

# CMFRI bulletin 44

Part Three

FEBRUARY 1991



## NATIONAL SYMPOSIUM ON RESEARCH AND DEVELOPMENT IN MARINE FISHERIES

**MANDAPAM CAMP**

16-18 September 1987

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Papers Presented  
Sessions V, VI & VII

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

Central Marine Fisheries Research Institute  
**40**  
YEARS  
1947-1987

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Bulletins are issued periodically by Central Marine Fisheries Research Institute to interpret current knowledge in the various fields of research on marine fisheries and allied subjects in India.

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*Published by*

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**Cochin-682 031, India**

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**Limited Circulation**

## MARINE NATIONAL PARK AND CONSERVATION OF FISHERIES RESOURCES

A.G.K. Menon  
*Zoological Survey of India, Madras*

### ABSTRACT

Industrial development often takes priority over other sectors in developing countries. In the process, problems like pollution of air, water, growth of slums, lack of sanitary facilities and other environmental hazards greatly increase, reaching to uncontrollable proportions. In the industrial development, in the sphere of both Fisheries and Tourism, mistakes of development are common. It is high time that we pay some attention to the proper planning and development of the seafood export industries along our fine fishing coast.

Similarly the other economic activities of sea, in particular the exploitation of the bed and coastal zones in the west coast for oil, have increased in recent years to such an extent that the detrimental effects on the ecological balance in some habitats are no longer minor.

IUFN and WWF have now launched a World Conservation Programme of the Oceans. The objective of the programme is the conservation of all marine forms of life. The urgent need for the establishment of Marine National Parks along the Indian Coastline for the purpose of conservation of our Fisheries resources is highlighted in the paper. On the east coast of India on the Tamil Nadu Coast, the fauna and flora of the Palk Bay and the Gulf of Mannar are the richest in India.

The Krusadi Island with the nearby Pulivasal and Shingle Islands and their reefs with the surrounding waters are proposed to be set aside as the Marine Park Research station. The string of sixteen coral islands stretching south and west of Krusadi Island should be declared as a Coral Reserve and the stretch of beaches west of Mandapam up to Tondi on the Palk Bay and to Valinokkam on the Gulf of Mannar side can be developed as excellent beach resorts.

### INTRODUCTION

In a developing country like ours which strives for better standard of living for its people and economic independence, projects of industrial development often take priority over other sectors. In the process, problems like pollution of air, water, growth of slums, lack of sanitary facilities and other environmental hazards greatly increase, reaching at times to uncontrollable proportions. The recent upsurge in conservation, preservation of natural resources, concern for ecology etc. are consequent to the result of bad planning which only aimed at getting quick commercial profits and material achievements.

As in industrial development, both in the spheres of fisheries, and Tourism, mistakes of development are common. Our marine product export has already touched a figure of over 500 crores a year and it is high time that we pay some attention to the proper planning and development of the seafood export industries along our fine fishing coast. Establishment of large marine product factories, boat building yards etc., may bring in development to a backward region but it has been noticed in several cases especially in the South-East coast of India that the development

has simultaneously caused dirt and filth and pollution of air of the coastal environment. Similarly the other economic activities at sea, in particular the exploitation of the sea-bed and coastal zones on the West coast of India for oil have increased in recent years to such an extent that the detrimental effects to the ecological balance in some habitats are no longer minor and incidental. The rapid advancement of technology in our country with the recent establishment of a Department of Ocean Development and the activities of the O N G C will inevitably bring about even more intensive and diversified uses of the sea and the sea-bed in future.

Two leading international organisations concerned with conservation of wildlife and their environment, the International Union for Conservation of Nature and Natural Resources (IUCN) and the World Wildlife Fund (WWF) have now launched a World Conservation programme of the Ocean (Anonymous, 1978; Allen, 1978). In this programme particular importance is being given to coastal and estuarine environments, and there is specified emphasis on monitoring the conservation status of critical marine habitats throughout the world and on the requirements for

Bangaram Island in the Lakshadweep situated close to Kavarathi, the capital island has recently been declared as a tourist centre. There is no restriction to coral collecting, sport fishing and SCUBA diving in Bangaram. Fishing in the lagoon for tuna bait is also extensively carried out. Foreign tourists especially Italians, East Europeans and Russians are now attracted in large numbers to Bangaram. The establishment of a Marine National Park in Suheli par is bound to further increase the tourist traffic and put the Union Territory of Lakshadweep on the world map of tourism while conserving the wild life and the environment. (Fig 1 and 2)

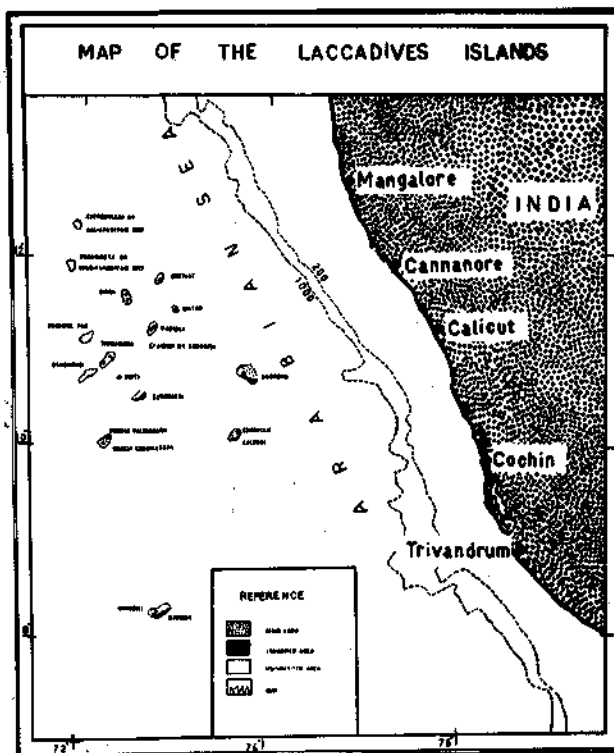


Fig. 1. Lakshadweep Islands.

#### PALK BAY AND GULF OF MANNAR

##### Marine National Park

On the east coast of India on the Tamilnadu coast, the fauna and flora of Palk Bay and the Gulf of Mannar are the richest in India. The chain of twenty coral islands of the region, with their reefs and shallow waters harbour a variety of animals and plants. The Gulf current enrich this fauna from day to day and the sheltered nature of the bay with its rich marine life and extensive beaches

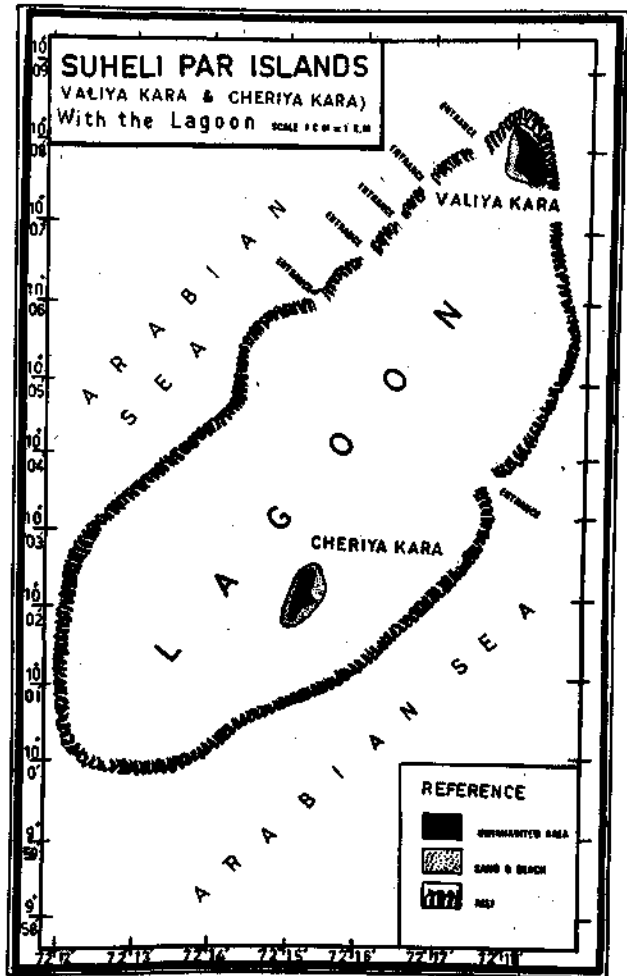


Fig. 2. Suheli lagoon and its islands, Valiakara and Cheriya Kara.

and the ancient and architecturally famous and beautiful temple of Ramaeswaram represent conditions ideally suited for the development of a Marine National Park (Fig.3)

##### Marine Park Research Station

The Krusadai Island with the nearby pullivasel and Shingle islands and their reefs with the surrounding waters are proposed to be set aside as the Marine Park Research Station (Fig.4).

The Krusadai Island is a small island roughly 3.22 km long and 0.8 km wide. The southern side and the eastern part of the northern shore of the island is muddy and fringed with mangrooves. It has extensive coconut, palmyrah and casuarina grooves. The marine fauna is rich and varied and have been described by various workers, both foreign and Indian (Boergesen, 1937 a, 1937 b,

### *The Beach Resort*

All the world over, especially from highly industrialised western countries, which have severe winter months, tourists travel to tropical areas where landscape is beautiful and the environment is unpolluted with natural bays and beaches to enjoy the sun, sand and the sea. The beach oriented tourist, travel for leisure and enjoyment and are altogether a different type of tourist from the scientist tourists who combine study with leisure. To attract these tourists considerable planning and development of our beaches are necessary.

In the island of Rameswaram, besides, the temple area on the eastern part of the island, there are vast stretches of uninhabited sandy beach areas especially on the Gulf of Mannar area between Dhanushkodi and Pamban and between the temple area and Pamban on the Palk Bay side.

Similarly the vast stretch of beaches west of Mandapam upto Tondi on the Palk Bay and to Valinokkam on the Gulf of Mannar side can be developed as excellent beach resorts for foreign tourists.

### *The Rameswaram Temple*

The Rameswaram temple built on the eastern sea front of the Rameswaram island is a great centre of pilgrimage for tourists from all over India and has great architectural and aesthetic appeal to foreign tourists. The amenities for both tourists and pilgrims have to be considerably improved to further develop the place for international tourism.

### CONCLUSIONS

Thus, the Palk Bay and the Gulf of Mannar area and the Suheli par in the Lakshadweep Archipelago should be designated as Marine National Parks. The Krusadai group of islands will make an excellent Marine Park Research Station, the rest of the islands in the Gulf of Mannar upto Tuticorin being set apart as the Coral Reserves. Industrial exploitation of coral reefs in this area should be strictly banned. Appropriate air/sea linkages and other amenities will have to be provided to encourage tourism in the area.

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