## Marine fisheries of the south-east coast of India during 2009 - 2010

T. V. Sathianandan, Wilson T. Mathew, J. Srinivasan, P. L. Ammini, K. Ramani, M. R. Beena, Lata Khambadkar and Sindhu K. Augustine Central Marine Fisheries Research Institute, Kochi

The south-east region consisting of Andhra Pradesh, Tamil Nadu and Puducherry is spread over a coastal length of 2,050 km and as per the Marine Fisheries Census 2010, this region has 785 landing centres, 1,168 marine fishing villages, 3.7 lakh fishermen families and 14.63 lakh fisher folk. The estimate of total marine fish landings in 2009 for the south-east region was 8,05,295 t accounting for 25.1% of the total marine fish landings in the country. The contribution from Tamil Nadu was 5,33,965 t (66.3%) followed by 2,58,695 t (32.1%) from Andhra Pradesh and 12,635 t (1.6%) from Puducherry. In 2010, the contribution from south-east region was 7,61,328 t showing a reduction of 43,967 t (5.5%). The percentage contribution by this region in 2010 towards total landings in the country was 22.8% in which the contribution by Tamil Nadu was 5.09,025 t (66.9%), Andhra Pradesh 2,41,439 t (31.7%) and Puducherry 10,864 t (1.4%). The resources that showed reduction in landings in 2010 compared to 2009 were oilsardine by 20,251 t, pig-face breams by 8,887 t, scads by 6,350 t, seerfishes by 4,420 t, Indian mackerel by 3,880 t and miscellaneous group by 27,464 t. Resource groups that have shown increase in landings were, Stolephorus by 7,767 t, goat fishes by 3,856 t, silverbellies by 9,785 t, squids by 4,157 t and cuttlefish by 3,344 t.

The important resources that contributed maximum towards total landings in the south-east region in 2009 were oilsardine 1.54.795 t (19.22%). lessersardines 72,379 t (9.0%), silverbellies 49,674 t (6.2%), penaeid prawns 45,448 t (5.6%) and Indian mackerel 41,881 t (5.2%). In 2009, Tamil Nadu contributed 87.4% of oilsardine landings, 62.1% of lesser sardine landings and 80.8% of silverbellies landings in the south-east region where as Andhra Pradesh contributed 54.9% of penaeid prawn landings and 55.1% of Indian mackerel landings. The percentage contribution from south-east region towards total landings of oilsardine, lesser sardine, silverbellies, penaeid prawns and Indian mackerel in the country were 37.3%, 71.6%, 72.5%, 18.5% and 22.5% respectively. In 2010 also, the resources that contributed maximum were the same namely oilsardine 1,34,544 t (17.7%), lesser sardines 65,208 t (8.6%), silverbellies 59,459 t (7.8%), penaeid prawns 48,217 t (6.3%) and Indian mackerel 38,001 t (5%). In 2010, Tamil Nadu contributed

89.6% of oilsardine landings, 64.3% of lesser sardine landings and 85.7% of silverbellies landings in the south-east region where as Andhra Pradesh contributed 56.8% of penaeid prawn landings and 51.5% of Indian mackerel landings. The percentage contribution from south-east region in 2010 towards total landings of oilsardine, lesser sardine, silverbellies, penaeid prawns and Indian mackerel in the country were 27.6%, 71.8%, 78.7%, 18.5% and 14.2% respectively. Landings of important resources in south-east region for 2009 and 2010 are shown in Fig. 1.

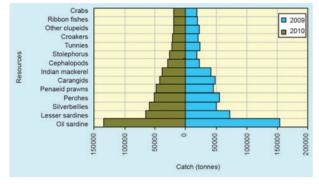


Fig. 1. Landings of important resource groups in south-east region for 2009 and 2010

The pelagic and demersal resources showed a decrease of 9.8% and 1.3% respectively in 2010 as compared to 2009 whereas the landings of molluscan resources increased by 29.3%. In the first quarter of 2010, there was 3.8% increase in the landings compared to 2009 whereas the landings showed decrease by 9.2%, 4.3% and 16.9% respectively during the second, third and fourth quarters. The contribution by the three sectors in 2010 were 4,84,163 t (63.6%) by mechanised sector, 2,36,339 t (31%) by motorised sector and 40,839 t (5.4%) by the non-mechanised sector whereas in 2009 contribution by these sectors were 4,77,646 t (59.3%)

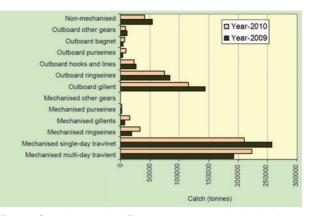


Fig. 2. Contribution by different gears towards the landings in south-east region for 2009 and 2010

by mechanised, 2,73,336 t (33.9%) by motorised and 54,314 t (6.7%) by non-mechanised sectors. Contribution by different gears towards landings in south-east region during 2009 and 2010 are shown in Fig. 2. Percentage contribution of the four categories of resources in the landings of south-east region in 2009 and 2010 are shown in Fig. 3.

The overall per boat and per hour catch (CPUE) combining all the gears for 2010 for the south-east region were 189 kg and 24 kg respectively and the same for 2009 were 177 kg and 26 kg respectively. Sector-wise CPUE for the region in 2010 were 1028 kg boat<sup>-1</sup> and 43 kg h<sup>-1</sup> for the mechanised sector, 88 kg boat<sup>-1</sup> and 14 kg h<sup>-1</sup> for the motorised sector and 47 kg boat<sup>-1</sup> and 11 kg h<sup>-1</sup> for the non-mechanised sector. Sector-wise CPUE for the region in 2009 were 1158 kg boat<sup>-1</sup> and 50 kg h<sup>-1</sup> for the mechanised sector, 88 kg boat<sup>-1</sup> and 16 kg h<sup>-1</sup> for the motorised sector and 53 kg boat<sup>-1</sup> and 12 kg h<sup>-1</sup> for the non-mechanised sector. Among different gears operated in the region in 2010, the maximum per boat catch observed was 3787 kg for mechanised ringseines followed by 1684 kg for mechanised

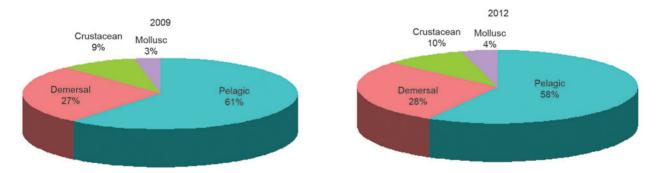


Fig. 3. Percentage contribution of the four categories of resources in landings for south-east region in 2009 and 2010

purseine, 1578 kg for mechanised gillnets, 1471 kg for mechanised multi-day trawlnets, 1040 kg for outboard purseines, 874 kg for outboard ringseines, 774 kg for mechanised hooks and lines and 703 kg for mechanised single-day trawl nets. The gears that had high per boat catch in 2009 for the south-east region were mechanised ringseines 3038 kg, mechanised purseines 1534 kg, mechanised multi-day trawlnets 1130 kg, mechanised single-day trawlnets 1127 kg, mechanised gillnets 1079 kg, outboard purseines 1030 kg and outboard ringseines 885 kg. In 2010, the gears that had high per hour catch for the region were mechanised ringseines 972 kg, mechanised purseines 406 kg, outboard ringseine 351 kg, outboard purseines 344 kg and outboard bagnets 137 kg. The gears with high per hour catch for 2009 in the region were mechanised ringseines 860 kg, mechanised purseines 462 kg, outboard purseines 419 kg, outboard ringseines 342 kg and outboard bagnets 107 kg.

In 2010, oilsardines were caught mainly by outboard ringseines (27%), mechanised ringseines (22%), mechanised trawlnets (27%), outboard gillnets (7%) and mechanised gillnets (6%), lesser sardines were caught mainly by mechanised trawlnets (40%), outboard gillnets (25%),

non-mechanised gears (25%) and outboard ringseines (7%); silverbellies were caught by mechanised trawlnets (87%), outboard ringseines (6%) and outboard gillnets (5%), perches were caught by mechanised trawlnets (74%), outboard gillnets (11%) and outboard hooks and lines (11%) and penaeid prawns were caught by mechanised trawlnets (90%) and outboard gillnets (4%).

In 2009, oilsardines were caught by outboard ringseines (20%), mechanised ringseines (11%), mechanised trawlnets (51%) and outboard gillnets (9%); lesser sardines were caught by mechanised trawlnet (20%), outboard gillnets (27%), non-mechanised gears (15%) and outboard ringseines (36%); silverbellies were caught by mechanised trawlnets (83%), outboard ringseines (8%) and outboard gillnets (6%); perches were caught by mechanised trawlnets (60%), outboard gillnets (23%) and outboard hooks and lines (14%) and penaeid prawns were caught by mechanised trawlnets (85%) and outboard gillnets (5%).

In 2010 in the south-east region, 102 pelagic species, 161 demersal species, 42 species of crustaceans and 17 species of molluscs were landed whereas in 2009, about 111 pelagic, 194 demersal, 43 crustacean and 19 mollusc species were landed.