

Migration of great seahorses

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In news— According to new study, the *Hippocampus kelloggi*, one of 12 species of fish with a horse-like head found in the Indo-Pacific region, could be migrating toward coastal Odisha due to fishing pressures.

Key findings-

- **Extensive fishing off the Coromandel coast** could be forcing the great seahorse to migrate laboriously toward Odisha.
- **Fishing is less intense in the Bay of Bengal off the Odisha coastline.** But the shallow coastal ecosystem of the eastern Indian State may not be the new comfort zone for the fish with a horse-like head.
- The study was based on a specimen of a juvenile great seahorse, or *Hippocampus kelloggi*, caught in a ring net and collected from the Ariyapalli fish landing centre in Odisha's Ganjam district.
- But the **great seahorse is not migrating in large numbers**, as the Odisha coast does not have coral reefs or seagrass meadows that the species can call home, except within the Chilika region
- Despite the ban on fishing and trading activities on seahorses from 2001, clandestine fishing and trading still take place in India.
- This creates immense pressure on the seahorse populations that have a high dependency on local habitats to maintain their extensive and long-life history traits.

Coastal Plain of India



About seahorses-

- A seahorse (also written sea-horse and sea horse) is any of 46 species of small marine fish in the genus *Hippocampus*.
- **Having a head and neck suggestive of a horse**, seahorses also feature segmented bony armour, an upright posture and a curled prehensile tail.
- **Seahorses are mainly found in shallow tropical and temperate salt water** throughout the world, from about 45°S to 45°N.
- **They live in sheltered areas such as seagrass beds, estuaries, coral reefs, and mangroves.**
- **Seahorses range in size from 1.5 to 35.5 cm.** They are named for their equine appearance, with bent necks and long snouted heads and a distinctive trunk and tail.
- Although **they are bony fish, they do not have scales**, but rather thin skin stretched over a series of bony plates, which are arranged in rings throughout their bodies.
- Each species has a distinct number of rings. **The armor of bony plates also protects them against predators**, and because of this outer skeleton, they no longer have ribs.

- **The coastal ecosystems of India house nine out of 12 species found in the Indo-Pacific**, one of the hotspots of seahorse populations that are distributed across diverse ecosystems such as seagrass, mangroves, macroalgal beds, and coral reefs.
- These nine species are distributed along the coasts of eight States and five Union Territories from Gujarat to Odisha, apart from Lakshadweep and the Andaman and Nicobar Islands.
- The population of the great seahorse, which is among the eight species **tagged 'vulnerable'**, is declining due to its **overexploitation for traditional Chinese medicines** and as **ornamental fish, combined with general destructive fishing and fisheries bycatch**
- **Seahorses are poor swimmers** but migrate by rafting clinging to floating substrata such as macroalgae or plastic debris for dispersal by ocean currents – to new habitats for successful maintenance of their population.