of ring seine operation. During early eighties the motorised country craft used to operate only traditional gears. After mid eighties ring seine was introduced and within 2-3 years there was a wide-spread expansion of its operation throughout the Kerala coast. During 1990 marine fish production of Kerala reached its peak of 6.93 lakh tonnes, about 40% of which was contributed by ring seine units, thanks to the abundance of oil sardine during this year. Induced by its better catching efficiency and higher monetary returns, the size of craft as well as gear has been gradually increased, which resulted in higher unit cost. This cost escalation coinciding with the dwindling oil sardine landings from 1991 onwards, led to reduction in the pace of ring seine development and its contribution to total landings in 1993 and 1994 was only about 27%. In 1997 it was 29%. During nineties the level of total marine fish production was maintained at about 5.5 lakh tonnes mainly because the reduction in ring seine landings was compensated by the increased contribution of mechanised trawl units. In 1990 it was 30% which further increased to 56% in 1994. During 1997, the latest year for which data is available, of the total landings of 5.75 lakh tonnes about 49% was contributed by mechanised trawlers, 47% by motorised crafts and 4% by non-motorised country crafts. Of the total motorised landings 61% was caught in ring seines and 7% in mini trawl nets, which indicate that different technological options were available to the traditional fishermen. The traditional gears have been replaced by ring seine (mini purse seine) and mini trawl nets, the gears so far operated only in mechanised fishing units.

Cost and earnings

Based on the data relating to 1996-97, the average cost and earnings of different types of fishing units have been worked out. Trawler is the major type of mechanised fishing

unit in operation throughout Kerala. The average operating cost per day of operation of a medium size trawler worked out at Rs. 3,850 of which 55% was accounted for fuel and 30% for wages. Total cost per day was about Rs. 4,830. With the daily average earnings of Rs. 5,800 the net profit was Rs. 970. For larger ring seine unit revenue per day of operation worked out at Rs. 6,500, operating cost at Rs. 4,685 and total cost at Rs. 5,660 having a net profit of Rs. 975. The net profit of an average size of ring seine at Rs. 990 was marginally higher than that of large size ring seines mainly because of the higher operating cost of the latter. For mini trawl operated by country craft fitted with 9 to 15 hp out board engines, net profit was Rs. 180, for gill net Rs. 135, for hook and line Rs. 82. However, for traditional fishing units, both motorised and non-motorised, most of the workers were owner operators and their returns consisted of net profit and wages. Thus the average returns per day of operation for a worker in ring seiners was about Rs. 110/-, mini trawl operating unit Rs. 120/- and other motorised units about Rs. 85/-. For non-motorised units it was about only Rs. 60/-. For mini trawl operators, even though daily income of worker was more than that in ring seiners, the annual income for the former is less than that of latter because of less number of operating days in a year for mini trawl.

The average earnings for a worker in a trawler was Rs. 145/- to 180/- and in a purse seiner, Rs. 125/-. The average operating days per year was 180 for trawler and 120 for purse seiner.

The total value of marine fish caught during 1997 based on the landing centre prices or the income received by the producers of marine fish was estimated at Rs. 1,500 crores. Since the average share of fishermen in consumers' rupee was about 50% the value at the consumer level was about Rs. 3000 crores of which an amount of Rs. 750 crores was export earnings. Of the 1500 crores earned by the fishermen through marine fishing, fuel expenditure accounted for Rs. 169 crores and the balance amount was added to the GDP of the State as income to different factors of production. Marine fisheries is a sector where oil is used for maximum productive purposes. The annual average value of fuel used and imported engines in terms of rupees worked out at Rs. 245 crores whereas the foreign exchange earnings

amounted to Rs. 750 crores. Hence, the demand from boat owners for the subsidised supply of fuel for their engines is highly justifiable.

Marketing

Fish marketing system has recently very much improved due to the better infrastructure such as road, transport and communication facilities. However, the presently available facilities for storage and processing are catering to the needs of only export marketing. Whenever there is an enhanced production due to the abundance of any commercially important variety of fish having only domestic demand, there will be a glut in the market and the producers are not benefited due to marketing bottlenecks. So also, if the export market is adversely affected by one or the other factors the fishing industry will be in doldrums. The only way out from this is to adopt adequate measures for the expansion of domestic marketing system. The growth of any industry depending mainly on export market has to face lot of risks and uncertainties.

Credit requirements

A prerequisite for the proper development of any industry is the availability of funds for investment on reasonably favourable terms and conditions. It is all the more true in the case of marine fisheries sector, because the people involved in it are considered as economically very poor and socially much backward. Further, the fishing activity is highly risky. Fish provides the cheapest animal protein to the poor people of this country. During seventies 80% of the credit needs of traditional sector was catered to by private money-lenders which has recently reduced to 40% due to the increased availability of institutional credit. The loans taken for productive purposes was only 20% during seventies which increased to 55% during nineties.

Liberalisation

The policy of giving licences to foreign deep sea vessels in the name of liberalisation and globalisation is highly detrimental to the interests of our coastal fishermen for whom marine fishing is the only source of occupation. These deep sea vessels with most modern equipment do indiscriminate

intensive fishing in the offshore waters, which ultimately may lead to depletion of stock of many of our commercially important fishes. Our fishermen vehemently protested against this policy and started nation wide agitation and a committee was constituted to look into it. In spite of this committee's recommendation, no concrete policy has been formulated to deal with this problem. Adoption of national marine fishery policy is highly essential for the overall development of this sector.