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ON THE CATCH TREND OF MECHANISED GILL NETTERS LANDED AT MADRAS FISHERIES HARBOUR*

An average of about 7 drift gill nets and 3 seasonally operating bottom set gill nets land at the Madras Fisheries Harbour by the Pablo type mechanised boats. These mechanised boats in the length range of 7 - 8 m are fitted with 24 - 30 Hp engines and operate in area off Madras coast

in 20 - 50 m depth range throughout the year except the southeast monsoon period, October-December. The catch trend of the gill netters with special reference to the seasonal abundance of the different groups caught during the period, 1988 - '89 are dealt with in the present study.

Monthly catch trend of the gill netters revealed increase of the catch with the increase in the number of unit operations. An increase of 5 and 12% in catch and effort respectively was recorded in 1989 compared to the earlier year.

Five major groups viz., sharks, rays, seer fishes, carangids and tunas contributed to the fishery. Their annual percentage composition during the period under study is indicated in Fig. 1. For an estimated 126 tonnes of sharks, constituted mainly by *Carcharius* spp. and *Rhizoprionodon* spp. landed during the period, an increase of 6% was recorded in 1988, whereas a uniform trend of the catch was noticed in the case of rays predominated by *Dasyatis* spp.

The annual percentage composition of seer fishes, represented mainly by *Scomberomorus commersoni* was slightly higher in 1988. An increase of 11% in the carangid landings was noticed in 1989. Of the estimated 97 tonnes of carangids landed during the two year period, 37% consisted of *Scomberoides lysan* with a 2% increase in the second year. The remaining species caught included *Carangoides malabaricus*, *C. gymnostethus* and *Caranx melampygus* in the order of abundance. The tuna landings revealed 14% increase in 1989 and were mainly comprised of *Euthynnus affinis* constituting 91% of the total tuna catch followed by *Thunnus* spp., *Auxis* spp. and *Katsuwonus pelamis*. The other groups of

fishes which contributed to a lesser extent included catfishes, barracudas, sciaenids, dolphin-fishes and rock-cods.

The percentage contribution of the various groups landed in different seasons of the two year period in relation to the corresponding total catches are indicated in Fig. 2. Based on the catch trend, it has been observed that the landings of the different groups in the mechanised gill net fishery are higher in the first and second quarters of the years under study. However, in the case of seer fishes and carangids considerable catches were noticed in the third quarter also.

Of an estimated total production of 480 tonnes landed by 1,893 gill net units operated during the entire period, the major contribution was seer fishes (29%) followed by sharks (26%), carangids (19%), tunas (15%) and rays (8%). The average catch per unit effort of the mechanised gill net fishery during 1988 and 1989 was estimated to be 245.15 and 245.46 kg respectively. The study suggests that there is scope for higher catches from this fishery by increasing the level of exploitation.

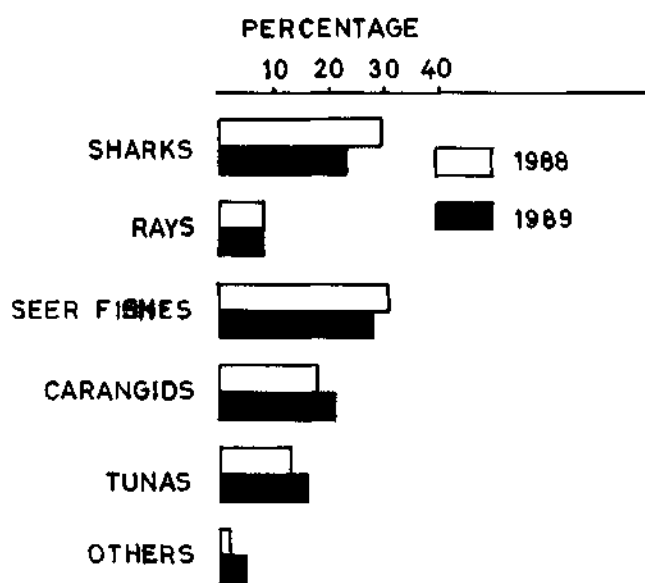


Fig. 1. Annual percentage composition of various groups in the mechanised fishery during 1988-'89.

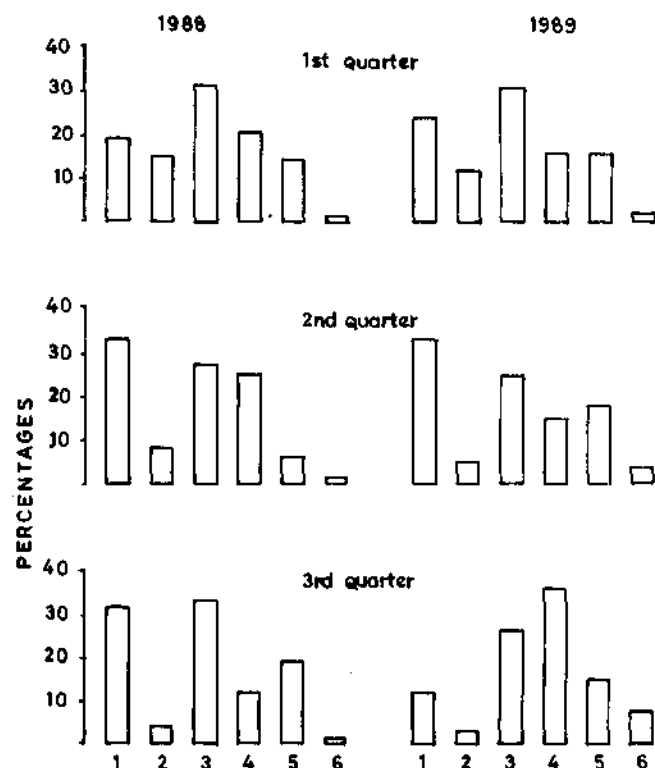


Fig. 2. Percentage composition of various groups landed during different seasons of the period, 1988-'89.

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