

# Mandapam And Its Environs

## **SOUVENIR**

Edited

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# Islands Around Mandapam

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Islands generally attract the attention of people with different interests. The islands around Mandapam offer the biologists a rich treasure of biological specimen. They also offer various areas of study for biologists, geologist and oceanographers. For common public they can be converted into attractive tourist spot where they can spend their time forgetting their worries in their routine life.

The islands around Mandapam are located as a part of the discontinuous barrier reef, the Mannar barrier reef. There are about fourteen islands around Mandapam with variety of flora and fauna in and around. They are: Shingle Island, Krusadai Island, Pallivasal, Poomarichan Tivu, Manoli, Manoli putty, Hare Island, Mulli Tivu, Vallai Tivu, Thalayari Tivu, Appa Tivu, Vallaiyamuni Tivu, Anaipar Tivu and Nallathanni Tivu.

## SHINGLE ISLAND

Shingle Island has an area of 13 hectares. North west shore is sandy and slopes rapidly down into moderately deep waters. It has higher steeping beaches or than other islands. According to Gravely et al., it consisted of two separate islands in 1878 and then formed the present Shingle Island between 1920-27. North eastern shores of this island is also sandy. Here we can find a large variety of living corals of beautiful shape and colour in abundance. South western shore is full of dead corals offering shelter for a rich variety of interesting fauna. In the past Singalese fishermen used to land here and stayed during their fishing operations. So it was called "Singala thivu", which was later called as 'Shingle tivu'. This island is fully covered with bushes and trees. Sometime back coral removal for commercial purposes was carried out from this island. No fishing activities were found in this island now. This island is 8 km away from Pamban.

## KRUSADAI ISLAND

This is generally called as the biologists paradise, because of the richness of the variety of fauna and flora. Large number of students and zoologists visit this island. Seaward beach ridges have a diverse vegetation of grasses and sedges. Mangrove woodland is extensive on north coast. Many ornamental species of plants were introduced in this island. The area of this island is about 66 hectares. Generally no fishing activity is found in this island. Fieldrats, birds, moths, beetles and garden lizards are the main inhabitants of this island. The Marine Biological Station which is at present functioning at Mandapam was established in this island and was carrying out valuable service to the cause of fisheries research in this area. Hydrobiology of the islands were regularly studied and recorded. Experiments on chanos culture, Oyster culture and seaweed culture were also attempted. At present pearl oyster culture is again tried with a view of commercialising the culture. The western end of the island is full with mangrove trees and other vegetations. The coral beds of these islands are well suited for biological habits and habitats. Several groups of animals find their shelter in this ecological niche. West of this coral bed, growth of sponges is found. The rare hemichordate the *Balanoglossus* thrives well in this island area. Coconut trees were introduced in this island. This island is 4 km away from Pamban.

## PALLIVASAL

This island is the continuation of Krusadai island, cut off by a shallow stretch of water. Northern part is muddy and marshy. Eastern and Southern shores are sandy. A continuous coral reef is projected into the sea from the southern shore. This forms an ideal shelter for an array of animal life, making this island an area of biological interest. The name of the island is derived from the word "Pallivasal" which means mosque. This has an area about thirty hectares. Thickly wooded jungle adds an attraction to this island. Occasionally fishing is carried out from this island. Here we can get somewhat potable water. This island is at a distance of about 7 kilometers from Mandapam.

## POOMARICHAN TINU

This island covers an area of about 18 hectares. The soil of this island is marsh. Thickly wooded jungle is spread over the island. The water area encloses a continuous reef. This island is also about 4 kilometers away from Mandapam.

## MANOLI ISLAND

Manoli island is about 2 kilometers long and 350 meters wide covering an area of 24 hectares, having a complex topography. The northern and southern beach ridges are separated by an area of *Thespesia* woodland. Pools and open mud flats are found. Trees (*Cordia subcordata*) and shrubs are found in large numbers in this island. Extensive coral reefs are present. Fishery, especially the "Kafankatt" fishery is regular during some seasons. The net will be spread during low tide; the fishes enter the enclosed area during high tide and trapped during the next low tide. Seaweeds are collected from this island area. This island is 6 km from Mandapam. The creeks and pools of this island are rich in mullet and chanos seeds. Large number of sea birds visit this island during March to September.

## MANOLI PUTTY

It is a very small island with an area of about 3 hectares. Extensive mud flats with a vast population of bushes are present. Patchy corals can be found around this island. From this island also fishing is carried out particular seasons. This island is 8 kilometers away from Mandapam.

## HARE ISLAND

This is the largest of the island in the fringing reef. It is 4 kilometers long with a width from 250 to 1800 metres. Total area is about 160 hectares. Human interference has made the vegetation and animal population different from that of other islands. Cattle, goats and monkeys are present in addition to the animal population of the islands of this area. Dense coconut gardens are found. Shore is sandy.

## OTHER ISLANDS

*Mulli thivu* is about 2000 metres in circumference. It is about 10 kilometres away from Mandapam Camp. Bushes are found throughout the island. Seaweed are collected from this island. *Vallal thivu* is also in the same area. It is 15 kilometres from Kilakarai. *Thallaiyari thivu* is about half the area of the above mentioned islands and is 15 kilometres from Kilakarai. *Appa thivu* is about 5000 metres in circumference. Seaweed collection is carried out regularly. *Vallaiyamuni* is 1500 metres in circumference and here also seaweed collection is carried out. *Anaipar thivu* is 15 kilometres from Kilakarai and is about 1500 metres in circumference. *Nallathanni thivu* is 5 kilometres from Mundel and has a circumference of about 5000 metres.

In most of these islands shore seines are operated and they support a good fishery. Live and dead corals are found. Many species of sea birds visit these islands.

## GENERAL FEATURES

### *Environment*

The environment of Mannar fringing reef is dominated by the seasonal monsoon wind. Wind shows annual variation from the north and North east from November to February and from south west in May to October. A maximum range of tidal amplitude at spring 0.81 m and at neap of 0.2 m is predicated. However during cyclone conditions covered by depression tidal waves as high as 5 meters are experienced.

### VEGETATION

Marine grass meadows are extensive on the reef flats. Mangrove vegetation is less extensive. Mud flat areas enclosed by sand spits are covered with meadows of *Arthrocnemum* and *Salicornia*. Interior woodland has *Thespesia populnea*, *Premna*, *Salladora*, *Calotropis*, *Accacia*, Palmyra and coconut.

### GEOMORPHOLOGY

Most of these islands are mostly alluvial, non-rocky and calcareous in soil condition. The islands are low and few meters above sea. The activities of corals or oyster and any mud depositional agencies are likely to flourish in these relatively calm seas.

### IMPORTANCE

There are plans to develop some of these islands into National Marine Park and make them an attractive tourist spots. In that case this area will assume much importance as the marine life in this area will be protected. Some of these islands are rich in fish seeds needed for fish culture which is gaining importance. Good fishery is also supported by some of these islands. There are immense possibilities to develop these islands into one of the most interesting tourist spots in India attracting large number of visitors along with specialists in different branches of science.

