



Sagar Samriddhi

Why in News?

Recently, the Ministry of Ports, Shipping & Waterways (MoPSW) has launched '**Sagar Samriddhi**,' an online dredging monitoring system to accelerate the '**Waste to Wealth**' initiative of the Government.

What is Dredging?

- Dredging is the removal of sediments and debris from the bottom of lakes, rivers, harbors, and **other water bodies**.
 - This is necessary because over time, sediment builds up and makes the waterways too shallow for boats and ships to navigate safely.
- The main purpose of dredging is to **maintain or increase the depth of navigation channels, anchorages**, and berthing areas so that larger ships can pass through and transport goods. This is crucial for the economy, as these ships carry a significant portion of the country's imports.

What is Sagar Samridhi?

- **About:**
 - This system has been developed by National Technology Centre for Ports, Waterways and Coasts (NTCPWC), the technological arm of MoPSW.
 - The system improves upon the old **Draft & Loading Monitor (DLM) system**.
 - The system aims to enhance productivity, contract management, and promotes **effective reuse of dredged** material.
 - It aligns with the vision of [**Atmanirbhar Bharat \(Self-reliant India\)**](#) and Make in India, strengthening the country's technological capabilities.
- **Capabilities:**
 - Real time dredging progress report
 - Daily and monthly **progress** Visualization
 - Dredger **performance** and downtime monitoring
 - Easy location **track** data with snapshot of loading, unloading and idle time
- **Significance:**
 - By minimizing human error through technology, the system **improves project implementation, reduces dredging costs**, promotes environmental sustainability, and enhances transparency and efficiency.
 - The annual maintenance dredging at Major Ports and Waterways is **around 100 million cubic meters, for which about Rs.1000 crores** are spent each year by the Ports and Inland Waterways Authority of India.
 - By implementing the Addendum and using the 'Sagar Samriddhi' system, the dredging **cost will significantly decrease, ensuring transparency and efficiency**.
 - The system enables better project planning, reduces operational costs, and facilitates the development of deep draft Ports.

Are there any Guidelines Related to Dredging in India?

- The MoPSW issued '**Dredging Guidelines for Major Ports**' in 2021, which outlined the procedure for planning and preparation, technical investigations, dredged material management, estimating the cost of dredging etc., to enable the Major Ports to formulate the dredging projects in order to complete in time.
- In March 2023, **the Ministry added an update to the Dredging Guidelines for Major Ports**, including a provision in the bidding documents that helps **reduce dredging costs through the concept of 'Waste to Wealth.'**
 - It suggests various beneficial ways to use the dredged material, such as in construction projects and for environmental improvement like beach nourishment.

What is NTCPWC?

- The NTCPWC was established under the **Sagarmala Programme of MoPSW** with the total investment of RS 77 Crores at IIT Madras in April 2023.
- The aim of the centre is **to enable research & development for the marine sector**, enabling solutions towards achieving the ultimate goal of building a robust marine industry in the country.
- This state-of-the-art centre has **world class capabilities for undertaking the 2D & 3D investigations of research** and consultancy nature for the Port, Coastal, and Waterways sector across all disciplines.

Source: PIB

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