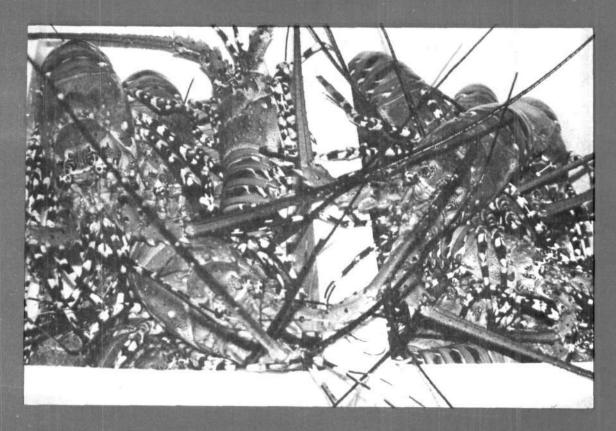


# समुद्री मारिस्थकी सूचना सेवा MARINE FISHERIES INFORMATION SERVICE

No. 123

OCTOBER 1993



तकनीकी एवं TECHNICAL AND विस्तार अंकावली EXTENSION SERIES

केन्द्रीय समुद्री मात्स्यिकी CENTRAL MARINE FISHERIES अनुसंधान संस्थान RESEARCH INSTITUTE कोचिन, भारत COCHIN, INDIA

> भारतीय कृषि अनुसंधान परिषद INDIAN COUNCIL OF AGRICULTURAL RESEARCH

## **HEAVY LANDING OF BROWN POMFRET AT TUTICORIN\***

Fishes of the family Stromateidae were never caught in abundance by traditional fishermen at Tuticotin. Catches in small numbers were recorded in gill nets and shore seines in the past and as such were grouped under "miscellaneous" fishes. From December 1992 to February 1993 bumper catch of brown pomfret Stromateus niger was recorded at Harbour Point landing centre which is a traditional site for shore seine operations at Tuticorin. Some enterprising shore seine fishermen after seeing schools of brown pomfret moving near the Tuticorin harbour anchorage used their encircling net to catch them.

During the three months from December 1992 to February 1993, a total of 178.275 tonnes of brown pomfrets were caught by 559 fishing units. Fishing for pomfrets lasted over a period of 41 days. Average catch per unit for the entire period came to 318.91 kg of pomfrets. Heavy landings of brown pomfrets were recorded on three days in January 1993, fetching good price for the fishermen. Details of estimated catch are given in Table 1 and 2. Towards the middle of February pomfret catch abruptly dwindled and the fishery came to an end. Roughly 86% of the pomfret catch was made during January.

Three closely related species of pomfrets are recognized from Tuticorin. They are the Brown pomfret *Stromateus niger* Bloch, Silver pomfret

TABLE 1. Estimated fsihing effort and catch

Months	Fishing effort (units)	Catch (tonne)	Catch per unit (kg)	Number of fishing days
Dec.1992	142	14.225	100.2	10
Jan. 1993	326	153.800	471.8	24
Feb. 1993	91	10,250	112.6	7
Total	559	178.275	318.9	41

Table 2. Details of bumper catch

Date	Fishing unit(u)	Catch in tonne	Total price obtained in Rs.
4.1.1993	15	9.750	2,43,750
22.1.1993	15	16.500	3,79,500
23.1.1993	15	13.650	3,13,950

Pampus argenteus (Euphrasen) and Chinese pomfret Pampus chinensis (Euphrasen). Very rich grounds for the pomfrets have been observed in the north east, northwest and southwest coasts of India. Heavy catch of brown pomfret has been reported from Dakshina Kannada coast earlier.

## Fishing gear and methods

At Tuticorin, brown pomfrets are caught with encircling gill nets as the fish swim in schools in the near-surface waters. The net is operated from two plank-built boats of the shore seine type. The nets used to catch brown pomfrets are commonly called lobster gill nets (Sinki valai) with mesh size 5.5 cm. Each net is 27.5 m long and 22 m high with ten 0.5 kg sinkers at foot rope and floats at the head rope. About twelve such net pieces are lashed together and carried by two



Fig. 1. A part of the pomíret catch landed.

<sup>\*</sup>Reported by P. Sam Bennet and G. Arumugam, Tuticorin Research Centre of CMFRI, Tuticorin - 628 001.

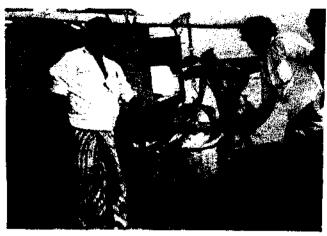


Fig. 2. The landed pomfrets are being weighed before loading into the truck.

boats with four or five persons in each boat. When a school is sighted for capture, the two boats separate and the net is laid out as each boat complets a half circle to enclose the school. The bottom of the net touches the ground thus confining the fish inside the net. The net is slowly hauled in narrowing the ring around the fish school. Another smaller net with mesh size of 12 cm to 14 cm is used to haul the fish inside the boat. The vessels usually make one daily trip to the fishing grounds, leaving the shore early morning and landing the catches in the evening. Number of boats engaged in pomfret fishery is regulated depending on the catches of the previous day. Fishing is conducted during daylight hours and when the water is clear and wind favourable.

## The fishery

At Tuticorin, fishery for brown pomfret lasted from December 1992 to February 1993. During December, 142 units went for fishing. Total pomfret landings during December came to 14.225 tonne with catch per unit of 100.2 kg. During January 326 fishing units landed 153.800 t of pomfret and the catch per unit for January came to 471.8 kg. During February, 91 units went for pomfret fishing with total landing of 10.250 t. Catch per unit for February was 112.6 kg. Very heavy brown pomfret catch was reported on three days in January 1993 (Tables 1 and 2).

Brown pomfrets from 380 to 520 mm total length were recorded in the catches with modal size at 450 to 460 mm. Weight of the fish landed ranged from 0.75 to 2.5 kg.

# Catch disposal and price structure

The catch was disposed off at the beach by auction as soon as landed. Boat owner got 50 per cent of the price as his share. The other 50 per cent was shared equally by the crew after deductions were made for fuel and food. During days of low catch, price per kg of pomfret at the landing centre was Rs. 27 to Rs. 29. On days of heavy landings the price came down to Rs. 22 to 23 per kg. Total estimated value obtained by fishermen on three days of heavy landings is given in Table 2. Two wholesale fish merchants purchased all the catches of pomfrets and sent them to markets in Kerala.