

## Types of Fish Found in India: A Brief Introduction

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India, with its vast and varied geographical landscape, boasts a rich diversity of aquatic life. The country's extensive coastline, numerous rivers, lakes, and ponds contribute to a thriving ecosystem of fish species. India is the world's third-largest fish producer and second-largest aquaculture fish producer. India accounts for around 7% of world fish output. The country also has more than 10% of the world's fish species and is one of 17 countries with high biodiversity. Fisheries and related industries employ around 14 million people. Andhra Pradesh is the country's greatest fish producer, followed by West Bengal and Gujarat. India is the world's third largest fish producer, accounting for 8% of global fish output, and ranks second in aquaculture production. The total fish production in 2021-22 is 16.24 million tonnes, with 4.12 million tonnes coming from the sea and 12.12 million tonnes from aquaculture. To some extent, challenges include improving the supply of quality seed, cold chain, satisfying infrastructure needs, and post-harvest infrastructure. India is home to around 2,246 finfish species, 765 of which are freshwater fish documented from inland water bodies like as wetlands, ponds, rivers, ditches, and rice fields.

Native Fisher	Number of Species
Marine Ecosystem	1518
Brackish water Ecosystem	113
Freshwater Ecosystem	877
Sub-total	2508
Exotic Fishes	291
Total	2799

(Sarkar *et al.*, (2012)

### Fish classification based on habitat:

**Freshwater Fish:** fish that spend the majority of their lives in freshwater, such as rivers and lakes, and have a salinity of less than 0.5 ppt. Freshwater contains around 40% of all known fish species. Example: Coldwater Fish (5- 20oC); Mahseer, Trout, etc. and Warmwater Fish (25-35oC): Carps, Catfish, Snakeheads, Featherbacks, etc.

**Brackish water Fish:** Fish that live in backwaters, estuaries, and coastal waterways that can withstand a wide range of salinities (0.5 - 30.0 ppt). Mullet, Milkfish, Seabass, Pearlsport, Mudskipper, and further related species are a few examples.

**Marine Fish:** Fish that spend the most of their lives in seawater, such as seas and oceans, with salinities more than 30 ppt. There are around 240 species that contribute to maritime fisheries. Example: Sardines, Ribbonfish Mackerel, Grouper, Anchovies, Cobia, Tuna, etc



### Type of fish found in India

#### Rohu

Rohu is a carp species found in rivers throughout the Indian subcontinent and is widely used in aquaculture. The huge silver-coloured Rohu fish is an important aquaculture freshwater species that is widely consumed in India and is regarded as a delicacy in Bhojpur (MP).

### **Ilish**

A common freshwater and brackish water fish in India, ilish, often referred to as hilsa shad, is found mostly in West Bengal, Odisha, Tripura, Assam, and Andhra Pradesh. In Andhra Pradesh and Bengal, fish is a popular meal. It is also known as hilsa shad, is a popular freshwater and brackish water fish in India, particularly in West Bengal, Odisha, Tripura, Assam, and Andhra Pradesh.



### **Katla or Catla,**

Katla or Catla, also known as large Indian carp, is a prominent type of freshwater fish found in rivers and lakes throughout India. Catla, along with rohu labeo and mrigal carp, is India's most significant aquaculture freshwater fish.



### **Tilapia**

Tilapia are freshwater fish that live in shallow waterways, rivers, lakes, and are also found in brackish water in India. Tilapia is also one of the most eaten fish in the world and, after carp and salmon, one of the most significant species in aquaculture.



### **Tengra**

In India, the rivers of Bengal, Bihar, Odisha, and Chhattisgarh are home to tengra fish.



### **Magur**

Magur is a kind of medium-sized walking catfish found to Indian rivers and Southeast Asia. The omnivorous wandering catfish is a delicacy in the Indian states of Assam, Maharashtra, and Uttar Pradesh.



### **Kajuli**

Kajuli also known as the Gangetic ailia, mostly found in large rivers and connected water systems. This species is an importance to local commercial fisheries of India



## **Biodiversity of Indian Fish**

India is home to a staggering variety of fish species, ranging from freshwater to marine environments. The Western Ghats, Eastern Ghats, Himalayan rivers, and the coastal regions all contribute to the diverse habitats that support numerous fish species. Some prominent freshwater species include Rohu, Catla, and Hilsa, while marine species like Pomfret, Sardines, and Kingfish thrive in coastal waters.

### **Adaptations to Varied Environments:**

Indian fish exhibit remarkable adaptations to their respective environments. From the cold waters of the Himalayan rivers to the warm, saline conditions along the coasts, these species have evolved specific physiological and behavioral traits. Understanding these adaptations provides insights into the resilience of Indian fish in diverse ecosystems.

**Economic Significance:** Fisheries play a crucial role in India's economy, providing livelihoods to millions of people. Both marine and inland fisheries contribute significantly to the country's protein consumption. The fishing industry, including aquaculture, also serves as a source of income for numerous coastal communities.

**Threats to Indian Fish:**

Despite their abundance, Indian fish face various threats, including overfishing, habitat degradation, pollution, and climate change. Understanding these challenges is essential for implementing sustainable practices that ensure the long-term health of fish populations and their ecosystems.

**Conservation Efforts:** Several initiatives and conservation projects aim to protect and sustainably manage Indian fish populations. These efforts include the establishment of marine protected areas, the promotion of responsible fishing practices, and the conservation of critical habitats. Collaborative efforts involving government agencies, NGOs, and local communities are crucial for the success of these endeavors.

**Cultural Significance:**

Fish holds cultural importance in many Indian communities. It is a staple in various regional cuisines and is often associated with religious and ceremonial practices. Exploring the cultural significance of fish provides a holistic understanding of the interconnectedness between people and their aquatic environments.

**Future Perspectives:**

As India continues to undergo rapid economic and environmental changes, the future of its fish populations remains a critical concern. Sustainable fisheries management, conservation efforts, and scientific research are vital for ensuring the resilience of Indian fish in the face of evolving challenges.