

Marine fisheries of the south-west coast of India during 2009-2010

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The south-west coast of India has been the major contributor of the country's fish production with a coastline of 994 km along the maritime states of Kerala, Karnataka and Goa. In this region, 2.79 lakh fishermen are directly or indirectly involved in marine fisheries sector. The marine fish landings in this coast continued to grow, rising from 8.75 lakh t to 10.83 lakh t, contributing 27.3% and 32.4% to the national fish production in 2009 and 2010 respectively. The region experienced a noticeable hike in landings of about 2.09 lakh t during 2010 when compared to 2009. Kerala, with a coastline of 590 km and 187 fish landing centres contributes more than half of the marine fish landings in this region.

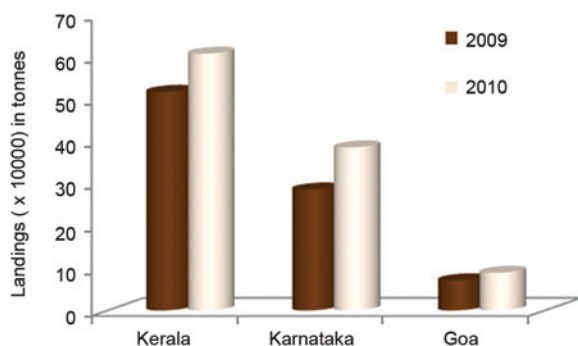


Fig. 1. Estimated marine fish landings (t) in different states of the south-west region during 2009-10

Over the previous year, the marine fish landings in Kerala increased from 5.18 lakh t to 6.08 lakh t in 2010. Karnataka's coastline, dotted with 96 fish landing centres, extends over a length of 300 km and shares one-third of the annual landings of the region. With an increase of 35% over the previous year, the annual marine fish landings in Karnataka reached 3.86 lakh t during 2010, which is the highest on record. Goa, sharing 8% of the landings also experienced an increase in landings from 0.7 lakh t to 0.9 lakh t during this period.

Marine fish landings - major resources

The marine fish landings during 2010 has been on the rise with marked increase in catches of the five major resources viz., oilsardine, mackerel, cephalopods, *Stolephorous* and ribbonfishes. Oilsardine and mackerel, together account for about 50% of the marine fish landings in the south-west region. The other major resources which contributed to the landings were threadfin breams (5.9%), cephalopods (5.7%), carangids (5.7%) penaeid prawns (4.9%), *Stolephorus* sp. (4.6%), ribbonfish (3.3%), scads (2.5%), flatfish (2.2%), lizardfish (2.2%) and tunnies (1.5%). Compared to 2009, a minor decrease was noticed in the landings of threadfin breams, penaeid prawns, scads and lizardfishes.

Table 1. Marine fish landings - major resources landed during 2009 and 2010

| Resources | 2009 | 2010 |
|--------------------|--------|--------|
| Oilsardine | 252760 | 352357 |
| Mackerel | 112350 | 184492 |
| Threadfin breams | 66442 | 63798 |
| Cephalopods | 39448 | 61884 |
| Carangids | 60677 | 61297 |
| Penaeid prawns | 58597 | 52545 |
| <i>Stolephorus</i> | 34242 | 49894 |
| Ribbonfish | 18076 | 35675 |
| Scads | 30370 | 27120 |
| Flatfish | 19879 | 23915 |
| Lizardfish | 29010 | 23909 |
| Tunnies | 20392 | 16772 |

In the south-west region, pelagics were the most abundant category, contributing about 7.7 lakh t in 2010. This accounted for 71% percent of the total fish landings, a slightly higher proportion than that reported in 2009. Although the pelagic fish landings in the south-west region comprised 100 different

species, nearly half of the landings in this group was constituted by oilsardine during both the years.

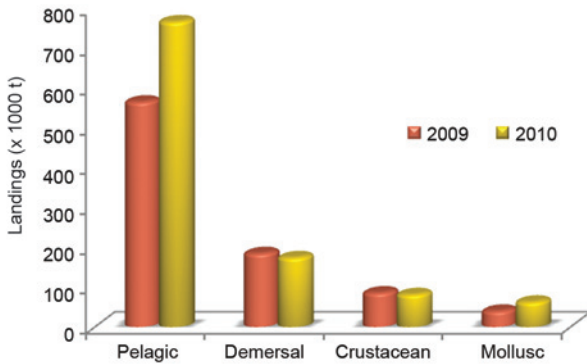


Fig. 2. Marine fish landings- major components

The other important contributors to the pelagic landings in 2009 and 2010 include mackerel, carangids, *Stolephorus*, tunnies and ribbonfishes. The major resources contributing to the landings of demersal resources are threadfin breams, flatfishes, lizardfishes, rock cods and croakers. Demersal resources provided about 1.73 lakh t, decreasing the proportional contribution from 21% in 2009 to 16% in 2010. The landings of crustaceans also decreased to 7% from 10% while a marginal increase was noticed in the landings of molluscs during 2010. The single, most important group representing nearly one-third of the crustacean landings is penaeid prawns. Cephalopods formed bulk of the molluscan landings in this region. In 2010, the region as a whole has 310 different number of species caught, with 134 demersal, 44 crustacean and 20 molluscan species. The contributions from Cochin, Munambum, Sakthikulangara and Neendakara Fishing Harbours form major part of the marine fish landings in Kerala (Fig. 3). Similarly, Mangalore and Malpe are the major harbours that play vital role in the fish landings of Karnataka.

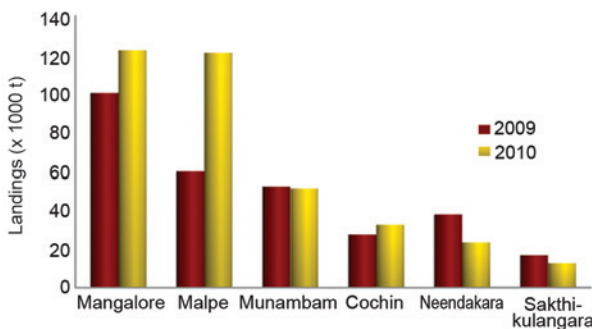


Fig. 3. Marine fish landings- contribution from major harbours

Marine fish landings - seasonal variations

The peak season in the south-west region was October-December, contributing 39% of the total catch during 2010 which showed an increase in the landings of about 1.83 lakh t compared to that in the corresponding period during 2009 (Fig. 4).

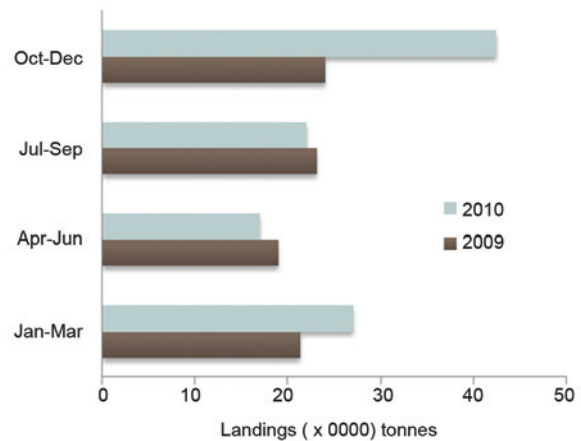


Fig. 4. Seasonal variations in marine fish landings of south-west coast during 2009 and 2010

Though the landings during Jan-Mar formed almost one-fourth of the total landings for both the years, in terms of quantity, the landings during 2010 showed an increase of 0.56 lakh t. A marginal decline in the landings was noticed during April-June and July-September in 2010.

Sector-wise contribution

The catch from mechanised sector showed an upward trend accounting about three-fourth of the total landings during 2010. The proportion of landings in motorised sector fell from 28% in 2009 to 25% in 2010. Sector-wise marine fish landings of south-west region during 2010 is depicted in Fig. 5.

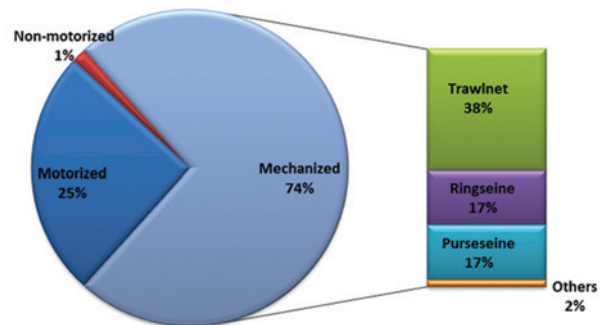


Fig. 5. Marine fish landings - sector-wise contribution during 2010

Among the mechanised sector, the bulk of the landings were by trawlers, purseseiners and ringseiners whereas ringseiners and gillnetters were the major contributors in the motorised sector during 2009 and 2010.

Major gears

Major gears which contributed to the landings in this region were trawl nets, seinenets and gillnets. Mechanised trawlers fitted with chinese engines were in operation along the coast especially in Mangalore Fisheries Harbour. Multi-day trawl landings accounted for 3.38 lakh t during 2010 which was about 66,660 more than that during 2009. The catch per hour (CPH) of the multi-day trawlers was

46.5 kg h⁻¹ which has not changed substantially during 2009 and 2010. The major resources caught in trawl net were threadfin breams, penaeid prawns, cephalopods, lizardfishes and ribbonfishes.

Ringseine units contributed both in mechanised and motorised sectors. Oilsardine and mackerel were the major contributors in the mechanised sector. The unit operations of the mechanised ringseine increased from 50,768 in 2009 to 68,577 during 2010 thus showing an increase of CPUE from 2100 kg in 2009 to 2660 kg in 2010. Similarly the unit operations of the mechanised purseseine also increased from 50,768 to 68,577 showing an increase in CPUE from 2,149 kg in 2009 to 2,769 kg in 2010.