

# **Factly Weekly**

**Compilation**

**2026**

**For UPSC CSE Prelims  
Exam**

**2<sup>nd</sup> Week**

**July 2026**

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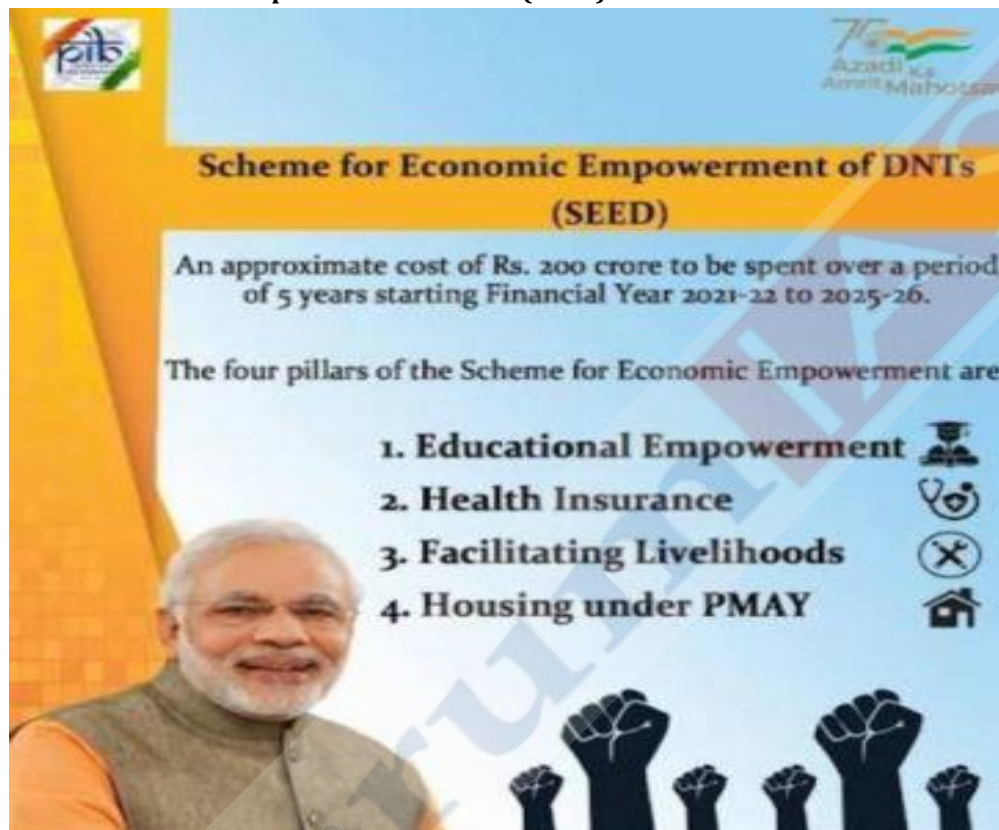
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### Scheme for Economic Empowerment of DNTs (SEED)

**News:** The Ministry of Social Justice & Empowerment highlighted the SEED Scheme after covering over 1.10 lakh beneficiaries during 2025-26.

#### About Scheme for Economic Empowerment of DNTs (SEED)



Source – PIB

- **Launched in:** The Scheme for Economic Empowerment of DNTs (SEED) was launched in February 2022.
- **Implemented by:** It is implemented by the Ministry of Social Justice & Empowerment through the Development and Welfare Board for De-notified, Nomadic and Semi-Nomadic Communities (DWBDNC).
- **Partner Agencies:** National Backward Classes Finance and Development Corporation (NBCFDC), National Scheduled Castes Finance and Development Corporation (NSFDC), and Non-Government Organizations are the partner agencies.
- **Aim:** It aims to provide educational support, health insurance, livelihood opportunities and housing assistance for DNT, NT and SNT communities.
- **Core Pillars:**

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- **Educational Empowerment:** It provides **free coaching and financial assistance** to support admission and employment opportunities.
- **Health:** It **distributes Ayushman Cards** and provides **health insurance through PMJAY**.
- **Livelihood:** It promotes **income generation by forming Self Help Groups in DNT clusters**.
- **Land and Housing:** It **facilitates housing support** under Pradhan Mantri Awas Yojana and other government schemes.

#### About De-Notified, Nomadic and Semi-Nomadic Tribes

- **Historical Background:** During the British rule, many communities were notified as “**born criminals**” under the **Criminal Tribes Act, 1871**, and all **members had to register with local magistrates**.
  - After Independence, **this Act was repealed in 1952**, and these communities became **known as De-Notified Tribes (DNTs)**.
- **Socio-economic Status:** **Nomadic and semi-nomadic communities** are those who **move from one place to another** instead of living permanently in one place.
  - Historically, these **communities had no access to private land or home ownership**.
- **Status in India:** Around **10% of India's population belongs to DNT communities**.
  - As per the report of the **National Commission for De-notified, Nomadic and Semi-Nomadic Tribes**, **1,235 communities** have been **identified as DNTs across the country**.
- **Institutional Support:** The **National Commission for De-notified, Nomadic and Semi-Nomadic Tribes (Indate Commission)** recommended measures for the development of these communities.
  - Based on its recommendations, the **Government constituted the Development and Welfare Board for De-notified, Nomadic and Semi-Nomadic Communities (DWBDNC)** in **2019** to formulate and implement welfare and development programmes.

#### **TribeX Platform**

**News:** TribeX Platform was launched to digitally transform tribal education and preserve India's rich traditional heritage.

#### About TribeX Platform

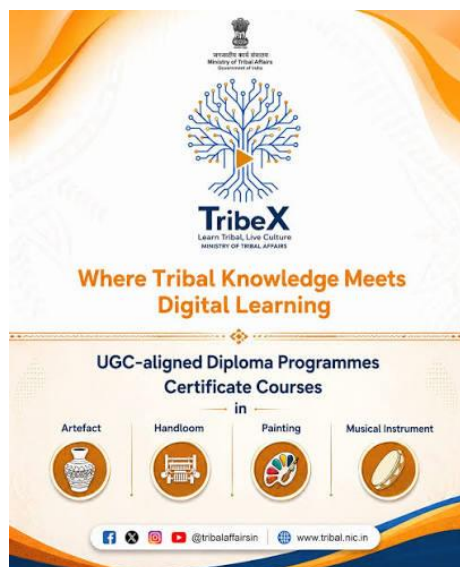


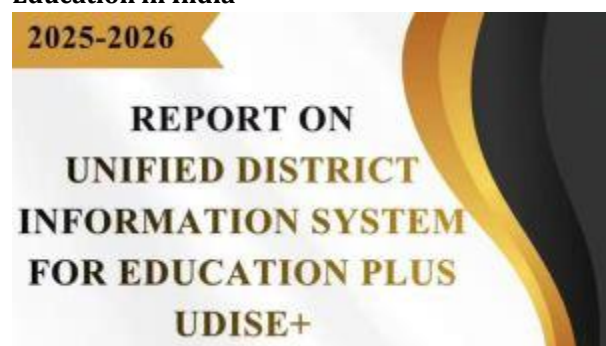
Figure 1. Source: Ministry of Tribal Affairs

- It is a **first-of-its-kind digital learning platform** dedicated to **tribal arts, culture, traditional knowledge and skill development**.
- It is a **one-stop digital platform** for **learning, documentation and preservation of tribal knowledge**.
- **Launched by:** It was launched by **Ministry of Tribal Affairs**.
- **Features:**
  - **Courses offered:** It offers **structured learning opportunities through free certificate courses and UGC-recognized Post Graduate diploma programmes** in tribal languages, art forms, crafts and traditional knowledge.
  - It currently **hosts 20 free certificate courses across a diverse range of tribal art forms**, including paintings, handicrafts, handloom, artefacts and traditional musical instruments.
  - It also integrates a **robust Learning Management System (LMS), and a Repository Management System** providing a **secure and seamless digital ecosystem** for learning, knowledge management and progress tracking.
  - **Digital Repository:** It serves as a **digital repository for documenting, preserving and promoting tribal languages, oral traditions, performing arts, cultural practices and indigenous knowledge systems for future generations**.
  - It also features a **Heritage Archive containing more than 5,000 multimedia resources** including audio recordings, videos and literature documenting tribal festivals, oral traditions and socio-cultural practices.
- **Significance:** It enables **learners, researchers, educators and enthusiasts across the world to learn directly from tribal knowledge experts and master artisans** while gaining authentic insights into India's diverse tribal traditions.

## Report on Unified District Information System for Education Plus (UDISE+) 2025-26 on School Education in India

**News:** The Union Ministry of Education released the Report on Unified District Information System for Education Plus (UDISE+) 2025-26 on school education in India.

**About Report on Unified District Information System for Education Plus (UDISE+) 2025-26 on School Education in India**



of Education.

- **Key Highlights:**

- **Increase in Teachers:** The number of teachers **increased by 8.3% compared to 2022-23**, improving teacher availability.
- **Improved Pupil-Teacher Ratio (PTR):** The PTR **improved to 10, 12, 17, and 21 at the foundational, preparatory, middle, and secondary levels respectively**, which is better than the NEP recommended ratio of 30:1.
- **Better Student Retention and Lower Dropouts:** Between 2024-25 and 2025-26, dropout rates declined to **1.8%** at the preparatory level and **7.0%** at the secondary level, while retention improved at the middle and secondary stages.
- **Higher Enrolment and Transition:** The secondary Gross Enrolment Ratio (GER) **increased from 68.5% to 71.7%**, and transition rates improved across all major stages of schooling.
- **Fewer Single-Teacher and Zero-Enrolment Schools:** Single-teacher schools declined by around 3%, while zero-enrolment schools reduced by around 29%.
- **Improved Digital and Basic Infrastructure:** Schools with computer access (69.9%), internet connectivity (67.4%), and basic infrastructure such as electricity, drinking water, toilets, handwashing facilities, libraries, and ramps with handrails recorded improvements.
- **Greater Female Representation:** Women formed **54.9% of the teaching workforce**, while girls' enrolment increased to **48.4% in 2025-26**.

### About Unified District Information System for Education Plus (UDISE+)

- UDISE+ is an **educational management information system** under the **Department of School Education & Literacy, Ministry of Education**.
- **Central Data Platform:** It enables recognised schools to **record and submit real-time data** on infrastructure, students, and teachers from **pre-primary to higher secondary levels**.
- **Validated Information:** The submitted **data is verified by officials at block, district, state, and national levels** to ensure credible information.
- **Unique School Identification:** Every onboarded school receives a unique **11-digit UDISE code** and login credentials for **real-time data entry and modification**.
- **Integrated Modules:** UDISE+ **manages school profile and facilities, student records** through the **Permanent Education Number**, and individual teacher and non-teaching staff profiles.

### Char Kaman and Charminar Complex

**News:** The Government of Telangana has announced a restoration project of Char Kaman which is historically part of Charminar Complex.

#### About Char Kaman and Charminar Complex



Figure 2. Source: Telangana Gov

- **Build by:** The Charminar was built **between 1589 and 1591** by **Muhammad Quli Qutb Shah**, the fifth ruler of the Qutb Shahi dynasty.
- It is a **square shaped structure with four pillars, one on each side and intricate carvings**.
- **Architecture:**
  - **Inspired by:** The architectural design of Charminar is **inspired from the Shia “tazias”**.
  - **Material used:** It has been built with granite and lime mortar.
  - **Four Pillars:** The four pillars around Charminar represent the four caliphs. These pillars or minars are 48.7 meters high.
  - These are **four stories, with each floor divided by intricately carved rings** that surround it.
  - On the top floor of **Chaminar** there is a **mosque** which is **believed to be the oldest mosque of Hyderabad city**.

- Attached to these is the **open space which can be used to accommodate more people on occasions like Friday prayers or festivals.**
- **Design:** The Char Kaman feature **distinctive Qutb Shahi architectural motifs**, with pillars crafted to resemble lotus leaves.
- In the year of 1889, **four clocks were also added on all the four sides of the structure.**
- **About Char Kaman:** The **four ornamental gateways** that lead to the Charminar, called the **Char Kaman.**
  - It was **built around 1594.**
  - **Architecture:** The **four arches had different names:** The arches **Machli Kaman, Kali Kaman, Sher-e-Batil Kaman, and Charminar Kaman** mark the four entrances to the historic city surrounding Charminar.
  - **Significance:** The arches **marked the entrances to the city of Hyderabad.** The adjoining outhouses were used as a sitting place for the nobles and officials.

### Global Passport Index

**News:** India slipped one place to 125th in the fifth Global Passport Index, while its composite score reached a five-year high.

#### About Global Passport Index



Source – Bharat24

- **Global Passport Index** ranks passports based on international travel, investment opportunities and quality of living, unlike the **Henley Passport Index**, which mainly measures visa-free travel access.
- **Released by:** It is published by **Global Citizen Solutions (GCS)**.
- **Coverage:** It ranks **197 countries**.
- **Data Source:** It draws on quantitative data from various international institutions and multilateral organisations, such as the **World Bank, the World Economic Forum and the Sustainable Development Report**.
- **Criteria:** The Global Passport Index evaluates passports on the basis of three criteria.
  - **Enhanced Mobility:** It carries **50% weight** in the overall ranking.
  - **Investment:** It contributes **25% of the overall score**.
  - **Quality of Living:** It contributes **25% of the overall score** and is assessed through **14 indicators**.
- **Key Highlights:**
  - **Global**
    - **European Dominance:** **Nine European countries** are among the **top 10**.
    - **Top Asian Passport:** **Singapore is the only Asian passport in the top 20**.
  - **India:**
    - **Overall Ranking:** India ranked **125th among 197 countries**, one place lower than last year, and
      - India is placed **between Namibia (124th) and Azerbaijan (126th)**.
    - **Travel Access:** The Indian passport provides **visa-free access to 26 countries**, while visas are still required for around 88 destinations.
    - **Quality of Living and Investment:** India ranked **118th in the Quality of Living Index** after **improving 11 places** and ranked **94th in the Investment Index** after **improving three places**.
    - **Position in Asia:** Among Asian countries, **India stands at the 29th position**.

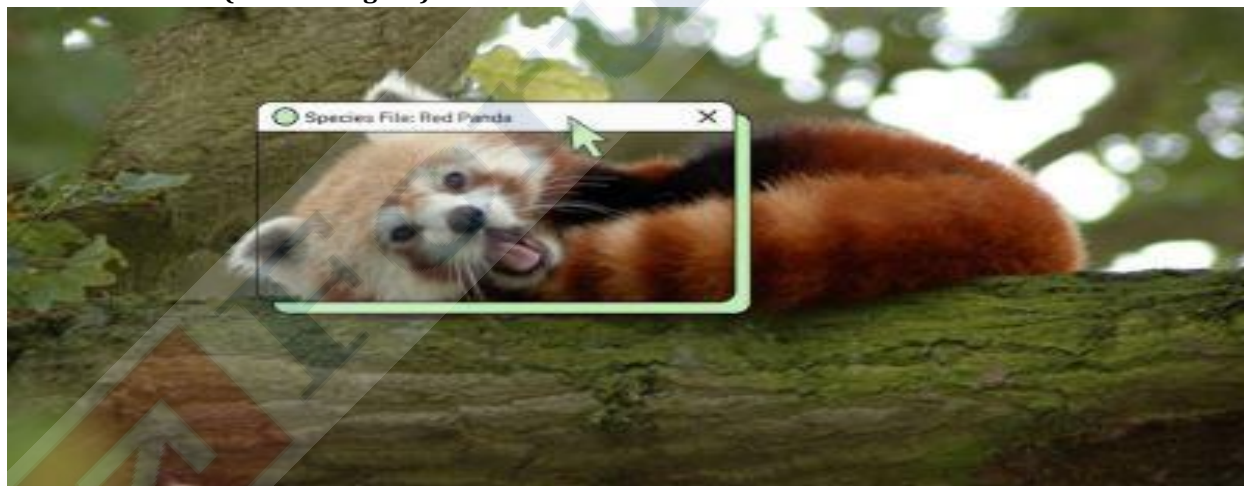
#### About Henley Passport Index

- **Published By:** It is compiled annually by **Henley & Partners**, a global citizenship and residence advisory firm.
- **Primary Data Source:** It relies on exclusive data from the **International Air Transport Association (IATA)**.
- **Coverage:** It covers **199 passports against 227 travel destinations**.
- **Scoring Criteria:** A passport receives one point if its holders can **enter a destination visa-free, with a visa-on-arrival, or through an electronic travel authority (eTA)** without prior embassy clearance.
- **India's Rank in 2026:** India ranked **80th globally**, providing visa-free or visa-on-arrival access to 55 destinations.

### Red Panda (*Ailurus fulgens*)

**News:** Reports highlighted the red panda's conservation challenges, habitat fragmentation, illegal threats, and the need for cross-border conservation efforts.

#### About Red Panda (*Ailurus fulgens*)



Source – Mongabay

- The red Panda (*Ailurus fulgens*) is a small, shy, solitary and arboreal carnivorous mammal that mainly feeds on bamboo and is also known as the lesser panda.
- **Species:** There are two species of red pandas – the Himalayan red panda (*Aurilius fulgens fulgens*) and the Chinese red panda (*Aurilius fulgens styani*).
- **State Animal:** The red panda is the State Animal of Sikkim.

- **Habitat:** The red panda inhabits **mountainous mixed deciduous and conifer forests** with old trees and **dense bamboo undergrowth**.
- **Distribution:**
  - **Global Range:** The red panda is found in the mountainous forests of **Bhutan, China, Nepal, northern Myanmar, and India**, with **Himalayan and Chinese** species distributed across these regions.
  - **Indian Range:** In **India**, it is found in **Sikkim, Arunachal Pradesh**, and the Darjeeling and Kalimpong districts of **West Bengal**.
- **Key Features:**
  - **Diet:** It mainly feeds on **bamboo shoots but also eats eggs, insects, small birds, fruits, and small lizards**.
  - **Behaviour:** It is **nocturnal, shy, solitary**, and usually remains within a home range of two to three kilometres.
  - **Appearance:** It has a **ruddy coat, a ringed bushy tail**, and is about the **size of a house cat**.
  - **Ecological Importance:** It is considered an **indicator species** because changes in its **population provide an early warning of environmental changes** and help **assess the health of its forest ecosystem**.
- **Threat**
  - **Habitat loss**
  - **Habitat fragmentation**
  - **Illegal trapping**
  - **Poaching, snaring, and the loss of nesting trees and bamboo**
- **Conservation Status**
  - **IUCN Red List: Endangered.**
  - **CITES: Appendix I**
  - **Wildlife Protection Act, 1972: Schedule I**

### World LNG Report 2026

**News:** India became the fourth largest regasification market in 2025 after surpassing Spain, according to the International Gas Union's World LNG Report 2026.

## About World LNG Report 2026



Figure 3. Source – IGU

- **World LNG Report** is an annual report published by the International Gas Union (IGU) that presents global trends, trade, investment, capacity and future outlook of the liquefied natural gas (LNG) sector.
- **Key Findings of 2026 Report**
  - **India:**
  - **Global Ranking:** India added 52.5 mtpa of regasification capacity across eight terminals and became the fourth largest regasification market in 2025.
  - **Terminal Development:** India commissioned the Chhara LNG terminal and expanded the Dabhol LNG terminal, increasing its capacity from 2.9 mtpa to 5 mtpa with year-round operations.
  - **Infrastructure Expansion:** India has four LNG projects under construction, which are expected to add 11.3 mtpa of regasification capacity by 2028.
  - **Demand Outlook:** The International Energy Agency projected that India's natural gas consumption will increase by nearly 60% by 2030 due to city gas distribution, industrial demand and power generation.
  - **Capacity Utilisation:** India's LNG regasification utilisation declined from 58% in 2024 to about 47% in 2025 because of weaker summer LNG imports and increased infrastructure.
- **Global Finding:**
  - **Record LNG Trade:** Global LNG trade reached a record 437 million tonnes in 2025, increasing by 6.3%, which was the strongest growth since 2022.

- **Top Exporters:** The **United States** remained the **world's largest LNG exporter with 110.7 million tonnes**, followed by **Qatar** (81.5 million tonnes) and **Australia** (80.3 million tonnes).
- **Top Importer:** **China** remained the **world's largest LNG importer** with 69.8 million tonnes.

#### About International Gas Union (IGU)

- **Establishment:** The International Gas Union (IGU) was **founded in 1931** and is a **non-profit organisation registered in Vevey, Switzerland**, with its **Secretariat located in London, UK**.
- **Role:** The organisation represents over **90% of the global gas market** and works across the **complete gas value chain**, from production to end use.
- **Functions:** IGU **promotes international gas trade, supports technology development**.
  - It **organizes global events** such as the **World Gas Conference, International Gas Research Conference, and World LNG conference series**.
- **Reports published:**
  - 2026 World LNG Report
  - 2026 Wholesale Gas Price Survey
  - Underground Gas Storage
  - Global Gas Report 2025

#### Guwahati Declaration

**News:** The BRICS nations adopted the Guwahati Declaration at the BRICS Heads of Anti-Drug Agencies Meeting held in Guwahati under India's 2026 BRICS chairmanship.

#### About Guwahati Declaration



Source – ANI

- The **Guwahati Declaration** was adopted to **strengthen cooperation against illicit drug trafficking and related transnational organized crime**.
- **Adopted by:** The declaration was **adopted by the BRICS nations**, under **India's 2026 BRICS chairmanship**.
- **Theme:** The meeting was held under the theme **"Building for Resilience, Innovation, Cooperation and Sustainability."**
- **Aim:** The declaration **aims to strengthen cooperation to prevent and combat illicit drug trafficking and related transnational organized crime**.
- **Key Pillars:**
  - **Information Sharing:** The declaration calls for **timely exchange of information, intelligence and best practices** in line with national laws and international obligations.
  - **Technology and Innovation:** The declaration highlights the **use of innovative technologies, digital tools and data-driven approaches** to strengthen law enforcement and regulatory measures against illicit drug trafficking.
  - **Demand Reduction:** The declaration stresses the **need to reduce drug demand, promote healthy lifestyles and protect vulnerable groups, especially children and young people**, through evidence-based and people-centred strategies.
  - **Coordinated International Action:** The declaration reaffirms the **commitment of BRICS nations to strengthen cooperation** to prevent and combat illicit drug trafficking and related transnational organised crime.

#### About BRICS

- BRICS is an **intergovernmental organization of major emerging economies** that aims to **promote greater economic and geopolitical integration and coordination among member states**.
- **Formation and Expansion:** BRICS began as BRIC countries comprising **Brazil, Russia, India and China**, **South Africa joined in 2010**, **five countries joined in 2024**, and **Indonesia became a member in 2025**.
- **Membership:** BRICS currently consists of **Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Iran, Saudi Arabia, the United Arab Emirates and Indonesia**.

- **Global Importance:** The grouping brings together **11 emerging economies** that account for around **49.5% of the world's population**, about **40% of global GDP**, and nearly **26% of global trade**.

### Tulsi Lake and Vihar Lake

**News:** Tulsi Lake and Vihar Lake have begun overflowing after heavy rain in Mumbai.

#### About Tulsi Lake and Vihar Lake



Source: HT

- **Location:** Tulsi Lake and Vihar Lake are located in **Mumbai, Maharashtra**.
  - They are **Mumbai's smallest potable water-supplying lakes**.
- **About Tulsi Lake:**
  - It is Mumbai's **smallest man-made reservoir**.
  - It is **located within the Sanjay Gandhi National Park**.

- Its water was **formally channeled into the city** by the **then-Governor, Sir Richard Temple Bart**, on **March 15, 1879**.
- It is **one of the seven lakes supplying drinking water to Mumbai**.
- **Catchment area:** It has a catchment area of about **6.76 sq. km** and a water spread area of around **1.35 sq. km** when full.
- **Storage capacity:** It has a live storage capacity of **8,046 million litres** and supplies an average of **18 million litres** of water every day.
- **About Vihar Lake:**
  - It is **the second-smallest lake reservoir**.
  - It is the **oldest man-made reservoir** in the city which **was commissioned in 1860**.
  - **Storage capacity:** It has a storage capacity of **27,698 million litres**, supplying 90 million litres of water to the city every day.
- Water overflowing from **Tulsi Lake naturally flows into Vihar Lake**, helping maintain the interconnected water management system that serves the city.
- The overflow from **both Tulsi and Vihar lakes drains directly into the [Mithi River](#)**, which cuts through the centre of Mumbai before emptying into the Arabian Sea.

### Partnership on Cyber, Critical Technologies and Supply Chains (PACTS)

**News:** India and Australia recently launched the Australia-India Partnership on Cyber, Critical Technologies and Supply Chains (PACTS).

#### About Partnership on Cyber, Critical Technologies and Supply Chains (PACTS)



Figure 4. Source – IANS

- The **Partnership for Cyber, Critical Technologies, Supply Chains (PACTS)** is a framework between **Australia and India** aimed at **strengthening cooperation in cyber security, critical technologies, resilient supply chains and defence research**.

- It replaces the **2020 Framework Arrangement on Cyber and Cyber Enabled Critical Technology Cooperation**.
- **Focus:** It seeks to **deepen collaboration in areas** considered critical to national security, economic growth and regional stability.
- **Bilateral Oversight:** The partnership will be jointly **overseen by India's Deputy National Security Advisor and Australia's Deputy Secretary of the International and Security Group in the Department of the Prime Minister and Cabinet**.
  - An **annual Senior Officials' Meeting** will **review progress**, identify emerging cyber and technology risks, and determine new collaborative projects under each pillar.
- **Pillars of partnership:** The partnership is structured around **five pillars of cooperation**:

| pillars of Partnership                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Supply Chain Resilience and Diversification</b> | <ul style="list-style-type: none"><li>● Under this, India and Australia will work to <b>develop secure and trusted technology supply chains</b>.</li><li>● They will <b>establish a bilateral mechanism for trusted vendor frameworks, strengthen cooperation on undersea cable security</b> through the Quad Partnership for Cable Connectivity and Resilience.</li><li>● <b>They will also collaborate on semiconductor supply chain research</b>, and promote secure critical minerals supply chains through coordinated investment and regulatory cooperation.</li></ul> |
| <b>Critical Technologies</b>                       | <ul style="list-style-type: none"><li>● The second pillar focuses on Critical Technologies with both countries <b>committing to deepen collaboration in artificial intelligence, space technologies, telecommunications, biotechnology and advanced materials</b>.</li><li>● The two sides will <b>support joint research, innovation and investment initiatives while working together on international standards for trustworthy and secure AI</b>.</li></ul>                                                                                                              |

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | <ul style="list-style-type: none"> <li>● They will also <b>explore new opportunities for collaboration in the rapidly expanding space sector.</b></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Cybersecurity</b>                  | <ul style="list-style-type: none"> <li>● Under the Cybersecurity pillar, India and Australia will enhance cooperation <b>to combat cybercrime, strengthen cyber resilience and protect critical infrastructure.</b></li> <li>● It includes plans <b>to establish a streamlined bilateral cyber cooperation mechanism</b>, expand dialogue on cybersecurity and data governance, facilitate joint workshops between government agencies and industry stakeholders, and establish a cyber technology skill incubator to promote workforce development.</li> </ul>                                      |
| <b>Digital Resilience</b>             | <ul style="list-style-type: none"> <li>● It aims <b>to expand cooperation in digital public infrastructure (DPI) across the Indo-Pacific.</b></li> <li>● The two countries will work together <b>to promote scalable and trusted digital solutions in sectors</b> such as renewable energy, healthcare, education, connectivity, skills development and social protection.</li> <li>● The initiative also <b>seeks to support partner countries in adopting India's Digital Public Infrastructure model</b> through capacity-building programmes and pilot projects.</li> </ul>                      |
| <b>Defence Research Collaboration</b> | <ul style="list-style-type: none"> <li>● Under this, India and Australia will <b>deepen defence science and technology cooperation</b> through joint research, institutional partnerships and innovation.</li> <li>● The two countries <b>will strengthen ties between Australia's Defence Science and Technology Group and India's Defence Research and Development Organisation (DRDO).</b></li> <li>● They will also <b>promote collaboration between defence start-ups, and undertake joint research</b> in maritime surveillance, advanced materials and other defence technologies.</li> </ul> |

## Chandraloi River and Mugger Crocodile

**News:** The NGT is examining crocodile deaths and the presence of banned Aldrin pesticide in Rajasthan's Chandraloi River, while accountability remains unclear.

### About Chandraloi River



Figure 5. Source – Wikipedia

- The **Chandraloi River** is a **small perennial river** flowing through **Kota district of Rajasthan**.
- **Origin:** The river originates **from a stream near Alania village in Kota district**.
- **Course:** The river **flows for about 15 kilometres through urban and rural areas**, carries urban runoff and industrial waste, and **finally merges with the Chambal River**.

- **Ecological Significance:** The river **supports a significant population of Mugger crocodiles (Crocodylus palustris)**, serves as **their breeding ground**, and also **supports diverse fish species**.

### About Mugger Crocodile

- The mugger crocodile is a **medium-sized crocodile** and a **member of the genus Crocodylus**.
- **Distribution:** It occurs across the Indian subcontinent and surrounding countries, including **Sri Lanka, Iran, Pakistan, and Nepal**.
- **Habitat:** It lives in **freshwater habitats including rivers, lakes, and marshes**.
- **Key Features :**
  - **Appearance:** It has the **broadest snout** among living crocodiles.
  - It also has a **powerful tail, webbed feet, and acute visual, hearing, and smelling senses**.
  - **Breeding:** It is a **hole-nesting species**, and **egg-laying takes place during the annual dry season**.
  - **Diet:** It mainly **eats fish, frogs, crustaceans, and insects**.
- **Threat :** It faces **habitat destruction and illegal hunting for its skin** and the alternative medicine market.
- **Status:** It is listed as **Vulnerable by the IUCN**, included in **CITES Appendix I**, and **protected under Schedule I of the Wildlife Protection Act, 1972**, which provides the highest level of legal protection.

## Aldrin Pesticide

**News:** The NGT is examining mugger crocodile deaths in Kota's Chandralok River after banned Aldrin was detected and accountability remained unresolved.

### About Aldrin Pesticide



Figure 6. Source – India Mart

- Aldrin is a **highly toxic, synthetic organochlorine insecticide** that belongs to the **cyclodiene group of chemicals**.

- **Key Features**

- **Toxicity:** Aldrin can kill birds, fish, humans, and many insect pests including termites, grasshoppers, and corn rootworm.

- **Exposure:** Humans are mostly **exposed through dairy products and animal meats**.

- Studies in India indicate an average daily intake of 19 micrograms of aldrin and dieldrin per person.

- **Persistence:** It is **extremely toxic**, difficult to metabolize, and non-biodegradable, allowing it to persist in the environment and

**contribute to bioaccumulation and biomagnification.**

- **Legal Status:**

- **The Stockholm Convention (2001)** lists Aldrin under **Annex A (Elimination)** as one of the original “**Dirty Dozen**” **hazardous chemicals**.

- **In India**, its **manufacture, import, and use are completely banned**, and Persistent Organic Pollutants are **regulated under the Regulation of Persistent Organic Pollutants Rules, 2018**, notified under the **Environment (Protection) Act, 1986**.

## Key Highlights of PM's Visit to Australia (2026)

**News:** Prime Minister Narendra Modi visited Australia from 8–10 July 2026 for the Third Australia–India Annual Summit in Melbourne.

### About Key Highlights of PM's Visit to Australia (2026)



Figure 7. Source – DD News

● **Prime Minister Narendra Modi visited Australia** from 8–10 July 2026 at the invitation of Prime Minister Anthony Albanese **for the Third Australia-India Annual Summit in Melbourne.**

● **Key Outcomes of PM's Visit to Australia**

○ **Defence Cooperation:**

○ **Strategic Framework:** India and Australia announced the **Joint Declaration on Defence and Security Cooperation**, making defence cooperation a stronger pillar of the partnership.

○ **Institutional Cooperation:** Both countries established an **Annual Defence Ministers' Dialogue** and expanded **defence exercises under the Mutual Logistics Support Arrangement.**

○ **Defence Industry and Innovation:** The leaders promoted **defence industry collaboration**, proposed an **MoU on Defence Articles and Defence**

**Services**, and agreed to explore a bilateral innovation framework connecting governments, industry, academia and research institutions.

○ **Military Capacity Building:** Both countries strengthened professional **military education**, **joint research**, **young officers' exchanges** and planned the **placement of an Indian military instructor at the Australian Defence College.**

○ **Maritime Security Cooperation:**

○ **Maritime Roadmap:** Both countries adopted the **India-Australia Maritime Security Collaboration Roadmap** for a peaceful and secure Indo-Pacific.

○ **Operational Cooperation:** They agreed to **cooperate in information sharing**, **capability development**, **capacity building** and operational coordination.

○ **Coast Guard Cooperation:** They welcomed the **MoU between the Maritime Border Command and the Indian Coast Guard.**

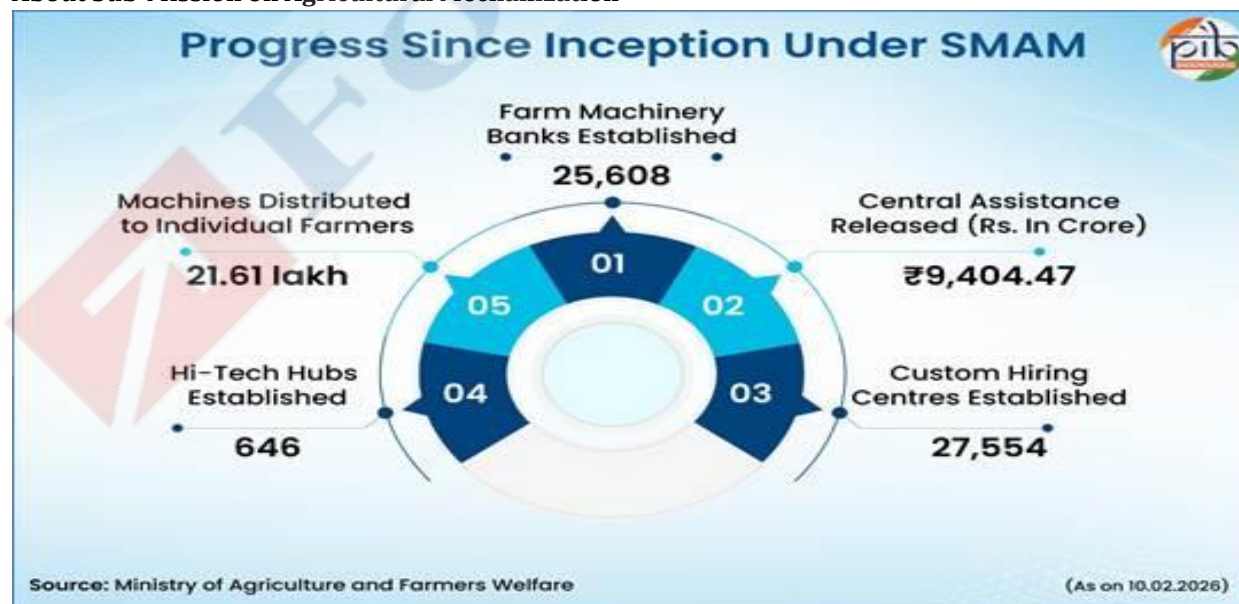
- **Economic and Trade Cooperation:**
  - **Trade and Market Access:** The leaders welcomed growing trade under **Economic Cooperation and Trade Agreement (ECTA)** and reaffirmed their commitment to conclude a balanced **Comprehensive Economic Cooperation Agreement (CECA)**.
  - **Industrial Cooperation:** They highlighted **complementarities between Make in India and Future Made in Australia**.
- **Critical Minerals and Supply Chains:**
  - **Critical Minerals:** Both countries promoted investment, research, processing and long-term supply arrangements for critical minerals.
  - **Supply Chain Resilience:** They committed to developing secure and resilient supply chains, particularly for energy and critical minerals.
- **Climate and Technology Cooperation:**
  - **Climate Cooperation:** They reaffirmed cooperation under the Paris Agreement and recognised progress under the India–Australia Renewable Energy Partnership.
  - **Technology Partnership:** They launched PACTS covering cyber security, critical technologies, supply chains and digital resilience.
  - **Innovation Partnership:** They welcomed the **Australia–Canada–India Technology and Innovation (ACITI)** Partnership MoU.
- **Space and Nuclear Cooperation:**
  - **Space Collaboration:** Australia reaffirmed **support for India's Gaganyaan Mission** and stronger cooperation between ISRO and the Australian Space Agency.
  - **Nuclear Cooperation:** Both countries finalised the **Administrative Arrangement for long-term Australian uranium exports to India** for peaceful purposes under IAEA safeguards.
- **Education, Skills and Cultural Cooperation:**
  - **Higher Education:** Both countries **expanded Australian university campuses in India**.
  - **Skill Development:** They supported a **National Centre of Excellence for Skilling in Mining in Odisha**.

- **Sports Cooperation:** They adopted the **India–Australia Sports Collaboration Roadmap**.
- **People-to-People and Culture:** They increased **Maitri grants**, strengthened **parliamentary exchanges** and advanced the repatriation of cultural artefacts and ancestral remains.
- **Regional and Global Cooperation:**
  - **Regional Institutions:** They strengthened **cooperation through the Quad, IORA, IPOI, ASEAN and the Australia–India–Indonesia trilateral mechanism**.
  - **Counter-Terrorism:** They expanded cooperation on **information sharing, counter-radicalisation and combating terrorism**.
  - **Multilateral Reforms:** Australia reiterated **support for India's permanent membership of a reformed UNSC**, and both countries reaffirmed support for each other's future non-permanent UNSC candidatures.

### Sub-Mission on Agricultural Mechanization

**News:** The Sub-Mission on Agricultural Mechanization (SMAM) has significantly advanced inclusive farm mechanization, enhanced agricultural productivity, and promoted the adoption of modern technologies across India.

#### About Sub-Mission on Agricultural Mechanization



Source: PIB

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- The **Sub-Mission on Agricultural Mechanization (SMAM)** was launched to promote farm mechanization in India.
- **Scheme type:** It is a **Centrally Sponsored Scheme** under the [Rashtriya Krishi Vikas Yojana \(RKVY\)](#).
- **Duration:** It was launched in **2014–15**.
- **Nodal Ministry:** The nodal ministry for the scheme is **Ministry of Agriculture & Farmers Welfare**.
- **Aim:** It aims to “**reach the unreached**” by extending the benefits of mechanization to underserved sections.
- **Beneficiary targeted:** It includes **small and marginal farmers, including women, Scheduled Castes (SC), Scheduled Tribes (ST), Farmer-Producer Organizations (FPOs), Self-Help Groups (SHGs), and rural entrepreneurs**.
- **Funding pattern:**
  - For most states, **the funding pattern is 60:40, while for North-Eastern and Himalayan states, it is 90:10.**
  - In the case of Union Territories, **assistance is provided as 100 percent Central funding.**
- **Focus:** It is designed to **promote inclusive and efficient farm mechanization** by improving access to modern agricultural equipment, reducing drudgery, and enhancing farm productivity.
  - **Promotion of Agricultural Mechanization:** Supports training, testing, demonstrations, and post-harvest mechanization to improve farm productivity, processing, storage, value addition, and crop residue management.
  - **Financial Assistance for Agricultural Machinery:** Provides subsidies through **DBT—40% for general farmers and 50% for SC/ST, small and marginal farmers, and beneficiaries in North-Eastern states.**
    - Small and marginal farmers also receive **₹2,000 per hectare** for mechanized services, including **drones, through CHCs, SHGs, and FPOs.**
  - **Farm Machinery Banks (FMBs) and Custom Hiring Centres (CHCs):** Supports SHGs, FPOs, and local institutions with **80–90% assistance** for FMBs (up to ₹30 lakh) and **40% assistance** for CHCs (up to ₹250 lakh) to improve access to farm machinery.
  - **Hi-Tech Equipment Hubs:** Establishes centres with advanced, high-capacity machinery for crop-specific operations and improved access to modern equipment.

- **Mechanization in the North Eastern Region:** Provides region-specific support, including **up to 100% subsidy** for small machinery and **95% assistance** for Farm Machinery Banks.
- **Features:**
  - The scheme promotes the establishment of **Custom Hiring Centres (CHCs)**. These are units comprising **a set of farm machinery, implements, and equipment meant for hiring by farmers.**
    - It also supports the **development of hubs for hi-tech and high-value agricultural equipment**, and the distribution of farm machinery.
  - It also undertakes **awareness generation through demonstrations and capacity-building initiatives.**
  - Its crucial focus is **on regions with low farm power availability and on addressing structural constraints** such as small landholdings and high capital costs through affordable rental services via CHCs.
  - It also supports **the performance testing and certification of agricultural machinery.**
  - **Targeted Information, Education, and Communication (IEC) activities** are undertaken to enhance adoption among stakeholders.
- **Scheme coverage:** The number of beneficiaries for individual farm machinery ownership **increased from 2.07 lakh in 2020–21 to 2.32 lakh in 2024–25.**
- **Impact:** Under SMAM, from 2014–15 to 2025–26, central assistance of ₹9,404.47 crore has supported the **distribution of 21.61 lakh machines to individual farmers.**
  - Additionally, it supported the establishment of **27,554 Custom Hiring Centers, 646 Hi-tech Hubs, and 25,608 Farm Machinery Banks.**

### Behali Wildlife Sanctuary

**News:** Serious allegations of illegal encroachment, extensive tree felling, and attacks on forest personnel, including incidents of gunfire, have emerged from Behali Wildlife Sanctuary.

#### About Behali Wildlife Sanctuary



Source: Mongabay

- **Location:** Behali Wildlife Sanctuary is located at the **foothills of the Eastern Himalaya**, in **Sonitpur district of Assam**.
- **Boundaries:**
  - It lies between the two famous protected areas, **the Nameri National Park on its west and [Kaziranga National Park](#) on its south.**
  - The northern boundary is shared by the **Papum Reserve Forest of Arunachal Pradesh** and the southern boundary has **many tea plantations and human habitation areas**.
- **Designated year:** It was **declared a reserve forest in 1917** and was notified a **Wild Life Sanctuary in 2022**.
- **Area:** The total area of the wildlife sanctuary is **157.25 sq. km**.
- **River associated:** The sanctuary is **bounded by the Singlajan River to the east**, which connects it to the Singlajan Reserve Forest, and **by the Borgang River to the west**.
  - **Note:** Both rivers are **tributary of Brahmaputra River**.
- **Vegetation:** It has **semi-evergreen and tropical wet forests**.
- **Flora:** Almost **308 native plant species** are found in the area. The dominant tree species include **Hodgson's magnolia, Ceylon ironwood and elephant apple**.
- **Fauna:**

- It is an important area for mammals like **Indian Elephant**, **Bengal tiger**, **Slow Loris**, **Capped Langur**, **Malayan Giant Squirrel**, **white-winged duck**, **hog deer**, and **Chinese pangolin**.
- It also provides habitat for critically endangered species, including the **black softshell turtle** and **red-necked vulture**.
- This area is also **recognised as an Important Bird Area in 1994** and a **Key Biodiversity Area in 2004**.

### Mojari Craft

**News:** The Centre has granted a Geographical Indication (GI) tag to Jodhpur's nearly 200-year-old Mojari craft, giving it official recognition and better global branding.

#### About Mojari Craft



Source – IE

- **Mojari is a traditional handcrafted leather footwear of Jodhpur** that has now received a **Geographical Indication (GI) tag**.
- **Origins:**
  - **Traditional Community:** The Mojari craft is closely associated with the **Jingar community**, which traditionally made saddles, leather sheaths, and other leather goods for armies.
  - **Shift to Shoemaking:** Around **250 years ago**, the community gradually shifted from **saddle making to shoemaking**, and Mojari gradually became their main occupation.

- **Historical Identity:** Once patronised by the royals, Mojari gradually evolved into a distinctive craft that gave Jodhpur a unique cultural identity.
- **Key Features:**
  - **Handcrafted Footwear:** The Jodhpuri Mojari is entirely handmade using leather from camel, goat, cow, and buffalo.
  - **Material Used:** Buffalo leather is used for the durable outer sole, while suede leather is used for the upper part.
    - The embroidery uses a special thread from Surat that combines the softness of silk with the strength of nylon.
  - **Traditional Craftsmanship:** Men carry out leather cutting, punching, and stitching.
    - women create intricate embroidery by drawing designs from memory before stitching.
  - **Distinctive Design:** Mojari is made in two halves with a densely embroidered upper part.
    - Traditionally, both shoes have identical designs and can be worn on either foot.
  - **Customisation:** Artisans also prepare customized Mojaris for fashion designers and the wedding market, including designs embroidered with gold or silver threads.
  - **Comfort:** Jodhpuri Mojari is known for its comfort in Rajasthan's hot climate because its design is suitable for local conditions.

### World Intangible Investment Report 2026

**News:** The World Intangible Investment Report 2026 highlighted that India recorded the fastest growth in intangible investment among the world's 15 largest economies.

#### About World Intangible Investment Report 2026



Source – WIPO

- **The World Intangible Investment Report** presents **annual and quarterly statistics on intangible investment** across 29 economies and **highlights global trends in knowledge-based investments**.
- **Published by:** The report is **published every year** by the **World Intellectual Property Organization (WIPO)** and **Luiss Business School (LBS)**.
- **2026 Edition:** The 2026 report is the **third edition** of the World Intangible Investment Highlights.
- **Tangible Investment:** Tangible investment means spending on physical assets such as factories, machinery and buildings.
- **Intangible Investment:** Intangible investment means spending on non-physical assets such as research and development, software, databases, organisational know-how, brands, design and intellectual property.
- **Key Findings:**
  - **Global:**
    - **Growth Trend:** Intangible investment has **grown more than three times faster than tangible investment since 2008** and exceeded USD 10 trillion in 2025.
    - **Global Leaders:** The **United States, Japan and Germany** lead in the absolute size of intangible investment, while Sweden, the United States and France lead in investment intensity.
    - **Asset Pattern:** Globally, **organisational capital and research and development** remain the **leading categories** of intangible investment.
  - **India's Performance:**
    - **Fastest Growth:** India **recorded the fastest growth in intangible investment among the world's 15 largest economies**, reaching USD 78.2 billion in 2023 with 7.9% growth.
    - **Major Components:** **Software and databases accounted for 45% of India's intangible investment**, followed by organisational capital, research and development, design and brands.
    - **Brand Growth:** India emerged among the **fastest-growing economies in brand investment**, recording a compound annual growth rate of 7.2% during 2013–23.

### About World Intellectual Property Organization (WIPO)

- **World Intellectual Property Organization (WIPO)** is a specialized agency of the United Nations that promotes and protects intellectual property across the world.
- **Origin:** The origins of WIPO go back to the **Paris Convention for the Protection of Industrial Property (1883)** and the **Berne Convention for the Protection of Literary and Artistic Works (1886)**.
  - These conventions provided for the establishment of an International Bureau.
- **Formation:** The two **International Bureaus** were **united in 1893** and were later replaced by the **World Intellectual Property Organization (WIPO)** in 1970 under the WIPO Convention.
- **Headquarters:** WIPO is **headquartered in Geneva, Switzerland**.
- **Membership:** WIPO has **193 member states**, and India became a member in 1975.
- **Functions:** WIPO **develops international intellectual property rules**, provides **global intellectual property services**, **resolves cross-border disputes**, and supports **international intellectual property cooperation**.

### About Global Liveability Index 2026

**News:** The Global Liveability Index 2026 was recently released, ranking cities worldwide on different urban liveability and quality of life indicators.

### About Global Liveability Index 2026

#### Top ten positions: EIU's Global Liveability Index 2026

Index score out of 100 (100=high), ranking out of 173 cities (7=high)

| City       | Country                                                                                         | Rank | Overall | Stability | Healthcare | Culture & environment | Education | Infrastructure |
|------------|-------------------------------------------------------------------------------------------------|------|---------|-----------|------------|-----------------------|-----------|----------------|
| Copenhagen |  Denmark     | 1    | 98      | 100       | 99         | 99                    | 100       | 100            |
| Vienna     |  Austria     | 2    | 97      | 99        | 100        | 94                    | 100       | 100            |
| Melbourne  |  Australia   | 3    | 97      | 99        | 100        | 96                    | 100       | 96             |
| Sydney     |  Australia   | 4    | 97      | 99        | 100        | 94                    | 100       | 96             |
| Zurich     |  Switzerland | 5    | 96      | 99        | 100        | 94                    | 100       | 96             |
| Geneva     |  Switzerland | 6    | 96      | 99        | 100        | 92                    | 100       | 96             |
| Osaka      |  Japan       | 7    | 96      | 100       | 100        | 87                    | 100       | 96             |
| Adelaide   |  Australia   | 8    | 96      | 99        | 100        | 91                    | 100       | 96             |
| Vancouver  |  Canada      | 9    | 96      | 99        | 96         | 97                    | 100       | 93             |
| Tokyo      |  Japan       | 10   | 96      | 100       | 100        | 88                    | 100       | 93             |

Source: EIU

Source – EIU

- The **Global Liveability Index** evaluates **living conditions across cities** and serves as a **global benchmark for urban liveability, resilience, and quality of life**.
- **Published by:** It is published by **Economist Intelligence Unit (EIU)**.
- **Coverage:** The index assessed **173 cities** using more than **30 qualitative and quantitative indicators**.
- **Score:** The index uses a **1–100 scale**.
- **Parameters:** The index measured –
  - Stability (25%)
  - Healthcare (20%)
  - Culture & Environment (25%)
  - Education (10%)
  - Infrastructure (20%)
- **Key Findings**
  - **Global Trend:**
    - **Top Three Cities:** **Copenhagen** remained the **world's most liveable city**, followed by **Vienna and Melbourne**.
    - **Bottom Cities:** **Damascus** remained the **least liveable city**, while **Tripoli and Dhaka** were also among the lowest-ranked cities.
    - **Global Trend:** The average **global score remained 76.1**, as healthcare and education gains were offset by declining stability from geopolitical tensions, conflicts, and civil unrest.
  - **India Performance:**
    - **Ranking:** **New Delhi** ranked **120th**, followed by **Mumbai (121st)**, **Chennai (123rd)**, and **Bengaluru (127th)**.
    - **Top 100:** All four Indian cities remained outside the global top 100.
    - **Performance:** **New Delhi and Mumbai** showed **no change from the previous year**.

**Economist Intelligence Unit (EIU)**

- **Economist Intelligence Unit (EIU):** It is the **research and analysis division** of the **British media company The Economist Group**, which provides global business intelligence, forecasting, research, and advisory services.
- **Coverage:** The EIU's Country Analysis service covers **198 geographies**, using a **network of more than 750 specialists** to examine **political, policy, and economic trends with in-depth analysis**.
- **Major Reports:** The EIU publishes flagship reports such as the **Global Liveability Index** and the **Democracy Index**.

### Key Highlights of PM's Visit to New Zealand

**News:** India and New Zealand announced the India–New Zealand Strategic Partnership and adopted the Roadmap to 2030 during the Prime Minister's visit.

#### About Key Highlights of PM's Visit to New Zealand (2026)



Source – Sarkaritel

- **Strategic Partnership:** On 11 July 2026, the Prime Ministers of India and New Zealand met in Auckland and **announced the India–New Zealand Strategic Partnership**.
- **Key Outcomes of PM's Visit to New Zealand:**
  - **Political and Diplomatic Engagement:**
    - **High-Level Political Dialogue:** India and New Zealand agreed to hold **regular meetings between their Prime Ministers, Cabinet Ministers, and Foreign Ministers**.

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- **Institutional Coordination:** Both countries decided to strengthen **interactions between ministries and government departments.**
  - They also agreed to continue annual senior-level meetings to guide the implementation of the Strategic Partnership and the Roadmap to 2030.
- **Defence and Security Cooperation:**
  - **Defence Cooperation:** Both countries agreed to **continue military exercises, unit visits, personnel exchanges, defence staff college exchanges, and high-level defence dialogue.**
    - They also agreed to **implement the 2025 Memorandum of Understanding on Defence Cooperation.**
  - **Maritime Security:** Both sides agreed to **implement the Maritime Cooperation Arrangement, Hydrography and Nautical Cartography Arrangement, and Mutual Logistics Support Arrangement.**
    - They also agreed to conduct **bilateral naval exercises, cooperate under the Indo-Pacific Oceans Initiative**, and establish an **annual Maritime Security Dialogue.**
  - **Counter-Terrorism and Cyber Security:** Both sides agreed to operationalize the **Joint Working Group on Counter-Terrorism, continue the Cyber Dialogue**, strengthen law enforcement cooperation, and improve infrastructure resilience.
- **Trade and Economic Cooperation:**
  - **Trade and Market Access:** Both countries **set a target to double bilateral trade to NZ\$7 billion (₹35,000 crore) by 2030.**
    - They also agreed to work towards the **early implementation of the India-New Zealand Free Trade Agreement.**
  - **Trade Facilitation:** Both sides agreed to **operationalize the 2025 Authorised Economic Operators Mutual Recognition Arrangement under the 2024 Customs Cooperation Arrangement** to simplify customs procedures and facilitate trusted trade.

- **Primary Industries:** India and New Zealand agreed to **implement cooperation in horticulture, forestry, animal husbandry, and dairying** through research, technical cooperation, and policy dialogue.
- **Tourism Connectivity:** Both countries agreed to **promote two-way tourism and encourage direct non-stop flights** under the **updated Air Services Agreement**.
- **People, Culture and Sport:**
  - **People-to-People Links:** Both countries agreed to **strengthen diaspora engagement and encourage cooperation between local governments**.
  - **Sports and Traditional Knowledge:** Both sides agreed to **continue sports cooperation**, implement the **Joint Action Plan on Sport**, and support **expert-level exchanges on traditional medicine**.
  - **Maritime and Cultural Cooperation:** India and New Zealand agreed to strengthen cooperation on **seafarer competency recognition, maritime heritage, and cultural exchanges**.
- **Education, Research, Science and Technology, and Disaster Management:**
  - **Education Partnerships:** Both countries agreed to **implement the 2025 Education Cooperation Arrangement** and expand partnerships between educational institutions.
  - **Research and Innovation:** Both sides agreed to **build partnerships in agriculture, climate, digital transformation, research, science, technology, and emerging technologies**.
  - **Climate and Disaster Management:** India and New Zealand agreed to strengthen cooperation through the **International Solar Alliance, the Global Biofuels Alliance**, and cooperation between their disaster management agencies.
- **Regional and Multilateral Cooperation:**
  - **Indo-Pacific Cooperation:** Both countries agreed to **coordinate in ASEAN-led and other regional forums**, strengthen cooperation under the **Indo-Pacific Oceans Initiative**, and **support peaceful dispute resolution** in accordance with international law, particularly UNCLOS.

- **United Nations Cooperation:** Both sides agreed to **strengthen cooperation at the United Nations, support UN reforms including India's candidature** for permanent membership of a reformed Security Council, and exchange support for multilateral candidatures where possible.

### Wild Water Buffalo

**News:** The Governing Body of National CAMPA approved four major wildlife and forestry conservation projects focusing on River Dolphins, Snow Leopards, Indian Rhinoceros, and Wild Water Buffalo to boost species population monitoring and habitat protection across India.

#### About Wild Water Buffalo



Figure 8. Source: iNaturalist

- **About:** It is a **large bovine** native to the **Indian subcontinent and Southeast Asia**.
  - It is also called **Asian buffalo, Asiatic buffalo and wild buffalo**.
- **Scientific name:** Its scientific name is **Bubalus arnee**.
- **Habitat:** It inhabits **wet grasslands, swamps, flood plains and densely vegetated** river valleys.
- **Distribution:** The wild water buffalo occurs in **India, Nepal, Bhutan, Thailand, and Cambodia, with an unconfirmed population in Myanmar**.
  - It has been extirpated in **Bangladesh, Laos, Vietnam and Sri Lanka**.
  - In India, it is largely restricted to in and around **Kaziranga, Manas and Dibru-Saikhowa National Parks, Laokhowa Wildlife Sanctuary and Bura Chapori Wildlife Sanctuary** and in a few scattered pockets in **Assam**, and in and around **D'Ering Memorial Wildlife Sanctuary in Arunachal Pradesh**.
  - A small population survives in **Balphakram National Park in Meghalaya, and in Chhattisgarh in [Indravati National Park](#) and [Udanti Wildlife Sanctuary](#)**.
- **Characteristics:**
  - It has an **ash-gray to black skin**.

- The **moderately long, coarse and sparse hair** is directed forward from **the haunches to the long and narrow head**.
- There is a **tuft on the forehead**, and the **ears are comparatively small**.
- **Size:** Its head-to-body-length is **240 to 300 cm (94 to 118 in)**.
- **Both sexes carry horns** that are heavy at the base and **widely spreading up to 2 m (6 ft 7 in) along the outer edges**, exceeding in size the horns of any other living bovid.
- The tip of the **tail is bushy and the hooves are large and splayed**.
- **Weight:** It weighs from **600 to 1,200 kg**.
  - It is among the **heaviest living wild bovid species**, and is slightly smaller than gaur.
- **Diet:** It prefers **grazing on grasses and sedges**, but also **eats herbs, fruits, bark, and foliage**. Additionally, **it feeds on crops like rice, sugarcane, and jute**, often causing significant damage.
- **Behaviour:** It is both **diurnal and nocturnal**.
- **Threat:** The wild water buffalo's decline is driven by:
  - **Habitat loss**
  - **Colonial-era sport hunting, and**
  - **Livestock pressures** like disease, competition, and interbreeding
- **Conservation status:**
  - **IUCN: Endangered**
  - **CITES: Appendix III**

### Phu Quoc Island

**News:** At least 15 Indian tourists were killed and 17 others were injured after a speedboat capsized near Vietnam's Phu Quoc Island.

#### About Phu Quoc Island



Figure 9. Source – Strait Times

- **Phu Quoc Island** is **Vietnam's largest island**, located in the **Gulf of Thailand** and known for its **white-sand beaches** and **nature-based tourism**.

- It is also known as **Pearl Island**,

- **Strategic Islands**: The island lies **closer to Cambodia than mainland Vietnam**, making it one of **Vietnam's most geographically strategic**

**islands.**

- **Shape**: The island has a **teardrop shape** and is also described as **roughly triangular**.
- **Size**: The main **island covers 567 sq. km.**, extends about **49 km** in length, and **forms part of an archipelago of 22 islands**.
- **Topography**:
  - A mountainous **ridge called "99 Peaks"** runs across the island.
  - The island is known for its **white-sand beaches**.
- **Highest Point**: The **Mount Chua** is the island's highest point (**630 m**).
- **Biodiversity**: A large part of the **island is protected under Phu Quoc National Park**, which is recognized as a **UNESCO Biosphere Reserve**.

### International Physics Olympiad 2026

**News:** India's young physicists have brought immense pride to the nation by delivering an extraordinary performance at the 56th International Physics Olympiad (IPhO) 2026.

#### About International Physics Olympiad 2026



Source: PIB

- It is an **annual competition** that brings together **some of the brightest high school students from around the world**.
- **Selection process:** Participants are **tested through theoretical and experimental examinations** that assess their understanding of physics, analytical thinking, and problem-solving skills.
- **About the International Physics Olympiad 2026:**
  - This is the **56th International Physics Olympiad (IPhO) 2026**.
  - **Held at:** It was held in **Bucaramanga, Colombia**.
  - **Participants:** It saw participation from **381 students representing 87 countries**.
- **India's participation and winners:**
  - This was **India's 27th participation** in the International Physics Olympiad.
  - **Coordinating agency from India:** The Indian team was selected and trained under the **National Olympiad Programme** conducted by **Homi Bhabha Centre for Science Education (HBCSE)**, a National Centre of the Tata Institute of Fundamental Research (TIFR) under the Department of Atomic Energy (DAE).
  - The **centre selects talented pre-university students** through **several stages and provides them with intensive training before international competitions**.
  - **Nodal Department from India:** The **Department of Atomic Energy (DAE)** is the nodal department.
  - **Winners:** **5 Indian students** have won **gold medals** at the International Physics Olympiad 2026. The Indian gold medal winners are:

- **Kansisk Jain from Pune,**
- **Riddhesh Anant Bendale from Indore,**
- **Rishit Garg from Delhi,**
- **Shresth Suraiya from Mumbai, and**
- **Svait Joshi from Ahmedabad.**
- With this, **India secured first place, jointly with Russia, China, Kazakhstan, South Korea, and Taiwan, in one of the world's leading competitions for school students.**

#### About National Olympiad programme



- National Olympiad programme **identifies, trains and prepares some of India's brightest young minds** to compete at international science Olympiads.
- **Nodal centre:** The **Homi Bhabha Centre for Science Education** is the **nodal centre of the country** for this programme.
- **Nodal Department:** The **Department of Atomic Energy (DAE)** is the **nodal department**.
- The **National Olympiad in basic sciences and mathematics** aims at promoting excellence in science

and mathematics among pre-university students.

#### Amnesty Scheme, 2026 (of EPFO)

**News:** Amnesty Scheme, 2026 (of EPFO) has been launched by EPFO, giving employers operating exempted Provident Fund (PF) trusts a one-time opportunity to regularise their legal status.

#### About Amnesty Scheme, 2026 (of EPFO)

- **Launched by:** It has been launched by the Employees' Provident Fund Organisation (EPFO), under the **Ministry of Labour & Employment**.
- **Application of the scheme:** It is meant for establishments that have been **running a Provident Fund Trust recognised under the Income Tax Act, 1961**, but do not have a formal exemption notification issued by either the Central Government or the State Government.

- The scheme **helps employers bridge a regulatory gap between their income tax recognition and EPF exemption status** without facing prolonged legal proceedings.
- **Validity of Scheme:** It was **notified on 29 June 2026** and **is valid for a period of six months** from the date of notification.
- **Eligible Establishments**
  - **Category-I:** These include establishments seeking retrospective regularisation of their PF trust while either:
    - already complying as an un-exempted establishment, or
    - Planning to continue future compliance as an un-exempted establishment.
  - **Category-II:** These are establishments seeking retrospective regularisation and intending to continue operating as exempted establishments under the [Code on Social Security, 2020](#).
- **Key Benefits and Reliefs Provided:** It offers several relief measures for eligible employers.
  - **Retrospective regularisation:** Eligible PF trusts can obtain exemption status from the date the trust was established up to the notified cut-off date.
  - **Relaxation of eligibility conditions:** Certain requirements under the Code on Social Security, 2020 have been waived, including:
    - **minimum employee strength**
    - **corpus size rules**
    - **requirement of three years of prior compliance**
  - **Relief from legal proceedings:** Pending assessments relating to provident fund dues, damages and interest will be withdrawn and treated as closed, provided employees have received contributions and interest equal to or higher than the statutory EPF rates.
  - Also, **past finalised orders covered under the scheme will be treated as void ab initio**, effectively nullifying earlier proceedings.

### Medog Dam and Paizhen Fault

**News:** Chinese geologists have warned that the under-construction Medog Hydropower Project is being built above the active Paizhen Fault, raising structural safety concerns.

#### About Medog Dam



Figure 10. Source – TH

- **Medog Hydropower Project** is a planned 60,000-MW run-of-the-river hydroelectric project on the Yarlung Tsangpo (Brahmaputra) River.

- **Location:** It is located in Medog County, Tibet, near the Great Bend of the Yarlung Tsangpo River and about 50 km from

China's border with Arunachal Pradesh.

- **Key Features**

- **Scale:** It is expected to become the world's largest hydropower project.
- **Capacity:** It has a planned generation capacity of 60,000 MW and is expected to produce around 300 billion Kwh of electricity annually.
- **Timeline:** China approved the project in December 2024, construction began in July 2025, and commercial operations are targeted for 2033.

#### About Paizhen Fault



Figure 11. Source – ZEE News

- The Paizhen Fault is an active geological fault located beneath the Medog dam site in the reservoir area on the Yarlung Tsangpo (Brahmaputra) River.

- **Faults** are fractures in earth's crust where rocks on either side of the crack have slid past each other.

- **Tectonic Origin:** It was created by the ongoing collision between the Indian and Eurasian tectonic plates.

- **Active Since:** It has remained highly active since the Pleistocene epoch, (Ice Age) and geological evidence shows that it continued to remain active into the Holocene epoch, with movement recorded as recently as 9,500 years ago.

- A magnitude 6.9 earthquake struck the Milin area of Tibet in 2017 near the northern end of the fault, confirming its continuing seismic activity.
- **Concerns:** It may weaken the foundation-bearing capacity of the area and increase the risk of earthquakes, landslides, slope collapses, and structural damage to the Medog Hydropower Project.

### Parrot Bornavirus 4 (PaBV-4)

**News:** Scientists have identified and genetically characterised Parrot Bornavirus 4 (PaBV-4) in India for the first time, raising concerns for captive parrots and conservation.

#### About Parrot Bornavirus 4 (PaBV-4)



Source – Moneycontrol

- Parrot Bornavirus 4 (PaBV-4) is an enveloped single-stranded RNA virus belonging to the genus **Orthobornavirus** in the family **Bornaviridae**.
- **Target Species:** It infects parrots and other psittacine birds such as macaws, cockatoos, parakeets, conures, cockatiels, budgerigars, and lovebirds.
- **Discovery by:** It was identified and genetically characterised in India by a team from Assam Veterinary and Fishery University.
- **Distribution:**
  - **Global:** It has been documented in the U.S., Canada, Israel, Japan, South Korea, and Europe.
  - **India:** It has been identified in captive birds from Assam, Karnataka, and West Bengal.

- **Pathogenesis:** It causes a **persistent non-cytolytic infection** in which **immune-driven inflammation** damages the **digestive and nervous systems**, leading to **enlargement of the proventriculus, poor digestion, and central nervous system inflammation**.
- **Transmission:**
  - **Direct Spread:** It spreads through **infected birds, contaminated food, water, saliva, feces, droppings, and feather dust**.
  - **Silent Spread:** Healthy-looking infected birds can shed the virus, and **infected parents can also pass it to eggs**.
- **Impacts**
  - **Bird Health:** It causes **Proventricular Dilatation Disease (PDD)**, resulting in **weight loss despite normal appetite, regurgitation, undigested seeds in droppings, neurological signs, poor digestion, and eventual death**.
  - **Conservation:** Its high prevalence in global aviculture and spread through the commercial bird trade **threaten captive breeding programmes and endangered parrot species**.
- **Diagnosis:** **RT-PCR (Reverse Transcription Polymerase Chain Reaction)** detects the virus from **cloacal swabs** in live birds and from **brain and proventriculus tissues** in dead birds.
- **Treatment:** There is currently **no specific antiviral treatment or vaccine**, and management focuses on **supportive care, reducing inflammation, and maintaining nutrition**.

### Thamirabarani River

**News:** The Madras High Court stated that no one has the right to pollute the Thamirabarani River by dumping ritual waste during ceremonies.

#### About Thamirabarani River



Source – ResearchGate

- **Thamirabarani River** is a rare **perennial river** of southern India that **flows entirely within Tamil Nadu**.
- **Other Names:** The river is also known as the **Tamraparni River** and **Porunai River**, and its **name refers to the copper-like colour of its waters**.
- **Origin:** The river originates **from the Agastyarkoodam Peak in the Pothigai Hills of the Western Ghats**.
- **Course:** The river flows for nearly **128 km**, initially moving **northward** and **later turning eastward** through **Tirunelveli and Thoothukudi (Tuticorin)** districts before **draining into the Gulf of Mannar**.
- **Nature:** It is a **rare perennial river** that is **fed by both the southwest and northeast monsoons**.
- **Tributaries:** Its major tributaries include **the Servalar, Manimuthar, Gadananathi, Pachaiyar, Chittar, Ramanathi, and Koraiyar rivers**.
- **Major Waterfalls:** The river forms **Banatheertham Falls, Agasthiyar Falls, and Kalyana Theertham waterfalls**.

- **Major Dams:** Important dams on the river include **Papanasam, Karaiyar, Manimuthar, Servalar, and Gadanathi** dams.
- **Biodiversity Hotspot:**
  - **Rich Fish Diversity:** The river is one of the richest rivers in the world for fish and is dominated by native snakehead fish species.
  - **Otter Habitat:** It is inhabited by all three otter species found in India—the Eurasian otter, the smooth-coated otter, and the Asian small-clawed otter.

### Operation Vajra and Mephedrone (MD)

**News:** The Central Bureau of Narcotics (CBN) dismantled an interstate Mephedrone manufacturing laboratory in Pune.

#### About Operation Vajra



Figure 12. Source – PIB

- **Operation Vajra** is an operation against an interstate synthetic drug trafficking syndicate led by the Central Bureau of Narcotics (CBN).
- **Led by:** The operation was carried out by the Preventive Branch of the Central Bureau of Narcotics (CBN), Madhya Pradesh.
- **Legal Framework:** The arrests, seizures, and possession of machinery, equipment, and chemicals were carried out under the Narcotic Drugs and Psychotropic Substances Act, 1985.
- **Aim:** The operation aims to dismantle organised drug trafficking networks and support the national vision of a Drug-Free India (Nasha Mukh Bharat).
- **Interstate Footprint:** The investigation and coordinated operations were conducted between 1st–10th July 2026 across Madhya Pradesh, Maharashtra, and Rajasthan, leading to the dismantling of a sophisticated laboratory in Pune.

#### About Mephedrone (MD)

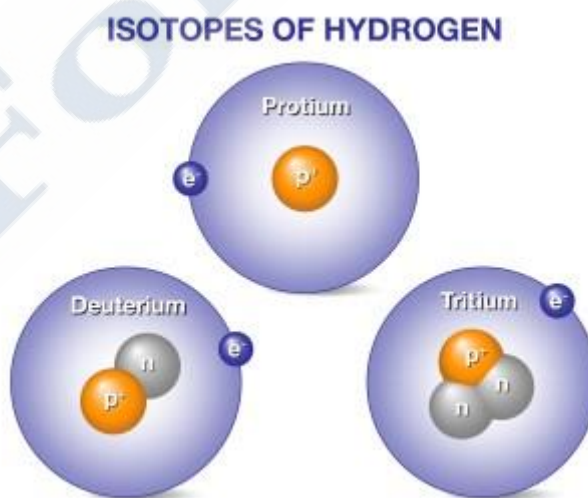
- **Mephedrone (4-methylmethcathinone or 4-MMC)** is a synthetic stimulant belonging to the amphetamine and cathinone chemical classes.
- **Street Names:** It is popularly known as “Meow Meow”, “MD”, “M-CAT”, “Drone”, or “White Magic”.

- **Effects:** It acts as a **central nervous system stimulant**, causing temporary **euphoria, alertness, and severe physiological dependency**.
- **Health Hazards:** It has been linked to **adverse physical and mental health effects**.
  - Short-term use may cause **anxiety, paranoia, nausea, and insomnia**, while prolonged use may lead to **cardiovascular problems, hallucinations, aggressive behaviour, addiction, and long-term psychological harm**.
- **Environmental Concern:** Mephedrone acts as a **xenobiotic and an environmental contaminant**, raising concerns about its presence in the environment.
- **Regulatory Status in India:** It is **strictly banned and classified as a psychotropic substance** under the **Narcotic Drugs and Psychotropic Substances Act, 1985**.
- **Dual-Use Precursors:** The **raw materials used to manufacture MD are often regular industrial chemicals**, making it **extremely difficult to track their diversion** from legitimate pharmaceutical industries into illegal cartels.

### Tritium

**News:** A new study published in Environmental Science & Technology reports a breakthrough in removing tritium from contaminated water using a metal-organic framework (MOF).

#### About Tritium



Source: Department of Energy

- It is a **radioactive isotope of hydrogen**.
- **Properties:**

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- **Atomic mass:** It has an atomic mass of 3.014 and is considered an important and versatile radioisotope.
- **Components:** It consists of one proton and two neutrons. It is unstable.
- **Half-life:** The physical half-life of tritium is 12.33 years, meaning that it takes just over 12 years for tritium to decay to half of its original amount.
- When it **bonds with oxygen, it forms tritiated water, or HTO.**
- It decays over time, and **while decaying, it emits beta radiation.** As tritium decays, it **changes to helium.**
- **Production:** It is produced **naturally from interactions of cosmic rays with gases in the upper atmosphere,** and is also a **by-product of nuclear reactors.**
- **Uses:** It is combined with phosphor **to produce self-luminous lighting used in exit signs, emergency lighting, and airport runway markers.**
  - It is also **used as a radioactive tracer in biomedical research** to study and diagnose diseases such as heart disease, cancer and AIDS.
  - In the future, **it is expected to play a key role in generating electricity** through nuclear fusion reactors.

#### About the Recent Findings

- A new study **found a promising way to remove tritium more efficiently.**
  - Researchers from China developed a new material called a **metal-organic framework (MOF)**, a highly porous material often described as a microscopic sponge.
  - They **coated a stainless-steel mesh with this MOF, called NH<sub>2</sub>-MIL-101(Cr).**
- The new material works in two ways:
  - It provides a **much larger surface area for separating water.**
  - It **captures tritium atoms and replaces them with normal hydrogen atoms.**
- **Result:** In laboratory tests, this method performed **134 times better** than the best existing industrial material and **about one million times better** than standard commercial packing materials used in distillation towers.
- **Applicability:** The researchers believe **this technology could make it much easier and cheaper to remove tritium from contaminated water,** helping reduce radioactive releases into the environment and improving the safety of nuclear waste management.

## Reusable Rocket

**News:** Japan's JAXA tested a prototype reusable rocket, while China successfully achieved its first reusable rocket booster landing.

### About Reusable Rocket



Source – Space News

- **Reusable launch vehicle (RLV)** is a **space launch system designed to recover and reuse** some or all of its component stages.
- **Goal:** RLVs aim to **transform space launches** from a **disposable model into a transportation model**, thereby **reducing the cost** of access to space.
- **Scientific Basis:** Rocket motion follows the **Tsiolkovsky rocket equation**, under which **carrying more fuel increases rocket weight and demands even more fuel**.
- **Working Principle:** After completing its mission, **the reusable stage separates, returns to Earth in a controlled manner**, and is recovered instead of being discarded.
- **Recovery Types:**
  - **Vertical Take-off, Vertical Landing (VTVL):** The booster uses **retro-propulsion (firing its engines downward)** and grid fins to **stabilize itself before landing vertically on a pad or barge**.
  - Examples: **SpaceX's Falcon 9 (United States)** and **Blue Origin's New Shepard (United States)** follows this recovery approach.

- **Horizontal Landing (Winged Body):** The reusable vehicle glides through the atmosphere and lands on a conventional runway like an aircraft.
  - **Example: ISRO's Pushpak (RLV-TD) (India)** follows this recovery approach.
- **Refurbishment:** The recovered stage is **inspected, repaired, and tested before being reused** for future missions.

#### Reusable Launch Vehicles in India

- **ISRO** started developing **reusable launch vehicle (RLV) technology in 2010** for a **two-stage-to-orbit (TSTO) launch vehicle**.
- **First Trial:** In **2016**, the **Reusable Launch Vehicle–Technology Demonstrator (RLV-TD)** **completed its first trial** by touching down at a predetermined landing site in the Bay of Bengal.
- **Vehicle Design:** The RLV uses a two-stage configuration in which the **first stage separates after fuel exhaustion**, while the **second stage continues the mission**.
- **Recovery Concept:** The **first stage re-enters the atmosphere, lands autonomously at a predetermined location, and is prepared for reuse after maintenance**.
- **Technology Demonstrator:** The **RLV-TD helps ISRO test key technologies required for developing a fully reusable launch vehicle**, including hypersonic flight, autonomous landing, and powered cruise flight.
- **Future Plan:** ISRO plans to **build a fully operational reusable launch vehicle by using the technologies demonstrated through the RLV-TD**.

#### Digital Threat Report 2025-26

**News:** The Ministry of Electronics and Information Technology (MeitY) released the second edition of the Digital Threat Report 2025–26 for the Banking, Financial Services and Insurance (BFSI) and payments ecosystem.

#### About Digital Threat Report 2025-26

2025-26 Threat Realization Matrix: Predictions vs Reality

|                   |           |                              |                                |                              |                                 |
|-------------------|-----------|------------------------------|--------------------------------|------------------------------|---------------------------------|
| Scale of Damage   | Systemic  | Cryptographic / Quantum Risk |                                |                              | Deepfake / Synthetic Identity   |
|                   |           |                              |                                |                              | Zero-Day Exploit                |
|                   | Severe    |                              | Adversarial AI / Model Evasion | Supply Chain / Third-Party   | Social Engineering / BEC        |
|                   |           |                              |                                |                              | Credential Theft/Session Hijack |
|                   |           |                              |                                | Ransomware (Multi-Extortion) | Mobile / UPI Fraud              |
|                   |           |                              |                                |                              | Cloud Misconfiguration Exploit  |
|                   |           |                              |                                |                              | AI-Driven Attacks               |
|                   |           |                              |                                |                              | Crypto Incidents                |
|                   |           |                              |                                |                              | IoT                             |
|                   | Material  |                              | Application Race Conditions    | API / Business Logic Abuse   | Phishing (Traditional)          |
|                   |           |                              |                                | Adversarial LLMs             | IDOR / Broken Object            |
|                   |           |                              |                                | LLM Prompt Hacking           | Insider Threat                  |
|                   | Localized |                              | Hardware / Sensor Side Channel |                              | Insecure Coding / SDLC Gaps     |
|                   |           | Latent                       | Developing                     | Accelerating                 | Immediate                       |
| Realization Speed |           |                              |                                |                              |                                 |

Source: Digital Threat Report 2025-26

- The **Digital Threat Report 2025-26** provides a **comprehensive assessment of the cybersecurity landscape in the Banking, Financial Services and Insurance (BFSI) sector**.
  - It identifies **sector-wide security gaps** and offers a **forward-looking analysis of emerging cyber risks**, equipping financial institutions with insights to prepare for current and future cyber threats.
  - It draws on **extensive digital forensics and incident response (DFIR) research, analysis aligned with CERT-In and CSIRT-Fin observations**, and research into adversarial AI.
- **Aim:** This initiative aims to support India's **Banking, Financial Services, and Insurance (BFSI) sector** in **strengthening their defences** and building long-term cyber **resilience** with the rapid digitization of financial services.
- **2025-26 Edition:** This is the **second edition** of the **Digital Threat Report**.
  - The **first edition** of this report was released in **2025**.
- **Released by:** It has been released by the **Ministry of Electronics and Information Technology (MeitY)**, along with the [Indian Computer Emergency Response Team \(CERT-In\)](#), the Computer Security Incident Response Team in Finance (CSIRT-Fin) and SISA.
- **Findings of the report:**

- **Attackers are increasingly targeting trust in systems** rather than just stealing data. They are **exploiting biometric onboarding, partner apps, AI decision-making and real-time payments**, creating new risks for the banking, financial services and insurance (BFSI) sector.
  - Financial attacks are shifting **from direct system compromise to manipulating trust** across biometric onboarding, partner applications, AI systems, APIs, programmable finance and third-party ecosystems.
- **Six of the seven cyber threat predictions from the [previous edition of the report](#)** have already come true, showing that cyber threats are evolving faster than traditional security systems can keep up.
  - **Deepfake attacks have become more advanced**, using real-time executive video deepfakes, malicious large language models (LLMs) and constantly changing attack techniques.
  - **Social engineering and Business Email Compromise (BEC) attacks have increased**, while **credential theft and session hijacking remain the main ways** attackers gain access to systems.
  - **Cyberattacks are now generated and launched at machine speed** rather than being manually created. **Phishing emails have also become highly personalised and are often difficult to distinguish from legitimate communications**, making the BFSI sector the most targeted industry.
- **Recommendations**
  - There is a need to make **active liveness detection a standard part of digital onboarding** and **strengthen security with continuous session monitoring** using behavioural biometrics, device posture checks and token binding for high-privilege sessions.
  - **Expand identity governance beyond employees** to include service accounts, machine identities and AI agents, while **enabling cross-database identity verification for high-assurance account openings** where legally allowed.
  - There is a **need to adopt continuous security assurance, ecosystem-wide trust and a resilience-focused approach** to cybersecurity.

## Ravidassias

**News:** Thousands of Ravidassias gathered in Punjab's Phagwara to renew their demand for a separate "Ravidassia religion" category in the Census.

### About Ravidassias



Figure 13. Source – WikiBharat

- **Ravidassias are a Dalit community** that follows the spiritual teachings, egalitarian philosophy, and mystic poetry of **Guru Ravidas**.
- **Distribution:** The bulk of the community, comprising nearly 12 lakh people, lives in the Doaba region of Punjab, including Jalandhar, Hoshiarpur, Kapurthala, and Nawanshahr.
- **Key Features of Ravidassias:**

- **Sacred Scripture:** The community follows Amritbani, which contains 200 hymns of Guru Ravidas.
- **Begampura Concept:** Guru Ravidas introduced the idea of Begampura, which described an equal society free from sorrow, fear, and discrimination.
- **Pilgrimage Centre:** Seer Goverdhanpur in Varanasi, the birthplace of Guru Ravidas, is the major pilgrimage centre for devotees.

### About Guru Ravidas

- **Guru Ravidas was born in Varanasi in a cobbler's family** and became a leading mystic poet-saint of the Bhakti Movement.
- **Beliefs:** He believed in one God and spread his message through unbiased religious poems.
- **Social Reform:** He dedicated his life to abolishing the caste system.
- **Contribution:** His devotional songs greatly influenced the Bhakti Movement, and around 41 of his poems were included in the Guru Granth Sahib.
- **Vision:** He introduced the concept of Begampura, which represented an egalitarian society free from sorrow, fear, and discrimination.

## CapaCITIES Project

**News:** The event “Scaling Urban Climate Resilience: The CapaCITIES Legacy and Way Forward” celebrated a decade of the CapaCITIES programme in New Delhi.

### About CapaCITIES Project



Source – CapaCITIES India

- **Capacity Building Project on Low Carbon and Climate Resilient City Development in India (CapaCITIES)** is a programme that strengthens the capacity of Indian cities to **promote low-carbon and climate-resilient urban development**.
- **Launched in:** The programme was **launched in 2016**.
- **Funder:** The programme is funded by the **Embassy of Switzerland to India and Bhutan**.
- **Implementing Agencies:** The programme is **implemented by ICLEI South Asia, South Pole and econcept**.
- **Knowledge Partner:** The **National Institute of Urban Affairs** serves as the knowledge partner.
- **Objective:** The programme aims **to build knowledge, tools and institutional capacity** for **integrating low-carbon and climate-resilient development** into urban governance **while supporting India's 2070 net-zero objective**.
- **Key Features :**
  - **Capacity Building:** The programme has **equipped Indian cities with knowledge, tools and institutional capacities** to integrate low-carbon and climate-resilient development into urban governance.

- **City Support:** The initiative has supported Coimbatore, Tiruchirappalli, Tirunelveli, Ahmedabad, Rajkot, Vadodara, Udaipur and Siliguri, along with the governments of Gujarat and Tamil Nadu.
- **Institutional Development:** The programme established permanent Net-Zero and Climate Action Cells in six project cities for long-term implementation, monitoring and climate budgeting.
- **Regional Expansion:** The capacity-building framework has expanded beyond India to Bhutan, Bangladesh, Sri Lanka and Malaysia.

### Ayad River

**News:** Severe environmental degradation was reported along the Ayad River in Udaipur due to pollution, concretisation, and inadequate waste management infrastructure.

#### About Ayad River

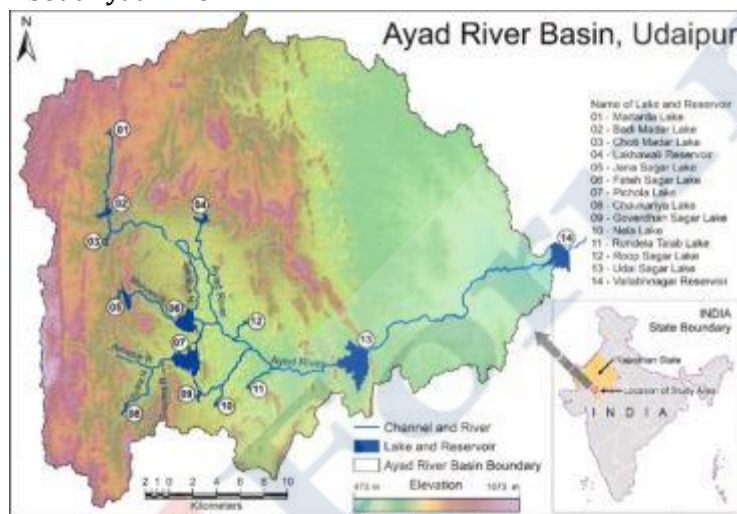


Figure 14. Source – ScienceDirect

- The Ayad River is also known as the Ahar River.
- **Origin:** The Ayad River originates in the Gogunda Hills in north-west Udaipur district of Rajasthan.
- **Course:** The river flows through Udaipur city, receives the outflow of Lake Pichola and Fateh Sagar Lake, feeds Udaisagar Lake, and later joins the Berach River.
- **Nature:** The Ayad River is a seasonal river, and its basin receives about 90% of its annual rainfall from the southwest monsoon between July and mid-October.
- **Tributary of:** The Ayad River is a tributary of the Berach River, which drains into the Banas River, then the Chambal River, followed by the Yamuna River, the principal tributary of the Ganga River.
- **Archaeological Value:** The river is associated with the Ahar-Banas Chalcolithic (Copper-Stone Age) culture, which dates from 3000 BC to 1500 BC.

- **Historical Monuments:** The riverbank contains the **Ahar ki Chhatriya**, which are the **royal cenotaphs (memorials) of the Maharanas of Mewar**.
- **Threats:** The Ayad River is **heavily polluted by solid waste and sewage**, while **concretization of its floodplains, riverbanks, and riverbed edges has reduced its carrying capacity**, restricted groundwater recharge, and **threatened the ecological integrity of Udaisagar Lake**.

### Paraquat Dichloride

**News:** The Union government has issued a draft notification proposing a complete ban on the manufacture, import, transport, distribution, sale and use of paraquat dichloride.

#### About Paraquat Dichloride



Figure 15. Source – BS

- Paraquat is also known as **paraquat dichloride** or **methyl viologen**.
- It is one of the **world's most-used herbicides**.
- It is a **highly toxic chemical** which is mainly **used to control weeds and dry out crops like cotton** before harvest.
- The US Environmental Protection Agency (EPA) states that **"even a small accidental sip can be fatal"** to humans.
- The **WHO** classifies paraquat as a **Category 2 chemical**, indicating it is **moderately hazardous and irritating**.
- **Restrictions:** It is **banned** in over **70 countries**, including **China, India** (banned recently under **Section 27 of the Insecticides Act, 1968**) and the **European Union**, due to its high **toxicity**.
  - Despite this, it **remains widely used in the US**.
  - Paraquat is still **not officially listed** under the **Prior Informed Consent (PIC) procedure of the [Rotterdam Convention](#)**.

### Indian Grey Hornbill

**News:** Gujarat's Gir forests have recorded a major conservation success with the successful reintroduction and breeding of the Indian Grey Hornbill.

#### About Indian Grey Hornbill

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Figure 16. Source: DD News

- The **Indian grey hornbill** is a **tropical bird** found on the **Indian subcontinent**.
- **Scientific name:** Its scientific name is **Ocyrocus birostris**.
- **Habitat:** It prefers **dry plains, foothills, and open habitats**.
- **Distribution:** Among all the hornbill species in India, the Indian grey hornbill is the most widely distributed.
- Its range spans the **length (Jammu to Kerala) and breadth (Rajasthan to West Bengal) of India**.
- It is also **distributed in parts of some neighbouring countries, including Pakistan, Nepal, and Bangladesh**.
- It doesn't **migrate** but may **make local movements in the drier western region**.
- **Characteristics:**
  - **Appearance:** Unlike the eight other hornbill species found in India, **the Indian grey hornbill is not brightly coloured**.
    - It is a **medium-sized bird** with **greyish-brown upper parts** and a **slight trace of a pale supercilium**.
    - The **ear coverts** are **darker**.
    - The **flight feathers of the wing** are **dark brown with a whitish tip**.
    - The **tail** has a **white tip** and a **dark subterminal band**.
    - It has a **red iris**, and **the eyelids have eyelashes**. The casque is short and pointed.
    - The **male has a larger casque on a dark bill**, and the **culmen and lower mandible are yellowish**.
      - The **bare skin around the eye is dark in males**, but sometimes pale reddish in females.
    - The female has a more yellowish bill with black on the basal half and on the casque.
    - The **juveniles lack the casque**, and the bare skin around the eye is dull orange.

- **Diet:** It is a **herbivore (frugivore)**. Sometimes, it also feeds on **molluscs, scorpions, insects, small birds, and reptiles**.
- **Behaviour:** It is **active during the day** and usually **spends time in pairs or small groups**.
  - It is **arboreal**, but very rarely descends to the ground.
  - It is quite noisy, **producing squealing calls, loud cackling, or short pipping-like sounds**.
  - Its **flight is heavy**, involving flapping interspersed with glides.
  - It prefers **mature trees with large trunk girths, particularly *Sterculia urens* and *Terminalia bellirica***.
- **Ecological role:** It plays a **crucial ecological role as a long-distance seed disperser**, helping regenerate forests by transporting seeds of fruit-bearing trees across large areas
- **Threat:** It is mainly threatened by the :
  - **Loss of dry forests and fruit trees**
  - **Hunting, and**
  - **Disturbance from agriculture and livestock grazing**
- **Conservation status:**
  - **IUCN Red List: Least Concern (LC)**