



MARINE FISHERIES INFORMATION SERVICE

**TECHNICAL AND
EXTENSION SERIES**

**No.11
September 1979**

**CENTRAL MARINE FISHERIES RESEARCH INSTITUTE
COCHIN, INDIA**

INDIAN COUNCIL OF AGRICULTURAL RESEARCH

IMPACT OF THE CYLONE OF NOVEMBER 1978 ON FISHING ACTIVITIES AT RAMESWARAM

Rameswaram Island is located in the south east coast of Tamil Nadu lying in between the Indian main land and Sri Lanka and bounded by Palk Bay on the north and the Gulf of Mannar on the south (Fig. 1). It is triangular and has an area of about 52 sq. km with a population of about 42,000. The island enjoys both the monsoons, the north-east and the south-west. The south-west monsoon extends from middle of May to beginning of September whereas the north-east monsoon commences in October and ceases in February or early March. With the onset of south west monsoon the Gulf of Mannar becomes rough and choppy, while the Palk Bay is calm. During the north-east monsoon these conditions are reversed.

A major cyclone hit the island on 24-11-78. A team from Central Marine Fisheries Research Institute, Cochin camped at Rameswaram for a period of about

18 days to make an on-the-spot study of the impact of the cyclone on the fishing activities at Rameswaram. A brief account of the cyclone and its impact is presented here.

The cyclone lasted for about 12 hours starting from noon. It was very intense for about 2½ hours between 5 and 7.30 P.M. The velocity of the wind was about 120 km per hour. The cyclone forecast had been given in advance, and as such all precautions were taken to restrict the loss to the minimum. Hence no loss of life had been reported. But it had caused tremendous loss to the fishing sector, particularly mechanised sector.

Assessment of damage

The total loss to the mechanised boats was estimated at about one crore of rupees. Out of 500

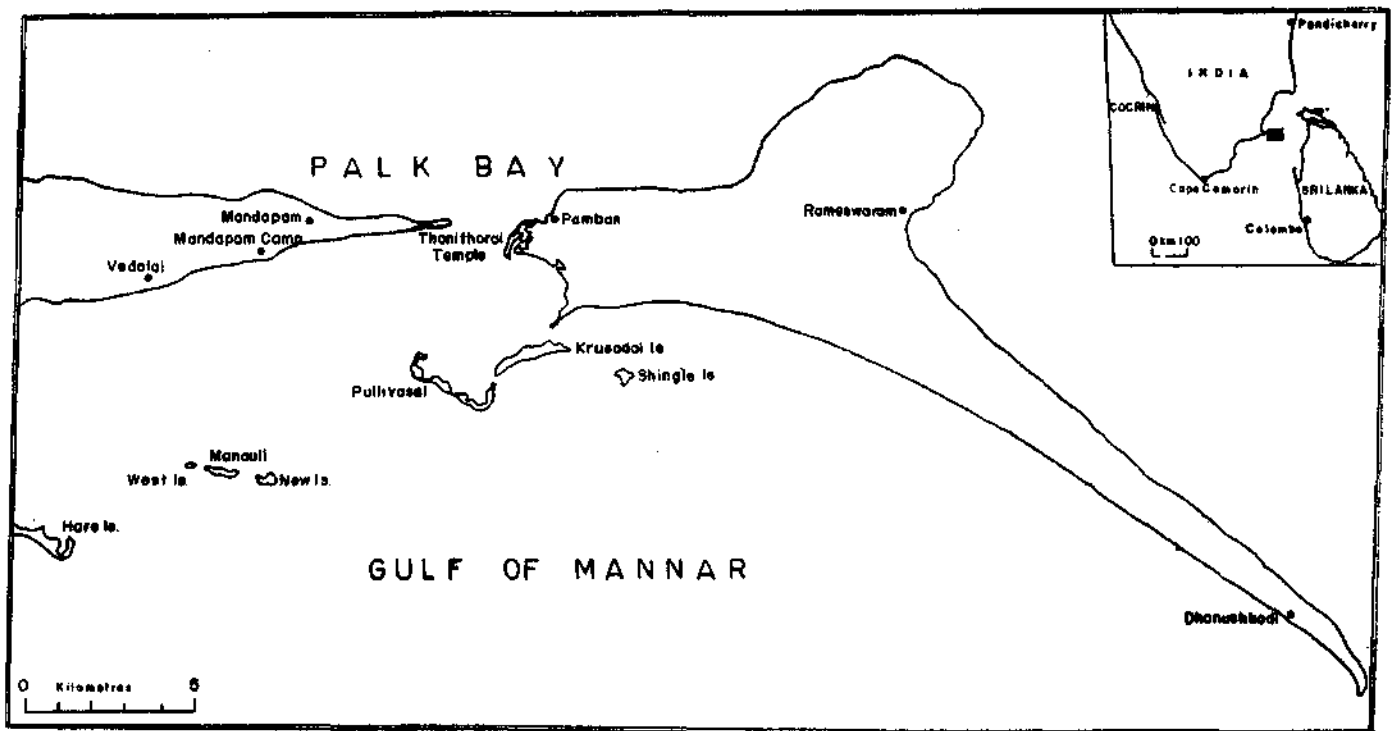


Fig. 1 Map showing the location of Rameswaram Island

boats operating at the time of cyclone, about 50 boats were either sunk or lost, 120 boats heavily damaged and 300 boats partly damaged. The extent of loss against these categories was estimated at Rs. 40, 36 and 30 lakhs respectively. But most of the boats lost or heavily damaged were under insurance cover. The loss to trawl nets numbering about 50 was estimated at one lakh of rupees. Carrier boats were also damaged due to the cyclone and the loss incurred on this account amounted to one lakh of rupees.

Information on size, H.P. and purchase value of the damaged boats was collected from 104 boat owners (Table 1 & 2). About 53% of these boats were 30' in length and the rest 32'. Among the 30 footers and 32 footers about 76% and 86% of the boats respectively have been manufactured after 1972. The H.P. of all the 30 footers were in the range 32.5-47.5 whereas for 32 footers about 64% of them were in this range and the rest 52.5 to 65.0 H.P. About 290 houses were completely damaged and 590 partly damaged.

Impact and rehabilitation

The employment potential of the 500 mechanised boats engaged in trawl fishing prior to the cyclone, at

about 10 persons including 6 fishermen per boat, was about 5,000 persons. Due to the cyclone there was no fishing from 24th to 30th November 1978 immobilising all these fishermen. On 1st December 1978 about 50 boats went for fishing and there was an increase in the number of boats going out for fishing on subsequent days till 9th December, the number ranging from 50 to 100. Again there was a set back in fishing activities due to another cyclone threat from 10th to 12th December. However, in the beginning of January 1979 considerable progress in fishing activities was observed with about 300 boats going out for fishing.

The estimate of fish landings for November and December 1978 was 1,874 tonnes valued at Rs. 0.67 crores. During the corresponding period of 1977 the landings were estimated at 2,394 tonnes valued at Rs 2.21 crores. The decrease of 520 tonnes, mostly penaeid prawns, observed during the period covering the cyclone compared to November and December of 1977 was valued at Rs. 1.54 crores. This loss may be attributed to the immobilisation caused by the cyclone. During January 1979 the estimate of fish landings at Rameswaram was 2,187 tonnes valued at Rs. 0.68 crores as against 1,443 tonnes in January 1978 valued at Rs. 0.65 crores, the difference in value being very small

Table 1. Details of size and H. P. of 104 damaged boats

H.P.	Number of boats		Total
	30' length	32' length	
32.5	12	3	15
37.5	16	3	19
40.7	4	—	4
42.5	10	5	15
45.0	2	10	12
47.5	10	11	21
52.5	—	2	2
60.0	—	3	3
62.0	—	5	5
65.0	—	8	8
	54	50	104

compared to the earlier period. In the subsequent months the landings further picked up restoring normalcy by March 1979.

The Government of Tamil Nadu took immediate action to provide relief measures to the victims of the cyclone. The fisherfolk affected were given help both in cash and kind. Synthetic yarn for fabrication of nets were distributed and loans were offered at reduced interest rates.

The boats that got damaged during cyclone period were attended to by a heavy influx of carpenters, mechanics and other labour force from the mainland. This has accelerated the repair works and improved the fishing activities within a short period and as stated

Table 2. Purchase particulars of 104 damaged boats

Year of manufacturing	Number of boats		Average purchase value per boat (Rs.)
	30' length	32' length	
1965	1	—	50,000
1966	—	—	—
1967	2	—	75,000
1968	—	1	75,000
1969	1	—	75,000
1970	1	—	80,000
1971	2	4	80,000
1972	7	3	90,000
1973	7	6	90,000
1974	6	1	1,00,000
1975	8	19	1,20,000
1976	7	7	1,25,000
1977	1	3	1,25,000
1978	6	3	1,25,000
Not Available	5	3	—
Total	54	50	

earlier, by the end of March '79 the fishing activities in the island have been restored.

This is prepared by C. R. Shanmughavelu, R. Sathiadass and S. Haja Najeemudeen in association with other staff of F. R. A. Division. The help rendered by the staff of Mandapam Regional Centre of C. M. F. R. I. is gratefully acknowledged.

