



# समुद्री मात्स्यकी सूचना सेवा

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## GOAT FISH RESOURCES OF INDIA WITH SPECIAL REFERENCE TO ITS OCCURRENCE IN THE SHRIMP TRAWLERS AT SAKTHIKULANGARA AND COCHIN FISHERIES HARBOUR\*

The goatfishes or red mullets of the family Mullidae form one of the important ground fish resources along the Indian coasts. With an annual average catch of about 5,000 t obtained from the Indian waters during 1978-'87 period, the goatfish landings exhibited gradual increase especially during 1984-'85 period (Fig. 1). These fishes are an important by-catch of the commercial shrimp trawlers landed at various bases along the Indian coast.

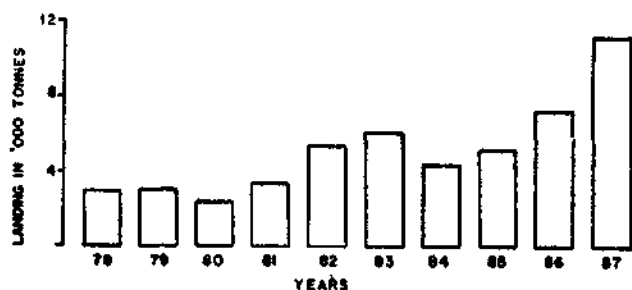


Fig. 1. Goatfish landings along the Indian coast during the period 1978-'87.

The catch trend of the goatfishes along the maritime states during the periods 1978-'87 indicates a maximum annual average catch of about 1,300 t obtained from the Andhra Pradesh followed by Tamilnadu (including Pondicherry) and Maharashtra. Though no landings were reported along the West Bengal coast most maritime states reveal gradual increase in the catches during the recent years (Fig. 2). A comparative study in the catch indices points out that an annual average of 3,700 t were landed along the east coast during the period 1978-'87 accounting to more than 70% of the total goat fish landings from the seas around India.

Kerala ranks third in the landings of goatfishes with an annual average of 182 t during the period, 1978-'87. Earlier studies indicate that these fishes constituted about 1% among the ground fish resources off Cochin. It is also reported that goat fishes appeared in the fishery at Vizhinjam along the southwest coast of India during April and lasts upto September. Based

on this view, observations made at two major mechanised landing centres along the Kerala coast viz, Sakthikulangara and Cochin Fisheries Harbour during the period 1981-'88 present an unusual catch trend in the goat fish landings.

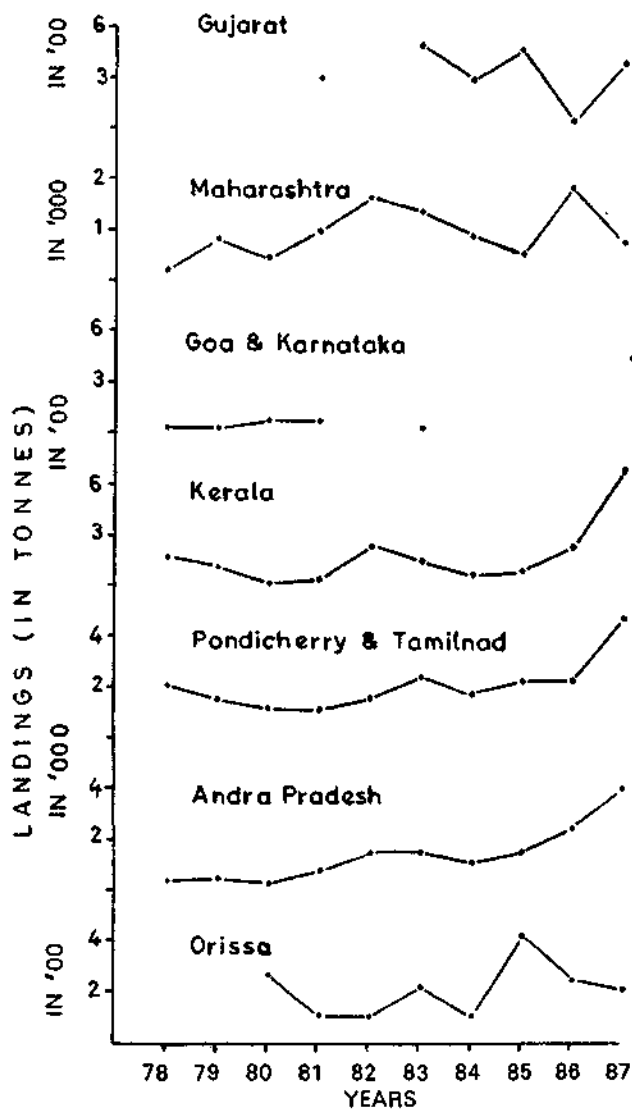


Fig. 2. Goatfish landings in various maritime states during the period 1978-'87.

Though no catch was recorded during 1981-'86 period at Sakthikulangara the fishes appeared in the mechanised catches only during August-September period of 1987 followed by considerable catches in most of the months in 1988. A similar trend was noted in the mechanised catch composition of Cochin Fisheries

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**Table 1.** *Percentage contribution of goat fishes to the monthly total landings from the mechanised catches at Sakthikulangara and Cochin Fisheries Harbour*

Centres Year/Month	Sakthikulangara		Cochin Fisheries Harbour		
	1987	1988	1986	1987	1988
January	—	—	—	—	3.03
February	—	—	0.40	0.14	1.33
March	—	—	0.73	1.04	4.90
April	—	—	0.41	—	1.31
May	—	16.85	0.89	0.31	4.31
June	—	8.48	0.13	1.73	0.54
July	—	5.91	—	—	—
August	0.71	4.63	—	—	—
September	8.33	20.87	—	—	—
October	—	27.56	—	0.10	0.07
November	—	21.50	7.49	0.29	1.40
December	—	10.31	0.24	0.08	5.30

Harbour also where no catch was recorded during 1981–'85 period. It is interesting to note that sudden appearance of these fishes was recorded here in the latter

years of the period under observation in most of the months excepting July–September during which season the number of operations of trawler units were much restricted due to monsoon.

The percentage contribution of goat fishes to the monthly estimated catch of the total mechanised landings was maximum during September–November period at Sakthikulangara which was not in conformity with the earlier studies on this resources off Vizhinjam. The percentage composition analysis at Cochin Fisheries Harbour indicated highly fluctuating trend in the monthly catches (Table 1). *Upeneus vittatus* was the predominant species recorded in both centres during the period of observation.

The goat fishes though form an important constituent of the mechanised trawler catches in most of the bases elsewhere along the Indian coast, the sudden appearance of this group as an important by-catch in the shrimp trawlers operated from Sakthikulangara and Cochin Fisheries Harbour is an unusual feature during the present period under study. While trawling is carried out in the respective traditional fishing grounds by the trawlers of these bases, the present finding on the sudden appearance of goat fishes in the mechanised catches in recent years deserves special attention.

