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The south-west region comprising the states of Kerala, Karnataka and Goa with a coastline of 994 km and 7.83 lakh fishermen population, had been the most productive and the largest contributor to the country's total marine fish landings. Marine fish production in this region during the year 2008 has been estimated as 11.11 lakh t, contributing about 34.5% to the all India landings (Fig. 1). Among the different states in the region, the maximum contribution was from Kerala 6,70,100 t (60%),

followed by Karnataka 3,30,060 t (30%) and the rest 1,10,508 t (10%) from Goa. Compared to the estimate of 2007, an increase of about 1,02,438 t in landings was noticed in the south-west region.

Major resources

In the south-west region, the pelagic fishes contributed 67%, demersal fishes 19%, crustaceans 8% and molluscs 6.5% of the total landings during 2008 (Fig. 2). The pelagic finfish production in this



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Fig. 1. Estimated marine fish landings in different states of south-west region during 2007 - '08

region increased from about 7.26 lakh t in 2007 to 7.44 lakh t in 2008. Oilsardine (49%), mackerel (15%), *Stolephorus* spp. (9.6%), carangids (7.3%), tunnies (3.4%), and ribbonfishes (4.3%) were the major components of the pelagic finfish production. The landings of the demersal resources have increased from 1.6 lakh t in 2007 to 2.07 lakh t in 2008, the major contributing resources being threadfin breams (35%), lizardfishes (13.7%), croakers (7.9%), soles (9.8%) and silverbellies (5.6%) (Fig. 3). The contribution by crustaceans did not vary much during 2007-'08 in this region, whereas the landings of molluscan resources registered an increase of 37,493 t because of the increased contribution from squids, cuttle fishes and bivalves.

The major resources which contributed to the landings were oilsardine (32.6%), mackerels (9.9%),



Fig. 3. Landings of major resources along the south-west coast during 2007 and 2008



Fig. 2. Components of marine fish landings in south-west region during 2007 and 2008

perches (9.7%), cephalopods (6.4%), threadfin breams (6.4%), *Stolephorus* spp. (6.4%) penaeid prawns (5.2%) and ribbonfishes (2.8%). Considering the diversity of the resources, a total of 270 species were landed in Kerala, 138 in Karnataka and 66 in Goa during 2008.

- Oilsardine being the major resource along the south-west coast contributed 3,61,757 t of which 64% was from Kerala and 22% from Karnataka and the rest from Goa. The landings registered a marginal decline of 31,273 t (8%) compared to 2007. Ringseine was the major gear (63%) of exploitation, followed by purseseine (25%), gillnet (5%) and non-mechanised gears (5%).
- Indian mackerel, another major pelagic resource also showed a decrease during 2008 (1,10,164 t) compared to 2007 (1,32,437 t). Purseseine (35%), ringseine (29%) and gillnets (24%) were the major gears which contributed to the landings.
- An increase of 31,611 t was observed in the landings of perches, the estimate being 1,07,716 t during 2008. The major contribution was from multiday trawlers (87%).
- Cephalopod fishery almost doubled during the year 2008 with an estimate of 71,441 t, Kerala (65%) and Karnataka (33%) being the major contributors.
- The landings of threadfin breams showed an increase of 46% (22,319 t) with an estimate of

71,139 t during 2008, trawlnet being the major gear (97%).

- Penaeid prawn fishery recorded an estimate of 57,391 t, which showed a slight increase of about 1600 t.
- The fishery of *Stolephorus* spp. showed two fold increase during 2008 with an estimate of 70,629 t, the landings during 2007 being 28,764 t.
- Carangid landings was about 54,000 t and not much variation noticed in this fishery compared to 2007.
- The ribbonfish landings was to the tune of 31,228 t and an increase of 2,681 t was noticed.
- A marginal decrease of 4,296 t was noticed in the landings of tunnies during 2008.
- The landings of other sardines also witnessed an increase of 11,674 t with an estimate of 25,758 t for 2008.

Fishing season

Fishing is carried out throughout the year along the south-west coast with an exception of 45 days ban for mechanised vessels during June -July. During 2008, July-September period was the most productive season (32%) followed by October -December period (30%). Compared to 2007, there was a quantum jump in the landings during July-September, in all the maritime states of this region. There was a decline of about 57,000 t during the January-March period as compared to 2007 (Fig. 4).

Sectorwise contribution

The contribution from mechanised sector increased from 58% in 2007 to 65% in 2008, whereas





contribution from motorised sector was to the tune of 33% and artisanal 2% (Fig. 5). Among the mechanised sector, trawlers (53%), purseseines (23%) and ringseines (20%) were the major contributors. The major gears contributing to the landings in motorised sector were ringseines and gillnets.



Fig. 5. Sectorwise landings in south-west region during 2008

Major gears

In the south-west region, the major gears which contributed to the landings were trawlnet (34%), ringseine (32.6%), purseseine (15%) and gillnets (8%) during 2008.

The unit operations of the single day trawlers increased from 3,08,834 in 2007 to 3,30,075 during 2008. However, the catch per unit effort (CPUE) had shown a slight decline from 239 kg/unit to 223 kg/unit. In case of multiday trawlers, there was increase both in the CPUE and catch per hour (CPH) during 2008. The major resources caught in trawlnets were threadfinbreams (18%), cephalopods(14.7%), penaeid pawns (10%) ribbonfishes (7.4%) and lizardfishes (7.1%).

Ringseine units mainly focusing on the pelagic shoals were operated from both motorised and mechanised crafts. Oilsardine was the major contributor in both the sectors, followed by mackerels in the mechanised sector and Stolephorus spp. in the motorised sector. Though the unit operations of mechanised ringseine had shown an increase from 34,588 in 2007 to 58,959 during 2008, the CPUE registered a slight decrease from 2,843 kg to 2444 kg. Similarly, the unit operations of the motorised ringseines also increased from 1,81,161 in 2007 to 2,17,763 in 2008. However, the CPUE showed a decrease of 295 kg. The CPUE of purseseiners registered a slight increase when compared to 2007, though there was a reduction of 12,298 in the number of units operated.