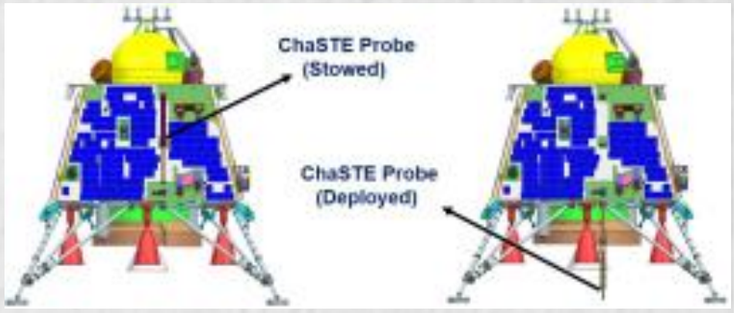
1. **International AI Safety Report 2025:** The Department for Science, Innovation and Technology (British Government) and the AI Safety Institute (now AI Security Institute) recently released the first-ever International AI Safety Report 2025.
   - **Key highlights of the report:** The report flags the imminent risk of generation, possession, and dissemination of child sexual abuse material (CSAM) using AI tools.
     - U.K. is making the first legislative attempt to tackle threats posed by AI-generated CSAM.
     - CSAM refers to material (audio, video, and images) depicting a sexually explicit portrayal of a child.
     - WEF (2023) highlighted how generative AI can create life-like images, especially of children.
     - Internet Watch Foundation (Oct 2024) reported the proliferation of CSAM on the open web.
   - **Way Forward:** The Government of India must amend existing laws to address these emerging threats and ensure long-term effectiveness:
     - **NHRC Advisory (Oct 2023)**: Replace 'child pornography' with **'CSAM'** under the **POCSO Act**.
     - Define 'sexually explicit' under Section 67B of IT Act to enable real-time CSAM identification and blocking.
     - Redefine 'intermediary' under the IT Act to include VPNs, VPS, and Cloud Services, making them liable for CSAM compliance.
     - Adopt the UN Draft Convention on 'Countering the Use of Information and Communications Technology for Criminal Purposes'.
     - Proposed Digital India Act 2023 must draw inspiration from the U.K.'s legislation to include AI-generated CSAM provisions.
2. **Katchatheevu Island:** Ahead of Prime Minister Narendra Modi's visit to Sri Lanka, the Tamil Nadu Legislative Assembly recently unanimously adopted a resolution urging the Union government to retrieve Katchatheevu Island from Sri Lanka.
   - India recognizes Sri Lanka's sovereignty over the island under the Katchatheevu island pact in 1974. However, Tamil Nadu claimed that Katchatheevu falls under Indian Territory.
   - **About Katchatheevu Island:** It is a small uninhabited island in the **Palk Bay**, between **Tamil Nadu and Sri Lanka**.



- **History**: Was part of Madras Presidency (British India) before being ceded to Sri Lanka under the 1974 Indo-Sri Lankan Agreement signed by Indira Gandhi and Sirimavo Bandaranaike.
- **Fishing Rights**: Agreement allowed Indian fishermen to access Katchatheevu for drying nets and religious pilgrimage but denied them fishing rights.
- **Long-standing Dispute**: Tamil Nadu governments have consistently opposed the ceding of Katchatheevu, citing traditional fishing rights and livelihood concerns.

3. **Chandra's Surface Thermophysical Experiment (ChaSTE):** The ChaSTE aboard Chandrayaan-3 became the first mission to successfully penetrate the soil of a celestial body to deploy a thermal probe.



- ChaSTE measured in situ temperatures near the Moon's South Pole, providing crucial data on water ice prevalence.
- **About:** ChaSTE (Chandra's Surface Thermophysical Experiment) is an instrument onboard Vikram lander of Chandrayaan-3 that measured the temperature of the Moon's surface and subsurface.
  - Features 10 temperature sensors spaced 1 cm apart along its length, near the nose-tip.
  - Uses a rotation-based deployment mechanism for penetration.
  - The probe descends by rotating its motor, encountering increasing soil resistance, confirming depth.
  - Reached a depth of 10 cm and collected temperature measurements until September 2, 2023.
  - Data confirmed higher-than-expected water ice presence in the Moon's South Pole region.

4. **North Sentinel Island:** Recently, a man was arrested in Andaman and Nicobar Islands for allegedly entering the prohibited tribal reserve area of North Sentinel Island.
   - **About:** North Sentinel Island is a part of the Andaman and Nicobar Islands in the Bay of Bengal.
     - Declared a protected area by the Indian government to preserve the Sentinelese tribe's autonomy and shield them from potential diseases.

- Entire North Sentinel Island and 5 km of coastal sea from the high-water mark is notified as a tribal reserve.

- **About Sentinelese Tribe:** They are one of the last uncontacted tribes in the world, known for their isolation and hostility towards outsiders.
  - Hunt, gather in the rainforest, and fish in coastal waters for survival.
  - Vigorously reject all contact with outsiders and have been known to greet visitors with spears and arrows.
  - Believed to be connected to the Jarawa tribe based on physical and linguistic similarities.
  - Carbon dating by the Anthropological Survey of India confirmed their presence on the island 2,000 years ago, while genome studies suggest Andaman tribes may have lived there for 30,000 years.
- **Protection Laws for the Sentinelese Tribe:** A&N Islands (Protection of Aboriginal Tribes) Regulation, 1956.

5. **TARANG:** It was recently inaugurated at the Hyderabad-based Indian National Centre for Ocean Information Services (INCOIS).
   - **About:** 'TARANG' is a 64-bit High Performance Computing (HPC) system designed to support multi-tasking, multi-programming, multi-user, and time-sharing environments.
     - Supported by technical infrastructure such as transformers, diesel generators, UPS, batteries, multiple utility paths, lighting system, and earthing pits.
   - **Compute & Storage Capacity:** 1 PetaFLOPS compute capacity → 2 PetaByte storage → 3 PetaByte archival storage.
     - Dedicated standalone system for AI & ML applications with 15.5 PetaFLOPS capacity.
   - **Applications & Benefits:** Supports advanced operational models for providing Tsunami Early Warnings for India and 25 other Indian Ocean rim countries.
     - Enhances the next-generation Ocean State Forecast system with more accurate representation of physical processes → Non-hydrostatic dynamics → High-resolution local forecast nests → Advanced data assimilation techniques → Augmented forecasts using GPU processors.

6. **Fiscal Health Index 2025:** The Fiscal Health Index (FHI) was recently released.
   - **About:** Fiscal Health Index (FHI) is an initiative by NITI Aayog to assess the fiscal health of states in India.
     - Covers 18 major states contributing significantly to GDP, demography, public expenditure, revenue, and fiscal stability.
     - **Odisha leads** the Index, followed by **Chhattisgarh, Goa, Jharkhand, and Gujarat.**
     - States manage two-thirds of public spending and one-third of total revenue, making their fiscal performance crucial for national economic stability.
     - Based on data from the Comptroller and Auditor General of India (CAG) for FY 2022-23.
   - **Objectives:** To provide a comparative analysis of fiscal health across states.
   - **Key Indicators Evaluated:** Tax Buoyancy → Revenue Generation and Mobilization → Debt-to-GSDP Ratio → Expenditure Management and Prioritization → Debt Management → Fiscal Deficit Management → Overall Fiscal Sustainability

7. **Western Ghats Project:** The Ministry of Science & Technology and Earth Sciences recently submitted a written reply in the Lok Sabha regarding the Western Ghats Project.
   - **About Western Ghats Project:** A Call for Proposals (CFP) on "Geospatial Technology and Solutions" was issued on 13th June 2024 through the Electronic Project Management System (e-PMS) portal.
     - The proposal aimed to develop a GIS-based Spring Information System for selected districts of Western Ghats to assess climate and land use impacts on watershed hydrology.
     - The committee rejected it due to lack of scalability and commercialization potential.



   - **About Western Ghats:** It is a mountain range (1,600 km stretch) parallel to the western coast of India.
     - UNESCO World Heritage Site and one of the 36 biodiversity hotspots in the world.
     - Home to high mountain forests, which are severely fragmented due to human activities like tea, coffee, and teak plantations.

- **Conservation Efforts:** In 2010, MoEFCC appointed Western Ghats Ecology Expert Panel (WGEEP) under Dr. Madhav Gadgil to study population pressure, climate change, and development impact on Western Ghats.
- **Implementation Status: In 2017,** MoEFCC designated **56,825 sq km as ESA** instead of **59,940 sq km** recommended by Kasturirangan committee.
- **ESA distribution among states:** Kerala (9,993 sq km) → Karnataka (20,668 sq km) → Tamil Nadu (6,914 sq km) → Maharashtra (17,340 sq km) → Goa (1,461 sq km) → Gujarat (449 sq km)

8. **BHARAT TEX 2025:** The Ministry of Textiles has supported Export Promotion Councils/Associations in organizing Bharat TEX 2025, a Global Mega Textile Event, to showcase India's textile value chain, innovations, and investment potential in the sector.
   - **About Bharat TEX 2025:** It's objective to position India as the most preferred destination for sourcing and investment in the textile sector.
   - **Key Features:** Showcased the entire textile value chain, from raw materials to finished products., and platform for collaboration among manufacturers, exporters, and importers.
   - **Government's Focus:** Increase textile manufacturing, modernize infrastructure, foster innovation, and upgrade technology.
   - **Government Schemes Supporting Textiles & Handlooms in India:**
     - **Handloom Sector Initiatives:**
       - ✓ **National Handloom Development Programme (NHDP):** Financial assistance for raw materials, upgraded looms, solar lighting units, worksheds, skilling, and market linkages.
       - ✓ **Raw Material Supply Scheme (RMSS):** Freight reimbursement for all yarn types, 15% price subsidy for cotton hank yarn, silk, wool, linen, and natural fiber-blended yarn.
     - **Handicrafts Sector Initiatives:** National Handicrafts Development Programme (NHDP) & Comprehensive Handicrafts Cluster Development Scheme (CHCDS)
   - **Key Government Schemes Supporting the Textile Sector:** PM MITRA → Production Linked Incentive (PLI) Scheme → Samarth Scheme → Integrated Processing Development Scheme (IPDS) → Raw Material Support Schemes