

## **Lizardfishes**

- Belonging to the family Synodontidae
- They do not form an independent fishery and are caught in small quantities in shrimp trawlers, forming a supporting fishery to the other major fisheries.
- Though a by-catch fishery, this group assumes significance by virtue of the high nutritive value and their acceptance as food both in the fresh and dry condition

### **• Distribution-Global**

They are found distributed from the Red sea to the Malay Archipelago, China and Japan.

### **• Distribution-India**

They are available in both east and west coasts. However, they are highly abundant in Kerala.

### **• Production trend**

The contribution of lizardfishes ranged between 0.1 % (500 t) during 1956 - 60 to 1.3% (29,600 t) during 1991-95.

- Lizardfishes catch was 0.54 lakh tonnes in 2014 and .78 lakh tonnes in 2015-16.
- Kerala contributed to the maximum of 43.4% to the total lizardfish landings, followed by Tamil Nadu, Maharashtra, Kamataka, Gujarat and Andhra Pradesh.

### **• Species composition**

Lizardfish fishery is represented by species such as the greater lizardfish, *Saurida tumbil*, brush toothed lizardfish, *S. undosquamis*; blunt nose lizardfish, *Trachinocephalus myops* and engleman's lizardfish, *Synodus englemani* along the west coast of India.

- Other species such as *Saurida longimanus* (longfin lizardfish) and *S. micropectoralis* (shortfin lizardfish) contribute to the fishery along the east coast.

### **• Mode of exploitation**

Lizardfishes are reported as an important bycatch of shrimp trawlers. It constitutes about 3 - 4% of bycatch of shrimp trawlers.

- Conservation and management Various maritime states have imposed a ban on trawling (closed season) to protect the spawning and juvenile population.

### **• Utilization**

Large sized fishes of above 20 cm are used for human consumption, while smaller ones are used as animal feeds and fertilizers. Of the species used for human consumption, *S. tumbil* has better acceptance when supplied in fresh condition.

- Lizardfishes are used for the preparation of Surimi and Satai (in Thailand) and fish sauce. Dried air bladder is also used for preparation of fish maws (isinglass).

### **Pomfrets**

- Belonging to the family, Stromateidae and Carangidae are shoaling demersal fishes.
- One of most delicious table fish along Indian coast. Have high export quality and command high unit value.
- Found on continental shelf at all depths, generally upto 100 fathoms, often enter estuaries and brackishwater. Three species form the fishery: Black pomfret (*Parastromateus niger*), Silver pomfret (*Pampus argenteus*) and Chinese pomfret (*Pampus chinensis*).
- Distribution-Global

Distributed in the Indo-west Pacific region, Persian Gulf, Pakistan, Malay Archipelago, Hongkong, China, Phillipines and Indonesia.

#### **• Distribution-India**

Distributed along both coasts, they are found abundant in Gujarat and Maharastra. Silver pomfret and Black pomfret dominant in Maharashtra, Gujarat, Orissa and Andhra Pradesh. Chinese pomfret form minor fishery and maximum production is mainly from Karnataka.

#### **• Production trend**

Production ranged from 13,600 t during 1951-55 to 41,000 t during 1996-99 and 47,200 t during 1981-85.

- 50, 192 t were landed in 2014 and 40804 t in 2015-16.
- Silver pomfret stood highest in production (23,819 t) followed by Black pomfret (13,668 t) and Chinese pomfret (3317 t).
- Maharashtra with an average catch (31.2 %) stood highest in production, followed by Gujarat and Orissa (11%).
- Mode of exploitation Gill net, trawl and dol net
- Fishing Season: It is generally from September to May Utilization Pomfrets in fresh condition are in good demand. They are filleted and frozen for export. Sometimes, they are brined and sundried. Pomfret stands next to ribbonfish (i.e. second position) in the export of frozenfish in both quantity and value (Rs. 177.7 crores).

## **Goatfishes**

- Belong to family, Mullidae. Maximum size 33 cm (*Upeneus taeniopterus*).
- 16 species of 3 genera occur in India. Main species are *Mulloides flavolineatus*, *M. vanicolensis*, *Parupeneus bifasciatus*, *P. indicus*, *P. barberinus*, *P. macronema*, *P. cinnabarinus*, *P. cyclostomus*, *Upeneus molccensis*, *U. sulphureus*, *U. vittatus*, *U. oligospilus*, *U. bensasi*, *U. sundaicus*, *U. tragula* and *U. taeniopterus*.
- 8 species of genus *Upeneus* contribute to bulk of fishery.
- They inhabit shallow coastal waters with sandy or muddy bottom and their concentration is generally restricted to a depth of 40 m or less and they rarely occur beyond 60 m depth. A few species are often associated with coral reefs.
- *Upeneus sulphureus* often enters estuaries. *U. sulphureus*, *U. vittatus* and *U. bensasi* form small schools whereas other species such as *U. tragula* are solitary.

### **• Mode of exploitation**

Bottom trawlers exploit the maximum amount of goatfishes as by-catch. However, drift gillnets, bottom set gillnets and hooks and lines are also in use.

### **• Utilization**

The goatfishes are mostly consumed in fresh condition. Smaller ones are sun-dried for human consumption. Though the flesh of the goatfishes is of good quality, they are priced low due to their small size. Hence, they are common in the diet of poor people.