

PROCEEDINGS OF THE SYMPOSIUM
ON
LIVING RESOURCES
of
THE SEAS AROUND INDIA



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AN APPRAISAL OF THE FISHERIES RESOURCES OF THE COASTAL WATERS OF MADRAS STATE

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ABSTRACT

The Madras State has a coastline of 620 miles with an inshore belt of 9,000 sq. miles and a continental shelf of 30,000 sq. miles. The Bay of Bengal, Palk Strait, Gulf of Mannar and the Arabian Sea with their varied hydrobiological conditions contribute to varied fisheries resources. Exploitation is confined to the coastal areas, within 10 fathoms, with non-powered indigenous crafts. But, with introduction of motorised boats, the annual catch has increased to four times from 44,000 tonnes in 1950-51 to 1,75,000 tonnes in 1966-67. Offshore fishing grounds between 10 and 40 fathoms have an estimated stock of 84,000 tonnes, mostly of mackerels, tunas, sea-breams, rock-cods and shrimps for immediate exploitation. The Wadge Bank extending over 4,000 sq. miles off Cape Comorin sustains a large reserve of demersal fishes and provides scope for expansion of trawling with larger vessels.

THE Madras State has a coastline of 620 miles. This seaboard is touched by the Bay of Bengal to a length of 220 miles, Palk Strait 170 miles, Gulf of Mannar 195 miles and the Arabian Sea 35 miles. The inshore belt and the continental shelf are estimated to be about 9,000 and 30,000 sq. miles respectively. These areas sustain a prodigious amount of varied fish life, which are exploited by the fisherfolk, about 2½ lakhs in number of whom 90,000 are active fishermen. They inhabit 310 hamlets along the coast. The crafts employed by them are mostly the indigenous catamarans and canoes, which number about 28,000 and 5,000 respectively. These fishermen operate about 38,000 drift and gill nets, 10,000 boat-seine nets, 6,000 stake nets, 25,000 shore-seine nets, 1,500 cast nets and several lines and hooks.

With their indigenous crafts and tackles, the fishermen are able to exploit the coastal waters within 10 fathoms. However, there has been a steady increase in the annual landings, as shown below, especially due to use of drift and gill nets made of nylon twine and to introduction of operation of bottom-set nets, trawl nets and small mechanised boats during the last decade. The annual catch has increased from 44,000 tonnes in 1950-51 to 1,75,000 tonnes in 1966-67.

Year	Weight in tonnes	Approximate value (Rs. in lakhs)
1957-58	68,000	600
1958-59	74,000	650
1959-60	82,000	750
1960-61	92,000	800
1961-62	94,000	830
1962-63	1,34,000	1,060
1963-64	1,54,000	1,630
1964-65	1,60,000	1,790
1965-66	1,65,000	1,790
1966-67	1,75,000	1,970

The average percentage composition of the landings for the state is as follows:

Sardines and allied forms	..	10
Silver-bellies	..	18
Pomfrets	..	8
Ribbon-fishes	..	7
Sharks and rays	..	6
Seer-fishes	..	5
Cat-fishes	..	5
Horse-mackerels	..	4
Perches	..	4
Sabre-fish	..	4
Big-jawed jumper	..	4
Prawns	..	4
Mackerels	..	3
Jew fishes	..	3
Leather jackets	..	2
Other varieties	..	12

There are seven maritime districts. The landings along their seaboard is as follows:

District	Length of coastline, miles	Landings, tonnes (1966-67)
Madras	.. 11	18,000
Chingleput	.. 88	25,000
South Arcot	.. 52	15,000
Thanjavur	.. 148	20,000
Ramanathapuram	169	40,000
Tirunelveli	.. 110	22,000
Kanyakumari	.. 42	35,000

The important fisheries of each district vary and are as shown below.

Madras.—Horse-mackerels, prawns, ribbon-fish, seer, mackerels, mullets, white-baits, sabre-fish, sardines, anchovies, sharks and silver-bellies.

Chingleput.—Ribbon-fish, mackerel, mullets, horse-mackerels, prawns, sardines, sabre-fish, white-baits, seer, sharks, jew fishes and anchovies.

South Arcot.—Ribbon-fish, prawns, sharks, sabre-fish, big-jawed jumper, sardines, mackerels, and horse-mackerels.

Thanjavur.—Mulletts, cat-fishes, skates and rays, jew fishes, leather-jackets, thread-fins, cock-up, horse-mackerels, sharks and white-baits.

Ramanathapuram.—Silver-bellies, seer fish, sabre fish, cat-fishes, sharks, sardines, pomfrets, ew fish, skates and rays, leather-jackets, rock-cods, big-jawed jumper and horse-mackerels.

Tirunelveli.—Ribbon-fish, big-jawed jumper, cat-fish, anchovies, sardines, perches, horse, mackerels, white-baits, leather-jackets, sharks, jew fishes and seer.

Kanyakumari.—White-baits, sharks, ribbon-fish, horse-mackerels, tunnies, cat-fishes, big-jawed jumper, lobsters, seer, rock-cods, prawns and gar fish.

For further expansion of the fishing operations, the offshore waters have to be exploited. The potential of these grounds is considerable; and it has been estimated that the area between 10 and 40 fathoms has a stock of 84,000 tonnes, mostly mackerels, tunas, sea-breams, rock-cods and shrimps, that can be exploited immediately. The urgent need for fishing harbours with all servicing and processing facilities for fishing vessels is being met with by construction of two such bases at Madras and Tuticorin at an estimated cost of 8 crores of rupees, during the Fourth Five-Year Plan period. The Madras harbour can facilitate the exploitation of the Coromandel coast extending from Pulicat to Point Calimere. The Tuticorin harbour will serve as base for exploiting the Gulf of Mannar extending down south into the Indian Ocean. The existence of the Wadge Bank off Cape Comorin, with an area of over 4,000 sq. miles and having a reserve of demersal fishes, is an advantage for intensive exploitation.