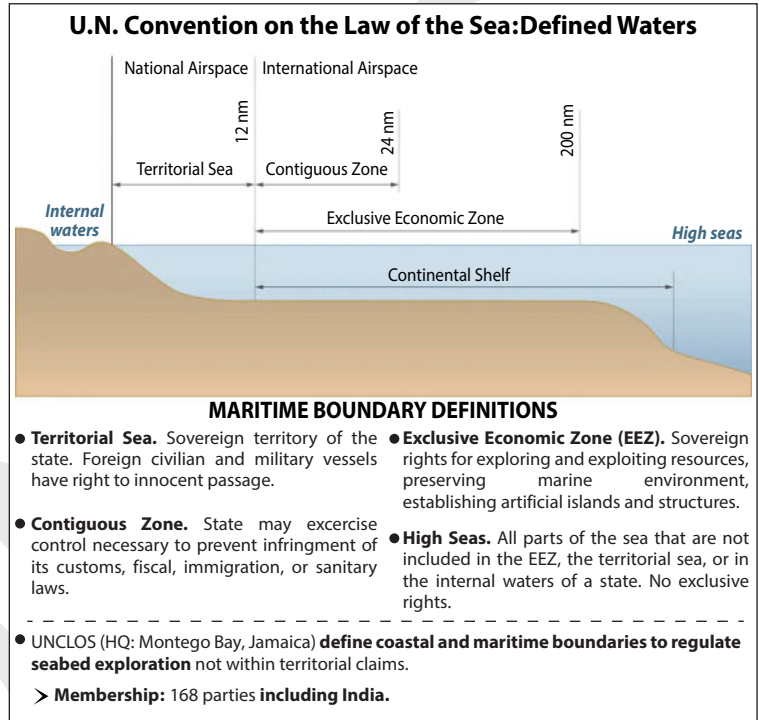


# NEWS TODAY

## UNITED NATIONS (UN) MEMBERS REACH ACCORD TO PROTECT MARINE LIFE ON HIGH SEAS

- For the first time, UN members have agreed on **unified treaty to protect biodiversity in high seas**.
  - Treaty was negotiated under **United Nations Convention on Laws of the Sea (UNCLOS) of 1982** which governs rights of countries regarding marine resources.
- Treaty of High Seas**, also known as **Biodiversity Beyond National Jurisdiction (BBNJ) Treaty**, will create a **new body to manage conservation of ocean life** and establish **Marine Protected Areas (MPAs)** in high seas.
  - It'll **put limits on how much fishing can take place**, exploration activities like deep sea mining etc.
- Significance of treaty**
  - Enforcing UN Biodiversity Conference's pledge to **conserve 30% of world's land and ocean by 2030 (Achieving 30x30 Goal)**.
  - Obliges countries** to conduct **environmental impact assessments** of proposed activities **on high seas**.
  - Combine different regional treaties** to address threats and concerns across species' ranges.
- High seas begin at border of countries' EEZ**, which **extend up to 370km from coastlines** (refer image).
  - They comprise **more than 60% of world's oceans** and nearly half planet's surface.
  - Only **about 1% of high seas** are currently protected.



## NATIONAL REMOTE SENSING CENTRE (NRSC), HYDERABAD RELEASES 'LANDSLIDE ATLAS OF INDIA'

- For the first time, NRSC scientists did **risk assessment on landslides recorded between 1988 and 2022** in 147 districts in **17 states and two union territories** to build a Landslide Atlas of India.
  - Atlas, prepared under **Disaster Management Support Programme of ISRO**, provides **state-wise geospatial distribution** of landslides using **space data and geospatial models**.
  - NRSC is responsible for **managing data from aerial and satellite sources**.
- Key findings**
  - India is **third most landslide prone country** in world.
  - 12.6% of India's land area**, excluding snow covered area, is **prone to landslide**.
  - Northwest Himalayas** contribute **66.5% of landslides** in India, followed by **Northeast Himalayas (18.8%) and Western Ghats (14.7%)**.
  - Top 5 districts based on their exposure to landslide:** Rudraprayag and Tehri Garhwal (Uttarakhand), Thrissur (Kerala), Rajouri (J&K) and Palakkad (Kerala).
- Landslide is defined as the **movement of mass of rock, earth or debris down a slope**.
- Causes of Landslides:** Socio-economic parameters like total population, number of households etc., deforestation, heavy rainfall, earthquake etc.
- Impact of landslides:** Loss of lives and infrastructure, risk of floods, creates financial burden for rebuilding infrastructure.

STEPS TAKEN BY GOVERNMENT TO MONITOR AND CONTROL LANDSLIDE

**Landslide Early Warning System (LEWS)** by GIS under LANDSLIP project

**Geological Survey of India's landslide susceptibility mapping** in different parts of country

**National Disaster Management Authority (NDMA) guidelines for Landslide Hazard Zonation**



## GOVERNMENT GRANTS 3-YEAR APPROVAL TO NANO-DIAMMONIUM PHOSPHATE (DAP) FERTILIZER MARKET LAUNCH

- Ministry of Agriculture has allowed IFFCO (**cooperative organization**) and Coromandel International to start production of nano-DAP for three years that would be available from **2023 kharif season**.
- Nano-DAP is a **next-generation fertilizer** with **nanoparticles of Nitrogen and Phosphorus**, i.e., particles with size between **1 to 100 nanometres**.
  - In 2021, IFFCO launched Nano-Urea. It is also **planning to launch nano-potash, nano-zinc and nano-copper fertilizers**.
  - DAP is a **phosphate-based fertilizer** manufactured by **reacting Ammonia** with **Phosphoric acid**, containing **Nitrogen and Phosphorus**.
    - Nitrogen and Phosphorus** are **primary macronutrients** and part of 18 essential plant nutrients.
- Advantages of using Nano-DAP**
  - Reduced fertilizer subsidy burden and import dependence** due to its **higher use-efficiency**.
  - Reduced input cost to agriculture** and helping to double farmers' income.
  - Improved Agriculture Sustainability** through higher nutrient uptake, lower water consumption and reduction in environmental losses.
- Concerns of using Nano-DAP**
  - Increased nanoparticles in soil and crops** from continued nanoparticles use.
  - Health Hazard** from nano-size particles at higher concentrations.

## SECOND INTERNATIONAL LABOUR ORGANIZATION (ILO) - UNITED NATIONS CHILDREN'S FUND (UNICEF) JOINT REPORT ON SOCIAL PROTECTION FOR CHILDREN

- Report titled "More than a billion reasons: The urgent need to build universal social protection for children" reflects **shared commitment to strengthening social protection systems** and expanding them to **reach every child at risk**.
  - Key highlights**
    - Globally, **just 1 in 4 children (aged 0-15 years)** are covered by social protection.
    - 2.4 billion children in world need adequate social protection**. However, children are still twice as likely as adults to live in poverty.
    - Increasing number of children without critical social protection** globally, threatening SDGs achievement - **SDG 1** (No Poverty) and **SDG 10** (Reduced Inequalities).
    - Challenges children face are growing** and compounded due to COVID-19, increasing cost-of-living, fragility, climate emergency etc.
  - Social protection is defined as **set of policies and programmes designed to reduce and prevent poverty and vulnerability throughout life cycle**.
    - E.g., Benefits for children and families, maternity, unemployment, employment injury etc.
  - Need for Child centric Social protection:** Boost their **productivity and earning potential**, addressing issues such as **child labour, drivers of gender inequality and exclusion** etc., increased access to food, nutrition, education and healthcare.
- 
- ```
graph TD; A[Accelerate progress towards universal coverage for children for improved well-being] --- B[Guarantee adequate benefit levels for meaningful change in children's lives]; B --- C[Provide a comprehensive range of benefits supporting children and families through a life-cycle approach]; C --- D[Ensure sustainable and equitable financing of social protection systems]; D --- E[Build rights-based, inclusive, gender-responsive, informed social protection systems]; E --- F[Ensure that social protection systems are adapted to developments in the world of work]; F --- A;
```

## 5 YEARS OF ELECTORAL BOND (EB) SCHEME

- EB is a **bearer instrument** in the nature of a **Promissory Note** and an **interest free banking instrument**. EBs were introduced in Union Budget 2017-18.
  - Citizen of India or a body incorporated in India** is eligible to purchase bond.
  - EBs are issued/purchased for **any value**, in multiples of Rupee **1,000, 10,000, 1,00,000, 10,00,000 and 1,00,00,000** from **specified branches of State Bank of India**.
  - Between March 2018 and November 2022, **64.74 percent of EBs redeemed**.
- Political parties** receiving donations through EBs have to **redeem them within 15 days** **otherwise EBs** shall be deposited by authorised bank with **Prime Minister's National Relief Fund (PMNRF)**.
- Eligibility of political parties:**
  - Registered under section 29A of Representation of People Act, 1951** and which **secured not less than one percent of the votes polled in last general election** to House of People or a Legislative Assembly.
- Significance:** Limit use of cash in political funding, eliminate fraudulent political parties, protecting donor from political victimization, curb black money etc.

**Concerns:** EBs have been challenged in SC as **EBs do not carry payee name**, this anonymity **impinges upon ethical funding**. Also, there is **no limit on donation by a company to political party** through EBs.

# GOVERNMENT TO DEVELOP 23 RIVER SYSTEMS FOR CARGO AND PASSENGER VESSEL MOVEMENT

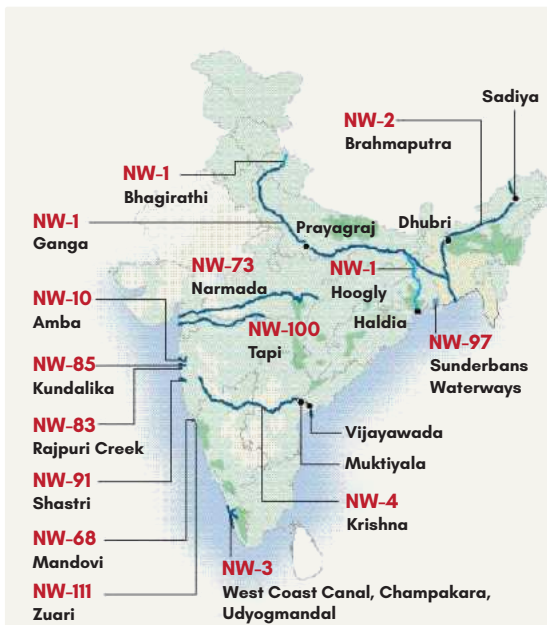
- 23 river systems are identified out of **111 national waterways** based on their feasibility for navigation.

➤ National Waterways (NWs) are declared under **National Waterways Act, 2016** to **promote Inland Water Transport (IWT)** in India.

➤ Ganga-Bhagirathi-Hooghly River System (Allahabad to Haldia) was **first NW** declared in **1986**.

➤ Recently, **NW-68** between **Panjim to Vasco** on **Mandovi River in Goa** was completed.

- India has an **extensive network of inland waterways in the form of rivers, canals, backwaters and creeks**. Inland waterways contribute **only around 2%** in India's internal freight movement.



## THE LINKS AND THE LENGTHS

|        |                                                       |          |
|--------|-------------------------------------------------------|----------|
| NW-1   | Ganga-Bhagirathi-Hooghly (Haldia-Prayagraj)           | 1,620 KM |
| NW-2   | Brahmaputra river                                     | 891 KM   |
| NW-3   | West Coast Canal- Champakara Canal- Udyogmandal Canal | 205 KM   |
| NW-4   | Krishna (Muktiala-Vijayawada)                         | 82 KM    |
| NW-10  | Amba river                                            | 45 KM    |
| NW-83  | Rajpuri Creek                                         | 31 KM    |
| NW-85  | Revadanda Creek- Kundalika river                      | 31 KM    |
| NW-91  | Shastri river-Jaigad Creek System                     | 52 KM    |
| NW-68  | Mandovi river (Usaon Bridge- Arabian Sea)             | 41 KM    |
| NW-111 | Zuari river (Sanvordem Bridge-Marmugao Port)          | 50 KM    |
| NW-73  | Narmada river                                         | 226 KM   |
| NW-100 | Tapi river                                            | 436 KM   |
| NW-97  | Sunderbans Waterways                                  | 172 KM   |

- Benefits of IWT: Eco-friendly and cheaper** (less fuel consumption per tonne-km), better connectivity to hinterland, require relatively less maintenance, **reduced pollution** of air, water, noise etc.

- Challenges with IWT:** Absence of storage facilities, limited number of vessels, inadequate inland ports and logistics system, low technology adaptation etc.

## Initiatives for Inland Waterways Development

➤ Establishment of **Inland Waterways Authority of India (IWAI)** in **1986**.

➤ **Inland Vessels Act, 2021** replaces Inland Vessels Act, 1917.

➤ **River Cruise Tourism on NWs**.

➤ **PANI (Portal for Asset & Navigation Information)** platform for **river navigation and infrastructure information**.

## ALSO IN NEWS



### Hallmark Unique Identification Number (HUID)

- Bureau of Indian Standards (BIS)** has prohibited the sale of **hallmarked gold jewellery or gold artifacts without HUID** after **31st March 2023**.

- Hallmarking of Gold jewellery is done as per **Indian Standards** specified in **IS 1417: 2016** with **3 symbols** (refer image) as

➤ **BIS logo** as first symbol.

➤ **Purity and fineness of gold** as second symbol.

➤ **HUID** as third symbol, a **unique 6-digit alphanumeric** code given to every piece of jewellery to enable traceability.

- It can be verified in **BIS CARE** app.

- Benefit:** Provide **third party assurance on purity and fineness of gold jewellery**.



### Swachh Sujal Shakti Samman 2023

- 36 Women WASH Champions** across the country receive **Swachh Sujal Shakti Samman 2023** by President of India.

- Event was organized by **Ministry of Jal Shakti** to felicitate **exceptional and exemplary work being done at grassroots level by women** in implementation of

➤ **Swachh Bharat Mission – Grameen (SBM-G)**; **Jal Jeevan Mission (JJM)**; **Jal Shakti Abhiyan: Catch the Rain (JSA-CTR)**.

- Other highlights**

➤ Release of **National Water Mission's (NWM) SoPs on Source Sustainability**.

➤ Launch of **JSA-CTR 2023**.





BrahMos missile

- Indian Navy successfully test-fired ship-launched version of BrahMos missile with an indigenous seeker and booster in Arabian Sea.
- Earlier, Indian Air Force had also successfully tested BrahMos missile from Sukhoi Su-30 MKI aircraft.
- BrahMos is a **medium-range ramjet supersonic cruise missile** that can be **launched from submarine, ships, aircraft, or land having range of 450 km.**
  - It is a **joint venture of India and Russia** and it's named after **rivers Brahmaputra and Moskva.**
  - It is a **two-stage missile with solid propellant booster engine as its first stage and a liquid ramjet as second stage.**
  - **Operates on Fire and Forget principle.**
  - It flies at a speed of **2.8 Mach or almost three times speed of sound.**



Bamboo Crash Barrier

- India has installed the world's **1st Bamboo crash barrier** on Vani-Warora highway in Maharashtra.
  - **200m long Bamboo Crash Barrier**, named Bahu Balli, is made from **Bambusa Balcoa** species of bamboo.
- Bambusa Balcoa, also known as **Female Bamboo**, is a **tropical clumping bamboo** mainly grown in **Northeast India and West Bengal.**
  - It is commonly used in **building material for houses, bridges, fishing floats, scaffolding, baskets etc.**
- **Benefits as Crash Barrier:** An alternative to current steel barriers, bamboo barriers have higher recycling value (50-70%) as compared to steel barriers (30-50%).



Great Seahorses

- As per a new study, **extensive fishing off the Coromandel coast** could be **forcing great seahorse to migrate toward Odisha.**
- **Seahorses** are a type of **fish with horse-like heads.** They are **poor swimmers** but migrate by rafting (clinging to floating substrata).
  - There are **46 species** of seahorses reported worldwide. **Coastal ecosystems of India house 9** out of 12 species found in Indo-Pacific.
- **Habitat:** Seagrass, mangroves, macroalgal beds, and coral reefs.
- **IUCN status:** Vulnerable.



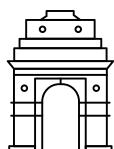
Global Education Monitoring Report

- Report was released by **United Nations Educational, Scientific and Cultural Organization (UNESCO).**
- **Key findings**
  - **Only 17%** of countries cover **sexual orientation, gender identity and gender expression issues** - least covered areas in CSE curricula.
    - **Comprehensive sexuality education (CSE)** is a curriculum-based process of **teaching and learning about cognitive, emotional, physical and social aspects of sexuality.**
  - **Only 20% countries have laws** and **39% have a national policy** that specifically addresses sexuality education.
  - **Sexuality education in primary education is compulsory in 68% countries** and in **secondary education in 76%.**
  - **Contraception issues** are covered in school curriculum in **two-thirds of countries.**

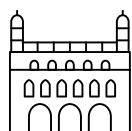


Lewis Super Acids

- Researchers at Paderborn University, Germany have been able to make a **unique class of catalysts called Lewis super-acids.**
    - Named for chemist, **G N Lewis**, Lewis super-acids **derive from Lewis acids.**
  - A Lewis acid is **any substance**, such as a Hydrogen ion (H<sup>+</sup>) that can **accept a pair of nonbonding electrons.** In other words, it is an **electron-pair acceptor.**
    - They are often **used to speed up chemical reactions.**
    - Lewis superacids are **stronger than antimony pentafluoride--** strongest Lewis acid -- and can **break even toughest bonds.**
- NOTE:** A **Lewis base** is any substance, such as OH<sup>-</sup> ion, that can **donate a pair of nonbonding electrons.** Therefore, it is an **electron-pair donor.**



DELHI



LUCKNOW



JAIPUR



HYDERABAD



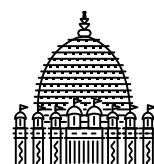
PUNE



AHMEDABAD



CHANDIGARH



GUWAHATI