

# Marine fish landings in Odisha during 2016 - An overview

\*K. G. Mini, Vivekanand Bharti, V. K. Manu, Sindhu K. Augustine and T. V. Sathianandan

ICAR-Central Marine Fisheries Research Institute, Kochi

\* e-mail: minikg02@gmail.com

The state of Odisha has a long coast line of 480 km with numerous fisheries harbours and fish landing centres like Paradeep, Bahabalapur, Dhamra, Atharabanki, Nuagarh, Bada Arjipally etc. According to Marine Fisheries Census 2010, there are 1.14 lakh fishermen families with 3.95 lakh fisherfolk engaged in actual fishing activities. In 2016, the marine fish production in Odisha was 1.17 lakh tonnes (t) showing a decrease of 17% over the previous year. The state contributed only 3.2% to India's marine fish production in 2016. Among the six coastal districts namely Balasore, Bhadrak, Kendrapara, Jagatsinghpur, Puri and Ganjam, most of the marine fish landings came from Jagatsinghpur district (62%).

The marine fish landings of Odisha comprises of pelagic, demersal, crustacean and molluscan resources with 197 species recorded from all the groups. Even though pelagic resources are the largest contributor (53%) in the state, the catch of these resources was 13% lower than that in the previous year. 70% of the total pelagic landings was represented by five resources, namely, ribbonfish,

Indian mackerel, other clupeids, lesser sardines and horse mackerel. The contribution of demersal and crustacean resources was 31% and 14% respectively (Fig. 1). The main demersal resource was croakers which contributed 48% of the total volume of demersal fish landings. Among the crustaceans, the most important resource was penaeid prawns, accounting for 82% of the total crustacean landings. Molluscan resources contributed 2% and showed a slight increase compared to 2015.

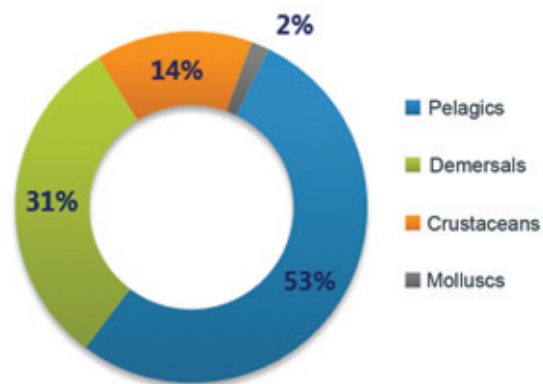


Fig. 1. Components of marine fish landings

The top five dominating resources were croakers, penaeid prawns, ribbon fishes, Indian mackerel and lesser sardines, which accounted for 52.8% of total marine fish landings of the state (Fig.2). In 2016 Indian mackerel, ribbon fish and croakers showed 2.5%, 2.2% and 0.2% increase respectively while lesser sardines and penaeid prawns decreased by 7.9% and 1.2% respectively as compared to previous year.

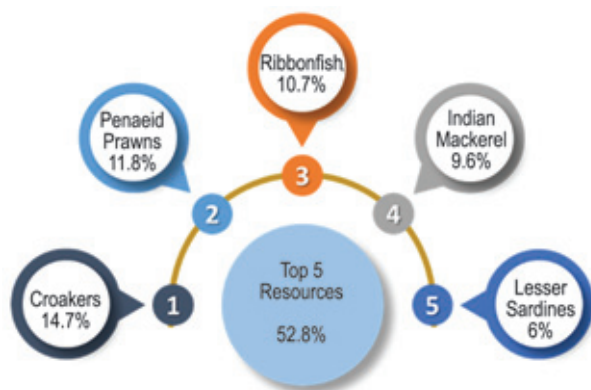


Fig. 2. Contribution of top 5 resources

In 2016, 66.8% of marine fish landings of the state was contributed by mechanised sector, while motorised and non-mechanised fishing sectors accounted for 26.9% and 6.3% respectively (Fig. 3). The landings from all three sectors decreased during 2016 compared to that of 2015. Trawl nets and gillnets, the two major gears operating in the state contributed more than three fourth of the marine fish landings. Multi-day trawlers (MDTN) contributed

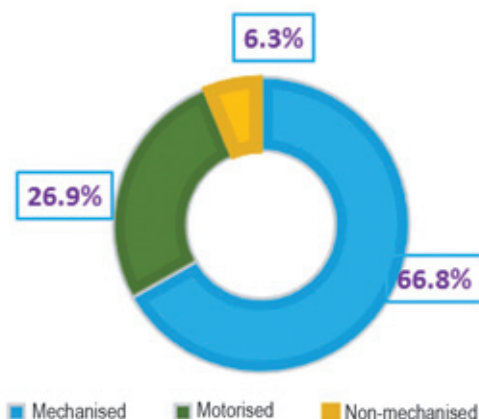


Fig. 3. Sectorwise catch contribution

(64%) of the state's marine fish landings with croakers, penaeid prawns, ribbon fishes and Indian mackerel as the major resources.

The maximum catch per unit effort of 3230 kg/unit was observed in MDTN, followed by single day trawl net (MTN) and mechanised gillnet (MGN) at 1468 and 1380 kg/unit respectively. The catch per unit hour for MDTN was 57 kg. The minimum catch per unit effort was recorded in traditional non-mechanised (NM) fishing gear, which was only 62 kg/unit (Fig. 4).

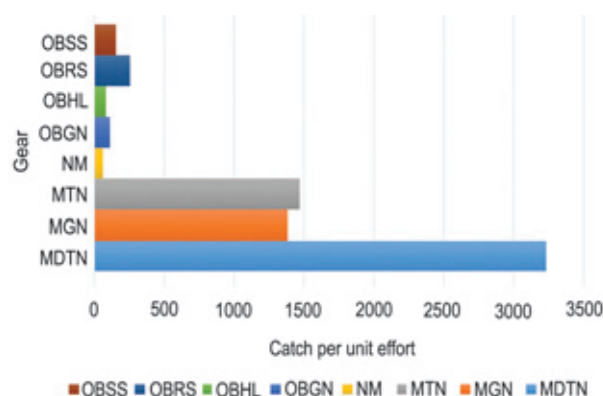


Fig. 4. Catch per unit effort of various gears

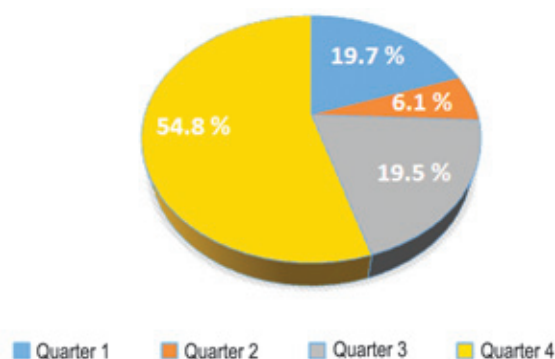


Fig. 5. Percent contribution of various quarters

Seasonal landing trend revealed that the best fishing in the entire year was realised in the fourth quarter (October - December) with 0.6 lakh t. There was almost equal volumes (0.2 lakh t) from first and third quarters. The least fishing activity was in the second quarter (April - June) which coincides with the seasonal fishing ban resulting in the lowest contribution (6%) by this quarter (Fig. 5).