‘Sea Snot’ Outbreak in Turkey

Why in News

Recently, **Turkey’s Sea of Marmara**, which **connects the Black Sea to the Aegean Sea,** has witnessed the **largest outbreak of ‘sea snot’.**

- A ‘sea snot’ outbreak was **first recorded in the country in 2007.**

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Key Points

- **Sea Snot and its Formation:**
  - It is **marine mucilage** that is formed when **algae are overloaded with nutrients** as a result of **water pollution** combined with the effects of climate change**.**
    - The **nutrient overload** occurs when **algae feast on warm weather** caused by **global warming.**
  - It looks like a **viscous, brown and foamy substance.**
- **Concerns:**
  - **Threat to the Marine Ecosystem:**
    - It has caused **mass deaths among the fish population**, and also killed other aquatic organisms such as **corals** and sponges.
    - It is now **covering the surface of the sea** and has also **spread to 80-100 feet** below the surface which eventually can collapse to the bottom and cover the sea floor.
  - **Livelihoods of Fishermen Affected:**

        - As the sludge is getting collected in their nets, making them so heavy that they break or get lost.
        - Moreover, the mucilage coating the strings makes the nets visible to fish and keeps them away.
    - **Water-borne Diseases:**
        - It can cause an outbreak of water-borne diseases such as **cholera** in cities like Istanbul.
- **Steps that are being Taken:**
    - The entire **Sea of Marmara** will be turned into a **protected area.**
    - Moreover, steps are being taken to **reduce pollution and improve treatment of waste water** from coastal cities and ships.
    - Turkey's biggest **maritime clean-up operation** is being launched and called on local residents, artists and NGOs to join hands to extend assistance.

Nutrient Pollution

- **About:**
    - It is the process where too **many nutrients, mainly nitrogen and phosphorus**, are added to bodies of water and can act like fertilizer, **causing excessive growth of algae.**
    - This process is also known as **eutrophication.**
- **Sources of Nutrients:**
    - They can **occur naturally** as a result of **weathering of rocks** and soil in the watershed and they can also **come from the ocean due to mixing of water currents.**
    - There are more nutrients entering our coastal waters from **wastewater treatment facilities, runoff from land in urban areas** during rains, and **from farming.**
- **Impact:**
    - **Severe algal growth blocks light that is needed for plants**, such as seagrasses, to grow.
    - When the **algae and seagrass die**, they decay and in this process the oxygen in the water is used up and this leads to **low levels of dissolved oxygen in the water.** This, in turn, **can kill fish, crabs, oysters, and other aquatic animals.**

World Oceans Day

- The World Oceans Day is celebrated every year on **8th June** to create awareness about the benefits that mankind gets from the ocean.
    - The Day was designated by the United Nations General Assembly in 2008.
    - Oceans are considered to be the **lungs of the planet**, a critical **part of the biosphere** and are a major **source of food and medicine.**
- The **theme** of the World Oceans Day 2021 is **'The Ocean: Life and Livelihoods'.**
- It is especially relevant in the lead-up to the **UN Decade of Ocean Science for Sustainable Development**, which will run from 2021 to 2030.
- The decade is aimed at strengthening international cooperation to develop scientific research and innovative technologies that are capable of connecting ocean science with the needs of modern society.

Source: IE