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The Gujarat coast in the northern Arabian sea, is one of the most biologically productive region in the world. The fishery resources are mainly demersal in habit with high trophic level. Annual marine fish landings for Gujarat during 2016 was an all-time high of 7.74 lakh tonnes (t), showing an increase compared to the previous year (7.23 lakh t). The state contributed 21.3% of the total marine

fish landings in India. The major fisheries harbours (Veraval, Porbandar, Mangrol) and the three landing centers (Jaffrabad, Nawabandar and Rajapara) contributed 74% of the total landings. Major fishery resources like non-penaeid prawns, ribbonfish, bombayduck, squids, lizardfish and rock cods showed increase in landings compared to that in 2015 (Fig. 1).

With inputs from A. Ladani, J. P. Polara, J. D. Vanvi, R. R. Chudasama, K. P. Chudasama, B.V.Makadia, S. P. Makwana and Rathod Vinodbhai Bhikhabhai, FRAD field staff in Gujarat.

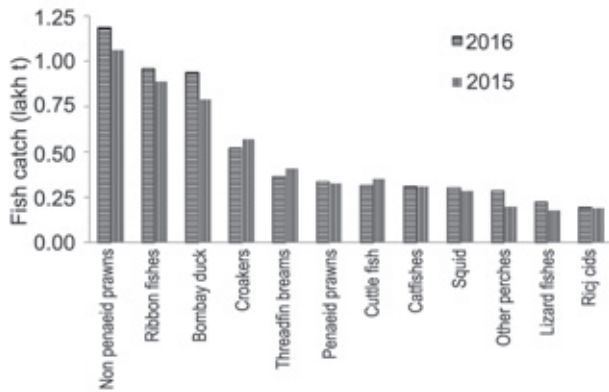


Fig. 1. Major marine fish resources landed in Gujarat during 2016 and 2015

The pelagic finfish resources contributed 38%, followed by demersals 32%, crustaceans 22% and molluscan resources (8%) (Fig. 2). Commercially important fishery resources that contributed to the total marine fish landings of Gujarat in 2016 were non-penaeid prawns (15.29%), ribbonfishes (12.34%), bombayduck (12.08%), croakers (6.71%), threadfin breems (4.69%), penaeid prawns (4.29%), cuttlefish (4.05%), catfishes (3.96%) and squid (3.85%). The non-penaeids which formed a major portion in the crustacean landings, commonly known as "Jawla" were mostly used for fish meal production. Cephalopods contributed maximum in the molluscan landings, which are mostly exported to the South east Asian countries.

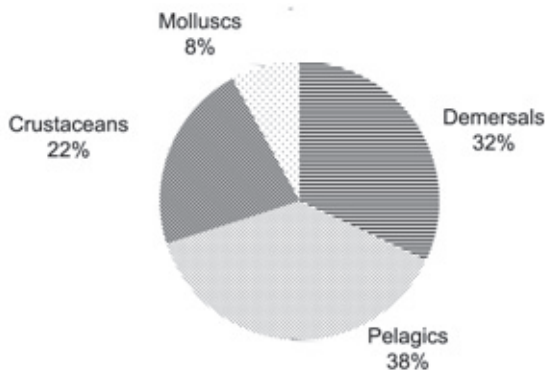


Fig. 2. Components of marine fish landings

The Gujarat fishery is unique in the country due to the domination of mechanised sector (Fig. 3). The estimated landings by mechanised fishing vessels was 7.09 lakh t followed by motorised vessels (0.65 lakh t) and non-motorised vessels contributing

a meagre 160 t. The non-motorised landings came mainly during fishing ban season from the districts of Jamnagar, Kutch, Devbhoomi Dwaraka and Morbi.

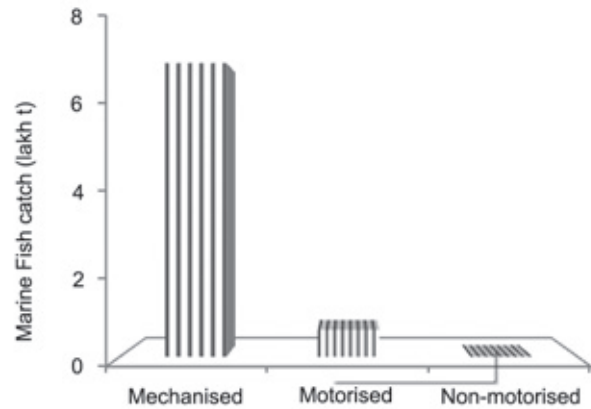


Fig. 3. Sectorwise marine fish landings of Gujarat

Mechanised sector (trawl, dolnet and gillnet) together contributed nearly 90% of total marine fish landings in the state. The multi-day trawlers (MDTN) contributed 53% of the total annual marine fish landings followed by mechanised dolnet (MDOL) (32%), outboard gillnet (OBGN) (8%), mechanised gillnet (MGN) (3%), mechanised trawlers (MTN) (3%) and others (1%) (Fig. 4). Motorised sector accounted for 8.43 % of the total catch of which, the main contribution was by gillnets.

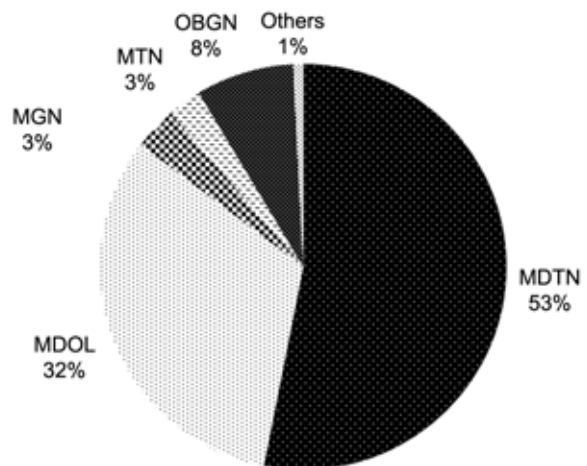


Fig. 4. Gearwise contribution to marine fish landings

A distinct seasonal difference was noticed in the fish landings of Gujarat. The fourth quarter (October - December) contributed maximum fish catch (3.65 lakh t), followed by first (1.94 lakh t), second (1.22 lakh t) and third (0.93 lakh t) quarters. The

maximum fish landings occurred during the post fishing ban period and winter season. Fish catch was very meagre during the seasonal fishing ban (June to August) in the region (Fig. 5).

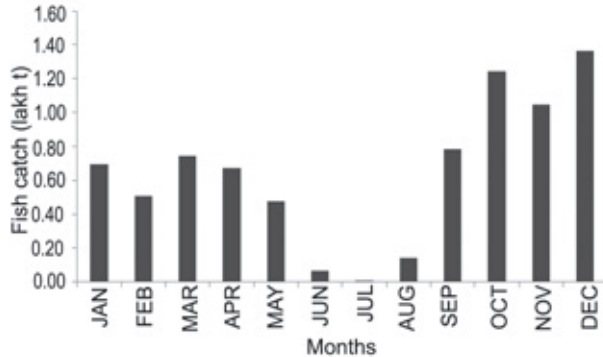


Fig. 5. Monthwise contribution to marine fish landings

The district-wise fish production of Gujarat for the year 2016 showed that the Gir-Somnath ranked first (3.42 lakh t), followed by Porbandar (1.13 lakh t), Amreli (0.91 lakh t), Dev Bhoomi Dwaraka (0.85 lakh t), Junagadh (0.72 lakh t), Kutch (0.35 lakh t), Valsad (0.25 lakh t), Navsari (0.08 lakh t), Jamnagar (0.03 lakh t), Morbi (261 t) and Baruch (181 t). The Gir-Somnath district with major fish landings centers like Veraval, Sutrapada, Nawabander, Muldwaaka and Dhamlej contributes significantly to the total marine fish landings in the state. Jaffrabad a major *dolnet* fish landing center in Amreli district, contributes important fishery resources like non-penaeid and penaeid prawns, bombayduck, ribbonfish and catfish.