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ASSESSMENT OF COASTAL FISH DIVERSITY IN THE RIVER GANGA: IMPLICATIONS FOR BIODIVERSITY CONSERVATION AND SUSTAINABLE FISHERIES

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The present study aims to understand fish diversity and assemblage patterns using the trophic guild approach in the coastal region of the river Ganga. Fish samples were collected from three estuarine sampling sites, viz., *Godakhali, Diamond Harbour, and Fraserganj, from September 2022 to September 2024. The study period recorded a total of 97 fin fish species, representing 21 orders and 51 families. Among them, the greatest species diversity was recorded in Diamond Harbour (77 species), followed by Godakhali (56 species) and Fraserganj (49 species). Five fish species were recorded under the 'Near Threatened category (Ailia coila, Arius gagora, Brevitrygon walga, Harpadon nehereus, and Scoliodon laticaudus), while Gymnura poecilura was classified as Vulnerable as per IUCN Red List status. The estuarine guilds show that the marine estuarine dependent (MMD) formed the major group, followed by marine estuarine opportunists (MMO), while the feeding guild shows that carnivores (CR) dominated the fish assemblages, followed by invertebrate feeders (IF). The present study gives the baseline information required to comprehend species-specific habitat use and can aid in future management strategies.*