

Brazil and France Launch Blue Nationally Determined Contributions (NDC) Challenge

Alongside **Brazil and France**, an inaugural group of eight countries – **Australia, Fiji, Kenya, Mexico, Palau, and Seychelles** – has already joined the initiative.

About Blue NDC Challenge

- It calls on all countries to place the ocean at the heart of their NDCs ahead of COP30.
- Supported by:** Ocean Conservancy, the Ocean & Climate Platform, and the World Resources Institute through the Ocean Resilience and Climate Alliance (ORCA).

Role played by Ocean in addressing the climate crisis

- Carbon Dioxide Absorption:** The ocean absorbs approximately 30% of global carbon dioxide emissions, acting as a significant carbon sink.
 - Coastal habitats like mangroves and seagrasses sequester carbon at **rates up to four times higher** than terrestrial forests
- Heat Regulation:** It captures about **90% of the excess heat** generated by greenhouse gas emissions.
- Renewable Energy:** Offshore wind energy has the potential to meet over one-third of global electricity needs.

Global Initiatives to Protect Ocean Ecosystems

- Marine Protected Areas (MPAs):** Regions designated for conservation, restricting activities to protect marine life.
- UN Decade of Ocean Science for Sustainable Development (2021–2030):** Aims to stimulate ocean science to reverse ocean decline and promote sustainable development.
- Indian Initiative:** MISHTI (Mangrove Initiative for Shoreline Habitats & Tangible Incomes), Deep Ocean Mission etc.



UNFPA State of World Population 2025: “The Real Fertility Crisis”

Report calls for a shift from panic over falling fertility to addressing unmet reproductive goals.

Key findings

- Reproductive Agency Crisis:** The real issue is not overpopulation but the inability to achieve desired family size due to lack of choice.
- Fertility Duality:** Some states (Bihar, UP, Jharkhand) have high fertility rates, while others (Delhi, Kerala, Tamil Nadu) have below-replacement fertility (2.0).
- Barriers to Reproductive Freedom**
 - Financial Constraints:** 4 in 10 cite financial limitations as a major barrier.
 - Structural Challenges:** Job insecurity (21%), housing constraints (22%), and lack of childcare (18%) hinder family planning.
 - Social pressures:** 19% face family/partner pressure to have fewer children.
 - Modern anxieties:** Climate change, political instability, loneliness, and shifting gender norms impact decisions.
- India's Progress & Persistent Inequalities**
 - Fertility rates dropped from 5 (1970) to 2 (2025) due to better education and healthcare.
 - Gaps remain:** Disparities across states, castes, and income groups limit reproductive rights.

UNFPA's Recommendations for India

- Expanding Sexual and Reproductive Health(SRH) Services:** Universal access to contraception, safe abortion, and infertility care.
- Removing structural barriers:** Affordable childcare, education, housing, and flexible work policies.
- Inclusive policies:** Extend services to LGBTQIA+, unmarried individuals, and marginalized groups.

About UNFPA

- Founded in 1969 as the United Nations Fund for Population Activities (UNFPA).
- Renamed in 1987 to the United Nations Population Fund (retaining the original acronym, UNFPA).
- Core Mission**
 - UNFPA works to guarantee sexual and reproductive rights and choices for all.
 - Empowering women and young people to make informed decisions about their bodies.

MoHUA issues Advisory for Repurposing of Smart City Special Purpose Vehicles

Government has decided SPVs will continue beyond the Smart Cities Mission (SCM) ending on 31.03.2025.

About SPVs

- **Genesis:** SPVs were created under the SCM in all 100 selected cities as companies **under the Companies Act, 2013**.
 - ⊕ Launched in 2015, the **SCM aims to enhance the quality of life in 100 selected cities** by providing efficient services, robust infrastructure, and a sustainable environment.
- **Ownership:** Jointly held by State/UT governments and ULBs in a **50:50 equity ratio**.
- **Structure:** Each SPV is led by a full-time CEO and includes representatives from the Central Government, State Government, and ULB on its Board.
- **Performance:** Mandated to implement the mission through focused planning, project development, and on-ground execution.
 - ⊕ By March 2025, over 93% of 8,000+ Smart Cities Mission projects were completed, with 99.44% of the ₹48,000 crore budget disbursed.

Repurposed SPVs domains for future engagement

- **Technology Support:** SPVs may help ULBs manage cyber hygiene, analytics, and data systems.
- **Project Implementation:** SPVs can implement and develop bankable projects, and charge a 1.5%–3% implementation fee as per state norms.
- **Research and Assessment:** SPVs can support evidence-based planning through assessments, logistics, and coordination.
- **Investment Facilitation:** SPVs can promote local economic development through project structuring, procurement, and inter-government coordination.

Home Minister Reviews Flood Management Preparedness & Mitigation Strategies Ahead of the Monsoon

The Minister emphasized India's Zero Casualty Approach in disaster management and the need for space technology in flood control.

Key directives towards Flood Management

- **Uniform Road Designs:** Ensured drainage integration in road designs, particularly for state and district highways.
- **Forest Expansion in River Basins:** Increasing Forest cover in Narmada River basin for basin revival, soil erosion reduction, etc.

About Flood Management

- **Flood Definition:** It is defined as, "High-water stages in which water over flows its natural or artificial banks onto normally dry land, such as a river inundating its floodplain."
- **Constitutional Provisions:** Primary responsibility for flood control lies with the states **Entry 17 of List II**.
- **Flood Management Architecture: Broadly Classified as-**

⊕ Structural Measure:

- ◆ **Reservoirs mitigate** floods by storing excess water (e.g., DVC dams in Damodar Basin).
- ◆ **Embankments**, in flood-prone states, provide effective flood protection. **E.g.,** Over 37,000 km built under the **Flood Management Programme**.
- ◆ **Detention Basins/ Wet Lands:** Detention basins are usually formed by utilizing natural depressions/ swamps and lakes. **E.g., Mokama Tal (Bihar).**

⊕ Non-Structural Measures

- ◆ **Flood Plain Zoning:** Aims to manage flood plains by demarcating flood-prone areas for restricted development.
- ◆ **Flood forecasting:** Managed by the Central Water Commission (CWC), is a cost-effective measure for flood management.
 - » Flood forecasting has been extended from 3 to 7 days.

Application of Space Technology in Flood Management

- **Real-Time Flood Monitoring & Mapping:** E.g., **ISRO's National Remote Sensing Centre** provides flood inundation maps during Kerala (2018) & Assam floods (2022).
- **Early Warning Systems:** Automated **flood early warning systems under National Hydrology Project (NHP)**
 - ⊕ Integrates satellite data with IMD & CWC inputs for predictive alerts.
- **Flood Hazard Zoning & Planning: State-level Flood Hazard Atlases** (e.g., Assam, Bihar, Odisha) using historic satellite data.
 - ⊕ E.g., **Bihar's atlas** aids in relocating vulnerable settlements.
- **Satellite communication (SATCOM)** ensures connectivity during floods for disaster response
 - ⊕ **Web-based platforms** (e.g., NRSC's BHUVAN) disseminate flood data to NDMA/SDMAs.

Crisis in India's Microfinance Sector: Insights from RBI Deputy Governor

Gross Loan Portfolio (GLP) of the microfinance sector fell 13.9% year on year, that reflects growing borrower stress and reduced lending.

- Microfinance for loans (i.e., microcredit) is the provision of small scale financial services to people who lack access to traditional banking services. **(World Bank)**

Challenges of Microfinance Institutions (MFIs)

- **High Cost of Outreach:** MFIs serve remote and underbanked populations through small-ticket loans.
 - ⊕ India's MFI outreach remains at 8%, far behind Bangladesh's 65%.
- **High Interest Rates:** MFIs charge 12%–30% interest, higher than banks' 8%–12%.
 - ⊕ High rates persist due to fixed transaction costs and limited volume.
- **Urban Poor Often Ignored:** MFIs over-focus on rural poor; only 800 MFIs target urban poor.
- **Loan Defaults:** High delinquency due to no collateral and poor risk management.
 - ⊕ Over 70% of payments are **late**, limiting cash flow and sustainability.
- **Overdependence on Banks:** 80% of MFI funding comes from commercial banks.
- **Lack of Product Diversification:** MFIs are largely limited to microcredit.
 - ⊕ Other services like **insurance, savings, remittances** are rarely offered.

Government's Initiatives

- **SIDBI's Micro Finance Scheme:** The programme requires participating NGOs/MFIs to provide equity support to access SIDBI finance.
- **Self-Help Group – Bank Linkage Programme (SHG-BLP),** formulated by NABARD and launched in 1992.

Etalin Hydropower Project Cleared in Arunachal Pradesh Biodiversity Hotspot

The **Forest Advisory Committee (FAC)** has given its "in-principle" approval to Etalin Hydropower Project situated at a **high conservation value area**.

About Forest Advisory Committee (FAC)

- ⊕ **Nature:** It is a **statutory body** under the provisions of section-3 of the **Forest (Conservation) Act, 1980**.
- ⊕ **Role:** Advise is recommendatory in nature so far as diversion of forest land for the purpose of non-forestry use, including mining.

About Etalin Hydropower Project

- **Location:** The Dibang Valley, in Arunachal Pradesh. It forms part of the **Eastern Himalaya Global Biodiversity Hotspot**, one of the **36 such global biodiversity hotspots**.
- **Rivers:** The Etalin project will feature **two Gravity dams:** One on the **Dri River** and Another on the **Talo (Tangon)**
- **Capacity: 3,097 MW.**

Implications of the Etalin Hydropower Project

- **Environmental Impact**
 - ⊕ **Deforestation:** The project will involve felling of 2.7 lakh trees and diversion of over 1100 hectare of unclassified forest land.
 - ⊕ **Biodiversity:** About **6 globally threatened mammal species** are found in this region of which **3 are endangered** and **3 are in the vulnerable category**.
 - ◆ This region has about **56% of total bird species of India**
 - ◆ It also has **3 very rare restricted range endemic bird species**.
- **Indigenous Concerns:** Local indigenous communities, including the **Adi and Idu Mishmi tribes**, have voiced strong opposition due to potential displacement and loss of land.

Also In News



SARAT

Drift and oil spill advisory issued by INCOIS after fire on container ship off Kerala coast.

- **Indian National Centre for Ocean Information Services (INCOIS)** also activated its **Search and Rescue Aid Tool (SARAT)** to track possible drift patterns of containers, debris.

About SARAT

- **Developed by Earth System Science Organization (ESSO)-INCOIS (under the Ministry of Earth Sciences).**
 - ⊕ Initiated and developed under the **Make in India program**.
- **Objective:** Facilitating the **search and rescue operations in the seas** to locate individuals/vessels in distress in the **shortest possible time**.
 - ⊕ Supports operations of the **Indian Coast Guard, Indian Navy, and Coastal Security Police**.
- **Functions:** Uses high resolution **Regional Ocean Modelling System**, run operationally on High Performance Computers at INCOIS.



Hodeidah Port

Israel Launches First Naval Strike on Yemen's Hodeidah Port.

About Hodeidah Port.

- **Location:** Western Yemen on the coast of Red Sea.
- **Significance:** About 70% of imports and 80% of humanitarian aid enter Yemen through the ports of Hodeidah, Salif, and Ras Issa, making these ports vital for both trade and aid.





Saint Sophia Cathedral

Russian Attack Damages Saint Sophia Cathedral in Kyiv.

About Saint Sophia Cathedral

- **Location:** In Kyiv, Ukraine, is a UNESCO World Heritage Site.
- Built in the 11th century, it is regarded as a **symbol of Ukraine's statehood and spiritual heritage**.
- Listed in 1990 for its **architectural and cultural significance**, described by UNESCO as part of the "new Constantinople" vision.
- **Architectural Style:** Its architectural style is a blend of **Byzantine and Eastern Orthodox**.
- Holds **universal value** for its role in shaping Eastern Christian architecture and **pilgrimage traditions**.



Financial Stability and Development Council (FSDC)

The Finance Minister recently chaired the 29th meeting of the FSDC.

About FSDC

- **Genesis:** It is an apex-level non-statutory body constituted by the Government of India in December 2010.
- **Objective:** Strengthening and institutionalizing the mechanism for maintaining financial stability and promoting financial sector development.
- **Composition:** Chaired by the Union Finance Minister and includes the RBI Governor, Finance Secretary, Secretary of Financial Services, Chief Economic Adviser, and the Chairpersons of SEBI, IRDAI, and PFRDA.
- **Sub-committee of FSDC:** A sub-committee of FSDC has also been set up under the chairmanship of Governor RBI.



CAQM

CAQM, CSIR-CRRI, School of Planning and Architecture (SPA) sign MoU to reduce dust pollution via urban road redevelopment in the National Capital Region (NCR).

About Commission for Air Quality Management in NCR and Adjoining Areas (CAQM)

- **Genesis:** Statutory body set up under **Commission for Air Quality Management in National Capital Region and Adjoining Areas Act 2021**.
- **Nodel Ministry:** Ministry of Environment, Forest and Climate Change.
- **Headquarters:** Delhi.
- **Role & Powers:** To take all such measures, issue directions, etc, for the purpose of protecting and improving the quality of the air in the **National Capital Region and Adjoining Areas**.
 - ⊕ Adjoining areas means the areas in the **States of Haryana, Punjab, Rajasthan and Uttar Pradesh**.

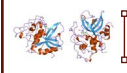


KATRIN Experiment

The Karlsruhe Tritium Neutrino (KATRIN) Experiment closely observed the disintegration of molecular tritium to estimate the neutrino mass.

About KATRIN Experiment

- Located in **Germany**.
- Aimed at determining the absolute mass of neutrinos, among the most elusive particles in the universe.
 - ⊕ **Neutrinos are:**
 - ◆ The lightest known particles.
 - ◆ Electrically neutral, weakly interacting, and extremely hard to detect.



Cathepsin B

Researchers at the **National Institute of Animal Biotechnology (NIAB)** found that reducing the activity of a cellular protein called '**Cathepsin B**' (Cat B) helps preserve the ovarian reserve.

About Cathepsin B

- **Nature:** Cathepsin B is a lysosomal cysteine protease.
- **Function:** Involved in protein turnover, antigen processing, and apoptosis (Programmed cell death for tissue regulation).
- **Location:** Primarily in lysosomes.
 - ⊕ **Lysosomes** are membrane-enclosed organelles that contain an array of enzymes capable of breaking down all types of biological polymers—proteins, nucleic acids, carbohydrates, and lipids.
- **Substrates:** Degrades extracellular matrix proteins (e.g., collagen, fibronectin).
- **Role in Disease:** Linked to cancer metastasis, inflammation, and neurodegenerative disorders.



Poson Poya

Sri Lanka is celebrating the sacred Poson Poya festival today, marking the historic arrival of Buddhism over 2,000 years ago.

About Poson Poya

- **Occasion:** Celebrated on the full moon day of June in Sri Lanka.
- Significance:**
 - Marks the **first sermon delivered by Arahata Mahinda**, son of Emperor Ashoka, to **King Devanampiyatissa at Mihintale**
 - A key value highlighted during **Poson Poya is non-violence**. In a world still troubled by conflict, it reminds that '**Ahimsa**'-non-violence-is a timeless principle that protects life and freedom for all.
 - For Buddhists, this hallowed day of Poson is **second only to Vesak in terms of importance**.

Personality in News



Sant Kabirdas (c. fourteenth-fifteenth centuries)

11th June marks the birth anniversary of Sant Kabirdas.

- **Place of Birth:** Varanasi, Uttar Pradesh.

Key Contributions

- **Core Belief:** Rejected rituals, casteism, and idol worship; emphasized One God (Nirguna Bhakti).
- Verses scribed to Kabir have been compiled in three distinct but overlapping traditions.
 - ⊕ **The Kabir Bijak** is preserved by the Kabirpanth (the path or sect of Kabir) in Varanasi and elsewhere in Uttar Pradesh;
 - ⊕ **The Kabir Granthavali** is associated with the Dadupanth in Rajasthan.
 - ⊕ Many of his compositions are found in the **Adi Granth Sahib**, compiled by **Guru Arjan Dev**.
- **Kabir's poems have survived in several languages and dialects:**
 - ⊕ Some are composed in the special language of nirguna poets, **the sant bhasha**.
 - ⊕ Others, known as **ulatbansi (upside-down sayings)**, are written in a form in which everyday meanings are inverted.



AHMEDABAD



BENGALURU



BHOPAL



CHANDIGARH



DELHI



GUWAHATI



HYDERABAD



JAIPUR



JODHPUR



LUCKNOW



PRAYAGRAJ



PUNE



RANCHI