

## 'Global Status of Multi-Hazard Early Warning Systems 2023' Report by the United Nations and the World Meteorological Organisation

- **Multi-hazard early warning systems (MHEWS)** enables individuals, communities, governments, business and others to take timely action to reduce disaster risks in advance of hazardous events.
  - ⊕ Four pillars of MHEWS are disaster risk knowledge, observation & monitoring, communication and preparedness to respond.
  - ⊕ Report assesses the current global status of MHEWS against Target of the Sendai Framework (2015-2030).
- **Key highlights:**
  - ⊕ Out of the 101 countries reporting having MHEWS, 95 have reported the existence of a disaster risk reduction strategy.
  - ⊕ Common Alerting Protocol has helped the timely flow of information from authoritative sources to the public.
  - ⊕ Over 400 million people in Least Developed Countries (LDCs) and Small Island Developing States (SIDS) have access to better predictions and warnings for floods, drought, etc.
- **Challenges:**
  - ⊕ Only half of the world is covered by an early warning system.
  - ⊕ Increasing unpredictability, complexity and severity of hazardous events are challenging the MHEWS capability.
  - ⊕ In India, disaster risk knowledge and management, warning, dissemination and communication are not adequate.
    - ◆ However, preparedness, response capabilities and detection, monitoring, forecasting capabilities are available.

### Initiatives for Disaster Risk Reduction:

- **Global:**
  - ⊕ **Early Warnings for All (EW4All)** initiative which aims to cover everyone on Earth by 2027.
  - ⊕ Regional Integrated Multi-Hazard Early Warning System for Africa and Asia (RIMES)
- **India:**
  - ⊕ **First Asian Ministerial Conference for Disaster Risk Reduction** hosted by India in 2016.
  - ⊕ **Coalition for Disaster Resilient Infrastructure (2019)**, Indian Tsunami Early Warning System (2007), iFLOWS Mumbai and CFLOWS-Chennai etc.

## United Nations Environment Programme (UNEP) releases Global Cooling Watch 2023 report

- The report demonstrates the potential and the pathways to achieve near-zero emissions from cooling.
- Cooling acts as a double burden on climate change by raising the demand for power at one end and inducing Global warming due to the release of refrigerant gases in cooling equipment.
  - ⊕ Emissions from cooling are predicted to account for more than 10 per cent of global emissions in 2050.
- **Key Highlights**
  - ⊕ 82% of global cooling-related GHG emissions came from G20 countries, in 2022
  - ⊕ Under the current approach to cooling, the installed capacity of cooling equipment globally will triple between now and 2050.
- **Recommendations**
  - ⊕ **Passive strategies** to address extreme heat and reduce cooling demand in buildings and in the cold chain.
  - ⊕ **Higher energy efficiency standards** and norms for cooling equipment.
  - ⊕ A **phase-down of climate-warming hydrofluorocarbon (HFC) refrigerants** at a faster rate than is required under the Kigali Amendment to the Montreal Protocol.
- **Global Cooling Pledge** issued with the COP28 provides a real opportunity to act.
  - ⊕ The pledge provides a **strong political push to take immediate steps to reduce emissions**, increase passive strategies, improve energy efficiency while phasing down HFCs etc.

- India Cooling Action Plan launched in 2019. It seeks to
  - ⊕ **Reduce cooling demand** across sectors by 20% to 25% by 2037-38, and **refrigerant demand** by 25% to 30% by 2037-38.
  - ⊕ Recognize 'cooling and related areas' as a thrust area of **research under the national S&T Programme**.



## 'Garba of Gujarat' declared as Intangible Cultural Heritage by UNESCO

- Inclusion has been made under the provisions of UNESCO's 2003 Convention for the Safeguarding of Intangible Cultural Heritage (ICH).
  - ⊖ Garba is 15th ICH element from India to join this list.
  - ⊖ In recent years, ICH elements that saw inscriptions are Durga Puja in Kolkata (2021), Kumbh Mela (2017), Yoga (2016) among others.
- **About Garba:**
  - ⊖ **Ritualistic and devotional dance** that is performed during festival of Navratri which is dedicated to worship of the feminine energy or 'Shakti'.
  - ⊖ It celebrates **fertility, honours womanhood**, and pays respect to mother goddesses.
- **About Intangible Cultural Heritage:**
  - ⊖ It is the **practices, expressions, knowledge and skills** that communities, groups and sometimes individuals recognise as part of their cultural heritage.
  - ⊖ **5 broad domains in which ICH is manifested :**
    - ◆ Oral traditions; performing arts; social practices, rituals and festive events; knowledge and practices concerning nature; traditional craftsmanship.
- **Significance of Inscription in ICH:**
  - ⊖ **Raise awareness at the local, national and international levels** of importance of ICH.
  - ⊖ Provide for **international cooperation and assistance for preserving/safeguarding ICH.**

### ➤ Efforts by India for Preservation of ICH

- ⊖ **Sangeet Natak Akademi** as nodal office for matters relating to ICH.
- ⊖ Scheme for Safeguarding Intangible Heritage and Diverse Cultural Traditions of India.
- ⊖ India elected as a member of **Intergovernmental Committee of UNESCO's 2003 Convention** for the Safeguarding of ICH for 2022-2026 cycle.

## Data centre stock in India to cross 1,300 MW by 2024: CBRE Report

- India's Data Centre capacity **doubled between 2020 to 2023 to reach ~880 MW** as of H1 2023, with nearly 500 MW currently under construction.
  - ⊖ **Mumbai, Chennai, and Bangalore will collectively dominate Data Centre stock** with an 80 per cent share by the end of 2024.
- A Data Centre is a **dedicated secure space within a building** / centralized location where computing and networking equipment is concentrated to **collect, store, process, distribute or allow access to large amounts of data.**
- **Drivers of Data Centre Growth**
  - ⊖ **Rapid digitalisation, enhanced tech infrastructure and the inclusion of advanced technologies** such as 5G, Artificial Intelligence (AI), blockchain and cloud computing.
  - ⊖ **Data localization** policies (the practice of **keeping data within the country** it originated from)
- **Initiatives taken for the growth of the Data Centre**
  - ⊖ **Draft data centre policy, 2020, which envisages,**
    - ◆ Incorporation of data centres under the **Essential Services Maintenance Act (ESMA).**
    - ◆ Recognize Data Centres as a separate **category under the National Building Code.**
    - ◆ Setting-up of **Data Centre Economic Zones.**
  - ⊖ **Infrastructure status to DC** with more than 5-megawatt capacity of IT load.

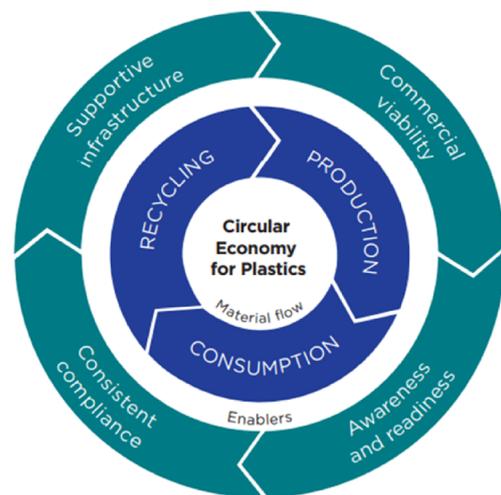
Yotta D1 is North India's first hyper-scale data center

## Two bills on Jammu and Kashmir (J&K) passed in Lok Sabha

- **J&K Reservation (Amendment) Bill, 2023**
  - ⊖ It amends the J&K Reservation Act, of 2004.
  - ⊖ Act provides reservation in jobs and admission in professional institutions to members of **Scheduled Castes, Scheduled Tribes, and other Socially and Educationally Backward Classes (SEBC).**
  - ⊖ **Under the Act, SEBCs include:**
    - ◆ people residing in **villages declared as socially and educationally backward**
    - ◆ people residing in areas **adjoining the Actual Line of Control and International Border, and**
    - ◆ **weak and underprivileged classes (social castes), as notified.**
  - ⊖ Bill **substitutes weak and underprivileged classes** with other backward classes as declared by the UT of J&K.
    - ◆ The definition of weak and underprivileged classes is **deleted** from the Act.
- **J&K Reorganisation (Amendment) Bill, 2023**
  - ⊖ It amends the J&K Reorganisation Act, of 2019.
  - ⊖ **Key highlights of the bill**
    - ◆ **Increases the total number of seats to 90 from 83**
    - ◆ **Reserves seven seats** for Scheduled Castes and nine seats for Scheduled Tribes.
    - ◆ **Nomination by Lieutenant Governor in Legislative assembly**
      - » **Up to two members from the Kashmiri migrant community** (one must be a woman)
      - » **One member representing displaced persons from Pakistan-occupied Jammu and Kashmir.**

## National Circular Economy Roadmap for Reduction of Plastic waste in India Released

- It aims to foster research and industry partnerships and co-develop a roadmap for India's transition to a circular economy in the Plastics sector.
  - ⊖ It was released as collaboration between India and Australia.
- **Need for a Policy Roadmap**
  - ⊖ India generates nearly **26,000 tonnes of plastic waste each day** as per Central Pollution Control Board (2020).
  - ⊖ Government's **ban on single-use plastics (2022) covers 10% to 15% of plastics used.**
  - ⊖ **India's plastic recycling average is around 13%.**
- **About Circular Economy (in Plastics sector)**
  - ⊖ It is one which uses as little **virgin plastic as possible** and **maximises the use of recycled material** for new products.
  - ⊖ Significance:
    - ◆ Will lead to **20% to 50% less greenhouse emissions, reduced micro plastics** in food chain.
    - ◆ **Reduction in the landfills** and enables digital tracking of waste streams.
  - ⊖ India's Circular Economy for plastics **consists of seven elements** (refer diagram).
- **Proposed Strategy to Achieve Circular Economy**
  - ⊖ **Set a single framework** and implementation plan.
  - ⊖ Develop a **circular economy transition body.**
  - ⊖ **Recognise and engage all stakeholders.**
  - ⊖ **Create systems to support states** to design and implement their action-plans.



## Also in News

### ✗ **NOTA (None of the Above) option in elections**

- NOTA is one of the options available in the **Electronic Voting Machine.**
  - ⊖ if a voter does not support any of the candidates contesting in the election, they have the option to select **NOTA.**
- It was introduced following the 2013 Supreme Court directive in the **PUCL versus Union of India case.**
- There is **no provision for re-polling** in a constituency even if NOTA gets the most votes.
- SC ruled that the NOTA option is **applicable only for direct elections** and not indirect elections such as the Rajya Sabha polls.

### **National Automated Fingerprint Identification System (NAFIS)**

- As of 2023, NAFIS has been **established at 1022 locations** across the country.
- **About NAFIS**
  - ⊖ **NAFIS is a country-wide searchable database** of crime- and criminal-related fingerprints
  - ⊖ It is **managed by the National Crime Record Bureau** at the Central Fingerprint Bureau.
  - ⊖ It **assigns a unique 10-digit National Fingerprint Number (NFN)** to each person arrested for a crime.
    - ◆ NAFIS provide the much-needed unique identifier for every arrested person in the CCTNS (Crime and Criminal Tracking Network & Systems) database as both are connected at the backend.

### **Miyawaki Plantation Method**

- South Eastern Coalfields Ltd (SECL) will undertake plantation using **Miyawaki method** in coal belt region of Chhattisgarh.
- **Miyawaki method:**
  - ⊖ Pioneered by Japanese botanist **Akira Miyawaki.**
  - ⊖ Involves planting **native trees, shrubs and groundcover plants** within **every square meter** to create a **dense canopy layer of tall trees in small land parcels.**
  - ⊖ **Species chosen** are plants which can **survive harsh weather and water-scarce conditions.**
- **Benefits of the method:** Forests grow rapidly; Utility in **urban forestry**; increase **carbon sequestration**, **reduce air and noise pollution** and **attract local birds and insects.**

### **Diel Vertical Migration (DVM)**

- DVM is synchronised movement of **deep-sea marine animals** up and down in oceanic water column over a daily cycle.
- **Free-floating zooplanktons swim up to food-rich surface waters at night** to feed when light is scarce and they are "hidden" from predators.
  - ⊖ They **return to the depths** before sun rises.
- DVM plays a pivotal role in sequestering carbon.
  - ⊖ Animals remove **substantial amounts of carbon** from Upper Ocean as they feed on surface-dwelling plankton.
  - ⊖ When these organisms return to deeper waters, they **carry carbon with them.**

**National Archives of India (NAI)**

- Recently, a book fair opened at National Archives of India.
- **About NAI**
  - ⊕ Functions as an **attached office of Ministry of culture as custodian of the records of government.**
  - ⊕ Established in 1891 at Kolkata as **Imperial Record Department.**
  - ⊕ **Following the transfer of the capital** from Kolkata to Delhi in 1911, it was shifted to Delhi.
- **Functions**
  - ⊕ **Nodal agency** for the implementation of the Public Records Act, 1993 and Public Records Rules, 1997.
  - ⊕ **Biggest archival repository** in South Asia.

**Indian Cybercrime Coordination Centre (I4C)**

- Recently, Meity blocked over 100 websites based on inputs from I4C.
- I4C was **established by Ministry of Home Affairs to deal with all types of cybercrime in the country, in a coordinated and comprehensive manner.**
- **Objectives of I4C**
  - ⊕ Facilitate easy filing of **Cybercrime complaints.**
  - ⊕ Act as an **early warning system for Law Enforcement Agencies (LEAs)** for proactive Cybercrime prevention.
  - ⊕ **Awareness creation** among public about preventing Cybercrime.
  - ⊕ **Assist States/UTs in capacity building of Police Officers, Public Prosecutors and Judicial Officers.**



**Pompe Disease**

- Recently, **India's first patient diagnosed with Pompe disease** died.
- **About disease**
  - ⊕ **A rare inherited disorder** that affects one child per million.
  - ⊕ Caused by a **deficiency of the enzyme acid alpha-glucosidase (GAA)** which breaks down complex sugars in the body.
  - ⊕ It results in the **accumulation of glycogen in cells**, particularly in muscles.
  - ⊕ It is an example of **Lysosomal storage disease**
- **Symptoms:** Muscle weakness, respiratory issues, heart problems etc.
- **Treatments:** **Mostly to manage the symptoms and improve the patient's quality of life.**

**Geographical Indication(GI) Tag**

- Recently, **4 products from Meghalaya** received GI Tag.
  - ⊕ **Lakadong turmeric:** known for its high **Curcumin** content.
  - ⊕ **Garo dakmanda:** Traditional dress worn by **Garo tribe.**
  - ⊕ **Larnai pottery:** Black pottery from Jaintia Hills District.
  - ⊕ **Garo chubitchi:** Traditional **rice based alcoholic beverage** of Garo tribe.
- **About GI Tag**
  - ⊕ Awarded by **Ministry of Commerce and Industry.**
  - ⊕ Administered by **Geographical Indications of Goods (Registration and Protection) Act of 1999.**
  - ⊕ Once awarded is valid for **10 years.**



**Personality in news**

**Rukmini Lakshmi Pathi (1892- 1951)**

- She was **freedom fighter, social reformer** from Andhra Pradesh's West Godavari district.
- She was influenced by Mahatma Gandhi, C Rajagopalachari, and Sarojini Naidu.
- **Contributions**
  - ⊕ Participated in Civil disobedience, Salt Satyagraha of 1930 in Vedaranyam of Madras Presidency.
    - ◆ She became first **female prisoner in Salt Satyagraha movement.**
  - ⊕ Was elected to Madras Legislative Council. Later, became **first woman to become a member of Legislative Assembly.**
  - ⊕ In 1946, served as a **minister of health** in Madras Presidency cabinet, becoming **first woman Minister in state.**
- **Personality values:** courage, fortitude, selflessness, patriotism.

