

Crustacean resources

Crustaceans together form an annual landing of 32,033 tonnes in 2022 with an increase of 67% from the previous year (19,179 tonnes). The major resource contributed under this group are penaeid prawns (18,575 tonnes, 58%) (Fig. 6) followed by non-penaeid prawn (8,105 tonnes, 25%), crabs (5,337 tonnes, 17%), and least was by lobsters (16 tonnes, <1%) and stromatopods (0.2 tonnes, <1%).



Fig. 6 Giant tiger prawn landings at Digha Mohana

Molluscan resources

Cephalopods were the major molluscan resources landed in West Bengal coast with annual landing of 7,079 tonnes in the year 2022 with an increase of about 136% compared to the previous year (2998 tonnes). Major groups in cephalopods landings were cuttle fishes contributing 74% (5,275 tonnes) followed by squids (1,763 tonnes, 25%) and octopus (41 tonnes, 1%).

Major fishing gears of West Bengal

The major fishing gears (Fig. 7) in operation to exploit the marine fishery resources along the West Bengal coast are trawl nets (59%) followed by gillnets (23%), bagnets (8%), combination gears (8%) and shoreseines (2%) (Fig. 8).

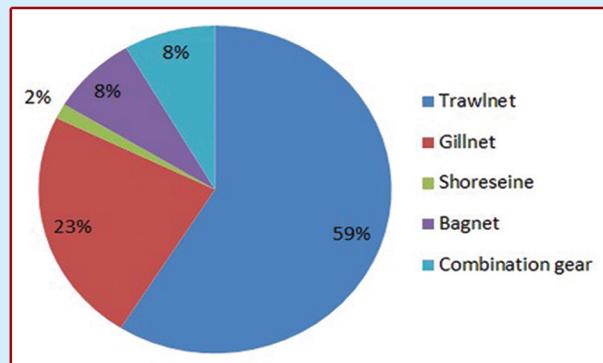


Fig. 7 Gear-wise contribution to the total marine fish landings of West Bengal in 2022

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Published by:

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Fig. 8 Shoreseine operation at Digha Mohana



Marine Fish Landings of West Bengal - 2022



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Post Box No. 1603, Ernakulam North P.O.
Kochi, Kerala- 682 018, India
CMFRI Pamphlet No. 124/2023
www.cmfri.org.in

Introduction

The coastal area of West Bengal, part of the Bay of Bengal Large Marine Ecosystem with dynamic estuarine network stretches between the mouths of rivers Herobhangon the Indo-Bangladesh border in the East and Subarnarekha in the West. Fishing activities in this zone provide economic sustenance and a source of livelihood to a cross-section of people in the lower Ganga deltaic region. The coastline of West Bengal spreads along the southern edge of its two maritime districts, South 24 Parganas and Purba Medinipur (Fig. 1). The South-24 Parganas has a magnificent mangrove (Sundarbans) on the eastern part and the Purba Medinipur has an open coast (Digha-Shankarpur) on the western part of West Bengal coast. The marine fisheries of the State mainly focused on these two districts. The state has a coast line of 158 km, continental shelf of 17,049 sq. km, 171 marine fishing villages, 49 marine fish landing centres of which 29 belong to Purba Medinipur district and 20 belong to South-24 Parganas, 81,067 fishermen families of which 70% belongs to traditional fishermen families with a total fisherfolk population of 3,68,816 directly or indirectly involved in marine fisheries. Of the total fisherfolk population, South 24 Parganas accounts for 68% followed by Purba Medinipur (29%). There are 92,341 active fishermen, of which 50,662 full time fishermen, 32,859 part-time and rest engaged in fish seed collection. Altogether, 11,054 fishing crafts engaged in the fishing activities of which 4,014 are mechanized, 6,564 motorised and 476 non-motorised (CMFRI Census, 2016).

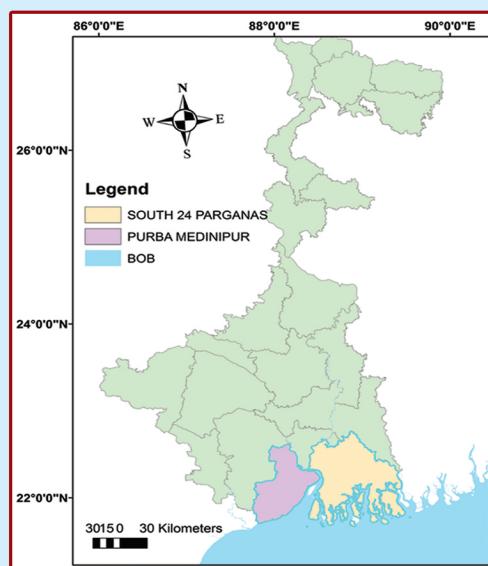


Fig. 1 Coastal map of West Bengal

Catch trends of West Bengal

The state has contributed on an average of about 2.1 lakh tonnes of marine fish landings per annum during last decade. There has been a remarkable increase in the marine fish landings of West Bengal over the last four decades where the landings has increased from a meager 0.2 lakh tonnes in 1990 to about 3.65 lakh tonnes in 2011 but after that showing a highly fluctuating trend (Fig. 2).

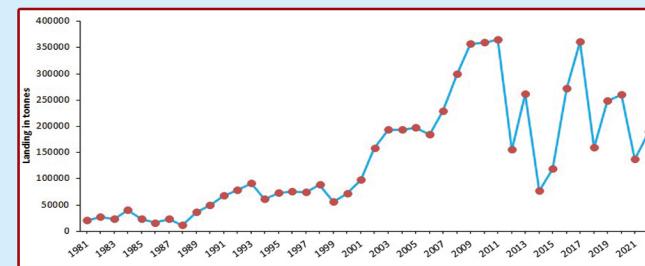


Fig. 2 Marine fish catch trend of West Bengal coast during 1981-2022

Marine landings of West Bengal

Currently, the marine fish landings of West Bengal has been estimated at 1.9 lakh tonnes during 2022, registering an increase of 38% compared to 2021 (1.4 lakh tonnes). Quarterly catch data analysis revealed that highest catch was recorded during the third quarter (0.81 lakh tonnes), followed by fourth (0.47 lakh tonnes), first (0.46 lakh tonnes) and lowest during second quarter (0.15 lakh tonnes) (Fig. 3). While comparing the sector-wise landings, mechanized sector contributed maximum (86%), followed by motorized sector (12%) and artisanal/non-motorised sector (2%). Among the two coastal districts, Purba Medinipur contributed highest landings with 0.99 lakh tonnes followed by South 24 Parganas (0.90 lakh tonnes).

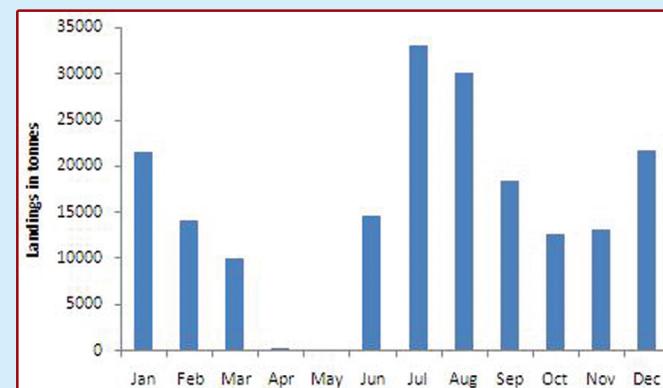


Fig. 3 Monthly marine fish landings of West Bengal coast in 2022

Major marine resource groups landed in West Bengal

The marine landings during the period were dominated by pelagic resources with landings of 0.91 lakh tonnes (48%) followed by demersal (0.59 lakh tonnes, 31%), crustacean (0.32 lakh tonnes, 17%) and molluscan resources (0.07 lakh tonnes, 4%) (Fig. 4). Miscellaneous resources which include bycatch, low valued fishes etc., do not form a regular fishery, which constitute about 398 tonnes (<1%) of the total marine landings of the state. The top ten major resources contributed to the fishery during the period were penaeid prawn, croakers, Bombay duck, other clupeids, catfish, *Coilia* spp., lesser sardine, hilsa shad, ribbonfish, and non-penaeid prawn (Fig. 5).

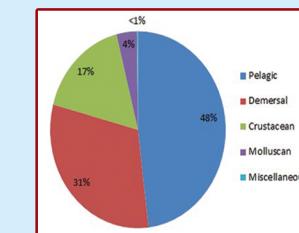


Fig. 4 Group-wise marine landings of West Bengal coast in 2022

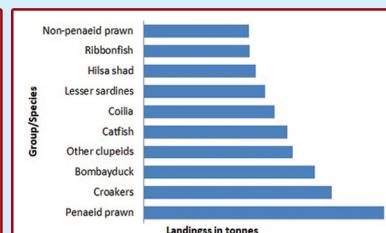


Fig. 5 Top ten marine fishery resources landed in West Bengal coast in 2022

Pelagic resources

Pelagic fish landings were recorded to 91,157 tonnes in 2022 with an increase of 27% from the previous year (71,675 tonnes). Among the top ten pelagic resources, Bombay ducks were the most dominant one contributing nearly 14% (13,191 tonnes) to the total pelagic landings followed by clupeids (11,508 tonnes, 13%), *Coilia* spp. (10,110 tonnes, 11%), lesser sardines (9,379 tonnes, 10%), hilsa shad (8,653 tonnes, 9%), ribbonfish (8,167 tonnes, 9%), horse mackerel (6,455 tonnes, 7%), *Setipinna* spp. (5,735 tonnes, 6%), Indian mackerel (5,110 tonnes, 6%) and seerfish (2,492 tonnes, 3%).

Demersal resources

Demersal fish landings were recorded to 58,877 tonnes in 2022 with an increase of 37% from the previous year (43,086 tonnes). Among the top ten demersal resources, croakers were the most dominant one contributing nearly 25% (14,509 tonnes) to the total demersal landings followed by catfish (11,059 tonnes, 19%), silver pomfret (7,836 tonnes, 13%), soles (6,255 tonnes, 11%), other perches (4,247 tonnes, 7%), black pomfret (4,051 tonnes, 7%), threadfins (2,867 tonnes, 5%), chinese pomfret (2,370 tonnes, 4%), threadfin bream (1,381 tonnes, 2%) and sharks (1,285 tonnes, 2%).