
Mains Topics

Parliamentary panel report on AMRUT Mission

Context

A Standing committee presented a report on Atal Mission for Rejuvenation and Urban Transformation (AMRUT) in Lok Sabha.

About AMRUT Mission

- Launched on **June 25, 2015**, AMRUT is a **Centrally Sponsored Scheme** by the Government of India.
- Aims to enhance **urban infrastructure** and ensure a **better quality of life** in selected cities and towns.
- Focuses on delivering **basic civic amenities** like water supply, sewerage, urban mobility, and green spaces with an emphasis on **inclusivity and sustainability**.

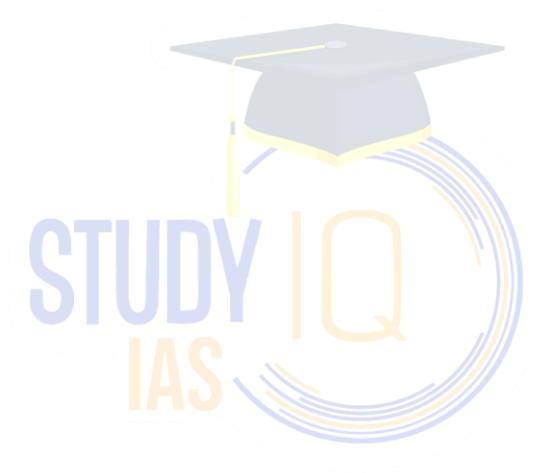
Key Issues Highlighted by the Parliamentary Panel

- **Funding and financial capacity constraints:** Inadequate funding for urban water infrastructure and insufficient operation and maintenance (O&M) support, with limited use of alternative financing.
- **Slow implementation:** Under **AMRUT 2.0**, although projects worth about **₹1.90 lakh crore** were approved, physical completion remains low at around **₹48,050 crore**.
- **Weak institutional framework:** Limited role of **Urban Local Bodies (ULBs)** and over-dependence on parastatal agencies in project execution.
- **Lack of integrated planning:** Absence of **Integrated Water Management** and long-term urban water strategies.
- **Data and monitoring gaps:** Poor reporting on water coverage, **Non-Revenue Water (NRW)**, metering, and wastewater reuse.
- **Untreated sewage challenge:** Urban India generates about **48,004 MLD of sewage**, while installed treatment capacity is only about **30,001 MLD (2021)**.

Key Recommendations of the Parliamentary Panel

- **Enhanced funding:** Increase central and multilateral funding support, especially for underserved regions.
- **Innovative financing:** Scale up **Public-Private Partnerships (PPPs)** and promote **municipal bonds**.
- **Strengthen ULB capacity:** Develop a **national roadmap** for institutional and technical capacity building of ULBs.
- **Planning reforms:** Ensure **100% submission of City Water Action Plans (CWAPs)** and undertake long-term national projections of urban water demand for the next **25-30 years**.
- **Policy convergence:** Enforce convergence across central urban and water-related schemes.
- **Wastewater focus:** Formulate a **National Urban Wastewater Reuse Policy** and augment wastewater treatment and reuse capacity.
- **Efficiency measures:** Operationalise incentives for **NRW reduction** and accelerate **smart water metering**.

Source: [Hindustan Times](#)



Tamil Nadu's Community-based MRV (CbMRV) Initiative

Context

Tamil Nadu has emerged as a **national and global example of community-led climate governance** through its **Community-based Monitoring, Reporting and Verification (CbMRV) initiative**.

What is the CbMRV Initiative?

- CbMRV (Community-based Monitoring, Reporting and Verification) is a **village-led system** that enables communities to **generate, manage, and use science-ready environmental and climate data**.
- **Launched:** Initiated in **2023** under the **UK PACT programme** in Tamil Nadu.
- **Pilot landscapes:**
 - **Aracode (Nilgiris):** Mountain forests and tribal livelihoods
 - **Vellode (Erode):** Agriculture and wetlands
 - **Killai (Cuddalore):** Mangroves and coastal fisheries
- **Data covered:** Rainfall, temperature, soil and water health, biodiversity, fish catch, cropping patterns, livelihoods, carbon stocks and emissions.
- **Digital integration:** Community data is fed into a **digital dashboard** used at village, district, and State levels.

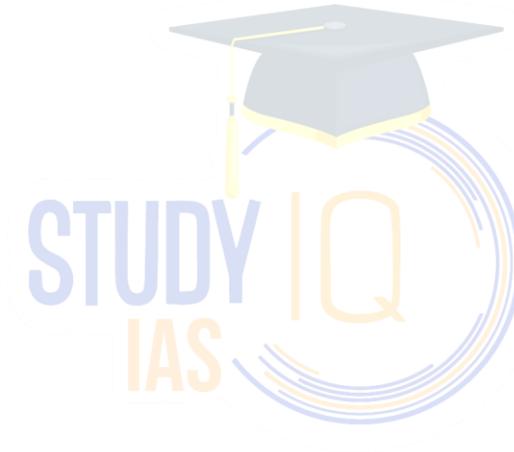
Role of Communities in Environmental and Climate Governance

- **First responders to climate change:** Indigenous peoples and local communities observe climate impacts earliest at micro-ecological scales such as rainfall variability, salinity intrusion, forest health, and biodiversity loss.
- **Custodians of traditional ecological knowledge:** Communities possess generational knowledge that complements scientific data and improves the relevance of climate indicators.
- **Frontline implementers of adaptation:** Local communities are central to sustainable agriculture, fisheries management, forest conservation, and water stewardship.
- **Democratic climate governance:** Community participation ensures downward accountability, equitable climate finance access, and locally appropriate solutions.
- **Enhanced monitoring and transparency:** Community-led data strengthens MRV credibility by adding ground-truthing to remote sensing and administrative datasets.

Why CbMRV is a Best-Practice Model

- **Bottom-up climate intelligence:** Converts local observations into formal climate data, correcting the over-reliance on top-down and remote sensing approaches.
- **Science-tradition integration:** Blends **traditional ecological knowledge with scientific monitoring protocols**, improving data quality and legitimacy.
- **Institutional relevance:** Supports **Gram Panchayat Development Plans**, Climate Resilient Village programmes, watershed planning, disaster preparedness, and State climate policies.

- **Climate finance readiness:** Village-scale MRV and carbon feasibility studies enable **community-centred carbon and adaptation projects**, helping unlock climate finance.
- **Capacity building:** Creation of **35 Key Community Stakeholders (KCS)** as trained climate stewards ensures continuity and local leadership.
- **Scalable and replicable:** Designed for long-term institutionalisation through ITIs, community colleges, Panchayat training centres, and State skill programmes.
- **Just transition oriented:** Shifts power and resources to frontline communities, aligning climate action with equity and livelihoods.



Today's Prelims Topics

Chakrashila Wildlife Sanctuary

Context

Community-led conservation efforts at the Chakrashila Wildlife Sanctuary have successfully restored wild honey bee colonies and revitalized associated wildlife

About Chakrashila Wildlife Sanctuary

- **Location:** Kokrajhar and Dhubri districts of Assam.
- **Established:** 1994; declared a wildlife sanctuary to protect regional biodiversity.
- **Landscape:** Dominated by forested hillocks (Chakrashila Hill), surrounded by plains and wetlands.
- **Flora:** Sal, teak, bamboo, cane, and diverse medicinal plants.
- **Fauna:** Rhesus macaque, capped langur, leopard, civets, deer, porcupine, Golden Langur (India's only sanctuary specifically notified for its protection).

Source: [Sentinel Assam](#)

Central Information Commission

Context

President Droupadi Murmu administered the oath of office to **Raj Kumar Goyal** as the Chief Information Commissioner, along with eight new Information Commissioners.

About Central Information Commission

- **Establishment:** Constituted under the **Right to Information (RTI) Act, 2005**.
- **Nature:** It is a **statutory body**, not a constitutional one.
- **Headquarters:** **New Delhi**.

- **Composition:** Includes the **Chief Information Commissioner (CIC)** and up to **10 Information Commissioners**.
- **Appointment:** Made by the **President of India** on the recommendation of a committee (PM, Leader of Opposition in Lok Sabha, and a Union Cabinet Minister nominated by PM).
- **Tenure:** Commissioners hold office for **3 years** (as per the 2019 amendment).
- **Function:** Hears **appeals and complaints** under RTI, ensuring transparency and accountability in public authorities.
- **Powers:** Equivalent to a civil court – can summon documents, order inquiry, and impose penalties on officials for failing to provide information.
- **Limitation:** Cannot enforce compliance beyond penalties; decisions sometimes face delays due to backlog of cases.

Source: [PIB](#)

Dandami Madia Tribe

Context

The Dandami Madia (also spelt as Maria) people have long shaped the cultural landscape of southern Chhattisgarh.

About Dandami Madia Tribe

- They are also called **Madia Gond** are a **Particularly Vulnerable Tribal Group (PVTG)** belonging to the larger Gond tribe.
- **Geographical distribution:** They primarily inhabit the forested and hilly regions of **Dantewada and Bijapur districts of Chhattisgarh**, with extensions into parts of **Maharashtra (Gadchiroli)** and **Telangana**.

- **Language:** They speak **Madia**, a Dravidian language, and also use Gondi and regional languages.
- **Livelihood:** Traditionally dependent on **shifting cultivation (podu)**, hunting–gathering, minor forest produce, and small-scale agriculture.
- **Social and cultural life:** Society is clan-based, with strong community bonds, distinctive folk dances (such as **Dandami dance**), ritual practices, and nature worship.

Source: [The Hindu](#)

National Energy Conservation Awards

Context

The President presented the National Energy Conservation Awards 2025 on National Energy Conservation Day 2025 (14th December).

About National Energy Conservation Awards

- **Launched in:** 1991
- **Initiative of:** Bureau of Energy Efficiency (BEE)
- **Aim:** To recognize outstanding achievements in reducing energy consumption while maintaining or enhancing productivity.
- **Sectors Covered:** Industries, commercial buildings, transport, institutions, and energy-efficient appliances.

Source: [Hindustan Times](#)

‘Ponduru Khadi’ gets GI tag

Context

Ponduru Khadi (Andhra Pradesh), has received the Geographical Indication (GI) tag from the Geographical Indications Registry.

About Ponduru Khadi

- It is a traditional **handspun and handwoven cotton fabric** produced in **Ponduru village, Srikakulam district, Andhra Pradesh**, locally known as **Patnulu**.
- **Key features:**
 - Made from **indigenous cotton varieties** such as hill cotton, punasa cotton, and red cotton native to the Srikakulam region.
 - The entire process—from cleaning the cotton to spinning and weaving—is done **manually**, preserving centuries-old artisanal skills.
 - Cotton is cleaned using the **jawbone of the Valuga fish**, a globally unique technique practiced only in Ponduru.

Source: [The Hindu](#)

MahaCrimeOS AI

Context

Microsoft CEO Satya Nadella launched MahaCrimeOS AI for Maharashtra police.

About MahaCrimeOS AI

- Maharashtra’s statewide **AI-powered crime investigation platform** developed using **Microsoft Foundry**.
- **Purpose:** To **speed up cybercrime investigations**, automate routine tasks, analyse complex data, and support officers with structured investigation workflows.
- **Developed by:** CyberEye (Microsoft partner ISV), Maharashtra Government’s **MARVEL initiative**, and **Microsoft India Development Centre (IDC)**.
- **Technology:** Powered by **Microsoft Azure OpenAI Service** with multimodal AI capable of processing **PDFs, audio, handwritten notes, images**, and multilingual inputs.

- **Crime coverage:** Focuses on **four categories**— cybercrime, financial fraud, crimes against women, and narcotics.
- **Key capabilities:**
 - Automates administrative work and provides real-time dashboards of cases and pending actions.
 - Reads **Marathi FIRs** and auto-generates **step-by-step investigation plans** aligned with Maharashtra Police protocols and **Supreme Court/High Court guidelines**.
 - Analyses telecom and digital data and prepares **court-ready case diaries**.

Source: [Indian Express](#)

Exercise Ekatha

Context

The 2025 edition of Exercise Ekatha was conducted in Maldives.

About Exercise Ekatha

- **Nature:** It is an **annual bilateral maritime exercise** between the **Indian Navy** and the **Maldives National Defence Force (MNDF)**.
- **Established in:** 2017
- **Aim:** To strengthen naval cooperation and interoperability at sea.

Source: [PIB](#)

SHANTI Bill 2025

Context

The Union Government has approved the Atomic Energy Bill, 2025, also known as the Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Bill.

Key Provisions of SHANTI Bill 2025

- **Private sector entry:** Allows **Indian and foreign private companies** to **set up, operate, and run nuclear power plants**, ending the government monopoly.
- **Replacement of laws:** Replaces the **Atomic Energy Act, 1962** and modifies the **Civil Liability for Nuclear Damage (CLND) Act, 2010**.
- **Revised nuclear liability regime:** Introduces a **pragmatic civil liability framework**, capping operator liability based on plant size and limiting maximum penalties (up to ₹1 crore even for severe breaches).
- **Supplier liability dilution:** Restricts the circumstances under which nuclear operators can seek compensation from equipment suppliers in case of accidents.
- **Regulatory strengthening:** Grants **statutory status to the Atomic Energy Regulatory Board (AERB)** and strengthens safety, security, safeguards, quality assurance, and emergency preparedness mechanisms.
- **Capacity expansion goal:** Aims to scale nuclear power capacity from ~8.8 GW to **100 GW by 2047**, supporting clean energy transition.
- **Technology push:** Supports development of **Small Modular Reactors (SMRs)** and customised **220 MW pressurised heavy water reactors (PHWRs)**.
- **Climate alignment:** Positions nuclear energy as a key pillar in achieving **India's 2070 net-zero target**.
- **Innovation facilitation:** Aligns patent and regulatory provisions to encourage **large-scale innovation** and private investment in nuclear technology.

Source: [The Hindu](#)

Species in News

Bondi Beach

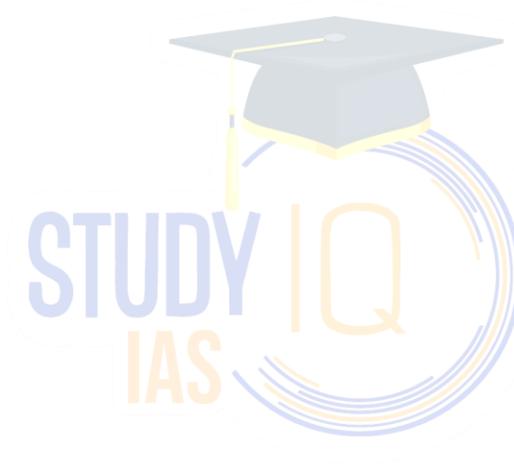


News? 12 people have been killed in a terror attack on Australia's Bondi beach.

About Bondi Beach

- It is an urban beach.
- Located in the eastern part of Australia.
- Known for crescent-shaped shoreline and strong surf conditions.

Source: [TOI](#)



Personality in News

Perumbidugu Mutharaiyar II



News? A postage stamp in honour of the king Perumbidugu Mutharaiyar II (Suvaran Maran) was released by Vice President C P Radhakrishnan.

About Perumbidugu Mutharaiyar II (705–745 CE.)

- He was also known as **Suvaran Maran** or **Shatrubhayankar**.
- He belonged to the **Mutharaiyar** dynasty, powerful feudatories of the **Pallava Empire** in early medieval South India.
- His domain covered **central Tamil Nadu**, including present-day **Thanjavur, Tiruchirappalli, Pudukkottai, Perambalur**, and regions along the **Cauvery basin**.
- **Tiruchirappalli** functioned as a major political centre during his reign.
- Known as a **valiant military leader**, he fought alongside Pallava king **Nandivarman II** in multiple campaigns.
- A strong patron of **Shaivism**, while also allowing **philosophical debates** with Jain and Buddhist scholars.
- Jain monk **Vimalachandra** is recorded as visiting his court, indicating **religious pluralism and intellectual engagement**.
- The Mutharaiyars were notable **temple builders**, particularly of **rock-cut cave temples and early structural stone temples**.

Source: [Indian Express](#)