

Marine fish landings in Karnataka during 2016 - An overview

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Karnataka, with a 300 km coastline supports livelihood of 1.7 lakh fisherfolk population residing in 144 marine fishing villages. The marine fish production in the state reached a record 5.29 lakh tonnes (t) in 2016. The increase is attributed to the hike in the landings of *Priacanthus* spp., lesser sardines and oil sardine in 2016 as compared to 2015. Among the three coastal districts of Karnataka, Dakshina Kannada and Udupi districts contributed 38% each, followed by the Uttara Kannada (24%). The Mangalore and Malpe Fisheries Harbours are the main contributors in the Dakshina Kannada and Udupi districts respectively. Huge landings of *Priacanthus* spp. was observed in multiday trawlers landed at Mangalore fisheries harbour to the tune of 15 to 25 t per boat during the months of November and December, 2016.

The main characteristic of marine fisheries in Karnataka is the predominance of pelagic resources. In the year 2016, the estimated pelagic landing of 2.84 lakh t accounted for 54% of the total marine fish landings. An increase of 17% was noticed in the pelagic landings compared to 2015, mainly due to rise in the catch of Indian mackerel, oil sardine and lesser sardines. Demersal fish resources contributed 36% of the total landings. The spurt in the demersal fish landing was mainly due to heavy landings of *Priacanthus* spp. by trawlers. The crustacean and molluscan resources contributed almost equally (5%) to the total landings for the year 2016 (Fig. 1).

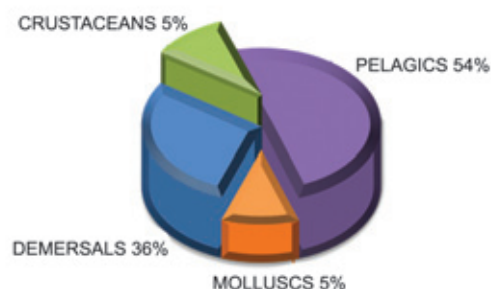


Fig. 1. Components of marine fish landings

Table 1. Major resources landed

Resources	Landings (t)	
	2016	2015
Indian mackerel	88,219	65,699
<i>Priacanthus</i> spp.	68,554	21,347
Oil sardine	62,609	43,489
Threadfin breams	52,858	40,699
Lizard fishes	33,972	28,399
Cephalopods	26,604	26,344
Scads	25,275	42,890
Lesser sardines	18,990	6,445
Tunas	16,801	6,460
Ribbon fishes	16,808	17,866
Penaeid prawns	15,292	16,218

The major resources that dominated during the year was the Indian mackerel, *Priacanthus* spp., oil sardine, threadfin breams, lizard fishes and cephalopods. These resources together contributed more than 60% of the estimated landings of marine fish along the Karnataka coast in 2016 (Table 1 & Fig. 2). The landings of Indian mackerel showed an

increase of about 22,000 t with major share from purse seiners and multi-day trawlers. An increase of about 47,000 t was noticed in the landings of *Priacanthus* spp., which was harvested mainly by trawlers in multi-day operations. Estimated catches of oil sardine was 62,609 t showing an increase of about 19,000 t over the previous year with major share (80%) coming from purse seiners. The landings of lesser sardines increased nearly threefold amounting to 18,990 t as a result of increased landings from trawlers and purse seiners. In 2016, landings of threadfin breams amounted to 52,858 t, 97% of which was caught in trawl nets that indicated an increase of 3%. There was a drastic drop of 40% in landings of scads. Marginal decline in the landings of ribbonfishes, penaeid prawns and cephalopods was recorded.

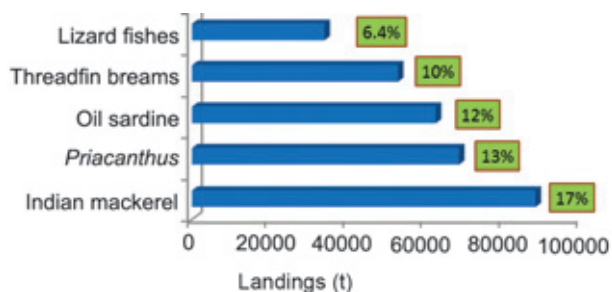


Fig. 2. Major marine fishery resources landed in Karnataka

Mechanised and motorised sectors contributed 91% and 8% respectively of the estimated marine fish landings in Karnataka (Fig. 3). Non-motorised sector contributed relatively little (1%) to the total marine fish landings in the state. Among the

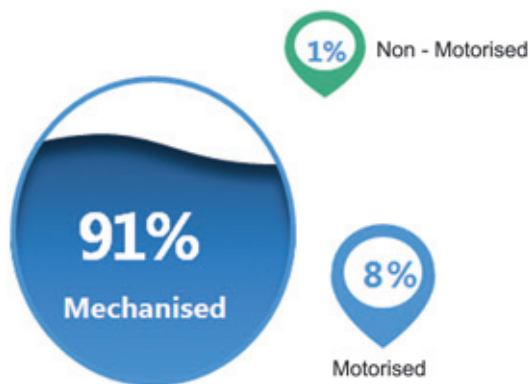


Fig. 3. Sectorwise marine fish landings

mechanised boats, 70% of the fish harvest was by trawlers and 29% by purse seiners. Compared to the previous year there was an increase of 5.2% in the total trawl landings. There was an increase in the multiday trawl landings with a reverse trend for single day trawl landings. Combined gear operations of hooks and line with trawl net also happened during this period. The purse seine landings increased by 68,440 t mainly due to ‘light fishing’ operations in the Dakshina Kannada and Udupi districts. In this fishing technique, when the moonlight is less or absent, lights are attached to a structure above water or suspended underwater to attract fish that were caught using nets. These landings are characterised by a wide species diversity and could be well differentiated from a regular demersal trawl catch. A self-imposed ban on light fishing by the fishermen in the Karwar area was noted.

Major gears which contributed from the motorised sector were ring seine (OBRS) and gillnet (OBGN). Among the different types of gears operated, trawl net (MTN) and seine nets (MPS, OBRS) contributed 94% of the landings (Fig. 4). Trawlers contributed 3.37 lakh t of marine fish in 2016. The catch per hour of the multi-day trawlers (MTN) increased to 110 kg/hr from 75 kg/hr. The resources mostly harvested by trawlers were threadfin breams, *Priacanthus* spp., scads, Indian mackerel, cephalopods, lizard fishes and ribbon fishes.

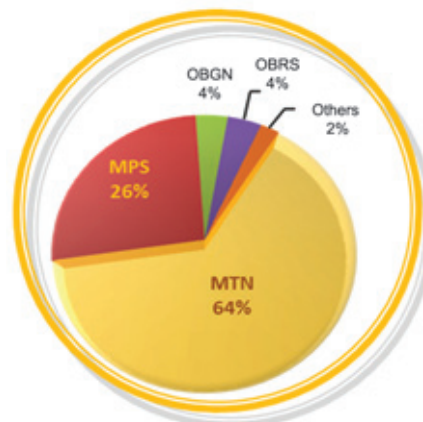


Fig. 4. Gearwise contribution to marine fish landings

The catch from mechanised purse seine (MPS) showed an increase of about 96% during 2016. The unit operations also increased from 33,919 in 2015 to 42,432 during 2016 and increase was noticed in the catch per unit effort also. The catches from ring seiners increased to 21,130 t with a catch per unit of 2,126 kg. Slight reduction in the number of ringseine unit operations and an increased trend in case of gillnetters was recorded. The catch from gillnetters was not as high as in 2015, but the estimated catch per boat (164kg) was higher than the previous year.

Seasonal contribution of landings indicated that the most productive period was from October-March (Fig. 5) and least volume (17%) during the April-June period.



Fig. 5. Seasonal landing trends