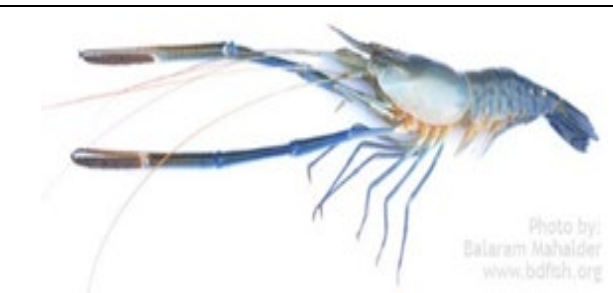



### a. Freshwater Prawns:

The Giant Freshwater Prawn, *Macrobrachium rosenbergii*, popularly known as SCAMPI, is the most important species. It is native to the Indo-West Pacific region, from India through Southeast Asia to Northern Australia. It has been introduced to several countries across the globe for aquaculture purpose. Males and females have different growth rates; the males exhibit heterogenous individual growth. Among males there are three different morphotypes (Small Males, Orange Claws and Blue Claws) which display social hierarchy. All three types of males are sexually active, and females that have undergone pre-mating moult will pair with any type male to reproduce. A Blue Claw male protects the female until their shells have hardened but the other two show no such behaviour.




The second largest freshwater palaemonid prawn, *Macrobrachium malcolmsonii*, also called the Indian River Prawn/Monsoon River Prawn/Godavari Prawn, has great potential for aquaculture development in the inland waters of the country. Freshwater prawn farming in India developed during 1999, after marine shrimp culture encountered disease problems.

Freshwater Prawns	
Name	Picture
Giant Freshwater Prawn (SCAMPI) <i>Macrobrachium rosenbergii</i>	 <p>Photo by: Balaram Mahalder www.bdfish.org</p>
Indian River Prawn <i>Macrobrachium malcolmsonii</i>	

### b. Marine Shrimp:

Some of the commercially important marine shrimps are Tiger Prawn (*Penaeus monodon*), Indian White Prawn (*Penaeus indicus*), Pink Shrimp (*Metapenaeus dobsoni*), Brown Shrimp (*Metapenaeus monoceros*), etc. For Aquaculture purpose, the exotic Pacific White Shrimp (*Litopenaeus vannamei*) has been introduced into India and is being farmed extensively on a

commercial-scale in low-saline or brackishwater ponds in Gujarat, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, West Bengal etc. With the availability of Specific Pathogen Free (SPF) quality brooders and seed and adoption of improved culture techniques, mortality of juvenile and young shrimp due to disease reduced and thereby yields of shrimp increased significantly in the country.

Marine Prawns/ Shrimps	
Name	Picture
Tiger Prawn/ Black Tiger Shrimp <i>Penaeus monodon</i>	
Indian White Prawn/Shrimp <i>Penaeus indicus</i>	
Pacific White Shrimp <i>Litopenaeus vannamei</i>	




## 1.2. Crabs

Crabs are decapods in which the abdomen is vestigial; the five pairs of thoracic legs are well developed and used for capturing prey, walking and swimming. Crabs inhabit a wide variety of habitats like mud flats, rock crevices, under stones, in gravel and sand and constructed burrows etc. They are primarily nocturnal and prefer hiding places for shelter during the day time.

### a. Freshwater Crabs:




Freshwater crabs are adapted to semi-terrestrial or terrestrial mode of life and known for their ability to complete the life-cycle independent of marine environment. They are

generally omnivorous, feeding on plant material, live or dead animals such as fish, prawns, molluscs, etc., and sometimes cannibalism is also seen. Over 1300 species are known from the world, of which 96 species are found in India. Some of the commonly found freshwater crabs of India are listed below:

Freshwater Crabs	
Name	Picture
Indian Freshwater Crab <i>Barytelphusa cunicularis</i>	
<i>Maydelliathelphusa lugubris</i>	
<i>Maydelliathelphusa falcidigitis</i>	




**b. Brackishwater/Marine Crab:**

Marine crabs are one of the valuable seafood items that are in great demand both in the domestic and export markets. There are about 600 species of marine crabs recorded from Indian waters. The crab fishery in India is dominated by a few species such as *Scylla serrata*, *S. tranquebarica*, *Portunus pelagicus*, *P. sanguinolentus*, *Charybdis feriata*, *C. lucifera* and *C. truncata*. Commercial-scale crab culture is undertaken along the coastal areas of Andhra Pradesh, Tamil Nadu, Kerala and Karnataka. Grow-out culture ('Crab Fattening') is generally pond based wherein crabs juveniles are held in pens or cages. Production of 'Soft-Shellied Crabs' is done using floating boxes held in tidal ponds.

Marine Crabs	
Name	Picture
Mud Crab <i>Scylla serrata</i>	
Three-spot Swimming Crab <i>Portunus sanguinolentus</i>	
Blue Swimming Crab <i>Portunus pelagicus</i>	

### 1.3. Lobsters

Lobsters are one of the most valuable and highly priced crustaceans as well as an important export commodity. The massive head bears five pairs of walking legs; the abdomen is well developed, muscular and bears five pairs of swimmerets. Lobsters are solitary animals that crawl on the sea floor and hide under rocks. Among the 12 species recorded from Indian coastal waters, only four species of Spiny Lobsters (*Panulirus homarus*, *P. ornatus*, *P. polyphagus*, *P. versicolor*) and one species of Slipper Lobster (*Thenus orinetalis*) are commercially important. Growth is slow, most lobsters take more than 3 years to attain maturation and they have a prolonged life-cycle. Grow-out and fattening of lobsters is commonly done in indoor tanks and cages to fetch better price in market.

Lobsters	
Name	Picture
Scalloped Spiny Lobster <i>Panulirus homarus</i>	 A photograph of a Scalloped Spiny Lobster (Panulirus homarus) from a dorsal perspective. It has a dark, segmented body with a prominent, fan-shaped tail fan at the posterior end. The legs are long and thin, with some showing spines.
Ornate Spiny Lobster <i>Panulirus ornatus</i>	 A photograph of an Ornate Spiny Lobster (Panulirus ornatus) from a dorsal perspective. It has a blue and white mottled pattern on its body and legs. The tail fan is orange and fan-shaped.
Slipper Lobster <i>Thenus orientalis</i>	 A photograph of a Slipper Lobster (Thenus orientalis) from a dorsal perspective. It has a large, brown, slipper-like carapace and a fan-shaped tail.

## 2. Molluscs

Molluscs are invertebrates, belonging to one of the largest phylum, inhabiting the marine, freshwater and terrestrial ecosystems. Their body structure, form, colour and size vary widely. In India, molluscs are captured for food, pharmaceuticals and ornamental purpose and dead shells are collected for making shell-lime. Molluscs include forms such as bivalves, univalves and cephalopods, and some of them support both capture and culture fisheries.

### 2.1. Bivalves

Bivalves as the name suggest are bilaterally symmetrical, laterally compressed molluscs, with extensive mantle lobes, which secrete the shell having two valves. Majority of bivalves are marine and a few species are found in freshwater habitats. Nearly 652 species of marine bivalves are reported from India, of which 88 species are endemic to Indian waters. Clams are the most important group among bivalves forming 85.8%, followed by Mussels 9.6% and Oysters 4.6%.