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## SYMPOSIUM ON CORALS AND CORAL REEFS

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SOUVENIR

## THE CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

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Central Marine Fisheries Research Institute was established early in 1947 at Madras and was shifted to its present headquarters at Mandapam Camp in 1949. The primary function of the Institute has been to collect detailed information on various aspects of the biology and fishery of the commercially important living resources of the seas around India like fishes, crustaceans, molluscs, seaweeds etc. The aspects of study include the distribution, habits, life-histories, age and growth, reproduction, food, movements, abundance and the relation between organisms and their environment, such information being essential for scientific exploitation of resources to obtain maximum sustainable yields, at the same time maintaining the stocks at optimum level-As more than three-fourths of the marine fish catches are landed along the west coast of India, and as the regional fisheries and species contributing to them differ, the work of the Institute is largely decentralised for a proper assessment of fish stocks and their rational utilization and is conducted at different sub-stations and units distributed along the coastline of India.

The various research problems are handled by three major divisions, viz., Fishery Biology, Marine Biology and Oceanography, and Fishery Survey. As a result of the work done at this Institute on the above subjects covering economically important groups or species of fishes, prawns etc. valuable fishery-based information has been gathered and their resources estimated. The sardines, mackerel, offshore and oceanic fishes, prawns and molluscs have received special attention and the related marine biological and oceanographic conditions have been studied.

The fluctuations in abundance of oil sardine and mackerel. the two most important pelagic species in our waters, have been studied in detail. The data collected on offshore and oceanic fishery resources have paved way for better commercial exploitation of the concerned species. The distribution pattern and seasonal fluctuations of the commercial species of prawns and lobsters are now known. Several interesting facts in the lifehistories of a number of species of prawns which have a bearing on their commercial catches have been discovered. Investigations on a number of other minor fisheries have also yielded basic data useful for commercial exploitation. Extensive under-water survey of pearl and chank beds in the Gulf of Mannar were carried out for estimating their resources. The resources have also been estimated by systematic surveys as a basis for the development of the industry and potentialities of Gelidium and Sargassum for the manufacture of high grade agar and alginate have been demonstrated giving birth to a new industry in the country. Investigations on marine biological and oceanographic factors affecting various fisheries along the west coast were initiated first on M.O. KRISTENSEN and then continued on R. V. KALAVA and R. V. VARUNA placed at the disposal of the Institute by the Indo-Norwegian Project. Considerable work has been carried out on the taxonomy and seasonal fluctuation of the standing crop of plankton and its distribution as well as physical and chemical factors influencing their production. The magnitude of organic production has been assessed and compared with fish landed; it was revealed that fish harvest could be increased 3 or more times the present level. Hydrographical studies have indicated upwelling of nutrient-rich waters over most of the west coast during south-west monsoon season which leads to high plankton production. A number of convergence and eddy zones occur on the shelf which are of fisheries interest, pelagic as well as demersal. A sampling design for collection of fisheries statistics was evolved for the first time and put into operation by this Institute from 1950 onwards, resulting in reasonably accurate estimates of the marine fish landings and their composition. Fishery survey work is continued to follow the relative fluctuations in fish catches on an all-India basis,

thereby contributing to the continuing resources survey. Initially fishery technological work was also carried out at this Institute. The Institute is recognised by the Inter-University Board for research work on marine sciences leading to the doctorate degree and a number of scholars of this Institute took their Ph.D. degrees from different universities.

Planned and systematic investigations on the marine resources based on collection of scientific data at national level have been conducted by this Institute for the past two decades. It was felt the time had come to evaluate the vast amount of knowlege gathered in this field and make available to the industry the useful information emerging therefrom, to help plan future programmes aimed at development and rational utitization of marine resources for the benefit of the country. With this object in view the Institute organised a symposium on the "Living resources of the seas around India" at Cochin in December 1968. The wide range of contributions presented and the useful discussions that took place more than justified the timely need of the same.

The Institute which was under the Ministry of Food, Agriculture, Community Development and Co-operation (Department of Agriculture), Government of India, was transferred to the Indian Council of Agricultural Research. New Delhi, with effect from 1st October 1967. The Institute's publications include (1) The Indian Journal of Fisheries (published earlier on behalf of the Ministry of Food, Agriculture, C.D. & Co-opn, Government of India) (2) Advance Abstracts of Contributions on Fisheries and Aquatic Sciences in India and (3) Bulletin of the Central Marine Fisheries Research Institute. The papers published by the scientific staff of this Institute number over 800 to-date.

Apart from the above publications, the Marine Biological Association of India which has been organised and run mainly by the co-operative efforts of the scientific staff of the Central Marine Fisheries Research Institute with its headquarters at Mandapam Camp, publishes regularly the Journal of the Marine Biological Association of India. Its other publications include the Proceedings of Symposia (i) on Scombroid Fishes held in 1962

(ii) on Crustacea held in 1965 (iii) on Mollusca held in 1968, and *Momoirs* (i) on Ribbonfishes of India (ii) on the Dinophyceae of Indian Seas. The service done by the Association to the cause of marine science has already received recognition within this country and outside.

The first symposium by the Marine Biological Association of India on "Scombroid Fishes" was held at the headquarters of this Institute at Mandapam Camp during January 12-15, 1962 and the present one on "Corals and Coral Reefs" is the second to be held here of the four conducted so far by the Association. It is hoped that the same will be as successful as the previous ones. The Institute has great pleasure in welcoming the participants and offering best wishes for the success of the Symposium.