

India Participates in G-20's Disaster Risk Reduction Working Group (DRRWG) ministerial meeting in Brazil

Participating G20 ministers and delegates **adopted a Ministerial Declaration** that called for greater action to implement **Sendai Framework** for Disaster Risk Reduction (DRR).

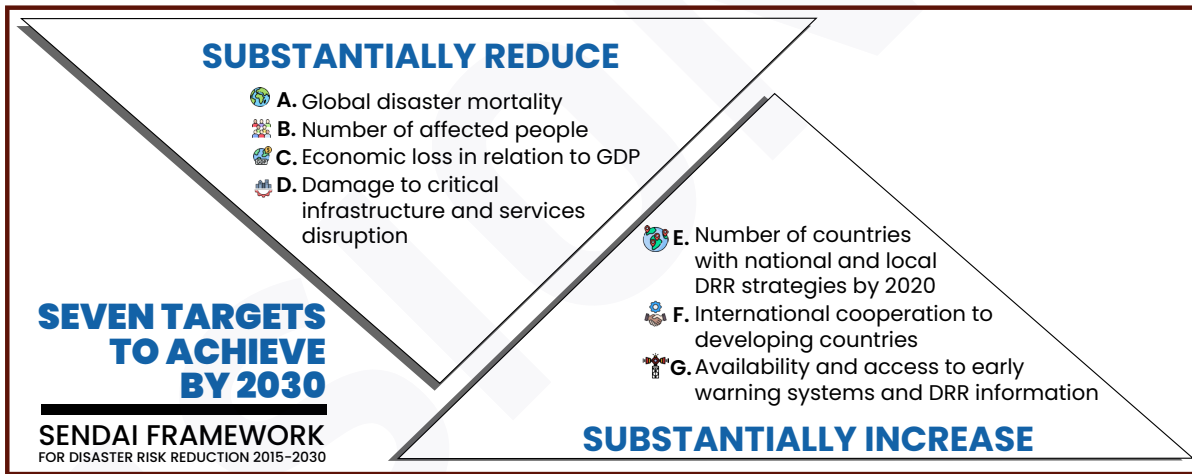
➤ Declaration **acknowledged need for mobilizing financial resources** and **adopting nature-based solutions and ecosystem based approaches** for DRR.

About G-20's DRRWG:

- **Established in 2023** under India's G-20 Presidency aims to **integrate disaster risk reduction across the work of the G-20.**
- **DRRWG's 5 priority areas** are Early warning system; disaster resilient infrastructure; DRR financing; disaster recovery, rehabilitation and reconstruction; and nature-Based solutions and ecosystem approaches for DRR.

About Sendai Framework for Disaster Risk Reduction (2015-30)

- It is a 15-year **non-binding** agreement **having 7 targets**, and is an **improved version** of the previous **Hyogo Framework for Action** (2005-15).
- **Adoption:** At **3rd United Nations World Conference on Disaster Risk Reduction (DRR)**, held in 2015 in Sendai (Japan).
 - ⊕ **DRR** is concept and **practice of reducing disaster risks through systematic efforts** to analyze and reduce causal factors of disasters.
- **Aim:** Substantial **reduction of disaster risk and losses** in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets.
- **Priorities of Frame work:**
 - ⊕ Understanding disaster risk,
 - ⊕ Strengthening disaster risk governance to manage disaster risk,
 - ⊕ Investing in disaster risk reduction for resilience,
 - ⊕ Enhancing disaster preparedness for effective response, and to "Build Back Better" in recovery, rehabilitation and reconstruction.



53% of Indian women remain outside labor force due to care responsibilities: ILO Report

As per the report, **Care responsibilities is the main barrier preventing women from participating in labour force**, whereas men usually cite other personal reasons such as education or illness.

key Highlights of report

- **Persistent gender gaps:** A gap of 24% existed between women (48.7%) and men (73%) in global labour force participation rate(2023).
- **Gendered division of Care Responsibilities:** 748 million people aged 15 and above were outside the labour force due to care responsibilities, of which **708 million were women.**
- **Multiple layers of Disadvantages faced by Rural women:** such as informal economy, lack of access to social protection and essential public services in labour market.

Key Recommendations on Improving women participation in Labor Force

- **Investing in Early Childhood Care and Education (ECCE):** It could increase women's employment to a global average of 56.5% in 2035, from 46.2% in 2019.
- **Promoting the 5Rs of decent work in care work:** It includes **recognise, reduce, redistribute, reward and represent.**
- **Collect and disseminate data:** In line with existing international statistical standards on paid and unpaid care work, etc.

Key Frameworks in India to promote Women Labour Force participation

- **Directive Principles of State Policy:** Under Article 39(d) promotes equal pay for equal work for both men and women.
- **Maternity Benefit Act, 1961:** Amended in 2017 to increase the duration of paid maternity leave from 12 to 26 weeks.
- **Code on Social Security, 2020:** Contains provision for creche facility in establishments with 50 or more employees.

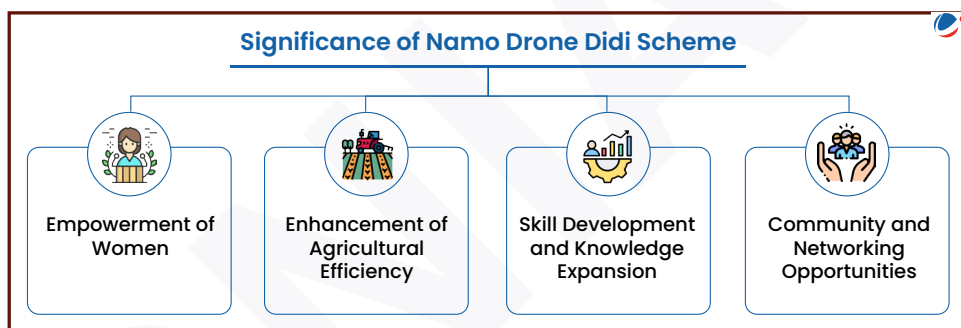
Government releases Operational Guidelines of Namu Drone Didi scheme

According to guidelines, scheme will be **overseen by an Empowered Committee of Secretaries** from key departments.

- Furthermore, Drone Portal, an IT-based MIS, will provide **real-time monitoring and drone operation tracking** to ensure scheme's smooth execution and effectiveness.

About Namu Drone Didi scheme

- **Ministry:** Ministry of Agriculture & Farmers Welfare
- **Type:** Central Sector Scheme under Deendayal Antyodaya Yojana – National Rural Livelihoods Mission
- **Objective:** Provide drones to 15000 selected Women SHGs during the period from 2024-25 to 2025-2026 for providing rental services to farmers for agriculture purpose
- **Key features of the scheme**
 - ⊕ **Cluster-Based Implementation:** Demand from farmers based on certain commitment on their part for drone services will be evaluated for selection of area/cluster.
 - ⊕ **Financial Support:** Women SHGs receive substantial **financial assistance, covering 80% of the drone and accessory costs**, up to Rs. 8 lakhs.
 - » SHGs can secure **loans from the National Agriculture Infrastructure Financing Facility (AIF)** with a 3% interest subvention **for the remaining 20% cost**.
 - ⊕ **Training:** A qualified women SHG member will undergo training as drone pilot and agriculture application.
 - ⊕ **Infrastructure and Support from Lead Fertilizer Companies (LFCs):** LFCs will aid SHGs in procurement, repair, and maintenance of drones, and also promote nano fertilizer use.



16th Conference of Parties (CoP-16) to Convention on Biological Diversity concluded in Colombia

It is first COP since adoption of **Kunming-Montreal Global Biodiversity Framework (KMGBF)**, serving as critical platform to assess progress and address **ongoing challenges to framework**.

Major outcomes of CoP-16:

- **Operationalisation of Cali Fund:** Large companies benefiting from **Digital Sequence Information** to contribute a percentage of profit to support indigenous people.
- **Agreement to establish a Permanent Subsidiary body:** Under Article 8(j) of CBD to enhance participation of indigenous people in all processes of convention.
- **Launch of Kunming Biodiversity Fund (KBF):** Supports accelerated action to deliver 2030 Agenda and SDG targets and 2050 goals of KMGBF.
- **Others:** Discussions on **synthetic biology, invasive alien species and identification of Ecologically or Biologically Significant Marine Areas etc.**

About KMGBF

- **KMGBF (adopted in CoP-15, 2022, at Montreal Canada)** includes **four goals for 2050 and 23 targets for 2030**. Targets address **threats to biodiversity**, meeting people's needs through sustainable use etc. Some of them being:
 - ⊕ **30-by-30 agreement** (protect 30% of land and water by 2030)
 - ⊕ Reducing the **introduction of invasive alien species by 50%** by 2030.
 - ⊕ Formulate mechanism for **"benefit-sharing from use of digital sequence information on genetic sources"** and traditional knowledge

About Convention on Biological Diversity (CBD)

- **Secretariat:** Montreal, Canada
- **Genesis:** Opened for signature at **United Nations Conference on Environment and Development (Rio "Earth Summit" 1992)** and was enforced in 1993.
- **Objectives:** Ensuring **conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of benefits** arising from use of genetic resources.
- **Parties:** International **legally binding treaty with 196 Parties** (Including India)
- **Protocols under Convention:** Nagoya Protocol on Access and Benefit-sharing, Cartagena Protocol on Biosafety and Nagoya – Kuala Lumpur Supplementary Protocol

Marine Protected Areas(MPAs) can conserve biodiversity and improve nutritional security

A study highlights that MPAs management and governance can conserve biodiversity and improve nutritional security.

Key highlights of the study

- **Contribution of Sustainable-use MPAs:** 13.6% of global catch, 14% of fisheries revenue and **13.7% of nutrient supply.**
 - ⊖ 7% of total global catches are represented from within exclusive economic zones (EEZs).
- **Establishing MPAs in nutritionally vulnerable coastal communities:** It can improve human health and nutrition.

Marine Protected Areas and their significance

- MPAs are essentially a space in the ocean where **human activities are more strictly regulated than the surrounding waters (as per ENVIS)**
- These places are given special protections for natural or historic marine resources by local, state, territorial, native, regional, or national authorities.
- **Significance**
 - ⊖ **Act as reservoirs of genetic material** for natural or assisted recovery of areas affected by pollution.
 - ⊖ **Crucial refuges for countless marine species: shields them from threats like overfishing, habitat destruction, and pollution.**
 - ⊖ **Reference sites serving as a baseline for scientific research:** offers insights into marine ecology.
 - ⊖ **Acts as sites for nature-based recreation and tourism.**
 - ⊖ **Helps in climate change mitigation and adaptation.**
- **Challenges in conservation of MPAs:** Difficulties in enforcing regulations, **requirement of substantial resources,** impacts livelihoods of local fishing communities.

Global Initiatives to Protect Marine Biodiversity

- **Kunming-Montreal Global Biodiversity Framework** aims to protect 30% of the planet's oceans and lands by 2030
- **Agreement on Marine Biodiversity of Areas beyond National Jurisdiction (High Seas Treaty)**

Marine Protected Areas in India

- Gulf of Mannar Marine Park (Tamil Nadu), Lothian Island (West Bengal), Gahirmatha (Odisha)

Global Tuberculosis (TB) Report 2024 released by World Health Organisation

The report shows that although **India has made some progress, it continues to have the highest disease burden.**

- **Tuberculosis is an infectious disease** caused by **bacteria (Mycobacterium tuberculosis)** and **most commonly affects lungs** and is curable as well as preventable
- It **spreads through the air** when people with lung TB **cough, sneeze or spit.**

Key Findings of the Report

- In **2023, TB likely became the world's leading cause of death globally,** surpassing Covid-19.
- **TB Treatment coverage:** It has increased to **75% as against target of 90% by 2027**
- **India specific findings**
 - ⊖ India accounted for **26% of the global TB burden** in 2023 and **26% of global TB related deaths.**
 - ⊖ India ranks **1st globally in burden of multidrug resistant/Rifampicin-resistant TB**

Issues highlighted by Report

- **Inadequate funding in low- and middle-income countries:** It was merely US\$ 5.7 billion (in 2023) equivalent to only 26% of the global target of reaching US\$ 22 billion per year (2027)
 - ⊖ **Funding in TB Research:** It was US \$1 billion (2022) as against target of US\$5 billion (2027)
- **Catastrophic health costs (>20% of annual household income): Around 50% of the TB-affected households globally face catastrophic costs,** far above the WHO End TB Strategy target of zero.

India's Initiatives for TB Prevention

- Pradhan Mantri TB Mukta Bharat Abhiyan
- **Universal Drug Susceptibility Testing (UDST):** to rule out drug resistance before or at the time of treatment initiation itself.
- **Addition of newer drugs:** E.g. Bedaquiline and Delamanid for management of drug resistant TB

Also in News



Gravity Energy Storage (GES)

GES is emerging as an alternative to battery energy storage for solar and wind power.

About GES:

- It is a type of mechanical energy storage system that **uses gravitational potential energy to store and generate electricity.**
 - ⊖ It involves **lifting a heavy mass during excess energy generation and releasing it to produce electricity** when demand rises or solar energy is unavailable.
 - » Types of weights used are often **water, concrete blocks or compressed earth blocks.**
- **Advantages:** High efficiency, large storage capacity, low environmental impact, longevity etc.
- **Limitations:** High initial cost and space requirement, complexity etc.
- **Applications:** Renewable energy integration, grid stabilization etc.



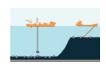
Analog Space Mission

ISRO has launched **India's first analog space mission** in Leh (Ladakh) to plan lunar mission experiments.

- It has been developed by **joint collaboration** of ISRO's Human Spaceflight Center, AAKA space studio, university of Ladakh and IIT Bombay.

About Analog Space Mission:

- Analog space missions are **field tests** done in locations that have physical similarities to that of the extreme space environments.
- It may include testing of **new technologies, robotic equipment, vehicles, study of behavioral effects (isolation and confinement).**
- **Reasons for choosing Leh (Ladakh)**
 - ⊖ **Geographical Features:** dry and cold climate, barren land, high-altitude terrain and extreme isolation closely resemble Martian and lunar landscapes.
- **Other analog missions:** NEEMO (NASA), SIRIUS Program (UAE)



Offshore Mining

Centre has introduced new royalty rates ahead of first offshore mineral auction for offshore mining.

About Offshore Mining:

- It is the process of retrieving mineral deposits from the deep seabed, at a depth of more than 200 metres.
- India's offshore mineral reserves include gold, diamond, copper, nickel, cobalt, copper, manganese, and rare earth elements essential for development.
- **Significance:** It will cater to increasing demand for terrestrial metals, reduce dependence on mineral imports.
 - ⊕ It can also help meet **world's pressing need for critical minerals**.
- **Concerns:** Ecosystem disruption, biodiversity loss, May harm fish populations, impacting livelihood of fishing communities.



Agentic AI

UAE's Abu Dhabi National Oil Company is to apply highly autonomous **Agentic Artificial Intelligence** in the energy industry for the first time.

About Agentic AI

- It allows systems to operate autonomously and perform tasks on behalf of users.
- It is **action-oriented** and is capable of independent decision making beyond content creation.
- It is **different from generative AI** which primarily focuses on creation, relying on human input and guidance.
- **Applications:** business operations, healthcare, cybersecurity etc.
- **Significance:** Improved problem-solving, adaptability; scalability can be deployed to different applications



River Cities Alliance

Ganga Utsav 2024 organized recently by the **National Mission for Clean Ganga (NMCG)** witnessed participation from several river cities under the **River City Alliance**.

River Cities Alliance

- **About:** It is an organization which includes 145 river cities nationwide and is **open to all river cities** of India.
- **Objective:**
 - ⊕ Promote **healthy urban rivers** through **river-sensitive urban planning**, contributing to **water-secure cities** and fostering inclusive, sustainable urban development.
 - ⊕ Provides a platform to the member cities for **sustainable management of urban rivers, sharing best practices and supporting innovation**.



Depresión Aislada en Niveles Altos (DANA)

Recent catastrophic flash floods in Spain are attributed to **DANA**.

About DANA:

- DANA is a phenomenon in which a **mass of very cold polar air becomes isolated** from **polar jet stream** and begins to circulate at very high altitudes (5-9 km).
 - ⊖ It forms **independently of polar or subtropical jet streams** unlike common storms.
- When it collides with **warmer, more humid air in Mediterranean Sea**, it **generates strong storms**, especially at end of northern summer and beginning of autumn.
 - ⊖ **Unlike a common storm**, which moves eastwards, a **DANA can remain stranded** in same place or even move westwards.



PM Vishwakarma Scheme

Two million applications have been successfully registered under the PM Vishwakarma scheme.

About PM Vishwakarma scheme:

- **Ministry:** Ministry of micro, small and medium enterprises.
- **Type:** **Central sector scheme**.
- **Purpose:** Holistic support to the **traditional artisans and craftspeople** in both **rural and urban areas**.
- **Objectives:**
 - ⊕ Enabling **recognition** of artisans and craftspeople as **Vishwakarmas** and to provide them with required **skill upgradation**.
 - ⊕ Provide a **platform for brand promotion and market linkages**, to help them access new opportunities for growth.



Thadou Tribe

Thadou Convention released a **10-point declaration** to protect Thadou tribe's distinct culture in Manipur.

About Thadou Tribe:

- Thadou are **indigenous non-naga tribe (Schedule Tribe)** of Imphal Valley in Manipur.
- **Language:** Thadou language belongs to **Tibeto-Burman family of Sino-Tibetan languages**.
- **Religion:** God Pathen is believed by Thadou to have created everything (Folk religion).
- **Dwellings:** Thadou settlements are located in forests.
 - ⊕ Villages are not arranged according to an established urban plan with no marking of perimeter.
- Since 2023, Thadous have been caught in ethnic conflict between Meitei and Kuki-Zo communities.

Place in News



Indonesia (Capital: Jakarta)

Mount Lewotobi Laki-Laki volcano has erupted on the Indonesian island of Flores.

Political Features:

- **Location:** **World's largest archipelago** Located off the coast of mainland **Southeast Asia** in the **Indian and Pacific oceans**.
 - ⊕ **Five main islands are:** Sumatra, Java, Kalimantan, Sulawesi and Papua.
- **Boundaries:** country shares its land border with three countries i.e. East Timor, Papua New Guinea, and Malaysia.
- One of the **founding members of Non-Aligned Movement**, along with India.

Geographical Features:

- Located at **intersection of shifting tectonic plates (part of the "Ring of Fire")**, It is prone to earthquakes and volcanic eruptions.
- There are over 100 active volcanoes in Indonesia e.g. **Mount Merapi, Mount Krakatoa**.
- **Climate:** As passed by equator, Indonesia has an almost **entirely tropical climate**.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI