

# SOUVENIR



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for the Headquarters of  
**CENTRAL MARINE FISHERIES RESEARCH INSTITUTE**  
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## THE TASK BEFORE THE CENTRAL MARINE FISHERIES RESEARCH OF INDIA

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The Central Marine Fisheries Research Institute has, after decades of valuable research and investigation on marine fishes and fisheries, been able to upgrade its technology with recently acquired vessels and equipment.

With its own building and more facilities, it is hoped that it will be able to adopt advanced technology to solve the main problem of the Industry which in a nut-shell is 'Economic fishing on a sustained basis in the Maritime zone of India and beyond'.

The present position is that India's production hovering around 1.6 million tonnes a year is contributed 60% by traditional fishing, 39% by Mechanised boats and 1% by Deep Sea fishing. There were 86 Nos. of deep sea vessels in 1984-85 including Chartered vessels.

There have been comments that there has been no real progress in deep sea fishing with only about 16 vessels at present against a reduced target of 250 in the Sixth Plan period.

There is conflict in almost every maritime fishing country among the fishermen using different sizes of craft and gear. This has started in India and controversies in some cases are taking an ugly turn.

Revision of Charter rules in April 1984 specifying revised zones as indicated in August 1982 by the Government of India has sharply reduced the number of such vessels even though the period of licence has not expired in some cases.

Depletion of shrimp in certain areas is suspected as indicated in the reduction in the catch per unit effort. This is true in case of shrimp trawlers operating off Paradip where data is available for a number of years. But for a cyclone which rendered 50% of the craft in-operative the fishing by all the boats

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would have been uneconomic. A situation similar to this is also being faced in Kerala.

To add to the problem, important fisheries of the lagoons are sustained economically by migratory fish from the sea. The stock of these fish in the sea has relationship with the lagoon fisheries. We have very little information regarding the limitation of these stocks in the sea. The same applies to estuaries.

Until the complicated inter-relationship of the different stocks of species is studied in a co-ordinated manner, a rational policy of fishing cannot be enunciated.

While the concerned Ministry is responsible for rational development as a whole, it evolves on the Marine Fisheries Research Institute to guide the fishing policy by providing a sound technological base.

Buildings do not make research but men and equipment do. The Fishery Survey of India conducted surveys of about 71000 sq. kms. of sea area in 1984/85. Some surveys of the EEZ have also been made. The results together with the data available to this Consultant from some Private Industries bring out some interesting points. Fishing is economic in some areas in certain seasons only. These are the well defined fishing Banks like the Wadge Bank and the Kori Great Bank. The catch rate in the fishing season is almost doubled. The reason for this, as is well known, is mainly migration of some commercial species but little is known about the details.

The important data of Fishery Survey of India is not correlated with factors governing abundance.

Breeding grounds of few commercial fishes are known, so also their behaviour to different gear.

It is obvious that the Central Marine Fisheries Research Institute, which had at one time laid down and monitored the programmes of the Fishery Survey of India should now be in charge and important exploratory cruises will include studies on environment.

Sustained investigations to know the limitations of the stocks and their migratory pattern in space and time should be undertaken on a national scale, also inviting international co-operation where required. There have been sporadic efforts to study migration of some fishes in the West Coast of India and in the Chilka Lake. For want of sustained effort, the results have only been indicative.

Distribution of the important commercial species in space and time must be determined as early as possible to enable the concerned Ministry to determine its policy and take suitable measures for regulating and financing the

Industry. The present *ad hoc* measures are leading to a lot of wastage in effort and money.

The Deep Sea Co-ordination Committee of the Ministry of Agriculture of the Govt. of India recommended that data of fishing by commercial fishing vessels should be sent to CMFRI in a prescribed proforma. The proforma is already prescribed on an international scale which is the standard log book of the fishing vessel. For enabling the CMFRI to arrive at conclusions it should be made obligatory for commercial vessels and selected mechanised boats with educated skippers to supply a copy of the log book to CMFRI. A suitable incentive may be given.

A very important factor is to create a batch of scientists with a love of the sea, good sea legs and ability to work under gruelling conditions.

The techniques of studying population dynamics are well developed. Determination of the priority areas of work, obtaining equipment and training men in their use, and rapid analysis of the data with a suitable computer will enable the CMFRI to advise the Ministry in an objective manner to make fruitful legislation in promoting and regulating fisheries.

These will be the tasks before the CMFRI which is a National Institute to provide a sound technological base for optimum development of India's marine fisheries.