

Sea Cucumber

September 21, 2021

In news—Recently, the Indian Coast Guard has seized two tonnes of banned sea cucumber in Tamil Nadu's Mandapam.

About sea cucumber-

- Sea cucumbers **are echinoderms from the class Holothuroidea.**
- They are marine animals with a **leathery skin and an elongated body** containing a single, branched gonad.
- They are found in all oceans, **mostly in shallow water** but sometimes at depths of many thousands of metres.
- They are best represented in the Indian Ocean and the western Pacific.
- Sea cucumbers are named for their resemblance to the fruit of the cucumber plant.
- Like all echinoderms, sea cucumbers have an **endoskeleton** just below the skin, calcified structures that are usually reduced to isolated microscopic ossicles joined by connective tissue.
- It has a soft cylindrical body, 2 to 200 cm long and 1 to 20 cm (0.4–8 inches) thick, is usually a dull, dark colour and often warty, thus resembling a cucumber.
- They **help recycle nutrients, breaking down detritus and other organic matter** after which bacteria can continue the degradation process
- One of the **by-products of the sea cucumber's digestion of sand is calcium carbonate**, a key component of coral reef.
- To survive, coral reefs must accumulate calcium carbonate, and thus sea cucumbers play a vital role in their preservation.
- They also maintain the transparency of seawater by eating sewage.
- **Feeding and excretion by sea cucumbers also increase**

alkalinity, which counteracts ocean acidification.

- Illegal harvesting and overexploitation of these animals leads to poorer sediment health, reduces nutrient recycling and impacts biodiversity.
- It is in **high demand in China and South-East Asia, where it is consumed as a delicacy.**
- It is also **used for various medicinal purposes.**

Conservation status-

- In India, Sea cucumber is treated as an **endangered species listed under schedule 1 of the Wildlife Protection Act of 1972.**
- They cannot be transported in any form for commercial use and are also protected under the Convention on International Trade in Endangered Species (CITES), which India is a signatory.
- A total ban on harvesting of sea cucumbers was imposed in 2001 under the WPA by the Union environment ministry.
- In 2020, the Indian government created the **world's first sea cucumber conservation area**, the Dr KK Mohammed Koya Sea Cucumber Conservation Reserve, in the Cheriyanani Reef in the Indian Union Territory of Lakshadweep.