

NEWS TODAY

UNEP launched Phasing out mercury measuring devices in healthcare project

It is \$134-million initiative led by UN Environment Programme (UNEP).

About Project

- **Aim**
 - ⊕ Phase out mercury thermometers and sphygmomanometers at a rate of **20% annually**, and reduce mercury spillages.
 - ⊕ Encourage adoption of accurate, affordable and safe mercury-free alternatives, while improving management of mercury-containing medical waste.
- **Member countries:** Albania, Burkina Faso, India, Montenegro, and Uganda.
- **Funding:** By Global Environment Facility.
- **Execution:** By World Health Organisation.

About Mercury

- It is a **naturally occurring element** found in air, water and soil.
- It is the **only metal** which is found in **liquid state at room temperature**.
- It is a **persistent, bio-accumulative, toxic pollutant**.
- All humans are **exposed to low levels of mercury**.
 - ⊕ Several countries and international organizations have **established reference levels for daily or weekly methyl-mercury or mercury intakes that are estimated to be safe** (or without appreciable risk to health).
- **Sources:** Gold mining, Coal-based thermal power plant, Volcanic emissions, etc.
- **Effect:**
 - ⊕ **Toxic effects on nervous, digestive and immune systems, lungs, kidneys, skin and eyes.**
 - ◆ **Minamata disease** is a **chronic neurological disorder** caused by **methyl-mercury**, a heavy metal with many industrial uses.
 - ⊕ When released into environment, it **accumulates in water laid sediments** where it **converts into toxic methyl-mercury and enters food chain**.

Minamata Convention on Mercury

- **Adopted in 2013 at Kumamoto (Japan)** and came into force in 2017.
- **1st global legally binding treaty** to protect human health and environment from adverse effects of mercury.
- **Purpose:**
 - ⊕ Ban on new mercury mines,
 - ⊕ phase-out of existing ones,
 - ⊕ phase-out and phase-down of mercury use in products and processes.
- Named after the city in Japan that became the epicentre of **Minamata disease**, caused by severe mercury poisoning.
- **India ratified it in 2018.**

Draft Digital Competition Bill (DCB) 2024: Stakeholders Seek Extension for feedback

DCB aims to **regulate Systemically Significant Digital Enterprise (SSDE)** and their **Associate Digital Enterprises (ADEs)** to prevent **Anti-Competitive Practices (ACPs)** by them.

- DCB takes a leaf out of the **Digital Markets Act (DMA)** of the European Union, introduced to prevent ACP of tech giants like Google, Facebook, and Amazon.

Key provisions

- **Ex-Ante Regulation:** Facilitates Competition Commission of India (CCI) to **intervene to prevent any potential ACPs** from occurring.
- **Core Digital Services (CDS):** These are **services that are susceptible to market concentration** and included in a predefined list outlined in Schedule I.
- **SSDE: Provides criteria for SSDE and also empowers CCI** to designate an enterprise as an SSDE if it has a significant market presence in CDS.
- **Obligations of SSDEs:**
 - ⊕ To **report to the CCI about their ADEs** which are directly or indirectly involved in the provision of the CDS.
 - ⊕ Also, SSDEs are prohibited from giving preference to their products/ services, relying on **non-public data of business users** operating on its CDS, and **impeding the ability of end users** to download, install, operate or **use third-party applications**.
- **Covers enterprise outside India:** CCI has the power to cause an inquiry against such enterprise for non-compliance with this Act or rules or regulations framed thereunder

Need for DCB

- The current **ex-post framework** (intervening after an event occurs) under the **Competition Act, 2002, does not facilitate timely redressal** of anti-competitive conduct by digital enterprises.
- The present framework **may not be effective in addressing the irreversible tipping of markets** (permanent dominance of a firm) in favour of large digital enterprises.
- Prevalence of practice of **collection of user data, self-preferencing** (i.e., platform favours its services), etc. by big tech giants.
- To support an **orderly expansion of the digital ecosystem**.

Indian Ocean: IORA's role Critical amidst heightened presence of global powers

IORA's significance is expected to increase with the **rising presence of Non-Resident global powers** like US (have military base in Diego Garcia Island), Russia (conducts military exercise with Myanmar) in the Indian Ocean Region (IOR).

Reasons for enhanced presence of global Powers in IOR

- **Maritime choke points:** For example, the **Strait of Hormuz and the Strait of Malacca** are essential for the free flow of trade, energy, and free movement to ensure security.
- **Geostrategic competition:** Emergence of **Indo-Pacific as an integrated maritime theatre**, due to competing interests of **China and other democracies** advocating for a rules-based order in the Indo-Pacific.
- **Pursuance of Blue Economy:** Home to a **third of the global population**, the IOR's littoral States (mostly developing) **depend heavily on marine resources**.
 - ⊕ This presents substantial opportunities for **sustainable economic and livelihood development**.

Challenges in the IOR

- Naval aggressions from China.
- **Small countries depend on external powers for security** due to regional power imbalances which also prevent **optimal regional cooperation**.
- Re-emergence of security issues like **piracy and maritime terrorism**.

Role of IORA

- IORA is the **only multilateral grouping that spans the entire Indian Ocean**.
- Offers a **space for inclusive diplomacy**, allowing member states greater agency in negotiations.
- Together with **India's SAGAR initiative**, it can be a **potential counter to China led 'China-Indian Ocean Region (IOR) Forum'**.

Indian Ocean Rim Association (IORA)

- **Secretariat: Mauritius**
- **Genesis:** An **inter-governmental organisation** established in 1997 and based on the **vision of Nelson Mandela**.
- **Aim:** Strengthening **regional cooperation and sustainable development** within IOR.
- **Members:** **23** members within IOR (including India).
- **Apex body:** **Council of Foreign Ministers (COM)** which meets annually.
- **6 priority areas**
 - ⊕ Maritime Safety & Security
 - ⊕ Trade & Investment Facilitation
 - ⊕ Fisheries Management
 - ⊕ Disaster Risk Management
 - ⊕ Tourism & Cultural Exchanges
 - ⊕ Academic, Science & Technology
- **'IORA's Outlook on the Indo-Pacific':** A **consensus document adopted in 2022** (proposed by India) which calls for **adherence to 1982 UNCLOS** and other relevant UN treaties.

WHO prequalifies new dengue vaccine TAK-003

Developed by Japan's pharma company Takeda, TAK-003 is a **live-attenuated vaccine** containing **weakened versions of the four serotypes** of the virus that cause dengue.

- It is the **second dengue vaccine** to receive **WHO prequalification**, following the **CYD-TDV vaccine**.
- WHO recommends the use of TAK-003 in **children aged 6–16 years** in settings with **high dengue burden** and transmission intensity.

About WHO Vaccine prequalification

- It was created in **1987** to **assure the quality of vaccines distributed by UN purchasing agencies**.
- Vaccines showing positive outcomes after evaluation of **relevant data, testing of samples and WHO inspection of relevant manufacturing sites are included in the list**.
- However, inclusion in the list **does not imply approval** of vaccines and manufacturing sites by the WHO.
 - ⊕ Such approval is a **prerogative of the National Regulatory Authorities**.
- Yet, pre-qualification is an important step in the **expansion of global access to vaccines** as it enables **procurement by UN agencies (including UNICEF) and PAHO** (Pan American Health Organization).
- **Other vector-borne disease** for which vaccines are included in this list include **malaria, yellow fever, Japanese encephalitis, Rabies, etc.**

About Dengue

- **Symptoms:** High fever, severe headache, pain behind the eyes, muscle and joint pain, etc. may lead to death.
- **Pathogen:** **Dengue virus** named DEN-1, DEN-2, DEN-3, and DEN-4.
- **Vector:** Infected **female mosquitoes, primarily the Aedes aegypti**. Transmission by **Aedes albopictus (tiger mosquito)** has been seen in Europe.
 - ⊕ It can also be transmitted from a **pregnant mother to her baby, via blood products, organ donation and transfusions**.
- **Affected regions:** Dengue is found in **tropical and sub-tropical climates** worldwide, mostly in urban and semi-urban areas (most of which are in Asia, Africa, and the Americas)

Probe agencies must give written grounds of arrest in UAPA cases: Supreme Court (SC)

In **Prabir Purkayastha v. State (NCT of Delhi)** case, SC stated that arrest of Prabir Purkayastha (Newslick founder-editor) in **Unlawful Activities (Prevention) Act (UAPA)** case is invalid as Delhi Police failed to inform the grounds of arrest before taking him into custody.

SC Observations

- ⊕ Mandate under **Pankaj Bansal v Union of India & Ors. Judgment** that grounds of arrest must be provided to accused in writing will apply to **cases under UAPA, 1967 as well.**
 - ◆ Earlier, under this judgement, SC held that **grounds of arrest must be provided to persons accused under Prevention of Money Laundering Act (PMLA), 2002.**
- ⊕ As provided under Articles 22(1) and 22(5) of Indian Constitution, **communication of grounds of arrest or detention is sacrosanct and cannot be breached under any situation.**
 - ◆ **Article 22(1): No person who is arrested shall be detained in custody without being informed of the grounds for their arrest.**
 - ◆ **Article 22(5): A person under detention should be communicated the grounds of detention order and allowed to make a representation against detention.**

About UAPA, 1967

- It provides for effective **prevention of certain unlawful activities of individuals and associations**, and for dealing with terrorist activities.
- **Section 43B (1): Any officer arresting a person under this act shall, inform accused of the grounds for such arrest.**

Ministry of Home Affairs (MHA) warns of rising digital arrest scams by cybercriminals

I4C, in collaboration with Microsoft, has **blocked over 1,000 Skype accounts linked to intimidation, blackmail, extortion and digital arrests of citizens by cybercriminals** posing as personnel of police, CBI, Narcotics Department, RBI etc.

About Digital Arrest

- It is a new form of **cybercrime where fraudsters impersonate law enforcement officials and deceive their targets** into believing that their Aadhaar card, SIM card, debit card or bank account has been used for criminal activities.

About Cybercrime

- It refers to any **illegal activity involving a computer, networked device or a network.**
 - ⊕ Example, Stealing corporate data; Hacking government computers etc.
 - ⊕ According to 'Crime in India' Report, **65,893 cases were registered under cybercrime**, showing an **increase of 24.4%** compared to 52,974 cases in 2021.
- **Challenges in tackling Cybercrimes**
 - ⊕ Lack of **critical cyber security infrastructure**, shortage of cybersecurity professionals.
 - ⊕ Evolving **threat landscape in Cyber security** e.g., **involvement of non-state actors**, organized crime.
 - ⊕ Increase in **proliferation of connected devices and internet**, new technology like **Internet of Things (IoT)** etc.
 - ◆ As per TRAI, internet penetration in India as of March 2023 is over 880 million.

Government initiatives to tackle Cyber Threats

- **Indian Cyber Coordination Centre (I4C):** Under MHA, it **coordinates activities related to combating cybercrime** in country.
 - ⊕ It facilitates **blocking of SIM cards, Mobile devices and Mule accounts** used by such fraudsters.
- **Computer Emergency Response Team (CERT-In)** is the **national nodal agency** for responding to **computer security incidents.**
- **National Cyber Crime Reporting Portal** launched to **enable the public to report** incidents of cybercrimes.
- **Toll-free number- 1930** has been **operationalized** to assist with **online cyber complaints.**

Also in News

Indian National Space Promotion and Authorization Centre (IN-SPACE)

IN-SPACE has been honoured with the **Leadership Award** for "Public Policy: Enabling Industry Development" by the Geospatial World Forum (GWF).

- GWF is an **interactive platform** of the global geospatial community.

IN-SPACE

- **Headquarters:** Ahmedabad(Gujarat)
- **Genesis:** Establishment in 2020 as a part of space sector reform.
- **Nodal department:** An autonomous agency in the **Department of Space (DOS).**
- **Aim:** To facilitate the participation of private players in India's space sector.
- **Key roles:**
 - ⊕ **Enable and nurture non-government entities (NGEs)** to accomplish their ventures in space sector and supervise their activities.
 - ⊕ **Authorize space operations and services** in the country through well defined framework.



Kanwar Lake

Condition of the Kanwar Lake has been deteriorating.

About Kanwar Lake (also known as Kabartal Wetland or Jheel)

- Located in **Begusarai district, Bihar**, it is a freshwater natural wetland.
- Draws water from confluence of **Gandak, Bia and Kareh river.**
- Bihar's first **Ramsar site** recognised as wetland of international importance in **2020.**
- Important **stopover along Central Asian Flyway.**
- **Important species:** Red-headed vulture, white-rumped vulture and Indian vulture.
- **Importance:** Acts as a sink for sediments, Habitat for several migratory species, provide livelihood opportunities, Supports lifecycle of fish or amphibians etc.
- **Threat:** Water management activities like **drainage**, water abstraction, damming and canalization.



BHISHM Portable Cubes

Indian Air Force tested **BHISHM portable cubes**, a state-of-the-art indigenous mobile hospital, at Agra for airdrops.

About BHISHM Portable Cubes

- These are a part of initiative named **Project BHISHM (Bharat Health Initiative for Sahyog, Hita and Maitri)**, designed to treat up to 200 casualties.
- Consists of **72 small cubes** equipped with advanced medical equipment which are **Radio Frequency Identification (RFID)-tagged**.
- **Integrates Artificial Intelligence and data analytics** to facilitate effective coordination, real-time monitoring of medical services in field.
- These cubes are **robust, waterproof, and light**, designed for various configurations, making them **ideal for diverse emergency scenarios**.



Soil Nailing

Tamil Nadu is using Soil Nailing to ensure the stabilization of slopes around the Nilgiris' major roads

Soil Nailing

- It is a **geotechnical engineering technique** that involves the **insertion of reinforcing elements into the soil** in a specified area to strengthen it.
- This is followed by **'hydroseeding'** wherein mixture of seeds, fertilizer, organic materials and water are applied onto the soil.
 - ⊖ It facilitates the **growth of grass and plant life**, that will help hold the topsoil together and **prevent erosion**.



Eco Sensitive Zone (ESZ)

Supreme Court has halted all mining activities within a 1-Km radius of the Sariska Tiger Reserve in Rajasthan enforcing its 2023 order.

2023 order of SC on ESZ:

- SC revised its 2022 directive that directed states to establish a **mandatory 1 Km ESZ around protected forests**.
- SC said that **ESZs cannot be the same for all the protected forests and may vary case by case**. However, it **prohibited any mining activities** within a 1-Km radius of such protected areas.

ESZ

- **ESZs are ecologically fragile areas** around protected areas (PAs) designated so under the **Environment Protection Act (EPA), 1986**
- They are created to **minimize the negative impact of development activities** on the fragile ecosystem of PAs.



Global Report on Internal Displacement 2024

Report was released by **Internal Displacement Monitoring Centre (IDMC)**.

- Internally displaced people (IDPs) refers to people **forced to flee their homes**, however, unlike refugees, they remain within their own country

Key findings:

- **75.9 million people were IDPs globally** as of the end of 2023 (71.1 million in 2022).
- **68.3 million people were IDP due to conflict and violence**.
 - ⊖ **Sudan, Syria, the Democratic Republic of the Congo (DRC), Colombia and Yemen** host nearly half of such IDPs.
 - ⊖ **In South Asia, Manipur has major contribution** to such IDPs
- Most of the **disasters linked to internal displacement** happened in **China and Türkiye** due to **severe weather and high-magnitude earthquakes**.



Lead

Scientists have developed an affordable sensor for detecting and measuring lead concentrations in water.

About Lead

- It is a **naturally occurring toxic metal** found in **Earth's crust**.
- Lead in the body is **distributed to the brain, liver, kidney and bones**. It is stored in the teeth and bones, where it can accumulate over time.
- It is **poor conductor of heat** and do not react with water.
- **Sources of lead exposure:** Mining and smelting, recycling of electronic waste and lead-acid batteries, plumbing, toys, lead paint etc.
- Lead exposure **causes damage to child's brain and nervous system, anaemia, hypertension, toxicity to reproductive organs** etc.



Sangam: Digital Twin Initiative

Ministry of Communications has unveiled Stage-I Participants for "Sangam Initiative: A Leap Towards AI-Driven Infrastructure Transformation".

About Sangam: Digital Twin Initiative

- It is a **Proof of Concept** focused on **revolutionizing the planning & design of infrastructure** by leveraging digital twin technology to **create precise, dynamic models of physical environments**.
- It combines the ability of **5G, IoT, AI, Digital Twin and next-generation computational technologies**.
 - ⊖ Digital twin is a **virtual representation of an object or system designed to reflect a physical object accurately**.
- It enhances the **efficiency and accuracy of infrastructure projects**.

Places in News



Slovakia (Capital: Bratislava)

Slovakia Prime Minister was shot multiple times after a cabinet meeting in Handlova town.

➤ Political Features:

- ⊖ **Landlocked country** of central Europe.
- ⊖ **Borders:** Poland (North), Ukraine (East), Hungary (South), Austria (West) and Czech Republic (Northwest).

➤ Geographical Features

- ⊖ **Mountain Range:** Carpathian Mountains, including Tatra Mountains.
- ⊖ **Highest Point:** Gerlachovský Peak.
- ⊖ **Major Rivers:** Danube, Váh, Hron, etc.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI