

Chapter-3**Some Freshwater Fish Resources of Odisha, India****Siba Prasad Parida***Department of Zoology, School of Applied Sciences**Centurion University of Technology and Management, Odisha, India*Email: sibaprasad.parida@cutm.ac.in

The state of Odisha situated between latitudes 17° 5'N and 22° 5'N and longitudes 81° 5'E and 87° 6'E is bordered by the Bay of Bengal in the east, West Bengal in the north-east, Bihar in the north, Madhya Pradesh in the west and north-west and Andhra Pradesh in the south. It is one of the east coast states of India. Fishes were the first vertebrates. Understanding the evolutionary history of fishes is therefore important not only for what it tells us about fish groups, but for what it tells us about evolution of the vertebrates and ultimately our own species.

Fish diversity accounts for more than half of all living vertebrates and are the most successful vertebrates in all aquatic habitats worldwide. There are nearly about 28,000 living species of fishes out of which approximately 1000 are cartilaginous (sharks, skates and rays), 108 are jawless (hagfishes and lampreys) and the remaining 26,000 are bony fishes.

A fish can be defined as an aquatic vertebrate with gills and with limbs in the shape of fins. Included in this definition is a great diversity of sizes (from 8 mm gobies and minnows to 12+mts whale sharks), shapes, ecological functions, life history scenarios, anatomical specializations and evolutionary histories. Most (about 60%) of living fishes are primarily marine and the rest lives in fresh water; about 1% move between salt and fresh water as a normal part of their life cycle.

Today and in the past, fishes have taken nearly all major aquatic habitats, from lakes and polar oceans that are ice-covered through much of the year, to tropical swamps, temporary ponds, intertidal pools, ocean depths, and all the more benign environments that lie within these various extremes. Fishes have been ecological dominants in aquatic habitats through much of the history of complex life. To colonize and thrive in such a variety of environments, fishes have evolved obvious and striking anatomical, physiological, behavioral, and ecological adaptations.

Fishes and fish products have been an ideal diet for people in ancient India. In most of the old and religious books fishes have been quoted as game and playing objects. Arjun in Mahabharata could win Draupadi only after penetrating the eyes of a fish. There are references about the "Dhewar Kanva" in Mahabharata.

There were certain castes like Dhewar, Machhuwa and Kewat which used to live on the bank of rivers and were entitled to use the products found in rivers and ponds, no doubt fish was one of them. These non-vegetarian diets had their roles in ancient Indian lives. They were used as special food during festivals and feasts.

Fishes were well protected in the olden days of Ashok, Someshwar and other kings. Fish products were commonly used as medicine in heart and other fatal diseases. In the period of Ashok there were strict rules