



## Ocean Mapping: Seabed 2030 Project

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### Why in News

Recently, it was announced that mapping of nearly one-fifth of the world's ocean floor had been finished under the **Seabed 2030 Project**.

### Key Points

- **Seabed 2030 Project:**

- Seabed 2030 is a collaborative project between the **Nippon Foundation of Japan** and the **General Bathymetric Chart of the Oceans (GEBCO)**.
- It was launched at the **United Nations Ocean Conference** in June 2017 and is aligned with the UN's **Sustainable Development Goal (SDG) 14** to conserve and sustainably use the oceans, seas and marine resources.

The United Nations Ocean Conference intended to be a game-changer in reversing the decline in the health of the ocean for people, planet and prosperity.

- The project aims to bring together all available **bathymetric data** to produce the definitive map of the world ocean floor by 2030 and make it available to all.  
Bathymetry is the measurement of the shape and depth of the ocean floor.
- In the past, **satellites and planes carrying altimeter instruments** have been able to provide large swathes of data about the ocean floor.
- However, the Seabed 2030 Project **aims to obtain higher quality information** that has a minimum resolution of 100 metres at all spots, using equipment such as deepwater **hull-mounted sonar systems**, and **Autonomous Underwater Vehicles (AUVs)**.

- **Importance of the Study of the Ocean Floor:**
  - **Helps in understanding several natural phenomena**, including ocean circulation, tides and biological hotspots.
  - Provides **key inputs** for navigation, forecasting disasters, exploration for oil and gas projects, building offshore wind turbines, fishing resources, and for laying cables and pipelines.
  - Ensure a **better understanding of climate change**.  
Climate change has impacted the flow of ocean currents and has led to sea-level rise.

### **General Bathymetric Chart of the Oceans**

- GEBCO is the **only** intergovernmental organisation with a mandate to map the entire ocean floor.
- It traces its origins to the GEBCO chart series initiated in 1903 by Prince Albert I of Monaco.
- It aims to **provide the most authoritative publicly-available bathymetry** of the world's oceans.
- It operates under the joint auspices of the **International Hydrographic Organization (IHO)** and the **Intergovernmental Oceanographic Commission (IOC)** (of **UNESCO**).
  - The IHO is an **intergovernmental organization** that works to ensure all the world's seas, oceans and navigable waters are surveyed and charted. It was established in 1921.
  - **India is its member.**
  - The **IHO Secretariat** is hosted by the Principality of **Monaco**.

**Source: IE**